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Social Media for Emergency Communication: An Analysis of Tweets by US FEMA and Italian Protezione Civile

Wert usacclis

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### INTRODUCTION

Social media have radically changed the way people communicate, and this revolution has also involved news production, news consumption, and the way organisations and the public deal with disaster communication. Thanks to the broader accessibility to new online technologies, people have now become a lively and active source for information. Social media are a virtual place where users covey a huge amount of data to a wide and heterogeneous public. This type of interaction enhances the effectiveness of communication but is often uncontrolled and, sometimes, unreliable. Facebook and Twitter are only two of the new social media platforms that have entered our lives and changed it completely. One of the many fields that has benefitted from the introduction of new media is emergency communication. Recently, new media are often the first communication platforms that provide early news about disasters and their use during these events increases drastically. On this matter, a useful service is Twitter, a microblogging platform that, since its launch in 2006, has become one of the most reliable media for communicating to a wide audience. There are many reasons behind the success of social media as both valuable sources of information and effective communication channels, among which the most important are portability, accessibility and interactivity. In many cases, in recent disasters such as the Boston marathon bombing or the Japanese tsunami, social media have supported their users in seeking real-time information, requesting for help, and staying in contact with the authorities. Therefore, there is a certain level of optimism related to employing social media channels and integrating them in the processes of disaster and emergency management. This is exactly what FEMA and Protezione Civile have started to do in the last few years. The increase in social media use for disaster communication can bring many advantages in terms of boosting messages reception, enhancing disaster preparedness and response, and improving the public's participation in the process of emergency management in its whole. In the last decade, this topic has started to gain the attention of many scholars, who have begun to consider it as one of the most interesting emerging fields of communication. Disaster and emergency management is a heterogeneous and complex process that involves many different activities, from data collection to public relation, from mass communication to personal involvement. This long practice has the definitive goals of managing every phase

of the emergency cycle, reducing damages to the infrastructure, reducing harm to the public and creating a resilient community. Beside an efficient organizational structure and the access to infrastructures, men and equipment, the backbone of these organisations is a functional communicative campaign that aims at informing the public about possible dangers. In order to do so, disaster management agencies need to adapt their communication skills to new technologies and to the characteristics of their audience. So, beside focusing on the content of their communications, agencies should also be aware that not everybody might understand their messages. Taking these factors into consideration helps in creating a steady relation with the public. The concepts of trust and credibility are two major issues in disaster communication, since they can influence the way people perceive information. New media and social media in general are associated with a low level of credibility and are addressed to as one of the major sources of fake news and misleading communications. Disaster management agencies need to tackle this problem and engage in a consistent production of reliable and trustworthy messages. Similarly, readability is also an important matter, because it indicates the level of difficulty of a text and, therefore, the number of people that can understand it. Producing texts that are difficult to read for a large part of the community can be counterproductive and be the cause of dangerous circumstances. The study of readability has started in the early 20<sup>th</sup> century and has steadily continued since. Throughout this period, scholars have provided some useful tools for assessing the difficulty of texts and for calculating how many years of study are needed to understand their content. Unfortunately, is very little

I will divide my dissertation into three chapters. In Chapter One I will focus on giving some background knowledge on the phenomenon of social media and how these services have radically changed the media world in general. Then, I will explain in detail the relation between social media and disaster communication; in this section I will also present Twitter and some of its many functionalities. Afterwards, I will give some extensive guidelines on how to create an effective communication strategy by following the indications provided by Haddow and Haddow, two scholars that have focused their research on this topic.

specific research that addresses to readability of social media messages and many more

studies need to be carried out to investigate this phenomenon extensively.

Subsequently, I will deal with the emergency cycle and explain each of the four phases of which it is made: preparedness, response, recovery and mitigation. For each phase I will apply the communication guidelines and indicate the most appropriate actions for emergency agencies that wish to improve their communication in every step of a crisis. The last part of the chapter will focus on the specific uses of social media during disasters, with a brief digression also on the typical social media users.

Chapter Two will be devoted to presenting the issue of credibility of an informative source, with a particular emphasis on how to create a trustworthy relationship in emergency communication. I will then move on and introduce the concept of readability: first, I will provide a historical overview of the many findings on this topic; then, I will move to presenting the readability formulae like the famous Flesch-Kincaid Reading Ease and the Gulpease Index. These tools will be very useful for an analysis of social media outputs that I will carry out in the final part of my work. Finally, the last part of the chapter is devoted to Part-of-Speech tagging, an automated process for natural language analysis that will help me understand the most frequent grammatical features that are associated with a high readability.

For the third and last chapter of my work, I will collect a large number of tweets posted by the American agency FEMA and by the Italian *Protezione Civile* in the last few months. I will create a specific dataset for each language and analyse the overall content. Then, I will look at different features like readability, parts-of-speech, adjectives and overall content of the messages. The main goal is checking if the content of the two agencies' social media outputs is clear and if it respects the characteristics of an effective disaster communication.

My interest for these topics started at the beginning of my final year at Università degli Studi di Padova. Between September and October 2018, I had the pleasure to take part in a project that aimed at localising a software for social media analysis into Italian. My internship at Datapiano S.r.l. resulted in a work experience in collaboration with Trinity College Dublin and the FÍOSÍN Group, a team specialised in social media analytics. During those months I worked in close contact with professor Khurshid Ahmad, Chair of Computer Science at Trinity College, who enlightened me on the importance of social media in the field of disaster communication. Thanks to this internship, I could deepen my knowledge on many of the topics that are at the core of this dissertation. At first, my

task was to create a bilingual disaster dictionary, where I collected all the official Italian and English terminology for emergency communication. Then, I focused on retrieving emergency-related data from the news and on analysing the way traditional media addressed to emergencies. It was during my one-week work experience in Dublin where I finally started to deal with social media messages. The FÍOSÍN team provided me with the tools to start my investigation on emergency communication: they taught me how to retrieve tweets and how to evaluate them; they also gave me the background knowledge I needed to understand the potential and the usefulness of parsing software. The work I did throughout the internship was a precious starting point for my investigation and the people I met during this experience inspired me with their passion and professionalism. The following dissertation is the rightful conclusion of the study that started more than one year ago and that has represented a turning point for my academic and, hopefully, professional career.

### **CHAPTER ONE**

### 1.1. The new media

In order to understand how experts use social media during an emergency it is important to keep in mind the many changes that occurred in the media world in the last decades. According to Haddow and Haddow (2014), the internet has radically changed the way people communicate. The media world in particular has been shaken by several transformations regarding both the way news is created, or published, and how people approach news consumption. This deep shift in the paradigm has seen the world moving from a one-way communication type, where news professionals produced a message, text or video that was addressed to many, to a type of communication that sees every individual both as a news producer and a news consumer. Of course, this is possible only thanks to the huge strides in the implementation of Internet-based online platforms that give every individual the possibility to comment, post pictures or videos, share news, participate in debates and so on. In particular, one major revolution is given by the possibility of connecting to these platforms instantly from everywhere in the world (Brenner, 2013). This way, the news landscape, among many others, is now more heterogeneous than before, but also more tailored to the individual, direct and portable. If we look at the figures about news consumption, there is a drop in the number of people that currently gather information from newspapers, television and radio – which are also called 'traditional' media. Despite this, according to the Pew research of 2010 (Pew 2010), the world of news has seen a steady growth in the number of people that are interested in news sharing and creation. In particular the use of new media and social networks for news fruition is increasing steadily day after day. These platforms have now become one of the most innovative and complex communication channels for information gathering. The consequences of this drastic change of perspective have not fully developed yet and many more changes are expected in the next years.

The interactive communication of the modern era is given by the new internet-based tools known as 'social media', which for the first time have enabled users to have a fast and active exchange of information with others. According to Seltzer and Mitrook (2007:227):

Social media are interactive digital tools that feature content users may generate, manipulate, or influence. Social media are conducive to timely, interactive communication and foster dialogue and content exchange among message consumers and creators.

Social media is a general term that indicates all those types of online and web-based platforms that enable their users to develop a personalized content or profile and stay connected with other people or other people's profile contents (Haddow and Haddow, 2014). As I mentioned earlier, from the point of view of news production, one of the most important characteristics of social media is the opportunity to create a two-way interaction between producers and consumers, which leads to a much broader exchange of information (ibidem). Another important feature that these services offer is the possibility to log-in from many different devices such as computers, laptops, tablets and smartphones. This characteristic alone helps increasing news consumption, deleting time and space barrier and establishing new frontiers for communication services all over the world. There are different types of social media, each one with its distinctive features. Social networks, for example, are defined as:

Websites that allow people to connect with friends and family, share photos, videos, music, and other personal information with either a select group of friends or a wider group of people based on shared or common interests. (Haddow and Haddow, 2014:27)

Facebook is the most famous social network and also the most common, with more than 2.41 billion monthly active users. Other famous websites that are regarded as social networks, like Twitter for example, are instead part of a different category known as 'microblogs.' Microblogs are different from social media because they present some limitations in the amount of information that can be shared in a single post. In microblogs, users produce and post short messages that can be addressed to specific users or can even reach an unknown public. These posts usually contain specific keywords that can be used to participate in a specific debate or to stay updated on trending topics. Twitter's main use is updating followers about trivial events of their everyday life. During disasters, though, when a huge amount of data must flow rapidly and reach the largest audience possible, Twitter's characteristics become unparalleled strengths (Latonero and Shklovski, 2011). In addition, the same authors state that the capacity to follow trends and topics rather than personal accounts, which is one of the most iconic features that made Twitter different from other social platforms, is also very helpful in disaster communication.

Other useful internet-based tools for disaster and emergency communication are called digital mapping tools, which collect data from disasters that occur in different parts of the world and rearrange them in interactive digital maps (Haddow and Haddow, 2014). Their utility is certain, still they remain less accessible than other social media, thus Twitter or Facebook still play a leading role in disaster management.

#### 1.1.1.Social media and disasters news

According to an article published by the Italian newspaper *Il Messaggero* on October 6, 2018, a Twitter user was the first to announce that an earthquake had hit near the city of Catania, in Sicily. This might just appear as a coincidence, but social media, Twitter in particular, are often the first platforms where early disaster information are available. They usually come from people that live or find themselves in the area where the disaster is taking place, reversing the roles in the production and distribution of news, which once saw professionals as the first link of the informative chain.

START, the American consortium for the Study of Terrorism and Responses to Terrorism, has carried out a study about the way social media are employed in disaster communication (START, 2012). Results show that the frequency in the use of social media rises drastically during a crisis. When many recent disasters such as the Boston marathon bombing (Bat-Tur, 2013), the Japan tsunami (Richardson, 2011) or Hurricane Sandy (Beneito-Montagut et al., 2013), the quantity of tweets posted was almost double compared to the average figures on a regular day, when no dramatic event was taking place. According to Haddow and Haddow (2014), many are the reasons that cause a more extensive use of social media during disaster:

- social media offer easy and immediate access to news from everywhere, thanks to portable devices like smartphones or tablets.
- People tend to use media that are also used by their peers or family members. They also rely on platforms that are believed to be trustworthy.
- During a crisis, people seek immediate information. Social media are the only
  platforms that can offer a variety of in-depth and accessible material, such as videos,
  photos and real-time updates about a disaster.

- People that are looking for help tend to use social media. If as a direct consequence
  of a disaster the communication infrastructures are not working properly, people's
  alternatives to contact someone are very limited. Social media are a valid alternative.
- If people are aware that an event has occurred in an area where friends of family members live, they usually resort to social media or other online platforms to contact them or to reassure acquaintances about their condition and health status.
- If a disaster is of huge proportions and the number of people missing is very high, individuals turn to social media to find their loved ones. In the past, many Facebook groups and pages were created with the goal of helping people to reconnect with their family.
- Social media campaigns can help dealing with the aftermath of disasters. Surveys
  have shown that people felt motivated by social media campaigns in donating supplies
  and helping those in need. Also, many movements in favour of gathering money for
  emergency relief were created through social media.
- Social media gives us 'real' information, or rather information that has not been
  modified or filtered by traditional communication media (newspapers, radio,
  institutions, television). They are the only mean to communicate rapidly without
  passing through traditional media first.
- Social media are used to create interpersonal relationships that help building a stronger sense of community and belonging to the territory. Temporary communities which originate from disasters can also last in the following periods. Communities play a huge role in disaster communication, as we will see later in this chapter.
- People express their feelings and seek for emotional support on social media.

As we can clearly see in these examples, social media use during disasters is not only oriented towards news seeking and information gathering but it is also linked to all those different personal situations that develop during and after the event. I will return to this topic at the end of this chapter, when I will give a more extensive picture on social media uses in disaster communication.

### **1.1.2.** Twitter

In this section, I will present an overview on one of the most important online platforms when dealing with emergencies, the microblogging service known as 'Twitter'. According to Mills et al. (2009:1):

Twitter is a free, platform-independent, Web 2.0 communication application that allows users to send short (up to 140 characters) electronic messages to other individual users and user groups. Twitter users can send messages to one another via most internet-enabled devices capable of text messaging. This new and unique service offers great potential for rapid and integrated response to disasters.

Even though this research was carried out 10 years ago, the authors already saw the potential of Twitter as a high-quality communication vehicle and a useful tool for crisis management for both private and governmental organizations. The usefulness of Twitter during disasters is given by the possibility of a rapid communication in time-pressed and critical situations.

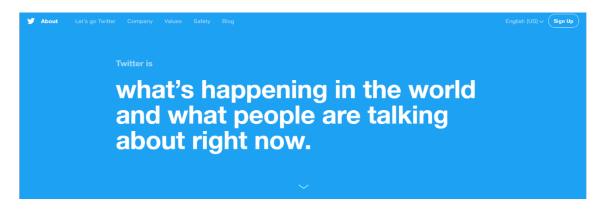


Figure 1. About Twitter; a screenshot of Twitter's homepage

### 1.1.2.1. Twitter: a short history

In 2006, the members of a company called *Odeo* had the idea of implementing a platform for creating and managing podcasts. Things, though, did not go according to their plans when Apple Inc. released a new version of their famous software *iTunes*, which, unfortunately for Odeo, promised the same podcast management possibilities integrated in a much known and diffused program. The company, then, had to find a way to avoid going bankrupt and came up with the idea of a service that allowed people to send text messages to a small group of people. The original project name was *twttr*, which was then changed to Twitter. As stated by the creator of Twitter himself, Jack Dorsey:

We came across the word "twitter," and it was just perfect. The definition was "a short burst of inconsequential information," and "chirps from birds." And that's exactly what the product was.

The platform was launched on July 2006 and, by April 2007, Twitter became an independent company. Year after year, its popularity grew stronger, and an increasing number of tweets was sent every day. On January 22, 2010 the first tweet was sent from outer space by the NASA astronaut Timothy Creamer from the International Space Station (ISS). In the same period, the Italian astronaut Paolo Nespoli was updating regularly from the ISS from his personal Twitter account, sending also many photos and videos of the earth seen from space. In Italy, on January 29, 2012, for the first time Twitter published a headliner news almost an hour before traditional media did: the death of Italy's former president Oscar Luigi Scalfaro was tweeted by a colleague of his, Alberto Gambino, and the fact that the national media had been beaten by a microblogging site started a lively debate in Italy. These are only some of the many achievements that this online service has accomplished since it was launched 13 years ago, and who knows how many it will get in the future.

### 1.1.2.2. Characteristics of the service

The platform became popular thanks to its simplicity and user-friendly interface. Just like any social network, Twitter is built around the concept of *followers*: when a user decides to follow another, the tweets of the latter are displayed in inverted chronological order on its Twitter homepage. If a user follows more than one account, then her or his homepage will be composed of a series of tweets posted by different users. In 2009, Twitter added a search bar that enables users to search for specific topics, trends, keywords and so on. Also, a few years ago, the maximum amount of characters for each tweet was doubled at 280 characters. Unlike Facebook, there is no chat and it is not possible to send files other than pictures or videos; also, messages can be sent only to followers.

At launch, one of the peculiarities of Twitter was the use of hashtags. Hashtags are single words linked to each other, marked by the hash symbol (#), that create an hypertextual link to all the messages that contain the same hashtag. The most popular tags can be found in a specific page that collects all the trending topics. Since it first went online, Twitter has frequently been used as a tool for 'user-generated content', also known as participatory journalism. This process involves citizens in the process of collecting,

reporting, analysing, and disseminating news and information (Bowman and Willis, 2003). The strength of this service is the immediate access to information. Unlike Facebook and other social media, which present many obstacles (friendships and likes in the case of Facebook), Twitter enables individuals that do not have an account to still access the tweets. As a matter of fact, by using a simple search engine, anyone can have access to any Twitter account, with the only restriction of the impossibility to send direct messages to that account. So, while interaction is in some way limited, access is granted to anybody.

The number of messages sent every day on Twitter is astonishing, here is graph that shows the number of active monthly users from 2014 to 2020.

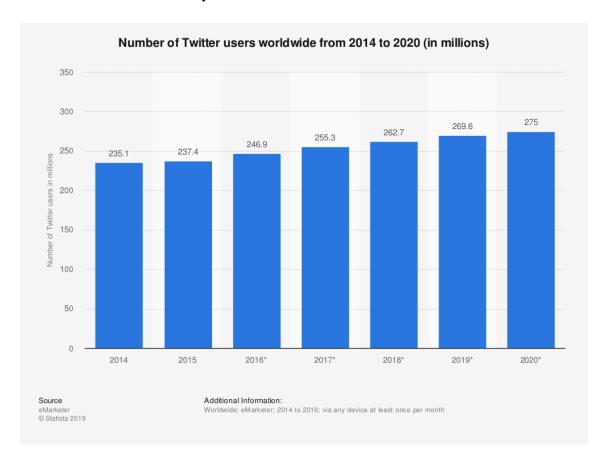


Figure 3. A graph that shows the number of Twitter users all over the world from 2014 to 2020.

The fast interaction between users empowers different companies to use Twitter as a service-provider platform. The America company *Dell*, for example, uses Twitter to communicate with their clients and offer costumer service. In addition, many universities use it for teaching purposes in both the US and in Europe. Communication agencies and

disaster management organisations, instead, use it to spread information before and during a crisis.

#### 1.1.3. Twitter and disasters

Thanks to the recent accomplishments of Twitter, in the past few years scholars have finally started to take into consideration microblogging as a resource during emergencies. According to Acar and Muraki (2011), many authors think that one of Twitter's main downside, and a downside of every social media, is information credibility. Researchers fear that among the many truthful messages that are produced and posted during an emergency, some can just be rumours, which can result in misleading users and creating dangerous situations (Vieweg, 2010). I will address the matter of information credibility on the social media in the second chapter of my dissertation.

According to Paroni (2010), the role of common people in emergency management is becoming increasingly important, so much so that traditional media providers are using information they find on the internet to report on the state of things during and after a disaster. Of course, social media are the platforms of choice when people need to share this kind of information. If we take again Twitter as an example, when a disaster occurs and people need to communicate with others, they usually start by creating a hashtag. By exploiting this simple feature, the communication flows better and is easier to follow. The communication created by the tweets that share the same hashtag is a dynamic interdigital process that can be accessed by anyone (Murero, 2014). Twitter's most useful features in disaster communication are:

- real-time information sharing;
- updates during the disaster;
- requests for help;
- reports about casualties and damages;
- support to initiatives for solidarity and relief.

Merchant, Elmer e Lurie (2011), though, state that social media should not replace traditional media and traditional communication but must be seen as an integrative part of the modern communication systems.

#### 1.1.3.1. Social media in disaster communication

According to Jaeger et al. (2007), the emergence of new communication technologies enhances the possibility of disaster communication due to their interactivity. Optimism about the relation between new media and disaster communication is given by the reputation that social networks have earned compared to traditional media, which are a grater and better usability, enhanced interactivity, and dependability (Jaeger et al. 2007). Also, new media are close to what Mills defines as an "ideal emergency communication system" (Mills et al. 2009), that is to say a user-friendly, mobile, portable, fast, reliable and low-cost system that is capable of sending and receiving messages, as well as providing data on geolocalisation. The importance of portability increases during disasters, especially when they are unpredictable or happen in remote places. Portability also offers an incomparable opportunity to eyewitnesses to report directly from the places that have been directly involved in the event.

While traditional media offer a one-way communication where the sender and the user are easily recognizable, social media change the notion that lies behind the concept of user completely. This shift is caused by one of the most peculiar features of new media, which is the ability of providing a two-way simultaneous exchange of information, enabling organization and individual to create and consume content simultaneously.

### 1.1.4. Changes in the "News Room"

According to Haddow and Haddow (2014), the implementation of new media, which now characterise the life of a vast portion of the world population, has radically changed the way news is created and consumed. Twitter, Facebook, and other social networks allow information to flow instantly from one place to another in real-time. In order to better understand how emergency communication and social media cooperate in the present days, it is important to highlight the major changes that the field of news experienced in the past few years.

The first consequence is that the news cycle does not longer exist. Before the time of the internet, a whole day needed to pass before news could be published: during this time journalists and agencies had the time to check the truthfulness of information and prepare an extensive article on the topic. In addition, newscasters could not get an immediate response on their publishing (Haddow and Haddow, 2014). After the advent of social media, though, people can just go on the Internet and find news by themselves. Of course, this implies that traditional media also had to change the way they created news, mainly by focusing on real-time reporting and information gathering, offering a similar news coverage to that found on the internet. As stated by Haddow and Haddow (2014:35):

the chaos of breaking news is no longer something out of which coverage arises - it's the coverage itself.

Another profound change in the news spectrum is that, thanks to new technologies, any user that posts information on social media can now be considered a 'reporter' (Haddow and Haddow, 2014). Every post, video or picture of a disaster are now available for anybody with an internet connection. The figures show that the activity and the interest of the public on social media are higher during disasters. Traditional media operators are now aware that they must react quickly to this high volume of informative noise. Given the fact that they cannot remain silent while news is being posted all over the Internet, they must try to publish the most accurate information possible, using social media as both news sources and tools to verify the veracity of their information (ibidem).

Of course, one of the major changes in news field is that people are now more likely to get their information online rather than from traditional media (ibidem). This implies that a piece of news can be modified accordingly to the device it is displayed on: different version of the same news can coexist in order to suit the best format to every digital support (ibidem). An important online feature that allows editors to modify news in real-time are tools like Chartbeat, which report the most read topics online and enables producers to focus only on news that are interesting for the public (O'Lear, 2013).

Thanks to new technologies, news can now be composed only by pictures or videos, without the support of written text. Lastly, source gathering is enhanced by social media. Journalist have now a better chance to find stories that may have escaped their attention in the first place, giving voices to everyday people with everyday problems (Haddow and Haddow, 2014).

Although social media have become almost essential for us, they cannot work without the help of traditional media. Every communication channel has its own characteristics that make it more or less suitable for a specific event or purpose, or even for a specific audience. It is important to keep this in mind when trying to study the most effective way to communicate during a disaster, especially when there are many lives at risk. Some research show that traditional and new media engage in a balanced collaboration during crises and emergencies. Usually, the most shared news on social media come from traditional media, as the latter behave like strong and influential media creators; on the contrary, social media help traditional media in spreading crowd-sources information faster and in reaching the widest audience possible.

### 1.2. A successful communication strategy

A successful communication strategy implies a series of different principles that, together, ensure information to flow effectively from organisations and/or institutions to the public (Haddow and Haddow, 2014). This section contains some practices that offer a guideline for emergency managers or organisations that want to create and implement emergency safety plans or disaster management programs. The main goal is making the communication as flawless as possible by providing enough information to the public. The agencies should focus on improving the way individuals respond to emergency and on finding strategies that aim at making the messages as clear, accessible and understandable as possible. There are nine different steps for an effective emergency communication:

- 1. focus on the needs of the public;
- 2. commit in producing an effective communication;
- 3. integrate communication in all planning and operation;
- 4. be clear and transparent;
- 5. verify your information;
- 6. give information in a timely manner;
- 7. make yourself available and accessible;
- 8. connect with your audience on an emotional level;
- 9. use social media.

1. Focus on the needs of the public. The first principle is one of the most important for an effective communication in general. In critical situations, the main target is the public, the people that the operators of disaster management want to protect. The first and most important thing to do is detecting and taking in account the needs of the public. During disasters, people need to be carefully informed about what they must do to reduce harm, where to go to reach safety and what to do in order to stay updated on the situation. Similarly, announcements made before the event should include lists of dos and don'ts, massages about the location of the nearest safe area and useful tips on how to protect buildings from massive damages. In order to do so, it is important to keep in mind that even though extensive informational campaign were already created, some people might not have had access to the preparedness information or attended mitigation meetings. Therefore, it is crucial to find a way to come in contact with these subjects and make sure they are informed. For example, two different communication campaigns can be implemented for the same area if experts understand that large portion of a community might not be available to attend the meetings. Similarly, sometimes experts may feel that some communities would benefit more from a specific informative campaign and therefore they will prepare different versions according to their needs.

Another crucial aspect, and one of the points I will focus on in my dissertation, is using a language that everybody understands. When dealing with a heterogeneous public, composed of people with different cultural, social and economic background, and presents different levels of schooling, it is important to follow some simple strategies that can improve the readability of messages. First of all, the use of acronyms or jargons is to be avoided because it can create confusion in the public; using many pronouns is also not recommended, since it can generate misunderstandings. Furthermore, name of places, persons and organizations of interest must be stated clearly, and the use of simple and clear language is always recommended. Of course, when it comes to communicating with the public, one language may not be sufficient. Depending on the country, the official language might not be the mother tongue for a consistent minority of the population. This is why agencies are encouraged to provide a translation of the messages in other languages,

which will enable them to stay connected with the parts of the public that would otherwise be excluded. According to a study carried out by Bartoli and Chiambretti (2013), the issue of language in disaster communication is an element that cannot be overlooked. Using only the national language only could generate some misunderstandings, especially when the messages contain names of places or organisations, which might not have a perfect correspondent between languages. On the other hand, using only a lingua franca such as English, if on the one hand it assures a wider comprehension for foreigners, on the other it may decrease the interest of the local population towards the messages. It is a very delicate matter that the international community must take into account.

Another key factor in emergency communication is identifying the most influential and respected community leaders and entrust them with the task of spreading the messages to the rest of their acquaintances. These facilitators might be church leaders, schoolteachers, local activists and so on. This is particularly useful in municipalities or neighbourhoods where the authorities are not trusted or simply ignored.

Lastly, choosing the right media allows organisations to be more efficient. Usually, television is the most efficient media for emergency communication but, lately, a growing number of people take their information from other sources such as social media or the internet.

2. Commit in producing an effective communication. This part is addressed to organisations or agencies that want to improve their emergency communication skills. Actively participating in the creation of the communication strategies is a good place to start. For individuals, being the designed spokesperson or being involved directly in the phases that come before and after the disaster can be very helpful. In agencies, the communication office should be involved in all decisions concerning emergency or disaster assessment and management. Experts should be consulted at every step of the communication process, so that they can give advice or revise some of the key points. These experts should form highly trained and specialised teams, each one with specific skills and tasks. It is advisable to have at least one communication specialist that can cooperate directly with the media. Furthermore, in the present days, one specialist in digital communication and new media is always a useful resource. Of course, the communication team should stay updated with the latest innovations in

disaster communication, and also in the new frontiers on digital technologies. A very important reminder for agencies is to invest regularly on communication: additional resources and trained staff can improve significantly the quality and quantity of information collection, analysis and dissemination.

- 3. Integrate communication in all planning and operation. This section is also devoted to agencies and organisations. All the decision that are taken within the period of the emergency should involve an expert in emergency communication, in order to identify the communicative issues promptly. Also, every step of the process should include a specific strategy that aims at disseminating suitable information related to said process. This way, communication efforts become an ongoing process, completely integrated in the activities of the organisations.
- 4. Be clear and transparent. One of the most important rules in communication is avoid spreading false information. It is even more important when dealing with emergencies and disasters. By 'giving false information', though, I'm not implying that an organisation is behaving dishonestly. Sometimes, when a crisis is occurring and there is little time to react, sources cannot be verified. Unverified sources are dangerous for both the public and the agencies, whose reputation could crumble in an instant. It is also recommended to avoid giving information about unknown facts and making promises that might not be kept. If a message states that assistance will arrive within the day, it is imperative to respect what has been communicated. Any delay will reduce the credibility of the organisation.

A very effective method to avoid spreading false information is having an efficient informative routine. Taking care of all the different phases of information building and putting a lot of effort in collecting, analysing and storing data can reduce the level of false information conveyed through the informative campaign. As a disaster unfolds, particular care should be placed on messages regarding casualties, levels of damage, and locations of shelters.

Transparency with the media is another important factor in disaster communication. Agencies should be fully aware of the way every different channel works and acknowledge what the media are reporting about them and how they are doing it. Finally, another effective strategy for always giving trustworthy information is to

- focus on what has already been done by the organisation, this way there is no need to check information.
- 5. Verify your information. As I mentioned earlier, verifying information and sources is fundamental in emergency communication. During a disaster, this is achieved by a thorough understanding of the situation and by a well-organised chain of information retrieval. Investing time and resources on specialised teams for collecting the best information in a timely manner can be very helpful in the long run. In order to validate the collected data, dedicated protocols can avoid spreading news based on rumours. The most important decisions should be made according to information that were analysed by the communication staff. Using data that has not been verified may lead to the dissemination of false information, and this is very unproductive in a disaster-response scenario.
- 6. Give information in a timely manner. During a crisis, people who have access to information are those who have the most power: remember to always share information at an appropriate time, otherwise they may become useless. A team of experts should update news and data as frequently as possible by employing a precise and detailed plan for every type of audience they want to reach. These updates should come at regular intervals, even if no new information is given. As a matter of fact, sometimes updating the public by repeating preparedness and mitigation protocols is enough to ensure a leading role in information spreading.

The types of media used for updating are usually radio, television, social media and newspapers. It is vital to employ as many media as possible, with no distinction of audience, share, or importance. Small news agencies or local newspapers are becoming more and more reliable as time passes. In the last few years, they have proven to be a good source of information during disasters, mainly for their close relationship with the area they operate in.

When new information has been found and checked, an update on the current situation should be prepared and published as soon as possible, especially if the data are related to warnings or announcements that can be beneficial for the public.

7. *Make yourself available and accessible*. People that are in charge of emergency management operations must be active and participate in every part of the process. The media must witness and be aware of their total involvement during the whole

- development of the event. It is advisable to address frequently to the media and to make other members of the agency accessible as well. Collaborating with other emergency agencies is also a good way to ensure that the media and the public stay informed, so that they can have a clear idea of what is going on.
- 8. Connect with your audience on an emotional level. Showing yourself open and accessible helps in creating a connection with the public. Trust and credibility are two very important factors in disaster communications because they can regulate the way the audience respond to disaster messages during a crisis. In order to obtain credibility and build a steady relationship with people, visibility is another key factor. Frequently addressing the media reassures the public and makes them know that someone is working for solving the situation. Credibility is also achieved by speaking in a simple and direct manner, avoiding acronyms, technicisms and complex structures. If you need to address to an organisation through its acronym remember to do so only if the organisation has already been involved in past disasters, so that the public is more likely to be already accustomed with the name. Always remember to involve every layer of the society during the disaster communication campaign, in particular those individuals that need specific communication channels and find themselves in precarious situations caused by disabilities or impairments. When the public is suffering due to the aftermath of a catastrophic event, emergency communicator should be empathic and should try to ease the pain. Visiting the disaster sites, making yourself visible and talking to those who have experienced the disaster are appropriate ways to show empathy. This attitude should last during the whole disaster management process: consistency is very important because it helps in building an emotional and trustworthy relationship.
- 9. *Use social media*. Social media have become the most important and lively communication channel during disasters. Emergency communication staffs should be updated to the latest trends when it comes to using social media. Though, it is also important to use traditional media as well, since the more channels are used the better.

### **1.3.** Emergency life cycle

According to the conventional description of emergency response and management, emergencies are usually represented as a cyclical process that is divided in different parts,

each of which constitutes a distinctive phase of the "emergency life cycle". The division into different phases allows agencies and organisations to identify more promptly which strategy is more effective for every situation and to make the best decisions in order to minimize damages and restore safety.

Before explaining in detail the emergency cycle, it is important to give the definition to some of the keywords that are found in this dissertation, starting from disaster. According to the work of McFarlane and Norris (2006:4), a disaster is:

A potentially traumatic event that is collectively experienced, has an acute onset and is timelimited.

Houston et al. (2012) state that disaster can be caused by different phenomena and can be divided in three different categories: natural, human or technological. Natural disasters are floods, earthquakes, volcanic eruptions, hurricanes and so on; human disasters are those caused directly or indirectly by men, like oil disasters, collapsing of buildings, nuclear disasters and similar; technological disasters are events caused by a malfunction of a technology system, which include any breakdown of technological system that may cause damages to infrastructure or individuals. Despite having different causes, each disaster is usually divided in three different phases: pre-event, event and post-event (Houston, 2012).

Another important keyword is 'disaster communication', which is often considered a product of the mass media and involves disaster messages and news coverage of the event. In reality, the origin of disaster communication is to be attributed to private or governmental communication agencies that employ highly trained staff and create efficient communication campaigns for emergencies and disasters. Reynolds and Seeger (2005:46) define disaster communication as:

an activity that seeks to explain the specific event, identify likely consequences and outcomes, and provide specific harm-reducing information to affected communities.

Finally, the term 'emergency' is defined as:

something dangerous or serious, such as an accident, that happens suddenly or unexpectedly and needs fast action in order to avoid harmful results (Cambridge Online Dictionary).

### 1.3.1. The four phases of emergency management

The United States Federal Emergency Management Agency (FEMA), like many other agencies, distinguishes four consecutive phases during emergencies, which form a circular scheme. The passage between one phase and the next one is marked by events that might be more or less evident, therefore is sometimes difficult to identify under which category an event fall.



Figure 4. A graphical representation of the emergency life cycle

The first phase is called *preparedness* and it characterises the period before the critical event. It does not imply a direct action, but it is a useful phase for planning operations, monitoring the territory, and detecting the possibility of an upcoming disaster. Some of these operations include: planning and executing disaster drills, creating and implementing emergency telephone numbers, providing useful instruction and installing measures that can help during the emergency. The know-how employed during this phase usually comes from the experience gained from previous emergencies. The goal of the *preparedness* phase is to create a sufficient level of promptness and to react quickly to every disaster that may occur. Of course, many different organisational levels are involved in the decisions and preparations during this period.

- The second phase is called *response* and starts when a disaster takes place. All the strategies that have been devised during the first phase are now put in practice with the objective of containing the emergency and reducing damages. Response implies an immediate and decisive action. During this phase, a high level of safety and well-being of the population is achieved if the preparedness phase was well implemented before the disaster. It is also the time to assess the validity of the strategies implemented during the previous phase and, if necessary, modify them according to the type of event. Some of the response activities include: activation of all the useful resources to cope with the emergency, creation of disaster recovery centres of control and coordination, creation of safe zones for shelter, elimination of critical situations, research for survivors and missing people. Moving to an emergency-based legislation is also useful during this phase.
- The third phase is *recovery*. The beginning of this phase is marked by the end of the emergency strictly speaking, which is usually the moment when people and properties have been de-risked. Throughout this period the objective is to restore safety and return to normality as soon as possible and all attention is shifted on bringing the social, economic, urbanistic and productive situation back to their normal status. Of course, it is important to carry out an evaluation of the damages caused by the disaster and use the information for a renovated strategy of disaster response. Paying attention to this kind of analysis can improve emergency response and its prevention, or, in case of disasters of great entity, it can help containing the worst consequences.
- ➤ The fourth and final phase is *mitigation*. During this phase, which lasts for a long period of time, agencies try to find the countermeasures to avoid the occurrence of other disasters or, at least, to avoid their most dangerous consequences. These operations can be carried out with different modalities. For example, if the event had natural causes, then infrastructure can be reinforced, and the natural geography can be modified; if it is technological, more extensive control protocols can be implemented and so on. An effective informative campaign is often helpful during this phase because it can inform people about risks and how to overcome difficulties

or avoid damages when the next disaster hits. The mitigation phase ends with a new phase of preparedness, starting a new emergency cycle.

### 1.3.2. Applying the communication principles to the emergency cycle

In this section, I will outline how the principles for an effective disaster communication apply for each of the four phases of the emergency life cycle as elaborated by Haddow and Haddow (2014). Some principles are suitable for every stage of the emergency and should always be taken into consideration. These basic principles are:

- always focus on the public's need;
- commit in every step of the communication process;
- involve communication experts in every step of the disaster management process;
- give information in a timely manner.

Other principles, instead, suit one or two phases better, as shown below.

### Preparedness

During the phase of preparedness, communication campaigns are usually focused on two main objectives: preparing for the next emergency and provide useful information to the population before it occurs. These operations involve different organisations and usually work better when they are implemented locally. The activities proposed by these subjects include, but are not limited to, evacuation training, evacuation practices, weather updates, events status updates, awareness campaigns and so on.

Implementing a preparedness programme shares some of the key aspects with promoting hazard mitigation. In fact, both include: collaborating with trained communication experts — who are in control of the information flow —, addressing to a specific target for each communication campaign, providing an extensive process of message development, and, lastly, using different communication channels, both traditional and new. The last point is particularly important: involving individuals that work in the field of news creation for newspapers or social media will result in a more effective preparedness planning.

The most effective communication plans merge information about the upcoming disaster and a list of actions that the public must adhere to in order to respond effectively to the emergency scenario.

The language should always be easy and understandable. Many agencies recognise the importance of collecting data in the period before a disaster by using both traditional news and social media as source. Thanks to social networks and microblogging platforms, in recent years people can provide real-time information about disasters. On the one hand, people should be encouraged to share information that can be helpful for creating a more effective preparedness program. On the other, this continuous flow of data creates a problem when it comes to checking sources and verifying information. The process of analysing data is difficult and time consuming, but it is of primary importance.

Once a course of action has been established, it should be communicated to the public. When using social media, it is important to keep in mind that the diffusion will be broad and immediate, but also that not everyone is being informed, since not all the population uses these platforms. When using traditional media, instead, the communication staff know that they are reaching the largest audience possible, but with the lack of the advantages of online technology. A combination of both is advisable and might solve the problems of message distribution.

Agencies should always keep in mind that there are people that need specific support in order to follow the course of actions provided in the plans. Elderly people, children and impaired people must be taken care of in the best way possible. Among the individuals that need special attention are people that do not speak the first language of the country. In this case, a translation might be necessary.

Lastly, establishing a strong personal relationship with the community enables the messages to reach all those individuals who do not take their information from neither traditional nor new media. As a matter of fact, many people do not trust the information spread by the media but trust people that share their same community and that have proven to be trustworthy in previous occasions. Therefore, creating a strong community-based network helps in delivering messages to the widest audience possible.

### Response

As reported by Haddow and Haddow (2014), during response information should be accurate and timely. The reports should include what is happening, the location of the event, the immediate consequences of the disasters, the impacts of the crisis and, finally, contacts for assistance. As technology advances, the different communication possibilities grow exponentially, enabling citizens to be an active part in reporting about the consequences of disasters.

During the phase of response, the press has access to the places where the event has occurred, therefore the contacts with disaster communication officials are more frequent. Unlike the previous phases, in which the flow of information goes from communication officials to the media and then to the public, in disaster response there is a broader collaboration between media and agencies. In this period, these operators share the common goal of providing timely and precise information to the public. Besides the media, individuals that share pictures or video of the event have now become precious sources of data. By exploiting the community-based networks that usually originate during preparedness, the flow of information becomes bidirectional: on the one hand, information can be spread locally by trusted community leaders; on the other, disaster communication officials can collect precise data of the impact of the disaster in each small community.

The most efficient way to improve communication in disaster response always starts by creating a written emergency communication protocol, which allows for a more immediate and thorough course of action. Collecting and analysing data is another crucial point that needs to be taken into consideration. Timeliness and accuracy are precious factors that must not be underestimated. Information about the immediate aftermath of the disaster and about damage assessment are the first that should be collected. In order to allocate the resources more efficiently, data must be analysed and sorted according to their priority. When the disaster is of huge proportion and many different public or private organisations are collaborating for providing the most efficient disaster response, a data collection network should be established to collect information from every possible source. Cooperation is a key factor. Of course, once the data has been collected and analysed, it is time to share it with the public, the media, and institutions.

In disaster response, the contacts with the media are frequent. They should be called as soon as possible after the event to decide which information should be given first. Also, messaging through social media is now one of the most effective way to communicate danger immediately. Always remember that should be the leaders of the disaster management agencies to address the media. This serves two different purposes:

- spreading detailed and trustworthy information about the disaster, the consequences and about what has been done so far.
- Creating a relationship built on trust and reassure the public that the organisations are doing everything in their power to help the population get back to normal.

Besides the leaders, also other members of the communication staff should be available at any time, mainly to control the flow of information towards the media. Television, social media and newspapers need to share images, videos or interviews during the phase of response. It is better to control this information and make sure that updates are being given at regular intervals. These updates should include the consequences of the disaster, the damages to people and infrastructure and the actions that have been carried out by the agencies. In order to avoid rumours and misinformation, it is important to be always ready to answer the many questions that the media usually have for the emergency management organisations. This way, credibility and trust are preserved.

Social media are incredibly useful resources during the response phase. Blogs, social networks, microblogging sites help in keeping the public informed. Some trained members of the communication staff should be up to date with the latest tendencies regarding social media and should use them as a source for their response activities.

### Recovery

The third phase in disaster and emergency management focuses on giving assistance to people and communities after the event. The attention of the media has now shifted to other topics as well, therefore this phase is more about marketing and Q&A sessions. The high number of agencies and the huge amount of messages that are produced after the event increase the possibility of misinformation. The parts of the communication staff

that are specifically trained for information retrieval and data confirmation should be extra careful in evaluating the reliability of the sources. These experts should follow the schedule that is usually created during the preparedness phase. Information retrieval staff should cope with news that were posted before and after the disaster.

Recovery information can be communicated through different channels: traditional media usually help in giving more detailed and extensive information. On the contrary, social media help spreading information fast. Local networks, instead, facilitate the communication to the smaller parts of the community.

### Mitigation

The goal of mitigation is to reduce the consequences of future disasters and lessen its consequences on people, infrastructures, economy and so on. Both private and public organizations and/or agencies should be involved in this process, as they usually play an active role in providing informational assistance. When creating a communication program for mitigation, there are four main steps that must be taken into consideration:

- 1) involve all members of the community by building a solid relationship with them;
- 2) understand and address the needs that are specific to a community;
- 3) identify possible solutions that can be used in the mitigation process;
- 4) create funding systems that enable economic support for the plan's implementation.

A mitigation programme can be anticipated by a marketing plan that helps developing an extensive communication campaign. This campaign should follow the rules about language clarity and explain step by step how mitigation works, what are the main objectives, and which results are expected.

An effective campaign should be implemented by a trained staff, which should also on establishing a durable relationship with the media and other subjects that can be useful to fulfil the purpose of the mitigation campaign. The media involved in the communication process are both traditional and new. Television, radio and newspapers help in reaching the widest audience possible and allow managers to have a better visibility to the audience. On the other hand, social media grant a better exchange of ideas and

involvement of the public. Information should remain accessible for anyone for the longest period of time possible. In this case, social media and new technologies have a head start, as they enable organisations to create extensive databases of all the messages posted during an event.

Different mechanisms can be promoted to spread information in the most effective way: beside the internet, other means are useful in this situation, such as printing brochures and informative materials, paying advertising or creating specific Public Service Announcements (PSAs), or, furthermore, collaborating with institutions to create meetings or workshops about disaster mitigation.

Each part of the public perceives and understands risks in a different way, so much so that the communication campaign should include different messages and address them to the most suitable part of the public. Thus, one of the most important aspect during mitigation is adapting each message to the different types of audiences.

### 1.4. Social media users and uses in disaster communication

### 1.4.1. Social media users

According to Houston et al. (2013), the major users and consumers of social media during disasters are:

- 1. *individuals*. It includes common people that use social media for their private interests and not because they are part of an organisation. During a disaster, individuals tend to use social media if they are close to the area where the event is occurring, whether geographically or emotionally.
- 2. *Communities*. It includes groups of people that insist on the same area or are connected by common interests or values. During a disaster, they usually use social media to rapidly communicate with each other.
- 3. *Organisations and agencies*. Unlike communities, these groups of people have a structure and share a common goal. Some organisations can be directly involved in disaster management or communication and use social media for coordinating a plan of action or for other purposes. FEMA and *Protezione Civile* are examples of this kind

- of organisations. Other organisation can be just affected by a disaster and so use social media for sharing news about possible damages to people or infrastructure.
- 4. *Governments and institutions*. It includes the State, federal organisation and institutions in general. They use social media to share important information or updates regarding the disaster.
- 5. News media. It includes traditional or new media; they use social media to share news.

### 1.4.2. Social media uses

As I have mentioned earlier, disasters are divided in three different phases: pre-event, event and post-event. The following table, created by Houston et al. (2013), shows the different possible social media uses and in which phase of the disaster they usually occur.

Disaster social media use	Disaster phase
Provide and receive disaster preparedness information	Pre-event
Provide and receive disaster warnings	Pre-event
Signal and detect disasters	Pre-event → Event
Send and receive requests for help or assistance	Event
Inform others about one's own condition and location and learn about a disaster-affected individual's condition and location	Event
Document and learn what is happening in the disaster	Event → Post-event
Deliver and consume news coverage of the disaster	Event → Post-event
Provide and receive disaster response information; identify and list ways to assist in the disaster response	Event → Post-event
Raise and develop awareness of an event; donate and receive donations; identify and list ways to help or volunteer	Event → Post-event
Provide and receive disaster mental/behavioural health support	Event → Post-event
Express emotions, concerns, well-wishes; memorialise victims	Event → Post-event
Provide and receive information about (and discuss) disaster response, recovery, and rebuilding; tell and hear stories about the disaster	Event → Post-event
Discuss socio-political and scientific causes and implications of and responsibility for events	Post-event
(Re)connect community members	Post-event
Implement traditional crisis communication activities	Pre-event → Post-event

Figure 5. Table that shows the main social media uses during an event

- 1. Provide and receive disaster preparedness information. Individuals and organisations must know how to react to a disaster. Social media are useful tools for disaster preparedness in the pre-event phase. Furthermore, they enhance the possibility of informing not only those who are willingly looking for information but also those who came across these messages unintentionally. This phenomenon happens because social media are based on a complex system of users share their interests with others. This intrinsic characteristic of social media increases the desired effect of informing people. The connections that are created during the pre-event and preparedness phases are likely to continue during the other phases as well.
- 2. Provide and receive disaster warnings. Before a disaster, social media can be useful to send and receive warnings (Vieweg et al. 2010). Individuals, private or public organisations, and institutions use these platforms to spread vital information to the society. Some suggest that, in the future, warning messages could be sent to anybody that has a mobile internet access in a specific geographical area (Samarajiva, 2005). This kind of system could enable a fast and extensive diffusion of disaster messages.
- 3. Signal and detect disasters. As I have mentioned earlier, thanks to social media any user can now post real-time updates about an event in different platforms. According to Warner (2012), some software program that provide a real time scanning and monitoring of social media could be developed in the future. The scholar also suggests that, in the near future, social media and mobile devices will be so technologically advanced that they will detect disasters and send information about them automatically.
- 4. Send and receive requests for help and assistance. Social media are commonly used in critical situations when people need to send a request for help (Warner, 2012). Many research have shown that a surprisingly high number of Tweets and other online messages contain requests for assistance during a disaster. Even in this case, in the near future some online platform could provide a useful service for monitoring and collecting help requests.

- 5. Inform others about one's own condition and location and learn about a disaster affected individual's condition and location. Immediately after a disaster, the first thing people usually do is check if their family or their friends are safe. Of course, social media suit for this kind of need perfectly, because they facilitate the process of connecting with other individuals.
- 6. Document and learn what is happening in the disaster. Uncertainty is common in the disaster areas. People search for news about the event, and thanks to social media they can gather and spread information about the consequences of the disaster (Vieweg et al. 2010). Depending on the aftermath, social media may sometimes be the only communication channel to stay in touch with others and with the authorities. Twitter, for example, facilitates users in documenting a specific disaster by means of hashtags. According to Palen et al. (2009), unlike what happened in the past with traditional media, "the post-disaster landscape is marked by a 'decentralized, highly distributed information production", which means that now individuals act like 'brokers' and valuable sources of information. During disasters, social media users contribute to the whole frame of posting, commenting, retweeting that develops in the post-event. This innovative type of communication supports agencies, individuals and journalists on having access to a variety of news, which can be then collected, checked and distributed. Of course, frequent and uncontrolled posting can lead to believe that a portion of the messages are not reliable, and this increases the concern about information credibility.
- 7. Deliver and consume news coverage of the disaster. This function is also associated with information gathering, but this time it focuses more on the coverage of the event from a journalistic point of view. Lately, social media have started to behave as 'distribution channels' for traditional news agencies, enabling a wider and more extensive coverage and spreading of the information.
- 8. Provide and receive disaster response information; identify and list ways to assist in the disaster response. Social media help in the process of informing people and agencies about disaster response. Thanks to their fast updating, new media can

generate a communication flow and distribute information where they are more needed. According to Williams et al. (2012), community-driven disaster social media platforms can be particularly helpful in spreading response information.

- 9. Raise and develop awareness of an event; donate and receive donations; identify and list ways to help or volunteer. Through social media, people can create initiatives to gather money or raise awareness in favour of those who were hit by the disaster. New media provide a chance for individuals and organisations to find a way to facilitate the phases of recovery and response (Williams et al. 2012). These initiatives have the main goal of incrementing the level of awareness and of motivating other individuals to take action, donate or volunteer. In the aftermath of a disaster, social media users can help both in creating and curating information about its consequences and in raising awareness for present or future events.
- 10. Provide and receive disaster mental/behavioural health support. According to Jain (2013), the number of people that use social media for health and mental support is increasing. New media provide a simple and easy way for individuals and groups to stay connected with those organisations that deal with mental and behavioural services. In these regards, the primary function of social media is connecting people that are experiencing similar difficulties to their family or to other individuals that are currently in the same situation. Some of the social media basic functions such as likes, retweets and sharing represent a way to stay closer and virtually comfort people. Also, using social media can generate attitudes that can improve mental and behavioural health.
- 11. Express emotions, concerns, well-wishes; memorialize victims. As we all know, one of the uses of social media after a disaster is expressing emotions, concerns and mourn victims. Through their personal accounts, people can express their mourning even if they live in a distant area or are currently far from home.

- 12. Provide and receive information about (and discuss) disaster response, recovery and rebuilding; tell and hear stories about the disaster. During the post-event phase, people usually still use social media platforms for staying in touch with others and sharing their thoughts and personal experiences. According to Houston et al. (2012), event coverage on social media lasts longer than in traditional mass media. Thanks to new media, disaster discourse can be facilitated, helping citizens in finding a way to access information and solutions provided after the disaster.
- 13. Discuss socio-political and scientific causes and implications of and responsibility for events. People often try to find the reasons behind a disaster or figure out what or who is responsible for it. Uncontrolled discussions can lead to actions of hostility. Given the possibility of a bilateral communication, social media can be used to improve the quality of the post-event processes.
- 14. (*Re*)connect community members. Tragic events like disasters can change relationship in an instant. Social media platform can help both in reconnecting members of the community that were separated because of the crisis, and in creating new connections. Bunce et al. (2012) report that connections that are created in the period that follows a disaster may result in lasting longer than other relationships. This indicates the potential of new media in enhancing connections and foster resilience.
- 15. Implement traditional crisis communication activities. According to Houston et al. (2010):

Disaster social media also can be used for traditional crisis communication activities such as to restore organizational normalcy, influence public perception, and regain and repair image and reputation.

This type of communication is considered the only one-way communication through social media.

#### **CHAPTER TWO**

## 2.1. The credibility of a communicative source

In this section, I will try to identify which are the criteria that determine the credibility of a communicative source. According to Renn and Levine (1991: 180), credibility is based on the levels of trust and confidence placed in a source; in the authors' words, credibility is:

a product of long-term evidence and commonly shared experience that a source is competent, fair, flexible to new demands, and consistent in its task performance and communication efforts.

The topic of credibility plays an important role in many different contexts of our social, emotional and working life, and directly affects the interactions we have throughout our entire existence (Gili, 2005). Before focusing more in detail on the many psychological factors that contribute to determine the credibility of a source, I explain in detail about the meaning of the term 'credibility' according to the current literature. People tend to associate credibility with the fact of 'being trustworthy', which is instead an intrinsic characteristic of an individual or a source. Recent studies show that credibility is a very heterogeneous psychological construct (Haas and Wearden, 2003). Gili (2005) states that credibility is not only an intrinsic characteristic of the source, but it is the product of a relational process that links a subject to a source. By defining credibility as a 'perceived quality', some authors highlight that the act of attributing credibility to a given communicative source is influenced by the personal characteristics of the individual and by the intrinsic features of the source (Fogg et al., 2002; Fogg and Tseng, 1999). An individual's cognitive style, the inclination towards trust or suspicion, or the consequences of previous experience are all elements that affect the perception of credibility. Furthermore, according to Lombardo et al. (2007) and as was discovered in the early studies on communication, the subjective assessment of credibility depends on the simultaneous evaluation of trustworthiness and expertise. Fogg et al. (2002) states that the concept of trustworthiness includes the perception of qualities such as 'being trustworthy', 'having good intentions' and 'giving correct information'. Expertise, instead, refers to the level of acquaintance that the subject has with the source.

# 2.1.1. The problem of information credibility on social media

According to Lombardo et al. (2007), the study of credibility is now becoming increasingly important when it refers to the Internet. The web is a place where there are millions of websites, search engines and services whose main goal is giving information of different nature (economic, medical, academic, financial and so on), and influence decisions (buying something, subscribing to newsletters, ask for medical advice). The different degree of credibility of online sources is linked to variables such as accuracy, reliability, vagueness, completeness and usability (Lombardo et al. 2007). Being able to evaluate the information available online is becoming fundamental for Internet users and for web-designers as well. The first look for the most reliable and useful sources, while the second must design websites that are as usable and professional as possible, granting a higher level of credibility (Fogg, 2003). It is easily understandable why the interest of scholars has recently shifted from traditional offline contexts to web-credibility. In this field, one of the major contributors was Fogg, who in 1999 inaugurated a new field of research at Stanford University, conducting large scale empirical studies on credibility (Lombardo et al. 2007). One of the major findings of the Stanford University team was the classification of online credibility into four main dimensions:

- 1. *presumed credibility:* this type of credibility comes from the general thoughts and stereotypes that crosses the mind of the user.
- 2. *Reputed credibility:* it indicates how much a user believes something or someone according to what has been said by a third party.
- 3. *Surface credibility:* it describes a form of credibility based on a superficial analysis of the source. This can be associated with the concept of judging something at first sight.
- 4. *Experienced credibility:* it is the credibility that a user assigns to a source and its given by her or his direct experience with that source. According to the authors, daily or frequent interaction with a website influences its credibility positively or negatively.

According to Fogg (2003), there are specific characteristics of websites that make them better or worse in each of the aforementioned dimensions. As explained by Lombardo et al. (2007), one of the elements that can improve *presumed* credibility of a website is the

presence of links to competitors' web pages. Similarly, *reputed* credibility is higher if the web source contains links to accredited websites or the source itself has been recommended by somebody we trust. Furthermore, some studies have highlighted the fact that *surface* credibility is positively influenced by an appealing graphic. On the contrary, elements like banners, disorganised content, or an obligation to subscribe are all features that reduce *surface* credibility (ibidem). Lastly, *experienced* credibility is enhanced by user-friendliness, personalisation and content coherence. Due to the quickness of modern web browsing, it is hard for websites to be obtain *experienced* credibility by users, but, once that it has been earned, it is the most influential type of credibility.

Other relevant factors of web-credibility are linked to the efficiency on the website's costumer care services: short or long time to reply, confirmation of the operations, presence of bibliography are just some examples (ibidem). Paying attention to these elements can help increasing the level of expertise attributed to the online source. Of course, on the other hand, the presence of issues and poor performance lowers the level of perceived expertise.

Side to side with expertise, another important dimension of web-credibility is *reliability*, which implies an ethical aspect of the source, or rather its integrity or correctness (Fogg and Tseng, 1999). The level of perceived credibility is higher if in the website there are the physical address and the telephone number of the company or of the people responsible for the website.

According to Lombardo et al. (2007), it is important to point out that the many components of a website do not automatically influence credibility. The evaluation follows a rule called Prominence-Interpretation Theory (Fogg, 2003), which states that the process of assessing credibility of online information requires two different passages. First, the user has to notice something (prominence) and then s/he has to elaborate a judgement about this element (interpretation). This mechanism can be influenced by different factors, which can be psychological or contextual, as explained by Lombardo et al. (2007). In prominence, the probability of a graphical or contextual element to be noted and perceived by a user depends on her or his emotional involvement, by purpose and motivation, by the topic of the website, and by the intrinsic personal characteristic of the user. On the other hand, in interpretation, the positive or negative judgment about an

element can be influenced by the context, which is composed of rules, environment and expectancy, and by the general beliefs and the expertise of the user (Fogg, 2003a).

Obviously, the judgment on credibility can be affected by distortions or mistakes, both when dealing with offline or online sources. According to Lombardo et al. (2007), there are two different type of mistakes: gullibility error and incredulity error. The first type refers to users that have an unconditioned faith towards a source and usually judge it as credible even if it is not. On the contrary, the second type of mistake makes the users suspicious about a source, even if it is reliable (Fogg and Tseng, 1999). Lombardo et al. (2007) conclude their research by stating that credibility is an important psychological dimension in traditional interpersonal communicative context as well as in the more recent online ones.

When dealing with crisis messages and disaster communication, credibility becomes a very delicate matter. As I have said many times in my dissertation, during a disaster the messages published in microblogging platforms provide real-time updates about the evolution of an event. Usually, this type of information travels faster and reaches more public than any news spread through traditional media. In order to understand how social media have influenced the perception of credibility, it is important to define the concept of 'gatekeeping'. Taking as reference the work by White (1950) and Lewin (1947), Westerman et al. (2013:171) define gatekeeping as:

[...] the process through which content creators decide what stories will be covered and reported, and thus, what information is released to consumers.

With the creation and implementation of new media, the number of individualities that can act as gatekeepers is increasing (ibidem). Since their role is to check the trustfulness of information, the contribution of these users is really important for assessing the credibility of a source. With new media, it is sometimes possible to skip the traditional gatekeepers and get directly to the primary source, which in the present days is more likely to be a news consumer rather than a professional news producer. Of course, direct sources of information in many cases lack professional gatekeeping: individuals, which have become news consumers and news creators at the same time, are now more responsible when it comes to deciding if a piece of information is credible or not (Westerman et al, 2014).

According to Bruns (2008), in the last few years the entire notion of gatekeeping has changed and has now evolved into a different phenomenon called 'gatewatching'. The main function of gatewatchers is to monitor the credibility of the information that passes and mark its content as useful or not; the purpose of gatewatching is also to avoid spreading incorrect information. In the Twitter universe, commenting and retweeting are a type of gatewatching (Westerman et al., 2014).

The way a piece of news is perceived and, therefore, the amount of credibility level it has for the audience, is a very important part of news creation. Some research shows that the level of credibility is significantly higher for news published by traditional media, even if the same news is published on social media with the same title (Schmierbach and Oeldorf-Hirsch, 2010).

# 2.1.2. Trust and credibility in emergency communication

During a crisis, institutions and emergency response actors find themselves dealing with the problem of effectively proving that their decisions are legitimate. In the meantime, the general public often has to deal with a wide range of incomplete or even contradictory information. For every professional subject involved in emergency communication, trust and credibility are two critical factors, mainly for two reasons: they can be used to influence the behaviour of individuals; they offer the possibility of controlling the general conduct of large groups of people. Despite their importance, trust and credibility are still being sometimes neglected by people involved emergency communication; in doing so, communicators miss the opportunity to rely on a tool that would give them a powerful source of control and influence over the public.

According to Renn and Lavine (1991), one of the major issues about trust building is the considerable gap that exists between how the public perceives risk and how it is instead measure and perceived by the authorities. As a matter of fact, experts tend to put on the same level risks that have a similar probability to occur and an equal magnitude. Similarly, they usually pay more attention to risks that have a low percentage of probability to occur but with higher consequences for the public, rather than considering more important events that are more frequent but have a lower impact. The public, instead, might prefer institutions to pay more attention to more frequent events, and at the

same time neglect and underestimate the consequences of less probable destructive disasters.

Before giving a more detailed explanation of trust and credibility in relation with emergency communication, I need to define the concept of 'trust'. If we look at the Cambridge English Dictionary, the term *trust* is defined as follows:

To believe that someone is good and honest and will not harm you, or that something is safe and reliable.

As we can see, the general meaning of this word is associated with a feeling of reassurance and the sentiment of being safe. The term, though, takes a different meaning when it is specifically related to emergency and risk communication. Sheridan (1985) gave a list of possible definitions of the word trust, here are the most relevant:

- an Actor's willingness to arrange and repose his or her activities on Other because of confidence that Other will provide expected gratifications" (Scanzoni, 1979);
- a generalized expectancy held by an individual that the word, promise, oral or written statement of another individual or group can be relied on" (Rotte, 1980);
- a generalized expectation related to the subjective probability an individual assigns to the occurrence of some set of future events" (Rempel, Holmes and Zanna, 1985);

All these definitions contain a point in common, which is the user's need for reliable information taken from a truthful and trustworthy source. Renn and Lavine (1991: 179) used these definitions to give their explanation of the concept of trust in the act of communication:

[Trust] refers to the generalized expectancy that a message received is true and reliable and that the communicator demonstrates competence and honesty by conveying accurate, objective, and complete information.

This definition is exhaustive and well represents how trust is perceived in emergency communication. Sometimes, the term *confidence* is employed as a synonym of *trust*, even if it has a slightly different meaning. Confidence denotes an expectancy of receiving trustworthy information by a source that has proven to be reliable over a long period of time (Renn and Lavine, 1991).

The main characteristics of trust are perceived confidence, objectivity, fairness, consistency and faith (ibidem). All these characteristics are important, but they do not

need to be present all five simultaneously. As reported by Renn and Levine (1991), the stronger influence of one of the factors can compensate for the total absence of another. Contrary to trust, confidence does not have fixed characteristics, rather it is built upon

past records of reliability of a source's communicative abilities and goal fulfilment.

context.

The following table, created by Renn and Levine (1991:182-183), contains some examples of positive and negative factors that influence trust and credibility in disaster communication at four different levels: message, person, institution, and political/cultural

MESSAGE			
Positive: Negative:			
relevant information	delayed information		
regular updates	no updating		
accurate information	sketchy reporting		
clearness and conciseness	• jargons, abbreviations, unclear		
unbiased information	• biased		
takes into account the interests of the public	• against the interests of the public		
admits uncertainty	<ul> <li>pretends to give the absolute truth</li> </ul>		
has a legitimate source of information	does not check its source		
well organized	no organization whatsoever		
• intense, powerful and with a precise	dull and without conclusions		
conclusion			
PERSON			
Positive:	Negative:		
admits uncertainty	• cockiness		
responds to emotions	indifferent		
• is competent (or it appears competent)			
is personally involved	• is an outsider		
clear and concise	uses a technical and difficult language		
perceived as expert or attractive			
charismatic			
honest, objective and altruistic			
INSTIT	UTIONS		
a) Abstract aspects			
Positive:	Negative:		
healthy economy	<ul> <li>period of recession</li> </ul>		
honest and efficient political system	widespread corruption		
• tranquillity			
good leadership	lack of leadership		
altruistic motivation	self-centred motivation		
• peace	• war		

b) Concrete aspects			
Positive:	Negative:		
strong leadership	• incompetent leadership		
positive personal experience	<ul> <li>negative personal experience</li> </ul>		
reliable Public Relations	• no Public Relations		
good quality services	<ul> <li>poor quality services</li> </ul>		
positive past performance	<ul> <li>negative past performance</li> </ul>		
socially involved	no social involvement		
daily contributions to the public			
POLITICAL/CULTURAL CONTEXT			
Positive: Negative:			
faith in institutions	structural decline		
balanced and well-functioning system	<ul> <li>poor leadership and political instability</li> </ul>		
	• social unrest		
	• corruption		
	• serious political and social turmoil		
innovation and new technologies			

Table 1. Positive and negative factors the influence the concepts of trust and credibility in disaster communication

This table is really helpful to identify the most important characteristic for a positive credibility at every level of emergency management. If we focus on the first part of the table, the one about messages, we can clearly see that many of the positive feature that grant a good reception during an emergency matches what I have presented in the first chapter.

# 2.2. Readability

One of the main purposes of this work is measuring the level of readability of social media messages posted by trusted emergency management agencies. Readability of messages is central in disaster communication. Despite this, some communication agencies do not take into account the average level of schooling of the population and this behaviour can lead to misinterpretation and danger. Although the readability of short messages has been neglected by the scholars for many years, the rising importance of social media in crisis and disaster communication has started to spark the interest of researchers all over the world.

According to Dale and Chall (1949:23), readability is:

The sum total (including all the interactions) of all those elements within a given piece of printed material that affect the success a group of readers have with it. The success is the extent to which they understand it, read it at an optimal speed, and find it interesting.

Readability should not be confused with two other important aspects that concern reading 'reading'. The first is the 'reading ability', which indicates the level of reading skills of an individual; the second is 'legibility', which is associated with the physical characteristics of a text and includes features such as font, structure and spacing (DuBay, 2004). According to Temnikova et al. (2015), the readability index of a text is expressed through an integer or digital number and its calculation takes into account different features:

- vocabulary,
- word length and ambiguity,
- sentence length,
- presence of figurative language,
- syntactic complexity and ambiguity,
- text structure,
- cohesion.

Why is this index so important? By assessing the difficulty of a text, readability indexes provide a tool for adapting the messages to the average level of understanding of the population, which depends on various factors like age, level of schooling, type of education, profession, provenance and so on.

Since dealing with emergencies and disaster requires the production of a clear and accessible communication, organisations that use social media to interact with the public should also be aware of the readability level of the messages they produce. This way, they will make sure that, beside containing useful information, the texts are also readable and clear. According to Davenport and DeLine (2014), tweets are less understandable than any other type of short messages, like SMS or chat messages. Consequently, analysing Twitter messages is a good way to verify the effort that emergency agencies put in posting readable messages.

# 2.2.1. Classic studies on readability

According to DuBay (2004), the scholars that have studied readability have mainly focused on implementing practices and formulas that could help in adapting written materials to the reading ability of the target audience. Since the first decades of the 20<sup>th</sup> century, these scholars have tried to find a solution for calculating the reading difficulty of a text. The first important work about readability was done by L. A. Sherman around 1880 (DuBay, 2004). The English Literature professor Lucius Adelno Sherman noticed that older prose writers used longer words compared to the English writers of his era, and so he started conducting a statistical experiment to analyse how sentence length had changed over time. He found out that, between Pre-Elizabethan times and his time, the average sentence length had reduced by more than half, leaping from 50 words per sentence to a mere 23 words per sentence. Among his results, Sherman highlighted a principle that is still valid in the present days: shorter sentences and concrete terms increase text readability. This approach was the first in this field to include statistic as a mean for assessing the readability of written texts. Furthermore, Sherman noticed that written language was becoming more and more effective by imitating the features of the spoken language, which is known to be more efficient than written language (ibidem). In his book titled Analytics of Literature, A Manual for the Objective Study of English Prose and Poetry (1893:312), he wrote:

Literary English, in short, will follow the forms of the standard spoken English from which it comes. No man should talk worse than he writes, no man writes better than he should talk [...]. The oral sentence is clearest because it is the product of millions of daily efforts to be clear and strong. It represents the work of the race for thousands of years in perfecting an effective instrument of communication.

Sherman's theories were later on confirmed by Flesch, who discovered a correlation between English and Chinese: both languages were working their way around making the texts simpler by using less complex grammatical constructions. Sherman's main accomplishment was involving the reader in the process of readability assessment. As a matter of fact, the core of his study had been the close relationship between readability and the audience's expectations and ability.

After Sherman's contribution, two main events started to increase the interest in the field of readability: the emergence of a first generation of immigrant who found the school textbooks too hard to understand, and the growing number of tools for studying

educational impairments. One of these tools was the first frequency list for English, which was the first tool employed by scholars and teachers for understanding the level of difficulty of a text. Frequency lists are lists of a language's words sorted by the frequency of occurrence in a corpus. According to Nation and Waring (1997), frequency lists are used to provide a scientific basis that enables learners to get the best return for their vocabulary learning effort. Scholars found out that, in other countries beside the USA such as Germany or Russia, teachers used word counts to match a text to the correspondent group of students that could understand it. In order to do so, they looked at the frequency of the words and discovered that the easier words were those that are used more frequently in a language. When students grow up and continue their studies, their vocabulary broadens, and they become capable of reading and understanding a wider range of complex words. In conclusion, scholars became aware that lexical semantic complexity is a strong predictor of the difficulty of a text (DuBay, 2004).

Edward. L. Thorndike of Columbia University was the first scholar to carry out an extensive study for word frequency in English, publishing three books on the subject, the last one containing 30,000 English words sorted by frequency (*A Teacher's Word Book of 30,000 Words*, 1944). After Thorndike, whose contribution to science lasted until the implementation of computers, important research was carried out by George Kingsley Zipf (1949). He used statistics to analyse language and define the principle of least effort for human speech by showing that there is a close relationship between easy and hard words. He called this relation 'Zipf's curve'. This law is an empirical formula that uses statistics to approximate different types of data coming from the field of physics or social sciences and study their probability distribution. In quantitative linguistics, Zipf's law states that in a corpus composed of utterances, the frequency of a word is inversely proportional to its rank on the frequency table. Therefore, the most used word appears twice more often than the second most used word and three time more often than the third higher raking word and so on.

In his work titled *The role of word frequency in readability*, Klare (1968:22) states:

Not only do humans tend to use some words much more often than others, they recognize more frequent words more rapidly than less frequent, prefer them, and understand and learn them more readily. It is not surprising, therefore, that this variable has such a central role in the measurement of readability.

All these works provided a statistical analysis of language and a simple assessment of the difficulty of words and texts and it was not until the 1980s that the readability of a text was also linked to the schooling level of the audience. In their research, Dale and O'Rourke (1981) associated a sample of 44,000 words with their corresponding grade-level scores, providing for the first time a percentage indication of individuals that were familiar with a given word and which was their schooling level. This was a breakthrough in the field of readability and allowed professionals, teachers, professors and editors to rapidly assess the readability level of their publishing.

# 2.2.2. New studies of readability

According to DuBay (2004), it was after the 1950s that new scientific accomplishments accelerated the studies of readability. Reading skills had become important given the high demand of specialized workers that could be employed in new emerging fields. One of the most important contributions from this period was given by George R. Klare, a psychology professor that donated his time to reviewing the previous works on readability but also participated in many important studies concerning this matter and even published some of them (DuBay, 2004). His contributions were important also for other languages besides English. The tests that Klare carried out for proving the readability formulas – which I will present in the following sections – showed the validity of such works even for specialized texts addressed to adult readers. By proving the validity of past research, G. R. Klare played a crucial role in the development of new readability theories and practices (ibidem).

Besides focusing merely on the concept of readability, other scholars were interested in discovering external factors that could affect it. For example, Gates and Zeller, in 1930 and 1941 respectively, studied interest as a factor that could influence readability in children's literature. Their work was also used by Flesch in his reading ease formula for adults, which combined reading ability, level of schooling, considered motivation and expertise as important factors of readability. In particular, expertise seems to be very important for the readability of technical documents. Klare et al. (1955) carried out an experiment that consisted of giving three different version on the same texts to enlistees in training of two Air Force bases in the US. Using the Flesch Reading Ease formula, which I will explain later in detail, they rated the texts as easy, medium and hard. When

they prepared the texts, they made sure that technical terms and the overall content remained unaltered. The results showed that the easiest version on the text was understood better, read much faster and preferred to the others. Furthermore, they discovered that subjects that are more familiar with the content of the text may experience a slight increase in reading profit from easier texts. The results of these experiments were criticized by some scholars. They thought that the little advantage perceived in easier text was not enough to justify the effort in reading it. On the contrary, other researchers were very impressed by this founding (DuBay, 2004).

One of the issues linked to the assessment of reading comprehension is that it can be measured only by means of indirect testing, which implies that the results are sometimes difficult to understand, even for trained scholars. This is true especially when calculating the effect that previous knowledge, expertise, memory and such have on readability and reading comprehension (ibidem). According to DuBay (2004), many of the studies that tried to consider and define these phenomena have shown inconsistencies, but all report how difficult it is to detect the effects that these variables have on comprehension. Some of the studies carried out by Klare in 1955 found out, for example, that immediate retention of information is affected by preferences, showing that people with an higher degree of study in a specific field took more profit in reading a technical text compared to people with lower degrees or people coming from different fields. Klare also designed an experiment to see how much readability was affected by motivation and reading ability. The study showed that when interest is low, then readability plays a major role in information retention. Other scholars found out that expertise and prior information are key factors in the comprehension of the information contained in a text (DuBay, 2004). Finally, Entin and Klare (1985) designed an experiment to study readability and finally measure its interaction with interest and previous knowledge. They tested 66 students and started by assessing their reading skill; then, they gave them a questionnaire that asked their level of interest in some topics and the level of knowledge of the terms contained in the texts. The text was composed of twenty-four passages of the Encyclopaedia: twelve original passages, six of high interest and six of low interest, and twelve re-written passages standardized to a readability level between 12th and 16th grade. The results of the experiment showed that:

- people with low interest and knowledge benefit more from higher readability;
- high knowledge can help understanding even the more difficult texts;
- when interest is high, then there is no benefit in simplifying the text;
- when interest is low, simplifying the text helps the readers understanding better;
- comprehension is improved when the texts are written at the reading level of readers, not when they are too simple.

## 2.2.2.1. The study of text content

According to DuBay (2004), as research on readability were developing fast, the scholars found out that, among the structural features of the text such as coherence and organisation, there were other factors that influenced comprehension and information retention. Some of these were:

- images, abstraction, type of discourse (direct, indirect), type of narration, sentences,
   phrases or clauses;
- difficulty of presented concepts,
- idea density,
- organisation,
- nominalisation,
- passive voice,
- clause structure (embeddedness).

The experts in cognitive linguistics were convinced that the act of thinking was at the base of the act of reading. This was supported by three main reasons: the first was that the meaning of a text is not written and printed on the pages but is given by an act of interpretation that the reader does when trying to construct the meaning of the words. The second reason was that, while reading, people link new information to their previous knowledge, which is stored by means of an organized structure in the long-term memory. The third and final reason was that reading includes an act of meaning reconstruction using both metacognition, which is the ability use a learning process, and attribution, which are beliefs about performance, effort and responsibility (DuBay, 2004).

While reinforcing the idea of text organisation, coherence and structure with new notions, linguists could not entirely empirically prove the impact of these factors on readability. The following notions and results are just some of the efforts to prove these theories (ibidem).

In the late 1970s, Kintsch and his colleagues addressed to readability's cognitive and structural features by looking at the number of propositions. Their findings proved once again that the number of sentences and the difficulty of the vocabulary are the most accurate indexes of the difficulty of a text. Kintsch major contribution was proving that the coherence level affects low-grade readers more than the others. On the other hand, high-grade readers tend to reorganise the text themselves in order to enhance the possibility of understanding the content.

Another important study was carried out by Susan Kemper in 1983 (DuBay, 2004). She examined physical, mental and inferred mental states to determine the inference load by measuring proposition density and density of embedded clauses. Her findings were similar to Kintsch's and proved that sentence length and familiarity with the vocabulary are important factors (ibidem).

Meyer et al. (1982) tried to measure readability by implementing an overall organisation of large portion of texts, stating that texts with a fixed structure are more effective, efficient and helps saving time and fatigue. They found out that presenting information in a text according to a predetermined scheme is very useful when trying to assess readability. Different kinds of plans can be designed according to the category of text we want to produce and to which type of information we want to convey. Organisation within a text can be achieved by highlighting subordination and other elements that mark the relation between two or more items.

According to DuBay (2004), coherence is another core feature in readability assessment. There are usually two different types of cohesion: local and global. Global cohesion is the common key concept that characterises the text as a whole and is used to recall information from memory faster; local cohesion, instead, works at a lower level and is related to the relationship between sentences. Some studies show that coherence is more important for young and less experienced readers, since they do not have the same familiarity and expertise as the older ones.

# 2.3. Readability index for English: Flesch reading ease (FRE)

One of the easier and most efficient techniques for measuring the readability of a text is the *Flesch reading ease* created by Rudolf Flesch. This index measures the level of readability of a written text in English. A result close to 100 indicates that the text is readable by almost anybody, while a low score shows that the message might be hard to understand for the majority of individuals. The formula to calculate FRES is:

$$206.835 - 1.015 \left(\frac{total\ words}{total\ sentences}\right) - 84.6 \left(\frac{total\ syllables}{total\ words}\right)$$

The table below shows how to interpret the results according to the studies carried out by Flesch himself (1979).

Score	School Level	Notes
100.0 – 90.0	5 <sup>th</sup> grade	Very easy to read. Easily understood by a 11-year-old student.
90.0 - 80.0	6 <sup>th</sup> grade	Easy to read. Conversational English for Consumers.
80.0 - 70.0	7 <sup>th</sup> grade	Fairly easy to read.
70.0 - 60.0	8th & 9th grade	Plain English. Easily understood by 13- to 15-year-old-students.
60.0 - 50.0	10 <sup>th</sup> to 12 <sup>th</sup> grade	Fairly difficult to read.
50.0 – 30.0	College	Difficult to read.
30.0 – 0.0	College graduate	Very difficult to read. Best understood by university graduates.

Table 2. The possible scores of the Flesch Reading Ease formula and the corresponding grade level

The table does not represent all the possible results, because some sentences can score higher than 100 or lower than 0, but they are extremely rare cases in standard English texts. Some researchers have focused on calculating the readability for Wikipedia entries divided by topic. As we can see by the following figure, the subject of the text is one of the factors that determines the overall readability of the text. The topics that are easier to understand are those concerning people of sports, music and news, while the least readable are the entries about politicians, philosophers and scientists.

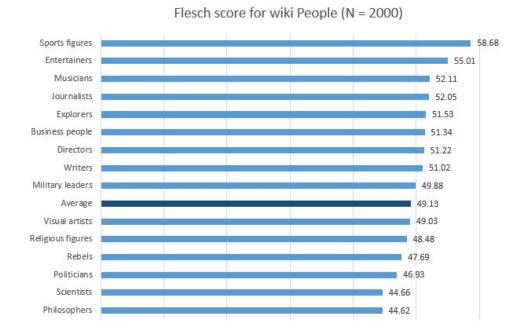


Figure 7. The Flesch Reading Ease for 2000 Wikipedia entries sorted by topic

#### 2.3.1. Flesch-Kincaid Grade Level Formula and ARI

An updated version of the FRE formula was created in 1975 by J. Peter Kincaid and called *Flesch–Kincaid Grade Level Formula*. It was used by teachers, university professors or other individuals for assessing the number of years of education required for understating a text perfectly. The grade level is calculated as follows:

$$0.39 \left(\frac{total\ words}{total\ sentences}\right) + 11.8 \left(\frac{total\ syllables}{total\ words}\right) - 15.59$$

The resulting number indicates the corresponding US grade level necessary to understand a text. E.g. a score of 7.2 means that the text is understandable by a 7<sup>th</sup> grader.

The *Automated Readability Index (ARI)* is another test for the readability of English texts used for representing the level of understanding of a text by American readers. Like the previous index, it indicates to the level of education needed for reading and comprehending a text. The formula for calculating ARI is:

$$4.71 \left(\frac{characters}{words}\right) + 0.5 \left(\frac{words}{sentences}\right) - 21.43$$

Characters indicates the total number of letters and numbers; words represents the total number of words; finally, sentence is the number of sentences. The result is always rounded up to the nearest whole number. The table below summarizes how to interpret the results.

Score	Age	Grade Level	
1	5 – 6	Kindergarten	
2	6 – 7	First/Second Grade	
3	7 – 9	Third Grade	
4	9 – 10	Fourth Grade	
5	10 - 11	Fifth Grade	
6	11 – 12	Sixth Grade	
7	12 – 13	Seventh Grade	
8	13 – 14	Eighth Grade	
9	14 – 15	Ninth Grade	
10	15 – 16	Tenth Grade	
11	16 – 17	Eleventh Grade	
12	17 – 18	Twelfth grade	
13	18 – 24	College student	
14	24 +	Professor	

Table 3. The possible scores for the Flesch-Kincaid Grade Level formula with the corresponding age and grade level

According to Walsh and Volsko (2008), in the United States, a text with a score of 6 is considered easy to read, while a score between 7 and 9 is associated with a text that has an average difficulty, but it is understandable by a large portion of the audience.

## 2.3.2. Readability index for Italian: Flesch–Kincaid readability tests

At first, Flesch-Kincaid test was created only for English, but was then adapted into Italian by Roberto Vacca in 1972. This formula calculates readability considering the average length of words, measured by the number of syllables, and the average length of sentences, measured in number of words. It takes into account two different parameters:

- 1) longer words are generally used less than short words;
- 2) longer sentences are often more syntactically complex than shorter sentences.

For the Italian language, the Flesch test formula is:

$$F = 206 - (0.6 * S) - P$$

The number 206 is a constant number used to obtain a result that is always between 100 and 0. The higher is the number, the more a text is readable. The number 0.6, instead, is another constant that refers to the average length of the words in Italian; S is the number of syllables contained in 100 words; P is the average number of words for each sentence in a sample of 100 words. If the number is above 60, then the level of readability is high; if it is between 60 and 50, the readability is medium; below 40 the readability is low.

## 2.3.2.1. Readability index for Italian: Gulpease Index

Another type of index that assesses readability in Italian is the Gulpease index. Differently from the Flesch test, this formula uses the number of letters rather than the number of syllables and does not take as reference the incidence of a sample of 100 words. This way, calculating the index is simpler and gives better results when dealing with short messages. The Gulpease Index was created in 1988 by a team working for the University of Rome "La Sapienza". It puts in relation three linguistic variables: word length, sentence length and the number of letters. The formula is:

$$89 - LP/10 + FR*3$$

Where LP is the number of letters multiplied by 100 and divided by the total number of words, and FR is the number of sentences multiplied by 100 and divided by the total number of words.

The results are usually between 0 and 100:

- below 80, the text is hard to understand for people that have finished their first degree of education (elementary school);
- below 60, the text is hard for those how have obtained a secondary degree (secondary school);
- below 40, the text is difficult for those who have a high school degree.

## 2.3.2.2. A readability assessment tool for Italian: READ-IT

READ-IT is an advanced tool for readability assessment of the Italian language. Unlike the conventional formulas, which only consider the length of words and sentences, READ-IT also analyses lexical, morpho-syntactic and syntactic complexity (Dell'Orletta et al., 2011). Some of the barriers for the correct comprehension of a written text may be caused by a low education level, a disability, or the fact that the message has been written in a language that is not the mother tongue of the reader. The existing formulas for readability, such as the Flesch-Kincaid test and the Gulpease Index, use simple mathematic functions for assessing the level of complexity of a text. If on the one hand they are easy to calculate, on the other they also have drawbacks. Some of these downsides are, for example, the assumption that longer sentences are always syntactically more complex than shorter ones, or that a word that contains more syllables is always semantically more complex than short words (ibidem). Of course, this assumption is not always true. In recent years a new approach has caught on and has started to take into consideration other features such as:

- a) linguistic complexity,
- b) target audience of the text,
- c) type of application for the readability assessment.

Although including these kinds of factors sure help in making the assessment of readability more relevant and accurate, it is not enough to provide a trustworthy representation of the difficulty of a text. READ-IT, the tool implemented by Dell'Orletta, Montemagni and Venturi, has a specific public and a specific goal: the objective is the simplification of texts for people who are suffering from a cognitive impairment. The scholars' analysis focuses on both syntax and lexis. According to Dell'Orletta et al. (2011), one of the most innovative aspects of READ-IT is that it deals with two different levels of textuality: the text as a whole and each sentence individually. Unfortunately, the results of the tests I conducted on READ-IT for assessing its usability for my dissertation

turned out negative, as the software had many problems in identifying the lexical complexity of even the simplest sentences. Here is an example:

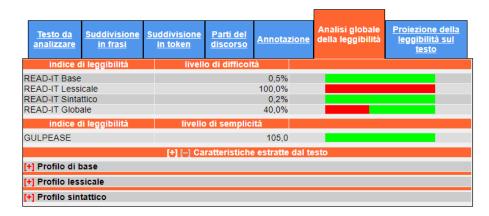


Figure 8. The readability scores of the Italian sentence "Oggi è una bella giornata" provided by READ-IT

The figure shows the analysis of a simple Italian sentence: *Oggi è una bella giornata* (in English, Today is a good day). The global difficulty given by READ-IT, which can be found on the fourth line "READ-IT Globale" is 40%, very far off the GULPEASE index, which instead gives a result of 105.0. While syntactical and basic readability are high, lexical complexity is marked as 100%, even though the sentence contains only common words. Therefore, in this case, the general readability index is compromised by the lexical analysis. Unfortunately, it happens every time. The following figure shows the analysis of an even simpler sentence: *Mi chiamo Alberto* (My name is Alberto).

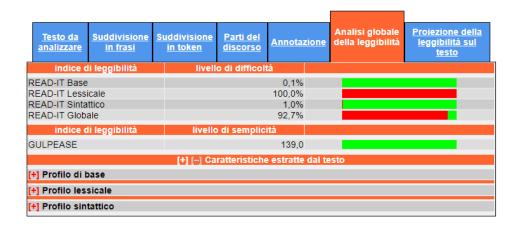


Figure 9. The readability scores of the Italian sentence "Oggi è una bella giornata" provided by READ-IT

As we can see, lexical complexity is still marked with 100% but this time it influences global readability so much that the overall sentence complexity is 92.7%.

On paper, READ-IT is presented as a very useful tool that contains every possible analysis on readability, but the online version that I tried has proven to be less accurate than I expected.

#### **2.4.** Text transformation

Beside providing educators with a tool for assessing the reading difficulty of a text, readability indexes were also used as a starting point for modifying and re-writing texts according to the target audience's grade level (DuBay, 2004).

Although the formulas are based on sentence and word length, transforming a text does not imply a simple operation of word substitution and sentence length reduction, in fact there are many other features that may affect the level of readability of a text (ibidem).

The first research on text transformation, carried out by Klare in 1963, did not give the expected results and only in one case text transformation and manipulation had a positive impact on readability (ibidem). In a later work (1976), the scholar, who was revising the previous research on this topic, identified and classified some factors that all the investigations had in common. He divided the common features into four different groups:

- 1) readability and content of the material;
- 2) competence and motivation of the subjects;
- 3) instructions given during the experiment;
- 4) details of the test situation.

The studies that gave a positive result in increasing readability by adapting the text were those in which the researchers had tried to tackle also these other factors beside sentence and word length (Klare, 1976).

According to DuBay (2004), Klare also created a list of characteristics that could affect comprehension at two different levels:

- words: number of functional words; familiarity and length; concreteness or abstractness; active voice or nominalized verb constructions.
- Sentences: length; active or passive verb; affirmative or negative; embeddedness.

In conclusion, paying attention to these factors could significantly improve the readability of a text. Short messages, though, are more challenging to deal with because the choices of text transformation are very limited, due to the absence of a textual coherence, the lack of sentence dependencies and the very few information about the context.

By studying the readability of tweets during emergencies, Temnikova et al. (2015) have given some recommendations for writing clear and readable tweets in an emergency:

- Each message should not contain more than two main points and the sentences should be very short and concise.
- Any unnecessary word must be deleted.
- All sentences should give complete information and express complete thoughts.
- It is always better to choose basic and familiar words.
- Abbreviations must be kept at minimum or used only if they are more understandable than their respective full form.
- Hashtags should be written at the end of the sentence and should be less than two.
- Mentions (e.g. @username) should be avoided.

## 2.5. Natural Language Processing and Part-of-Speech tagging

In this section I will present the main features of NLP, before focusing on another important step of my analysis, which is Part-of-Speech (PoS) tagging.

In recent years, the interest for Natural Language Processing (NLP) has increased drastically, especially due to the innovation brought by new technologies. According to Kibble (2013), Natural Language Processing is a field of research and application that explores the methods through which computers can learn and manipulate texts or products of natural languages for carrying out useful operations. The basic features of NLP are taken from different disciplines such as computer science, linguistics, mathematics and even psychology.

Humans use many different channels to communicate: they can talk and listen, gesticulate or use written language. A text is a group of words that have been written or printed on paper or are shown through a monitor of an electronic device in order to be read by an individual or a target audience (Vergona, 2018). One of the basic NLP operations that can be done to written texts is tokenisation, which implies dividing the series of characters that compose the sentences in units that corresponds to words, symbols or other elements. For example, if we take this sentence taken from *Oliver Twist* by Charles Dickens:

For the next eight or ten months, Oliver was the victim of a systematic course of treachery and deception.

After tokenisation the sentence will be divided as follows:

```
'For', 'the', 'next', 'eight', 'or', 'ten', 'months', ',', 'Oliver', 'was', 'the', 'victim', 'of', 'a', 'systematic', 'course', 'of', 'treachery', 'and', 'deception', '.'
```

At this level of analysis, the words have not been classified according to their grammatical category yet, and there are also very few hints about the sentence's syntactic structure. Nevertheless, a good amount of information can be obtained by a rather superficial analysis of the tokenised text. For example, we can think of a way to identify names in the sentence. We know that personal names are always written with the initial capital letter, but this is not enough to distinguish them from names of cities, countries, or nationalities and from the initial letter of the first word of the sentence, which is also in capital. In fact, if we look at the sentence above, there are two different tokens that start with the capital letter, 'For', 'Oliver', but only one of them is a personal noun. Other strategies to find a name include (Vergona, 2018):

- checking if the noun is preceded by a title, like Mr. or Mrs.;
- in newspapers, names can be followed by a comma and a number, usually between 1 and 100, that indicates the age of the subject;
- the presence of a verb that is usually associated with a human, such as for example "said", "saw", "thought" and so on.

This short digression is useful to understand which are the many different ways to assign a grammatical category by just looking at the tokenised sentences.

The next step of automatic textual analysis is associating each token to a grammatical category, an operation also known as Part-of-Speech (PoS) tagging. In computational linguistic, there are many classifications of PoS, but in general the categories correspond to the grammatical categories that we learn when studying a language: Nouns, Proper nouns, Verbs, Adjectives, Adverbs, Pronouns, Prepositions, Conjunctions, Determiners. There are some cases in which the same concept can be expressed by words belonging to different grammatical categories, without altering the semantic of the sentence. Similarly, identical words can be classified as different PoS depending on their grammatical function in a specific sentence. Here are some examples:

- a. the influence of Rome grew steadily;
- b. the growth of the influence of Rome was steady;
- c. the soldiers completely destroyed the city;
- d. the soldiers' destruction of the city was complete;
- e. John likes to walk;
- f. John went for a walk;
- g. my career had a harsh stop;
- h. you must stop when the light is red.

In the first four examples, the same concept is expressed by using words that have a different grammatical function (adverb  $\rightarrow$  adjective; adverb + verb  $\rightarrow$  noun + adjective); in the last four, instead, the same exact word has different grammatical meaning in the sentences (verb  $\rightarrow$  noun; noun  $\rightarrow$  verb).

It is also possible to assign a PoS to a word by means of a rule that considers the way a token interacts with others within the context of the sentence. An easy rule for differentiating noun from verbs, for example, implies that noun are tokens that refer to people, places, things and concepts, while verbs describe events or actions.

If we look at the examples above, we can see that some fixed patterns emerge:

- determiner noun,
- preposition determiner noun,
- preposition proper noun.

By studying the composition of a sentence, we might encounter some patterns that are not formed by the same tokens, but appear in similar contexts:

Mary sat on the chair / The cat sat on the sofa

In the examples above, a name and a 'Determiner – Noun' constructions are be used before a verb. These patterns can be aggregated and written as follows:

Of course, other elements can also be incorporated with this kind of annotation:

```
(Mary / The cat) sat on (the / a) (chair / sofa)
```

According to Kibble (2013), the patterns that present similar distributions, and therefore occur in similar contexts, are identified as standards by the phrasal categories such as Noun Phrases or Verb Phrases. A common representation of the information regarding similar structures is called 'constituent structure', which can be represented by this scheme: X ==> A, B, C. According to this kind of rules, grammatical sentences can be decomposed in different constituent sentences that are made up of different combinations of PoS elements (Kibble, 2013), here are some examples:

- sentence ==> noun phrase, verb phrase;
- noun phrase ==> determiner, noun;
- noun phrase ==> name;
- noun phrase ==> noun phrase, conjunction, noun phrase
- verb phrase ==> verb, preposition, noun phrase.

PoS Taggers can assign a specific tag to each token, and each assignment is then used by the software for creating a series of rules that will be used to analyse the text. The group of tags that a PoS Tagger uses to assign a grammatical category to each token is called tagset. One of the most used tagsets is the one created by the Penn Treebank Project, which includes 36 different parts of speech. It can be found at this website: <a href="https://www.ling.upenn.edu/courses/Fall\_2003/ling001/penn\_treebank\_pos.html">https://www.ling.upenn.edu/courses/Fall\_2003/ling001/penn\_treebank\_pos.html</a>.

# 2.5.1. Types of PoS Taggers

When it comes to resolving the ambiguity of tokens in a sentence, there are two main types of PoS taggers:

- 1) rule-based PoS taggers;
- 2) stochastic PoS taggers.

The first type gathers information from the context to resolve ambiguous instances. This process is carried out by looking at the grammatical category of the words immediately before and after the ambiguous item. For example, is the item is followed by a verb and preceded by a determiner, then it is tagged as a noun, because nouns are statistically more likely to be placed between determiners and verbs than any other grammatical category. In the second type of taggers, ambiguity is resolved by attributing the most probable tag to the unknown item, meaning for example that if the word "bear", which in English can be both a noun or a verb, is statistically more likely to be tagged as a noun, then these taggers identify it as a noun. Of course, a similar approach can cause some incongruencies.

According to Tian and Lo (2015), another important distinction can be made between supervised and unsupervised PoS taggers. Supervised taggers do not create rules of their own but base their analysis on corpuses that have already been tagged manually. Once they are given a list of rules, these programs employ it for tagging other texts. Unsupervised taggers, instead, do not need any previous rule but use a statistical approach for creating tagsets. The four main types of taggers are: Unigram Taggers, Hidden Markov Model (HMM) Based Taggers, Maximum Entropy Based Taggers, and Transformation Based Taggers (Tian and Lo, 2015).

The first type, *Unigram Taggers*, use the so-called 'training corpuses' (corpuses that have been already tagged) to assign the most probable PoS to each token. The second type, *HMM Based Taggers*, is more complex, since they do not assign the grammatical categories to the tokens individually, but they consider the whole context by using a very complex mathematical model. In simple words, the grammatical category assigned to a token depends on the grammatical functions of the two previous items. The third type of tagger, *Maximum Entropy Based Taggers*, were developed for analysing the tokens

within a probabilistic model. The analysis carried out by these taggers takes into account also the context and the orthographic style of the words. Lastly, *Transformation Based Taggers* are based on linguistic rules, which have been assigned to them through training corpuses (ibidem).

#### 2.5.2. Stanford Parser (for English)

This Part-of-Speech Tagger is part of a broader project called Stanford CoreNLP Natural Language Processing Toolkit. It is a pipeline software used for analysing natural languages, and currently works for English, Arabic, Chinese, French, German and Spanish. Since its first implementation, it has been used for many research (Manning et al., 2015). The software requires Java version 1.8 or above to be installed and uses the Penn Treebank Project tagset. Since the software does not have a dedicated User Interface (UI) but works only with command lines, I decided to work with Microsoft PowerShell for using commands more efficiently. The list of command for tagging a text is very simple:

```
./stanford-postagger.bat models/English-left3words-distsim.tagger sample-input.txt > output.txt
```

The input file must be a .txt file. The output is a text line that contains the source text tokens followed by an underscore and the corresponding PoS. Here is the output of the tokenized sentence taken from Oliver Twist:

```
For_IN the_DT next_JJ eight_CD or_CC ten_CD months_NNS ,_, Oliver_NNP was_VBD the_DT victim_NN of_IN a_DT systematic_JJ course_NN of_IN treachery_NN and_CC deception_NN ._.
```

#### 2.5.3. TreeTagger (for Italian)

TreeTagger is a freeware software created by Helmut Schmidt, a professor at the Institute for Computational Linguistics of the University of Stuttgart.

TreeTagger is a Hidden Markov Model Based Tagger based on decisional trees that utilizes the Viterbi algorithm: it has a tree structure in which every node displays the linguistic characteristic and a probability indicator (Tian and Lo, 2015).

TreeTagger is very simple and user-friendly. It can be downloaded for free from this website: <a href="https://www.cis.uni-muenchen.de/~schmid/tools/TreeTagger/">https://www.cis.uni-muenchen.de/~schmid/tools/TreeTagger/</a>.

Beside the software, there are also the link for downloading the parameter files for each of the 20 languages that TreeTagger can analyse. For Italian I used the parameters implemented by Marco Baroni. After downloading the software and the parameters, the program can be executed. In only a few seconds, the user can select the input file and the output directory and then click on the 'run' button. The software analyses and tags the tokens with the correspondent PoS and then generates the output file. The input file must be a .txt file saved with a UTF-8 encoding. The following screenshot shows the software's UI:

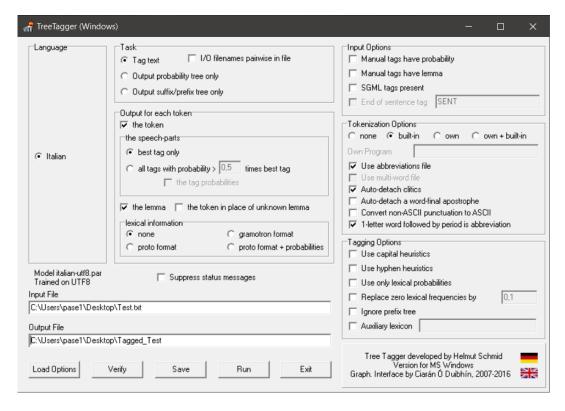


Figure 10. A screenshot of the TreeTagger User Interface

The following table shows the output of the opening sentence taken from Italo Svevo's masterpiece *La Coscienza di Zeno*. The output is in .txt format.

Io	PRO:pers	io
sono	VER:pres	essere
il	DET:def	il
dottore	NOM	dottore

di	PRE	di
cui	PRO:rela	cui
in	PRE	in
questa	PRO:demo	questo
novella	NOM	novella
si	PRO:refl	si
parla	VER:pres	parlare
talvolta	ADV	talvolta
con	PRE	con
parole	NOM	parola
poco	ADV	poco
lusinghiere	ADJ	lusinghiero
•	SENT	

The first column shows the token taken from the input file; the second shows the tagset<sup>1</sup>; lastly, the third column shows the *type*, which is the word as we will find it in the dictionary.

## 2.6. Summary

In the first part of this chapter I have given a quite extensive overview on two important topics of disaster communication: credibility and readability. Credibility is an extratextual quality of a text and it is important to build a steady relationship with the audience, and therefore enhance the trustworthiness level of the received messages. Readability, on the other hand, is strictly connected to how the texts are written and allows communicators to adapt the messages to the reading level of the audience. In the remaining part of the chapter, I explained more in detail some of the tools that I will employ during my analysis of the almost 1000 disaster management tweets taken from FEMA's and *Protezione Civile*'s Twitter accounts. For English, I will assess readability through the Flesch-Kincaid Grade Level Formula and then parse and tag the most readable tweets with the Stanford PoS Tagger. Likewise, for Italian, I will use the Gulpease Index for readability and TreeTagger for PoS tagging.

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<sup>&</sup>lt;sup>1</sup> For the complete list of the tagset of the parameters file for Italian created by Marco Baroni, see: http://sslmit.unibo.it/~baroni/collocazioni/itwac.tagset.txt

#### **CHAPTER THREE**

## 3.1. An overview on FEMA and Protezione Civile

Before carrying out my investigation on social media, I will provide some background information about the two agencies that I chose as primary sources of my data: FEMA and *Protezione Civile*.

The Federal Emergency Management Agency (FEMA) was founded on April 1, 1979 by United States President Jimmy Carter. At first it was an independent organisation, but later on it became part of the United States Department of Homeland Security (FEMA, 2019a). Since then, the main purpose of the agency has been coordinating disaster response and management in the United Stated territory. The governor of any State can declare the state of emergency and request an intervention to the president of FEMA and to the Federal Government. The agency provides on-the-ground disaster recovery relief operations and works in collaboration with experts in different fields. Furthermore, it promotes funding campaigns for reconstruction of infrastructures, and organises preparedness and response training programs all over the country. FEMA is responsible for all phases of emergency management, from preparedness to mitigation, and oversees different programs for responding to specific events such as floods, earthquakes, hurricanes, and tropical storms (FEMA, 2016). Some of FEMA's programs address to insurance coverage for flood damages and fundraising for restoring buildings, build shelters and implement disaster control projects.

For a more efficient emergency response coordination, FEMA has divided the territory of United States into 9 different regions (FEMA, 2019b):

- ➤ Region I, Boston, MA Serving Connecticut, Maine, Massachusetts, New Hampshire, Rhode Island, Vermont
- Region II, New York, NY Serving New Jersey, New York, Puerto Rico, Virgin Islands
- Region III, Philadelphia, PA Serving District of Columbia, Delaware, Maryland, Pennsylvania, Virginia, West Virginia

- Region IV, Atlanta, GA Serving Alabama, Florida, Georgia, Kentucky, Mississippi, North Carolina, South Carolina, Tennessee
- ➤ Region V, Chicago, IL Serving Illinois, Indiana, Michigan, Minnesota, Ohio, Wisconsin
- Region VI, Denton, TX Serving Arkansas, Louisiana, New Mexico, Oklahoma, Texas
- Region VII, Kansas City, MO Serving Iowa, Kansas, Missouri, Nebraska
- Region VIII, Denver, CO Serving Colorado, Montana, North Dakota, South Dakota, Utah, Wyoming
- Region IX, Oakland, CA Serving Arizona, California, Hawaii, Nevada, Pacific Islands
- Region X, Bothell, WA Serving Alaska, Idaho, Oregon, Washington

Decentralisation is one of the distinctive characteristics of the agency, whose response capabilities depend on small trained teams that are responsible for different areas and deal with medical emergencies, urban rescue, response support, preparedness for nuclear incidents and training operations. Finally, FEMA oversees the National Donation Management Program, that provides a widely accessible platform for people and organisation that want to donate or participate in the recovery and response phases in times of disasters. FEMA's official Twitter account (@fema) has been active since October 2008 and is followed by almost 770,000 people. In over 11 years of activity, about 17,000 tweets have been posted on this account. FEMA also manages another Twitter account, FEMA en español (@FEMAespanol), that is dedicated to the consistent Spanish-speaking linguistic minority in the US. The account was opened on October 2012 and about 4,000 tweets have been posted since then. The number of followers is much lower compared to the English account, only 12,000 people.

The Italian *Dipartimento della Protezione Civile* is the part of the government of the Republic of Italy that is in charge of coordinating the operations of defence and civil protection. It was officially instituted on February 24, 1992. The agency deals with prevision, prevention, management and response of disasters and emergencies of different types, including floods and fires. *Protezione Civile* works in close collaboration with local administrations, especially *province* and *regioni*, and private organisations though

volunteering campaigns. The decentralised structure enables a higher level of local flexibility and a better central coordination for on-the-field operations. Besides counting on the police and army forces the agency puts a lot of effort into promoting volunteering, which opens the possibility of collaborating with experts in many different fields. According to the Italian law, *Dipartimento di Protezione Civile* is composed of different organisations: Italian army forces, Italian police forces, *Corpo Nazionale dei Vigili del Fuoco* (Italian Firefighters Corps), *Croce Rossa Italiana* (Italian Red Cross), *Servizio Sanitario Nazionale* (Italian Healthcare service), and the volunteering associations.

The main activity of the agency is taking care of emergency management as a whole, including the operations of rescue and assistance to individuals after a disaster. When an event is so severe that the response capabilities of the local administration are no longer capable of coping with the consequences of the event, the administrations can obtain the state of emergency by the government. The agency's disaster response follows the Augustus method, a protocol that assures a better planning of emergency management by putting more effort in the phase of preparedness. This method highlights one of the most fundamental aspects of Italian *Protezione Civile*: a systemic nature that combines a structure composed of different elements with a centralised control of all systems.

In the parts of Italy were the presence of linguistics minorities is higher and bilingualism is widespread, the term '*Protezione Civile*' has been given an official equivalent in the minority language. It is known as *Protection civile* in the French-speaking regions, *Zivilschultz* near the town of Bolzano, *Civilna Zaščita* or *Protesion Civîl* in Friuli-Venezia Giulia, and *Protezion Zivil* in the Ladin-speaking part of the Dolomites.

The Department of *Protezione Civile* has been active on Twitter since April 2018 with the official username @DPCgov and it is followed by almost 35,000 people. During these one and a half years, slightly less than 2,000 tweets were posted. The account's 'bio', which is a brief description of the content and purpose of the account, reads as follow:

Canale ufficiale del Dipartimento della Protezione Civile, non è un canale per richieste di soccorso. (English translation: Official Channel of the *Dipartimento della Protezione Civile*, it is not a channel for aid requests)

If we compare it to the bio of the FEMA account, which is:

Our story of supporting citizens & first responders before, during, and after emergencies. For emergencies, call your local fire/EMS/police or 9-1-1.

we can clearly see that the American agency gives an indication about the number to call during an emergency and therefore facilitates the target audience in finding a solution to a problem they might be experiencing. On the contrary, the Italian agency, instead, only communicates to the audience that the Twitter account is not meant to receive and manage aid requests. A simple indication to call 118 in case of emergency, the Italian number for emergencies, would have been appropriate. This is only one of the many differences between the two organisations that we will see in this chapter.

# 3.2. Presenting the datasets

For my analysis, I have collected 970 tweets in total, 498 in Italian and 432 in English, from the official Twitter accounts of *Protezione Civile* and FEMA. The tweets were downloaded thanks to a free online service of Twitter messages retrieval. The website that offers this service, Vicinitas, also includes a wide range of useful tools for analysing historical data of specific accounts or retrieving real-time information. The steps for downloading the tweets are simple: you must log in into the website with your personal Twitter account, then you have to select 'User Tweets' among the 3 different download options and enter the name of the account on the search bar. After clicking the 'Search' button, the tool automatically retrieves the tweets and prepares them for downloading. The output is an .xlsx (Microsoft Excel) file that displays information like date, full text, number of likes and retweets, language, tweet type, and the number of hashtags and mentions.

For my analysis I chose to focus only on tweets, so I had to manually delete all the messages that were marked as 'retweets' by the Twitter retrieving tool. Once I completed this task, I read all the remaining messages and selected those that were about emergency and disaster communication. As a matter of fact, a relevant percentage of tweets posted by the two agencies were related to other topics, including commemorations of past events, messages about festivities, and replies to the subscribers' questions.

Once only the relevant tweets had been selected, the next step was preparing the texts for qualitative and quantitative evaluation. First of all, one major issue was given by the presence of URLs. As I explained in Chapter Two, the readability formulae base their calculation on the length of the words in the sentences, therefore the presence of an URL interferes with the correct assessment of readability, since it is considered as one long

word. I decided to substitute the URLs in the tweets with the word 'Urlname', for two reasons: on the one hand, by avoiding the presence of a long word the assessment of readability is more accurate; on the other, the decision to replace URLs with a textual marker like 'Urlname' does not completely upsets the results of readability assessment by simplifying the text too much. On the contrary, I decided to leave hashtags and mentions as they were, as they were important for the qualitative analysis of the messages. Finally, I sorted the tweets into the four phases of the emergency cycle according to their content and then I grouped together the messages that dealt with the same type of disaster.

# 3.2.1. English dataset

The English dataset was composed of 432 total tweets posted between August 24 and December 3, 2019. Of these 432 tweets: 337 were about disaster management and were sorted into the emergency phase they were referred to; 95 were about other topics, including 21 tweets sent in reply of a user's request, and were not taken into consideration for readability assessment. The following table shows the figures for the English dataset:

TWEETS	Number of tweets	Percentage
TOTAL TWEETS	432	
DISASTER RELATED TWEETS	337	78.0%
OTHER TOPICS	95	22.0%

TWEET BY EMERGENCY PHASE	Number of tweets	Percentage
PREPAREDNESS	227	67.4%
RESPONSE	58	17.2%
RECOVERY	42	12.5%
MITIGATION	9	2.7%

Table 5. The content of the tweets by FEMA

As we can see by the figures in Table 5, 78.0% of the messages posted on the @FEMA Twitter account in the period under consideration were related to disaster communication. The other data showed that 67.4% of the messages gave information about preparedness

for future events, 17.2% were related to response activities, 12.5% were written during the recovery phase, lastly, only 2.7% were about mitigation. Table 6, instead, shows the occurrences for every type of disasters encountered in the tweets for every phase of the emergency cycle.

## **PREPAREDNESS** Preparedness Activities | 56 Floods and Severe Weather 52 General Information 50 Hurricanes 41 Fire 16 Tornadoes 8 Earthquakes 4 RESPONSE Hurricanes 29 Floods 17 General Information 9 Earthquake Fire 1 **RECOVERY** Hurricanes General Information Floods 7 Earthquakes 3

Table 6. Breakdown of tweet topics by emergency phase for US FEMA

The most frequent critical events in the US are floods, hurricanes, earthquakes, wildfires and tornadoes. Since there were no messages that dealt with specific disaster in mitigation, I did not include them in the table. The entry called "General Information", which can be found under every section of the table, indicates a group of messages that touch on other topics related to emergency communication but do not address directly to any specific emergency. The messages that fall under the category called "Preparedness Activities", instead, indicate the many activities that FEMA organises to raise awareness on disasters.

### 3.2.2. Italian dataset

The Italian dataset was composed of 498 tweets, 66 more than the English dataset. The disparity in the total amount of messages is given by the more extensive posting of retweets by FEMA. The messages were posted by the @DPCgov twitter account between April 12 and December 3, 2019. 375 messages out of 498 were about disaster communication, while the remaining 123 were about trivial topics. 311 disaster tweets dealt with preparedness, 51 with response, 8 with recovery and only 5 with mitigation. The following table shows the figures more in detail:

TWEETS	Number of tweets	Percentage
TOTAL TWEETS	498	
DISASTER RELATED TWEETS	375	75.3%
OTHER TOPICS	123	24.7%

TWEETS BY EMERGENCY PHASE	Number of tweets	Percentage
PREPAREDNESS	311	82.9%
RESPONSE	51	13.6%
RECOVERY	8	2.1%
MITIGATION	5	1.3%

Table 7. The content of the tweets by Protezione Civile

Table 7 shows that three quarters of the messages posted on the *Protezione Civile* Twitter account were about emergency and disaster communication. A similar percentage was also registered in the English dataset. It is important to point out that almost the entirety of disaster messages refer to the phases of preparedness and response, 82.9% and 13.6% respectively. On the contrary, only a small number of tweets belong to the recovery and mitigation category. As I did for the English data, the table below shows the most frequent disaster for each phase:

#### **PREPAREDNESS**

Floods and Severe Weather
General Information
46
Preparedness Activities
Fire 2

#### RESPONSE

Floods and Severe Weather | 18 Earthquake | 16 Volcanic Activity | 12 General Information | 4 Fire | 1

# **RECOVERY**

Floods and Severe Weather | 3 Earthquake | 3 Volcanic Activity | 1 Fire | 1

Table 8. Breakdown of tweet topics by emergency phase for Protezione Civile (mitigation not included)

The most frequent disasters in Italy relate to floods and severe weather conditions. Other types of disasters are fires, earthquakes and volcanic activities. The latter is specific to the Italian dataset, since no data about volcanoes were registered in the FEMA tweets. Once again, there were no mitigation messages that dealt with a particular type of disaster, so I did not include it in the table.

A comparison between the dataset is useful to understand how the two agencies cope with disasters that occur in their respective territories. The overall percentage of disaster-related tweets is similar in both datasets (78% for FEMA; 75.3% for *Protezione Civile*), showing that both organisations are also involved in promoting other activities beside disaster management. The most evident differences are noticeable in how the messages divide into the four emergency phases. While the English dataset shows a much more balanced distribution, the Italian tweets are almost entirely devoted to the first phase of the emergency cycle, in accordance with the Augustus method. In any case, more importance is given to preparedness in both the English and the Italian tweets. Another important aspect in the Italian dataset is that not all the disasters are dealt with in every

stage of the emergency cycle: only severe weather, floods and fires are included in the *Protezione Civile*'s preparedness informational campaign. Disasters such as earthquakes and volcanic activities, instead, are dealt with only when an actual response is needed. This is also imputable to the unpredictability of said events.

## 3.3. Analysis of the tweets: readability

The readability of the Italian and English datasets has been assessed using two websites that automatically provide the Gulpease and the Felsch-Kincaid Grade Level indexes as a tool for checking the level of readability for written texts. The results of the assessment have been plotted in two graphs (figure 11 and figure 12). In order to better understand the distribution of the values in the chart, I have decided to match every readability value on the *y* axis with the corresponding number of occurrences. No distinction was made according to the emergency phase: the tweets have been treated as a whole. Messages that dealt with topics other than emergency communication were not taken into consideration for readability assessment.

In the Italian dataset, the 375 tweets have scored a minimum readability level of 37 and a maximum of 120, with an average of 70. A result of 70 indicates that the messages are perfectly readable for people that have completed secondary school. On the contrary, scores around 40 are hard to read for people that have completed high school. The scores with the most occurrences were 60 (23 occurrences in total), followed by 62 and 70, with 20 and 17 occurrences respectively.

In the English dataset, instead, the lowest score was 3.3 and the highest was 16.7; keep in mind that in the Flesch-Kincaid Grade Level a low score indicates a higher level of readability. The average grade level recorded in the 334 English tweets was 8.4, which is only somewhat higher than I anticipated, since it indicates the equivalent schooling level of 10th to 12th grade. Texts with a score of 8 are considered averagely understandable for a large part of the population; results close to 9, instead, are usually comprehensible for college students. The distribution of the occurrences is more heterogeneous in the English dataset; 6.7, 7.6, 5.5, 6.3, and 7.9 were the results with the highest number of occurrences (the first two with 10 each; the remaining three with 9 each).

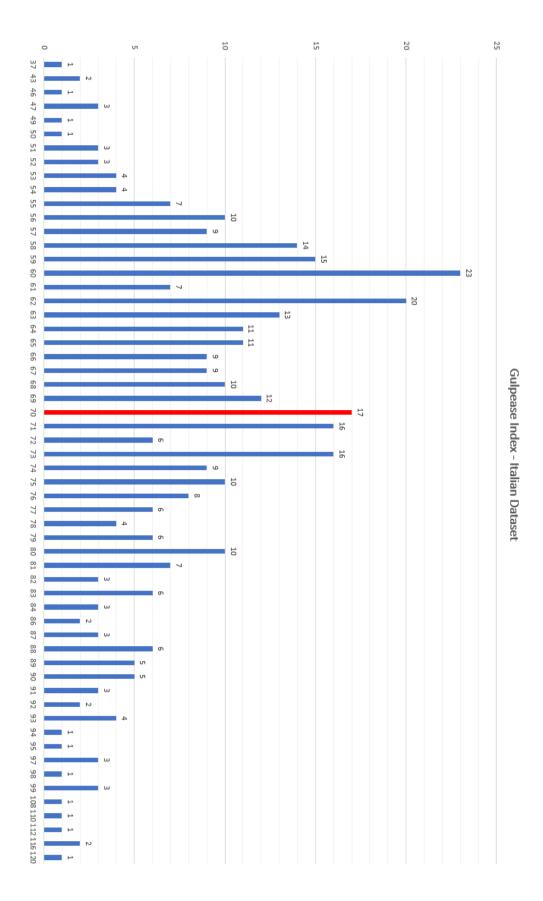


Figure 11. Graphical representation of the Gulpease Index for the Italian tweets (average value in red)

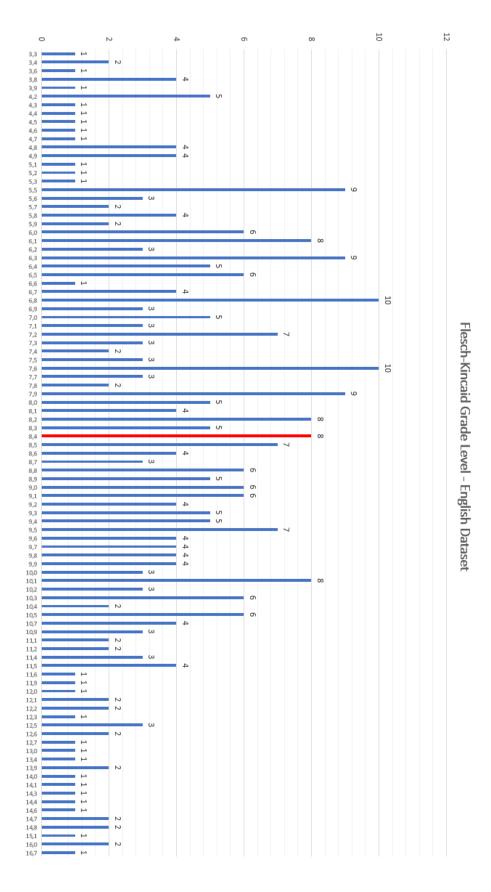


Figure 12. Graphical representation of the Flesch-Kincaid Grade Level for the English tweets (average value in red)

The graphs above are the graphical representation of the readability scores for the Italian and English tweets. Each column presents the number of occurrences at the top, while the corresponding values are indicated in the *y* axis. The red column indicates the average readability score of the whole dataset.

In the Italian dataset, 6 tweets have recorded a Gulpease Index over 100 but further investigation is needed to clarify if this high score is reliable or not. I will check the results by conducting a short case study. I will select 30 random messages taken from the dataset (10 with a low score, 10 with an average score, and 10 with a high score) and run them through an online tool called Corrige. This service provides a more detailed analysis of the readability of an Italian text by considering the Gulpease index and the difficulty of the words, taking a reference the base vocabulary of the Italian language. Unfortunately, Corrige is a premium service, so the amount of data I could check without subscribing and paying was very limited. By double-checking the readability of the messages my intent is to verify the accuracy of the Gulpease Index for tweets and short messages in general and, at the same time, to obtain the most truthful score of the level of clearness of the messages, particularly for those tweets that have recorded a very low or very high result. I will also try to identify to which extent lexical complexity influences the statistical assessment of readability. Similarly, I will conduct a study on 30 random English tweets, chosen with the same criteria as the Italian messages, and run them through two online tools that measure the percentage of difficult words and the Dale-Chall index respectively. The Dale-Chall index measures readability by confronting the words contained in a text with a list of 3'000 words that 80% of 4th grade students are usually familiar with. The score goes from 0 to more than 10: text with a score of 4.9 or lower are easily understood by students that have completed 4<sup>th</sup> grade, texts with a score of 9 or above are understood by an average college student. Once again, the purpose is to prove if the conventional readability formulae are suitable for the analysis of short messages, and if vocabulary choices compromise the general readability of disasterrelated social media messages.

# 3.4. A further investigation on readability

As I mentioned at the end of the previous section, this part will be devoted to conducting a brief case study on the effectiveness of the readability formulae for Twitter messages.

By checking the influence of lexical complexity on the readability score of the tweets, I will try to verify if the output of the traditional readability formulae gives a fair representation of the actual difficulty of the information conveyed through the messages. In other words, since both the Flesch-Kincaid Grade Level formula and the Gulpease Index are based on a statistical evaluation of the texts and take into consideration its structure (number of sentences, number of words, length of words and so on), I will investigate to which extent complex words influence overall readability of short messages. After selecting the tweets, I used the online tools mentioned in the previous sections and noted down the new readability score and the percentage of difficult words. The Italian data did not show any direct influence of lexical complexity on automatic assessment of readability. Since no clear pattern emerged from my analysis, I decided to divide the tweets according to their syntactical structure and study the impact of complex words accordingly. I noticed that the messages could be divided into three different categories: tweets formed by one long sentences; tweets formed by two or more mediumlength sentences; very fragmented tweets composed of very brief, almost telegraphic sentences.

For the first category of messages, I noticed that in some instances, the high percentage of complex words was reflected on a low scoring Corrige Index, and this complexity was correctly identified also by the Gulpease index. This is an example:

<u>M</u> "Dobbiamo continuare a lavorare sulla <u>pianificazione</u> <u>d'emergenza</u> perché è <u>fondamentale</u> che quella <u>territoriale</u> sia perfettamente <u>integrata</u> con la <u>pianificazione</u> <u>nazionale</u>" così <u>Borrelli</u> alla firma dei <u>gemellaggi</u> per <u>Vesuvio</u> e Campi <u>Flegrei</u> leggi qui <u>/</u>→ <u>Urlname</u>

Gulpease: 37 Corrige: 35 Complex words: 41%

In this case, there is a direct correspondence between statistical and lexical complexity, which means that a high number of difficult words lowers the level of readability of the message.

Another example, instead, shows that despite a lower percentage of complex words the Corrige Index was still lower than the Gulpease index:

<u>#exeFlegrei19</u> metterà alla prova il sistema di <u>#protezionecivile</u>. Sarà un <u>test</u> per migliorare la <u>pianificazione</u> sul rischio <u>vulcanico</u> in un percorso che vedrà in futuro l'uso sempre più efficace della <u>tecnologia</u>" così <u>Borrelli</u> durante la presentazione dell'esercitazione nazionale <u>Urlname</u>

Gulpease: 46 Corrige: 36 Complex words: 22%

We would expect that a decrease in the number of complex words would also involve a rise in the level of readability. This increase is picked up only by the Gulpease Index and therefore is not directly linked to word complexity. Clearly, the structure of the text plays an important role in readability assessment even if the lexis is complex. If we look at these other examples:

➤ Il bollettino di <u>criticità</u> e <u>allerta</u> per domani, venerdì #<u>18ottobre</u>, è VERDE per rischio <u>idraulico</u>, rischio idrogeologico e rischio temporali (ma ricorda che non è possibile escludere fenomeni localizzati!)

#protezionecivile Urlname

Gulpease: 70

Corrige: 45

Complex words: 25%

Lo scenario elaborato per #Pasquetta dal Centro Funzionale Centrale prevede dal tardo pomeriggio precipitazioni, anche a carattere di rovescio o temporale, su Lazio, zone meridionali di Umbria e Toscana, nord della Campania, Liguria di Levante e Piemonte occidentale e meridionale Urlname

Gulpease: 43

Corrige: 37

Complex words: 23%

These tweets present a similar structure but this time the disparity between the two indexes is slightly higher. It seems that tweets consisting of long sentences experience a drop in their readability if the percentage of complex words is around 25%.

For what concerns the second type of messages, once again there is no valid evidence of a fixed pattern that can explain the way lexical complexity influences tweets readability in Italian. Even when there is more than one sentence, the increase in the language complexity does not translate in a decrease in readability, as shown by the following messages.

<u>\( \text{#allertaARANCIONE} \)</u> lunedì <u>#9settembre</u>, su parte del Veneto.

<u> #allertaGIALLA</u> in quattro regioni.

Consulta il bollettino per conoscere il livello e le zone di <u>allerta</u> sul tuo territorio <u> Urlname</u>

Gulpease: 70

Corrige: 74

Complex words: 32%

#SalaSituazioneItalia in contatto con le strutture di #protezionecivile sul territorio. #terremoto avvertito dalla popolazione, dalla prime verifiche non risultano feriti né danni. Urlname

Gulpease: 70

Corrige: 45

Complex Words: 22%

Despite a high incidence of complex words in the first tweets, its Corrige index is higher than the Gulpease Index. The second one, instead, shows that even with a relatively small percentage of difficult words, the difference between the Corrige Index and the Gulpease score is relevant. Probably, the statistical features such as word and sentence length are predominant when the message is divided in two or more sentences.

Finally, the third type of messages has in part proved that lexical complexity can influence the level of readability. The two tweets below show that if the sentences are brief and concise but composed of a high percentage of difficult words, from a statistical point of view the tweets remain perfectly readable.

Gulpease: 93 Corrige: 100 Complex words: 40%

<u>\( \int\_{\text{allertamento}}^{\text{L'allertamento}} \) meteo-idro \( \text{è} \) una cosa seria. <u>Informiamoci</u> sempre sui canali ufficiali. Urlname</u>

Gulpease: 95 Corrige: 97 Complex words: 31%

In other instances, instead, the messages experience a direct influence on readability derived from the high number of complex words. In this message, for instance, 26% of complex words is enough to lower the readability index by 55 points:

🔉 dati satellitari

∆ dati <u>pluviometrici</u>

**a** dati termometrici

La nuova <u>piattaforma</u> <u>Radar-DPC</u> ha già registrato più di 1 milione di visite, tu la conosci? <u>Urlname</u>

Gulpease: 116 Corrige: 61 Complex words: 26%

If we take another message with a similar structure, we can see that the indexes almost coincide when the level of lexical complexity is very low:

Cosa puoi imparare nei nostri campi scuola?

Montare una tenda

Spegnere un incendio

Diventare supereroe

Dal #10giugno torna "Anch'io sono la protezione civile: i campi scuola" 👉 Urlname

Gulpease: 97 Corrige: 89 Complex words: 11%

A syntactical structure with brief and concise sentences appears to be the most accurate indicator of a high statistical readability, so much so that it positively influences lexical complexity. The analysis of the Italian dataset with Corrige.it has not given me the results

I anticipated: textual structure is predominant over lexical complexity in almost every case.

As concerns the English dataset, the results show that the influence of lexical complexity is more predictable. The Dale-Chall index seems to give a good representation of overall complexity because in many cases a gradual increase in the percentage of difficult words causes a decrease of the level of readability. Furthermore, it appears that, for the English language, the structure of the messages is of secondary importance. Instead, it is the lexical complexity that influences readability the most. The following table shows the data for the 30 tweets that I randomly selected for this case study. For convenience, each tweet has been assigned an ID – writing the whole message would have created a problem of space and clarity. The IDs indicate the level of readability of the tweets: low, average or high. For each message, I have indicated the Flesch-Kincaid Grade level score, the corresponding Dale-Chall score, and the percentage of complex words.

ID	FLESCH- KINCAID	DALE- CHALL	%DIFF WOR
High_2	3.4	5.8	11
High_1	3.3	5.8	17
Avg_8	8.5	7.4	18
High_3	3.8	6.4	19
High_4	3.8	6.8	22
Avg_6	8.4	7.5	23
High_9	4.6	7.3	25
High_5	4.2	8.8	26
High_6	4.2	7.9	26
High_10	4.8	7.5	26
Avg_2	8.2	8.5	27
Avg_10	8.4	8.9	27
High_7	4.2	8.7	29
Avg_4	8.3	8.7	30
Avg_5	8.4	10	30
High_8	4.4	10.1	31
Avg_7	8.5	9.4	33
Avg_3	8.3	9.4	34
Avg_1	8.2	9.9	37
Avg_9	8.5	8.3	38
Low_9	16.0	11.3	41
Low_6	14.6	11.2	45
Low_8	14.8	11.4	45

Low_1	12.5	12.4	47
Low_7	14.7	12.3	48
Low_3	12.7	12.1	51
Low_2	12.6	12.6	52
Low_5	14.3	12.8	52
Low_10	16.7	10.8	55
Low_4	14.0	14.6	71

Table 9. A comparison between the Flesch-Kincaid Grade Level and the Dale-Chall Index; the percentage of difficult words is indicated on the far-right column. The ID indicates a low, average or high readability.

The data in the table have been sorted in ascending order according to the percentage of difficult words. As we can see, for most of the cases, a high incidence of lexical complexity corresponds to a low level or statistical readability. The only relevant exceptions have been highlighted in yellow. The most readable messages according to the evaluation through the Flesch-Kincaid formula, identified by the 'High\_#' ID, experience a steady increase in their readability complexity if the percentage of difficult words is around 20% or more.

If we try to look at the syntactical structure of the tweets, as I did for the Italian dataset, we will find that there is less correlation between the message been split into different segments and readability if the lexical complexity is high. In the following example, even though the sentence is divided in many smaller units, the statistical readability is extremely low:

<u>Snapshots</u> of some of the <u>federal</u> teams <u>supporting #Michael response efforts</u>:

FEMA teams taking disaster assistance registrations

@USACEHQ installing emergency generators

@HHSGov Disaster Medical Assistance Teams staffing mobile medical bases Urlname

Flesch-Kincaid Index: 14.0 Dale-Chall Index: 14.6 Complex Words: 71%

This other example, instead, shows us that messages made of one long sentence are still both statistically and lexically hard to understand when the number of difficult words is high:

Our <u>latest #podcast episode features</u> a great <u>discussion</u> with <u>@NationalVOAD</u> about the <u>vital role voluntary agencies</u> have in <u>supporting communities</u> before, during & after <u>disasters</u>:

■Web: <u>Urlname</u>

Flesch-Kincaid Index: 14.3 Dale-Chall Index: 12.8 Complex words: 52%

In conclusion, the English data show a major correspondence between statistical readability and percentage of complex lexis. This relation is probably given by two main reasons: on the one hand, the sentence structure is not as relevant as in was the Italian data; on the second, there is probably a more direct relation between words length and semantic complexity. On the contrary, for the Italian readability tools, the percentage of difficult words seems to be less indicative of the overall score compared to syntactical complexity. In addition, it is possible that the high frequency of hashtags, tags and emoticons used in the Italian tweets might represent an obstacle for both information retention and correct automatic evaluation of readability.

While the Dale-Chall index appears appropriate for giving a more accurate identification of textual difficulty for English, the results obtained from by Corrige.it were less revealing of the real impact that difficult words have on the comprehensibility of the Italian tweets. Further investigations are needed to find out whether Corrige behaves like this for every short message or just for tweets.

## 3.5. Parsing the dataset

In this section, I will focus on the analysis of the most readable tweets for each dataset by running them on the PoS tagging software I presented in Chapter Two. The main purpose is identifying which parts of speech are linked to a higher readability in both languages. I will aim at measuring the frequency of three of the most meaningful parts of speech: nouns, verbs and adjectives. For both languages, I will conduct a quantitative analysis on the first two, in order to check whether nominal or verbal constructions are associated with a major readability. I will focus also on the number of sentences and the average length of messages. Furthermore, I will highlight the frequency of Twitter-specific elements such as hashtags, tags, URLs and emotions. With regards to the adjectives, instead, my analysis will be qualitative for the most part and will described in the next section of the chapter.

The organisations that deal with emergency and disaster communication must be aware that during a crisis the public is very susceptible to the information it receives. For this reason, FEMA and *Protezione Civile* mustn't spread panic by depicting an event as more serious than it really is, as for example a newspaper would do. In the meantime, though, they must make sure that the public understands the gravity of the situation and therefore

a good amount of honesty and common sense is needed. In addition, most of the language that refers to the magnitude of an emergency is usually mediated and decided with the help of the insurance companies, which work for granting disaster insurance coverage to people affected by the consequences of disasters. Using an inappropriate vocabulary might influence the way insurance company deal with their clients' claims. I expect both organisations to employ a vocabulary that does not excessively convey the gravity of the emergency.

# 3.5.1. PoS Tagging results

Before proceeding with parsing the tweets, I selected a dataset that was extensive enough to give me enough data to work on. I decided to select twenty of the most readable tweets for each language, paying attention to the content and the structure in order to have the widest variety of tweets possible. Variety was an issue especially for the Italian data, because many of the most readable tweets were very similar to each other. Once I gathered the tweets, I prepared them for automatic tagging by adjusting the format to obtain an accurate output. This procedure included operations like inserting spaces between words and emoticons, making sure that the sentences were divided correctly, and getting rid of every unnecessary information.

Once the tweets had all been tagged, I copied the parsed text into an Excel worksheet and checked the results: overall, the two taggers produced a fairly correct output, with some persistent mistakes only for ambiguous words (TreeTagger) and capitalized words (Stanford Parser). Of course, Twitter-specific elements were not correctly identified by the two software programs, so some manual tagging was also required. I marked every hashtag, tag, emoticon and URL manually; for each hashtag I also noted down the reference.

In order to better compare the results between the two datasets, I analysed the tokens for each tweet separately and then I looked at the average data. The results of the analysis conducted on the English data showed that, on average, the 20 tweets were composed of 19% by nouns and 18% by verbs. On the contrary, the Italian dataset showed that the percentage of nouns was almost double compared to the presence of verbs (21.7% against 10.8%). Further investigations have brought me to find out that some of the most readable Italian tweets were composed of nominal structures in which there was no verb. On

average, grammatical constructions like "vento forte il 5 novembre sulle regioni centromeridionali" or "allerta GIALLA rischio temporali Lombardia e Veneto" appear to be common in the Italian tweets. There is also a case where the whole message does not contain a verb:

Il Bollettino di criticità e allerta per giovedì #17ottobre: ✓ rischio idraulico VERDE ✓ rischio idrogeologico VERDE ✓ rischio temporali VERDE. Urlname

On the contrary, this type of structure is not common at all in the English data, whose massages are entirely composed of verbal structures, like in the following example:

Rain from #Florence these next few days will cause flooding in many parts of the Carolinas. Expect flash flooding at any time and stay off the roads. Do NOT walk, swim or drive through floodwaters! Urlname

Despite consisting of a slightly higher number of sentences per tweet compared to the English messages, the Italian tweets are composed of 5.15 nouns and 2.17 verbs on average in 3.0 sentence per tweet; the English tweets, instead, present 7.95 nouns and 7.85 verbs in 2.5 sentences per tweets. Replacing nouns with verbs is one of the most efficient way to engage in a clearer communication, and this is probably the reason why FEMA went for an extensive use of verbs. *Protezione Civile*, instead, went for a very segmented syntax, almost telegraphic, written with a style which is typical of online messages. I checked weather nominalisation was one of the major trends in Italian tweets, but I have found no clear evidence that can prove a high number of nouns beside the aforementioned nominal structures.

On the other hand, the study on Twitter-specific elements showed that the use of hashtags and emoticons is much more extensive in Italian. Tags, instead, are exclusive to the English messages. URLs where used by both in the same quantity (one URL per message). The table below shows the average employment of Twitter-specific elements in the two datasets. As we can notice, @DPC\_gov employs emoticons and hashtags more frequently, probably with the intent of simplifying the messages or catching the attention of the audience. @FEMA instead produces texts that are suitable for other formats as well and does not rely on Twitter-specific elements that much.

	@FEMA	@DPC_gov
Hashtags	0.7	1.8
URLs	1.0	1.0
Emoticons	1.3	3.2
Tags	0.3	0.0

Table 10. Average number of Twitter-specific elements per tweet

In addition, @DPC\_gov employs emoticons and hashtags more frequently, probably with the intent of simplifying the messages or catching the attention of the audience. On the other hand, @FEMA produces texts that are suitable for other formats as well and does not rely on Twitter-specific elements that much.

The results of the investigation carried out specifically on hashtags have shown that in the Italian tweets the reference is often a date (#31Maggio), an alert level (#AllertaARANCIONE), name of organisations (#protezionecivile), or an event (#terremoto). In English, hashtags refer only to the name of events (#Florence, #MidWestFlooding).

In conclusion, readability of tweets from a grammatical point of view is given in Italian by making an extensive use of nouns, with brief, nominal sentences, few verbs, and a telegraphic style; hashtags and emoticons are also frequent. In English, instead, readability is given by short full-formed sentence with very few Twitter-specific elements.

# 3.5.2. Adjectives

I used the parsing software to create a list of the adjectives that referred to disasters in all the tweets contained in the English and Italian datasets. The main aim was identifying to which extent FEMA and *Protezione Civile* described a disaster as dangerous, serious and unsafe. Once I ran the data through TreeTagger and Stanford Parser, I manually checked the output files for any major mistakes and then filtered the results in a Microsoft Excel worksheet. Among all the adjectives, I collected only those who referred to the intensity of a disaster and noted down their frequency.

These are the results of analysis on the English tweets:

ADJECTIVE	FREQUENCY	DISASTER/EVENT
Dangerous	13	Flooding; cold; wind
Serious	3	Storm; flood
Major	3	Disaster; flood
Severe	21	Weather; storm; flood; cold;
Severe		rainfall; thunderstorm
Extreme	4	Weather
Life-threatening	3	Storm
Deadly	4	Storm surge; flooding

Table 11. Adjectives to describe emergences collected from the English dataset

Table 11 shows the adjectives that describes the intensity of an event in the tweets by FEMA, sorted by increasing severity. In the considered messages, FEMA employed a scale that goes from a minimum threat of "dangerous" to a maximum of "deadly", which is a surprising result since terms like "deadly" or "life-threatening" might be perceived as too much serious. I would have expected "severe" to be at the top of the adjective intensity scale, but the result shows that, despite being the most used, it is in the middle.

The Department of *Protezione Civile*, on the other hand, used a different approach. Emergency intensity is communicated through a scale based on the colours green, yellow, orange and red. It is especially employed for events related to severe weather conditions and flooding risk. The figure below, taken from the official website of *Protezione Civile* (Protezione Civile, 2020), shows the different levels of intensity of an alert.



Figure 10. The color-coded system used by Protezione Civile to indicate the level of an alert.

Figure 10 shows that severity of a hydrogeological event is colour-coded and goes from green, which indicated that the level of alert is zero, to red, which is the maximum level of threat. This type of coding covered almost the entirety of disaster-related adjectives in the Italian tweets, with only a few exceptions. *Significativo, forte*, and *inteso* were other terms used to rate the severity of weather conditions and hydrogeological hazard. By employing this kind of approach, *Protezione Civile* reduces at minimum the risk of alarming the public but still manages to inform people about the seriousness of an emergency.

In conclusion, the *Protezione Civile's* approach is sounder since each event can be related to a specific grade on a fixed scale. FEMA, instead, decided to express severity by relying on an arbitrary choice of adjectives, which might result in misinterpretation and, therefore, in altering the perception of the public.

## 3.6. Qualitative analysis of the tweets

This last part of my work is devoted to analysing the way disaster information is dealt with by a qualitative point of view. The tweets I collected will be compared with the standardised messages created for one of the studies that were part of Project Slándáil. For the analysis, I collected tweets that, according to the indications presented in Chapter One, were good examples of disaster communication through social media.

### 3.6.1. Project Slándáil

Project Slándáil was an Irish-led collaborative project founded by the *EU Framework 7* funding for security born by the cooperation of eleven partners from the EU. These include communication and digital media companies, academics, media and digital researchers and emergency response representatives of four different countries: Italy, the UK, the Republic of Ireland and Germany. The project was created to carry out research about natural disasters, such as earthquakes, floods and so on, and to study how the use of social media could improve communication during a crisis. The close relation between Slándáil researchers and the representatives of the emergency service organisations enabled the project to extensively observe how social media could positively enhance disaster responses to natural disasters. The main aim was building a framework for

reducing response times of disaster response organisations by using information retrieved from people near the affected areas as reliable source. Slándáil stated that many of the emergency services in the present days are heavily dependent on online data and social media when it comes to find information about the most affected areas or about which places need an intervention after a disaster. As I told many times in my dissertation, though, social information can sometimes be misleading. One of the main points of Project Slándáil was improving the quality of the information retrieved from social media but still ensuring a high level of protection to the users' privacy.

When Slándáil begun its work there were no other systems that could analyse aggregated information taken from social media and that could check their level of reliability. In addition, no other software could communicate the result in different languages. The intention of the Slándáil Project was laying the groundwork for a digital platform that could increase response and effectiveness of disaster management organisations in time of crisis. The partners on the project were: Trinity College Dublin (IRE), Pintail Ltd. (IRE), Stillwater Communications (IRE), An Garda Siochana (IRE), Institut für Angewandte Informatik EV (GER), CID GMBH (GER), Military disaster prevention in Saxony (GER), Università degli Studi di Padova (ITA), DataPiano SRL (ITA), University of Ulster (UK), Centre for Irish and European Security (IRE), and Police Service Northern Ireland (PSNI, UK).

In one of their studies, Slándáil looked at creating some reliable messages that could work as prototypes in the Slándáil environment. These prototypical messages, though, are valid also outside this environment and are useful for making a comparison with the tweets produced by FEMA and *Protezione Civile*. For each language, English, Italian and German, the study contains standardised messages for floods, earthquakes, severe weather conditions, and, finally, wildfires. These will be the four main disaster type that I will focus on in this section.

The Slándáil report that I took into consideration was entitled "Report on Communicativeness of the Slándáil system". Its main aim was illustrating the results of the studies carried out on the Slándáil system to expand its multilingual communicative possibilities. By means of appropriate recommendations, the contribution of the study to the goal of the project was creating prototypical messages that could improve the users' ability to communicate in a timely and efficient way during a crisis. The information for

creating the textual prototypes was gathered through the analysis of multilingual corpora, study of terminology, surveys, and data coming from disaster management agencies. The corpora used for the project, the assessment of readability, and other investigations have helped the researchers in detecting and collecting useful communicative strategies for different media. The model messages created during this research are considered by the authors as a starting point for the implementation of texts that are communicatively effective and adaptable to different disaster scenarios. The readability of language used in the prototypes has been tested and the messages have turned out to be perfectly readable for the majority of the audience.

# 3.6.1.1. Prototypical messages

The model for the messages was the analysis of the disaster management organisations' guidelines for best practice in communication. The prototypes can be used by the agencies as a starting point for creating effective communications in time of disasters. The study provides messages for different types of media (e-mail, Facebook, SMS and Twitter) for both pre- and post- event scenarios for all those disasters that can be anticipated. On the other hand, for unpredictable events the indications are only for the post-event. For my analysis, only the Twitter messages will be considered. The choice of the linguistic register was also based on the results of a study on previous disaster communications. The authors have chosen to adapt the English 'you' into the Italian informal form 'tu', as is usually done by *Protezione Civile*. One fundamental consideration led the creation of the different textual prototypes: it is not sufficient to give information about an upcoming disaster or emergency, it is also important to provide short and easy instructions that explain the public what they should do before and after the event. As we have seen in Chapter One, providing the public with timely, detailed and useful information can help in saving lives, reducing damages, contributing to generating a solid know-how for future disaster, and, finally, building a relationship based on trust between the public and the emergency management agencies. The possibility of an efficient two-way communication also increases.

The procedure for creating the prototypical messages implied many steps. First, information about disaster communication was retrieved from different sources. The topics covered disaster communication guidelines useful before, during and after

emergency situations. In was during this phase that the researchers understood the different approach that each county had for specific disasters. Depending on the frequency of specific disasters, local agencies are more or less incline to give detailed information about it. For example, there is no need to give advice on earthquakes in the UK, since there is no significant seismic activity in Great Britain and there were no critical events associated with this type of emergency.

Second, the structure of the models followed the structure of the warning messages collected in the first part of the study. The average length of each text is given by the limitations of the format (Twitter, SMS) and by the assumption that people do not spend an excessive amount of time reading the messages. All messages contain safety tips after the warnings or general post-event communications. The prototypes are created so that the basic information such as date, place and time are easy fill in.

The study provided some useful style guidelines for FEMA and *Protezione Civile*, beside an indication of the impact that this kind of linguistic style has on the audience.

FEMA	<ul> <li>high number of imperatives,</li> <li>high-frequency words,</li> <li>simplified syntax,</li> <li>personal style</li> </ul>	<ul> <li>empower the population,</li> <li>reduce power-distance,</li> <li>long-term trust building, social media used to give examples of correct behaviour</li> </ul>
PROTEZIONE CIVILE	<ul> <li>limited use of the imperative form,</li> <li>high-frequency words,</li> <li>informal and direct style (tu) appeal to citizens as individuals</li> </ul>	<ul> <li>population only partially empowered,</li> <li>low power distance, social media used to appeal to individuals' common sense</li> </ul>

Table 12. Guidelines for improving clarity in disaster communication.

# 3.6.2. Comparing the tweets

The following examples contain the prototypical tweets taken from the Slándáil study for three different emergencies: floods, earthquakes and wildfires. Each section contains also one or two examples of the closest correspondent in the English and Italian dataset that I collected for my study on readability. I will highlight which are the main common points between the messages and which are the major differences; I will also try to give some recommendations on how the messages could have been improved. Sometimes the

correspondence between the content of the models and the content of the datasets is not close, given the fact that agencies often add some other information to the tweets.

#### > Floods

Flooding was the only disaster for which I could collect data for all languages and for both pre- and post- event, probably because it is a high-frequency event in Italy and in the US as well.

#### Pre-event

## Prototype (ENG and ITA):

- FLOOD WARNING issued for [#area/s] until [time, day]. Avoid flooded areas. Check local media for updates. Call [number] for #emergencies only.
- #AVVISO ALLERTA METEO ARANCIONE previste precipitazioni intense e alluvioni su [#località] da [data] a [data]. Cosa fare [URL].

#### FEMA:

Flash flooding & storm surge from #Dorian can happen quickly. Pay attention to directions from local officials and stay tuned to local weather alerts. If trapped, get to a higher floor in the building. Do NOT enter a closed attic.

#### **Protezione Civile:**

⚠ #AllertaGIALLA domani, giovedì #6giugno, per rischio temporali su alcuni settori di Lombardia e Veneto.
 Consulta il bollettino per conoscere il livello e le zone di allerta sul tuo territorio → Urlname

The pre-event standardised messages are all very brief and give scarce information about the emergency except for date, time and place. What they do is giving advices on how to reduce harm after the event with a very short sentence or through an hypertextual link. This characteristic is perfectly maintained in the English dataset tweet, which ends with some practical indications the public should follow in case of a flooding. In Italian, instead, the tweet indicates that there will be a threat caused by severe weather conditions in the near future but does not give any indication on how to reduce damages or harm. Also, the URL leads to the *Protezione Civile* website, where, again, there are no tips on how to confront the emergency.

#### **Post-event:**

# Prototype (ENG and ITA):

- Flood warning for [#area/s] lifted. Check out our flood recovery tips [URL]
- #AVVISO CESSATA ALLERTA fiume [#nome] tornato sotto i livelli di guardia. Cosa fare dopo l'alluvione [URL]

#### FEMA:

- Tropical Storm #Lane has produced over 40 in. of rain in some areas and can still cause dangerous flooding & landslides. Stay off the roads to keep it clear for emergency workers. If you must go outside, be wary of hazards like downed power lines, contaminated water & debris.
- If you are one of the many Americans who experienced flooding this spring & you have flood insurance, it's important that you start the claims process as soon as possible. Download the FEMA App to learn how to file a flood insurance claim.

#### **Protezione Civile:**

🔬 🖒 Dopo la forte ondata di #maltempo che ha colpito il nostro Paese il sistema di #protezionecivile è in queste ore a lavoro per:

verifica dei danni

▲ agevolare le dichiarazioni di stato di emergenza

Leggi qui Urlname Urlname

If we look at the messages that refer to post-event, the situation is identical: only the English tweets follow the general guideline of presenting information of the event followed by other indications. It is important to notice that FEMA also spent an entire tweet to giving insurance advices to the population hit by the disaster. *Protezione Civile*, instead, does not even give detailed information about the status of the areas affected by the flooding. The message is limited to informing the end users that the agency is working for bringing the area back to normal.

It is evident that *Protezione Civile* should adopt a similar communicative strategy to FEMA and include a list of indications for the public. As I said earlier, if the indications given by the agency are insufficient, the audience might experience some issues in time of crisis. I also checked if the URL posted by *Protezione Civile* was leading to a page that, beside give more extensive information about the disaster, also provided a section devoted to specific recommendations and safety tips, but it did not. Despite this, there is room for improvement, especially if the agency moves in three different directions:

- 1) include a list of recommendations specific to the emergency in every tweet;
- 2) include more exhaustive recommendation about the disaster in web page that is linked at the end of the tweet;

3) post an explicative image that explain the audience what to do, as FEMA often does.

By employing only one of these simple propositions, I think that *Protezione Civile* could take their social media disaster communication to a higher level.

# Earthquakes

#### **Post-event:**

### Prototype (ENG and ITA):

- #EARTHQUAKE REPORT [M location] [Date-Time] with depth [num] #Safety tips at [URL]
- AVVISO CESSATO #ALLARME #TERREMOTO [#LOCALITÀ]. Si raccomanda prudenza. Seguite i consigli su cosa fare dopo un #terremoto [URL]

#### FEMA:

- As local authorities respond to aftershocks from #Ridgecrest #earthquake, follow @femaregion9,
   @Cal\_OES and your county officials for the latest info.
   ☐ Review how to stay safe with tips from @Readygov here: Urlname
- If you're affected by #AlaskaEarthquake, follow directions from state and local officials to stay safe. Follow @AlaskaDHSEM & @FEMARegion10 for more updates. Urlname

#### **Protezione Civile:**

- #7novembre in seguito alla scossa di #terremoto di magnitudo 4.4 registrata tra le province de L'#Aquila e #Frosinone, dalle verifiche effettuate dalla #SalaSituazioneItalia non risultano danni a persone o cose ☐ Urlname
- La nostra #SalaSituazioneItalia è in contatto con le strutture di #protezionecivile sul territorio. Il #terremoto è stato avvertito dalla popolazione, dalle prime verifiche non risultano feriti né danni. Urlname

In this case only post events data were available, since earthquakes are natural disasters that are almost impossible to predict. Once again FEMA follows the prototypical messages by addressing giving safety tips to the audience. It is important to notice how FEMA also recommends to follow the Twitter accounts of other agencies or organisations that are directly involved in managing the disaster. This time, *Protezione Civile* provides data about the consequences of the disaster but there is still no indication about what to do in case of an earthquake.

Both organisations refer to the event by using hashtags, exploiting one of the characteristic features of Twitter. In doing so, the agencies actively participate in the social media debate that usually generates when a disaster occurs and that sees in the creation and diffusion of hashtags one of its most peculiar and direct consequences.

### Wildfires

#### **Pre-event**

#### **Prototype (ENG and ITA):**

- #WILDFIRE #WARNING FOR [#location]. Call [num] for evacuation info. If ordered to evacuate, do it asap. Learn more at [URL]
- #ALLARME #INCENDIO BOSCHIVO [#LOCALITÀ]. Si raccomanda di chiudere le finestre ed evitare di uscire fino a nuovo avviso. Cosa fare [URL]

#### FEMA:

If you need a safe place to stay due to the CA wildfires, text SHELTER and your zip code (i.e. SHELTER 12345) to 43362 to locate an open emergency shelter near you.

Follow local officials for evacuation instructions & @femaregion9 for more info. #CampFire #WoolseyFire #HillFire

#### **Protezione Civile:**

#25settembre #incendio #calci Siamo in costante contatto con @ProtCivileRT e il Centro Coordinamento Soccorsi in seduta permanente in Prefettura a Pisa. Alle 13.00 hanno operato sul fuoco 5 Canadair di @emergenzavvf, 1 elicottero di VVf e 1 di @Esercito. #protezionecivile

The third and last examples refer to wildfires, another common emergency for Italy and the US. This was the only case for which I could not find corresponding tweets for the pre-event, but I only managed to retrieve some for the post-event, assuming that the prototypical messages would follow the same structure of those for floods and earthquakes. In this case both FEMA and *Protezione Civile* produced an effective communication: they gave background information about the event, provided tips for assistance and links for further communications (indirectly in the case of the Italian tweets).

In conclusion, FEMA does a good job in producing an effective disaster communication and follows the prototypical message closely. On the contrary, *Protezione Civile* still needs to broaden its communicative skills, especially by fully exploiting the possibilities

given by social media: providing a link to the official website of the agency is not enough to ensure a good message retention from part of the public.

## 3.7. Overall considerations on the analysis

This last section of the chapter is devoted to some personal considerations about my work. My research has focused on many different aspects of social media messages for disaster communication, starting from statistical readability, passing through grammatical features and then concluding with comparing the tweets with reliable standardised messages. Overall, I think that both agencies are very respectful of the general disaster communication guidelines and put a lot of effort in establishing a steady relationship with their public. In this regard, FEMA has a slight advantage since its Twitter account has been active for a longer period of time. On the other hand, *Protezione Civile* is still at the beginning of its journey in the field of new media communication. Since my analysis was mainly addressed to assessing the readability scores and evaluating the structure of the tweets, it would have been also interesting to check how the public feels about the actions of the agencies and if the goal of building a steady relationship has been accomplished. Unfortunately, I did not have the time nor the possibility to consider this matter as well. Moving now to the study of readability, despite the promising results, I have found that the automatic evaluation of readability given by free online tools sometimes suffers from the intrinsic structure of tweet as well as the average length of the texts, which is always very short. Still no specific tools were specifically trained for assessing the readability of Twitter messages and, therefore, are capable of correctly identifying the features that are specific to this media. Also, the online premium tool I used to verify the impact of lexical complexity of overall readability for Italian, Corrige.it, did not gave the results I had anticipated, probably due to the peculiar structure of the Italian tweets. On the contrary, the more regular and 'grammatically correct' composition of the English messages allowed me to identify and study the impact of difficult words on readability more effectively. According to the indications of Haddow (2014) and Temnikova et al (2015), and given the high number of social media and Twitter-specific elements plus the higher incidence of problematics linked to grammatical and structural features of the messages highlighted in this chapter, my suggestion for Protezione Civile would be paying more attention to the way they organise messages. Especially, I would recommend to avoid exploiting hashtags, which are often used inappropriately for indicating dates, places and names of organisations. Besides representing helpful means for organising a hypertextual connection between messages that share the same topic, hashtags are also a threat to an effective communication, as indicated by Temnikova et al (2015). As a matter of fact, users might click on the hyperlink without even reading the whole message. The advent of new media has drastically changed the way people read. On the one hand, it had a negative impact by lowering the average daily reading time. On the other hand, it has increasingly modified how people make use of online texts. The innovative expedients for jumping from a text to another have contributed to the decrease of the users' average attention span. Given the above, *Protezione Civile* should realise that, despite the peculiarities of Twitter, it should be dealt with like every other media. Tweets should be complete and present exhaustive information even with space limitations. Of course, the use of hashtags should be encouraged, but only in reference of specific events, just as FEMA does.

Regarding PoS Tagging, instead, the parsing software have proven to be accurate for most of the tokens. The only entities that were not correctly recognised were the Twitter-specific elements, as I had already anticipated. The choice of working with taggers that were not specifically trained for Twitter was given by the experience that I already had with TreeTagger and Stanford Parser. I preferred to rely on tools that would have enabled me to work with high-quality outputs instead of working with specific taggers for Twitter that I was not familiar with. It would be interesting to conduct the same grammatical analysis with a software specifically trained for parsing tweets and see if the results vary and the Twitter-specific elements are correctly identified.

Overall, my work can be deemed to cover a sufficient number of features for evaluating the effectiveness of tweets in emergency communication, although many more aspects can be considered for further investigations.

### **CONCLUSIONS**

The main purpose of my dissertation was carrying out a quantitative and qualitative analysis of social media messages produced by two disaster and emergency management agencies: American FEMA and Italian Protezione Civile. My work covered background knowledge on the relation between disaster communication and social media, as well as information about the concept of trust-building, information credibility and readability. I then presented the tools used for my analysis: the readability formulae and the PoS taggers. I collected almost 1000 tweets and I divided them into two different datasets, one for each language. Then, I assessed the level of statistical readability of the tweets through the classic readability formulae, such as the Flesch-Kincaid Grade Level and the Gulpease Index. The majority of both datasets was composed of readable tweets, with only a low percentage that was identified as very difficult to understand. Once statistical readability was established, I decided to go further in my analysis and conduct a brief case study on lexical complexity. In this case, the trend of the two datasets was different: while in the tweets produced by FEMA readability was gradually influenced by the increasing percentage of difficult words, in Italian there was no noticeable relation between classic readability assessment and percentage of complex lexis. Later, I focused on the grammatical features of the tweets, with the intent of identifying which grammatical category was associated with a higher level of readability. In order to investigate this, I parsed the datasets using TreeTagger for Italian and Stanford Parser for English. The two groups of data gave different results: the English messages presented a higher number of full-formed sentences and verbal structures compared to the frequent nominal forms of the Italian tweets. Parsing the messages also allowed me to study how the two agencies use adjectives to describe the level of an alert or the severity of an event. Finally, in order to see if the two agencies engaged in an efficient disaster communication, I compared the tweets with some prototypical messages retrieved from a research carried out for Project Slándáil.

The results of my study seem to prove that both agencies are doing a fine job in creating readable disaster messages. The readability formulae and the other software for assessing readability, though, were not specifically trained for analysing Twitter messages, and this might have reflected on the overall precision of the scores. A more specific and Twitter-

trained tool, which should be able to identify and process Twitter-specific features, might be useful for a more accurate analysis of readability.

Between the two agencies, FEMA is the one that, for different reasons, produces a more effective emergency and disaster communication. First, it posts tweets that are syntactically more complete and less schematic. Second, despite the space limitation of 280 characters, it manages to give complete information about the event, including advices to the public. Lastly, FEMA is present also in the phases of recovery and mitigation.

On the other hand, *Protezione Civile*, despite being very active on its Twitter account, does not convey the same amount of information as FEMA. It seems that the Italian agency considers Twitter as a complementary vehicle of information and not as one of the most updated and resourceful disaster communication tools. This consideration originates from the poor variety of information that *Protezione Civile* publish through their tweets. The agency is very present during the phase of preparedness and updates the public almost daily with weather reports, but, in the case of a real emergency, the information is limited only to the time and place of the event. This is not enough to produce an effective disaster communication; a broader approach is recommended. The agency, though, has implemented an effective color-coded system, which results in a better representation of the scale of alert.

This work represents a starting point for future analysis on readability of social media messages in disaster communication and many other aspects can be considered to assess the effectiveness of the work that agencies like FEMA and *Protezione Civile* carry out every day. At the time where social media are such a crucial part of our lives and have now become one of the main communication channels, I hope that their importance will be valued and that researchers will start to study the phenomenon of social media in disaster communication more extensively.

### REFERENCES

- Acar, A., Muraki, Y. (2011) *Twitter for Crisis Communication: Lessons Learned from Japan's Tsunami Disaster*. Article in International Journal of Web Based Communities 7(3):392-402.
- Ahmad, K., Bury, R. Busà, M.G., Cravotta, A. Gründer-Fahrer, S., Musacchio, M.T., Panizzon, R., Zschuckelt, A. (2016) Report on Communicativeness of the Slándáil System. Deliverable 4.4. Project Slándáil.
- Beneito-Montagut, R., Anson, S., Shaw, D., Brewster, C. (2013) Governmental Social
   Media use for Emergency Communication. Conference proceedings 10th
   International ISCRAM Conference. Baden-Baden, Germany.
- Bowman, S., Willis, C. (2003) We Media: How Audiences are Shaping the Future of News and Information. The Media Center at the American Press Institute.
- Bruns, A. (2008). The active audience: Transforming journalism from gatekeeping to gatewatching. In C. Paterson and D. Domingo (Eds.), Making Online News: The Ethnography of New Media Production. New York: Peter Lang.
- Bunce, S., Partridge, H., Davis, K. (2012) Exploring information experience using social media during the 2011 Queensland floods: a pilot study. Australian Library Journal. 61(1). pp. 34–45.
- Dale, E., Chall J. S. (1949) The concept of readability. Elementary English 26(1):19-26, in DuBay, W. H. (2004) The Principles of Readability. Impact Information. USA.
- Dale, E., O'Rourke, J. (1981). The living word vocabulary: A national vocabulary
   Inventory. Chicago: World Book–Childcraft International, in DuBay, W. H. (2004)
   The Principles of Readability. Impact Information. USA.
- Davenport J. R., DeLine, R. (2014) *The readability of tweets and their geographic correlation with education*.
- Dell'Orletta F., Montemagni S., Venturi G. (2011) READ-IT: assessing readability of
  Italian texts with a view to text simplification. In: SLPAT '11 SLPAT '11
  Proceedings of the Second Workshop on Speech and Language Processing for
  Assistive Technologies. Edinburgh, UK. Association for Computational Linguistics.
  Stroudsburg, PA, USA. pp. 73-83.

- DuBay, W. H. (2004) The Principles of Readability. Impact Information. USA.
- Entin, E. B., Klare, G. R. (1985). *Relationships of measures of interest, prior knowledge, and readability to comprehension of expository passages*. Advances in Reading/Language Research 3:9-38 in DuBay, W. H. (2004) *The Principles of Readability*. Impact Information. USA.
- Flesch, R. (1979) *How to Write Plain English*. University of Canterbury.
- Fogg, B.J. (2003a). *Prominence-Interpretation Theory: Explaining How People Assess Credibility Online*. Proceedings of CHI'03, Extended Abstracts on Human Factors in Computing Systems (pp: 722-723), Ft. Lauderdale, Florida, USA.
- Fogg, B.J., Tseng, H. (1999). The Elements of Computer Credibility. Proceedings of the CHI'99 Conference on Human Factors in Computing Systems (pp. 80-87), Pittsburgh, Pennsylvania, United States.
- Fogg., B.J. (2003). Persuasive Technology: Using Computers to Change What We Think and Do. San Diego, CA: Elsevier.
- Gates, A. I. (1930) Interest and ability in reading. New York: Macmillan, in DuBay,
   W. H. (2004) The Principles of Readability. Impact Information. USA.
- George K. Zipf (1949) *Human Behavior and the Principle of Least Effort*. Addison-Wesley.
- Gili G. (2005), La credibilità. Quando e perché la comunicazione ha successo.
   Soveria Mannelli (CZ): Rubettino.
- Haas C., Wearden S.T., (2003), *E-credibility: Building Common Ground in Web Environment*. Educational Studies in Language and Literature, 3:169-184.
- Haddow, K., Haddow, G. (2014), Disaster Communications in a Changing Media World.
- Houston, B., Hawthorne, J., Perreault, M., Park, E., Hode, M., Halliwell, M., McGowen, S., Davis, R., Vaid, S., Mcelderry, J., Griffith, S. (2014) Social Media and Disasters: A Functional Framework for Social Media Use in Disaster Planning, Response, and Research.
- Houston, J.B., Pfefferbaum, B., Rosenholtz, C.E. (2012) Disaster News: Framing and
  Frame Changing in Coverage of Major U.S. Natural Disasters, 2000–2010.
   Journalism and Mass Communication Quarterly. 89(4). pp. 606–623.

- Jaeger, P.T., Shneiderman, B., Fleischmann, K. R., Preece, J., Qu, Y., Wu, P. F.
   (2007) Community Response Grids: E-government, Social Networks, and Effective Emergency Management. Telecommunications Policy. 31(10–11). pp. 592–604.
- Kemper, S. (1983). *Measuring the inference load of a text*. Journal of Educational Psychology. 75:3, 391-401.
- Kibble, R. (2013). *Introduction to Natural Language Processing*. https://london.ac.uk/sites/default/files/study-guides/introduction-to-natural-language-processing.pdf
- Kintsch, W., Miller, J. R. (1981) Readability: A view from cognitive psychology. In Teaching: Research reviews. Neward, DE: International Reading Association, in DuBay, W. H. (2004) The Principles of Readability. Impact Information. USA.
- Klare, G. R. (1968) The role of word frequency in readability. Elementary English, 45:12-22, in DuBay, W. H. (2004) The Principles of Readability. Impact Information. USA.
- Klare, G. R. (1976) A second look at the validity of the readability formulas. Journal of reading behavior 8:159-152, in DuBay, W. H. (2004) The Principles of Readability. Impact Information. USA.
- Klare, G. R., Mabry, J. E., Gustafson, L. M. (1955). The relationship of style difficulty to immediate retention and to acceptability of technical material. Journal of Educational Psychology 46:287-295, in DuBay, W. H. (2004) The Principles of Readability. Impact Information. USA.
- Latonero, M., Shklovski, I. (2011) Emergency Management, Twitter, and Social Media Evangelism. International Journal of Information Systems for Crisis Response and Management, 3(4), 1-16.
- Lewin, K. (1947). Frontiers in group dynamics: Concept, method and reality in science; social equilibria and social change. Human Relations, 1, 5–40, in DuBay, W. H. (2004) The Principles of Readability. Impact Information. USA.
- Lombardo, G., Caci, B., Cardaci, M. (2007). *Dalla credibilità offline alla web-credibility: dimensioni psicologiche del costrutto*. Psychofenia vol. X, n. 16.
- Manning, C., Surdeanu, M., Bauer, J., Finkel, J., Bethard, S., McClosky, D. (2014).
   The Stanford CoreNLP Natural Language Processing Toolkit. Proceedings of 52Nd

- Annual Meeting of the Association for Computational Linguistics: System Demonstrations.
- McFarlane, A.C., Norris, F.H. (2006) Definitions and concepts in disaster research.
   In F.H. Norris et al. (eds.) Methods for Disaster Mental Health Research. Guilford Publications Inc., New York, NY. pp. 3-19.
- Merchant, R.M., Elmer, S., Lurie N., (2011) Integrating Social Media into Emergency-Preparedness Efforts. The New England Journal of Medicine, 365(4), 2011, pp. 289-291.
- Meyer, B. J. F. (1982). Reading Research and the Composition Teacher: The Importance of Plans. College Composition and Communication 33, no. 1:37-49 in in DuBay, W. H. (2004) The Principles of Readability. Impact Information. USA.
- Mills, A., Chen, R., Lee, J., Rao, H.R. (2009) Web 2.0 Emergency Applications: How
  Useful can Twitter be for Emergency Response?. Journal of Information Privacy and
  Security. 5(3). pp. 3–26.
- Murero, M. (2014) Comunicazione post-digitale. Teoria interdigitale e mobilità interconnessa. Libreriauniversitaria.it edizioni, Limena (PD).
- Nation, I.S.P. (1997), Vocabulary Size, Text Coverage, and Word Lists, in Schmitt;
   McCarthy (eds.), Vocabulary: Description, Acquisition and Pedagogy. Cambridge:
   Cambridge University Press, pp. 6–19. Journal of Computer-Mediated
   Communication 19 (2014) 171–183. International Communication Association.
- National Consortium for the Study of Terrorism and Responses to Terrorism. (2012)
   START. Social Media Use during Disasters: A Review of the Knowledge Base and Gaps. University of Maryland.
- O'Lear, C. (2013) *Interview* by Kim Haddow, cited in Haddow, K., Haddow, G. (2014), *Disaster Communications in a Changing Media World*.
- Palen, L., Vieweg, S., Liu, S.B., Hughes, A.L. (2009) Crisis in a Networked World: Features of Computer-mediated Communication. Social Science Computer Review. 27(4). pp. 467–480.
- Paroni, F. (2010) Definizione degli scenari di emergenza e Web 2.0: SocialEMIS. Politecnico di Milano. Elaborato di Laurea.

- Pew Research Center's Project for Excellence in Journalism. (2010) Journalism.org.
   Understanding the Participatory News Consumer: How Internet and Cellphones
   Users have Turned News into a Social Experience.
- Press release (2010). Media Advisory M10-012 NASA Extends the World Wide Web Out into Space. NASA.
- Rempel, J.K., Holmes, J. G., Zanna, M. P. (1985) *Trust in Close Relationships*. Personality and Social Psychology 49: 95-112.
- Renn, O., Levine, D. (1991) Credibility and Trust in Risk Communication. R.E.
   Kasperson and P.J.M. Stallen (eds.). Communicating Risks to the Public, 175-218.
   Kluwer Academic Publishers. Netherlands.
- Reynolds, B., Seeger, M. (2005) *Crisis and Emergency Risk Communication as an Integrative Model*. Journal of Health Communication. 10(1). pp. 43–55.
- Rotte. J.B. (1980). *Interpersonal Trust. Trustworthiness, and Gullibility*. American Psychologist 135: 1-7.
- Samarajiva, R. (2005) Policy Commentary: Mobilizing Information and Communications Technologies for Effective Disaster Warning: Lessons from the 2004 Tsunami. New Media and Society. 7(6). pp. 731–747.
- Scanzoni, J. (1979) Social Exchange and Behavioural Interdependence. In Burgess,
   R. L., Huston, T. L. (1979) Social exchange in developing relationships. New York:
   Academic Press.
- Schmierbach, M., Oeldorf-Hirsch, A. (2010), A Little Bird Told Me, so I didn't Believe it: Twitter, Credibility, and Issue Perceptions, Proceedings of Annual Meeting of the Association for Education in Journalism and Mass Communication, AEJMC, Denver, CO, August 4-7.
- Seltzer, T., Mitrook, M. (2007). *The Dialogic Potential of Weblogs in Relationship Building*. Public Relations Review, 33(2), 227-229.
- Sheridan, T.B. (1985). *Trustworthiness of Command and Control System*. Unpublished Manuscript. Cambridge, MA: MIT.
- Temnikova I., Vieweg S., Castillo C. (2015) *The case for Readability of Crisis Communications in Social Media*. Qatar Computing Research Institute, Doha, Qatar.
- Vergona, F. (2018). Analisi di situazioni emergenziali tramite la classificazione automatica di Tweet. Elaborato di Laurea, Politecnico di Torino

- Vieweg, S., Hughes, A., Starbird, K., Palen, L. (2010) Microblogging During Two
  Natural Hazards Events: What Twitter may Contribute to Situational Awareness.
  Conference on Human Factors in Computing Systems Proceedings.
- Walsh T. M., Volsko T. A. (2008) Readability Assessment of Internet-Based Consumer Health Information, Respir Care 2008;53(10):1310–1315. Daedalus Enterprises.
- Warner, J.E. (2012) Social media to the rescue: the American Red Cross story. The Social Media Monthly. 12 October. http://thesocialmediamonthly.com/social-mediato-the-rescue-the-american-red-cross-story
- Westerman, D., Spence, P. R., Van Der Heide, B. (2013) *Social Media as Information Source: Recency of Updated and Credibility of Information*. Journal of Computer-Mediated Communication 19 171–183. International Communication Association.
- White, D. M., (1950) *The "Gate Keeper": A Case Study in the Selection of News.* Journalism Quarterly, 27, 383–390.
- Williams, R., Williams, G., Burton, D. (2012) *The Use of Social Media for Disaster Recovery*. University of Missouri Extension, Joplin, MO.
- Xia, X., Yang, X., Wu, C., Li, S., Bao, L. (2012) *Information Credibility on Twitter in Emergency Situation*. Computer Science College, Zhejiang University.
- Zeller, D. (1941). The Relative Importance of Factors of Interest in Reading Materials for Junior High School Pupils. New York: Bureau of Publications, Teachers College, Columbia University, in DuBay, W. H. (2004) The Principles of Readability. Impact Information. USA.

## **WEBSITES**

- Bar-Tur, Y. (2013) Mashable. Boston Police Schooled Us All on Social Media.
   <a href="http://mashable.com/2013/04/22/boston-police-social-media">http://mashable.com/2013/04/22/boston-police-social-media</a> (last accessed on September 6, 2019)
- Brenner, J., Smith, A. (2013) 72% of Online Adults are Social Networking Site
   Users. Pew Research Center: Internet & Technology.
   https://www.pewresearch.org/internet/2013/08/05/72-of-online-adults-are-social-networking-site-users/ (Last accessed: 3/09/2019).

- Carlson, N. (2011) The Real History of Twitter. Business insider. Online article https://www.businessinsider.com/how-twitter-was-founded-2011-4?IR=T (Last accessed: 15/09/2019).
- Corriere della Sera. (2012) È morto l'ex presidente Oscar Luigi Scalfaro. Online article. <a href="https://www.corriere.it/politica/12">https://www.corriere.it/politica/12</a> gennaio 29/morto-oscar-luigi-scalfaro 7d0ca31e-4a55-11e1-bc89-1929970e79ce.shtml (Last accessed: 17/09/2019).
- Corrige!it (2016) *Corrige!Leggibilità*. Eulotech SRL. <a href="http://www.corrige.it">http://www.corrige.it</a> (Last accessed: 04/02/2020).
- Data•yze. Readability Analyzer. <a href="https://datayze.com/readability-analyzer.php">https://datayze.com/readability-analyzer.php</a> (Last accessed: 06/02/2020).
- Dipartimento della Protezione Civile (2020). Allertamento meteo-idro. Presidenza del Consiglio dei Ministri. <a href="http://www.protezionecivile.gov.it/attivita-rischi/meteo-idro/attivita/previsione-prevenzione/centro-funzionale-centrale-rischio-meteo-idrogeologico/allertamento-meteo-idro (Last accessed: 08/02/2020).</a>
- FEMA (2013) Emergency Management in the United States. In FEMA (2013) IS-111.A: Livestock in Disasters. Indipendent Study.
   <a href="https://training.fema.gov/emiweb/downloads/is111\_unit%204.pdf">https://training.fema.gov/emiweb/downloads/is111\_unit%204.pdf</a> (last accessed: 30/09/2019).
- FEMA (2016) FEMA's Federal Insurance and Mitigation Administration Fact
   Sheet. Official website of the Department of Homeland Security.
   https://www.fema.gov/media-library/assets/documents/12318?id=3032
   (Last accessed: 26/12/2019).
- FEMA (2019a) *About the Agency*. Official website of the Department of Homeland Security. https://www.fema.gov/about-agency (Last accessed: 28/12/2019).
- FEMA (2019b) *FEMA Regional Contacts*. Official website of the Department of Homeland Security. <a href="https://www.fema.gov/fema-regional-contacts">https://www.fema.gov/fema-regional-contacts</a> (Last accessed: 28/12/2019).
- FreeCodeCamp. (2018) An introduction to part-of-speech tagging and the Hidden Markov Model. Online resource. <a href="https://www.freecodecamp.org/news/an-introduction-to-part-of-speech-tagging-and-the-hidden-markov-model-953d45338f24/">https://www.freecodecamp.org/news/an-introduction-to-part-of-speech-tagging-and-the-hidden-markov-model-953d45338f24/</a> (Last accessed: 07/01/2020).

- Frongia, D. (2011) *Imparare con Twitter*. SegnalazionIT. Online article
   <a href="https://web.archive.org/web/20111113191907/http://segnalazionit.org/2011/09/impa">https://web.archive.org/web/20111113191907/http://segnalazionit.org/2011/09/impa</a>
   <a href="rare-con-twitter">rare-con-twitter</a> (Last accessed: 24/09/2019).
- Fry, J., (2013) Poynter.org, Boston Explosions a Reminder How Breaking News
  Reporting Is Changing. <a href="http://www.poynter.org/latest-news/making-sense-of-news/210471/boston-explosions-a-reminder-of-how-breaking-news-reporting-is-changing">http://www.poynter.org/latest-news/making-sense-of-news/210471/boston-explosions-a-reminder-of-how-breaking-news-reporting-is-changing</a>. (Last accessed: 18/09/2019).
- Good Calculators (2020) Flesch Kincaid Calculator. Free Online Calculators.
   https://goodcalculators.com/flesch-kincaid-calculator/ (Last accessed: 03/02/2020).
- Il Messaggero. (2018) *Terremoto nel Catanese, il primo allarme sui social*. Online article. <a href="https://www.ilmessaggero.it/italia/terremoto\_sicilia\_catania\_allarme\_social-4020916.html">https://www.ilmessaggero.it/italia/terremoto\_sicilia\_catania\_allarme\_social-4020916.html</a> (Last accessed: 19/09/2019).
- Internet Archive (2014) Slándáil: The Project.
   <a href="https://web.archive.org/web/20190412113323/http://slandail.eu/project/">https://web.archive.org/web/20190412113323/http://slandail.eu/project/</a> (Last accessed: 07/02/2020).
- Jain, S. (2013) The role of social media in disaster psychiatry (or how I became a fan of Facebook). PLOS blogs. <a href="http://blogs.plos.org/mindthebrain/2013/01/24/the-role-of-social-mediain-disaster-psychiatry-or-how-i-became-a-fan-of-facebook/">http://blogs.plos.org/mindthebrain/2013/01/24/the-role-of-social-mediain-disaster-psychiatry-or-how-i-became-a-fan-of-facebook/</a> (Last accessed: 18/09/2019).
- Johnson, S. (2009) How Twitter Will Change the Way We Live. Time Magazine. http://content.time.com/time/magazine/article/0,9171,1902818,00.html (Last accessed: 28/09/2019).
- Mangiatordi, A. (2013) Livelli dell'indice Gulpease. <a href="https://farfalla-project.org/readability\_static/">https://farfalla-project.org/readability\_static/</a> (Last accessed: 30/01/2020).
- Penn Treebank Project. Alphabetical list of part-of-speech tags used in the Penn Treebank.
   <a href="https://www.ling.upenn.edu/courses/Fall\_2003/ling001/penn\_treebank\_pos.html">https://www.ling.upenn.edu/courses/Fall\_2003/ling001/penn\_treebank\_pos.html</a>
   (Last accessed 04/02/2020).
- Readable. Dale-Chall Analyzer. <a href="https://app.readable.com/text/dalechall/">https://app.readable.com/text/dalechall/</a> (Last accessed: 06/02/2020).

- Richardson, C. (2011) WebProNews. Visualizing Twitter Use During the Japanese Earthquakes. <a href="http://www.webpronews.com/visualizing-twitter-use-during-the-japanese-earthquakes-2011-06">http://www.webpronews.com/visualizing-twitter-use-during-the-japanese-earthquakes-2011-06</a> (last accessed on September 7, 2019).
- Statista. (2019) *Number of monthly active Facebook users worldwide as of 4th quarter 2019(in millions)*. <a href="https://www.statista.com/statistics/264810/number-of-monthly-active-facebook-users-worldwide/">https://www.statista.com/statistics/264810/number-of-monthly-active-facebook-users-worldwide/</a> (Last accessed: 13/09/2019).
- Statista. (2019) Number of Twitter users worldwide from 2014 to 2020 (in millions).
   <a href="https://www.statista.com/statistics/303681/twitter-users-worldwide/">https://www.statista.com/statistics/303681/twitter-users-worldwide/</a> (Last accessed: 14/09/2019).
- Troilo, D. (2010) Twitter chiama Terra. Così Nespoli cinguetta dallo spazio...
   Skytg24.
   <a href="https://tg24.sky.it/mondo/2010/12/24/paolo\_nespoli\_spazio\_twitter\_youtube.html">https://tg24.sky.it/mondo/2010/12/24/paolo\_nespoli\_spazio\_twitter\_youtube.html</a>
   (last accessed: 26/09/2019).
- Vicinitas (2019). Dowload User Tweets for Free. <a href="https://www.vicinitas.io/free-tools/download-user-tweets">https://www.vicinitas.io/free-tools/download-user-tweets</a> (Last accessed: 03/12/2019).

## RIASSUNTO IN ITALIANO

Questo lavoro è il frutto dell'esperienza maturata durante il mio ultimo anno di magistrale all'Università degli Studi di Padova, periodo in cui ho avuto il piacere di trascorrere un periodo di stage presso l'azienda italiana Datapiano S.r.l. per prendere parte ad un progetto in collaborazione con il Trinity College di Dublino. Lo scopo principale del progetto era quello di localizzare in italiano un software per l'analisi in tempo reale di informazione d'emergenza nei social media creato dal gruppo irlandese Fíosín. Il programma era in grado di scansionare una grande quantità di messaggi postati sulla piattaforma Twitter e di individuare automaticamente quelli riferiti alle emergenze attraverso un metodo basato su parole chiave. La localizzazione del software ha richiesto molti passaggi, tra i quali la creazione di una lista terminologica bilingue, lo studio della terminologia legata alle emergenze e l'utilizzo di software di parsing, ovvero programmi che analizzano un testo dividendolo in parti chiamate "token" per farne l'analisi grammaticale. Nel corso del progetto, ho trascorso una settimana al Trinity College per lavorare a contatto diretto con il gruppo irlandese e svolgere i miei compiti in maniera più efficiente. Durante questo periodo, ho collaborato con il professor Khurshid Ahmad, responsabile del dipartimento di ingegneria informatica al Trinity College e ricercatore esperto nell'ambito dei social network. Il suo aiuto è stato prezioso per portare a termine i miei compiti nella maniera più professionale possibile e per indirizzare il mio lavoro di tesi verso questi argomenti. Purtroppo, il periodo di stage è finito prima che potessi portare a termine la localizzazione del software, ho perciò deciso di utilizzare il lavoro svolto come punto di partenza per un'analisi della comunicazione d'emergenza attraverso i social network.

I nuovi orizzonti della comunicazione digitale, assieme al rapido sviluppo tecnologico, hanno cambiato radicalmente il modo in cui le persone comunicano tra di loro e si approcciano alla comunicazione in generale. Il cambio di paradigma che ha recentemente investito il mondo della comunicazione ha coinvolto anche e soprattutto il mondo giornalistico. In particolare, si sono andati gradualmente a modificare quelli che sono i ruoli tradizionali della comunicazione dei mezzi tradizionali, ovvero televisione, radio e giornali. Gli utenti che utilizzano i social network, infatti, si sono progressivamente sostituti ai giornalisti come fonte primaria di notizie, grazie alle infinite possibilità

comunicative offerte dalle nuove tecnologie. Allo stesso tempo, grazie alla diffusione del giornalismo online, hanno anche conquistato il primato di maggiori fruitori delle stesse. In tal modo, non vi è più una distinzione netta tra chi crea le notizie e chi invece ne fruisce solamente, come avveniva in passato, ma invece si assiste ad un continuo scambio di ruoli tra i vari protagonisti del processo giornalistico. I social network come Facebook o Twitter sono solo alcune delle piattaforme online che permettono un rapido scambio di informazioni in vari formati (testuale, audio e video) e che sono diventati una delle risorse informative più utilizzate. Questi servizi permettono ai loro utenti di poter scambiare enormi quantità di informazioni in tempi molto rapidi, quasi istantanei, e di raggiungere un pubblico molto ampio, eterogeneo e sparso geograficamente. Questa immensa mole di dati risulta però talvolta difficile da controllare e in molte occasioni si sono registrati casi di diffusione di false notizie o di indicazioni fuorvianti. Le nuove tecnologie di comunicazione non hanno influenzato solamente il mondo del giornalismo, anzi i loro effetti sono stati registrati in tutti quei processi di informazione che mettono in contatto quotidiano individui, organizzazioni e istituzioni con un pubblico più o meno esteso. È questo il caso della comunicazione d'emergenza, i cui esperti hanno individuato nei social network un canale semplice ed efficace per aumentare la portata dei propri comunicati. In questo frangente, Twitter è la piattaforma che, da quando è stata lanciata nel 2006, ha registrato il maggior numero di successi per quanto concerne la comunicazione d'emergenza. In più di un'occasione, infatti, è stato il sito di microblogging più famoso del mondo a fornire le prime informazioni riguardo ad eventi critici, seguendo l'andamento generale che si è andato a creare negli ultimi anni in cui sono stati i nuovi mezzi di informazione a dare le prime notizie riguardo ad avvenimenti di caratura nazionale o internazionale. I principali fattori che influenzano positivamente la comunicazione d'emergenza attraverso i social network sono: l'elevata portabilità, dovuta soprattutto all'integrazione con smartphone e laptop, l'accessibilità, si tratta infatti di sistemi molto intuitivi e user-friendly, e infine l'evidente vantaggio in termini di interattività tra gli utenti, che ne hanno segnato il successo nel panorama della comunicazione. Durante alcuni eventi dell'ultimo decennio, come l'attentato durante la maratona di Boston e lo tsunami in Giappone, i social network sono stati per gli utenti l'unico mezzo di comunicazione per mettersi in contatto con le autorità competenti. Durante queste situazioni di emergenza, infatti, l'impossibilità di comunicare attraverso i

tradizionali sistemi di comunicazione, probabilmente dovuta all'intasamento delle linee telefoniche o al malfunzionamento delle infrastrutture comunicative, non ha lasciato altra scelta alle persone direttamente coinvolte nell'emergenza se non quella di utilizzare i social network. Essi hanno fornito il supporto ideale per rimanere aggiornati in tempo reale sull'evoluzione dell'evento, lanciare richieste di aiuto e rimanere in contatto con le autorità. C'è perciò un certo livello di ottimismo riguardo la possibilità di utilizzare i social come mezzo per diffondere la comunicazione d'emergenza ad un pubblico molto vasto. L'integrazione di questi sistemi all'interno del processo comunicativo da parte delle agenzie che si occupano di gestione e comunicazione delle emergenze apporterebbe molte migliorie dal punto di vista dell'aumento della ricezione dei messaggi, dell'accrescimento della qualità delle fasi di prevenzione e risposta, e del maggiore coinvolgimento della popolazione nell'intero processo di gestione dell'emergenza. Questo è esattamente ciò che hanno cominciato a perseguire negli ultimi anni le due agenzie che verranno presentate in questo elaborato: FEMA, agenzia americana, e la Protezione Civile, organizzazione italiana. Il tema della relazione tra social network e comunicazione d'emergenza è stato preso in esame dagli studiosi, che ne hanno evidenziato le potenzialità come uno dei settori più innovativi nel campo della comunicazione.

La gestione dell'emergenza è un processo eterogeneo e molto complesso che comprende differenti attività, sia comunicative che di intervento diretto. Le agenzie che si occupano di questo processo, infatti, devono essere in grado di integrare elevate capacità comunicative, necessarie a informare i cittadini sulla gestione del rischio e delle emergenze, a capacità di coordinamento delle varie organizzazioni che coprono le attività di protezione civile sul territorio. Lo scopo principale di queste operazioni è quello di fornire una gestione adeguata di ogni fase del ciclo dell'emergenza – che verrà spiegato in seguito – di ridurre i danni alle persone ed alle infrastrutture, e di creare una comunità resiliente ed informata. Soprattutto quest'ultimo punto richiede l'implementazione di una campagna informativa che sia estesa ed efficace in modo da informare gli utenti dei pericoli che essi corrono durante le emergenze. Questo sforzo da parte delle organizzazioni deve tenere conto di alcuni fattori per aumentare l'efficacia dei propri comunicati: da una parte è necessario che il contenuto informativo dei messaggi sia sempre veritiero e utile, dall'altra esso deve essere chiaro e leggibile per la maggior parte

dell'utenza. Se la veridicità delle informazioni non è così difficile da ottenere, lo stesso non si può dire della leggibilità dei messaggi. Quando ci si deve rivolgere ad un pubblico il più ampio possibile, per forza di cose si deve fare i conti con una grande diversità, sia essa linguistica, generazionale, culturale o educativa. Tenere in considerazione questi fattori e trovare un modo di soddisfare le esigenze di tutti permette alle organizzazioni di stabilire con la popolazione un rapporto di fiducia basato sulla credibilità. Fiducia e credibilità sono degli elementi importanti nella comunicazione, e assumono un valore ancora più rilevante quando ci sono delle vite in gioco. Un basso livello di credibilità potrebbe portare le persone a dubitare della veridicità dei comunicati delle agenzie e quindi ad adottare comportamenti sconsigliati o addirittura pericolosi. In genere, i social network sono associati a bassi livelli di credibilità e sono spesso le piattaforme in cui viaggiano le cosiddette "fake news". In molti casi infatti, in Italia e in altri paesi, la diffusione di notizie false attraverso queste reti informative ha generato dei veri e propri episodi di disinformazione di massa, tanto da richiedere un coinvolgimento diretto del governo. Le agenzie che si occupano di gestire le emergenze e rispondere ai disastri naturali devono cercare di arginare questo problema e assicurarsi di produrre in maniera consistente messaggi che siano valutati come credibili dagli utenti.

Allo stesso modo, la chiarezza dei messaggi è di vitale importanza per una comunicazione d'emergenza efficace. La misura della leggibilità è un metodo di analisi statistica che fornisce un'indicazione della difficoltà di un testo attraverso un indice numerico e una scala di valori di riferimento. Essa avviene attraverso una formula matematica le cui variabili sono solitamente legate alla lunghezza delle frasi e delle parole, oltre al numero di sillabe o caratteri. La valutazione della leggibilità di un messaggio è importante in qualsiasi tipo di comunicazione scritta perché esprime il livello di complessità di un testo e, di conseguenza, indica la quantità di persone che sono in grado di leggerne e capirne il contenuto. Diffondere messaggi troppo difficili per una parte consistente della popolazione risulterebbe controproducente e, nel caso della comunicazione di emergenza, potrebbe avere gravi conseguenze. Gli studi sulla leggibilità si sono diffusi durante i primi decenni del Novecento, anche se alcuni lavori risalgono agli ultimi anni del diciannovesimo secolo, e nuove ricerche vengono ancora condotte ai giorni nostri. Lo scopo principale di queste ricerche era fornire ad insegnanti, editori e giornalisti uno strumento per valutare la difficoltà dei testi da loro scritti. Purtroppo, pochi ricercatori

hanno condotto studi specifici sulla leggibilità di messaggi brevi, che sono la tipologia testuale che ho analizzato nel mio elaborato.

Ho diviso il mio lavoro in tre capitoli. I primi due sono dedicati a fornire le conoscenze pregresse riguardo ai temi di social network, comunicazione d'emergenza e la loro interazione, con una parte dedicata anche a leggibilità, concetto di credibilità e alla presentazione degli strumenti di analisi che sono stati utili per l'ultimo capitolo, in cui invece ho condotto un'analisi qualitativa e quantitativa sui messaggi postati da FEMA e Protezione Civile nei rispettivi account Twitter. Il primo capitolo è interamente dedicato ai nuovi media e alla comunicazione d'emergenza. Seguendo le ricerche di Haddow e Haddow, due autori che hanno dedicato il loro tempo a studiare l'interazione tra questi due fenomeni, ho individuato ed elencato le strategie migliori da adottare per la creazione di un piano comunicativo efficace nell'ambito della gestione dell'emergenza. Alcune di queste strategie sono rivolte sia alle organizzazioni che si occupano di comunicazione in generale, sia ai singoli componenti che ne fanno parte. Si tratta di accorgimenti volti ad assicurare un maggior livello di efficacia ed empatia nei confronti degli utenti finali. Questi comportamenti includono: porre maggiore enfasi sui bisogni della popolazione; assicurarsi che la comunicazione sia efficace ed integrata ad ogni stadio della gestione dell'emergenza; essere certi che le informazioni siano sempre corrette e che vengano distribuite in maniera sincera, trasparente, e temporalmente intelligente; raggiungere più persone possibili utilizzando ogni mezzo di comunicazione a disposizione; infine, creare un rapporto emozionale e personale con l'utenza, mostrandosi aperti e disponibili ad intervenire per ogni evenienza legata alle conseguenze di un disastro o di una crisi emergenziale. Una volta chiarite queste strategie nel dettaglio, mi sono soffermato sul ciclo dell'emergenza, di cui ho elencato e spiegato le parti in cui viene generalmente suddiviso. Le fasi dell'emergenza sono quattro: prevenzione, risposta, ripristino e previsione. La prima fase, quella della prevenzione, indica il periodo di tempo che viene prima di un evento critico e include le operazioni di pianificazione, addestramento, organizzazione delle risorse e informazione. Durante questa fase infatti si cerca di monitorare il territorio alla ricerca di possibili minacce per la sicurezza e, contemporaneamente, di informare e preparare la popolazione ad affrontare le emergenze. Durante questa fase possono anche essere diramate le allerte per il futuro verificarsi di alcune situazioni di rischio. La seconda fase, quella di risposta, prevede azioni di mobilitazione e intervento per far fronte all'emergenza. Sono incluse in questa fase le operazioni di soccorso, le azioni di ripristino dell'ordine pubblico e l'intervento per mantenere attivi i servizi essenziali. Alla risposta segue il ripristino, ovvero il periodo in cui le attività principali sono quelle di ricostruzione delle infrastrutture danneggiate, di assistenza a imprese o persone per alleviare i danni causati dall'emergenza, e di raccolta di finanziamenti per aiutare le zone colpite dall'evento. Infine, la fase di previsione avviene tra un evento e un altro; è un periodo utile per analizzare i dati e verificare i livelli di criticità e vulnerabilità del sistema di gestione dell'emergenza. Ciascuna di queste fasi necessita di un particolare tipo di comunicazione attraverso i mezzi tradizionali o i social network. Difatti, come previsto dai principi della comunicazione d'emergenza, ogni fase delle operazioni di gestione degli eventi critici prevede l'integrazione di specifiche funzioni comunicative. L'ultima parte del capitolo è dedicata all'uso dei social network nella comunicazione d'emergenza. In questa sezione vengono perciò delineati gli utenti tipici che fanno uso delle piattaforme online durante le emergenze, tra i quali troviamo gli individui, le comunità (intese come gruppi che insistono su una stessa zona geografica o che condividono interessi comuni), e infine le organizzazioni più o meno estese, tra cui le istituzioni. Oltre a una panoramica sugli utenti, mi sono soffermato anche sugli usi che queste persone o agenzie fanno dei social media: molti di questi sono legati alla ricerca e all'ottenimento di informazioni riguardanti l'evento, ma ci sono anche altri aspetti riguardanti lo stare connessi con le persone care o l'interagire con la comunità per fornire aiuto materiale, economico o psicologico.

Nel secondo capitolo mi sono concentrato su un altro aspetto fondamentale per la comunicazione d'emergenza, ovvero il concetto di credibilità. La credibilità è il risultato di una esperienza duratura con una fonte comunicativa che ha dimostrato la sua competenza e la sua flessibilità durante un periodo determinato. Come già detto in precedenza, i contenuti provenienti dal web sono spesso associati a un basso livello di credibilità. Gli studi infatti indicano che, data la immensa mole di fonti di informazione presenti online, sia difficile per siti e social network instaurare un rapporto duraturo con gli utenti. Per aumentare la credibilità, gli operatori che comunicano attraverso il web devono perciò considerare anche altri fattori, come ad esempio presentare le informazioni in maniera adeguata oppure fare affidamento su fonti affidabili. Con la diffusione delle fonti informative sociali, la valutazione della credibilità di una fonte e delle informazioni

in essa contenute è sempre meno sotto il controllo degli esperti di comunicazione e ricade maggiormente sugli utenti stessi, i quali fungono da "guardiani" in questo processo denominato "gatewatching". Durante lo svolgimento di un'emergenza, però, questo compito non può spettare ai comuni cittadini, e sono le agenzie stesse a doversi fare carico di convincere le persone che le informazioni fornite sono legittime e attendibili. Il problema della comunicazione d'emergenza è che essa viene percepita in maniera diversa da chi ne fruisce piuttosto che da chi la produce. In altre parole, il livello di rischio percepito da un'agenzia per un evento ad alto impatto ma con minore probabilità è solitamente maggiore rispetto ad uno più frequente ma con impatto minore, contrariamente a quanto avviene per le persone, che assegnano invece un livello di emergenza e rischio maggiore a eventi più probabili ma con impatti meno significativi. La credibilità delle agenzie di gestione dell'emergenza è anche dovuta a fattori esterni alla comunicazione stessa: stabilità politica, efficienza delle istituzioni, economia e cultura.

La parte successiva del capitolo è dedicata al tema della leggibilità. Lo studio e l'implementazione di questo concetto statistico ha permesso di quantificare la difficoltà di un testo, introducendo così un punto di riferimento per ogni individuo o organizzazione che si occupa di produzione di testi scritti. La leggibilità è parte integrante dell'analisi dei tweet di FEMA e Protezione Civile che occupa interamente il terzo capitolo. Per questo motivo ho elencato le differenti formule per misurare l'indice di leggibilità di un testo per entrambe le lingue prese in esame, italiano e inglese. Per l'inglese, la formula più diffusa e affidabile è la Flesch-Kincaid Grade Level Formula, che indica la difficoltà di un testo mettendola a confronto con gli anni di studio necessari per comprenderne il contenuto. Per l'italiano invece, l'indice maggiormente diffuso è il Gulpease, che fornisce un'indicazione numerica della complessità testuale: più è alto il numero, più il testo è difficile. Per quanto riguarda l'italiano, una breve sezione è dedicata a READ-IT, uno strumento di misura della leggibilità che dovrebbe fornire una più attenta analisi della complessità di un testo prendendo in esami vari aspetti come lessico, sintassi e caratteristiche statistiche. Purtroppo, un approfondimento ne ha evidenziato le evidenti lacune e quindi l'impossibilità di utilizzarlo per analizzare i messaggi. L'ultima parte del secondo capitolo è dedicata a spiegare le nozioni di Natural Language Processing e di Parsing grammaticale. Questo campo della ricerca esplora le metodologie grazie alle quali i computer possono apprendere e analizzare testi scritti in un qualsiasi linguaggio naturale, facendo affidamento su assunti provenienti da varie discipline come la linguistica, la matematica e la psicologia. I software di parsing e tagging grammaticale sfruttano degli indici statistici o dei cosiddetti file di "training" per analizzare un testo, segmentandolo in vari token (che corrispondono a parole o simboli) e indicandone la categoria grammaticale. Per la mia analisi sono stati presi in considerazione due di questi software: lo Stanford Parser, per l'inglese, e TreeTagger, per l'italiano. Entrambi questi programmi combinano facilità d'uso con un'alta precisione dei risultati, offrendo così un ottimo strumento per analizzare il contenuto grammaticale dei testi.

Il terzo ed ultimo capitolo del mio elaborato è dedicato ad un'analisi qualitativa e quantitativa dei tweet postati da FEMA e Protezione Civile nei rispettivi account Twitter. Sono stati raccolti poco meno di 1000 tweet, circa 500 per ciascuna lingua, e ne è stato analizzato il contenuto in modo da poterli suddividere a seconda della fase del ciclo dell'emergenza a cui facevano riferimento. Una volta divisi i messaggi, ne è stato calcolato l'indice di leggibilità, il che ha permesso di evidenziarne la difficoltà testuale media. In entrambe le lingue, il valore intermedio era in linea con una leggibilità accessibile alla grande maggioranza della popolazione, con solamente alcuni casi estremi in cui i messaggi sono risultati molto difficili da leggere. Lo studio della leggibilità dei tweet non si è limitato solamente a questo. È stato infatti condotto uno studio parallelo per verificare l'attendibilità della misurazione statistica della leggibilità attraverso le formule tradizionali confrontandola con i risultati di altre due formule: la Dale-Chall per l'inglese e l'indice Corrige per l'italiano. Oltre a prendere in esame i valori statistici del testo, entrambi questi strumenti basano la loro analisi sulla complessità lessicale, confrontando le parole del testo con una lista più o meno estesa di parole che fanno parte del vocabolario di base di una lingua, ovvero quelle parole con cui tutti i parlanti sono familiari e il cui impiego nella comunicazione è molto frequente. Il confronto tra gli indici ha evidenziato due andamenti differenti per le due lingue: in italiano non è stato registrato alcun impatto della complessità lessicale sulla leggibilità statistica; in inglese, invece, a un graduale aumento della percentuale di parole difficili è corrisposto un aumento di entrambi gli indici di leggibilità, ovvero quello statistico e quello ponderato dal lessico. In italiano infatti, sembra che sia la struttura della frase ad essere importante per la leggibilità: più un testo è suddiviso in tante piccole frasi, più esso risulta leggibile.

L'attenzione è stata poi spostata allo studio grammaticale dei messaggi che hanno ottenuto un livello di leggibilità molto alto. Lo scopo principale era quello di individuare quale categoria grammaticale è associata ad un elevato grado di comprensibilità per ciascuna lingua. Anche in questo caso ci sono stati dei risultati discordanti: i messaggi della Protezione Civile hanno mostrato un uso molto maggiore di strutture nominali, con una presenza di verbi quasi dimezzata rispetto ai sostantivi nonostante un numero di frasi per tweet di poco maggiore a quello dei messaggi in inglese. Al contrario, i tweet di FEMA hanno mostrato una preferenza per strutture verbali più tradizionali e non presentavano costruzioni nominali con totale assenza di verbi. Il parsing grammaticale dei messaggi ha anche permesso un breve studio sugli aggettivi, il cui scopo era individuare il modo in cui le due agenzie sono solite descrivere il livello di allerta delle emergenze. Ogni organizzazione che lavora a stretto contatto con la comunicazione d'emergenza dev'essere consapevole del fatto che, se non adeguatamente modulati, i comunicati possono scatenare reazioni di panico tra la popolazione. Occorre che ogni evento venga descritto nella maniera più consona, evitando di dare l'impressione che la serietà di quest'ultimo sia maggiore di quanto non lo sia in realtà. Nei dati considerati, mentre FEMA utilizza in modo arbitrario degli aggettivi che vanno da dangerous (pericoloso) a deadly (mortale), la Protezione Civile ha implementato un sistema di allerta basato sui colori verde, giallo, arancione e rosso, che indicano un livello crescente di allerta senza sbilanciarsi troppo sulle possibili conseguenze. Un approccio simile è preferibile per evitare che si generi panico e che la popolazione sovrastimi l'entità di un evento.

L'ultima parte dell'analisi riguarda la comparazione dei tweet raccolti con dei messaggi prototipici derivati da uno degli studi del *Project Slándáil*, un progetto collaborativo nato in Irlanda e sovvenzionato dalla Comunità Europea il cui scopo era quello di migliorare la comunicazione d'emergenza attraverso un'integrazione maggiore dei social network. Grazie ai risultati ottenuti dal Progetto Slándáil è stato possibile mettere a confronto i tweet delle agenzie con una serie di testi attendibili, in modo da evidenziarne le eventuali lacune del contenuto informativo. FEMA si è dimostrata maggiormente attenta a informare gli utenti sia sugli eventi, sia sul comportamento da adottare in caso di necessità. Al contrario, la Protezione Civile ha mantenuto quasi sempre un atteggiamento piuttosto passivo, come dimostrato dalla monotematicità dei suoi comunicati, che si

basano spesso su bollettini e informazioni di allerta senza fornire informazioni utili agli utenti.

Nonostante l'analisi sia stata condotta con l'aiuto di strumenti che non sono specifici per Twitter, i risultati sono stati soddisfacenti ed hanno rispettato quelle che erano le mie aspettative iniziali. Tutte e due le agenzie prese in esame hanno dimostrato di avere una certa competenza nella creazione di messaggi per la gestione delle emergenze attraverso i social network, soprattutto per quanto riguarda la leggibilità. Per quanto riguarda la comunicazione d'emergenza in generale, FEMA risulta più esaustiva sia per la quantità di informazioni che riesce a veicolare attraverso i tweet, sia per la maggiore presenza durante le fasi di risposta e ripristino. Al contrario, sembra che la Protezione Civile utilizzi i social network come un canale comunicativo secondario e meno importante, per questo i messaggi non contengono informazioni esaustive.

Questo lavoro rappresenta un punto di partenza per eventuali future ricerche sulla leggibilità dei messaggi distribuiti attraverso i social network nell'ambito della comunicazione d'emergenza. Ci sono molti altri aspetti che potrebbero essere considerati per dare un quadro più ampio sull'efficacia degli sforzi comunicativi compiuti giorno dopo giorno da queste agenzie. In un periodo in cui i social network sono diventati una parte così importante della nostra vita e hanno quasi monopolizzato il mondo della comunicazione, spero che la loro utilità possa essere valorizzata e che il fenomeno che comunicazione d'emergenza attraverso i nuovi media venga studiato in maniera più approfondita.

## **APPENDIX**

ITALEU 😝 #Terremoto #Albania: le verifiche di agibilità sono una misura di emergenza che permette ai cittadini di

## Tweets by *Protezione Civile* (@DPC\_gov)

tornare nelle proprie case, se valutate agibili. Il team italiano è impegnato sia nei sopralluoghi sia nelle attività di training dei tecnici locali. #3dicembre Urlname △#allertaARANCIONE mercoledì #4dicembre per rischio idrogeologico su settori della Sardegna. △#allertaGIALLA in 5 regioni. 😭 🏖 Avviso meteo del #3dicembre per temporali in Sardegna e burrasca in Liguria e sulle due isole maggiori 🔧 Urlname #3dicembre, Giornata internazionale delle persone con disabilità. Il Dipartimento, grazie @AbiliProteggere, lavora per favorire un cambiamento culturale sulle tematiche della prevenzione, del soccorso e assistenza alle persone con disabilità in emergenza Urlname ∩#allertaARANCIONE, martedì #3dicembre, per rischio idraulico su alcuni settori di Veneto ed Emilia-Romagna. #allertaGIALLA in sei regioni. ⚠ L'allerta ti avvisa che potresti trovarti in situazioni di pericolo. Consulta il bollettino → Urlname ITALEU #Terremoto #Albania. Le attività di ricerca e soccorso sono terminate: squadre e unità cinofile fanno rientro in Italia. Inizia ora una nuova fase per il nostro team con la verifica dei danni e delle agibilità degli edifici. #protezionecivile Urlname △ #AllertaARANCIONE il #2dicembre in Emilia-Romagna e Veneto. △ #AllertaGIALLA su nove regioni al Centro-Nord. Leggi l'avviso meteo del 1° dicembre per piogge diffuse al Centro-Nord ∠⊋Urlname △ #AllertaARANCIONE il #1dicembre in Emilia-Romagna e Veneto. 🔔 #AllertaGIALLA su Liguria, Toscana, Lombardia, Piemonte e settori occidentali di Emilia-Romagna Leggi l'avviso meteo del 30 novembre per piogge diffuse al Nord-Ovest 👉 Urlname ITALEU #Terremoto #Albania: prosegue il lavoro del team italiano impegnato ieri, grazie al personale AREU, nel trasferimento di un paziente con sindrome da schiacciamento dall'ospedale traumatologico di #Tirana al Policlinico di Bari #protezionecivile #30novembre Urlname #allertaROSSA sabato #30novembre in Veneto ed Emilia-Romagna. △#allertaARANCIONE su Emilia-Romagna e Lombardia. △#allertaGIALLA su Veneto ed Emilia Romagna. P Consulta il bollettino per conoscere il livello e le zone di allerta sul tuo territorio → Urlname 🛣 🖍 Intense precipitazioni hanno caratterizzato il mese di novembre. Cumulate medie tra i 200-500 mm e punte massime fino a 700-1000 mm (in celeste-blu nella mappa) in Piemonte, Liguria, Veneto, Friuli Venezia Giulia e Toscana. Fonte dati: Rete dei Centri Funzionali Urlname ITALEU #Terremoto #Albania: la macchina dei soccorsi italiana è impegnata su più fronti. Accanto alle delicate attività delle squadre USAR stiamo supportando l'assistenza alla popolazione con un campo a #Durazzo capace di ospitare 250 persone #29novembre @eu echo @emergenzavvf Urlname ITALEU 🗷 #Terremoto #Albania: gestire un'emergenza vuol dire portare in modo tempestivo sul luogo dell'evento risorse, personale e mezzi. Al porto di #Durazzo si allestisce la base logistica dei soccorritori italiani. #protezionecivile #28novembre Urlname #allertaROSSA, #29novembre, in Veneto, Lombardia ed Emilia-Romagna. #allertaARANCIONE in alcuni settori dell'Emilia-Romagna. #allertaGIALLA in 3 regioni.

🖳 Le immagini del 25 e 26 novembre, elaborate da @CIMAFoundation , mostrano in blu il corso del fiume e in

#facebookdown sta interessando anche il nostro profilo. Vi invitiamo a consultare il link Purlname 

\$\times\$ Piena del Po: abbiamo attivato il monitoraggio satellitare del fiume per verificare le aree inondate.

celeste le aree allagate tra Piemonte, Lombardia e Emilia- Romagna Urlname

#allertaROSSA per rischio idraulico, giovedì #28novembre, in Veneto, Lombardia ed Emilia-Romagna.
#allertaGIALLA in otto regioni.
Consulta il bollettino per conoscere il livello e le zone di allerta sul tuo territorio 🖃 Urlname
#Terremoto #Albania: la macchina dei soccorsi italiana è pienamente operativa e già dalla serata di ieri sta
supportando le attività di ricerca e soccorso e di assistenza alla popolazione con l'allestimento delle prime tende a #Durazzo
#protezionecivile #27novembre Urlname
L'intervento italiano per aiutare l'#Albania colpita dal #terremoto è stato attivato nell'ambito del Meccanismo
europeo.
Perché fare #protezionecivile è fare squadra \( \frac{1}{2} \) Urlname
#allertaROSSA, il #27novembre, in Emilia-Romagna, Lombardia e Veneto.
#allertaARANCIONE in Lombardia e su gran parte della Liguria.
#allertaGIALLA su ampi settori del Paese.
Leggi l'avviso del #26novembre per piogge e venti forti ∠ Urlname
#Terremoto #Albania: coordinati dal DPC 200 donne e uomini del sistema di #ProtezioneCivile stanno
raggiungendo #Tirana e #Durazzo
Squadre di ricerca e soccorso
Volontari delle colonne mobili
Personale medico
1 Unità cinofile
Leggi → Urlname
#Terremoto #Albania: in partenza team italiano per aiutare le autorità locali impegnate a rispondere all'emergenza.
Il team supporterà la risposta di #protezionecivile nella ricerca e soccorso, valutazione dei danni e agibilità degli edifici Urlname
#26novembre #terremoto Albania. La scossa è stata nettamente avvertita nelle regioni che affacciano
sull'Adriatico. Dalle verifiche effettuate dalla #salasituazioneItalia con le strutture di #protezionecivile sul nostro
territorio, non risultano danni a persone o cose. Urlname
#allertaROSSA, martedì #26novembre, per rischio idraulico su gran parte dell'Emilia-Romagna e parte della
Lombardia.
↓#allertaARANCIONE su settori di Lombardia e Veneto.
∴#allertaGIALLA in 4 regioni.
Consulta il bollettino 👉 Urlname
#25novembre #viadotto #A6, in accordo con la @RegLiguria abbiamo attivato i nostri centri di competenza
#25novembre #viadotto #A6, in accordo con la @RegLiguria abbiamo attivato i nostri centri di competenza @UNI_FIRENZE - Dipartimento Scienze della Terra, @CIMAFoundation e @CNR_IRPI per il monitoraggio
#25novembre #viadotto #A6, in accordo con la @RegLiguria abbiamo attivato i nostri centri di competenza @UNI_FIRENZE - Dipartimento Scienze della Terra, @CIMAFoundation e @CNR_IRPI per il monitoraggio della frana → Urlname
#25novembre #viadotto #A6, in accordo con la @RegLiguria abbiamo attivato i nostri centri di competenza @UNI_FIRENZE - Dipartimento Scienze della Terra, @CIMAFoundation e @CNR_IRPI per il monitoraggio della frana → Urlname ↓ #25novembre, su parte dell'Emilia-Romagna.
#25novembre #viadotto #A6, in accordo con la @RegLiguria abbiamo attivato i nostri centri di competenza @UNI_FIRENZE - Dipartimento Scienze della Terra, @CIMAFoundation e @CNR_IRPI per il monitoraggio della frana → Urlname  ∴ #allertaROSSA, lunedì #25novembre, su parte dell'Emilia-Romagna.  ∴ #allertaARANCIONE in 8 regioni.
#25novembre #viadotto #A6, in accordo con la @RegLiguria abbiamo attivato i nostri centri di competenza @UNI_FIRENZE - Dipartimento Scienze della Terra, @CIMAFoundation e @CNR_IRPI per il monitoraggio della frana Urlname
#25novembre #viadotto #A6, in accordo con la @RegLiguria abbiamo attivato i nostri centri di competenza @UNI_FIRENZE - Dipartimento Scienze della Terra, @CIMAFoundation e @CNR_IRPI per il monitoraggio della frana Urlname  #25novembre, su parte dell'Emilia-Romagna.  #4llertaROSSA, lunedì #25novembre, su parte dell'Emilia-Romagna.  #4llertaARANCIONE in 8 regioni.  #4llertaGIALLA su gran parte dell'Italia.  #4 Ancora piogge e venti di burrasca al centro-sud. Leggi l'avviso meteo del #24novembre #4 Urlname
#25novembre #viadotto #A6, in accordo con la @RegLiguria abbiamo attivato i nostri centri di competenza @UNI_FIRENZE - Dipartimento Scienze della Terra, @CIMAFoundation e @CNR_IRPI per il monitoraggio della frana Urlname  \[ \tilde{\Omega} \) #allertaROSSA, lunedì #25novembre, su parte dell'Emilia-Romagna. \[ \tilde{\Omega} \) #allertaARANCIONE in 8 regioni. \[ \tilde{\Omega} \) #allertaGIALLA su gran parte dell'Italia. \[ \tilde{\Omega} \) Ancora piogge e venti di burrasca al centro-sud. Leggi l'avviso meteo del #24novembre \( \tilde{\Omega} \) Urlname \[ \tilde{\Omega} \) #allertaROSSA, domenica #24novembre, in Calabria e su settori di Piemonte e Liguria.
#25novembre #viadotto #A6, in accordo con la @RegLiguria abbiamo attivato i nostri centri di competenza @UNI_FIRENZE - Dipartimento Scienze della Terra, @CIMAFoundation e @CNR_IRPI per il monitoraggio della frana Urlname  \[ \int \text{ #allertaROSSA, lunedi #25novembre, su parte dell'Emilia-Romagna.} \] \[ \int \text{ #allertaARANCIONE in 8 regioni.} \] \[ \int \text{ #allertaGIALLA su gran parte dell'Italia.} \] \[ \int \text{ Ancora piogge e venti di burrasca al centro-sud. Leggi l'avviso meteo del #24novembre \( \text{ Turlname} \) \[ \int \text{ #allertaROSSA, domenica #24novembre, in Calabria e su settori di Piemonte e Liguria.} \] \[ \int \text{ #allertaARANCIONE in 9 regioni.} \]
#25novembre #viadotto #A6, in accordo con la @RegLiguria abbiamo attivato i nostri centri di competenza @UNI_FIRENZE - Dipartimento Scienze della Terra, @CIMAFoundation e @CNR_IRPI per il monitoraggio della frana Urlname  \[ \text{\t
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#25novembre #viadotto #A6, in accordo con la @RegLiguria abbiamo attivato i nostri centri di competenza @UNI_FIRENZE - Dipartimento Scienze della Terra, @CIMAFoundation e @CNR_IRPI per il monitoraggio della frana Urlname  \[ \textstyle{\texts
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#25novembre #viadotto #A6, in accordo con la @RegLiguria abbiamo attivato i nostri centri di competenza @UNI_FIRENZE - Dipartimento Scienze della Terra, @CIMAFoundation e @CNR_IRPI per il monitoraggio della frana Urlname  #2 #allertaROSSA, lunedi #25novembre, su parte dell'Emilia-Romagna.  #allertaARANCIONE in 8 regioni.  #allertaGIALLA su gran parte dell'Italia.  #3 Ancora piogge e venti di burrasca al centro-sud. Leggi l'avviso meteo del #24novembre Urlname  #4 #allertaROSSA, domenica #24novembre, in Calabria e su settori di Piemonte e Liguria.  #4 #allertaGIALLA in 16 regioni.  #4 #allertaGIALLA in 16 regioni.  #5 Leggi qui l'avviso meteo del #23novembre Durlname  #23novembre 1980, #terremoto #Irpinia. Il tragico sisma evidenzia i limiti e ritardi di un sistema dei soccorsi non coordinato.  Due anni dopo nasce l'organismo sovra-ministeriale con l'obiettivo di coordinare tutte le forze del Paese: il Dipartimento della #protezionecivile. Urlname    42 #allertaROSSA in #Liguria, piogge intense al nord-ovest. Siamo al Centro Funzionale Centrale con Carlo Cacciamani per fare il punto sull'intenso #maltempo che caratterizzerà il fine settimana del #23novembre e
#25novembre #viadotto #A6, in accordo con la @RegLiguria abbiamo attivato i nostri centri di competenza @UNI_FIRENZE - Dipartimento Scienze della Terra, @CIMAFoundation e @CNR_IRPI per il monitoraggio della frana \to Urlname  \( \to \text{#allertaROSSA, lunedi #25novembre, su parte dell'Emilia-Romagna.} \) \( \to \text{#allertaRANCIONE in 8 regioni.} \) \( \text{#allertaGIALLA su gran parte dell'Italia.} \) \( \to \text{*allertaROSSA, domenica #24novembre, in Calabria e su settori di Piemonte e Liguria.} \) \( \text{#allertaRANCIONE in 9 regioni.} \) \( \text{#allertaGIALLA in 16 regioni.} \) \( \text{*allertaGiqui l'avviso meteo del #23novembre \( \text{*y-Urlname} \) \( \text{#23novembre 1980, #terremoto #Irpinia. Il tragico sisma evidenzia i limiti e ritardi di un sistema dei soccorsi non coordinato.} \)  Due anni dopo nasce l'organismo sovra-ministeriale con l'obiettivo di coordinare tutte le forze del Paese: il Dipartimento della #protezionecivile. Urlname  \( \$\text{\$\t
#25novembre #viadotto #A6, in accordo con la @RegLiguria abbiamo attivato i nostri centri di competenza @UNI_FIRENZE - Dipartimento Scienze della Terra, @CIMAFoundation e @CNR_IRPI per il monitoraggio della frana Urlname  \[ \tilde{\tilde{\tilde{\tilde{IRPI}}} \] Urlname  \[ \tilde{\tilde{\tilde{IRPI}}} \] #allertaROSSA, lunedi #25novembre, su parte dell'Emilia-Romagna. \[ \tilde{\tilde{IRPI}} \] #allertaROSSA, lunedi #25novembre, su parte dell'Emilia-Romagna. \[ \tilde{\tilde{IRPI}} \] #allertaGIALLA su gran parte dell'Italia. \[ \tilde{\tilde{IRPI}} \] Ancora piogge e venti di burrasca al centro-sud. Leggi l'avviso meteo del #24novembre \( \tilde{\tilde{\tilde{IRPI}}} \) Urlname  \[ \tilde{\tilde{IRPI}} \] #allertaROSSA, domenica #24novembre, in Calabria e su settori di Piemonte e Liguria. \[ \tilde{\tilde{IRPI}} \] #allertaRANCIONE in 9 regioni. \[ \tilde{\tilde{IRPI}} \] #allertaGIALLA in 16 regioni. \[ \tilde{\tilde{IRPI}} \] Leggi qui l'avviso meteo del #23novembre \( \tilde{\tilde{\tilde{IRPI}}} \) Urlname  #23novembre 1980, #terremoto #Irpinia. Il tragico sisma evidenzia i limiti e ritardi di un sistema dei soccorsi non coordinato.  Due anni dopo nasce l'organismo sovra-ministeriale con l'obiettivo di coordinare tutte le forze del Paese: il Dipartimento della #protezionecivile. Urlname \[ \tilde{\tilde{\tilde{IRPI}}} \] #allertaROSSA in #Liguria, piogge intense al nord-ovest. Siamo al Centro Funzionale Centrale con Carlo Cacciamani per fare il punto sull'intenso #maltempo che caratterizzerà il fine settimana del #23novembre e #24novembre. Guarda il video \[ \tilde{\tilde{\tilde{IRPI}}} \] Urlname \[ \tilde{\tilde{\tilde{IRPI}} \] #allertaROSSA domani, #23novembre, in Liguria.
#25novembre #viadotto #A6, in accordo con la @RegLiguria abbiamo attivato i nostri centri di competenza @UNI_FIRENZE - Dipartimento Scienze della Terra, @CIMAFoundation e @CNR_IRPI per il monitoraggio della franaUrlname
#25novembre #viadotto #A6, in accordo con la @RegLiguria abbiamo attivato i nostri centri di competenza @UNI_FIRENZE - Dipartimento Scienze della Terra, @CIMAFoundation e @CNR_IRPI per il monitoraggio della frana   Urlname
#25novembre #viadotto #A6, in accordo con la @RegLiguria abbiamo attivato i nostri centri di competenza @UNI_FIRENZE - Dipartimento Scienze della Terra, @CIMAFoundation e @CNR_IRPI per il monitoraggio della frana   Urlname
#25novembre #viadotto #A6, in accordo con la @RegLiguria abbiamo attivato i nostri centri di competenza @UNI_FIRENZE - Dipartimento Scienze della Terra, @CIMAFoundation e @CNR_IRPI per il monitoraggio della frana - Urlname
#25novembre #viadotto #A6, in accordo con la @RegLiguria abbiamo attivato i nostri centri di competenza @UNI_FIRENZE - Dipartimento Scienze della Terra, @CIMAFoundation e @CNR_IRPI per il monitoraggio della frana   Urlname
#25novembre #viadotto #A6, in accordo con la @RegLiguria abbiamo attivato i nostri centri di competenza @UNI_FIRENZE - Dipartimento Scienze della Terra, @CIMAFoundation e @CNR_IRPI per il monitoraggio della frana - Urlname

#allertaARANCIONE, venerdì #22novembre, su alcuni settori di Veneto ed Emilia-Romagna. #allertaGIALLA
in otto regioni.
in arrivo una nuova perturbazione. Leggi l'avviso meteo del #21novembre ☐ Urlname
Complimenti a @emergenzavvf per questo importante riconoscimento al loro lavoro e alla loro straordinaria
abnegazione Urlname
Consulta il Bollettino → Urlname
#AllertaROSSA, mercoledì #20novembre, in Emilia-Romagna.
#AllertaARANCIONE in Veneto e Emilia-Romagna.
#AllertaGIALLA in 9 Regioni.
L'allerta #meteo-idro ti avvisa che potresti trovarti in situazioni di pericolo. Consulta il bollettino 🗲 Urlname
#19novembre Il Presidente di @montecitorio Roberto Fico oggi al Dipartimento della #protezionecivile. È stato un
onore fargli conoscere il personale e le nostre sale operative che in ordinario e in emergenza garantiscono il
monitoraggio e la valutazione dei rischi sul territorio. Urlname
△ ♣#Maltempo #18novembre ore 19. Il sistema di #protezionecivile è operativo per rispondere alle criticità in
corso. Attenzione massima in Emilia-Romagna.
Invitiamo i cittadini a mantenere comportamenti prudenti e a informarsi sui canali istituzionali
#AllertaROSSA oggi e domani in Emilia-Romagna.
△#AllertaARANCIONE #19novembre su Veneto, P. A. di Bolzano, Emilia-Romagna, Lombardia, Piemonte e
Liguria 🛴 #Allerta GIALLA su gran parte del Paese.
Avviso #meteo #18novembre per pioggia, neve e venti / Urlname
#18novembre 2013, #alluvione #Sardegna. Sei anni fa una forte ondata di #maltempo colpisce l'isola. Drammatico
il bilancio dell'evento. Il Sistema di #protezionecivile si attiva sin da subito per fornire soccorso e assistenza.
Urlname
#Maltempo #18novembre aggiornamento ore 11.00. In calo livello dei fiumi in #Toscana. In
#EmiliaRomagna segnalate alcune criticità per la rottura di argini di rii minori. Il Dipartimento della
#protezionecivile segue la situazione in contatto con Regioni e strutture operative Urlname
Maltempo #17novembre, il sistema di #protezionecivile è attivo, massima attenzione per la piena dell'#Arno a #Pisa. Il punto con Luigi D'Angelo Direttore dell'Ufficio Emergenze \( \bar{V} \) Urlname
#Arino a #1 isa. Il punto con Edigi D'Angeto Difettore dell' Officio Energenze q'Offinane  #Arino a #1 isa. Il punto con Edigi D'Angeto Difettore dell' Officio Energenze q'Offinane  #Arino a #1 isa. Il punto con Edigi D'Angeto Difettore dell' Officio Energenze q'Offinane  ##Arino a #1 isa. Il punto con Edigi D'Angeto Difettore dell' Officio Energenze q'Offinane  ##Arino a #1 isa. Il punto con Edigi D'Angeto Difettore dell' Officio Energenze q'Offinane  ##Arino a #1 isa. Il punto con Edigi D'Angeto Difettore dell' Officio Energenze q'Offinane  ##Arino a #1 isa. Il punto con Edigi D'Angeto Difettore dell' Officio Energenze q'Offinane  ##Arino a #1 isa. Il punto con Edigi D'Angeto Difettore dell' Officio Energenze q'Offinane  ##Arino a #1 isa.  ##
Toscana.
#allertaARANCIONE in 5 regioni.
#allertaGIALLA in 8 regioni.
Consulta qui i livelli e le zone di allerta meteo-idro
↑ Triname
fare qui
protezionecivile Urlname
#allertaROSSA oggi #16novembre e domani #17novembre in Veneto, friuli Venzia Giulia ed Emilia-
Romagna.
#allertaARANCIONE in 8 regioni.
#allertaGIALLA su gran parte dell'Italia
Leggi l'avviso meteo del #16novembre 🗲 Urlname
#allertaROSSA domani, #16novembre, in Veneto.
#allertaARANCIONE in 6 regioni.
#allertaGIALLA in 12 regioni.
Ancora temporali e venti di burrasca su gran parte dell'Italia. Leggi l'avviso meteo del #15novembre
Graname
☐ Là attivo dal #15novembre il numero solidale 45500 per sostenere la città di #Venezia. Puoi donare 2€ da rete
fissa e mobile.
Le somme saranno trasferite dagli operatori che aderiscono all'iniziativa senza alcun ricarico. Leggi qui: Urlname
#Venezia e #Alessandria, il Consiglio dei Ministri dichiara lo stato d'emergenza
#protezionecivile Urlname
#allertaROSSA in Veneto.
#allertaGIALLA in 11 regioni.

😭 🦾 Avviso meteo del #14Novembre per neve al nord e pioggia e venti di burrasca su gran parte del Paese 👍 Urlname
#14novembre 1951, #alluvione #Polesine. Fu enorme il numero di vittime e di danni. All'epoca non esisteva la moderna #protezionecivile ma questo tragico evento viene ricordato anche per la prima grande mobilitazione e
campagna di solidarietà del dopoguerra.  Comune Occhiobello Urlname
#allertaGIALLA domani, giovedì #14novembre, in 7 regioni.
Avviso di condizioni meteo avverse del #13novembre per pioggia, vento e neve sulle regioni
settentrionali  Urlname
#13novembre "Su #Venezia si è abbattuto un evento straordinario: stiamo lavorando perché da domani si possa
arrivare alla dichiarazione dello stato di emergenza" cosi Borrelli nel corso della riunione nella sala della #protezionecivile regionale. Urlname
🗘 #allertaARANCIONE domani, mercoledì #13novembre, su parte della Basilicata. #allertaGIALLA in 12 regioni.
Consulta il bollettino per conoscere il livello e le zone di allerta meteo-idro sul tuo territorio 🗗 Urlname
#maltempo #12novembre aggiornamento ore 10. Dal punto con Regioni e strutture operative non si segnalano al momento situazioni di emergenza ma criticità puntuali senza il coinvolgimento di persone. Il sistema di #protezionecivile continua a seguire l'evoluzione dei fenomeni. Urlname
Il #12novembre si insedia il Comitato nazionale del Volontariato di #protezionecivile.
È un passo importante per rafforzare il ruolo del volontariato nel nostro sistema.
Leggi qui ← Urlname
#Stromboli passaggio da ARANCIONE a #allertaGIALLA
Attiva fase di ATTENZIONE
Restano in vigore i divieti
△ alla navigazione nell'arco di un miglio marino nel tratto di mare antistante la Sciara del Fuoco
Urlname
#allertaROSSA oggi e domani in Calabria e Sicilia. #12novembre #allertaROSSA anche su parte di
Basilicata e #allertaARANCIONE in Puglia e su restanti bacini di Basilicata, Calabria e Sicilia.
Avviso meteo #11novembre per pioggia e venti di burrasca → Urlname
#11novembre Un'intensa perturbazione interesserà oggi e domani #12novembre il Sud Italia. Il sistema di #protezionecivile è attivo ma ogni cittadino può fare la sua parte.
Guarda il video e scopri cosa puoi fare per non correre rischi
☐ Intensa perturbazione in arrivo al Sud.
#allertaARANCIONE, lunedì #11novembre, su Basilicata, Calabria e Sicilia. Allerta GIALLA in 5 regioni.
Leggi l'avviso meteo del #10novembre 👉 Urlname
#allertaGIALLA domani, domenica #10novembre, in Toscana, Campania, Basilicata, Calabria e sul versante
occidentale della Sardegna.
Consulta il bollettino per conoscere il livello e le zone di allerta meteo-idro sul tuo territorio → Urlname
Tre giorni di attività per migliorare la risposta in emergenza
Scenari operativi complessi per testare la sinergia tra diverse strutture
& Truppe Alpine e Associazione nazionale Alpini fianco a fianco per un importante banco di prova. Questa è Vardirex! Urlname
☐#allertaARANCIONE, sabato #9novembre, sulla Provincia Autonoma di Bolzano e su settori di Veneto e
Calabria.
Calabria.
Calabria.
Calabria.  A #allertaGIALLA in 12 regioni.  B In arrivo temporali e venti di burrasca anche al Sud. Leggi l'avviso meteo del #8novembre P Urlname  #7novembre In seguito alla scossa di #terremoto di magnitudo 4.4 registrata tra le province de L'#Aquila e
Calabria.  ☐ #allertaGIALLA in 12 regioni. ☐ In arrivo temporali e venti di burrasca anche al Sud. Leggi l'avviso meteo del #8novembre ☐ Urlname  #7novembre In seguito alla scossa di #terremoto di magnitudo 4.4 registrata tra le province de L'#Aquila e  #Frosinone, dalle verifiche effettuate dalla #SalaSituazioneItalia non risultano danni a persone o cose ☐ Urlname
Calabria.  A #allertaGIALLA in 12 regioni.  B In arrivo temporali e venti di burrasca anche al Sud. Leggi l'avviso meteo del #8novembre P Urlname  #7novembre In seguito alla scossa di #terremoto di magnitudo 4.4 registrata tra le province de L'#Aquila e
Calabria.  ☐ #allertaGIALLA in 12 regioni. ☐ In arrivo temporali e venti di burrasca anche al Sud. Leggi l'avviso meteo del #8novembre ☐ Urlname  #7novembre In seguito alla scossa di #terremoto di magnitudo 4.4 registrata tra le province de L'#Aquila e  #Frosinone, dalle verifiche effettuate dalla #SalaSituazioneItalia non risultano danni a persone o cose ☐ Urlname  #7novembre #terremoto L'Aquila aggiornamento ore 18.55. La nostra #salasituazioneItalia è in contatto con le
Calabria.
Calabria.

Contrasto alle violazioni sui contributi erogati in emergenza significa maggiori garanzie per i cittadini colpiti.
Questo lo spirito del protocollo firmato ieri con la @GDF
#protezionecivile Urlname
La Conferenza delle Autorità di Protezione Civile è stata simbolicamente la tappa conclusiva della prima edizione
della #settimanadipc. Un momento di confronto per affrontare insieme le sfide future. È così che facciamo
#protezionecivile. Leggi la news Urlname
#allertaARANCIONE domani, giovedì #7novembre, su settori della Campania.
#allertaGIALLA in sette regioni.
Consulta il bollettino per conoscere il livello e le zone di allerta meteo-idro sul tuo territorio → Urlname
"La forza della #protezionecivile è il suo essere modello integrato. Dietro la protezione civile ci sono divise e
competenze diverse. Questa è l'Italia migliore che sa fare sistema" così il Presidente Conte durante la Conferenza delle Autorità di Protezione Civile #6novembre Urlname
"I Vigili del Fuoco sono fieri di fare parte del sistema di #protezionecivile. I Vigili del Fuoco in caso di emergenza
sono il primo violino di questa grande orchestra" così Fabio Dattilo durante la Conferenza delle Autorità di
Protezione Civile #6novembre Urlname
"Lo spirito di squadra è importantissimo. Essere qui oggi tutti insieme, aver riunito tutti i soggetti che compongono
la #protezionecivile è un'occasione importante di crescita" così Enzo Bianco @comuni_anci durante la Conferenza
delle Autorità di Protezione Civile #6novembre Urlname
"Istituzioni, enti, comunità scientifica, volontariato, ordini professionali: oggi insieme ragioniamo sulle sfide da
perseguire per rendere la nostra #protezionecivile sempre più di tutti, con tutti" così Borrelli apre la Conferenza
delle Autorità di Protezione Civile #6novembre Urlname
🛴 #allertaARANCIONE, domani #6novembre, in Abruzzo e in Campania. #AllertaGIALLA in 13 Regioni.
Consulta il bollettino per conoscere il livello e le zone di allerta #meteo-idro sul tuo territorio 🗲 Urlname
#5novembre 1994,#alluvione #Piemonte. 25 anni fa piogge, esondazioni e frane causarono vittime e danni. È la
prima grande emergenza idrogeologica che impegna il Sistema di #ProtezioneCivile, il primo test per il Servizio
Nazionale istituito nel '92 dalla legge 225
ArpaPiemonte Urlname
#6novembre a #Roma si svolgerà la Conferenza Nazionale delle Autorità di #protezionecivile: tappa conclusiva
della #settimanadiPC. È prevista la presenza del Presidente Conte. I giornalisti interessati alla conferenza sono invitati a accreditarsi. Leggi: Urlname
mivitati a accreditarsi. Leggi. Ormane
Mislianore la tampastività dei massaggi di allantamento
Migliorare la tempestività dei messaggi di allertamento
Aggiornare i piani di #protezionecivile
Aggiornare i piani di #protezionecivile Diffondere le buone pratiche di riduzione del rischio
Aggiornare i piani di #protezionecivile Diffondere le buone pratiche di riduzione del rischio #5novembre è #TsunamiDay. Scopri di più su Urlname
Aggiornare i piani di #protezionecivile  Diffondere le buone pratiche di riduzione del rischio  #5novembre è #TsunamiDay. Scopri di più su Urlname  #5novembre Esplosione a #Quargnento in provincia di #Alessandria: il cordoglio del Dipartimento della
Aggiornare i piani di #protezionecivile  ☐ Diffondere le buone pratiche di riduzione del rischio ☐ #5novembre è #TsunamiDay. Scopri di più su Urlname  #5novembre Esplosione a #Quargnento in provincia di #Alessandria: il cordoglio del Dipartimento della #protezionecivile ☐ Urlname
Aggiornare i piani di #protezionecivile  ☐ Diffondere le buone pratiche di riduzione del rischio ☐ #5novembre è #TsunamiDay. Scopri di più su Urlname  #5novembre Esplosione a #Quargnento in provincia di #Alessandria: il cordoglio del Dipartimento della #protezionecivile ☐ Urlname ☐ ☐ #Vento forte il #5novembre sulle regioni centro-meridionali.
Aggiornare i piani di #protezionecivile Diffondere le buone pratiche di riduzione del rischio #5novembre è #TsunamiDay. Scopri di più su Urlname #5novembre Esplosione a #Quargnento in provincia di #Alessandria: il cordoglio del Dipartimento della #protezionecivile Urlname  Urlname Urlname Urlname Urlname Urlname
Aggiornare i piani di #protezionecivile Diffondere le buone pratiche di riduzione del rischio #5novembre è #TsunamiDay. Scopri di più su Urlname #5novembre Esplosione a #Quargnento in provincia di #Alessandria: il cordoglio del Dipartimento della #protezionecivile Urlname  Di #Vento forte il #5novembre sulle regioni centro-meridionali. Sei preparato? Urlname  AllertaARANCIONE domani, martedì #5novembre, su Lazio, Campania e Molise.
Aggiornare i piani di #protezionecivile Diffondere le buone pratiche di riduzione del rischio #5novembre è #TsunamiDay. Scopri di più su Urlname #5novembre Esplosione a #Quargnento in provincia di #Alessandria: il cordoglio del Dipartimento della #protezionecivile Urlname  Dipartimento della #protezionecivile Urlname  Urlname  #4 Vento forte il #5novembre sulle regioni centro-meridionali.  Sei preparato? Urlname  #4 Urlname  #4 #4 Urlname  #4 #4 #5 #5 #5 #5 #5 #5 #5 #5 #5 #5 #5 #5 #5
Aggiornare i piani di #protezionecivile Diffondere le buone pratiche di riduzione del rischio #5novembre è #TsunamiDay. Scopri di più su Urlname #5novembre Esplosione a #Quargnento in provincia di #Alessandria: il cordoglio del Dipartimento della #protezionecivile Urlname  Di #Vento forte il #5novembre sulle regioni centro-meridionali. Sei preparato? Urlname  AllertaARANCIONE domani, martedì #5novembre, su Lazio, Campania e Molise.
Aggiornare i piani di #protezionecivile Diffondere le buone pratiche di riduzione del rischio #5novembre è #TsunamiDay. Scopri di più su Urlname #5novembre Esplosione a #Quargnento in provincia di #Alessandria: il cordoglio del Dipartimento della #protezionecivile Urlname  #Vento forte il #5novembre sulle regioni centro-meridionali. Sei preparato? Urlname  #allertaARANCIONE domani, martedì #5novembre, su Lazio, Campania e Molise. #allertaGIALLA in 12 regioni #Avviso di condizioni meteo avverse del #4novembre per pioggia e vento di burrasca sulle regioni centro-meridionali. Leggi qui Urlname
Aggiornare i piani di #protezionecivile Diffondere le buone pratiche di riduzione del rischio #5novembre è #TsunamiDay. Scopri di più su Urlname #5novembre Esplosione a #Quargnento in provincia di #Alessandria: il cordoglio del Dipartimento della #protezionecivile Urlname    Vento forte il #5novembre sulle regioni centro-meridionali.   Sei preparato?   Urlname   U
Aggiornare i piani di #protezionecivile Diffondere le buone pratiche di riduzione del rischio #5novembre è #TsunamiDay. Scopri di più su Urlname #5novembre Esplosione a #Quargnento in provincia di #Alessandria: il cordoglio del Dipartimento della #protezionecivile Urlname    Urlname
Aggiornare i piani di #protezionecivile Diffondere le buone pratiche di riduzione del rischio #5novembre è #TsunamiDay. Scopri di più su Urlname #5novembre Esplosione a #Quargnento in provincia di #Alessandria: il cordoglio del Dipartimento della #protezionecivile Urlname    Urlname
Aggiornare i piani di #protezionecivile Diffondere le buone pratiche di riduzione del rischio #5novembre è #TsunamiDay. Scopri di più su Urlname #5novembre Esplosione a #Quargnento in provincia di #Alessandria: il cordoglio del Dipartimento della #protezionecivile Urlname  Perotezionecivile Urlname  Protezionecivile Urlname  #4novembre il #5novembre sulle regioni centro-meridionali.  #5novembre sulle regioni centro-meridionali.  #5novembre, su Lazio, Campania e Molise.  #4allertaGIALLA in 12 regioni  #4avviso di condizioni meteo avverse del #4novembre per pioggia e vento di burrasca sulle regioni centro-meridionali. Leggi qui Drlname  #5novembre è il Giorno dell'Unità Nazionale e la Giornata delle #ForzeArmate, parte integrante del sistema di #protezionecivile e una #UnaForzaperilPaese Urlname  #4novembre 1966, #alluvione di #Firenze. Furono ingenti i danni e le vittime. Nei giorni successivi l'alluvione si sviluppò la generosa mobilitazione degli "angeli del fango": precursori della realtà organizzata e formata che oggi
Aggiornare i piani di #protezionecivile Diffondere le buone pratiche di riduzione del rischio #5novembre è #TsunamiDay. Scopri di più su Urlname #5novembre Esplosione a #Quargnento in provincia di #Alessandria: il cordoglio del Dipartimento della #protezionecivile Urlname  #Wento forte il #5novembre sulle regioni centro-meridionali. Sei preparato? Urlname  #allertaARANCIONE domani, martedì #5novembre, su Lazio, Campania e Molise.  #allertaGIALLA in 12 regioni  #Avviso di condizioni meteo avverse del #4novembre per pioggia e vento di burrasca sulle regioni centro-meridionali. Leggi qui #Urlname  ### Il #4novembre è il Giorno dell'Unità Nazionale e la Giornata delle #ForzeArmate, parte integrante del sistema di #protezionecivile e una #UnaForzaperilPaese Urlname  #4novembre 1966, #alluvione di #Firenze. Furono ingenti i danni e le vittime. Nei giorni successivi l'alluvione si sviluppò la generosa mobilitazione degli "angeli del fango": precursori della realtà organizzata e formata che oggi conosciamo come volontariato di #protezionecivile Urlname
Aggiornare i piani di #protezionecivile Diffondere le buone pratiche di riduzione del rischio H5novembre è #TsunamiDay. Scopri di più su Urlname #5novembre Esplosione a #Quargnento in provincia di #Alessandria: il cordoglio del Dipartimento della #protezionecivile Urlname Dim #Vento forte il #5novembre sulle regioni centro-meridionali. Sei preparato? I Urlname Dim #allertaARANCIONE domani, martedì #5novembre, su Lazio, Campania e Molise. Dim #allertaGIALLA in 12 regioni Dim Avviso di condizioni meteo avverse del #4novembre per pioggia e vento di burrasca sulle regioni centro-meridionali. Leggi qui Durlname  Tr II #4novembre è il Giorno dell'Unità Nazionale e la Giornata delle #ForzeArmate, parte integrante del sistema di #protezionecivile e una #UnaForzaperilPaese Urlname #4novembre 1966, #alluvione di #Firenze. Furono ingenti i danni e le vittime. Nei giorni successivi l'alluvione si sviluppò la generosa mobilitazione degli "angeli del fango": precursori della realtà organizzata e formata che oggi conosciamo come volontariato di #protezionecivile Urlname  Innalzati i livelli di allerta oggi #3novembre in Liguria #allertaROSSA, in Emilia-Romagna e Calabria
Aggiornare i piani di #protezionecivile Diffondere le buone pratiche di riduzione del rischio #5novembre è #TsunamiDay. Scopri di più su Urlname #5novembre Esplosione a #Quargnento in provincia di #Alessandria: il cordoglio del Dipartimento della #protezionecivile Urlname  #5novembre Esplosione a #Quargnento in provincia di #Alessandria: il cordoglio del Dipartimento della #protezionecivile Urlname  #5novembre sulle regioni centro-meridionali.  #5novembre su Lazio, Campania e Molise.  #4allertaARANCIONE domani, martedì #5novembre, su Lazio, Campania e Molise.  #4allertaGIALLA in 12 regioni  #5novembre per pioggia e vento di burrasca sulle regioni centro-meridionali. Leggi qui #5 Urlname  #5novembre per pioggia e vento di burrasca sulle regioni centro-meridionali. Leggi qui #5 Urlname  #5novembre la Giorno dell'Unità Nazionale e la Giornata delle #ForzeArmate, parte integrante del sistema di #protezionecivile e una #UnaForzaperilPaese Urlname  #4novembre 1966, #alluvione di #Firenze. Furono ingenti i danni e le vittime. Nei giorni successivi l'alluvione si sviluppò la generosa mobilitazione degli "angeli del fango": precursori della realtà organizzata e formata che oggi conosciamo come volontariato di #protezionecivile Urlname  #Innalzati i livelli di allerta oggi #3novembre in Liguria #allertaROSSA, in Emilia-Romagna e Calabria #allertaARANCIONE.
Aggiornare i piani di #protezionecivile Diffondere le buone pratiche di riduzione del rischio #5novembre è #TsunamiDay. Scopri di più su Urlname #5novembre Esplosione a #Quargnento in provincia di #Alessandria: il cordoglio del Dipartimento della #protezionecivile   Urlname   Urlnama
Aggiornare i piani di #protezionecivile Diffondere le buone pratiche di riduzione del rischio #5novembre è #TsunamiDay. Scopri di più su Urlname #5novembre Esplosione a #Quargnento in provincia di #Alessandria: il cordoglio del Dipartimento della #protezionecivile Urlname #5novembre sulle regioni centro-meridionali. Sei preparato? Urlname #4novembre il #5novembre sulle regioni centro-meridionali. Sei preparato? Urlname #4novembre do avverse del #4novembre per pioggia e vento di burrasca sulle regioni centro-meridionali. Leggi qui Furlname #5novembre e la Giorno dell'Unità Nazionale e la Giornata delle #ForzeArmate, parte integrante del sistema di #protezionecivile e una #UnaForzaperilPaese Urlname #4novembre 1966, #alluvione di #Firenze. Furono ingenti i danni e le vittime. Nei giorni successivi l'alluvione si sviluppò la generosa mobilitazione degli "angeli del fango": precursori della realtà organizzata e formata che oggi conosciamo come volontariato di #protezionecivile Urlname    Innalzati i livelli di allerta oggi #3novembre in Liguria #allertaROSSA, in Emilia-Romagna e Calabria #allertaARANCIONE.   Domani #4novembre:   #4AllertaARANCIONE in tre regioni
Aggiornare i piani di #protezionecivile Diffondere le buone pratiche di riduzione del rischio #5novembre è #TsunamiDay. Scopri di più su Urlname #5novembre Esplosione a #Quargnento in provincia di #Alessandria: il cordoglio del Dipartimento della #protezionecivile - Urlname Urlname Whento forte il #5novembre sulle regioni centro-meridionali. Sei preparato? I Urlname #4llertaARANCIONE domani, martedì #5novembre, su Lazio, Campania e Molise. #4llertaGIALLA in 12 regioni Avviso di condizioni meteo avverse del #4novembre per pioggia e vento di burrasca sulle regioni centro-meridionali. Leggi qui Urlname  #5 Il #4novembre è il Giorno dell'Unità Nazionale e la Giornata delle #ForzeArmate, parte integrante del sistema di #protezionecivile e una #UnaForzaperilPaese Urlname #4novembre 1966, #alluvione di #Firenze. Furono ingenti i danni e le vittime. Nei giorni successivi l'alluvione si sviluppò la generosa mobilitazione degli "angeli del fango": precursori della realtà organizzata e formata che oggi conosciamo come volontariato di #protezionecivile Urlname    Innalzati i livelli di allerta oggi #3novembre in Liguria #allertaROSSA, in Emilia-Romagna e Calabria #allertaARANCIONE.  Domani #4novembre:   #AllertaARANCIONE in tre regioni   #AllertaARANCIONE in tre regioni   #AllertaARANCIONE in tre regioni   #AllertaARANCIONE in tre regioni
Aggiornare i piani di #protezionecivile Diffondere le buone pratiche di riduzione del rischio  #5novembre è #TsunamiDay. Scopri di più su Urlname #5novembre Esplosione a #Quargnento in provincia di #Alessandria: il cordoglio del Dipartimento della #protezionecivile □ Urlname □ #Vento forte il #5novembre sulle regioni centro-meridionali. Sei preparato? □ Urlname □ #allertaARANCIONE domani, martedì #5novembre, su Lazio, Campania e Molise. □ #allertaGIALLA in 12 regioni □ Avviso di condizioni meteo avverse del #4novembre per pioggia e vento di burrasca sulle regioni centro-meridionali. Leggi qui □ Urlname  □ ¶ ¶ #4novembre è il Giorno dell'Unità Nazionale e la Giornata delle #ForzeArmate, parte integrante del sistema di #protezionecivile e una #UnaForzaperilPaese Urlname #4novembre 1966, #alluvione di #Firenze. Furono ingenti i danni e le vittime. Nei giorni successivi l'alluvione si sviluppò la generosa mobilitazione degli "angeli del fango": precursori della realtà organizzata e formata che oggi conosciamo come volontariato di #protezionecivile Urlname □ Innalzati i livelli di allerta oggi #3novembre in Liguria #allertaROSSA, in Emilia-Romagna e Calabria #allertaARANCIONE.  Domani #4novembre: □ #AllertaARANCIONE in tre regioni □ #AllertaARANCIONE in tre regioni □ #AllertaGIALLA in 12 regioni Avviso meteo del #3novembre □ Urlname
Aggiornare i piani di #protezionecivile Diffondere le buone pratiche di riduzione del rischio  #5novembre è #TsunamiDay. Scopri di più su Urlname #5novembre Esplosione a #Quargnento in provincia di #Alessandria: il cordoglio del Dipartimento della #protezionecivile ☐ Urlname  #5novembre Esplosione a #Quargnento in provincia di #Alessandria: il cordoglio del Dipartimento della #protezionecivile ☐ Urlname  #5novembre sulle regioni centro-meridionali.  #5 preparato? ☐ Urlname  #4 allertaARANCIONE domani, martedì #5novembre, su Lazio, Campania e Molise.  #4 allertaGIALLA in 12 regioni  #5 Avviso di condizioni meteo avverse del #4novembre per pioggia e vento di burrasca sulle regioni centro-meridionali. Leggi qui #5 Urlname  #5 11 #4novembre è il Giorno dell'Unità Nazionale e la Giornata delle #ForzeArmate, parte integrante del sistema di #protezionecivile e una #UnaForzaperilPaese Urlname  #4novembre 1966, #alluvione di #Firenze. Furono ingenti i danni e le vittime. Nei giorni successivi l'alluvione si sviluppò la generosa mobilitazione degli "angeli del fango": precursori della realtà organizzata e formata che oggi conosciamo come volontariato di #protezionecivile Urlname  #5 Innalzati i livelli di allerta oggi #3novembre in Liguria #allertaROSSA, in Emilia-Romagna e Calabria #allertaARANCIONE.  Domani #4novembre:  #4 #4 #4 HertaARANCIONE in tre regioni  #4 #4 HertaARANCIONE in tre regioni  #4 #4 HertaARANCIONE, domani #3 novembre, in sette regioni.
Aggiornare i piani di #protezionecivile Diffondere le buone pratiche di riduzione del rischio #5novembre è #TsunamiDay. Scopri di più su Urlname #5novembre Esplosione a #Quargnento in provincia di #Alessandria: il cordoglio del Dipartimento della #protezionecivile Urlname  Wento forte il #5novembre sulle regioni centro-meridionali. Sei preparato? Urlname  #allertaARANCIONE domani, martedì #5novembre, su Lazio, Campania e Molise.  #allertaGIALLA in 12 regioni  Avviso di condizioni meteo avverse del #4novembre per pioggia e vento di burrasca sulle regioni centro-meridionali. Leggi qui Urlname  ##1 #4novembre è il Giorno dell'Unità Nazionale e la Giornata delle #ForzeArmate, parte integrante del sistema di #protezionecivile e una #UnaForzaperilPaese Urlname  #4novembre 1966, #alluvione di #Firenze. Furono ingenti i danni e le vittime. Nei giorni successivi l'alluvione si sviluppò la generosa mobilitazione degli "angeli del fango": precursori della realtà organizzata e formata che oggi conosciamo come volontariato di #protezionecivile Urlname  AllertaARANCIONE.  Domani #4novembre:  ##AllertaARANCIONE in tre regioni  ##AllertaARANCIONE in tre regioni  ##AllertaARANCIONE, domani #3novembre, in sette regioni.  ##AllertaARANCIONE, domani #3novembre, in sette regioni.  ##AllertaARANCIONE, domani #3novembre, in sette regioni.
Aggiornare i piani di #protezionecivile Diffondere le buone pratiche di riduzione del rischio  #5novembre è #TsunamiDay. Scopri di più su Urlname #5novembre Esplosione a #Quargnento in provincia di #Alessandria: il cordoglio del Dipartimento della #protezionecivile ☐ Urlname  #5novembre Esplosione a #Quargnento in provincia di #Alessandria: il cordoglio del Dipartimento della #protezionecivile ☐ Urlname  #5novembre sulle regioni centro-meridionali.  #5 preparato? ☐ Urlname  #4 allertaARANCIONE domani, martedì #5novembre, su Lazio, Campania e Molise.  #4 allertaGIALLA in 12 regioni  #5 Avviso di condizioni meteo avverse del #4novembre per pioggia e vento di burrasca sulle regioni centro-meridionali. Leggi qui #5 Urlname  #5 11 #4novembre è il Giorno dell'Unità Nazionale e la Giornata delle #ForzeArmate, parte integrante del sistema di #protezionecivile e una #UnaForzaperilPaese Urlname  #4novembre 1966, #alluvione di #Firenze. Furono ingenti i danni e le vittime. Nei giorni successivi l'alluvione si sviluppò la generosa mobilitazione degli "angeli del fango": precursori della realtà organizzata e formata che oggi conosciamo come volontariato di #protezionecivile Urlname  #5 Innalzati i livelli di allerta oggi #3novembre in Liguria #allertaROSSA, in Emilia-Romagna e Calabria #allertaARANCIONE.  Domani #4novembre:  #4 #4 #4 HertaARANCIONE in tre regioni  #4 #4 HertaARANCIONE in tre regioni  #4 #4 HertaARANCIONE, domani #3 novembre, in sette regioni.

Avviso di condizioni meteo avverse del #1novembre per piogge e temporali in arrivo al Centro-Nord. Leggi qui
Consulta il bollettino per conoscere il livello e le zone di allerta meteo-idro sul tuo territorio ☐ Urlname
#31ottobre 2002, il #terremoto di San Giuliano di Puglia. Alle 11.32 una scossa di magnitudo 5.8 colpisce la
provincia di Campobasso. 30 le vittime tra cui 27 bambini e una maestra coinvolti nel crollo della scuola
"Francesco Jovine".
@emergenzavvf Urlname
🗘 #allertaGIALLA domani, giovedì #31ottobre, in Umbria, Lazio, Abruzzo e su parte della Toscana.
Consulta il bollettino per conoscere il livello e le zone di allerta meteo-idro sul tuo territorio ☐ Urlname
#30ottobre 2016, un #terremoto di magnitudo 6.5 scuote il #centroItalia. La violenta scossa colpisce territori già
duramente interessati dal sisma del 24 agosto e del 26 ottobre ma non provocherà vittime.
Sorvolo dei territori dopo la scossa del 30 ottobre 2016 Urlname
🛴 #AllertaGIALLA domani, mercoledì #30ottobre, su Sicilia, Calabria, Abruzzo e su settori di Puglia, Marche e
Molise.
Consulta il bollettino per conoscere il livello e le zone di allerta meteo-idro sul tuo territorio   Urlname  Urlname
#29ottobre "Stiamo facendo un bel lavoro in una Regione esposta a molti rischi. La Calabria sta dimostrando di
saper lavorare in sinergia per un futuro di #protezionecivile". Miozzo a Catanzaro nel seminario sul programma per la riduzione del rischio sviluppato con @pongovernance Urlname
•
+ Aumentare capacità e competenze dei territori  Migliorare le strategie per la riduzione del rischio
#29ottobre siamo in Calabria per fare il punto sul programma #protezionecivile: verso una governance più forte per
la riduzione del rischio" sviluppato con
@pongovernance Urlname
#29ottobre "Quella dello scorso autunno è stata un'ondata di maltempo imponente e imponente è stata la
mobilitazione della #protezionecivile. 20 mila donne e uomini hanno operato nei tanti territori italiani colpiti" così
Borrelli nel giorno del ricordo della tempesta #Vaia Urlname
🛱 🛍 Il bollettino nazionale di criticità e allerta è il quadro di sintesi delle allerte diramate a livello regionale per
rischio idraulico, rischio idrogeologico e temporali.
Domani, martedì #29ottobre, la mappa è VERDE \$\frac{1}{2}\$
#protezionecivile Urlname
🗘 #allertaGIALLA, domani #28ottobre, su parte della Sicilia.
L'allerta ti avvisa che potresti trovarti in situazioni di pericolo   ☐ Urlname
#allertaROSSA, sabato #26ottobre, su parte della Sicilia.
Consulta il bollettino 🗗 Urlname
#25ottobre 2011, l'alluvione in Liguria e Toscana. Ore di piogge intense colpiscono violentemente il territorio.
Trovano la morte 13 persone, tra le quali Sandro Usai, volontario di #protezionecivile, travolto dalla piena mentre
era impegnato a prestare i primi soccorsi.
Ansa Urlname
La nostra #SalaSituazioneItalia è in contatto con le strutture di #protezionecivile sul territorio. Il #terremoto è stato
avvertito dalla popolazione ma non risultano danni a persone o cose 👉 Urlname
#AllertaROSSA domani, #25ottobre sulla Sicilia
🛴 #AllertaARANCIONE su Lombardia e Lazio. #AllertaGIALLA su 9 regioni
Avviso di condizioni meteo avverse del #24ottobre per temporali e rovesci al sud-est. Leggi qui 👍 Urlname
🗘 #AllertaARANCIONE domani, #24ottobre, su Liguria, Lombardia, Piemonte e Toscana. #AllertaGIALLA su 9
regioni
#Maltempo in arrivo sulle regioni occidentali, su quelle tirreniche centrali e su Sicilia.
Leggi l'avviso #meteo del #23ottobre → Urlname
L'allertamento meteo-idro è una cosa seria. Informiamoci sempre sui canali ufficiali. Urlname
🗘 #allertaGIALLA, domani #23ottobre, su parte di Sardegna, Piemonte e Emilia-Romagna.
Consulta il bollettino per conoscere il livello e le zone di allerta #meteo-idro sul tuo territorio 🔁 Urlname
#22ottobre Aggiornamento #maltempo delle 14.30. Sopralluogo in Liguria con il Presidente Toti e l'assessore
Giampedrone. Priorità di queste ore è il ripristino della viabilità dopo le forti piogge che hanno colpito la Regione.
Limianie

regionale sono al lavoro. Siamo qui per garantire tutto il nostro appoggio". Il punto della situazione del Capo Dipartimento Borrelli in Prefettura ad Alessandria. Urlname Aggiornamento #maltempo delle ore 05.30: le principali criticità si registrano nell'Alessandrino con circa 130 evacuati. Il Capo Dipartimento, Angelo Borrelli, è in partenza per la regione Piemonte. 👉 Urlname #22ottobre Siamo in unità di crisi per seguire l'evoluzione dell'ondata di maltempo che in queste ore sta interessando il Piemonte e la Lombardia. Urlname 😭 🔡 I piani di #protezionecivile sono libretti di istruzione per affrontare le emergenze. Ecco il piano per il rischio vulcanico Campi Flegrei che abbiamo testato durante #exeFlegrei19. Guarda il video integrale >> Urlname △ #allertaARANCIONE, il #22ottobre, su parte della Lombardia. #allertaGIALLA sul resto della Lombardia, su gran parte di Liguria e Piemonte e sulla Valle d'Aosta. Leggi l'avviso #meteo del #21ottobre ✓⊋ Urlname #settimanadiPC Siamo stati in piazza e all'università per parlare di cultura del rischio. Abbiamo organizzato convegni e mostre con i tanti attori del sistema. Con #exeFlegrei19 ci siamo messi alla prova. Per 7 giorni abbiamo fatto #protezionecivile tutti insieme, come sempre 🕅 Urlname #AllertaROSSA in Liguria, sapere cosa fare prima, durante e dopo un'alluvione è il primo passo per evitare situazioni di pericolo 1 Urlname △ #AllertaROSSA dalla serata del 20 ottobre su Liguria centrale. #AllertaARANCIONE su Lombardia, Piemonte, Liguria. 🗘 #AllertaGIALLA su Emilia- Romagna, Lombardia, Piemonte, Toscana e Valle d'Aosta. Avviso meteo del #20ottobre al Nord. Leggi qui 👉 Urlname #ExeFlegrei 19 #20ottobre Per 4 giorni abbiamo testato il piano nazionale di #protezionecivile dei Campi Flegrei messa in sicurezza beni culturali evacuazione strutture sanitarie gestione del traffico allontanamento assistito della popolazione La protezione civile è fatta di tante cose e durante questa settimana abbiamo provato a raccontarle. La protezione civile è fatta di tante persone ed è l'unione delle persone che lavorano negli enti, nelle istituzioni e nel volontariato a rendere tutto possibile. #settimanadiPC Urlname AllertaARANCIONE domenica #20ottobre su parte della Liguria. #AllertaGIALLA su parte di Liguria, Lombardia, Valle d'Aosta, Piemonte e Toscana. 💪 😭 Avviso di condizioni meteo avverse del 19 ottobre per temporali e rovesci al Nord. Leggi qui 👉 Urlname #exeFlegrei19 #19ottobre Stazione Centrale di Napoli, punto di incontro per i cittadini di Pozzuoli. Dai punti di incontro, in fase di allarme, il piano nazionale dei Campi Flegrei prevede la partenza verso le Regioni e le Province autonome gemellate con i Comuni della zona rossa Urlname #ExeFlegrei19 "Stiamo testando le procedure di evacuazione insieme ai cittadini, grazie a loro e a tutti coloro che stanno operando per avere comunità resilienti". Il Capo Dipartimento Borrelli segue la simulazione delle attività previste nella fase di allarme per i Campi Flegrei Urlname #exeFlegrei19 #19ottobre Oggi TESTIAMO la risposta del sistema di #protezionecivile in fase di allarme. Il piano nazionale dei Campi Flegrei prevede l'evacuazione assistita della zona rossa secondo un calendario di partenze scaglionate. Qui siamo nell'area di attesa di Pozzuoli. Urlname #exeFlegrei19 #18ottobre Cosa accade in caso di passaggio ad allerta ROSSA? È quello che iniziamo a TESTARE ora 🖺 Passaggio a fase operativa di ALLARME Allontanamento dei cittadini che vivono in zona rossa \* Organizzazione e gestione delle aree di attesa e di incontro #exeFlegrei19 L'evacuazione dei ricoveri per animali è una delle azioni previste in fase di preallarme, così come l'evacuazione di strutture ospedaliere, residenze sanitarie e penitenziari. L'obiettivo è garantire l'assistenza sanitaria e veterinaria e alleggerire la zona rossa. Urlname Fine settimana con temporali e rovesci al Nord Ovest. Leggi l'avviso di condizioni meteo avverse del #18ottobre ∠ Urlname #exeFlegrei19 #18ottobre Terzo giorno. Stiamo TESTANDO cosa accadrebbe durante la fase di preallarme nell'area dei Campi Flegrei. La salvaguardia dei beni culturali è uno degli scenari operativi su cui ci stiamo mettendo alla prova. Urlname

#22ottobre aggiornamento #maltempo ore 11.30. "Le strutture operative e i volontari della colonna mobile

#ExeFlegrei19 #18ottobre "Da qui seguiremo gli scenari operativi e garantiremo il supporto al territorio". Con
Luigi D'Angelo, Direttore operativo emergenze, entriamo nella Dicomac e scopriamo i dettagli della grande
esercitazione sul rischio vulcanico.
☐ Guarda il video ↓ Urlname
#exeFlegrei19 #17ottobre L'esercitazione sul rischio vulcanico entra nel vivo! Stiamo continuando a testare le varie
fasi di risposta del sistema di #ProtezioneCivile in caso di emergenza e ora è il momento dell'attivazione della
Dicomac 1 Urlname
Il bollettino di criticità e allerta per domani, venerdì #18ottobre, è VERDE per rischio idraulico, rischio
idrogeologico e rischio temporali (ma ricorda che non è possibile escludere fenomeni localizzati!)
#protezionecivile Urlname
#exeFlegrei19 È possibile sapere quando ci sarà un'eruzione dei Campi Flegrei? La scienza oggi non può dirlo.
Ecco perché è importante
monitorare
nianificare pianificare
Qui la versione completa del video 🕞 Urlname
#exeFlegrei19 #17ottobre Stiamo SIMULANDO cosa accadrebbe in caso di variazione dei parametri di
monitoraggio del vulcano
Convocazione della Grandi Rischi struttura di collegamento con la comunità scientifica
Passaggio in #allertaARANCIONE dopo valutazioni della Commissione Urlname
Scopriamo insieme l'area dei Campi Flegrei, scenario dell'esercitazione di #protezionecivile #ExeFlegrei19, in
programma da oggi al #20ottobre. Qui la news e il video completo ∠ Urlname
Il Bollettino di criticità e allerta per giovedì #17ottobre:
✓ rischio idraulico VERDE
✓ rischio idrogeologico VERDE
✓ rischio temporali VERDE
Urlname
#Protezionecivile è confronto! Oggi Borrelli e il Capo di Gabinetto dell'Interno, Prefetto Piantedosi, sono collegati
con le Prefetture dei capoluoghi di regione per fare il punto sulle azioni che le autorità locali portano avanti nella
quotidianità e in emergenza #settimanadiPC Urlname
#16ottobre, inizia oggi #ExeFlegrei19. I giornalisti interessati a seguire le varie attività dell'esercitazione in
programma sono invitati ad accreditarsi. Qui le istruzioni Urlname
È tutto pronto la grande esercitazione sul rischio vulcanico #exeFlegrei19. #16ottobre si comincia!
#settimanadiPC Urlname
Libano: sono partiti equipaggi italiani per fronteggiare gli incendi boschivi che
stanno interessando il Paese.
EUIT I due Canadair di @emergenzavvf operano nell'ambito del progetto europeo #RescEu-IT. Leggi
qui → Urlname
#15ottobre, in Università a lezione di #protezionecivile. Dopo la bella esperienza dello scorso anno, abbiamo
presentato oggi la seconda edizione del laboratorio organizzato insieme a
@UniLUMSA
#settimanadiPC Urlname
#AllertaARANCIONE, mercoledì #16ottobre, per rischio idrogeologico in Lombardia, Laghi e Prealpi
Varesine.
#AllertaGIALLA in cinque regioni.
L'allerta ti avvisa che potresti trovarti in situazioni di pericolo. Consulta il bollettino → Urlname
Revisioni meteo
Monitoraggio di frane e alluvioni
Sono alcuni esempi di uso dei dati satellitari in #protezionecivile.
Oggi siamo a "Beyond" l'evento dedicato ai ragazzi con tanti esperti che parleranno dell'importanza
dell'osservazione della Terra dallo Spazio Urlname
#15ottobre 2015, l'alluvione di #Benevento. Una forte ondata di maltempo colpisce il Sannio provocando vittime e
gravi danni sul territorio. In quei giorni furono tanti gli operatori del sistema di #protezionecivile a intervenire con
professionalità e impegno
VVF e Difesa Urlname
△#AllertaARANCIONE dalla notte del #14ottobre su parte della Liguria.
#AllertaARANCIONE il #15ottobre su parte di Liguria e Lombardia. #AllertaGIALLA in 8 regioni.
😭 🕭 Avviso #meteo del 14 ottobre per temporali e venti forti al Nord e al Centro. Leggi 🍞 Urlname

🖫 🥷 🖎 Cultura è#protezionecivile! Partiamo dalla scuola per avere comunità resilienti. Partiamo dai ragazzi
per avere cittadini informati su come affrontare i rischi. Oggi, insieme al ministro Fioramonti, abbiamo dedicato
una giornata della #settimanadiPC al mondo della scuola Urlname
Previsione P
Prevenzione (
Gestione dell'emergenza
Ricostruzione 4
La comunità tecnico-scientifica è parte integrante del nostro sistema.
#14ottobre Segui la diretta dalle ore 11 della giornata "La Scienza per la #ProtezioneCivile" su Urlname
La #settimanadiPC è appena iniziata e @Iononrischio si prepara per un altro appuntamento importante: portare le
buone pratiche di #protezionecivile all'interno dell'esercitazione #Flegrei19.
#iononrischio2019 continua! Grazie a tutti! 🛇 🙋 \delta Urlname
Il Bollettino di criticità e allerta per lunedì #14ottobre:
✓ rischio idraulico VERDE
✓ rischio idrogeologico VERDE
rischio temporali VERDE
#protezionecivile Urlname
Buona settimana della #ProtezioneCivile a tutti! ♥ ይ
Perché apriamo proprio il #13ottobre la #settimanadiPC con le buone pratiche di @iononrischio ce lo spiega il
Capo Dipartimento Borrelli nel video 1
#DRRday #iononrischio2019 Urlname
Il #13ottobre è importante per 3 motivi
☐ Inizia la #SettimanadiPC
È la Giornata internazionale per la riduzione dei disastri naturali
E il secondo giorno di #iononrischio2019
Vi aspettiamo nelle piazze @iononrischio per fare #protezionecivile tutti insieme!
#DRRday Urlname
i puli pollettino nazionale di criticità e allerta è il quadro di sintesi delle allerte diramate a livello regionale per
rischio idraulico, rischio idrogeologico e temporali. Domani #13ottobre la mappa è VERDE
#protezionecivile Urlname
Dietro questa foto c'è una storia che vogliamo raccontare. Il ragazzo con sciarpa @iononrischio è il fratello di
Luigi, una delle vittime del Ponte Morandi. Dopo il tragico crollo Michele è diventato volontario di
#protezionecivile e si impegna ogni giorno in aiuto degli altri. Urlname
Sai cosa fare in caso di terremoto? Conosci i comportamenti corretti per non rischiare in caso di alluvione e
maremoto?
♥I volontari di #protezionecivile ti aspettano in piazza! Scopri il gazebo @iononrischio più vicino 🗲 Urlname
Sta per iniziare #iononrischio2019!
5 sta per iniziate monomiscinozoro.  Smila volontari ti aspettano in tutta Italia per parlare di buona pratiche di #protezionecivile in caso di
terremoto, maremoto e alluvione. Ci vediamo in piazza!
Scopri di più su Urlname
Il bollettino di criticità e allerta per domani, sabato #12ottobre, è VERDE per rischio idraulico, rischio
idrogeologico e rischio temporali (ma ricorda che non è possibile escludere fenomeni localizzati!)
#protezionecivile Urlname
Scenario operativo basato sull'alluvione Firenze del 1966
Esperti di #protezionecivile europea
Team di assistenza e supporto tecnico
Questo è stato #EuModexItaly , l'esercitazione internazionale conclusa ieri a Firenze Urlname
& Passione
Solidarietà
Concretezza
#ProtezioneCivile: i valori fanno sistema!
Guarda lo spot della Settimana nazionale della Protezione Civile
#settimanadiPC
Urlname
Conoscenza
Memoria
Resperienza
M Especializa

Inaugura oggi #10ottobre a Firenze la mostra itinerante "Terremoti d'Italia". I volontari @LaresItalia vi
accompagneranno nel percorso espositivo sulle tracce dei terremoti del passato
Ogni giorno la Rete dei centri funzionali:
© ■ elabora previsioni meteo
↑ 💸 monitora i fenomeni e il loro impatto sul territorio
🗘 🚱 🏥 valuta le allerte e i livelli di criticità meteo-idro
Domani, #11ottobre, il bollettino è VERDE
#protezionecivile Urlname
#exeFlegrei19 Le esercitazioni di protezione civile sono un banco di prova importante. Dal 16 al 20 ottobre
ci eserciteremo sulla risposta di #protezionecivile nello scenario dei Campi Flegrei 1
#settimanadiPC Urlname
"#exeFlegrei19 metterà alla prova il sistema di #protezionecivile. Sarà un test per migliorare la pianificazione sul rischio vulcanico in un percorso che vedrà in futuro l'uso sempre più efficace della tecnologia"così Borrelli durante
la presentazione dell'esercitazione nazionale Urlname
∴#allertaGIALLA domani, giovedì #10ottobre, su alcuni settori di Puglia, Calabria e Sicilia.
Consulta il bollettino per conoscere il livello e le zone di allerta #meteo-idro sul tuo territorio 🗗 Urlname
#9ottobre 1963, la tragedia del #Vajont. Una frana si stacca dal monte Toc precipitando nel bacino artificiale
sottostante. L'onda che si solleva cancella e distrugge intere comunità. Tragico il bilancio finale con quasi duemila
vittime. Erano le 22.39 di 56 anni fa Urlname
Dal primo pomeriggio oggi, mercoledì #9ottobre, attesi temporali su Sicilia e Calabria. Leggi qui l'avviso di
condizioni meteo avverse → Urlname
La settimana della #protezionecivile è
2 Prevenzione
**Preparazione
Cultura del rischio
<u>▶</u> Pianificazione
e tanto altro ancora
#9ottobre alle ore 10 presentiamo gli eventi e le iniziative della #settimanadiPC. Segui la diretta su Urlname
#allertaGIALLA domani, mercoledì #9ottobre, per rischio idraulico, idrogeologico e rischio temporali su parte
di Calabria e Sicilia.
Consulta il bollettino per conoscere il livello e le zone di allerta #meteo-idro sul tuo territorio Turiname
■ Il #9ottobre presentiamo a #Roma gli eventi e le iniziative della Settimana nazionale della #ProtezioneCivile.
I giornalisti interessati a seguire la conferenza stampa della #settimanadiPC sono invitati ad accreditarsi. Leggi
qui 👉 Urlname
☐ #allertaARANCIONE domani, martedì #8ottobre, sui settori settentrionali della Sicilia.
#allertaGIALLA su gran parte di Calabria e Sicilia.
Consulta il bollettino per conoscere il livello e le zone di allerta #meteo-idro sul tuo territorio 👉 Urlname
La nostra #SalaSituazioneItalia è in contatto con le strutture di #protezionecivile sul territorio. Il #terremoto è stato
avvertito dalla popolazione, dalle prime verifiche non risultano feriti né danni. Urlname
🗘 #allertaARANCIONE domani, lunedì #7ottobre, su settori di Calabria e Sicilia.
Avviso di condizioni meteo avverse del #60ttobre per temporali e venti forti in arrivo su gran parte
dell'Italia G Urlname
🐯 🖏 #BuonaDomenica dal Raduno del Volontariato di #Protezionecivile calabrese!
A Lamezia Terme si chiudono oggi la due giornate formative dedicate alla prevenzione, gestione e cultura del
rischio. Urlname
Protezione civile è fare presto e fare prima!
Il 12 e il 13 ottobre i nostri volontari vi aspettano in piazza per scoprire le buone pratiche di #protezionecivile in
caso di terremoto, alluvione e maremoto. Si avvicina #iononrischio2019! #settimanadiPC
Urlname
∴#allertaGIALLA domani, domenica #6ottobre, su settori della Calabria e della Sicilia.
Consulta il bollettino per conoscere il livello e le zone di allerta meteo-idro sul tuo territorio   ☐ Urlname
Sparatoria di Trieste: il cordoglio del Capo del Dipartimento della #protezionecivile   Urlname  Urlname
Consulta il bollettino per conoscere il livello e le zone di allerta meteo-idro sul tuo territorio 👉 Urlname
1

Ogni giorno la Rete dei centri funzionali:
elabora previsioni #meteo
monitora i fenomeni e il loro impatto sul territorio
valuta le allerte e i livelli di criticità meteo-idro
Domani, #4ottobre, il bollettino è VERDE \\ Urlname
#allertaGIALLA domani, giovedì #3ottobre, in otto regioni.
Avviso di condizioni meteo avverse del #20ttobre per temporali e venti forti al Centro-Sud. Leggi qui
Urlname
☐ In arrivo pioggia e temporali al Nord e al Centro.
#AllertaGIALLA domani, #20ttobre, in 8 Regioni italiane.
Leggi l'avviso di condizioni #meteo avverse del #10ttobre 🔁 Urlname
La lotta agli #incendi boschivi è un lavoro di squadra. Qui il bilancio della campagna estiva 🗗 Urlname
#1ottobre 2009, #alluvione #Messina. Sono trascorsi 10 anni dal violento alluvione che colpì la Sicilia orientale
causando vittime e ingenti danni.
Il Sistema di #protezionecivile si attivò immediatamente con l'obiettivo prioritario di raggiungere le tante frazioni
isolate
<b>™</b> @GDF Urlname
🗱 🛍 Il bollettino nazionale di criticità e allerta è il quadro di sintesi delle allerte diramate a livello regionale per
rischio idraulico, rischio idrogeologico e temporali.
Domani #1ottobre la mappa è VERDE 🖓 🖓 #protezionecivile Urlname
Il Bollettino di criticità e allerta per lunedì #30settembre:
✓ rischio idraulico VERDE
✓ rischio idrogeologico VERDE
✓ rischio temporali VERDE
#protezionecivile Urlname
final American Monitoraggio e sorveglianza per terremoti, vulcani e tsunami
Partner @iononrischio e sempre presente nelle attività di formazione
#29settembre #INGV20ANNI: un'occasione per ringraziare il mondo della ricerca del supporto che garantisce alla
#protezionecivile Urlname
Il bollettino di criticità e allerta per domani, domenica #29settembre, è VERDE per rischio idraulico, rischio
idrogeologico e rischio temporali (ma ricorda che non è possibile escludere fenomeni localizzati!)
#protezionecivile Urlname Il Bollettino di criticità e allerta per sabato #28settembre:
✓ rischio idraulico VERDE
<b>│</b> <del>─</del>
✓ rischio idrogeologico VERDE
✓ rischio temporali VERDE #protezionecivile Urlname
⇒ 15 giorni a #iononrischio2019: la campagna nazionale per le buone pratiche di protezione civile che da
quest'anno apre la #settimanadiPC
Leggi qui / Trlname
Il bollettino di criticità e allerta per domani, venerdì #27settembre, è VERDE per rischio idraulico, rischio
idrogeologico e rischio temporali (ma ricorda che non è possibile escludere fenomeni localizzati!)
#protezionecivile Urlname
#26settembre 1997, il #terremoto in Umbria e Marche. Furono 11 le vittime e ingenti i danni sul territorio e al
patrimonio artistico.
La #protezionecivile garantì soccorso e assistenza alla popolazione colpita mettendo a frutto l'esperienza maturata
anche nelle passate emergenze. Urlname
Il Bollettino nazionale di criticità e allerta meteo-idro segnala le allerte previste 🗘
fino alle 24.00 del giorno di emissione
e nelle 24 ore del giorno dopo
Domani, giovedì #26settembre, la mappa è VERDE 🖓
#protezionecivile Urlname
La #settimanadiPC si avvicina!
S#Abbiamo logo e hashtag
Ma quali emoji usereste per descrivere questi giorni in cui ci eserciteremo, parleremo di prevenzione e

racconteremo il nostro bellissimo sistema?
Aspettiamo la vostra #settimanadiPC con emoji nei commenti! 1 Urlname
#CambiamentiClimatici.
Ma cosa è il tempo e cosa è il clima?
#ClimateActionSummit #ClimateChange Urlname
#allertaGIALLA domani, mercoledì #25settembre, in Umbria e su parte della Toscana.
Consulta il bollettino per conoscere il livello e le zone di allerta meteo-idro sul tuo territorio   ☐ Urlname
🗘 #allertaGIALLA domani, martedì #24settembre, su buona parte di Puglia e Calabria e sul settore nord-orientale
della Sicilia.
Consulta il bollettino per conoscere il livello e le zone di allerta meteo-idro sul tuo territorio ☐ Urlname
#allertaARANCIONE il #22settembre per rischio temporali e idrogeologico in Toscana e per rischio temporali
nel Lazio.
☐#allertaGIALLA domani #23settembre in Lombardia, Liguria, Toscana, Umbria, Marche e Lazio.
Consulta il Bollettino → Urlname
#22settembre #terremoto avvertito in provincia di #Udine. Dalle verifiche effettuate dalla #SalaSituazioneItalia, al momento non risultano feriti e danni. Urlname
🗘 🍙 Sapere cosa può succedere durante un'allerta è il primo passo per evitare situazioni di pericolo.
L'allerta non è una semplice previsione #meteo 1
#protezionecivile Urlname
Liguria, centro e levante.
Avviso meteo del #21settembre per piogge e temporali al Centro-Nord → Urlname
© © CLe buone pratiche di #protezionecivile apriranno la #SettimanadiPC!
#Iononrischio2019 torna nelle piazze italiane il 12 e 13 ottobre 🕽 Urlname
Il bollettino di criticità e allerta per domani, sabato #21settembre, è VERDE per rischio idraulico, rischio
idrogeologico e rischio temporali (ma ricorda che non è possibile escludere fenomeni localizzati!)
#protezionecivile Urlname
#Stromboli: dichiarato lo stato di emergenza in seguito agli eventi parossistici di luglio e agosto Urlname
☐#allertaGIALLA il #20settembre per rischio idraulico, idrogeologico e temporali in Puglia e per rischio
idrogeologico e temporali sul versante ionico della Calabria.
Avviso meteo del #19settembre per venti forti in Puglia e Calabria 🗗 Urlname
Eccoci! Parleremo di prevenzione nelle scuole, nelle piazze, avremo un giorno dedicato alla scienza e
un'esercitazione per migliorare le capacità operative
Faremo #protezionecivile tutti insieme come sempre. La #settimanadiPC si avvicina. Guarda il video Urlname
Abbiamo imparato a montare una tenda e abbiamo scoperto che cosa è un piano di protezione civile.
Ma più di tutto i ragazzi di Anch'io sono la #protezionecivile: i campi scuola ci hanno insegnato che "le radici devono avere fiducia nei fiori". Grazie
Urlname
☐ #allertaARANCIONE domani, giovedì #19settembre, su parte del Molise e della Puglia.
A #allertaGIALLA in 14 regioni.
Avviso di condizioni meteo avverse del #18settembre per temporali e venti forti sulle regioni adriatiche
Urlname
☐#allertaGIALLA domani, mercoledì #18settembre, per rischio temporali in Veneto, Emilia-Romagna e Marche.
Avviso di condizioni meteo avverse del #17settembre per temporali e venti forti al centro-nord   Urlname
Il Bollettino di criticità e allerta per martedì #17settembre:
✓ rischio idraulico VERDE
✓ rischio idrogeologico VERDE
✓ rischio temporali VERDE
#protezionecivile Urlname
#protezionecivile è lavorare tutti insieme per essere pronti. Urlname
Anche per la giornata di domani, lunedì #16settembre, il bollettino di criticità e allerta indica colore VERDE su
tutta l'Italia (ma ricorda che non è possibile escludere fenomeni localizzati!)
#protezionecivile Urlname
Il Capo Dipartimento esprime vicinanza e rivolge auguri di pronta guarigione all'operaio forestale investito da
un'autovettura oggi pomeriggio, mentre era intento a spegnere un incendio nei pressi di Augusta → Urlname

Il Bollettino nazionale di criticità e allerta meteo-idro segnala le allerte previste 🗘
fino alle 24.00 del giorno di emissione
e nelle 24 ore del giorno dopo
Domani, domenica #15settembre, la mappa è VERDE
#protezionecivile Urlname
Il bollettino di criticità e allerta indica per domani, sabato #14settembre, colore VERDE su tutta l'Italia (ma ricorda
che non è possibile escludere fenomeni localizzati!)
#protezionecivile Urlname
Ogni giorno la Rete dei centri funzionali:
🕲 💻 🤬 elabora previsioni meteo
Monitora i fenomeni e il loro impatto sul territorio
🗘 🚭 🖹 valuta le allerte e i livelli di criticità meteo-idro
Domani, venerdì #13settembre, il bollettino è VERDE
#protezionecivile Urlname
Il bollettino di criticità e allerta per domani, giovedì #12settembre, è VERDE per rischio idraulico, rischio
idrogeologico e rischio temporali (ma ricorda che non è possibile escludere fenomeni localizzati!)
#protezionecivile Urlname
365 giorni all'anno e 24 ore su 24, la nostra Sala Situazione Italia è il primo punto di contatto per tutte le realtà di
#protezionecivile.
Scopriamola insieme
Urlname
#allertaGIALLA domani, mercoledì #11settembre, in Calabria e su gran parte della Sicilia.
Consulta il bollettino per conoscere il livello e le zone di allerta meteo-idro sul tuo territorio → Urlname
#10settembre 2000, l'alluvione di #Soverato. Poco prima dell'alba, la piena del torrente Beltrame, igrossato dalle
piogge, travolge il campeggio Le Giare, che sorge a poca distanza dall'alveo. Si conteranno 13 vittime.
© @CNR_IRPI
Urlname
#allertaGIALLA domani, martedì #10settembre, in Sicilia e in quasi tutta la Calabria.
Consulta il bollettino per conoscere il livello e le zone di allerta meteo-idro sul tuo territorio   Urlname  □ Urlname
Formazione tecnico-scientifica
Scambio di esperienze e buone pratiche
Da oggi al 15 settembre una delegazione dei Paesi @ASEAN sarà in Italia ospite del Servizio Nazionale della
#protezionecivile, in collaborazione con @ItalyMFA _ Urlname
#9settembre 2017, l'alluvione di #Livorno. Nella notte e fino al mattino successivo, abbondanti precipitazioni si
abbattono sulla città e le zone collinari. Esondano il fiume Ardenza e il Rio Maggiore. 9 le vittime e ingenti i danni.
Anpas, Misericordie Urlname
#allertaARANCIONE lunedì #9settembre, su parte del Veneto.
#allertaGIALLA in quattro regioni.
Consulta il bollettino per conoscere il livello e le zone di allerta sul tuo territorio ☐ Urlname
regioni
Avviso di condizioni meteo avverse del #7settembre per temporali al centro-nord ☐ Urlname
Consulta il bollettino per conoscere il livello e le zone di allerta meteo-idro sul tuo territorio ☐ Urlname
🔛 😯 🚭 🏥 Monitoraggio tecnico-scientifico
\$\times \text{\tin}\text{\tetx{\text{\tetx{\text{\text{\text{\texi}\text{\text{\text{\text{\text{\text{\tin}\text{\text{\text{\text{\texi}\text{\text{\text{\text{\text{\text{\text{\text{\text{\text{\text{\text{\text{\text{\texi
☐ ② ③ Informazione alla popolazione ② ■ ② Coordinamento forze in campo
© Pinformazione alla popolazione © ■ Coordinamento forze in campo A □ Dal 30 agosto il vulcano #Stromboli è in #allertaARANCIONE, ma il Sistema di #protezionecivile
☐ ② ③ Informazione alla popolazione ② ■ ② Coordinamento forze in campo
© Pinformazione alla popolazione © Pi Coordinamento forze in campo A □ Dal 30 agosto il vulcano #Stromboli è in #allertaARANCIONE, ma il Sistema di #protezionecivile rotezionecivile è sempre operativo □ Urlname
☐ ② ② Informazione alla popolazione ③ ■ ☐ Coordinamento forze in campo ☐ ① Dal 30 agosto il vulcano #Stromboli è in #allertaARANCIONE, ma il Sistema di #protezionecivile rotezionecivile è sempre operativo ☐ Urlname ☐ #allertaGIALLA domani, venerdì #6settembre, su tredici regioni.
© Pinformazione alla popolazione © Pi Coordinamento forze in campo  A Dal 30 agosto il vulcano #Stromboli è in #allertaARANCIONE, ma il Sistema di #protezionecivile rotezionecivile è sempre operativo  Urlname  Avviso di condizioni meteo avverse del 5 settembre per temporali in Valle d'Aosta, Toscana ed Emilia-
© Pinformazione alla popolazione © Pi Coordinamento forze in campo  A Dal 30 agosto il vulcano #Stromboli è in #allertaARANCIONE, ma il Sistema di #protezionecivile rotezionecivile è sempre operativo Urlname  A #allertaGIALLA domani, venerdì #6settembre, su tredici regioni.  A Avviso di condizioni meteo avverse del 5 settembre per temporali in Valle d'Aosta, Toscana ed Emilia-Romagna Urlname
© Pinformazione alla popolazione © Pi Coordinamento forze in campo A Dal 30 agosto il vulcano #Stromboli è in #allertaARANCIONE, ma il Sistema di #protezionecivile rotezionecivile è sempre operativo □ Urlname      #allertaGIALLA domani, venerdì #6settembre, su tredici regioni. Avviso di condizioni meteo avverse del 5 settembre per temporali in Valle d'Aosta, Toscana ed Emilia- Romagna □ Urlname      #AllertaGIALLA domani #5settembre su Sicilia, Calabria, Basilicata, parte di Abruzzo, Piemonte e Lombardia.
© Pinformazione alla popolazione © Pi Coordinamento forze in campo  A Dal 30 agosto il vulcano #Stromboli è in #allertaARANCIONE, ma il Sistema di #protezionecivile rotezionecivile è sempre operativo Urlname  A #allertaGIALLA domani, venerdì #6settembre, su tredici regioni.  A Avviso di condizioni meteo avverse del 5 settembre per temporali in Valle d'Aosta, Toscana ed Emilia-Romagna Urlname

🗘 #AllertaARANCIONE domani, mercoledì #4settembre, sulla Calabria meridionale ionica. #AllertaGIALLA nei
restanti settori e in Sicilia.
🔬 Avviso di condizioni meteo avverse del #3settembre per piogge e temporali in Calabria. 👉 Urlname
💸 dati satellitari
∆dati pluviometrici
dati termometrici
La nuova piattaforma Radar-DPC ha già registrato più di 1 milione di visite, tu la conosci? 👉 Urlname
#AllertaARANCIONE domani, #martedì3settembre, su Abruzzo, Molise e Puglia. #AllertaGIALLA in undici
regioni.
Avviso di condizioni meteo avverse del 2 settembre per piogge e temporali dal Nord al Sud 👉 Urlname
A \(\infty\)#Stromboli: prosegue il monitoraggio del #vulcano.
Represidio sull'isola del team del Dipartimento, al lavoro con le tutte le componenti e le strutture operative del
Servizio di #protezionecivile.
Leggi qui ∠→ Urlname
#2settembre, sulle aree occidentali e centro-meridionali della Sicilia.
#allertaGIALLA in dodici regioni.
Avviso di condizioni meteo avverse del #1settembre per temporali dal Nord alle Marche (2) Urlname
#allertaGIALLA domani, domenica #1settembre, in sette regioni.
Avviso di condizioni meteo avverse del #31agosto per temporali in arrivo sulla Sicilia Urlname
A C #Stromboli: disposto passaggio a #allertaARANCIONE
Attivata fase operativa di PREALLARME
L'innalzamento di allerta e fase operativa significa:
Implementazione del monitoraggio del #vulcano
Potenziamento del coordinamento di #protezionecivile
Urlname
#allertaGIALLA domani, sabato #31agosto, in sette regioni.
Consulta il bollettino per conoscere il livello e le zone di allerta meteo-idro sul tuo territorio Purlname
#allertaGIALLA domani, venerdì #30agosto, in sei regioni.
Consulta il bollettino per conoscere il livello e le zone di allerta meteo-idro sul tuo territorio 🗗 Urlname
#29agosto Esplosione #Stromboli: per garantire la sicurezza della popolazione è stata ulteriormente estesa
l'interdizione alla navigazione nel tratto di mare antistante la Sciara del Fuoco. Leggi qui 👍 Urlname
& 4 L'acqua è un conduttore di elettricità
Sei in vacanza? Non farti trovare impreparato in caso di #maltempo con #temporali e fulmini → Urlname
∴#allertaGIALLA giovedì #29agosto, in Umbria, Abruzzo, Basilicata, Calabria, Sardegna e Sicilia.
L'avviso di condizioni #meteo avverse del #28agosto prevede ancora #temporali in Sardegna, in estensione
sulla Sicilia. Leggi qui 👍 Urlname
#28agosto Esplosione #Stromboli, ore 15. Siamo in unità di crisi con autorità locali e strutture operative che stanno
garantendo sul posto la risposta di #protezionecivile, e i centri di competenza scientifica. 2 canadair
@emergenzavvf in azione. Non risultano persone coinvolte Urlname
#28AGOSTO Esplosione #Stromboli: il Dipartimento è in contatto con le strutture di #protezionecivile sul
territorio e con i centri di competenza scientifica. Verifiche IN CORSO da parte della nostra #SalaSituazioneItalia
Urlname
☐#allertaGIALLA mercoledì #28agosto in Piemonte, Sardegna, Marche e Umbria.
Avviso meteo del #27agosto per piogge e temporali in Piemonte e Sardegna → Urlname
Il bollettino di criticità e allerta per domani, martedì #27agosto, è VERDE per rischio idraulico, rischio
idrogeologico e rischio temporali (ma ricorda che non è possibile escludere fenomeni localizzati!)
#protezionecivile Urlname
Indispensabili e impareggiabili in tante attività di #protezionecivile.
#26agosto è la #Giornatamodialedelcane! 🚱 🕒 Urlname
#allertaGIALLA lunedì #26agosto in Abruzzo e Umbria. Consulta il bollettino per conoscere il livello e le zone
di allerta meteo-idro sul tuo territorio   ☐ Urlname
🗘 #AllertaGIALLA domani, domenica #25agosto, in Abruzzo, Basilicata, Molise e Puglia.
Consulta il bollettino per conoscere il livello e le zone di allerta meteo-idro sul tuo territorio 👉 Urlname
#24agosto 2016, il #terremoto colpisce i territori del #CentroItalia. Il sistema di #protezionecivile si è
immediatamente mobilitato per rispondere all'emergenza. Tragico il bilancio finale della violenta scossa: 299
vittime numerosi feriti e gravi danni sul territorio. Urlname

♦ ♦ GR Incendi in #Grecia: in partenza equipaggi italiani per fronteggiare gli incendi boschivi che stanno
interessando il Paese.
EUIT I due Canadair di @emergenzavvf operano nell'ambito del progetto europeo #RescEu-IT. Leggi qui ☐☐ Urlname
☐#allertaGIALLA domani, mercoledì #14agosto, per rischio temporali in cinque regioni.
Avviso di condizioni meteo avverse del #13agosto per piogge e temporali al Nord-Est e al Centro. Leggi qui
Avviso di condizioni meteo avverse dei #13 agosto per piogge e temporan ai Nord-Est e ai centro. Leggi qui   ← Urlname
#allertaARANCIONE, fino alle prime ore di martedì #13agosto, per rischio temporali nelle zone alpine
occidentali della Lombardia.
Consulta il Bollettino → Urlname
I giovani hanno la forza per migliorare il mondo.
Buona Giornata della Gioventù dai ragazzi di Anch'io sono la #protezionecivile: i campi scuola.
#YouthDay Urlname
Tempi più brevi per i rimborsi ai datori di lavoro!
Una notizia importante per il mondo del volontariato di #protezionecivile. Scopri di più qui - Urlname
#allertaARANCIONE domani, #12agosto, per rischio temporali su parte della Lombardia.
#allertaGIALLA in valle d'Aosta, Piemonte, Lombardia e Veneto.
Avviso di condizioni meteo avverse dell' #11agosto per temporali al Nord 👉 Urlname
#allertaGIALLA domani, domenica #11agosto, per rischio temporali sulle zone alpine de <u>lla</u> Lombardia.
Consulta il bollettino per conoscere il livello e le zone di allerta meteo-idro sul tuo territorio   ☐ Urlname
🗘 #allertaGIALLA domani, sabato #10agosto, per rischio temporali nell'area settentrionale della Lombardia.
Consulta il bollettino per conoscere il livello e le zone di allerta meteo-idro sul tuo territorio   ☐ Urlname
Il Bollettino nazionale di criticità e allerta meteo-idro segnala le allerte previste 🗘
① fino alle 24.00 del giorno di emissione
e nelle 24 ore del giorno dopo
Domani, 9 agosto, la mappa è VERDE
#protezionecivile Urlname
🗘 📰 🖺 La Flotta aerea dello Stato lavora a supporto delle squadre e dei mezzi locali ma la lotta agli #incendi
boschivi si fa anche così 1 Urlname
#Maltempo #8agosto : ecco le cumulate di precipitazioni registrate nelle ultime 24 ore in Italia.
Suarda la mappa radar qui ☐ Urlname
#allertaARANCIONE #8agosto su parte della Lombardia. #allertaGIALLA in Veneto, Emilia-Romagna e su
settori di Lombardia e Toscana
L'allerta #meteo-idro ti avvisa che potresti trovarti in situazioni di pericolo. Consulta il Bollettino → Urlname
∴#allertaARANCIONE oggi e domani, #7agosto, su parte della Lombardia.
#allertaGIALLA domani in Veneto, Friuli Venezia Giulia, Valle d'Aosta, Piemonte e Lombardia.
Avviso meteo del #6agosto per temporali e venti forti al Nord 👍 Urlname
Oggi ad Ischia sono stati presentati i risultati della microzonazione sismica di terzo livello. Un lavoro importante
per i territori colpiti dal terremoto dell'agosto 2017.
Che cos'è la microzonazione sismica? Guarda qui 1 Urlname
#6agosto 1991, nasce il primo sito #web: un'innovazione che ha rivoluzionato il nostro modo di
comunicare.
E voi ricordate il nostro primo sito web? Era il 1998! 1 Urlname
Consulta il bollettino per conoscere il livello e le zone di allerta meteo-idro sul tuo territorio ☐ Urlname
② O ② Quando un #incendio boschivo è sotto controllo?
e cosa vuol dire incendio in bonifica? 1 Urlname
Il bollettino di criticità e allerta per domani, lunedì #5agosto, è VERDE per rischio idraulico, rischio idrogeologico
e rischio temporali (ma ricorda che non è possibile escludere fenomeni localizzati!)
#protezionecivile Urlname
Ogni giorno la Rete dei centri funzionali:
elabora previsioni meteo
on monitora i fenomeni e il loro impatto sul territorio
valuta le allerte e i livelli di criticità meteo-idro
Domani, domenica #4agosto, il bollettino è VERDE
#protezionecivile Urlname

#Esodoestivo2019: il calendario di #ViabilitàItalia indica per domani #3agosto condizioni di traffico da bollino nero. Il DPC fa parte di Viabilità Italia, centro che si occupa di fronteggiare crisi legate alla viabilità e di adottare e pianificare strategie di intervento Urlname
☐#allertaGIALLA domani, sabato #3agosto, per rischio temporali in Veneto.
Consulta il bollettino per conoscere il livello e le zone di allerta meteo-idro sul tuo territorio → Urlname
Il vulcano Stromboli ripreso il #1Agosto da #Sentinel2, a 1 mese dall'esplosione parossistica del 3 luglio. Le
immagini mostrano come l'attività vulcanica sia ancora elevata.
Stromboli è in #allertaGIALLA che corrisponde alla fase operativa di ATTENZIONE Urlname
(2) Rischi sul territorio
Norme di comportamento
Competenze del Servizio nazionale
In tanti usate il Contact Center per avere informazioni sulle nostra attività
Ora trovate le risposte alle domande più frequenti nella nuova sezione del nostro sito Urlname
A#allertaARANCIONE domani, venerdì #2agosto, per rischio temporali in Lombardia e #allertaGIALLA in
quattro regioni.
Avviso di condizioni meteo avverse del #1agosto per temporali e venti forti dal Nord al Centro. Leggi qui
Urlname
31 #1agosto
#allertaGIALLA per rischio temporali in Veneto
L'allerta ti avvisa che potresti trovarti in situazioni di pericolo. Consulta il Bollettino - Urlname
3 #31 luglio
↑ #allertaGIALLA
rischio temporali
Lombardia e Veneto
© L'allerta ti avvisa che potresti trovarti in situazioni di pericolo. Consulta il Bollettino → Urlname
È bello correre insieme nella stessa direzione!
Buona #GiornataMondialeDellAmicizia dai ragazzi di Anch'io sono la #protezionecivile: i campi scuola 🚭 🕫
Urlname
iii#30luglio
#allertaGIALLA per rischio temporali in Veneto e per rischio idrogeologico in Toscana.
L'allerta ti avvisa che potresti trovarti in situazioni di pericolo. Consulta il Bollettino: Urlname
#allertaGIALLA domani, lunedì #29luglio, in Veneto, Umbria, Abruzzo, Basilicata e Calabria.
Avviso di condizioni meteo avverse del #28luglio per venti forti al sud al Sud 👉 Urlname
#28luglio 1883, il #terremoto di #Casamicciola. I numeri della catastrofe sono impressionanti: 2.333 vittime e oltre
1.360 edifici crollati. Il ricordo della devastazione è stato fissato nel gergo popolare con l'espressione: "Ccà pare Casamicciola"
Urlname
I #temporali si formano velocemente. Ecco sette cose da sapere per non farsi trovare impreparati
#ETNA #allertaGIALLA 🖟 il Dipartimento dispone il passaggio a livello di #allertaGIALLA e attiva la fase
#ETNA #allertaGIALLA A il Dipartimento dispone il passaggio a livello di #allertaGIALLA e attiva la fase operativa di attenzione
#ETNA #allertaGIALLA ⚠ il Dipartimento dispone il passaggio a livello di #allertaGIALLA e attiva la fase operativa di attenzione  ☐ Urlname
#ETNA #allertaGIALLA il Dipartimento dispone il passaggio a livello di #allertaGIALLA e attiva la fase operativa di attenzione  Urlname  ##ETNA #allertaGIALLA e attiva la fase operativa di attenzione  ###################################
#ETNA #allertaGIALLA ⚠ il Dipartimento dispone il passaggio a livello di #allertaGIALLA e attiva la fase operativa di attenzione ☐ Urlname
#ETNA #allertaGIALLA ⚠ il Dipartimento dispone il passaggio a livello di #allertaGIALLA e attiva la fase operativa di attenzione  ☐ Urlname  ☐ #allertaARANCIONE domani, domenica #28luglio, in Lombardia, Veneto, Liguria e Lazio. #allertaGIALLA in 14 regioni. ☐ Avviso meteo del #27luglio per piogge e temporali al Centro-Nord e temperature in diminuzione ☐ Urlname
#ETNA #allertaGIALLA ⚠ il Dipartimento dispone il passaggio a livello di #allertaGIALLA e attiva la fase operativa di attenzione  ☐ Urlname  ☐ #allertaARANCIONE domani, domenica #28luglio, in Lombardia, Veneto, Liguria e Lazio. #allertaGIALLA in 14 regioni. ☐ Avviso meteo del #27luglio per piogge e temporali al Centro-Nord e temperature in diminuzione ☐ Urlname ☐ #allertaARANCIONE domani, sabato #27luglio, per rischio temporali in Lombardia e su parte del Veneto.
#ETNA #allertaGIALLA ⚠ il Dipartimento dispone il passaggio a livello di #allertaGIALLA e attiva la fase operativa di attenzione  ☐ Urlname  ☐ #allertaARANCIONE domani, domenica #28luglio, in Lombardia, Veneto, Liguria e Lazio. #allertaGIALLA in 14 regioni.  ☐ Avviso meteo del #27luglio per piogge e temporali al Centro-Nord e temperature in diminuzione ☐ Urlname  ☐ #allertaARANCIONE domani, sabato #27luglio, per rischio temporali in Lombardia e su parte del Veneto.  #allertaGIALLA in otto regioni.
#ETNA #allertaGIALLA ⚠ il Dipartimento dispone il passaggio a livello di #allertaGIALLA e attiva la fase operativa di attenzione  ☐ Urlname  ☐ #allertaARANCIONE domani, domenica #28luglio, in Lombardia, Veneto, Liguria e Lazio. #allertaGIALLA in 14 regioni. ☐ Avviso meteo del #27luglio per piogge e temporali al Centro-Nord e temperature in diminuzione ☐ Urlname ☐ #allertaARANCIONE domani, sabato #27luglio, per rischio temporali in Lombardia e su parte del Veneto. #allertaGIALLA in otto regioni. ☐ Avviso meteo del #26luglio per piogge e temporali al Centro-Nord e temperature in diminuzione ☐ Urlname
#ETNA #allertaGIALLA il Dipartimento dispone il passaggio a livello di #allertaGIALLA e attiva la fase operativa di attenzione
#ETNA #allertaGIALLA il Dipartimento dispone il passaggio a livello di #allertaGIALLA e attiva la fase operativa di attenzione  Urlname  ##ETNA #allertaGIALLA in 14 regioni.  ### Avviso meteo del #27luglio per piogge e temporali al Centro-Nord e temperature in diminuzione ### Urlname  #### ### #### #### #################
#ETNA #allertaGIALLA il Dipartimento dispone il passaggio a livello di #allertaGIALLA e attiva la fase operativa di attenzione  Urlname  ##ETNA #allertaGIALLA in 14 regioni.  ### Avviso meteo del #27luglio per piogge e temporali al Centro-Nord e temperature in diminuzione ### Urlname  ##### ### ##########################
#ETNA #allertaGIALLA ⚠ il Dipartimento dispone il passaggio a livello di #allertaGIALLA e attiva la fase operativa di attenzione  ☐ Urlname  ☐ #allertaARANCIONE domani, domenica #28luglio, in Lombardia, Veneto, Liguria e Lazio. #allertaGIALLA in 14 regioni.  ☐ Avviso meteo del #27luglio per piogge e temporali al Centro-Nord e temperature in diminuzione ☐ Urlname  ☐ #allertaARANCIONE domani, sabato #27luglio, per rischio temporali in Lombardia e su parte del Veneto.  #allertaGIALLA in otto regioni.  ☐ Avviso meteo del #26luglio per piogge e temporali al Centro-Nord e temperature in diminuzione ☐ Urlname  Per fare la cosa giusta bisogna rimboccarsi le maniche ☐ Urlname  Il Dipartimento della Protezione Civile esprime il più sincero cordoglio ai familiari e all'Arma dei @ Carabinieri per la morte del Vice Brigadiere Mario Rega Cerciello Urlname  Il bollettino delle #ondatedicalore per la giornata del #26luglio Urlname
#ETNA #allertaGIALLA  il Dipartimento dispone il passaggio a livello di #allertaGIALLA e attiva la fase operativa di attenzione  □ Urlname
#ETNA #allertaGIALLA  il Dipartimento dispone il passaggio a livello di #allertaGIALLA e attiva la fase operativa di attenzione  □ Urlname
#ETNA #allertaGIALLA  il Dipartimento dispone il passaggio a livello di #allertaGIALLA e attiva la fase operativa di attenzione  □ Urlname

4 Team Urban Search and Rescue
🛱 🖺 scenario operativo basato sul rischio sismico
Competenza e gioco di squadra: questo è stato lo spirito di MODEX SICILY 2019, l'esercitazione
internazionale che si è svolta dal 16 al 19 luglio. Guarda la gallery 👉 Urlname
31 #25luglio
rischio temporali
Piemonte, Lombardia e Veneto
L'allerta ti avvisa che potresti trovarti in situazioni di pericolo. Consulta il Bollettino: Urlname
Il bollettino di criticità e allerta indica colore VERDE su tutta l'Italia per domani, mercoledì #24luglio.
#protezionecivile Urlname
Verso l'esercitazione Campi Flegrei di ottobre
Testare le capacità operative
Aggiornare le pianificazioni per il rischio vulcanico
Risiamo in Comitato Operativo per fare il punto sulle attività che impegneranno il sistema di #protezionecivile
Urlname
ttBuon compleanno al Presidente #Mattarella, punto di riferimento per tutto il Servizio nazionale di
#protezionecivile Urlname
Il bollettino di criticità e allerta per domani, martedì #23luglio, è VERDE per rischio idraulico, rischio
idrogeologico e rischio temporali (ma ricorda che non è possibile escludere fenomeni localizzati!)
#protezionecivile Urlname
#allertaGIALLA domani, lunedì #22luglio, per rischio temporali in Veneto.
Consulta il bollettino per conoscere il livello e le zone di allerta meteo-idro sul tuo territorio   Urlname
☐#allertaGIALLA domani, domenica #21luglio, per rischio temporali in Veneto.
1 · · · · · · · · · · · · · · · · · · ·
Consulta il bollettino per conoscere il livello e le zone di allerta meteo-idro sul tuo territorio ☐ Urlname
250 anni fa il primo uomo sulla #Luna. Da allora la ricerca ha portato innovazioni nel nostro campo.
<u>A</u> vulcani
⚠rischio idrogeologico
🕏 clima
<b>⊘</b> incendi
∆alluvioni
fiterremoti fiterremoti
Tante le attività di #protezionecivile in cui ci avvaliamo di strumenti e immagini satellitari.
Ogni giorno la Rete dei centri funzionali:
elabora previsioni meteo
Monitora i fenomeni e il loro impatto sul territorio
valuta le allerte e i livelli di criticità meteo-idro
Domani, sabato #20luglio, il bollettino è VERDE
#protezionecivile Urlname
L'attività eruttiva dell'Etna nelle immagini dei satelliti #Sentinel5P e #Sentinel3 di @CopernicusEMS Urlname
#19luglio 1985, la tragedia della Val di Stava. Alle ore 12:22 una disastrosa colata di fango, provocata dal crollo di
due bacini di decantazione della miniera di Prestavèl, investì l'abitato di Stava causando la morte di 268 persone.
@emergenzavvf Urlname
Il bollettino di criticità e allerta per domani, venerdì #19luglio, è VERDE per rischio idraulico, rischio
idrogeologico e rischio temporali (ma ricorda che non è possibile escludere fenomeni localizzati!)
#protezionecivile Urlname
#18luglio 1987, l'alluvione della #Valtellina. Dopo giorni di piogge abbondanti, colate di fango e detriti si
abbatterono per dieci giorni su diversi paesi della valle. 53 i morti.
@ @crocerossa Urlname
☐#allertaGIALLA domani, giovedì #18luglio, per rischio temporali su alcuni settori della Lombardia e in Veneto.
Consulta il bollettino per conoscere il livello e le zone di allerta meteo-idro sul tuo territorio 👉 Urlname
## ## ## ## ## ## ## ## ## ## ## ## ##
#allertaGIALLA domani, mercoledì #17luglio, in Veneto.
Consulta il bollettino per conoscere il livello e le zone di allerta meteo-idro sul tuo territorio   Urlname
È da qui che coordianiamo la flotta aerea dello Stato per la lotta agli incendi boschivi.
Entriamo insieme nella sala del Centro Operativo Aereo Unificato
Urlname

∴#allertaARANCIONE oggi, lunedì #15luglio, in Lombardia, Toscana e Calabria.
∴#allertaARANCIONE domani, #16luglio, in Puglia e Calabria.
∴#allertaGIALLA domani in 6 regioni.
Avviso meteo del #15luglio per piogge e temporali al Sud 🗲 Urlname
∴#allertaARANCIONE oggi, #14luglio, in Lombardia.
☐#allertaARANCIONE domani, #15luglio, in Lombardia, Liguria e Toscana.
∴#allertaGIALLA domani in 13 regioni.
Avviso meteo del #14luglio per temporali al Nord-Ovest e al Centro 👉 Urlname
#allertaARANCIONE oggi, sabato #13luglio, nelle Marche, in Abruzzo e in Puglia.
∴#allertaGIALLA domani, domenica #14luglio, in sei regioni.
Avviso di condizioni meteo avverse del #13luglio per piogge e temporali nel Nord-Ovest
Siamo nella città natale di Zamberletti perché da oggi la Dacia di Villa Baragiola porterà anche il suo nome.
Un'occasione per onorare e rendere viva la memoria del padre della #protezionecivile con un centro studi di
protezione civile → Urlname
☐ #allertaARANCIONE domani, sabato #13luglio, per rischio temporali nelle Marche e in Abruzzo.
#allertaGIALLA in 12 regioni.
Avviso di condizioni meteo avverse del #12luglio per piogge e temporali al Centro-Sud. Leggi qui 🗗 Urlname
######################################
Lombardia, Toscana e Molise.
Consulta il bollettino per conoscere il livello e le zone di allerta meteo-idro sul tuo territorio   ☐ Urlname
Dopo la forte ondata di #maltempo che ha colpito il nostro Paese il sistema di #protezionecivile è in queste
ore a lavoro per:
werifica dei danni
agevolare le dichiarazioni di stato di emergenza
Leggi qui Urlname
Ogni giorno la Rete dei centri funzionali:
elabora previsioni meteo
on the control of the
\( \text{\tince{\text{\tinintert{\text{\tinite\tinitheta}\text{\text{\text{\text{\text{\text{\text{\text{\tinit}\text{\text{\text{\text{\text{\tinit}\text{\text{\text{\text{\text{\text{\text{\text{\text{\text{\text{\texi}}\text{\text{\text{\text{\text{\text{\tinit}\text{\text{\text{\text{\text{\text{\text{\text{\text{\text{\text{\text{\tinit}\text{\text{\text{\text{\text{\text{\text{\text{\text{\text{\text{\tinit}\tint{\text{\tinitheta}\text{\text{\text{\text{\text{\text{\tinit}\tint{\text{\tinitheta}\text{\text{\text{\tinit}\ti
Domani, giovedì #11luglio, il bollettino è VERDE
#protezionecivile Urlname
#10luglio 1976, il disastro di #Seveso spinge l'Europa a dotarsi di una normativa comune sul rischio industriale e
mette al centro del dibattito la tutela ambientale e la gestione degli incidenti causati da sostanze pericolose.
#protezionecivile
To Archivio Famiglia Volpi Urlname
Menzione speciale per la Piattaforma radar DPC all' #OpenGovChampion. Il servizio rende disponibili:
🗱 dati satellitari
dati pluviometrici
dati termometrici
→ Urlname
#allertaARANCIONE, mercoledì #10luglio, per rischio temporali sulla Toscana centro meridionale.
#allertaGIALLA in gran parte dell'Italia.
Avviso di condizioni meteo avverse del #9luglio per piogge e temporali da Nord a Sud 👉 Urlname
#allertaGIALLA domani, martedì #9luglio, in sette regioni.
Avviso di condizioni meteo avverse del #8luglio per piogge e temporali al Centro-Nord. Leggi qui 👉 Urlname
#allertaGIALLA, domani, lunedì #8luglio, in sette regioni.
Avviso di condizioni meteo avverse del #7luglio per temporali e venti forti al Centro-Nord. Leggi qui
Graname de condizioni ineteo di volse del miragno per temporani e venti forti di condici ineteo di volse del miragno per temporani e venti forti di condici ineteo di volse del miragno per temporani e venti forti di condici ineteo di volse del miragno per temporani e venti forti di condici ineteo di volse del miragno per temporani e venti forti di condici ineteo di volse del miragno per temporani e venti forti di condici ineteo di volse del miragno per temporani e venti forti di condici ineteo di volse del miragno per temporani e venti forti di condici ineteo di volse del miragno per temporani e venti forti di condici ineteo di volse del miragno per temporani e venti forti di condici ineteo di volse del miragno per temporani e venti forti di condici ineteo di volse del miragno per temporani e venti forti di condici ineteo di volse del miragno per temporani e venti forti di condici ineteo di volse del miragno per temporani e venti forti di condici ineteo di volse del miragno per temporani e venti forti di condici ineteo di volse del miragno per temporani e venti forti di condici ineteo di volse del miragno per temporani e venti forti di condici ineteo di volse del miragno per temporani e venti forti di condici ineteo di volse del miragno per temporani e venti forti di condici ineteo di volse di condici ineteo di condici ine
Nei nostri campi scuola estivi la #protezionecivile è un bellissimo gioco di squadra Urlname
^
<ul> <li>∴ #allertaGIALLA domani, domenica #7luglio, in sei regioni.</li> <li>∴ Avviso meteo del #6luglio per piogge e temporali in arrivo al Nord</li> </ul>
Wish Avviso meteo dei #6iugiio per piogge e temporali in arrivo al Nord
☐ #allertaGIALLA domani, sabato #6luglio, per rischio temporali in Friuli Venezia Giulia e sui settori
settentrionali di Lombardia e Veneto.

Stromboli: #allertaGIALLA
Il Dipartimento, in accordo con la Regione Siciliana, dispone il passaggio ad #allertaGIALLA e l'attivazione
della conseguente fase operativa di attenzione   Urlname
Il bollettino di criticità e allerta per domani, venerdì #5luglio, è VERDE per rischio idraulico, rischio idrogeologico
e rischio temporali (ma ricorda che non è possibile escludere fenomeni localizzati!)
#protezionecivile Urlname
ore19 #3luglio esplosione #Stromboli: In unità di crisi facciamo il punto con autorità locali, centri di competenza e
strutture operative: Centro Operativo comunale di Lipari è attivo per garantire sul posto la risposta di
#protezionecivile, canadair di #vigilidelfuoco in azione Urlname
#allertaGIALLA domani, giovedì #4luglio, in Lombardia, Veneto, Emilia-Romagna e in gran parte del
Piemonte.
Ancora piogge e temporali nel nord-Italia. Leggi qui l'avviso meteo del #3luglio 👉 Urlname
EU Ecco la mappa delle ondate di calore che la scorsa settimana hanno colpito l'Europa. Urlname
Nel 2017 il nostro Paese ha dovuto affrontare una lunga emergenza per gli incendi boschivi. A quasi due anni di
distanza sono ancora ben visibili i danni dei vasti incendi sul Vesuvio nelle immagini acquisite ieri da #Sentinel2
EU 🐉 Urlname
🗘 #allertaGIALLA domani, mercoledì #3luglio, in cinque regioni.
Avviso di condizioni meteo avverse del #2luglio per pioggia e temporali al Nord. Leggi qui 👍 Urlname
☐#allertaARANCIONE oggi e domani, martedì #2luglio, per temporali forti nella Provincia Autonoma di
Bolzano.
☐#allertaGIALLA domani in Lombardia e Veneto nord-occidentale.
Avviso meteo del #1luglio per piogge e temporali al Nord 👉 Urlname
BEcco la temperatura della superficie terrestre dell'Italia rilevata il 30 giugno da #Sentinel3 €∪ 🐉 Urlname
#AllertaGIALLA domani, lunedì #1 luglio, su parte della Lombardia e del Veneto.
Consulta il bollettino per conoscere il livello e le zone di allerta meteo-idro sul tuo territorio 👉 Urlname
Ogni giorno la Rete dei centri funzionali:
elabora previsioni meteo
omnitora i fenomeni e il loro impatto sul territorio
Q avaluta le allerte e i livelli di criticità meteo-idro
Domani, domenica #30giugno, il bollettino è VERDE
#protezionecivile Urlname
#29giugno 1919, terremoto del #Mugello. Oggi ricorre il centenario del terribile sisma che colpì comunità che da
poco avevano vissuto il dramma della Prima Guerra Mondiale. Urlname
Il Bollettino di criticità e allerta per sabato #29giugno:
✓ rischio idraulico VERDE
✓ rischio idrogeologico VERDE
rischio temporali VERDE
#protezionecivile Urlname
Dal nostro Centro Funzionale facciamo il punto sulle temperature registrate nel nostro Paese nella giornata del
#28giugno.  Massime molto elevate su Pianura Padana centro-occidentale, vallate alpine, Toscana, Umbria, Lazio, Sardegna e
zone interne della Puglia settentrionale Urlname
Il Bollettino nazionale di criticità e allerta meteo-idro segnala le allerte previste $\triangle$
fino alle 24.00 del giorno di emissione
e nelle 24 ore del giorno dopo Domani #27giugno la mappa è VERDE Urlname
+ Aumentare le capacità operative e le competenze dei territori
Ridurre il rischio da catastrofe
Oggi siamo al #cds per condividere i risultati finora raggiunti nell'ambito del @pongovernance e Capacità
Istituzionale 2014-2020 Urlname
AllertaGIALLA domani, giovedì #27giugno, per rischio idraulico, idrogeologico e temporali su gran parte della
Calabria.
Consulta il bollettino per conoscere il livello e le zone di allerta sul tuo territorio 👉 Urlname
La campagna antincendio boschivo 2019 è iniziata! (anche per i ragazzi di Anch'io sono la
#protezionecivile: i campi scuola) Urlname
Il bollettino di criticità e allerta per domani, mercoledì #26giugno, è VERDE per rischio idraulico, rischio
idrogeologico e rischio temporali (ma ricorda che non è possibile escludere fenomeni localizzati!)
#protezionecivile Urlname

DPC collabora per la fornitura delle previsioni meteo utili al Sistema di Previsione e allarme su #ondatecalore curato dal @MinisteroSalute . Urlname
∴#allertaGIALLA domani, martedì #25giugno, su gran parte della Calabria.
Consulta il bollettino per conoscere il livello e le zone di allerta meteo-idro sul tuo territorio 👉 Urlname
3 mesi di attività
# 1400 pazienti curati e più di 200 interventi eseguiti
ITMZ Oggi doniamo alle autorità del Mozambico il PMA che ha dato assistenza alle comunità colpite dal ciclone
Idai. La missione del team italiano si chiude qui, grazie a tutti! 💍 Urlname
Auguri @CISOM 🏂
Le competenze nel campo del pronto soccorso sanitario e del soccorso tecnico-logistico, la disponibilità degli
operatori Cisom nelle attività di formazione e assistenza alla popolazione sono risorse preziose per il nostro sistema di #protezionecivile Urlname
#23giugno #terremoto avvertito a #Roma, in corso le verifiche della #SalaSituazioneItalia. Al momento non risultano feriti e danni. Urlname
Ogni giorno la Rete dei centri funzionali:
elabora previsioni meteo
Monitora i fenomeni e il loro impatto sul territorio
Q avaluta le allerte e i livelli di criticità meteo-idro
Domani, lunedì #24giugno, il bollettino è VERDE 🖓
#protezionecivile Urlname
#allertaARANCIONE domani, domenica #23giugno, su alcuni settori della Lombardia.
↓#allertaGIALLA in Veneto e sul resto della Lombardia.
Consulta il bollettino per conoscere il livello e le zone di allerta sul tuo territorio ☐ Urlname
🗘 #allertaARANCIONE oggi e domani, sabato #22giugno, su alcuni settori della Lombardia.
#allertaGIALLA, domani, in sei regioni.
Avviso di condizioni meteo avverse del #21 giugno per pioggia e temporali al Nord. Leggi qui 👉 Urlname
Monitoraggio del territorio
@Monitoraggio marino
& Cambiamenti climatici
Supporto per gestione emergenze
SEUII programma @CopernicusEU supporta le attività di #protezionecivile Urlname
Esprimiamo dolore per la morte di Emanuele Crestini, sindaco di Rocca di Papa, coinvolto lo scorso 10 giugno
nell'esplosione del Palazzo comunale → Urlname
#AllertaGIALLA domani, venerdì #21giugno, per rischio temporali su gran parte della Lombardia e sul settore
alpino del Veneto.
Consulta il bollettino per conoscere il livello e le zone di allerta sul tuo territorio 👉 Urlname
Ogni giorno nelle nostre sale monitoriamo e valutiamo i rischi sul territorio.
Ed è sempre bello raccontare le attività di #protezionecivile ai ragazzi.
Oggi abbiamo ospitato in Dipartimento i volontari del servizio civile ACLI. Benvenuti! 🚱 😨 Urlname
M''Dobbiamo continuare a lavorare sulla pianificazione d'emergenza perché è fondamentale che quella territoriale
sia perfettamente integrata con la pianificazione nazionale" così Borrelli alla firma dei gemellaggi per Vesuvio e
Campi Flegrei
leggi qui △ Urlname
#AllertaGIALLA, giovedì #20giugno, per rischio temporali sul settore alpino del Veneto.
Consulta il bollettino per conoscere il livello e le zone di allerta meteo-idro sul tuo territorio 👉 Urlname
Rell'ospedale da campo in Mozambico continua l'assistenza sanitaria alla popolazione colpita dal ciclone Idai
Il nostro team, composto da operatori DPC e @crocerossa, è impegnato anche nelle attività di training e formazione
del personale medico locale. Buon lavoro a tutti! Urlname
#allertaGIALLA domani, mercoledì #19giugno, per rischio temporali su settori di Lombardia e Veneto.
Consulta il bollettino per conoscere il livello e le zone di allerta sul tuo territorio ☐ Urlname
💲 🕻 Siamo alla prima Conferenza nazionale sulle previsioni meteorologiche e climatiche.
In #protezionecivile le previsioni meteo sono importanti per le attività di prevenzione e le valutazioni climatiche
consentono alle istituzioni di programmare azioni di riduzione del rischio Urlname
#allertaGIALLA domani, martedì #18giugno, per rischio temporali su alcuni settori della Puglia.
Consulta il bollettino per conoscere il livello e le zone di allerta sul tuo territorio 👉 Urlname

Il bollettino di criticità e allerta per domani, lunedì #17giugno, è VERDE per rischio idraulico, rischio
idrogeologico e rischio temporali (ma ricorda che non è possibile escludere fenomeni localizzati!)
#protezionecivile Urlname
Siamo al Raduno nazionale del volontariato di #ProtezioneCivile.
Questi sono i gesti, i sorrisi, le capacità, la preparazione e l'umanità dei nostri volontari: persone normali capaci di
imprese eccezionali. Buon raduno! Urlname
#allertaGIALLA domani, domenica #16giugno, per rischio idrogeologico su parte della Lombardia.
Consulta il bollettino per conoscere il livello e le zone di allerta sul tuo territorio ☐ Urlname
La Flotta aerea dello Stato supporta squadre e velivoli antincendio locali
₹ ¶7 elicotteri delle Forze Armate
₹3 ¶2 elicotteri dei Carabinieri
₹ EU 2 Canadair del progetto RescEu-IT
\$\langle \rightarrow \pi \frac{1}{2} \rightarrow \pi \rightarrow \pi \frac{1}{2} \rightarrow \pi \frac{1}{2} \rightarrow \pi \frac{1}{2} \rightarrow \pi \frac{1}{2} \rightarrow \pi \rightarrow \pi \frac{1}{2} \rightarrow \pi \rightarrow \pi \ri \rightarrow \pi \frac{1}{2} \rightarrow \pi \rightarrow \pi \rig
↑#allertagialla per temporali domani, sabato #15giugno, sulla Lombardia. Leggi l'avviso di condizioni meteo
avverse del 14 giugno → Urlname
#SalaSituazioneItalia in contatto con le strutture di #protezionecivile sul territorio. #terremoto avvertito dalla
popolazione, dalle verifiche non risultano feriti né danni. Urlname
Oggi è la #GiornataMondialeDelDonatoreDiSangue ma è sempre un buon momento per rimboccarsi le maniche!
#WorldBloodDonorDay2019 Urlname
🗘 #allertaGIALLA domani, venerdì #14giugno, per rischio idraulico su parte del Veneto.
Consulta il bollettino per conoscere il livello e le zone di allerta sul tuo territorio ☐ Urlname
#13giugno I danni sono stati ingenti ma il sistema ha risposto con grande prontezza. "Grazie al grande lavoro svolto
dal sistema di #protezionecivile per aiutare le comunità", così Borrelli al termine del sorvolo delle zone colpite dal
#maltempo in Lombardia Urlname
#13giugno 1981: dopo tre giorni si conclude il dramma di Vermicino. L'epilogo della vicenda evidenziò i limiti del
sistema dei soccorsi e accelerò il dibattito che portò alla nascita, nel 1982, di un organismo di coordinamento di
tutte le forze del Paese: il nostro Dipartimento. Urlname
#allertaGIALLA domani, giovedì #13giugno, in Veneto.
Consulta il bollettino per conoscere il livello e le zone di allerta meteo-idro sul tuo territorio   Urlname #12giugno ore 12.30 #Maltempo in Lombardia: Borrelli ha convocato una riunione con autorità locali e strutture
operative per fare il punto sulle attività di #protezionecivile messe in campo per fronteggiare le criticità in corso
nelle province di Lecco e Sondrio Urlname
"A fare la differenza nel sistema di #ProtezioneCivile italiano è proprio l'impegno delle più diverse professionalità,
sia nel pubblico che nel privato, tanto nella quotidianità quanto nella straordinarietà dell'emergenza" così Borrelli
durante la firma dell'intesa con @ENAVSpA Urlname
🗘 #allertaGIALLA domani, mercoledì #12giugno, in Valle d'Aosta, Lombardia e Veneto.
Consulta il bollettino per conoscere il livello e le zone di allerta meteo-idro sul tuo territorio 👉 Urlname
Esprimiamo dolore per la morte del Vigile del Fuoco deceduto mentre era impegnato nelle attività di spegnimento
di un incendio a San Giorgio Ionico, in provincia di Taranto.
→ Urlname
🗘 #allertaGIALLA domani, martedì #11giugno, in Veneto e in gran parte della Lombardia.
Consulta il bollettino per conoscere il livello e le zone di allerta sul tuo territorio 👉 Urlname
Buona #GiornatadellaMarina. Oggi è l'occasione per ringraziare i nostri #professionistidelmare del prezioso
supporto garantito nelle tante attività e emergenze di #protezionecivile Urlname
#allertaARANCIONE domani, lunedì #10giugno, per rischio temporali in Piemonte, Lombardia e Alto Adige.
☐ #allertaGIALLA in 4 regioni.
Avviso meteo del #9giugno per piogge e temporali in Valle d'Aosta e in Alto Adige. Leggi qui 🗗 Urlname
☐#allertaARANCIONE domani, domenica #9giugno, per rischio temporali su parte della Lombardia.
#allertaGIALLA su settori di Piemonte, Lombardia e Abruzzo.
Avviso meteo del #8giugno per temporali in Piemonte e Lombardia. Leggi qui 🕞 Urlname
Ogni giorno la Rete dei centri funzionali:
elabora previsioni meteo
on the control of the
Q aluta le allerte e i livelli di criticità meteo-idro
Domani, sabato 8 giugno, il bollettino è VERDE
#protezionecivile Urlname

Il DPC collabora per la fornitura delle previsioni meteo utili al Sistema di Previsione e allarme sulle ondate di calore curato dal Ministero della Salute. Urlname
Festeggiamo i 120 anni della Confederazione Nazionale delle #Misericordie. Auguri alle donne e agli
uomini che indossano la divisa giallo-azzurra per aiutare la comunità. La passione e l'umanità dei volontari  @LeMisericordie sono una risorsa del sistema di #protezionecivile. Urlname
Per domani, venerdì #7giugno, la mappa indica l'assenza sul territorio di fenomeni meteo-idro significativi previsti
e prevedibili (ma ricorda che non è possibile escludere fenomeni localizzati!)
#protezionecivile Urlname
🗘 #AllertaGIALLA domani, giovedì #6giugno, per rischio temporali su alcuni settori di Lombardia e Veneto.
Consulta il bollettino per conoscere il livello e le zone di allerta sul tuo territorio ☐ Urlname
In DPC celebriamo la #GiornataMondialedellAmbiente con un'iniziativa organizzata dall'Associazione
nazionale insigniti dell'Ordine al merito della Repubblica italiana. Cambiamenti climatici e politiche di riduzione
del rischio al centro dell'incontro. Urlname
Cosa puoi imparare nei nostri campi scuola?
Montare una tenda
Spegnere un incendio
Diventare supereroe
🖄 🖒 Dal #10giugno torna "Anch'io sono la protezione civile: i campi scuola" 👉 Urlname
205 anni oggi. Festeggiamo l'Arma dei @_Carabinieri_ e il loro straordinario impegno per lo Stato e per il Servizio
nazionale di #protezionecivile. Auguri!
#FestaArma2019 Urlname
#5giugno
AllertaGIALLA in Calabria, Puglia, Basilicata, Abruzzo, Lombardia e Veneto.
L'allerta meteo-idro ti avvisa che potresti trovarti in situazioni di pericolo. Consulta il Bollettino (3) Urlname
Verso #IononRischio2019
Un grande benvenuto ai nuovi volontari formatori V Urlname
Organizzazione, preparazione così facciamo #protezionecivile! Urlname
Il bollettino nazionale di criticità e allerta è la sintesi delle valutazioni regionali relative ai rischi idraulico,
idrogeologico e temporali.
II colore VERDE indica per domani, martedì #4giugno, l'assenza di fenomeni significativi previsti e prevedibili.
#protezionecivile Urlname
☐#allertaGIALLA domani, lunedì #3giugno, in Emilia-Romagna, Abruzzo, Molise, Basilicata e Puglia.
Consulta il bollettino per conoscere il livello e le zone di allerta meteo-idro sul tuo territorio 👉 Urlname
IT Ci siamo! Anche quest'anno una rappresentanza del grande mondo del Servizio nazionale di
#Protezionecivile partecipa alla Rivista del #2Giugno. Buona #FestadellaRepubblica a tutti!
Urlname
Domenica #2giugno
#AllertaGIALLA in Emilia-Romagna, Abruzzo, Molise, Basilicata, Puglia e Calabria.
Vuoi conoscere il livello e le zone di allerta meteo-idro sul tuo territorio?
Consulta il Bollettino Urlname
#allertaGIALLA domani, sabato #1 giugno, in Emilia-Romagna, Abruzzo, Molise, Basilicata, Calabria e Sicilia.
Consulta il bollettino per conoscere il livello e le zone di allerta meteo-idro sul tuo territorio 🔁 Urlname
#AllertaARANCIONE domani, venerdì #31maggio, nella pianura emiliana centrale e #allertaGIALLA nei
restanti settori dell'Emilia-Romagna, in Abruzzo e su alcuni bacini di Veneto, Basilicata, Puglia e Calabria.
Consulta il bollettino   Urlname
Volontariato di #protezionecivile è capacità operativa, preparazione e anche amore e cura per il bello!
In questi giorni più di 60 volontari sono stati impegnati nel Corso di formazione sulla salvaguardia dei beni culturali in emergenza che si conclude oggi in Dipartimento Urlname
#AllertaROSSA il #30maggio, per rischio idraulico in Emilia-Romagna.
#AllertaGIALLA in Veneto, Emilia-Romagna, Toscana, Marche, Umbria, Abruzzo e Puglia
Consulta il bollettino per conoscere il livello e le zone di allerta sul tuo territorio ☐ Urlname #29maggio #maltempo in Emilia-Romagna, aggiornamento ore 13:00
Siamo con Luigi D'Angelo, Direttore operativo emergenze, per fare il punto sull'impegno del sistema di
#protezionecivile 1 Urlname
#protezionecivile 1 Urlname #29maggio 2012, #terremoto in pianura padana emiliana. Dopo il sisma che il 20 maggio scosse gran parte del
#protezionecivile 1 Urlname #29maggio 2012, #terremoto in pianura padana emiliana. Dopo il sisma che il 20 maggio scosse gran parte del Nord con epicentro tra Modena e Mantova, una seconda scossa causò ulteriori crolli e vittime. Grande è stato

🕽 🛴 #allertaROSSA, #28maggio e #29maggio, in Emilia-Romagna. #allertaARANCIONE in Emilia-Romagna e
Veneto, #allertaGIALLA in 10 regioni. Avviso meteo del 28 maggio   ☐ Urlname
ore15 #28maggio #Maltempo in Emilia Romagna
Il Presidente Conte ha dichiarato la mobilitazione straordinaria della #protezionecivile
Attivate colonne mobili di Lombardia e Veneto Operativi COI, CON, Viabilità Italia
Team DPC a Modena a supporto
ream Di € a Modena a supporto    → Urlname
#28maggio ore 9.00 #Maltempo in Italia: Il Capo Dipartimento Borrelli ha convocato una riunione operativa per
fare il punto sullo stato dei fiumi del modenese. Attivo il centro coordinamento soccorsi per garantire sul posto le
attività di #protezionecivile. Urlname
Sapere cosa può succedere durante un'allerta è il primo passo per evitare situazioni di pericolo. L'allerta
non è una semplice previsione #meteo 1 #protezionecivile Urlname
#AllertaARANCIONE, martedì #28maggio, in Veneto, Emilia-Romagna e Calabria. #AllertaGIALLA in 11
regioni.
Avviso #meteo del #27maggio per pioggia e temporali su gran parte dell'Italia. Continua a leggere qui
Urlname
Aggiornamento ore 9:30: #SalaSituazioneItalia in contatto con le strutture di #protezionecivile sul territorio.
#terremoto avvertito dalla popolazione, dalle verifiche non risultano feriti né danni. Urlname
Avviso di condizioni meteo avverse del #26maggio per pioggia e temporali su gran parte dell'Italia.
#allertaGIALLA domani, lunedì #27maggio, in 13 regioni.
Leggi qui 👉 Urlname
Avviso meteo del #25maggio per piogge e temporali al Centro-Nord e in Sardegna. Burrasca al Sud.
#allertaGIALLA oggi, sabato #25maggio, in 8 regioni.
#allertaGIALLA domani, domenica #26maggio, in 12 regioni.
Leggi qui 👉 Urlname
■ Sabato #25maggio
#AllertaGIALLA in Veneto, Lombardia, Marche e Umbria.
Vuoi conoscere il livello e le zone di allerta meteo-idro sul tuo territorio?
Consulta il Bollettino Urlname
♦ ♦ EUIL #24maggio Incendi Israele: partiti questa mattina team italiani per fronteggiare i vasti roghi che stanno
interessando l'area centrale del Paese, a pochi chilometri da Tel Aviv e Gerusalemme.
Buon lavoro! Urlname
🗘 #allertaGIALLA domani, venerdì #24maggio, in Lombardia, Veneto, Emila-Romagna ed Abruzzo.
Consulta il bollettino per conoscere il livello e le zone di allerta sul tuo territorio → Urlname
Emergenza maltempo autunno 2018.
Sei un'amministrazione e hai dubbi su deroghe, affidamenti, contributi e detrazioni previste dalla normativa?
Abbiamo preparato alcune risposte che potrebbero esserti utili.
Visita il nostro sito e resta aggiornato → Urlname
#allertaGIALLA domani, giovedì #23maggio, in nove regioni.
Consulta il bollettino per conoscere il livello e le zone di allerta sul tuo territorio 🖃 Urlname
"Lavorare insieme, pubblico e privato, per garantire la sicurezza dei cittadini" così Borrelli a margine dell'incontro
operativo di oggi, #22maggio, sulla gestione della diga di Corbara in caso di evento di piena nel bacino del Tevere.
#protezionecivile Urlname
La settimana della #protezionecivile è realtà! Si svolgerà ogni anno a ottobre e sarà un'occasione per diffondere
buone pratiche, condividere procedure e promuovere la cultura del rischio.
Topiorni per fare protezione civile tutti insieme, come sempre!
- · · ·
Urlname
Urlname #22Maggio
Urlname  #22Maggio
Urlname  #22Maggio
Urlname  #22Maggio  ∴ #AllertaARANCIONE per rischio idraulico in Veneto sui settori di Basso Brenta-Bacchiglione e Fratta Gorzone  ∴ #AllertaGIALLA per rischio idrogeologico e idraulico in Emilia Romagna e Veneto.
Urlname  #22Maggio  ↑ #AllertaARANCIONE per rischio idraulico in Veneto sui settori di Basso Brenta-Bacchiglione e Fratta Gorzone  ↑ #AllertaGIALLA per rischio idrogeologico e idraulico in Emilia Romagna e Veneto.  Consulta il Bollettino: Urlname
Urlname  #22Maggio      #AllertaARANCIONE per rischio idraulico in Veneto sui settori di Basso Brenta-Bacchiglione e Fratta Gorzone      #AllertaGIALLA per rischio idrogeologico e idraulico in Emilia Romagna e Veneto.      Consulta il Bollettino: Urlname  EU  Siamo orgogliosi di far parte della prima flotta aerea antincendio europea. Questa estate insieme a
Urlname  #22Maggio      #AllertaARANCIONE per rischio idraulico in Veneto sui settori di Basso Brenta-Bacchiglione e Fratta Gorzone      #AllertaGIALLA per rischio idrogeologico e idraulico in Emilia Romagna e Veneto.      Consulta il Bollettino: Urlname  □ ₩ Siamo orgogliosi di far parte della prima flotta aerea antincendio europea. Questa estate insieme a Croazia, Svezia, Spagna e Francia saremo impegnati nella lotta comune agli #incendi boschivi nell'ambito del
Urlname  #22Maggio      #AllertaARANCIONE per rischio idraulico in Veneto sui settori di Basso Brenta-Bacchiglione e Fratta Gorzone      #AllertaGIALLA per rischio idrogeologico e idraulico in Emilia Romagna e Veneto.      Consulta il Bollettino: Urlname  EU  Siamo orgogliosi di far parte della prima flotta aerea antincendio europea. Questa estate insieme a

Usiamo i social per diffondere informazioni corrette ♥
#terremoto #protezionecivile Urlname
Sai quali sono le buone pratiche di #protezionecivile in caso di #terremoto?
© Urlname
#SalaSituazioneItalia in contatto con le strutture di #protezionecivile sul territorio. #terremoto avvertito dalla popolazione, dalla prime verifiche non risultano feriti né danni. Urlname
☼ #allertaARANCIONE domani, martedì #21maggio, per rischio idraulico in Emilia-Romagna e Veneto.
(2) #allertaGIALLA in 5 regioni del Centro-Nord.
Consulta il bollettino per conoscere il livello e le zone di allerta sul tuo territorio ☐ Urlname
#20maggio 2012, il #terremoto in Emilia Romagna. Un forte sisma scuote gran parte del Nord Italia. Nove giorni
dopo una seconda scossa aggrava ulteriormente il bilancio delle vittime e dei danni al patrimonio artistico e
produttivo. Urlname
🗘 #AllertaARANCIONE domani, lunedì #20maggio, su Emilia - Romagna. #AllertaGIALLA su sei regioni al
Centro-Nord.
Consulta il bollettino per conoscere il livello e le zone di allerta meteo-idro sul tuo territorio ☐ Urlname
Tanti colori, tante divise diverse ma oggi la #protezionecivile si tinge tutta di rosa e sostiene la lotta contro i
tumori del seno.
See Soggi corriamo a #Roma la #RacefortheCure. Buona corsa a tutti!
#20annidiRACE #raceroma2019 Urlname
AllertaARANCIONE domani, #domenica19maggio, su Emilia - Romagna. #AllertaGIALLA su sette regioni al Centro-Nord.
Consulta il bollettino per conoscere il livello e le zone di allerta meteo-idro sul tuo territorio → Urlname
Consulta il bollettino per conoscere il livello e le zone di allerta meteo-idro sul tuo territorio   Urlname  □ Urlname
& Resilienza
Volontariato
— Riduzione del rischio
Continuano le attività del Progetto V-IOLA Urlname
Radar DPC è online da un mese e già regala soddisfazioni! Il servizio rende disponibili dati satellitari,
pluviometrici e termometrici.
Il nostro progetto è tra i 32 finalisti del Premio @opengovitaly per #OpenData e #Trasparenza. Evviva! Urlname
(a) (b) Un'attività operativa h24
Si chiude oggi in Montenegro reserchazione internazionale MNE-MODEA 2019  Regione Piemonte e EuroModex Urlname
Avete presente quelli che si affidano ai siti più improbabili per avere informazioni sulle allerte #meteo-idro? #protezionecivile Urlname
Consulta il bollettino per conoscere il livello e le zone di allerta sul tuo territorio → Urlname
♦ Abbiamo attivato il team @CopernicusEMS per valutare gli effetti del #maltempo dei giorni scorsi in nord Italia.
Le immagini radar di #Sentinel1 EU 💸 sono utilizzate per valutare l'estensione. #Sentinel2 EU 💸 fornisce le
immagini pre-evento.
Ecco la mappa di Modena Urlname
🗘 #AllertaARANCIONE, domani 16 maggio, in Calabria.
∴#AllertaGIALLA su 4 regioni
Leggi l'avviso meteo del #15maggio per l'arrivo di temporali e venti forti al Sud → Urlname
Ci confrontiamo con le realtà che nel mondo si impegnano nella riduzione del rischio e portiamo la nostra
esperienza come sistema di #protezionecivile. Ridurre il rischio è una sfida necessaria che coinvolge sia il pubblico sia il privato" così Borrelli al #GP2019Geneva Urlname
#AllertaROSSA, fino alle 24.00 del #14maggio, su parte dell'Emilia-Romagna.
#15Maggio
🗘 #AllertaARANCIONE su alcuni settori dell'Emilia-Romagna
#AllertaGIALLA su 8 regioni italiane
Oconsulta il Bollettino: Urlname
#13maggio In unità di crisi facciamo il punto sul #maltempo in atto in Italia. Il Dipartimento della
#protezionecivile segue l'evolversi della situazione in contatto con regioni e strutture operative. Urlname

	In emergenza nessuno deve essere lasciato indietro, nemmeno in cucina: ad Avezzano con i volontari di #protezionecivile si parla di dieta senza glutine nelle 3 cucine da campo allestite da CRI, FIR-CB e ANA per
	l'evento organizzato dall'@AIC_celiachia con i NAS dei Carabinieri Urlname
	#AllertaROSSA, oggi e domani #14maggio, in Emilia Romagna. Domani #AllertaARANCIONE su parte dell'Emilia Romagna, delle Marche, dell'Abruzzo e del Molise.
	Leggi l'avviso #meteo del #13maggio 🗲 Urlname
	#13maggio
	🗘 #AllertaARANCIONE su Emilia-Romagna e Marche
	AllertaGIALLA su 9 regioni italiane
	L'allerta ti avvisa che potresti trovarti in situazioni di pericolo.
	© Consulta il Bollettino: Urlname
	#alpiniadunata2019 "Essere qui significa toccare con mano la qualità delle attrezzature di cui vi siete dotati nel
	tempo, le vostre capacità e la gloriosa storia dell'Associazione nazionale #Alpini nel sistema di #protezionecivile"
	così Borrelli alla cittadella degli #Alpini Urlname
	"Uno degli aspetti fondativi dell'Associazione nazionale #Alpini è la grande cultura della montagna. Chi la
	montagna l'ha conosciuta sa che è un ambiente difficile ma proprio perciò è un luogo aperto dove la solidarietà è condizione essenziale" così Borrelli a #alpiniadunata2019 Urlname
	Avviso meteo del #11maggio per l'arrivo di temporali e venti forti su gran parte del Paese.
	Avviso ineteo dei #11maggio pei fairivo di temporari e venti forti su gran parte dei Faese.  Avviso ineteo dei #11maggio pei fairivo di temporari e venti forti su gran parte dei Faese.
	#AllertaGIALLA su 12 regioni
	Leggi qui Pulname Diffusione delle buone pratiche, lotta alle fake news: nella nostra comunicazione social possiamo contare su una
	community appassionata specchio di una comunità reale di #protezionecivile partecipe e competente. Siamo al
	#Fdv2019 per parlare di comunicazione in emergenza Urlname
	Avviso meteo del #10maggio per l'arrivo di temporali in Lombardia, Veneto ed Emilia-Romagna.
	#allertaGIALLA, domani #11maggio, nelle tre regioni.
	Leggi qui ∕⊋Urlname
	A febbraio i mezzi dell'associazione G. Caria Paracadutisti sono stati distrutti in un rogo doloso.
	Oggi, grazie a ANA, VAB e Corpo AIB del Piemonte che hanno messo a disposizione i mezzi, l'Associazione
	parteciperà alla campagna antincendio boschivo. Questa è #protezionecivile! Urlname
	Ogni giorno la Rete dei centri funzionali:
	elabora previsioni meteo
	monitora i fenomeni e il loro impatto sul territorio
	🗘 🖁 valuta le allerte e i livelli di criticità meteo-idro
	Per domani #10maggio è stata valutata #allertaGIALLA in Emilia-Romagna 🖓
	#protezionecivile Urlname
	♥ Oggi è #EuropeDay e la #protezionecivile è un lavoro di squadra, anche a livello europeo.
	Il Meccanismo europeo di protezione civile si è subito mobilitato per aiutare il #Mozambico dopo il ciclone Idai.
	L'Italia è nel Meccanismo e fa la sua parte con il PMA attivato a Beira Urlname
	#9Maggio
	#AllertaGIALLA per rischio idraulico ed idrogeologico in Emilia-Romagna e Toscana
	Consulta il Bollettino: Urlname
	#8maggio, la #GiornataMondialeCroceRossa è occasione per festeggiare le donne e gli uomini che ogni giorno
	aiutano chi soffre Le competenze sanitarie, tecnico-operative e la grande umanità degli operatori @crocerossa sono una ricchezza del
	sistema di #protezionecivile. Auguri! Urlname
	#8maggio
	AllertaGIALLA per rischio idraulico e idrogeologico su gran parte dell'Emilia-Romagna
	L'allerta ti avvisa che potresti trovarti in situazioni di pericolo.
	© Consulta il Bollettino: Urlname
	martedì #7maggio
	1 <del></del>
	#AllertaARANCIONE per rischio idraulico su pianure dell'Emilia-Romagna
	AllertaGIALLA su gran parte dei restanti bacini della regione
Į	Consulta il Bollettino: Urlname #6maggio 1976, il #terremoto del Friuli. Quel catastrofico sisma, con le successive scosse di settembre, segnò una
	tappa decisiva per la nascita della moderna #protezionecivile, grazie all'attività e alle intuizioni dell'allora
Į	commissario Giuseppe Zamberletti.
	@emergenzavvf Urlname
U	

0.40.7
🔝 🤀 Ancora maltempo, oggi #5maggio, sulle regioni centro-settentrionali. Precipitazioni e venti intensi,
lunedì #6maggio, al Centro-Sud.
Mareggiate lungo le coste esposte.
Leggi lo scenario #meteo elaborato dal Centro Funzionale Centrale   ☐ Urlname
Lunedì #6Maggio
#allertaARANCIONE su gran parte dell'Emilia-Romagna.
#allertaGIALLA in sette regioni e sui restanti bacini emiliani.
Consulta il Bollettino: Urlname
#5maggio 1998, l'alluvione di #Sarno. In poche ore una vasta colata di fango e detriti travolse alcuni centri abitati
in provincia di Salerno, Avellino e Caserta. Sarno fu il Comune a pagare il tributo più alto di vittime.
@@emergenzavvf Urlname
Altro
Anto  Avviso meteo del #4maggio per l'arrivo di temporali, neve e venti forti.  #allertaARANCIONE il
#5maggio, su gran parte dell'Emilia-Romagna.
↓#allertaGIALLA in otto regioni e sui restanti settori emiliani.
Leggi qui 👉 Urlname
Compie oggi 158 anni l'@Esercito Italiano, #unaforzaperilpaese e sempre in prima linea nelle emergenze di
#protezionecivile. Auguri! Urlname
Sabato #4Maggio
1 T
#AllertaGIALLA meteo-idro su nove regioni.
Consulta il Bollettino per conoscere il livello e le zone di allerta: Urlname
■ Venerdì #3maggio
☐ #AllertaGIALLA per temporali in Lombardia
Consulta il Bollettino: Urlname
Un anno fa abbiamo aperto questa pagina per portare i temi di #protezionecivile nella quotidianità. Una sfida bella
che tutti voi state rendendo possibile. E allora oggi vogliamo dire grazie alla nostra comunità virtuale che ci aiuta a
fare protezione civile in modo reale! Q Urlname
🗘 #allertaGIALLA domani, giovedì #2maggio, per temporali sul settore nord-orientale della Lombardia.
Consulta il bollettino per conoscere il livello e le zone di allerta sul tuo territorio → Urlname
Mercoledì #PrimoMaggio
Allerta GIALLA per temporali su Lazio e settori di Umbria, Molise, Abruzzo e Puglia.
Allerta GIALLA per rischio idrogeologico su parte dell'Abruzzo.
Consulta il Bollettino: Urlname
martedì #30aprile
#allertaGIALLA per rischio idraulico su alcuni settori veneti.
#allertaGIALLA per temporali e rischio idrogeologico in Abruzzo.
Guarda il Bollettino qui: Urlname
Un mese fa il team italiano ha attrezzato in #Mozambico un Posto Medico Avanzato per supportare le attività
dell'ospedale locale danneggiato dal ciclone Idai.
II PMA dispone di:
Sala operatoria e terapia intensiva
Apparecchi radiologici e ecografici Urlname
#allertaGIALLA, lunedì 29 aprile, per rischio idrogeologico e temporali su parte del settore costiero della
Toscana, su Abruzzo, Molise e Puglia.
Consulta il bollettino per conoscere il livello e le zone di allerta sul tuo territorio ☐ Urlname
Avviso di condizioni meteo avverse del #27aprile per venti forti fino a burrasca in Piemonte, Lombardia e
Sardegna.
Leggi qui 👉 Urlname
#allertaGIALLA domani, sabato #27aprile, per rischio idrogeologico sul settore settentrionale della Lombardia.
<u> </u>
Consulta il bollettino per conoscere il livello e le zone di allerta sul tuo territorio   Urlname  Occupatione di distributo di la consulta
Avviso di condizioni meteo avverse del #25aprile per piogge e temporali al Centro-Nord.
△#allertaGIALLA domani, venerdì #26aprile, in sei regioni.
Leggi qui 👉 Urlname
#allertaGIALLA domani, giovedì #25aprile, su settori di Lombardia e Veneto.
Consulta il bollettino per conoscere il livello e le zone di allerta sul tuo territorio   Urlname

Suono a sapersi
#protezionecivile Urlname
<ul> <li>         — #allertaGIALLA domani, mercoledì #24aprile, in Lombardia, Veneto e Friuli Venezia Giulia.     </li> <li>         Consulta il bollettino per conoscere il livello e le zone di allerta sul tuo territorio      </li> <li>         — Urlname     </li> </ul>
Avviso di condizioni meteo avverse del #22aprile per piogge e temporali in arrivo al Centro-Nord.
#allertaGIALLA domani, martedì #23aprile, in 8 regioni.
Urlname
Lo scenario elaborato per #Pasquetta dal Centro Funzionale Centrale prevede dal tardo pomeriggio precipitazioni,
anche a carattere di rovescio o temporale, su Lazio, zone meridionali di Umbria e Toscana, nord della Campania,
Liguria di Levante e Piemonte occidentale e meridionale Urlname
#Earthday II mondo soffre gli effetti del cambiamento climatico: guarda sulla mappa gli eventi significativi del
2018  Urlname
Avviso meteo del #21aprile per venti intensi fino a burrasca forte al Centro-Sud. Mareggiate lungo le coste
esposte.
↑#allertaGIALLA, lunedì #22aprile, per rischio temporali nel Lazio, Umbria e Molise.
Leggi qui 👉 Urlname
La #protezionecivile è di tutti, con tutti. #BuonaPasqua dal nostro team a lavoro per l'emergenza #Mozambico e
auguri da tutti noi! Urlname
Per la giornata di #Pasqua previsti venti da forti a burrasca, con raffiche fino a burrasca forte, su isole maggiori e
Calabria.
Sei preparato?
#protezionecivile Urlname
Venti fino a burrasca forte in arrivo su Sardegna, Sicilia e Calabria.
Sulla base dei fenomeni previsti non è stata valutata per domani, #21aprile, alcuna criticità idrogeologica e
idraulica sul territorio nazionale.
Leggi l'avviso → Urlname
Il Bollettino di criticità e allerta per domani, sabato #20aprile, è VERDE per rischio idraulico, rischio idrogeologico
e rischio temporali
#protezionecivile Urlname
Il nuovo bollettino di vigilanza #meteo è online sul sito Urlname
EUITMzEmergenza #Mozambico. Nei primi 20 giorni di attività il team italiano a Beira ha curato oltre 900 pazienti.
Il nostro Posto Medico Avanzato dispone di:
Sala operatoria e terapia intensiva
Laboratorio di analisi
1 <sup>1</sup> / <sub>2</sub>
Apparecchi radiologici e ecografici Urlname
Domani, venerdì #19aprile, la mappa indica l'assenza sul territorio di fenomeni meteo-idro significativi previsti e prevedibili (ma ricorda che non è possibile escludere fenomeni localizzati!)
#protezionecivile Urlname
#NotreDame State Ecco la prima immagine satellitare disponibile dopo l'incendio Urlname
Ogni giorno la Rete dei centri funzionali:
elabora previsioni meteo
♦ monitora i fenomeni e il loro impatto sul territorio
🗘 🖁 valuta le allerte e i livelli di criticità meteo-idro
Domani, giovedì #18aprile, il bollettino è VERDE 🎧
#protezionecivile Urlname
Che bello raccontare come funziona il sistema di #protezionecivile ai ragazzi!
Oggi nella nostra sede operativa abbiamo incontrato gli studenti dell'Istituto "La Rosa Bianca" di Cavalese in
provincia di Trento. Urlname
💸 dati satellitari
& dati termometrici
Hai visitato la nuova piattaforma Radar-DPC? Fallo, è un servizio open access! #protezionecivile
Urlname
Il Bollettino nazionale di criticità e allerta meteo-idro segnala le allerte previste 🗘
fino alle 24.00 del giorno di emissione
e nelle 24 ore del giorno dopo
Domani, #17aprile, la mappa è VERDE ₩
#protezionecivile Urlname

#NotreDame L'incendio è spento e la struttura principale è salva grazie all'incredibile lavoro dei Vigili del fuoco
francesi e all'impegno di tante strutture statali. È proprio vero: la protezione civile è un lavoro di squadra. Grazie!
Urlname
"Qui non facciamo le classiche previsioni #meteo"
Entriamo insieme nel nostro Centro Funzionale Centrale
#protezionecivile
Urlname
Consulta il bollettino per conoscere il livello e le zone di allerta sul tuo territorio ☐ Urlname
EUITMZEmergenza #Mozambico: nel Posto Medico Avanzato italiano sono stati curati più di 700 pazienti e
realizzati oltre 40 interventi chirurgici nelle prime due settimane di attività.
Il PMA dal 30 marzo supporta le attività dell'ospedale di Beira danneggiato dal ciclone Idai Urlname
🗘 #allertaGIALLA domani, lunedì #15aprile, per rischio idrogeologico e temporali su Calabria, Abruzzo,
Basilicata, Molise, Puglia e Sicilia.
Consulta il bollettino per conoscere il livello e le zone di allerta sul tuo territorio ☐ Urlname
↑#allertaGIALLA domani, domenica#14aprile, su Lombardia, Abruzzo, Calabria, Emilia Romagna, Molise,
Umbria e Puglia.
Consulta il bollettino per conoscere il livello e le zone di allerta meteo-idro sul tuo territorio ☐ http:// 13apr_19
#protezionecivile Urlname
🗘 Allerta GIALLA domani, sabato 13 aprile su Abruzzo, Puglia, Basilicata e Calabria. Consulta il bollettino per
conoscere il livello e le zone di allerta sul tuo territorio ☐ Urlname

## Tweets by FEMA (@fema)

On this International Day of Persons with Disabilities, we affirm our commitment to ensure an inclusive environment and celebrate the contributions & diversity that people with disabilities bring to our nation. #IDPD #IDPWD https://t.co/sMA2qOr6rn

To all of our partners, thank you for your dedication to supporting communities before, during and after disasters. Happy #Thanksgiving! https://t.co/6ZImEoekfC

Podcast Alert

We spoke with @Airbnb, @verizon & @Uber at the Innovation Forum in Silicon Valley about new ways to use technology to support disaster survivors.

Web: https://t.co/X2frN9AQNV Apple: https://t.co/ikoeHoSwkQ

Google Play: https://t.co/IPLH8VG6Y8 https://t.co/ArJgEWV6hE

. @AAAauto estimates that more than 49 million Americans will hit the road this Thanksgiving, and that they will rescue more than 360,000 of them. Make sure that your car is stocked with the essentials to get you to your loved ones safely.

https://t.co/8mIRND8SkQ

#SafeTravels https://t.co/2AshSEW1bs

Every 2 years, we lead a National Exercise to test our readiness against threats.

Recently, @FEMA\_Dan & @CISAgov discussed the 2020 exercise, which will be about managing a cyber emergency when our critical infrastructure is physically impacted.

https://t.co/PlsTtrCmei

#NLE2020 https://t.co/JGrbbrW4bT

On #WorldHelloDay, our team says hello! Learn more about our work by checking out Pub 1, the document that describes our mission & role in emergency management: https://t.co/5zBglaxvrx

#WeAreFEMA https://t.co/WOPcwynDNF

Kathleen's family evacuated in 2018 during the #CampFire. In this video, she describes her experience while stressing the importance of having an evacuation plan.

Ongoing wildfire conditions in California are a good reminder to #BeReady with a plan today:

https://t.co/t5R22y75OB https://t.co/rW59khmvGl

On this week's podcast episode, we talk to @CISAHarrell for Critical Infrastructure Security & Resiliency Month about the nation's most essential services & functions. #CISR

■ Web: https://t.co/3ZIQ2VIZrk

Apple: https://t.co/VBRXzvblCm

Google Play: https://t.co/f1I0qUvmhZ https://t.co/TNrXqFJC11

The 2012 Waldo Canyon Fire destroyed 346 homes in Colorado Springs, CO. To prepare the region for future disasters, the city adopted stronger building and fire codes and taught homeowners to take part in wildfire mitigation.

More: https://t.co/kNUlW6xmMk

https://t.co/ZC1vfstZup

How do other countries deal with disasters? In today's #PrepTalks, @JanRPeelen shares how the Netherlands prevents flooding and how the Dutch are learning to live with water.

Find the full talk & resources at https://t.co/kLAhNH0e3b

https://t.co/PfTqfevARF

If you are at #IAEM19 today(11/19), don't forget to visit booth 337 between 11-11:45 am for a workshop with our Integrated Public Alert & Warning System team. Hope to see you there! https://t.co/ZX6WjaHP7P

If you are at #IAEM2019, come visit us at booth 337 on Tuesday 11/19 from 11 to 11:45 am for a workshop with our Integrated Public Alert & Warning System team! Learn how to effectively communicate & work with broadcasters to help save lives with #IPAWS. https://t.co/8mt6hGXdQN

As you prepare for your holiday travels, stay weather aware:

Download our app and set alerts for your destination: https://t.co/Tsw9BKNuTO

✓ Follow @Readygov for #SafeTravels tips https://t.co/Y21vOqh9Uu

In 2011 a deadly tornado devastated Joplin, Missouri, killing 161 people.

Since then, the city has built 14 safe rooms that open up for people in the community during severe weather. #MitigationWorks

https://t.co/zrsCzknq1J

Wildfires move fast. Know your area's risk and make sure you're getting alerts from local officials so you can evacuate quickly when needed.

Make your plan now with tips from @Readygov: https://t.co/Chwi6Bp6Rd https://t.co/TI8h94CvIW

November is #NativeAmericanHeritageMonth!

Follow this thread for stories and employee highlights to celebrate the rich culture and history of Native Americans and Alaska Natives. \$\frac{1}{2}\$ https://t.co/HlyFKSYX3j

Happy #VeteransDay to all those who have valiantly served and protected our nation. Thank you for your service! https://t.co/dVCVWWFH0W

Today, we pause to remember those affected by the devastating #CampFire, #HillFire and #WoolseyFire one year

As recovery efforts continue, we are grateful to the state and local officials in California as well as the affected communities for their partnership. https://t.co/sD9WKJwUpz

Marty, a retired #veteran from Sparta, WI experienced significant flood damage to his home when a nearby river overflowed. With help from the National Flood Insurance Program (NFIP), he was able to recover faster & get back to his routine.

Learn more: https://t.co/Cf1AePb6kv https://t.co/szKY5GZlhh

This serves as a great reminder that a defensible space can make a difference in how quickly wildfires spread. Prepare for wildfires by creating a 30-foot zone around your home free from fallen leaves, debris, or any flammable materials.

Learn more: https://t.co/t5R22y75OB https://t.co/eM6qI4TYQi

Podcast alert!

We spoke with veterans from each military branch about the unique but complementary transition from active duty to a career in emergency management.

Web: https://t.co/5pjVFbF5P0 Apple: https://t.co/Ta5Xf9DUV4 Google Play: https://t.co/IdM2drDDuH #VeteransDay https://t.co/tjwfiuJWhC

Story time!

#TsunamiDay is a good reminder to consider the dangers of tsunamis & how we can keep communities living in high risk areas safer with mitigation projects.

Here's one example: 4

As you begin your #Halloween festivities, be sure to check your local @NWS forecast: https://t.co/mpqvfg6AYv Severe thunderstorms and strong winds are expected across the East Coast, stay safe!

#PreparedNotScared https://t.co/cjnth9gUXh

We often discuss mitigation, but do you really know what it is & how it makes communities more resilient? Learn all about it in our wrap-up podcast for Community #PlanningMonth.

Web: https://t.co/EpFspxitUI

iTunes: https://t.co/os04dEDDUc

Google: https://t.co/Q7PQtnnm8V https://t.co/wNHb4tz0pO

Earlier today, @FEMA Dan kicked off a financial preparedness class for FEMA employees. Why? To help our team #BeReady at home so they can better help disaster survivors at work.

✓ Join us! Check out @Readygov's tips & free resources: https://t.co/eRhNUXHRz1 https://t.co/f9sXwm7h2E

Thoughtful planning for how & where we build can reduce a community's disaster risk. Mitigation projects like property buyouts are one way to minimize or avoid damage from disasters, creating safer neighborhoods.

#PlanningMonth https://t.co/88Ev7gEOtV

We just released the updated National Response Framework, with a new Emergency Support Function #14 Cross-Sector Business and Infrastructure Annex. It includes lessons learned from the 2017 hurricane & wildfire seasons. Find more information: https://t.co/9mCZomkMES

Today we celebrate #NationalFirstRespondersDay. Thank you to all those at the front lines of disasters ensuring the health, safety and security of communities across the country.

Our mission could not be accomplished without your commitment to keeping people safe!

https://t.co/c5tmVMCzGG

If your area's at risk for wildfires, #BeReady with a plan to evacuate on short notice.

- ▲ If officials tell you to evacuate, go quickly
- Follow @Cal\_OES @CAL\_FIRE & @FEMARegion9
- Find nearby shelters on our app: https://t.co/Tsw9BL56io

#GettyFire

#KincadeFire https://t.co/5S4vumlk9C

"Have a 5-minute plan. Have a 2-minute plan." Charles evacuated during the Camp Fire last year with his family and some critical belongings.

When wildfires threaten, #BeReady with a plan: https://t.co/Chwi6Bp6Rd

#KincadeFire #TickFire https://t.co/QOZgHmz2ro

If you are near wildfires, be aware of air quality in your area:

- ♦ Use a N95 mask to filter air pollutants.
- If driving, turn the air vents to re-circulation mode & put the fan on high.
- For air quality info, check @EPA's https://t.co/vuujpCVL0U

#TickFire

#KincadeFire https://t.co/v2TqWbgiEe

Podcast alert!

In this episode, we discuss the National Response Coordination Center (NRCC) which served as the central hub for federal response efforts during Hurricane #Dorian.

Web: https://t.co/YMZOqbv0sj Apple: https://t.co/mXGkpKTU1s

Google Play: https://t.co/I9xyPLZSav https://t.co/qBiDjg34kW

If you are in an area at risk for wildfires, stay safe:

- If authorities tell you to evacuate, leave quickly.
- Pay attention to air quality alerts from your local @NWS office.
- Follow your local officials for the latest emergency information.

https://t.co/t5R22y75OB https://t.co/jy0kEN3ndD

Why are lifelines like roads & power essential to mitigation projects? How can well-planned infrastructure protect communities from future disasters?

Find answers to these questions in our latest blog post on National Community #PlanningMonth:

https://t.co/rpytJV4Tew https://t.co/oJb8km7TmM

California: stay aware of the wildfire risk today.

- Follow @Cal\_OES @CAL\_FIRE and your local @NWS office for the latest information.
- Know your community's evacuation routes & check for possible road closures.
- ▲ If local officials tell you to evacuate, leave immediately! https://t.co/Xz0lVl5SLN

In our latest #PrepTalks video, David Kaufman from @CNA\_org explains how trends like expanding cities, aging populations and social network usage affect the future of emergency management.

Find the full talk & resources at https://t.co/kLAhNH0e3b

https://t.co/lIL94CiYLY

It's National Community #PlanningMonth! We're joining @APA\_Planning in highlighting the importance of well-planned infrastructure.

Find more information on building stronger communities:

https://t.co/1CkFZzgQqs

https://t.co/cC9ivaad1j https://t.co/X8noScJpDF

Stay informed & prepare now if you are in the path of Tropical Storm #Nestor. Heavy rain, wind & flooding is expected across the central and eastern Gulf Coast.

Follow @FLSERT, @GOHSEP @AlabamaEMA & @NHC\_Atlantic for updates!

Set alerts in our app: https://t.co/Tsw9BL56io https://t.co/VSNH4v9SD4

Today FEMA employees across the country participated in the #GreatShakeOut. Thanks everyone who joined in on the fun and shared their photos with us! 🔞

Practicing Drop, Cover & Hold On is essential to #BeReady during an earthquake.

Learn more tips at: https://t.co/MNGBNvnPzY https://t.co/EWQOWjyORO

If you're in the path of Potential Tropical Cyclone 16, including parts of the Gulf Coast from Louisiana to the Florida Panhandle, make sure you have multiple ways to track weather alerts.

Follow @NHC\_Atlantic & know how to be prepared with these tips from @Readygov 🗹 🖓

https://t.co/JO02f8uezY

Do you know how to stay safe during an earthquake? Join us during this year's International @ShakeOut Day to practice Drop, Cover, Hold On with us!

Time: 10:17 A.M. local time wherever you are on Thursday, October 17

Register: https://t.co/Zb8iU8QV0F https://t.co/Ssa37aTD2y

This week, we worked with @EconAtState to present to the United Nations International Telecommunications Union about the value of the Integrated Public Alert & Warning System (IPAWS) & why it's important to incorporate during emergency drills.

Fires burn fast - Make your plan:

- Follow @Cal\_OES @CAL\_FIRE @LAFD @LACOFD for the latest information.
- ▲ Know your evacuation route & check for possible road closures.
- ▲ If told to evacuate, leave immediately.

#BeReady: https://t.co/t5R22y75OB

#SaddleridgeFire https://t.co/eRPKxnXKxO

One year ago, #HurricaneMichael made landfall on the Florida Panhandle. In 12 months, the region has made huge strides towards their recovery with help from the whole community. As of today, nearly \$1.9 billion in federal assistance has been given to the 18 impacted counties. (b) https://t.co/N22HdxY0QR

Podcast alert!

We talked with Operation HOPE's Chief Operating Officer, Dr. Anita Ward to learn key steps that Millennials can take to be financially prepared for an emergency.

Web: https://t.co/OM9ZifNSnq Google: https://t.co/UzLcToVr3H

Apple: https://t.co/6QnwjCUPcN https://t.co/lAQRHuMApO

3 years ago today, Hurricane Matthew severely damaged parts of the Southeast coast. Since then, the whole community has worked together to help move the recovery process forward.

Reminder: Hurricane season is not over until November 30th.

Stay prepared: https://t.co/YbTCtJCzgd https://t.co/Go68c5j1h8

Over the past year, our Assistance to Firefighters Grant programs awarded \$700M to:

Staff local fire departments

Train first responders

Support public education on fire prevention and fire codes

Learn more: https://t.co/XVeoEiWFlJ

#FirePreventionWeek https://t.co/4YuS86ZW1p

Oct. 6-12 is #FirePreventionWeek, which is the perfect time to thank your local firefighters and learn about preventing home fires & wildfires in your community!

Follow @NFPA, @usfire & @Readygov for fire safety tips throughout the week.

https://t.co/tJZGrw7Dcn https://t.co/iA9T7fqq05

On this #WorldAnimalDay we are thankful to the many Animal Search and Rescue partners we coordinate with after disasters!

@action4ifaw is one such example as they work to rescue & support community animals & wildlife during emergencies.

More: https://t.co/vxwprAU4Bt

\*\*IFAW https://t.co/39aAcUnIHY

It's #InternationalPodcastDay! In our latest episode, we chat with the @USGS National Earthquake Information Center about how they monitor & track the impacts of earthquakes worldwide.

Apple: https://t.co/XVpthNauIb

Google: https://t.co/9E5CEd9CzF

Web: https://t.co/bdQvBCblbr https://t.co/ohpk2D6dr8

Our latest #PrepTalks video is about the importance of building codes. Stuart Tom, a retired fire marshal from @MyGlendale, CA, describes how codes help communities prevent disaster damage and recover faster. Watch and find out how to get involved:

https://t.co/8bYkvQcYzR

Tropical Storm #Karen may impact Puerto Rico & the U.S. Virgin Islands in the next few days. Stay informed Follow local officials: @NMEADpr, @fortalezapr, @readyusvi

Ī	Follow @NHC_Atlantic & @NWSSanJuan for the latest updates
Ĺ	Set weather alerts: https://t.co/Tsw9BL56io https://t.co/rfaO4XKUzT
	Today marks 2 years since Hurricane #Maria made landfall in #PuertoRico. We continue working with many
	partners to help the island build back stronger & prepare for the future.
	Watch more: https://t.co/rA2P32smko
Ļ	Read about the recovery: https://t.co/05eMx2edy0 https://t.co/vvDpZDd3q8
	The #PrepTalks Symposium is taking place today in Washington, DC with 7 new speakers sharing innovative ideas
	for emergency management.
	Look forward to videos of today's talks being released in coming months! You can also view 25 previous talks at https://t.co/kLAhNH0e3b. https://t.co/knaoIwP0wr
ŀ	#ICYMI We released a podcast episode recently featuring our Chemical, Biological, Radiological & Nuclear
	office. Learn how experts plan for dangerous man-made events:
	Web: https://t.co/yS1aMXoqz4
	Google Play: https://t.co/Pmjny17jJ6
	iTunes: https://t.co/zsx4Qh1riw https://t.co/5AADmQ9St0
ŀ	We released 3 documents today to support emergency managers. To read & provide feedback, head to:
	https://t.co/J9jVENtlB3
	Planning Conditions: Disaster Housing Guide
	Disaster Management Financial Guide
	https://t.co/AAJEq7kK8E
	Public Information Officer Basic Guidance https://t.co/0MP6Hab33h
ľ	Podcast Alert! Join us for a discussion about how to help children #BeReady for disasters & the important role
	they play in creating a culture of preparedness.
	Web: https://t.co/QzV08DzFuN
	Google Play: https://t.co/2c7cIsoqRG
	Apple: https://t.co/blrLgc1cJf https://t.co/BWlepY2btk
ľ	Today, we honor those who lost their lives and salute the bravery of those who responded on September 11th,
	2001.
	On this National Day of Service and Remembrance, learn about opportunities to serve your community:
	https://t.co/v5UrbOT5u6 #NeverForget https://t.co/HYBxzmNFsg
ŀ	Are you looking for a job opportunity that helps people before, during and after disasters?
	Register now for our virtual career fair this Thursday September 12th, 2019 between 10:00am - 6:00pm EDT.
	Learn more and register now: https://t.co/wXKKlDw1gv https://t.co/xQPyy3DZEY
ľ	Stay safe if you are returning home and cleaning up after #Dorian. Continue following your local and state officials
	for updates.
	For the latest information by state, follow @FLSERT
Ļ	@GeorgiaEMA @SCEMD @NCEmergency @VDEM https://t.co/PS3QFtD2Wh
	The Emergency Management Assistance Compact (#EMAC) is an agreement that allows states to help other states
	when disaster strikes. These partnerships for Hurricane #Dorian are a great example of #mutualaid at work.
ŀ	https://t.co/wtP2d1yNHn  If your power's out due to #Dorian, be safe while using generators:
	♦ Keep it outside, at least 15 ft. from the house
	♦ Keep it dry & properly grounded
	<ul> <li>♦ Never plug the generator into a wall outlet or main electrical panel</li> </ul>
	More from @ENERGY: https://t.co/PExnrO3uCK https://t.co/EfgrGn8MeN
ŀ	Flash flooding & storm surge from #Dorian can happen quickly.
	Pay attention to directions from local officials and stay tuned to local weather alerts.
	If trapped, get to a higher floor in the building. Do NOT enter a closed attic.
Ĺ	https://t.co/SVAXtWfrUT https://t.co/Ovw7x4FchL
	#Dorian may continue to cause flooding in parts of Virginia & North Carolina today:
	O Do not swim, drive or walk in floodwaters. If you come across a flooded road, turn around!
	⚠ Downed power lines in the water may electrocute you.
ļ	More from @Readygov: https://t.co/SVAXtWfrUT https://t.co/j3WEwx4xBq
	4 "Hurricane Dorian Southeast Response"
	We collected a variety of posts in this Moment to highlight #Dorian response efforts in the Southeast provided by
	the #WholeCommunity. https://t.co/qwOso98uk8
ŀ	Tonight #Dorian will continue to impact parts of the Southeast coast. Be prepared before you go to bed in case of
	tornado warnings:

Set @NWS weather alerts that will wake you up.
⚠ Know where to take shelter.
Keep sturdy shoes close by your bed.
https://t.co/KnBfIwQ40g https://t.co/ipABPqZ7jh
If your evacuation orders have been lifted, follow guidance from your state & local officials. Check to make sure
road conditions are safe before you return home. #Dorian
For the latest information by state, follow @FLSERT @GeorgiaEMA @SCEMD @NCEmergency @VDEM
https://t.co/hvRMk5fvhz
#Dorian is bringing dangerous winds and flash flooding to South Carolina, North Carolina and southeastern
Virginia. Keep off the roads and seek safe shelter!
As you shelter, stay in an interior room away from windows & follow your local officials for updates. https://t.co/VUvr1Z0aDf
We have been working closely with state & local officials to move people, equipment & resources throughout areas
affected by #Dorian.
As the storm impacts North & South Carolina today, these teams on the ground are ready to respond quickly.
https://t.co/GEnvS9jB0J Hurricanes bring more than just damaging winds; they can also cause tornadoes & flash flooding. As #Dorian
moves up the coast, download our app to track local weather alerts & know when your area is at risk.
間 iTunes: https://t.co/YkgVPM8D2y
android: https://t.co/CyCjSivp8R https://t.co/buWPYjLmR6
If you are under a tornado warning due to Hurricane #Dorian:
Safely & quickly get to a sturdy building or safe room.
Stay away from windows and doors.
⚠ Do NOT get under a bridge or overpass. Go to a low, flat location.
https://t.co/KnBfIwQ40g https://t.co/xThQTQ8ONv
Follow @CIDIoutreach for information on #Dorian humanitarian organizations working in the Bahamas and how
Americans can help.
@theOFDA and @USEmbassyNassau are also sharing the latest information on governmental response efforts.
https://t.co/n38GTylFMU
As we respond to #Dorian's impacts in the U.S., our partners at @USAID @theOFDA are supporting the Bahamas
with their storm response & recovery. They are working closely with @nemabahamas to coordinate help on behalf
of the entire U.S. government.  More: https://t.co/KOUv4YB8NJ https://t.co/1q5tSkGGEy
Hurricane #Dorian may bring dangerous storm surge along the coast.
☐ If told to evacuate by local officials, leave immediately.
↑ Do NOT drive around barricades!
Check road conditions before you go. Follow @FLSERT @GeorgiaEMA @SCEMD @NCEmergency for the
latest. https://t.co/BjmrIb8Icb
Heavy rain from #Dorian can cause sudden flooding. Stay tuned to local weather alerts to know when your area is
at risk for flash floods.
Do not walk, swim or drive through floodwaters. If you come across a flooded road, A Turn Around, Don't
Drown \( \lambda \) https://t.co/0z0zN6w9RP
As Florida begins to feel the impacts of Hurricane Dorian, follow these tips from @Readygov to stay safe.
Download our app or text SHELTER and your zipcode to 43362 for emergency shelter locations.
Page Apple: https://t.co/YkgVPM8D2y
4 Android: https://t.co/CyCjSivp8R https://t.co/4IVbRNJX12
.@NHC_Atlantic has issued storm surge watches and warnings for #Dorian along the Florida, Georgia, North &
South Carolina coasts. Storm surge can:
Wash out roads & buildings
Threaten lives
If you are under an evacuation order, leave immediately: https://t.co/Chwi6Bp6Rd https://t.co/eaAg4oKX07
@NHC_Atlantic has issued storm surge watches and warnings for #Dorian along the Florida, Georgia, North
& South Carolina coasts. Storm surge can:
Wash out roads & Divos
### Threaten lives If you are under an evacuation order, leave immediately: https://t.co/Chwi6Bp6Rd https://t.co/qfkEnxOEJ5
As #Dorian approaches, evacuate if local officials tell you to. Know your evacuation zones/routes &; stock your
vehicle with supplies.
Find shelter locations:

Text "SHELTER" &; your zip code to 43362

View a shelter map on our app: https://t.co/Tsw9BL56io https://t.co/WFQh0jESFC

With the prolonged approach of a large storm like #Dorian, it's normal to experience feelings of stress and anxiety. Help is available. Reach out to the @distressline to get support:

Call 800-985-5990 or text TalkWithUs to 66746

■ Visit https://t.co/2NDRvrnCR0 https://t.co/POAE0IxNms

As #Dorian approaches, make sure you can get local weather alerts a few different ways. Heavy rain, wind &; flooding can be expected across a wide area.

Set alerts in our app: https://t.co/Tsw9BL56io

Use a hand-crank or battery-powered weather radio

Follow @NWS offices https://t.co/16GB2M1i0l

We are ready to assist local, state and tribal partners affected by Hurricane #Dorian. This is a team effort: 4,000 people are responding overall, representing 27 departments and agencies as well as @RedCross and @NationalVOAD.

→ Learn more: https://t.co/diwzYtUwVv https://t.co/5KO1LZDFWp

As Hurricane #Dorian approaches Florida, finish preparing as soon as possible if you are in the storm's path. For tips on how best to prepare, review this Moment by @Readygov:

45 "Getting Ready for Hurricane #Dorian" https://t.co/KUA32rz4pv

@navigatesoul There is a multi-agency effort working closely to monitor the situation in the Bahamas. @theOFDA is coordinating with their partners to support eventual response efforts & emp; the @USCG is coordinating with @StateDept to send search & emp; rescue teams to the islands.

#Dorian is a powerful storm. Know your risks & Dorian; be ready:

Con the coast: life-threatening storm surge, extreme winds. Evacuate if local officials tell you to!

[22] Inland: Flooding, high wind & Down outages are possible. Be ready to shelter & Down; sign up for weather alerts. https://t.co/c7TYg6SXno

It's normal to feel anxiety during storms like #Dorian. Signs you're experiencing disaster-related stress:

Difficulty sleeping

Disorientation, confusion

♦ Feelings of hopelessness, depression

Get support from @distressline: call 800-985-5990 or text TalkWithUs to 66746. https://t.co/v020oAvQQS

If you're told to evacuate for Hurricane #Dorian, don't delay; leave quickly. Follow your local officials to know if you need to leave.

Know your route before leaving, don't forget to bring pets & amp; have a few options for places to go.

Tips from @Readygov: https://t.co/Chwi6Bp6Rd https://t.co/FigufhelWf

Stay alert if you are in #Dorian's potential path, which may bring impacts from Florida to the Carolinas. September is the height of hurricane season; prepare now & Dan ready.

We are in constant contact with affected states & amp; tribes to provide support. https://t.co/xsI5HQEHNF

Stay alert & Dorian if you are in the Southeast. Monitor forecasts closely, as the storm's track can change quickly.

We continue to coordinate with state, local & amp; tribal officials to provide support.

Follow @NHC\_Atlantic , @FLSERT , @GeorgiaEMA , @SCEMD https://t.co/9fCYnHqpQK

As you plan for Hurricane #Dorian, consider the specific medical needs of all members of your household. Planning ahead can save your life in a disaster.

Follow @PHEgov, @HC\_Ready, @CDCemergency & Tollow @FDA\_Drug\_Info to learn how to #PrepYourHealth throughout hurricane season. https://t.co/W0tooNZgqK

#Dorian may cause heavy storm surge, wind damage & Dorian may cause heavy storm surge, wind damage & Dorian may cause heavy storm surge, wind damage & Dorian may cause heavy storm surge, wind damage & Dorian may cause heavy storm surge, wind damage & Dorian may cause heavy storm surge, wind damage & Dorian may cause heavy storm surge, wind damage & Dorian may cause heavy storm surge, wind damage & Dorian may cause heavy storm surge, wind damage & Dorian may cause heavy storm surge, wind damage & Dorian may cause heavy storm surge, wind damage & Dorian may cause heavy storm surge, wind damage & Dorian may cause heavy storm surge, wind damage & Dorian may cause heavy storm surge, wind damage & Dorian may cause heavy storm surge, wind damage & Dorian may cause heavy storm surge, wind damage & Dorian may cause heavy storm surge, with the state & Dorian may cause heavy storm surge, with the state & Dorian may cause heavy surge, with the state & Dorian may cause heavy surge, with the state & Dorian may cause heavy surge, with the state & Dorian may cause heavy surge, with the state & Dorian may cause heavy surge, with the state of the st

If you're in Dorian's path, monitor forecasts closely. Storm tracks can change quickly!

→ Stay informed; follow @NHC\_Atlantic, @FLSERT & amp; local officials https://t.co/Dd1izU4aXG

Latest @NHC Atlantic forecasts for #Dorian include a storm surge threat in coastal areas.

As you and your family prepare for the storm, make sure to review your evacuation plan. Many localities have services for sheltering & transportation that can help you get to safety. https://t.co/z6HWgbC2se

Get help before, during and after Hurricane #Dorian with the FEMA app:

- $\checkmark$  Get safety tips for every stage of the storm
- ✓ Look up emergency shelter locations
- ✓ Sign up for localized @NWS weather alerts (up to 5 locations).
- Download: https://t.co/Tsw9BL56io https://t.co/OyMPHqwIpF

Stay alert if you are in an area that might be affected by #Dorian later this week. Forecasts can change quickly, so now is the time to review your #HurricanePrep plan.

Follow @Readygov for more tips and @NHC_Atlantic, @FLSERT, @GeorgiaEMA for updates.
https://t.co/141S9jDNvY
If you are affected by #Dorian, make sure you're staying informed.
#USVI: Sign up for @readyusvi alerts at https://t.co/4erMKmFvfF.
#PuertoRico: Get updates from @NMEADpr at https://t.co/tcturIpqVg
You can also install our app to set weather alerts: https://t.co/dg2LwmV47Q https://t.co/Cwnf660pIE
We're continuing to work closely with federal agencies and local officials to support needs for #Dorian. For
information about the storm, follow:
→ @NWSSanJuan, @NHC_Atlantic
→ @NMEADpr, @fortalezapr
☐ @readyusvi https://t.co/DXHCmWwJFh
If you or your loved ones in #PuertoRico are feeling stress and anxiety due to #Dorian, you're not alone. Free, 24/7
support is available with @ASSMCAonline. Call 1-800-981-0023 to speak with a counselor.
https://t.co/5Qnr3WQzer
As affected areas prepare for #Dorian, we are continuing to coordinate at the federal level to support @NMEADpr
and local officials in #PuertoRico.
For the latest information on potential storm impacts, follow @NWSSanJuan & Danger (@NHC_Atlantic.
https://t.co/aQZaB3zUxC
We are working closely with officials in Puerto Rico and the U.S. Virgin Islands to support their preparation
for #Dorian. If you are in the path of the storm, get prepared & p
Set weather alerts on your phone: https://t.co/Tsw9BL56io https://t.co/Bk0LqqX8P4
Today marks 2 years since #HurricaneHarvey made landfall. We continue to work closely with the affected
communities to help them build back stronger.
In Aransas County, the town of Fulton began rebuilding the 1,200-foot fishing pier and a new convention
center. https://t.co/ZALFZzwD6U
With the height of hurricane season approaching, now is the time to review your plan and check supplies.
Stay aware by following local authorities, @NWS office, @NHC_Atlantic & Stay aware by following local authorities, @NWS office, @NHC_Atlantic & Stay aware by following local authorities, @NWS office, @NHC_Atlantic & Stay aware by following local authorities, @NWS office, @NHC_Atlantic & Stay aware by following local authorities, @NWS office, @NHC_Atlantic & Stay aware by following local authorities, @NWS office, @NHC_Atlantic & Stay aware by following local authorities, @NWS office, @NHC_Atlantic & Stay aware by following local authorities, @NWS office, @NHC_Atlantic & Stay aware by following local authorities, @NWS office, @NHC_Atlantic & Stay aware by following local authorities are stay aware by following local authorities.
Review @Readygov's #HurricanePrep tips: https://t.co/YbTCtJCzgd https://t.co/Fn1LJFHl8q
Helping communities prepare for and recover from disasters would not be possible without the tireless work of our
employees. Through the #IAMFEMA series, hear directly from FEMA team members about what they do.
https://t.co/BYc5O0tPIR
As summer vacation ends and the new school year begins, it's a good time for parents, educators and students to
review emergency plans.
Check out the #SchoolSafetyChat hashtag starting in a few minutes at 2PM EDT for plenty of school safety tips
and a chance to ask questions! https://t.co/FVjWKrilPi
FEMA Corps teams do important work helping communities prepare for and respond to disasters. It's a great
opportunity to work for the federal government and gain experience in emergency management sector.
Learn more about FEMA Corps: https://t.co/jnnf6RcPuj https://t.co/oaUUla1ZBU
Radios are a great resource during disasters. 🗐 When cell towers and internet are down, radios will continue to
receive emergency alerts and @NOAA weather alerts.
A big #NationalRadioDay shout-out to Ham radio operators and all they do to support emergency communications!
https://t.co/EugdD9uIU5
"It's your home, it's your family, it's your block - own it!"
In our latest #PrepTalks video, @danielhomsey shares how neighbors helping neighbors can lead to resilient
communities prepared for any disaster.
More info: https://t.co/feN4ngRTG8
https://t.co/xnVSk3Uoen
On this #WorldHumanitarianDay, thank you to the volunteers who support communities after disasters. Your
commitment is uplifting and your efforts are vital to the recovery process.   https://t.co/CbTynHRtu9
Podcast Alert! We are talking about how building a more resilient nation gets people home faster, businesses up
and running quicker, and helps communities recover sooner.
Web – https://t.co/rn41K6kKp8
Google Play – https://t.co/2c7cIsoqRG
Apple – https://t.co/blrLgc1cJf https://t.co/FMvinDGlYj
We've launched the National Mitigation Investment Strategy to start a conversation in every community about how
to address risks NOW so everyone can recover faster after disasters.
☐ Learn more: https://t.co/vsQLJPX7SP
#MitigationSaves https://t.co/aqBb3SSFEd
It's #InternationalYouthDay! Thank you to all the young people who work across the country in disaster
preparedness and response! Whether it's through @NationalService or our #YouthPrep Council, we're celebrating
what you do to help people before, during, and after disasters. A type of the before the surface of the best of th
what you do to help people before, during, and after disasters. D https://t.co/ubepbvoilloi

Today (8/7) at 2:20 p.m EDT we will conduct a nationwide test of the Emergency Alert System in coordination with @FCC.

Alerts will occur on TVs & Damp; radios, not phones!

⚠ This test ensures lifesaving info can be sent quickly by local officials.

i: https://t.co/Op8T9AEpiF https://t.co/Aw46YWII2V

Tomorrow, Wed. 8/7 at 2:20 p.m EDT we will conduct a nationwide test of the Emergency Alert System in coordination with @FCC.

(S) Alerts will occur on TVs & Damp; radios, not phones!

⚠ This test ensures lifesaving info can be sent quickly by local officials

https://t.co/Op8T9AEpiF https://t.co/PomyPrneyS

The @DHSgov preparedness grants help state, local, tribal and territorial governments, as well as nonprofit and private sector partners, with their preparedness efforts.

Learn more about grant funding opportunities and guidelines at https://t.co/s9WUUTM6x0. https://t.co/isu8bcRanD

Podcast alert!

We took this one to last week's #PPPConf19 to chat with public & private sector partners about how we work together before, during & private sector partners about how we work together before, during & private sector partners about how we work together before, during & private sector partners about how we work together before, during & private sector partners about how we work together before, during & private sector partners about how we work together before, during & private sector partners about how we work together before, during & private sector partners about how we work together before, during & private sector partners about how we work together before, during & private sector partners about how we work together before, during & private sector partners about how we work together before, during & private sector partners about how we work together before, during & private sector partners about how we work together before, during & private sector partners about how we work together before a private sector partners about how we work together before about the private sector partners about how we work together before a private sector partners about how we work together before a private sector partners about how we work together before a private sector partners about how we work together before a private sector partners and the private sector partners are partners about how together before a private sector partners are partners about how together before a private sector partners and the private sector partners are partners about how together before a private sector partners are partners and the private sector partners are partners are partners are partners are partners and the partners are partners are

■ Web: https://t.co/nUIcgHFJty

Google Play: https://t.co/jPPehqq41K

Tunes: https://t.co/JprS8jdPMa https://t.co/B3ZdgRLl5g

Next week, Wed. August 7th at 2:20 pm EDT, in coordination with the @FCC, we will conduct a nationwide test of the Emergency Alert System on TVs & Damp; radios.

The test will not occur on cell phones

Learn more: https://t.co/Op8T9AEpiF https://t.co/zQsJjcjAe5

"We have to move the decision-making down to the people closest to that decision point."

In our latest #PrepTalks video, @OCFAChief talks about moving away from centralized leadership to a mission-driven culture.

More: https://t.co/gMHGuHpNFe

https://t.co/8m7kYmAT3p

In celebration of National #FriendshipDay, thank you to all our partners who support survivors before, during and after a disaster! No Here are a few examples of the great work they do:

Today marks 29 years since the signing of the Americans with Disabilities Act! People with disabilities are an important part of the #WholeCommunity effort to prepare for disasters.

Learn more from @Readygov: https://t.co/6dKEeBXRSd

#ADAanniversary

https://t.co/wUzSU3cW04

Today, we rolled out the updated National Threat & Darry Hazard Identification & Darry; Risk Assessment (THIRA) process, which helps communities assess and address their risks.

FEMA grant recipients can learn more at https://t.co/yDFvWeDRwD https://t.co/tTl9611vXP

It's #PartnershipDay! The partnerships we will be highlighting today are essential to our mission: voluntary, faith-based organizations and private sector companies.

Today we celebrate what we can accomplish together to help communities before, during and after disasters. https://t.co/cbQNhAURaG

On Wednesday August 7th at 2:20 p.m. EDT, we will conduct a nationwide test of the Emergency Alert System on TVs & Camp; radios.

This 1-minute test will be done in coordination with emergency managers, radio/TV/cable operators & the @FCC.

✓ Learn more: https://t.co/Op8T9AEpiF https://t.co/C463OMqs5T

The FEMA app helps you get fast, real-time weather alerts from @NWS, including air quality alerts in your area. https://t.co/Tsw9BKNuTO

To download:

iTunes: https://t.co/YkgVPMqdU6

Android: https://t.co/CyCjSidNKh https://t.co/GZUOuTndcX

Today, we're joining the 8th Annual Private-Public Partnership Conference with @USChamber in Washington, D.C.

Hundreds of companies are here to network and explore how government and businesses can work together during a crisis. #PPPConf19

i: https://t.co/7War9iPEhI https://t.co/tPapvUJIYb

Recent storms, including #Barry, are a good reminder to prepare your home for the worst. 🛍 碒

Flooding can happen anywhere. Find out about your risks & power flood insurance can protect the life you've

built by visiting https://t.co/71Wykdeke1.					
#HurricanePrep https://t.co/xyAOTSHXV0					
The Young Warrior Tribal #YouthPrep Camp is a great example of how youth across the country are helping build					
a culture of preparedness.					
Last year, one of our #PrepTalks discussed the power of youth involvement. Check it out here:					
https://t.co/WawAON5bXU https://t.co/ervTVrSvYv					
We recently had a chance to meet with @USCG to discuss lessons learned from last year's hurricane responses.					
Topics included hazardous materials removal, search & camp; rescue, and innovative approaches to future storm					
Read more on our blog: https://t.co/vIuEyamoXK https://t.co/BOUYOU68le					
What is space weather?  How does it affect Earth & what is space weather?  How does it affect Earth & how do we prepare? In our #podcast today.					
chat with @NOAA's #SpaceWeather Prediction Center about these questions:					
Web: https://t.co/BiI2zxObwY					
Google: https://t.co/BXyKeQYEt0					
Apple: https://t.co/9qLOA2R7pz https://t.co/6iMcX9OAsJ					
"Resiliency is about bringing multiple parts of a community together." Yesterday David Maurstad, head of our					
Federal Insurance & Principle Parts of a Community together. Testerday David Madistad, head of our Federal Insurance & Principle Parts of a Community together. Testerday David Madistad, head of our Federal Insurance & Principle Parts of a Community together. Testerday David Madistad, head of our Federal Insurance & Principle Parts of a Community together.					
forces to build a foundation of resilience. https://t.co/Rgp7Z7BcJZ					
While Tropical Storm #Barry moves over land, flooding continues to be a major threat.					
Stay aware and follow your local officials to know when the threat has passed and it's safe to go outside.					
For latest from @NWS: https://t.co/qsjSipPvcw https://t.co/i2174hPrca					
As #Barry continues to track north across Louisiana today, it may cause tornadoes in addition to heavy rains and					
flooding.					
Make sure you're getting alerts from a few sources. Download the FEMA app set weather alerts on your phone:					
https://t.co/Tsw9BL56io					
Review what to do: https://t.co/4FEhIGh2Vw					
#Barry is expected to cause severe floods. Stay safe:					
♦ If it floods, move to a higher floor but don't enter a closed attic.					
♦ If you have an emergency, call 9-1-1!					
Text, don't call, to keep phone lines clear.					
Follow updates from local officials.					
https://t.co/uc4CT0xLtO					
Storm surge is extremely dangerous. If you live in one of the affected areas pictured below, be sure to follow					
directions from your local officials. If told to evacuate, do so immediately!					
Follow your local @NWS office for weather alerts: https://t.co/mpqvfgobQ3					
#Barry https://t.co/4bcsPwdZTV					
If you are in the path of #Barry, finish your storm preparations as soon as possible.					
Tips from @Readygov: https://t.co/YbTCtJCzgd https://t.co/rLn8Oc97pz					
As we continue to monitor the storm developing in the Gulf, now is the time to prepare if your area is at risk for					
flooding.					
Follow your local @NWS office to know the impact on your area: https://t.co/mpqvfg6AYv					
Follow state and local officials: @GOHSEP @nolaready @MSEMA https://t.co/3m0CWbh4ef					
If you're feeling stressed or overwhelmed due to recent storms, flooding or other disasters, you're not alone. The					
@distressline is available anytime to provide you with confidential emotional support.					
& Call 1-800-985-5990					
Text "TalkWithUs" to 66746 https://t.co/6KbEVSnU0B					
Great thread from @NWS on tropical storm safety \$\frac{1}{2}\) https://t.co/isn3rdfFOC					
If you live near the Gulf Coast, stay alert and follow @NHC_Atlantic and your local @NWS office today as they					
track the development of a potential tropical cyclone.					
Heavy rainfall can lead to dangerous flooding. Know how to stay safe: https://t.co/ETF8Of4bOQ					
In our latest #PrepTalks video, the team from @KPCC's The "Big One" podcast explains how telling personal					
narratives can inspire a community to get prepared.					
For more info and discussion guides, visit https://t.co/zkL3RztPQW.					
https://t.co/IR8hASKtio					
Stay aware and take flood threats seriously this week!					
Download the FEMA app to set @NWS weather alerts for up to 5 locations: https://t.co/Tsw9BL56io					
Follow @Readygov for tips on dealing with storms, flooding and other hazards. https://t.co/KNjuGbibk0					
As local authorities respond to aftershocks from #Ridgecrest #earthquake, follow @femaregion9, @Cal_OES and					
your county officials for the latest info.					
Review how to stay safe with tips from @Readygov here: https://t.co/MNGBNvnPzY https://t.co/J0SJQfMiZk					

Yesterday's #earthquake in Southern California is a good reminder to review your earthquake safety tips. Follow your local officials and sign up for local emergency alerts to stay informed! https://t.co/xVHgiqdbtc Happy #July4th! Have fun and stay safe today as we celebrate the signing of the Declaration of Independence 243 years ago. https://t.co/6BgvMh3BW1 Our latest #podcast episode features a great discussion with @NationalVOAD about the vital role voluntary agencies have in supporting communities before, during & ter disasters: Web: https://t.co/REAUFXRIUI iTunes: https://t.co/V2eTyEeTmm Google: https://t.co/f7ViUptD4F https://t.co/RQnWFyjaCf Happy 70th anniversary to @USGSA! During disasters, GSA works with us and other federal partners on logistics, ensuring that supplies, equipment and services can be delivered efficiently. Learn more: https://t.co/LuPrudduCT https://t.co/sSer5YRkUI Happy #NationalPostalWorkerDay! After a disaster, postal workers are often among the first to go back to work, ensuring you receive the checks, medications and other vital mail you may need to recover. https://t.co/FoT5bEqdVi It's #CanadaDay! ca Here's one way we are working closely with Canadian and other international partners to improve #wildfire response: https://t.co/nWTguEiPxb Today's #InsuranceAwarenessDay! Most homeowners or renters insurance policies don't cover flood damage. Federal disaster assistance from @FEMA & amp; @SBAgov isn't designed to restore your home fully or replace most items. How does flood insurance help? (1/3) #HurricanePrep https://t.co/kAWebTOCQH Happy #Pride Month! Today marks 50 years since the #Stonewall Riots, which paved the way for the LGBTQIA+ civil rights movement. Read more in a blog post from @USNatArchives: https://t.co/bAptBGTmiJ https://t.co/4eoUuy8F8Q If you have outdoor activities planned, make sure you can get severe weather alerts from @NWS wherever you are with the FEMA app. Download: iTunes: https://t.co/YkgVPM8D2y Android: https://t.co/CyCjSivp8R https://t.co/kJPLnR5f1I This is a good reminder to have supplies and an evacuation plan if you live in a wildfire-prone area. Follow your local @NWS & Discal officials today to stay informed; conditions can always change quickly! More tips from @Readygov: https://t.co/t5R22y75OB #SummerSafety https://t.co/XYDqoZy7hd Join us & Dir at the Building #Resilience Through Private-Public Partnerships Conference. Learn & Dispersion of the Partnerships Conference. Learn & Dispersion of the Partnerships Conference of the Partnerships Co responding to disasters. → Register: https://t.co/BCP4Nh7Elr #PPPConf19 https://t.co/bu8U9ZxZXz If you're in an area expecting storms, make sure to check the forecast before heading out this weekend. Plan ahead and know where you can take shelter if needed. ↑ Most importantly: never drive through flooded roads! #TurnAroundDontDrown https://t.co/fIm1r9eSgk Stay informed: Download the FEMA App to receive real-time weather alerts, safety tips and sheltering information. https://t.co/Tsw9BL56io Tunes: https://t.co/YkgVPM8D2y Android: https://t.co/CyCjSivp8R https://t.co/8LdfaunlHH If you missed @amandaripley's #PrepTalk, catch up with today's #podcast episode. Hear real disaster survivor stories and learn why people behave differently during disasters: ■ Web: https://t.co/oG3PbDtivN iTunes: https://t.co/N84ZDu3CxQ Google: https://t.co/m2HgKepEdG https://t.co/bX08rIrD13 How can design help people better understand disaster risks?

In our latest #PrepTalks video, Claudine Jaenichen shares how #visualdesign can improve emergency resources like evacuation maps.

Check out the full talk at https://t.co/WxIDLxOZTC. https://t.co/thGicxdLuq

We have been supporting states in the Midwest following severe storms & Doding the past several weeks. For the latest information, follow @femaregion7 & Double partners at @IowaHSEMD @MoSEMA\_ @KansasEmergency @NEMAtweets

#MidwestFlooding https://t.co/Rg0hAZwiWW

Happy #FlagDay! In the face of disaster, our nation's flag has always been a symbol of hope and resilience. im: Breezy Point, NYC 11/1/2012 - A FEMA worker surveys damage from a fire caused by a gas leak during Hurricane Sandy. https://t.co/OIXG92Yjkb Getting insurance is an important step for #HurricanePrep. After #HurricaneHarvey, the average flood insurance payout was over \$117,000. It usually takes 30 days for a flood insurance policy to go into effect. Don't delay! Learn more at https://t.co/71Wykdeke1. https://t.co/oT5ngbV1RV As heavy rains continue to affect parts of the southern Plains and Gulf Coast keep in mind that it's impossible to know how deep flood waters are just by looking at them. Never attempt to drive through flood waters; Turn Around Don't Drown! https://t.co/ILnJJ7NI90 As severe weather tracks across parts of the South today be sure you know the difference between a tornado watch and a tornado warning. En Listen to local officials for the latest weather updates for your area and be prepared to take shelter if necessary. https://t.co/Q4TKawg880 In the latest FEMA Podcast, we discuss what it's like to plan and conduct a large-scale exercise like #ShakenFury to ensure we're always ready for the next disaster. Web: https://t.co/xR3xboibWg iTunes: https://t.co/Lx4cgVsyng Google Play: https://t.co/lGYRpT50j3 https://t.co/33gJwJTAyP If you are one of the many Americans who experienced flooding this spring & camp; you have flood insurance, it's important that you start the claims process as soon as possible. Download the FEMA App to learn how to file a flood insurance claim. https://t.co/K3vY7OwfFo https://t.co/0uVUG3gv7q This week, we're participating in #ShakenFury, an exercise simulating the response & Damp; recovery to an earthquake in the New Madrid Seismic Zone. Exercises like this are a great way to evaluate & Dry improve how we work with the #WholeCommunity. Learn more: https://t.co/PefAZ2DxRw https://t.co/9oxyVKtXWw If you're in an area affected by flooding, pay close attention to updates from your local officials and always check for hazards and closures on your route before heading out. A Remember: NEVER drive through flooded roads. Turn Around, Don't Drown! https://t.co/1q6i34hyXP We've updated the National Response Framework, which is the guide for how our nation responds to all types of disasters & amp; emergencies. Want to hear about the upcoming changes? We're hosting webinars throughout the next month. Register: https://t.co/bbYjfSakED https://t.co/15CbAy8wPp In our latest #PrepTalks video, James Gore shares his story of supporting Sonoma County during the 2017 #TubbsFire. Watch: https://t.co/XBoTK8ur9J Earn more about how you can get involved in your community's preparedness; https://t.co/v5UrbOT5u6 https://t.co/c4N0MtMsff If you're trying to get in contact with loved ones after the tornadoes in Ohio, reach out through text & torna media to help keep phone lines clear for emergency calls. Follow @Ohio EMA @cityofdayton @MCOhio @femaregion5 & Camp; other local officials for the latest info. https://t.co/6kHkIrtqQa Heading out for #MemorialDay weekend? Be ready with the FEMA app. Set @NWS weather alerts on your phone for up to 5 locations and have safety information at your fingertips. Learn more & Learn #SafeTravels https://t.co/XljjDPX5Bx We're seeking feedback from emergency managers & Demonstrates involved in incident management! Review & Department on the recently updated draft of the National Incident Management System (#NIMS) Training Program: https://t.co/mzLFAqlHQn Comments are due by June 21st. https://t.co/RMqpNNBIdl It's National #EMSWeek! After major disasters, we often rely on Emergency Medical Services teams from all over the country to support lifesaving efforts by local responders. Thank you to all of our EMS partners for your daily dedication. https://t.co/4UTm76wafU With dangerous storms, hail, tornadoes & amp; flooding possible today around Texas & amp; Oklahoma, it's critical to stay informed. Follow: → @FEMARegion6 → @NWSSPC & amp; your local @NWS office: https://t.co/mpqvfg6AYv ☐ @Readvgov → @okem @TDEM & amp; your local officials https://t.co/R80qq7jmLh In our latest #podcast episode, we chat about FEMA initiatives & amp; teams that are working on integrating emergency managers with our law enforcement partners. #PoliceWeek2019

W.L. Luc. // // W.N/7011-7					
Web: https://t.co/VHWY72UeZm					
iTunes: https://t.co/zWVNDz2e8R					
Google: https://t.co/ZrHX8enI9T https://t.co/cIq2z7Z8uS					
.@FEMA_Dan is heading a multi-agency U.S. delegation at the Global Platform on Disaster Risk Reduction this					
week. Follow #GP2019Geneva for more. https://t.co/JieZE05LxK					
In our latest #PrepTalks video, we explore how systems thinking can help emergency managers respond more					
effectively to a disaster.					
Phear Dr. Chick Macal from the @argonne Resilient Infrastructure Initiative and find discussion materials at					
https://t.co/0hEaXeZ1QF. https://t.co/A5NDa5nzRH					
Strong building codes lead to more disaster-resistant infrastructure!					
#InfrastructureWeek is a great time to think about how your local community can better withstand future disasters					
by making smart investments in #BuildingSafety.					
https://t.co/R2fNXnxxdw					
In honor of #PoliceWeek2019, thank you to our law enforcement partners who are often at the front lines helping					
protect lives during disasters. We're grateful for your service and teamwork as part of the emergency management					
community. https://t.co/FVJ5Nzn5nh					
How do we create a culture of preparedness? @FEMA_Dan has been leading this effort for the last year. In our					
latest #podcast episode, we sit down with him to hear more:					
Web: https://t.co/ikpdLHwMUA					
iTunes: https://t.co/3b0GKjHd4t					
Google Play: https://t.co/pM10UiQykx https://t.co/iP3BkINLg9					
Do you work in local #EmergencyManagement? We just released new resources to help you work with elected					
officials and other senior leadership to respond to disasters and other incidents. #EM					
Download the toolkit here: https://t.co/kAFOjE9gNJ https://t.co/NVMleY07y3					
Stay alert this week as severe weather sweeps though a large portion of the country!					
Make sure you're getting @NWS weather alerts pushed to your phone with our app: https://t.co/Tsw9BL56io					
https://t.co/3o2TIPK5hm					
We're joining @NOAA @NWS at various stops this week to encourage communities along the East Coast to get					
ready for hurricane season. More: https://t.co/myvmm7WRSI					
#HurricanePrep https://t.co/ZUQUMSuLIi					
It takes a community working together to protect against wildfires. This was the case in Colorado Springs, thanks					
to education & Digital to education amp; mitigation projects led by @CSFDPIO.					
to education & Description of the discrete for a di					
Watch their story & Din others in YOUR community tomorrow for @nfpa's #WildfirePrepDay:					
Watch their story & Direction with the watch their story amp; join others in YOUR community tomorrow for @nfpa's #WildfirePrepDay: https://t.co/Nsav34glFe https://t.co/Q8tJmUXBPt					
Watch their story & During the 7.0 earthquake in Alaska last year, buildings with earthquake mitigation retrofits were able to withstand					
Watch their story & During the 7.0 earthquake in Alaska last year, buildings with earthquake mitigation retrofits were able to withstand the shaking, helping people inside stay safe					
Watch their story & During the 7.0 earthquake in Alaska last year, buildings with earthquake mitigation retrofits were able to withstand the shaking, helping people inside stay safe  Talk to your local officials about building stronger, safer buildings in your community →					
Watch their story & During the 7.0 earthquake in Alaska last year, buildings with earthquake mitigation retrofits were able to withstand the shaking, helping people inside stay safe  Talk to your local officials about building stronger, safer buildings in your community → https://t.co/CRKtPVnx48 https://t.co/pI6Lkpf83x					
Watch their story & DUR community tomorrow for @nfpa's #WildfirePrepDay: https://t.co/Nsav34glFe https://t.co/Q8tJmUXBPt  During the 7.0 earthquake in Alaska last year, buildings with earthquake mitigation retrofits were able to withstand the shaking, helping people inside stay safe  Talk to your local officials about building stronger, safer buildings in your community → https://t.co/CRKtPVnx48 https://t.co/pI6Lkpf83x  As we welcome May, there's a timely reminder in the Atlantic that hurricane season is just around the corner!					
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Check out the #FinancialChat hashtag over the next hour for some useful tips on preparing for disasters with the right insurance coverage! We will be sharing some key info on flood insurance as well.  $\label{eq:local_problem}$  https://t.co/pcW2MIYTVR

On this #EarthDay, we salute the teams that strengthen the environment during disaster recovery! https://t.co/7RyPsFonL4

As areas on the East Coast face severe weather threats today, make sure you have multiple ways to stay informed!

Find your local NWS office: https://t.co/mpqvfg6AYv

Follow @FLSERT @SCEMD @NCEmergency @VDEM @MDMEMA and your local/county officials. https://t.co/VwCNvGnj43

After disaster strikes, restoring power is not only a major step towards recovery but also a sign of hope for the community. This #NationalLinemanAppreciationDay, we thank and honor lineworkers for the hard work they do every day. #WholeCommunity https://t.co/YasDGILpDX

We have not one, but TWO #PrepTalks to share today! After disasters, getting goods & Deck into local communities quickly is the key to a faster recovery. Emergency managers must work closely w/companies to restore the #SupplyChain. (1/4) https://t.co/jMRjhnyi6k

Make sure you're getting weather alerts and be ready to take shelter if under a tornado warning. Check https://t.co/KnBfIwQ40g for more safety info. https://t.co/vu3uhdxuwU

📢 @DHSgov just announced new Fiscal Year 2019 funding opportunities for 8 preparedness grant programs!

For information and guidance on how to apply, visit https://t.co/s9WUUTM6x0. https://t.co/IYpN1eaNZu

According to @NWS, several areas in the South will see severe storms & Described tornadoes this weekend. Make sure you're getting life-saving alerts by downloading our app. Review tips on how to find shelter & Described applying the plan for your family.

Download: https://t.co/Tsw9BL56io https://t.co/38PyHp951S

We're looking forward to having more #PrepTalks to share!

In the meantime, head over to https://t.co/kLAhNH0e3b for videos on all kinds of emergency management topics, along with discussion materials and links to resources. https://t.co/vjKCUu4719

How is saving (5) like getting in shape? What's the difference between financial counselors & the samp; planners? We chat w/@AFCPE about this & the difference between financial counselors & the samp; more in our new #podcast eps.:

Web https://t.co/taBZCF9sgT

iTunes https://t.co/I1rGJaANPQ

Google https://t.co/bFMmHDHZ6h

#FinancialFuture2019 https://t.co/iOsyT3l50G

Great discussion happening on #FinancialChat right now. Check out the conversation and join @Readygov and our partners! https://t.co/UslesY1wt6

Thank you to the volunteers who help before, during and after disasters. We're grateful for your time, your passion and your partnership.

Help us celebrate #NationalVolunteerWeek by supporting a local voluntary org today. Visit

https://t.co/GL6VWp7x7M to find out how. https://t.co/CfouHAIIon

Broadcast radio can save lives during disasters. If you're at #NABShow 2019 this week, come by our Integrated Public Alert & Warning System (IPAWS) booth C3330! You can check out live demos & Chat with experts about emergency broadcasting.

Learn more: https://t.co/lZPajsoW42 https://t.co/cib66d1I4R

Our latest podcast episode celebrates #FEMA40 by looking back at key events from the last 4 decades. Hear directly from some of the employees who responded to those events:

■ Web: https://t.co/w1VkZVZlOZ

iTunes: https://t.co/wFMcKjSc8W

Google Play: https://t.co/Qc15FWPO6j https://t.co/GIEO6dJLWT

As spring storms threaten, take these steps to get prepared:

Have multiple ways to get weather alerts, such as a weather radio, TV and phone.

✓ Follow your local @NWS office and local/county/state officials.

Review @Readygov safety tips: https://t.co/sJCZ2u8UOx https://t.co/Ps5cNP0I6F

We celebrated 40 years as an agency this past Monday. As we look back at the last 4 decades, we're grateful to the people, organizations & partners who worked by our side.

Thanks for being a part of this journey towards building a more resilient nation. #FEMA40 https://t.co/6NZOLuVL0s

Yesterday, @FEMA\_Dan traveled to Nebraska to assess the flood damage. While there, he made a stop in Beatrice, Nebraska. Although the area still flooded in 2019, millions of dollars were saved and fewer homes were lost thanks to successful #mitigation efforts. https://t.co/PTZ0uUYUvB

We are so thankful for these very good puppers who provide comfort and encouragement at some of the most difficult times. #NationalPuppyDay https://t.co/s0p8nwgAGw

There continue to be serious flood risks across large parts of the Missouri and Mississippi River basins. If you are under a flood warning, take action to get to a safe place. https://t.co/jfXOw11kDo

It's the #firstdayofspring! 🚱 🕃 Those daffodils in your yard aren't the only thing that may pop-up this time of year. This is a prime time for severe storms. Make a plan now for where you'll go and how you'll communicate during severe weather. https://t.co/sQyOf6wIrW https://t.co/HDGaaXVVKO

If you'd like to help with the #MidwestFlooding, keep in mind cash is best. Connect with a trusted org here: https://t.co/OYdLZcPpM5. https://t.co/gSW6ZIn6ir

Even after flood waters begin to recede, road conditions can still be dangerous. Floods can damage roads and bridges in ways that may not be readily apparent. If you come across a barricade , listen to local officials and find an alternate route. https://t.co/fClkVudOtC

For continued updates regarding the #Nebraskaflood, be sure to follow trusted officials including @NWSOmaha and @NEMAtweets. https://t.co/7IAJdsmlRX

∆ Dangerous storm conditions are shaping up across several states. 
 ∧

Follow your local officials for directions, get to a safe place and stay there — don't put yourself at risk!

Set @NWS alerts on your phone & more tips with our app: https://t.co/Tsw9BL56io https://t.co/4zgLlRKkqN

On this #AmericorpsWeek we salute our #FEMACorps members, who meet every challenge with tenacity and spirit.  $\bigcirc$ 

Thank you for the smiles, hard work and dedication to helping people affected by disasters! https://t.co/iQacQWx4Ue

Here's to the women who strengthen their communities, make them resilient and help them build back stronger after disasters. #InternationalWomensDay https://t.co/ywIFVINpWC

We're extending a warm welcome to @FEMA\_Pete, our new Acting Administrator. @FEMA\_Brock, thank you for your leadership these past years. Best of luck!

 $\underline{\wedge}$  Flash flooding and debris flow can be sudden and deadly. Stay safe and follow @Cal\_OES , @femaregion9 and @NWSLosAngeles for the latest information. https://t.co/NL06QBidHL

As we look ahead to possible severe weather this weekend, now is the time to get ready.

Make sure you & Dear loved ones are getting weather alerts multiple ways.

Download our app to set @NWS weather alerts on your phone: https://t.co/Tsw9BL56io https://t.co/Haoxhg9E4J

If you were affected by last night's severe storms & Damp; tornadoes in the South, follow @FEMAregion4 @AlabamaEMA @LeeCountyEOC @GeorgiaEMA for the latest information.

Let others know you're okay through texting, social media & Damp; registering at @RedCross

https://t.co/L3zYLYd2WS. https://t.co/x2yuPK2rcQ

Thank you to the thousands of @FEMA employees across the country who serve with good humor, flexibility and dedication to helping people before, during and after disasters. Together, we are #FEMAstrong. #EmployeeAppreciationDay https://t.co/IIAe4mLO0E

A great deal of hard work goes into flood predictions so people can get timely alerts & Damp; stay safe. A great deal of hard work goes into flood predictions so people can get timely alerts & Damp; stay safe.

✓ Follow your local @NWS office: https://t.co/mpqvfg6AYv

✓ Follow local & Tollow local & Tol

Set weather alerts on your 2: https://t.co/Tsw9BL56io https://t.co/cT9qZnVaZM

A great example of how community groups play a big part in the disaster recovery effort!

In #PuertoRico, there are currently 24 Community Recovery Centers that gather a variety of local & Community Recovery Centers

More info: https://t.co/rwnBTqflBM https://t.co/QHrtTPDjZv

Qur latest #PrepTalks video discusses the critical actions that citizens, responders & Dicials can take after a nuclear detonation. Hear about the work done by researchers to guide these life-saving decisions: https://t.co/MsHid573uu https://t.co/NjyawHKACw

This colorful snapshot from @NWS https://t.co/SURHuhXnFB today shows a whole slew of hazardous weather conditions this weekend.

Get ready now by making sure you're getting local weather alerts, following local officials & amp; checking your emergency kit. Stay safe & amp; alert! https://t.co/EpKGSqVymO

If you're in the affected area, stay safe and get ready by making sure you're getting weather alerts several ways Download our app to set push alerts for your local area: https://t.co/Tsw9BL56io https://t.co/mKsSE2q9ny

Stay safe out there. Download our app for safety tips and weather alerts in your area: https://t.co/Tsw9BL56io #WinterSafety https://t.co/zs4742IrFD

February is #EarthquakeAwarenessMonth, a great time to brush up on safety tips & Deck your insurance. Standard homeowner's insurance doesn't cover earthquakes.

Follow @ShakeOut @USGS @USGS_ShakeAlert to stay up-to-date and visit https://t.co/MNGBNvnPzY for						
more tips. https://t.co/IYSwu2SelB						
Help spread the word: we're looking for 8th-11th grade students to join our Youth Preparedness Council!						
This is a great way for teens across the country to help their communities be more safe, prepared and resilient.						
Apply by March 31: https://t.co/nwqpVrKgEx #FEMAYPC https://t.co/hRjPl06LQp						
↑ California: Stay alert if you're under severe weather warnings. Follow @femaregion9, @Cal_OES, and your local @NWS office. Remember to NEVER drive through a flooded road. https://t.co/ilHLJsKkVK						
We're looking for people to join the National Advisory Council for 3-year terms starting Sept. 2019! There are 12 openings in areas such as disability and access & Department are such as disability and access when the such as disability and access when						
& & & & & & & & & & & & & & & & & & &						
Applications due 3/15. i Info: https://t.co/6jpANZGOoW https://t.co/5NdYx1TArf						
We love seeing #FEMACorps teams in action! ♥ https://t.co/2gmGjviS25						
Be ready for severe weather & Days stay informed with our app. You can sign up for @NWS alerts for up to 5						
locations, making it easy to:						
Stay safe during your commute to/from the office						
Keep an eye out for family/friends in different states						
Hhttps://t.co/Tsw9BL56io https://t.co/9Z9NPGbL4Q						
No matter where you are, it's always good to remember: Turn Around, Don't Drown.						
Check forecasts before heading out and set your all alerts, as flash flooding can happen quickly with little warning.						
https://t.co/SVAXtWfrUT https://t.co/18BFrVyuMT						
On this #NationalWeatherpersonsDay, thank you to all of our friends at @NWS & Day; the larger weather						
community for keeping us safe and informed! 😂 🎧 https://t.co/EYSFzRaBmO						
@realBattleSheep Good question! Preparing for space weather events is similar to preparing for weather-related						
disasters. The most important thing is to have emergency supplies and a plan. @Readygov has a great page with						
info and tips: https://t.co/cdszqU788N						
This weekend, stay safe while on the go! From forecasts of heavy 🖨 on the West Coast to warmer temps thawing						
#PolarVortex snow:						
Follow your local @NWS office https://t.co/IzyEAMZvj1						
Download the @fema app to set weather alerts for up to 5 locations https://t.co/Tsw9BL56io						
https://t.co/cyKiKhcI6a						
We're monitoring the effects of extreme cold in many states from the #PolarVortex. Follow:						
@Readygov & PEMA regions for #WinterSafety tips: https://t.co/ri3OnhaBkc						
→ Your local @NWS office for weather forecasts						
Local officials for emergency alerts & ttps://t.co/TMztJEPY0J						
As many parts of the country deal with severe cold & country winter weather this week, download the FEMA app to:						
Brush up on your #WinterSafety tips						
Set weather alerts in up to 5 locations to monitor quickly changing storm conditions						
https://t.co/Tsw9BL56io https://t.co/n26Voh71hJ						
If you're near a wildfire burn area, pay close attention to alerts and warnings from your local officials. Follow @Cal_OES @CaltransHQ @NWSLosAngeles for more. https://t.co/LZ40suwVFm						
@Worknclasteachr @HeritageInns Hello, thanks for reaching out. The situation you were referring to has been						
resolved amicably with all parties involved. We continue to work with the whole community to coordinate the						
response to the California wildfires.						
If you're in an area expecting severe weather in the next couple days, keep a close eye on weather reports and						
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NEVER drive through a flooded road.						
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NEVER drive through a flooded road.  ☐ To set weather alerts for up to 5 locations on your phone, download our app: https://t.co/Tsw9BL56io https://t.co/v4MqjLnp6b  Holidays can be a tough time for some people. If you or a loved one are feeling sad, stressed or overwhelmed, the disaster @distressline provides free 24/7 confidential counseling.  ☐ Call 800-985-5990, text "TalkWithUs" to 66746 or visit ☐ https://t.co/dMC8rfGzMV for more info. https://t.co/QyzzJkxtuZ  #Wildfires increase the risk for flash flooding & mp; mudflows. If you live near a burn area, consider buying flood insurance to protect your home.  ☐ Find out how: https://t.co/LtK66gTcQU https://t.co/DcyboUHLbr  In our latest #podcast episode, we explore the important contributions that faith-based and community groups make before, during and after disasters.						
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@theoneils97 Part of our work w/partners is assessing private and public sites to place RVs & Discrete RVs & Di

Many parts of the country will be affected by severe weather this weekend. Stay closely tuned in to weather forecasts and make sure you're ready: https://t.co/5eMw13iXPH https://t.co/2qPBn8RvpB

@pensandopr @primerahora After a bidding process, local company Puerto Rico Drilling was awarded the contract for the disposal of the water bottles in Ceiba. The company will recycle the water bottles and the wooden pallets.

@Shecrow2 All residents of Butte County are eligible for state and federal disaster assistance. Please visit https://t.co/XE9B9RAu3t for a list of state resources. You can also visit https://t.co/2NLb51B0Df for federal resources and info. https://t.co/nGwmM4YLEi

Today, we join the nation in honoring and remembering President George H.W. Bush. #Remembering41

President Bush visits Homestead, FL after Hurricane Andrew in 1992. https://t.co/fTaM900mm2

@theoneils97 Hi, we're working with our partners to review all available housing options. Most people find their

@theoneils97 Hi, we're working with our partners to review all available housing options. Most people find their own housing solutions. The first leases for direct housing (i.e. manufactured homes/RVs) have already been signed. For more info: https://t.co/pAOiBY3QBu

@Dawniewouldnt Hi, housing will come in many forms. Direct housing (trailers, direct leasing & Direct housing) is one possible solution. All options are on the table for families to find what works best for them. We have latest updates here: https://t.co/pAOiBY3QBu

Water, sewage & Damp; transit are examples of public works "lifelines" supporting our daily lives. In our latest #PrepTalks video, Philip R. Mann from @GainesvilleGov shares his ideas for improving how we restore these services after disasters.

Watch: https://t.co/AJveyUY4pj https://t.co/pJG9BjL9Md

@DlisHome Hi, in response to a request from the state, we activated Transitional Sheltering Assistance (TSA) for displaced survivors of the California wildfires. For those eligible, FEMA authorizes and funds the use of hotels/motels as transitional shelters.

@BertHeren Hi Bert, sorry for the delayed reply. We're working with county/state partners to help with critical needs and transitional sheltering. We're also exploring long-term direct housing options like RVs or manufactured housing units. Latest info: https://t.co/pAOiBY3QBu

@Maryeb2Boyle @LunaLuvgood2017 Hi Mary, sorry for the delayed reply. There are emergency, intermediate & polymer amp; long-term housing options. We're offering critical needs/rental help & polymer transitional housing while developing direct housing options. More info: https://t.co/pAOiBY3QBu

@marcyfraser Hi Marcy, we're working with local & partners to address the housing needs of survivors. Please visit our page on the California wildfires to read more about the response so far: https://t.co/nGwmM5gn2S@DAndreAz Hi Denise. Sorry for the delayed reply. We're working with state & place of ficials to determine the best housing solutions for each community affected in Butte County, and in the meantime have temp housing options available. More info: https://t.co/pAOiBY3QBu

Our teams are working closely with state & Docal officials to address needs after #AlaskaEarthquake.

- Be prepared to drop, cover & amp; hold on in case of aftershocks.
- Check on your neighbors if it's safe.
- Document damage or losses by taking photos/video before cleaning up. https://t.co/68TYC9zFla

If you're affected by #AlaskaEarthquake, follow directions from state and local officials to stay safe. Follow @AlaskaDHSEM & @FEMARegion10 for more updates. https://t.co/hekGo7oB1k

If you are trying to contact loved ones affected by the #earthquake in Alaska, use text and social media to reach out. Phone lines may be overwhelmed and often, texts can make it through when voice calls can't. https://t.co/MgUhyHciRW

Our @FEMA Integration Teams (FIT) are embedding with partners to improve #wholecommunity coordination and responsiveness during disasters.

Read more about this new initiative: https://t.co/DhzyKgLioM https://t.co/x5o5eIQsuO

If you live in the affected area, make sure to follow your local @NWS office for information. You can also download our app to sign up for weather alerts and get tips for dealing with emergency situations.  $\P$  https://t.co/Tsw9BL56io https://t.co/sPt6zoQmEB

@SusanLaufer Hello Susan, efforts are ongoing in FL and we are still there. So far, 98,400 FL families and individuals have contacted us & Description over \$111.8 million in grants have been approved for housing assistance and Other Needs Assistance. Latest info at: https://t.co/262K1PnCf5

Charitable & Diving Tuesday, consider supporting one of the many @National VOAD orgs that respond to disasters: https://t.co/g3G2vJyDx1 https://t.co/QINLxg0Tkn

Back in Oct., @POTUS signed the Disaster Recovery Reform Act into law. In our latest #podcast episode, we catch up w/@FEMAspox for a conversation on how the DRRA will help better prepare the nation for disasters.

Web: https://t.co/hSNLrymWFR

Tunes: https://t.co/o5NLNhnfDl https://t.co/NK3j25XWyI

If you applied for disaster assistance, you can check your application status anytime. Call 1-800-621-3362 & select "Check Application Status" for info on your:

- **✓** Status
- ✓ Last status update
- ✓ Submission date
- ✓ Instructions on the appeal process https://t.co/aafB7W4Eh5

Winter weather and a heavy travel weekend can be a dangerous mix. Take some pre-cautions before you consider heading home:

Check the forecast along your route.

A Listen to local officials and stay off the roads if asked. https://t.co/zbgRsVyWtE

Thank you to the emergency workers, service members, volunteers and community members who work hard every day to help those affected by disasters. We're grateful for your service. Happy #Thanksgiving! https://t.co/YnhNtXwf2N

If you or your loved ones recently went through a disaster, it's normal to feel frustrated or hopeless, especially during the holidays. Help is always available. Contact the disaster @distressline, which is available 24/7 at 1-800-985-5990. https://t.co/gvrgzl3YeP

Heavy rain is forecast for much of the western U.S. in the coming days. If you live near, or are passing through recently burned areas be aware of the potential for debris flows or landslides. https://t.co/G9t9tqEGQ2

Big thanks this #NationalPhilanthropyDay to our nonprofit & Dilanthropic partners. They play a critical role during disasters by turning donations into help & Dilanthropic partners.

Here's to the volunteers, organizations & amp; donors that support them.  $\square$  @funds4disaster @NationalVOAD https://t.co/QE21JKmufd

Our most recent #podcast episode explores the inspiring @MyPI\_National initiative, which helps young adults prepare themselves & prepare themselves amp; their communities for disasters.

Listen on the web: https://t.co/1rE7OCHDfn

iTunes: https://t.co/NH7sC79o9H https://t.co/0YJGNyV7hx

If you need a safe place to stay due to the CA wildfires, text SHELTER and your zip code (i.e. SHELTER 12345) to 43362 to locate an open emergency shelter near you.

Follow local officials for evacuation instructions & Defended of the following for more info. #CampFire #WoolseyFire #HillFire https://t.co/P5fquZDt2h

On this #VeteransDay, thank you to all those who have served our nation. We are honored that over 3,000 veterans continue to serve today within our agency. https://t.co/07KknsINid

If you or your loved ones are near the #WoolseyFire, #HillFire or #CampFire, follow updates from local authorities and local news. Be ready to evacuate if told to do so.

Follow: @Cal\_OES @femaregion9 @LAFD @VCFD\_PIO @CountyofButte https://t.co/wU3P30PKVD

Prioritizing limited resources during disasters can be a matter of life or death. In our most recent #PrepTalk, @sherifink shares 2 stories that drive this lesson home, while offering ideas for improving decision-making for the next disaster.

Watch: https://t.co/iWDovklGo5 https://t.co/BlUoFPfQsJ

On one of our recent #podcast episodes, we chat with experts from Beatrice, Nebraska about how they've learned over the years to #BuildBackBetter, lowering flood risk to lives & Description of the years to #BuildBackBetter, lowering flood risk to lives & Description of the years to #BuildBackBetter, lowering flood risk to lives & Description of the years to #BuildBackBetter, lowering flood risk to lives & Description of the years to #BuildBackBetter, lowering flood risk to lives & Description of the years to #BuildBackBetter, lowering flood risk to lives & Description of the years to #BuildBackBetter, lowering flood risk to lives & Description of the years to #BuildBackBetter, lowering flood risk to lives & Description of the years to #BuildBackBetter, lowering flood risk to lives & Description of the years to #BuildBackBetter, lowering flood risk to lives & Description of the years to #BuildBackBetter, lowering flood risk to lives & Description of the years to #BuildBackBetter, lowering flood risk to lives & Description of the years to #BuildBackBetter, lowering flood risk to lives & Description of the years to #BuildBackBetter, lowering flood risk to lives & Description of the years to #BuildBackBetter, lowering flood risk to live & Description of the years to #BuildBackBetter, lowering flood risk to live & Description of the years to #BuildBackBetter, lowering flood risk to live & Description of the years to #BuildBackBetter, lowering flood risk to live & Description of the years to #BuildBackBetter, lowering flood risk to live & Description of the years to #BuildBackBetter, lowering flood risk to live & Description of the years to be a high flood risk to live & Description of the years to be a high flood risk to live & Description of the years to be a high flood risk to be a high flood risk to be a high flood risk to live & Description of the years to be a high flood risk to be a high floo

Listen on the web: https://t.co/1rE7OCHDfn

☐iTunes: https://t.co/mkwQnTWbBW https://t.co/2D7BXy1DwW

You can also download our app to make sure you get alerts for any severe weather headed your way, along with easy tips for getting prepared for and white headed your way, along with easy tips for getting prepared for for any severe weather headed your way, along with easy tips for getting prepared for for any severe weather headed your way, along with easy tips for getting prepared for for any severe weather headed your way, along with easy tips for getting prepared for for any severe weather headed your way, along with easy tips for getting prepared for for any severe weather headed your way.

If you're in the TN Valley or ArkLaMiss region, be sure to have multiple ways to get weather alerts and safety information from local officials including: phone, radio, TV, and social media. https://t.co/tGSmhBF4De

It's World #Tsunami Awareness Day. Tsunamis can happen anywhere along the U.S. coast. Check with your local emergency management agency to learn about the risks in your area and understand community evacuation plans and routes. https://t.co/qLn1PR11Mj

#HurricaneMichael tested Florida Panhandle homes. @Habitat\_org took care to build these five homes to higher standards allowing them to weather the storm. As recovery begins, these homes are excellent examples of simple mitigation measures that work. https://t.co/gVKtUPCxqq

Make sure you're getting weather alerts if you're in these areas and enjoy a safe #Halloween night! If you're under a tornado warning, seek shelter immediately in an interior room away from windows. More: https://t.co/sJCZ2u8UOx https://t.co/f6VJd26RrZ

Stay informed by downloading the FEMA app at https://t.co/Tsw9BL56io.

Get tips on dealing with 🔬 🕄 = and set weather alerts for up to 5 locations. https://t.co/WOqWZA1t7a

#CNMI: If you were affected by Super Typhoon #Yutu, register for disaster assistance at https://t.co/gryh5A6N9X or by calling 800-621-3362 (800-462-7585 for TTY).

Visit https://t.co/ZIZC6YHqt8 for more info & https://t.co/chzH0NnhTK

If you were affected by a recent disaster, start recovery with these steps:

File your insurance claim immediately

Look up your eligibility & Look up your eligibil

Referred to @SBAgov? Fill out the application. You don't need to accept the loan. https://t.co/xnLlhjWc27

We continue to work with partners to bring in people & Dring in supplies to support #CNMI's response & Dring in people & Dring in people & Dring in supplies to support #CNMI's response & Dring in people & Dring

@FEMA Federal Coordinating Officer Bern Ruiz on Tinian earlier today with local officials surveying damage. Credit: Gov. Ralph DLG. Torres https://t.co/GfbhGfSPgq

If you were affected by Typhoon #Yutu, start the clean up process as soon as you're ready. Be sure to document any damage and losses with photos & points. You'll be able to share these with your insurance agent. #CNMI https://t.co/nbWd3N2nhd

Multiple agencies are providing support after #Yutu. While we work with local officials to support their needs, @USCG is assessing damage to ports and waterways, @HHSgov teams are preparing support to medical facilities, and @DeptofDefense is working to transport food and water. https://t.co/wIKLP7whG7

If you have loved ones in the Northern Marianas Islands (CNMI) or Guam, check in with them after #Yutu via social media or text

We are continuing to work with local officials as they assess damage and respond to the storm impacts. https://t.co/yxpPwHDuec

We are monitoring Typhoon #Yutu and coordinating with local authorities. For the latest info, follow @cnmihsem @GHSOCD and visit @NWS Guam's page at https://t.co/nXEkXRiggx https://t.co/H8doXyhQWx

@vetwifeforlife Hi, the first step is to file your insurance claim and provide info on that in your disaster assistance application. If you got a decision letter, read it carefully to see if we need more info. For help with your options, call 800-621-3362 (800-462-7585 TTY).

If you were affected by a recent disaster, visit a Disaster Recovery Center where you can talk to someone and find out which types of disaster assistance might best meet your needs.

To find a location nearby, text DRC & DRC & or visit https://t.co/MzEhMfiQv9https://t.co/IG8AIAxEe3

@jreneemetcalf Hi there, FEMA inspectors may send text messages from their cell phones to schedule a time for your home inspection. However, a FEMA representative will NEVER send text messages asking for personal or financial information and will NEVER ask for money.

"What happens when the water drains, when the dust settles? You have to rebuild an economy. This is what insurance does."

Sean Kevelighan from @iiiorg discusses how insurance improves safety, resilience & prince improves safety, resilience amp; innovation in our latest #PrepTalks video.

Watch: https://t.co/z4DusY15uh https://t.co/lQZD5Cd41v

@mrs\_osmer36 Hi, thanks for reaching out. You can review your application online at https://t.co/gryh5A6N9X & Description among the second of the second of

We are working hand-in-hand with state & Docal officials to make sure survivor needs are being addressed in the areas hardest hit by #Michael.

©: @FEMA leaders meeting with local officials from #JacksonCounty, @LeonCounty & CityofLynnHaven, Florida. https://t.co/FMxTjxMXc9

Cleaning up after #Michael? Keep these tips in mind for tracking your disaster-related costs.

Having good records of your damage and losses will help with insurance claims as well as applying for disaster assistance. https://t.co/CCdahMkq1H

As recovery efforts for #Michael continue, we have teams walking through affected neighborhoods, meeting with survivors to discuss their needs & their needs amp; help them register for disaster assistance.

 $You \ can \ register \ at \ https://t.co/gryh5A6N9X \ or \ call \ 800-621-3362 \ (TTY \ 800-745-0243). \ https://t.co/81IHC2ir9olarges.$ 

If you were affected by Hurricane #Michael, there are many different sources of help from local orgs to federal agencies.

Register at https://t.co/gryh5A6N9X to find out what types of assistance are available.

You can also call 800-621-3362 (TTY 800-745-0243). https://t.co/LpMOWz11Xw

Every major disaster like #Michael requires a whole community response, from neighbor helping neighbor to federal agencies. It takes coordination & to affected areas.

Take a look at the big picture for food & the big picture for food & the big picture for food amp; water: https://t.co/vRQw7jDXRi

Snapshots of some of the federal teams supporting #Michael response efforts:

FEMA teams taking disaster assistance registrations

@USACEHQ installing emergency generators

@HHSGov Disaster Medical Assistance Teams staffing mobile medical bases

https://t.co/6g1cy82P3o https://t.co/a6dpfmEGcj

While grocery stores re-open after #Michael, over 40 sites in Florida & Description of Georgia are distributing food, water & State of Georgia are distributing food, water & State of Georgia are distributing food, water & Georgia are distribution for the Georgia a

FL: https://t.co/4Yit1e0IgS https://t.co/vMC1RYflPF

A great example of how disaster response is a team effort.

More on other coordinated relief efforts for #Michael here: https://t.co/6g1cy82P3o https://t.co/TR5O40jZan

We have created a rumor control page for Hurricane #Michael that will be updated regularly. Help us share this info and remember to always check with official sources like @FLSERT, @GeorgiaEMA and @femaregion4. https://t.co/uESgljgy3y https://t.co/T3h7ZiFUrZ

⚠ Carbon monoxide poisoning is deadly but preventable. PLEASE be careful when using portable generators after #Michael. https://t.co/vD2lczWGlU

Our focus remains on supporting affected states by coordinating resources & Director agencies, private sector & Director agencies, #Michael

Pictured: Distribution points for food & Distribution points for food & Distribution Pictured: Distribution points for food & Distribution Pictured: Distribution points for food & Distribution Pictured: Dis

Read more: https://t.co/6g1cy82P3o

Follow: @FLSERT @GeorgiaEMA https://t.co/IGEdRZMEUZ

Every disaster is different & person has unique needs after #Michael. To start your recovery process: Contact your home or flood insurance provider to file a claim.

■ Visit https://t.co/gryh5A6N9X to check other kinds of help. https://t.co/45VAsjoRlb

47 Our updated Moment is a snapshot of the current #Michael response: federal teams supporting state/local partners with search & Department of the current #Michael response: federal teams supporting state/local partners with search & Department of the current #Michael response: federal teams supporting state/local partners with search & Department of the current #Michael response: federal teams supporting state/local partners with search & Department of the current #Michael response: federal teams supporting state/local partners with search & Department of the current #Michael response: federal teams supporting state/local partners with search & Department of the current #Michael response: federal teams supporting state/local partners with search & Department of the current federal teams supporting state/local partners with search & Department of the current federal teams supporting state/local partners with search & Department of the current federal teams supporting state/local partners with search & Department of the current federal teams support federal teams supporting state/local partners with search & Department of the current federal teams support federal teams

https://t.co/rInJEwbVJX

Many voluntary agencies are responding to Hurricane #Michael, addressing needs like hot meals, debris removal & Debris remova

 $Head to \ https://t.co/g3G2vJyDx1 \ to \ find \ groups \ that \ are \ responding, \ and \ donate \ money—not \ stuff—to \ help \ them \ buy \ exactly \ what \ they \ need. \ https://t.co/DH8iUbBDnK$ 

If you're planning on traveling to areas affected by #Michael, keep in mind:

- Let someone else know when you leave & Damp; where you're going.
- Check road conditions beforehand. FL: https://t.co/g6bkezSelV NC: https://t.co/XQce4LMQgX
- Expect limited cell coverage in hard hit areas. https://t.co/X1EUrM7QRl

If you're still trying to get in touch w/loved ones after #Michael, don't give up. Crews are working hard to restore power & amp; cell coverage.

Try text instead of calling

Search @RedCross https://t.co/L3zYLYd2WS

✓ Report life safety issues to @FLSERT: https://t.co/DNVEya9B3Q https://t.co/XVsRv8zm5B

Search operations continue today in hard hit areas of Florida like Panama City & Deach. Search and rescue teams walked over 100 miles in the past few days, supporting state and local officials with wellness checks and evacuations. #Michael https://t.co/KAjgHKARGq

After a disaster like #Michael, check on your neighbors once it's safe. When you're ready, start the recovery process by calling your insurance company to start a claim.

Follow your local and state officials for updates on resources in your area: @FLSERT @GeorgiaEMA https://t.co/HOnShvru5N

If you want to volunteer to help with #Michael relief efforts, DO NOT go to the affected area without first connecting with an organization.

 $\blacksquare Look up groups that are working in affected areas and register to volunteer at https://t.co/g3G2vJyDx1. https://t.co/Mo48Q5KBZL$ 

If you evacuated for #Michael, keep these factors in mind before deciding to return home. Follow directions from your local officials and plan ahead before heading back. https://t.co/UscIxNZEON

4 "Hurricane Michael Response"

As #Michael swept across multiple states this week, we saw a massive coordinated response from the local up to the federal level. Here's a look at the variety of groups that continue to work in the affected areas. https://t.co/rInJEwbVJX

We have teams from all over the country working with federal, state & Decal partners in Florida. Their specialties range from damage assessment to medical missions to search & Decal Partners in Florida. Their specialties range from damage assessment to medical missions to search & Decal Partners in Florida.

Here's a look at some of the search & Damp; rescue teams that have been helping: #Michael https://t.co/ehBtSpGR65

Want to help people affected by #Michael? The best way to help is through a monetary donation. Money is flexible and doesn't require packaging or transport.

Head to https://t.co/g3G2vJyDx1 for more info on organizations that are helping after the storm. https://t.co/jXRfxHAo08

The risk of flash flooding & Driving tornadoes due to #Michael continues today in the Carolinas & Driving the Carolinas & Driv

Avoid going outside. NEVER drive across a flooded road.

☐Make sure to get weather alerts on your phone: https://t.co/Tsw9BL56io https://t.co/kbFKegD89D

As first responders & amp; emergency crews are working after #Michael, stay off the roads to help them do their jobs.

⚠ If you have an emergency, call 9-1-1!

To keep phone lines clear, let loved ones know you're safe through texting, social media, or https://t.co/L3zYLYd2WS https://t.co/OFPyCZCkH1

As Hurricane #Michael continues across land, many federal teams are in place along with private sector & woluntary agency partners to support state & place along with private sector amp; voluntary agency partners to support state amp; local officials with response efforts. This is a major team effort. More info: https://t.co/6g1cy82P3o https://t.co/yjLWyqranc

It's extremely important to keep sheltering in a safe place and to stay aware as #Michael continues to move inland! https://t.co/pGvp1bzxal

Keep a close eye on your local weather forecasts in the next few days. If you must go outside during a storm, remember: Turn Around, Don't Drown! https://t.co/SVAXtWfrUT #Michael https://t.co/OIzV0U3l5x

When sheltering in a hurricane, stay above flooded levels of a building but don't go higher than you need to.

<u>Name Remember:</u> The higher you go, the stronger the wind. Stay away from windows. Bring your phone and radio with you so you can get weather updates.

#Michael https://t.co/40qzN9veMZ

Hurricane #Michael is fast approaching. It will bring high winds and flooding to several states. Make sure you're getting updates a few ways:

NOAA weather radio

Weather alerts on your phone

Social media: follow local officials & Samp; @NWS offices https://t.co/mpqvfg6AYv https://t.co/h0BjbJTNfU

As Hurricane #Michael nears land, take shelter & Damp; stay safe.

Follow weather updates on your phone or radio.

♦ In a tornado WARNING, go to an interior, windowless room.

If water comes in, go to the highest floor that's not flooded but do NOT enter a closed attic.

https://t.co/KD5WZ7gamP

If you're evacuating for #Michael, have a few different destinations in mind & Deck with state/local authorities for the latest on road closures before you go.

Follow @myFDOT @GADeptofTrans @ALDOTMobileArea @USDOT for more info. https://t.co/mOnmyCkCFL

Flooding from Hurricane #Michael will affect several states. Finish preparations ASAP and get ready to shelter in a safe location.

Make sure you're getting weather alerts for your area and stay off the roads once rain and winds start. https://t.co/vHH7oWoK4X https://t.co/KrG7UAv6xn

As you wrap up last minute preparations for Hurricane #Michael, download the FEMA app so you can:

- ✓ Get safety tips for every stage of the storm
- ✓ Look up emergency shelter locations
- ✓ Sign up for localized weather alerts (up to 5 locations).
- https://t.co/Tsw9BL56io https://t.co/kk2BRb3aRL

Water levels will rise before Hurricane #Michael makes landfall. If your area is under a storm surge warning, finish your prep today and leave immediately if told to do so—it can be a matter of life or death.

Follow your local officials and @NHC\_Surge for warning info. https://t.co/gBlglDYls3

⚠ If you're told to evacuate for Hurricane #Michael, leave NOW. ∧

Today is the last day to travel before storm conditions start. Storm surge is deadly, take it seriously.

Follow @FLSERT & type://t.co/Chwi6Bp6Rd. https://t.co/NszTNJdMuy

If you need a safe place to go before Hurricane #Michael arrives, you can text SHELTER and your zip code (i.e. SHELTER 12345) to 4FEMA (43362) to locate an open emergency shelter near you. https://t.co/L1oU4fyB1A

As Hurricane #Michael approaches land, make sure you have multiple ways to stay informed & that devices now.

NOAA weather radio

Weather alerts on your phone https://t.co/vHH7oWoK4X

Social media: follow local officials & Samp; @NWS offices https://t.co/mpqvfg6AYv https://t.co/KBRTnOAS1a

The window to prepare for Hurricane #Michael is closing quickly. Please share and check on friends, family members and neighbors.

Follow @FLSERT @femaregion4 @NWSTallahassee @NHC\_Atlantic for the latest info. https://t.co/kAiEJJIx0o

⚠ If you're told to evacuate for Hurricane #Michael, don't delay. Leave as soon as possible.

Listen to @FLSERT and local officials for the latest on evacuation orders.

Check your route before leaving, figure out a few places you can go & Dr, make sure to take your pets. https://t.co/8LOotd5m1P

If you are in the path of Hurricane #Michael, download our app to get @NWS weather alerts and useful preparedness tips on what to do in the hours leading up to the storm's arrival. https://t.co/Tsw9BL56io https://t.co/phr7IU7b8F

Make sure to follow your local @NWS office or sign up for weather alerts on your phone  $\frac{1}{4}$  to stay safe: https://t.co/Tsw9BL56io https://t.co/Zs4UM79t1G

If you're in the path of #Michael, get prepared:

✓ Stock up on food, water, supplies & samp; meds.

✓ Tune in to latest forecasts & tollow your local officials.

Check https://t.co/YbTCtJCzgd for more tips.

Follow @femaregion4 @NHC\_Atlantic @FLSERT @AlabamaEMA for more updates. https://t.co/7n6c7oyMOR @davidpaterimos Hi, thanks for the question. By law (WARN Act of 2006), you can opt out of local alerts like AMBER & Description (WARN) are presidential Alerts will only be used for major national emergencies.

@sbeardsley Hi Scott, you can block local wireless emergency alerts (WEAs) by changing the settings on your phone. However, by law (the WARN Act of 2006), you cannot opt out of receiving Presidential Alerts, which will only be used for national emergencies.

TODAY (10/3): At 2:18 PM EDT, we will be testing the Wireless Emergency Alert system nationwide. Expect a message box on your phone along with a loud tone and vibration.

Questions? Visit https://t.co/Op8T9AEpiF https://t.co/cCXJGGObPP

North & Disaster assistance at a Disaster Recovery Center in your area.

To locate an open center, text DRC and your zip code to 43362 (message &

TOMORROW (Wednesday) 10/3: Expect to get a test emergency alert message on your phone at 2:18 PM EDT. You'll hear a loud tone & Direction. This is a nationwide test of the Wireless Emergency Alert system. Questions? Check out https://t.co/Op8T9AEpiF. https://t.co/RIdPay87eN

Throughout the year, we're always excited to work with partners like @LULAC to involve Latino/Hispanic communities in programs like preparedness events & December 1.

 $Find out more about how you can participate at \ https://t.co/gt2aqY0diq.\ \#HispanicHeritageMonth \ https://t.co/EyD0RdHSsc$ 

@WOMEN4ACAUSE Hi, the alerts we're testing were set by law: the 2006 Warning, Alert, and Response Network (WARN) Act. There are 3 types of Wireless Emergency Alerts. Presidential Alerts are the only type that can't be opted out of, but will only be used for national emergencies.

REMINDER: Next Wednesday 10/3 at 2:18 PM EDT, we will conduct a nationwide test of the Wireless Emergency Alert system, in coordination w/@FCC. You'll get a message box on your phone with a tone & with a tone & with a tone & with anyone. https://t.co/7gkuWJQoXO

How can we better plan for and integrate people with access and functional needs in emergency management? In a new #PrepTalks video, Vance Taylor from @Cal\_OES offers some ideas, such as using digital tech and #AI to better serve people in need.

Watch: https://t.co/U0oAU1WJDZ https://t.co/OZdll2C8eR

Many communities in North and South Carolina are still facing major river flooding as a result of #Florence. Our teams are supporting the states as they monitor and respond this week.

If you are in an affected area, please stay safe and tuned in to updates from local officials.

https://t.co/HnxM9ubWkN

@JamesDa77780545 @NCEmergency Hi James, to apply for disaster assistance, call 800-621-3362 or visit https://t.co/gryh5A6N9X.

If you have property damaged by #Florence, you can start the recovery process once it's safe to do so. Document your damage with photos & process first, then begin cleaning up by removing flood-damaged materials like sheetrock, flooring, and carpet.

#ASL

https://t.co/O4xn1Vc90w

Flood insurance policyholders affected by #Florence: file a claim as soon as possible.

Call your agent to file a claim, document all damages before cleanup, and work with your adjuster.

More info: https://t.co/S2v0aijVns. https://t.co/nXDpQBBs2u

If you were affected by #Florence and have flood insurance, file a claim ASAP.

Start by calling your agent to file a claim. You can ask about an advance payment to help kickstart the recovery process. More info: https://t.co/S2v0aijVns https://t.co/TlbIXLntaj

Unfortunately, scam artists often appear after disasters like #Florence.

FEMA reps will always have ID. Be wary of calls asking for personal information.

If you suspect fraud, report it by calling the Disaster Fraud Hotline at (866) 720-5721 or email disaster@leo.gov. https://t.co/orKPzAWEjZ

NC @CivilAirPatrol youth cadets and members of a Mobile Emergency Response unit were among the many teams @FEMA\_Brock met with today in North Carolina. State & Docal responders are still facing severe floods caused by #Florence. For latest updates, visit https://t.co/voDX5b2Vz1.https://t.co/7avkvaKkWL

If you evacuated because of #Florence, keep in mind that flooding is still happening in many locations, roads may be blocked, and power is still being restored.

Follow @SCEMD / @NCemergency to know when it's safe and ask yourself these questions before heading home: https://t.co/q72zX0QR1I

Exactly 1 year ago, #HurricaneMaria made landfall in Puerto Rico. Our teams & Durtners continue to work every day to support Puerto Rico's recovery.

Watch short stories about the recovery effort: https://t.co/JXeM9w51lZ https://t.co/41oW7B9CB3

@MichaelWmGordon To clarify: the emergency alert is not a text message. Just like alerts you see on TV, WEAs are broadcast from cell towers and nearby WEA-capable phones will receive the message. Your phone number is not shared with anyone.

Always check the latest updates from local officials before heading out in an area affected by #Florence. Even if evacuation orders are lifted, many other factors like blocked roads and power outages may mean it's still not safe to return home. https://t.co/36A1hvRIeC

The impact of disasters can be felt long after the event itself. If you feel overwhelmed, anxious, or depressed, this is normal. You're not alone. @distressline is available 24/7 with trained counselors who can listen and help. #HurricaneFlorence #HurricaneMaria https://t.co/Uiw2kTM08F

If you evacuated for #Florence, continue following local officials to know when to return.

If you're going home, plan ahead by checking which routes are safe & amp; have a backup place to stay if your home's very damaged.

Starting to clean up? Protect yourself with these tips: https://t.co/YVYfKo4RRU

Our administrator @FEMA\_Brock visited some shelters in North Carolina today to meet evacuees & Dear their stories firsthand. He also met with local & Dear their stories firsthand. He also met with local & Dear their stories firsthand. He also met with local & Dear their stories firsthand. He also met with local & Dear their stories firsthand. He also met with local & Dear their stories firsthand. He also met with local & Dear their stories firsthand. He also met with local & Dear their stories firsthand. He also met with local & Dear their stories firsthand. He also met with local & Dear their stories firsthand. He also met with local & Dear their stories firsthand. He also met with local & Dear their stories firsthand. He also met with local & Dear their stories firsthand. He also met with local & Dear their stories firsthand. He also met with local & Dear their stories firsthand. He also met with local & Dear their stories firsthand. He also met with local & Dear their stories firsthand. He also met with local & Dear their stories firsthand. He also met with local & Dear their stories firsthand in the Dear their stories firsth

Many different voluntary & Damp; faith-based agencies like @ Salvation Army US have been on the ground ramping up support for those affected by #Florence. They are important partners to the federal, state, and local response, helping with immediate needs like hot meals. https://t.co/K7cVvp7eLI

Every disaster is different & Derson has unique needs after #Florence. A variety of resources may be available to help with recovery:

✓ Call 2-1-1 to connect with local sources of help.

https://t.co/gryh5A6N9X connects you with federal or voluntary organization resources.

https://t.co/UYuxr0vvF0

Responding to a storm like #Florence takes teamwork at all levels. It starts with neighbors helping neighbors, which is where voluntary organizations come in.

If you want to help, go to https://t.co/g3G2vJyDx1 to register & amp; connect w/a group BEFORE heading to the affected area. https://t.co/H0bbFKgMmt

River flooding is still a serious concern due to #Florence rains.

We can't emphasize enough: NEVER drive around barricades.

North Carolina: If you're still evacuated for #Florence, stay safe & Docal officials to know when to go home.

You can also:

& Contact your home or flood insurance provider to file a claim.

Visit https://t.co/gryh5A6N9X to check what kinds of help might be available. https://t.co/tI7J7JjFUA

#Florence will be a long recovery process. Even as search and rescue teams respond to ongoing flooding, other teams are also supporting state and local partners in areas like medical, communications, and sheltering. See the latest snapshot at https://t.co/GMlVQxDde6. https://t.co/ZTRfEwzpiO

4 "Hurricane Florence Response"

As historic flooding continues across the Carolinas, teams from all over the country are working together to save lives and support the local community. Here are some of the latest highlights. https://t.co/w0z6jEv4f2 Due to severe weather across much of the East Coast and ongoing response efforts, the national emergency alert test has been postponed to the backup date of Oct. 3, 2018 at 2:18 PM EDT.

If you have questions about the test, visit the FAQ at https://t.co/Op8T9AEpiF. https://t.co/S9RYxyfdiv

Want to help people affected by #Florence? The best way to help is through a cash donation to a trusted organization. Cash is flexible and doesn't require packaging or transport. https://t.co/NxZuUBLfhX

If you're in an area affected by #Florence, please continue to stay alert, monitor weather forecasts, and listen to local officials. Check your emergency supplies and be ready go quickly if told to evacuate. https://t.co/Hg33nswYS7

If you evacuated for #Florence, don't return until local officials say it's safe.

You can also begin filing your flood insurance claim now or whenever you're ready. Call your agent or insurance company.

More info: https://t.co/S2v0aijVns. https://t.co/edZ0PNsFwR

#Florence is still causing flash floods & amp; tornadoes today. Stay safe by having multiple ways to get weather alerts:

Follow your local @NWS office

Tune in on your TV and weather radio

Download our app at https://t.co/Tsw9BL56io or by texting APPLE or ANDROID to 4336 https://t.co/sbikO6yJ9Y

Our Urban Search & Der Rescue teams, along with @USCG & Description of the Search and Search are supported by the Search are s

Rainfall from #Florence continues to cause extreme flooding & many roads are not safe. If you're in an affected area, do not go outside unless absolutely necessary. If you must go, check which roads are closed first. Above all, remember: TURN AROUND, DON'T DROWN. https://t.co/hkMwvFU73R

4 "Hurricane Florence Response"

Disaster response requires teamwork and coordination at all levels. Check out the incredible teams that have come together from across the nation to prepare for and respond to Hurricane Florence. https://t.co/w0z6jEy4f2

#Florence continues to cause dangerous flooding, so please listen to local officials for up-to-date safety information and evacuation orders. @NCEmergency @SCEMD https://t.co/noeio0OaT3

If you're affected by #Florence & David Maurstad from the National Flood Insurance Program encouraged this today during our morning press briefing. https://t.co/5XMsDwLy5A https://t.co/MJIiKFAOHs

If you're trying to get in touch with loved ones affected by #Florence, keep in mind that communications may be spotty while the storm moves through.

Try texting or using social media to connect with them. Keep trying.

Check https://t.co/L3zYLYd2WS. https://t.co/r7b6jnJSsl

Info on the emergency alert test:

♦ It's a nationwide test of the same system that pushes public emergency messages like AMBER alerts

Presidential Alerts are only for national emergencies

♦ FEMA & amp; @ FCC are testing to ensure it will work when needed

FAQ: https://t.co/Op8T9AEpiF https://t.co/FBC1AF7oHY

⚠ Please share this safety message and urge others to stay tuned to their local weather forecasts. #Florence continues to move slowly. This means it can still cause extreme flooding as it continues to dump rain over the Carolinas into SW Virginia. https://t.co/VPaGGOTzsz

Rain from #Florence these next few days will cause flooding in many parts of the Carolinas. Expect flash flooding at any time and stay off the roads. Do NOT walk, swim or drive through floodwaters! https://t.co/KI7H0Mfs5Z

If you evacuated for #Florence, follow local officials to know when it's safe to go home.

If you're sheltering at home, stay inside until local officials say it's safe to go outside. Floodwaters may be contaminated & to hide hazards like downed power lines.

@SCEMD @NCEmergency https://t.co/VMVXoissZY

Throughout the week, we've worked hard to deploy people and resources to support all of the state and local officials affected by #Florence. As this effort continues, here's a snapshot of how we and our federal partners have been providing that support: https://t.co/34pCvTWSXQ https://t.co/tHOopLZeed

Hurricane #Florence is a slow-moving storm that will keep dumping a lot of rain. Stay indoors until you are told by local officials that it's safe to go outside. Do not wade through flood water, which may be contaminated or electrically charged. https://t.co/VH5Hx1e7g4

Over 1,150 @FEMA Urban Search and Rescue personnel are integrated with state & Docal teams in NC, SC, & Docal teams in NC, SC, & Docal teams after #Florence. The teams came from all over the country this week, traveling long distances with equipment & Docal teams of the Storm. https://t.co/w5WUKE9CTU

During a disaster, phone lines may be overwhelmed. To let loved ones know you are safe, check in on social media or send a text instead of calling, to keep lines open for emergency calls. #Florence https://t.co/J6XXkSM2a1

Please share this safety info for #Florence:

♦ If trapped in a building, go to the highest floor.

Do not climb into a closed attic; you may get trapped by rising floodwater.

♦ Get on the roof only if necessary.

⚠ Call 9-1-1 for emergencies. ⚠ https://t.co/Hna2aGpmMP

Incredibly important to remember: areas far from the coast are also at risk of severe flooding. Now's the time to make sure you are getting weather alerts and following your local @NWS office. #Florence https://t.co/D9GaiEyyEF

Stay safe and shelter away from windows on the lowest floor that's not subject to flooding. If you get trapped in a flooded building, go to the highest floor but do NOT enter a closed attic.

⚠ Call 911 If you need rescue. ⚠

#Florence https://t.co/QGIzOGqq3w

A good reminder that it's important for everyone to monitor weather alerts for their local area into next week. Get @NWS alerts for up to 5 locations in the FEMA app: https://t.co/Tsw9BL56io https://t.co/98bu8Q03wR

With storm conditions getting worse by the minute, now is the time to take shelter. Stay safe indoors and get ready for the possibility of a extended power outage. #Florence https://t.co/vkxlyQM37q

Last minute prep for #Florence should be completed soon, as strong winds will be felt this evening. This goes for parts inland as well as the coast. Again, evacuate NOW if told to do so by local officials.

If you need a safe place to go, text SHELTER & amp; your zip code to 43362. https://t.co/JqFH36SFat

Storm surge is deadly. Anyone in an evacuation zone in the Carolinas and Virginia must leave NOW if they haven't yet.  $\#Florence\ https://t.co/m3BKPoX5q4$ 

If you're in a mandatory evacuation zone for #Florence, your window of time to leave is closing rapidly. Here are the zones for South Carolina: https://t.co/rFbWeHDLgI

Don't focus on the category of the storm. Hurricane #Florence will slow down as it approaches the coast & moves inland. This will cause extremely dangerous flooding.

Make sure you have multiple ways to get local weather alerts—through your phone  $\blacksquare$ , weather radio  $\blacksquare$ , and TV  $\blacksquare$ . https://t.co/CqX98wH2Lv

This is a massive flood threat from #Florence that will last into next week. Please be ready by signing up for local weather alerts and reviewing safety information: https://t.co/SVAXtWfrUT https://t.co/k8AG0osaFT

Here's a look inside our National Response Coordination Center, where a team of over 175 people representing federal agencies, non-governmental organizations, & private sector partners are working hard around the clock to support state & private sector partners are working hard around the clock to support state & private sector partners are working hard around the clock to support state & private sector partners are working hard around the clock to support state & private sector partners are working hard around the clock to support state & private sector partners are working hard around the clock to support state & private sector partners are working hard around the clock to support state & private sector partners are working hard around the clock to support state & private sector partners are working hard around the clock to support state & private sector partners are working hard around the clock to support state & private sector partners are working hard around the clock to support state & private sector partners are working hard around the clock to support state & private sector partners are working hard around the clock to support state & private sector partners are working hard around the clock to support state & private sector partners are working hard around the clock to support state & private sector partners are working hard around the pr

@SteveJaxhome Thank you for your feedback. We suggest signing up for FEMA text messages if you do not have a smart phone, data plan or wifi access so you can still receive information via SMS. Find out more here: https://t.co/zKC0ItUvXo

Remember:

**©** Forecasts can still change. Even if the latest predicted storm track shifts, stay alert & prepared for the worst.

⚠ Severe rainfall & Doding is expected far inland. Sign up for weather alerts so you know about hazards in your immediate area.

#Florence https://t.co/Hk1n00owJy

We have created a rumor control page for Hurricane #Florence that will be updated regularly. During disasters, it's critical to avoid spreading false information. Always check with official sources before sharing. https://t.co/PAjGQZJ1Nt https://t.co/z4L0r1YjAT

Please help share this information about evacuating with service animals & Depth are leaving today, follow local official accounts to get the latest information about routes and other safety guidance: @SCEMD @NCEmergency @VDEM #Florence https://t.co/b9bWYqJ1RZ

If you need to evacuate for Hurricane #Florence, today is your last day to go before the storm arrives. You can text SHELTER and your zip code (i.e. SHELTER 12345) to 4FEMA (43362) to locate an open emergency shelter near you. https://t.co/vv0UPzw0wS

Today is the day to finish preparing for Hurricane #Florence. Check on family, friends, and neighbors as well, in case they need help getting ready. https://t.co/dn9TH6tVMt

Storm surge watches and warnings for #Florence are active for the entire North Carolina coast and parts of South Carolina. Evacuate immediately if told to do so by local officials. Follow @NHC\_Atlantic for the latest forecasts. https://t.co/IFvyli2oN4

If you're ordered to evacuate due to #Florence and need a safe place to go, you can find a list of emergency shelters in the FEMA App. Many shelters are now open in South Carolina & District will update as more open across the affected region. https://t.co/Tsw9BL56io https://t.co/73ROuDenXv

Tips on evacuating & amp; animals for #Florence:

- The Americans with Disability Act requires hotels & Disability Act
- Hotels don't have to accept pets. Not all shelters accept pets. Plan ahead accordingly.
- More: https://t.co/yB1WzLW3NX https://t.co/RYFEk6JVEO

If you have flood insurance, take pics/videos of your property BEFORE #Florence. Have photos of appliances, furniture, & Defent the valuable items—anything you might file an insurance claim for later if it's damaged. More tips: https://t.co/RjxLo4uS2Y https://t.co/RZpmwgOOwt

With the effects of #Florence expected on the coast starting Wed night, now is the time to finish preparing. Check updates from local officials often & pays to stay informed. Be ready even if you're far from the coast, as severe flash flooding is expected inland. https://t.co/2DVBeeqwBy

Some great tips here for getting prepared when expecting widespread power outages. Know how to report outages and downed power lines to your local electric company. #Florence https://t.co/dRlSqVpFNU

With #Florence expected to cause massive outages for an extended time, make sure you prepare for health-related needs. Have enough medication to last multiple days to weeks and discuss specialized needs like #dialysis now. https://t.co/nhuvnRa3Nm

#Florence will produce life-threatening storm surge, flash flooding, and river flooding as well as hurricane-force winds well inland. Finish preparing as soon as possible. Expect power/cell/water/sewer outages and blocked roads for days or weeks after. https://t.co/ZxKqX24cg6

Both storm surge and inland flooding are threats for #Florence. This is why it's important to follow directions from local officials and leave immediately if told to do so. Never walk, swim, or drive through flood waters. https://t.co/Hn1GoWAcVD

If you're evacuating for #Florence, it's important to follow directions from local officials about where to go and how to get there. Follow these accounts: @SCEMD (South Carolina), @NCEmergency (North Carolina), @VDEM (Virginia) https://t.co/fgNRUJmW8k

Hurricane #Florence is forecast to cause life-threatening storm surge, inland flooding, and damaging winds along the Carolinas and Virginia. It's extremely important for everyone in the storm's path to heed warnings and listen to local officials. https://t.co/kAAAX1kTDQ

#Florence is a serious storm and history shows us that storm tracks can change quickly and unexpectedly. This is why it's extremely important to follow your local officials and stay tuned in through the week.

https://t.co/iIBbs0mcFu https://t.co/zNTnIgcwuw

Hawaii: Know your local evacuation routes and be ready to shelter as the storm nears. Finish preparations today. Make sure you're following @NWSHonolulu @GovHawaii @Hawaii\_EMA for updates and stay safe. https://t.co/94CSO5kzq5

As Guam and the Northern Mariana Islands are bracing for Typhoon #Mangkhut, we have staff and supplies ready to support response and recovery operations across the islands. For the latest on the storm, follow updates from @GHSOCD. https://t.co/4EJGRXD56E

Those in #Guam and Northern Mariana Islands #CNMI may start seeing typhoon impacts as early as Monday afternoon, so preparations should be completed as soon as possible. Follow @GHSOCD latest updates. https://t.co/gbnBm9RD8i

Make time this weekend to check your emergency supplies, just in case #Florence or another storm ends up impacting your area. Download the FEMA app to arm yourself with useful hurricane prep tools and information: https://t.co/Tsw9BL56io https://t.co/dNcETvGGOO

As we keep an eye on Hurricanes #Florence and #Olivia through the weekend, it's also a good time for you to get ready. https://t.co/QGCZnUGZav

With ongoing activity in the Atlantic and Pacific, now is the time to check your supplies and make a plan. Follow @NHC\_Atlantic and @NHC\_Pacific for the latest on Hurricanes #Florence and #Olivia. https://t.co/WnfKx1QTBL

Today, #PrepTalks is bringing experts together to share new ideas and discuss issues confronting emergency managers. Join in by checking out the hashtag and view previous talks at https://t.co/kLAhNH0e3b. https://t.co/g3WzIRUVFO

Good advice for those affected by #Gordon. During and after a storm, do not go outside unless absolutely necessary. Remember that flood waters can hide dangerous debris and downed power lines. https://t.co/QAmRVnkVk7

#Gordon will affect more than just coastal areas; many locations inland will see heavy rainfall. Be ready by downloading the FEMA app, which allows you to track weather alerts for up to 5 locations. https://t.co/Tsw9BL56io https://t.co/CPLxpn5vdT

If you are in #Gordon's path, finish your preparations now and keep a close eye on updates as impacts are expected today. Follow @NHC\_Atlantic @AlabamaEMA @GOHSEP @MSEMA @FLSERT for latest updates. https://t.co/imBF2q9Tmy

Heavy rain from Tropical Storm #Gordon will cause flash flooding. Remember that 6 in. of moving water can knock a person down and cause you to lose control of your vehicle. If you see a flooded road, Turn Around, Don't Drown. https://t.co/A6re0Rhjue

If you are in Tropical Storm #Gordon's path, it's critically important to prepare now and stay alert. Follow @NHC\_Atlantic @Alabama\_EMA @GOHSEP @MSEMA @FLSERT for latest updates. https://t.co/7ejwTkd3M2

Heading somewhere for #LaborDay weekend? Make sure to download the FEMA app and set weather alerts for the locations you'll be visiting, so you'll be ready come or the locations you'll be ready or the locatio

These stories gathered by @distressline are a powerful reminder of how disaster recovery involves the whole community. https://t.co/wDRvOflLwp

(8/25) Today's update on the coordinated response efforts for Tropical Storm #Lane. While all tropical storm watches and warnings have been cancelled, flooding is ongoing. Continue following @Hawaii\_EMA @GovHawaii @NWSHonolulu for info on local impacts. https://t.co/oAkSO9C7zE

The response to Tropical Storm #Lane wouldn't be possible without faith and community based organizations like the @RedCross. We build these partnerships beforehand so we know how to support their work on the ground as soon as disaster strikes. https://t.co/XiVWYSlWmF

Tropical Storm #Lane has produced over 40 in. of rain in some areas and can still cause dangerous flooding & landslides. Stay off the roads to keep it clear for emergency workers. If you must go outside, be wary of hazards like downed power lines, contaminated water & amp; debris. https://t.co/n1FZqTdCtm

## **RINGRAZIAMENTI**

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