

**MINISTRY OF HEALTH  
REPUBLIC OF HUNGARY**  
Office of the Chief Medical Officer

**NATIONAL INFLUENZA PANDEMIC  
PREPAREDNESS PLAN**

**PLAN OF ACTIONS AND MEASURES  
TO RESPOND TO AN INFLUENZA PANDEMIC  
CAUSED BY A NOVEL VIRUS SUBTYPE**

**Budapest  
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## CHAPTER ONE

### INTRODUCTION

#### **The influenza pandemic**

Of the common pandemic pathogens, influenza viruses remain a serious cause of morbidity every year worldwide, which, due to the structure and animal host range of one of its subtypes, may evolve into a subtype which can cause a global epidemic.

An influenza pandemic occurs when a reassortment of genes between human and avian influenza virus strains takes place, for which mankind is susceptible.

When a new influenza virus subtype having the capacity to cause influenza pandemic appears, no one in the population is immune against either haemagglutinin (H) or neuraminidase (N), or in the worst case, against both of the virus surface antigens. When this occurs, the range of population groups at risk, and in need of protection, will be expanded considerably.

Influenza pandemics are likely to have severe public health and economic implications. In 1918, the pandemic, so-called “Spanish flu” due to the death of a member of the Spanish Royal Family and intense reporting by the Spanish media, caused about 20 million deaths worldwide. On average pandemics causing high morbidity and mortality occurred every 25 years during the last century, whereas the last pandemic took place more than 30 years ago.

Elaborated in 1997 and revisited in 2001, the Hungarian pandemic preparedness plan needed to be reviewed in keeping with the documents that were adopted by the World Health Assembly as well as the guide published by the European Union on 23 December 2004 (Commission Working Document on Community Influenza Pandemic Preparedness and Response planning).

In preparation for influenza pandemics, certain Member States have developed systems of national influenza pandemic planning based on the WHO guidelines adopted in 1999. Because of the characteristics of pandemics, however, and the special features of the European Union area in which people, animals and products circulate freely, the question of the need for Community action to co-ordinate preparedness and response in the EU had become critical.

From the point of view of animal health, mention must be made of Council Directive 92/40/EEC introducing Community measures for the control of avian influenza, which defines the Community control measures to be applied by Member States’ competent authorities in the event of an outbreak of avian influenza. Furthermore, the Commission urges Member States to step up surveillance of avian influenza and to introduce strict measures in order to prevent animal-to-human spread of the disease.

Advance preparation for the pandemic will create the groundwork for effective response, for decreasing morbidity and mortality related to the influenza epidemic to the smallest possible level and for preventing disruptions in delivering health care to the population.

## **Overarching goal of the National Influenza Pandemic Preparedness Plan**

### **The overarching goals of the Plan are to**

- ◆ Inform measures of preparedness for the influenza planning;
- ◆ Put in place and make ready for deployment a well established response mechanism to contain and eradicate the pandemic and to see to it that cases presenting in masses are provided appropriate health care;
- ◆ Ensure that planned actions and measures contribute to decreasing the number of influenza cases, cases with complications and deaths;
- ◆ Promote, on the basis of a communications plan, information of the public at large and healthcare workers on issues related to the pandemic, prevention of panic and active involvement of the public in implementing preventive measures;
- ◆ Attain, through the implementation of actions and measures set forth in the plan, that the country's national economy continues to be operational, its public administration is maintained and its national security and defence are ensured.

### **The objectives of the Plan are to**

- ◆ Ensure that estimates based on statistics and preliminary forecasts make it possible to assess the expected magnitude of cases during a potential pandemic, to define the size of population groups at risk due to their health status, to identify the occupational groups to be protected with a view to maintaining the economic viability of the country and to define the number of individuals in those groups;
- ◆ Identify the specific measures to be taken during the preparedness period, the public health institutional, material and human resources as well as organisational and information systems needed to contain and eradicate the pandemic;
- ◆ Inform the advance elaboration of measures that are required to contain the pandemic and will need to be imposed in the event of a pandemic, and inform the coordination of intersectoral division of tasks;
- ◆ Define conditions for the supply of a new vaccine needed for mass vaccination, promote fast-track licensing of the vaccine, setting medical priorities in vaccine use and outlining rules of vaccine distribution;
- ◆ Promote elaboration of guidelines for the prevention of the disease and treatment of cases, for the period between the launch of vaccine production and beginning of vaccination with the vaccine produced;
- ◆ Develop actions and measures to be taken in order to control and contain the disease in a breakdown by the individual phases of the pandemic as defined by WHO, and identify the actions to be taken by the agency and organisations concerned in the eradication of the epidemic;
- ◆ Link the technical management scheme of epidemic eradication at the national, regional and local levels to the disaster management command and control systems at the Governmental and sectoral levels; provide the basis for multisectoral cooperation required to contain and eradicate the epidemic;

- ◆ Ensure that the costs required to prevent and contain the outbreak as well as budgetary allocations needed may be planned for in advance;
- ◆ Facilitate harmonisation of domestic activities with actions taken by WHO, the EU and other international organisations;
- ◆ Promote preparation of communications concerning the pandemic according the individual pandemic phases taking into account specific target groups.

### **Impact of the pandemic on the healthcare system**

In the event of an influenza pandemic, if preventive measures fail to control and contain spread of the infection, and when high morbidity rates are seen, there will be a significant excess need for care at all sectors and levels of the healthcare delivery system (outpatient services, specialist services, inpatient care, as well as rescue and patient transportation services).

Primary health care will see cases in the highest numbers. In addition to overcrowded family practitioners' offices and clinics, the number of home calls and visits may increase considerably. This may be further increased if, for considerations of preventing the spread of infection, health authorities urge that preference be given to providing care at patients' homes.

The emergency ambulance services will have to expect both emergency medical care and patient transportation activities in volumes many times exceeding the average on an ongoing basis. During a pandemic, alternative ambulance and patient transportation service providers will have to expect significant excess demands.

Inpatient facilities will need to put in place and operate capacities to accommodate patients with infectious diseases, beyond 100 percent utilisation of infectious disease wards and services, in the event of a failure to contain further increases in morbidity by applying preventive measures.

Depending on the appearance of expected complications, intensive care capacities will have to meet significant excess needs, even if the totality of intensive care capacities would be deployed to care of influenza cases.

The potential pandemic will have a fundamental impact on the professional operation of inpatient care institutions. In keeping with the provisions outlined in emergency health plans, during the pandemic period only patients who are absolutely in need of inpatient care may continue to be in hospitals and only such patients may be admitted. Non life-saving interventions and examinations should be postponed until the pandemic has subsided, and all efforts should be made to ensure that the length of stay of justified cases does not exceed the medically acceptable minimum number of days.

Executives of healthcare institutions will need to take account of growing demands on radiological diagnostic and laboratory units, due to cases with complications.

In order to contain the spread of the epidemic, hospital visiting will have to be prohibited, which may result in a further disruptive impact on patient care as there might be an increased volume of phone calls to inquire about patients by relatives and next-of-kin denied access to the institutions.

The situation may be worsened by the need to expect that despite timely vaccination of healthcare workers in contact with patients, some of them might become ill and temporarily absent from work.

If an epidemic of emergency nature develops and when prevention fails to be effective enough, support by the civil sector will assume greater significance. Retired healthcare workers, volunteers of charity and faith-based organisations as well as students at various health training facilities may be involved in delivering health care, on a voluntary basis.

## CHAPTER TWO

### ORGANISATIONS WITH PRIMARY RESPONSIBILITY FOR PANDEMIC PREPAREDNESS AND RESPONSE AND THE LEGAL FRAMEWORK OF THEIR INVOLVEMENT

Responding to and containing the influenza pandemic or an epidemic emergency are primarily the tasks of the healthcare sector from a technical point of view; however, the health sector in itself is not able to address all consequences and issues related to the epidemic. For preparedness and containment to be effective and efficient, the joint efforts and involvement of Government and society are required.

#### **Organisations of Government control:**

- the Governmental Coordinating Committee (GCC)  
GCC Operative Staff (OpS)
- Ministry of Health (MoH)

#### **Healthcare organisations in charge of pandemic preparedness and response:**

- Outbreak Assistance Working Party (OAWP)
- National Influenza Pandemic Prevention Task Force (NIPPTF)
- National Public Health and Medical Officers' Service (NPHMOS)  
Office of the Chief Medical Officer (OCMO)  
National Epidemiological Centre (NEC)  
County (Budapest Metropolitan) and municipal (metropolitan district) institutes of the National Public Health and Medical Officers' service
- Hungarian National Ambulance and Emergency Service (HNAES)
- healthcare institutions.

#### **Organisations collaborating in pandemic preparedness and response pursuant to effective legislation:**

- Ministry of Agriculture and Regional Development (MARD)  
Animal Health Authority
- Ministry of Environment Protection and Water Management
- County (Budapest Metropolitan) and municipal (metropolitan district) defence committees
- Ministry of the Interior  
National Directorate-General for Disaster Management of the Ministry of the Interior (NDGDM)  
Civil protection services  
National Police Headquarters (NPH)  
the Border Guard
- Ministry of Defense  
Hungarian Army
- Ministry of Foreign Affairs
- Ministry of Education



**The legal framework of pandemic preparedness and response:**

Pandemic preparedness and response are provided for in the Health Law, in effective pieces of legislation concerning disaster medical services and contingency planning of healthcare institutions; concerning infectious diseases and response to and control of epidemics; concerning disaster management, as well as other legal instruments of state administration.

## CHAPTER THREE

### PANDEMIC PHASES IN RELATION TO HUNGARY, IN KEEPING WITH WHO'S DEFINITION

The National Influenza Pandemic Plan will be implemented as required by the **epidemiological situation**, which may be divided into the **following phases**, taking into account the World Health Organisation's Global Influenza Preparedness Plan, published in April 2005 (WHO/CDS/CSR/GIP/2005.5):

#### INTERPANDEMIC PERIOD

- PHASE 1** No new influenza virus subtypes have been detected in humans. An influenza virus subtype that has caused human infection may be present in animals. If present in animals, the risk of human infection or disease is considered to be low.
- PHASE 2** No new influenza virus subtypes have been detected in humans. However, a circulating animal influenza virus subtype poses a substantial risk of human disease.

#### PANDEMIC ALERT PERIOD

- PHASE 3** Human infection(s) with a new subtype, but no human-to-human spread, or at most rare instances of spread to a close contact.
- PHASE 4** Small cluster(s) with limited human-to-human transmission but spread is highly localized, suggesting that the virus is not well adapted to humans
- PHASE 5** Larger cluster(s) but human-to-human spread still localized, suggesting that the virus is becoming increasingly better adapted to humans, but may not yet be fully transmissible.

#### PANDEMIC PERIOD

- PHASE 6** New influenza virus subtype spreads with increased and sustained transmission in general population.
- Level 6/a** Spread of the new influenza virus subtype in initially affected country.
- Level 6/b** New influenza virus subtype appears in other countries.
- Level 6/c** New influenza virus subtype appears in Europe.
- Level 6/d** First verified cases caused by the new influenza virus subtype in Hungary.
- Level 6/e** New subtype causes regional outbreak in Hungary.
- Level 6/f** New subtype causes national outbreak in Hungary.
- Level 6/g** First wave of pandemic subsides in Hungary.
- Level 6/h** Second/third wave of pandemic in Hungary.

#### POSTPANDEMIC PERIOD

Return to interpandemic period.

## CHAPTER FOUR

### PREPAREDNESS PERIOD

The preparedness period includes phases 1, 2, 3, 4 and 5 of the pandemic according to WHO's categorisation.

### INTERPANDEMIC PERIOD

#### *PHASE 1*

No new influenza virus subtypes have been detected in humans. An influenza virus subtype that has caused human infection may be present in animals. If present in animals, the risk of human infection or disease is considered to be low.

#### **Objectives:**

1. To develop and maintain national influenza pandemic contingency plans which are in harmony with international plans.
2. To promote national capacity to respond to early reports of new influenza virus strains.
3. To develop effective mechanisms for mobilization and rapid deployment of resources to areas of need.
4. To develop effective mechanisms for decision-making and subsequent actions regarding national and international responses to influenza related health emergencies, by strengthening intersectoral and intergovernmental cooperative arrangements.

#### **Actions:**

- ✧ Operated by the Ministry of Health, the Outbreak Assistance Working Party (OAWP) meets at least twice every year, in keeping with its Rules of Procedures. During its meetings, OAWP reviews the country's epidemiological situation and discusses current issues and tasks related to pandemic preparedness.

The head of OAWP may order a pandemic exercise, taking into account the annual plan of action of the Governmental Coordinating Committee (GCC) as well as the annual exercise plan of the Health Security Committee (HSC) of the EU Directorate General for Health.

- ✧ The Chief Medical Officer in his capacity of deputy head of OAWP will operate the National Influenza Pandemic Prevention Task Force (NIPPTF) as an interdisciplinary technical subcommittee of OAWP.  
NIPPTF will hold its meetings with a frequency and at dates set by the Chief Medical Officer as required by the tasks to be accomplished, and shall make recommendations and provide advice concerning preparedness.
- ✧ The Ministry of Health (MoH) shall inform GCC on the process of preparedness in the frames of the annual reports.

- ✧ MoH, with the collaboration of the Office of the Chief Medical Officer (OCMO) shall ensure the availability of vaccines needed for free-of-charge vaccination against seasonal influenza and shall see to it that population groups at high risk are vaccinated.

In Hungary, the National Epidemiological Centre is in charge of epidemiological surveillance; as part of this, it

- ✧ maintains a surveillance service in periods of seasonal influenza.
- ✧ assesses morbidity of influenza-like disease on an ongoing basis.
- ✧ during the operation of the surveillance service, issues a weekly report not later than 12 noon on each Wednesday.
- ✧ monitors the spread of influenza viruses and the rapid identification of pathogens responsible for influenza-like disease.
  - studies resistance to antivirals
  - ensures supply of reagents to regional virological laboratories
  - liaises with the European Influenza Surveillance Scheme (EISS) and WHO
  - forwards isolated strains to WHO to allow for monitoring of changes in antigene structure
  - collaborates with animal health organisation in order to exchange information and isolated strains.

Maintaining the avian surveillance scheme is the task of the Ministry of Agriculture and Regional Development (MARD), which provides information to OCMO-NEC on an ongoing basis.

- ✧ OCMO updates guidelines concerning influenza with the involvement of NEC.
- ✧ Inpatient institutions develop and regularly update institutional influenza pandemic plans in order to supplement the epidemic preparedness planning section of their respective contingency plans.
- ✧ The supplements to the institutional contingency plans are reviewed and approved by the competent medical officers.

The executive management of healthcare institutions must ensure that the institutional contingency plan is regularly updated. The updating exercise is reviewed and controlled by the competent county (Budapest Metropolitan) chief medical officer, who initiates repeated coordination with other involved agencies at the regional defence committee, as appropriate.

- ✧ It must be ensured that healthcare workers are properly informed and advised about pandemics during the interpandemic period. This takes place in the form of continuing education courses, professional journal, publications, conferences and internet web-sites.

In the course of preparedness, but also during the period of response, communications at appropriate levels, with adequate messages and of sufficient duration are of equal value and importance as are technical activities, in order to maintain regular contacts with all target groups.

## **Communications during the period**

### **National Information Strategy**

#### **Information to professional and technical staff**

- ✧ Familiarization with pandemic plan and related activities
- ✧ Preparation of information materials (CD-ROM) that will be disseminated by professionals on the basis of common criteria
- ✧ Prepare public health and medical officers' service and family practitioners.

#### **Information to the public**

- ✧ Direct communication (professionals at NPHMOS, family practitioners, website etc.)
- ✧ Indirect communication (media, radio, television, newspapers, electronic media).
- ✧ Publications (leaflets and brochures).

Detailed elaboration and development of materials will take place on an ongoing basis.

### **Communication infrastructure**

In order to implement the information strategy, the following infrastructure network is available:

- e-mail, intranet, internet, telephone, fax.

### **Websites**

Health and medical websites that are available include the homepage of the Ministry of Health — [www.eum.hu](http://www.eum.hu); the health information system of the Ministry of Health — [www.drinfo.eum.hu](http://www.drinfo.eum.hu); the homepage of NPHMOS — [www.antsz.hu](http://www.antsz.hu); and the homepage of the National Epidemiological Centre — [www.oek.hu](http://www.oek.hu).

In order to enhance communication efforts towards the population at large, contacts should be taken up and possibilities of collaboration should be explored and developed with non-governmental organisations (Red Cross, charity organisations, churches, students of health training schools etc.), as a result of which it is expected that the number of websites in support of our communication will grow.

### **Information network among senior response stakeholders**

Minister of Health, Deputy Secretary of State of the Ministry of Health (head of OAWP), Hungary's Chief Medical Officer (deputy head of OAWP), Deputy Chief Medical Officer, Director-General of the National Epidemiological Centre, Head of the Department of Epidemiology at the Office of the Chief Medical Officer.

### **Communication channel towards the EU and WHO**

Formal communication links with the EU and WHO will be maintained by the National Epidemiological Centre and MoH.

### **Risk communication**

In accordance with their risk assessment and evaluation, OAWP, OCMO and NEC will provide information on the risk of potential infection, on recommended, required and mandated preventive and other actions, on an ongoing basis.

### **Population feedback**

Identifying civil organisations, establishing links with them and capitalising on the possibilities of collaboration are underway.

In the course of informing the media, and through them, the public at large, special attention should be paid to make sure that appropriate stress is put on making a clear differentiation between ‘traditional influenza’ and avian influenza, as well as between epidemic and pandemic.

## ***PHASE 2***

No new influenza virus subtypes have been detected in humans. However, a circulating animal influenza virus subtype poses a substantial risk of human disease.

- ✧ MoH takes action with Government to make available budgetary resources required for preparedness
- ✧ OCMO draws up plan for distribution of vaccines and medicinal products that will become necessary if a pandemic occurs
- ✧ OCMO, with the involvement of Hungary’s Chief Pharmaceutical Officer, plans expected needs of supplies from other medicinal products required for the treatment of influenza cases if a pandemic occurs and explores arrangements to meet such needs.
- ✧ NEC ensures procurement of pandemic virus strain appropriate for the production of the new vaccine. To this end, it gets into contact with the National Institute for Biological Standards and Control (NIBSC, UK).
- ✧ The Ministry, with the involvement of the Chief Medical Officer, takes measures to ensure the adequacy of the process of domestic manufacturing and marketing of the pandemic vaccine and medicinal product.
- ✧ OCMO prepares preliminary cost estimates for financing vaccines and medicinal products that will become necessary if a pandemic occurs.

## PANDEMIC ALERT PERIOD

### PHASE 3

Human infection(s) with a new subtype, but no human-to-human spread, or at most rare instances of spread to a close contact.

- ✧ Following announcement by WHO, the National Influenza Pandemic Prevention Task Force will, upon initiative of the Chief Medical Officer, define current actions to be taken.
- ✧ OAWP reviews activities and measures of pandemic response that necessitate the collaboration of organisations in other sectors.
- ✧ The Administrative Secretary of State of the Ministry of Health advises the chairman of GCC to see to it that the Border Guard, the Hungarian Customs and Finance Guard and the NDGDM start preparing for collaboration with the health authority and begin preparedness in order to discharge their duties during a pandemic.
- ✧ NEC continues (epidemiological and virological) routine surveillance.
- ✧ NEC monitors incoming or obtained international information, and updates the Chief Medical Officer as deputy head of OAWP on an ongoing basis.
- ✧ From the date of announcement by WHO, the Ministry, OCMO, and NEC provide regular information to professional and technical organisations and the public at large on the situation as it evolves, as well as on measures and actions taken and planned.
- ✧ NPHMOS institutions collaborate closely with animal health authorities.
  - As part of this:
    - they monitor potential outbreaks of influenza-like diseases on poultry farms
    - should it come to killing and destruction of poultry holdings, they provide technical support in order to ensure the protection of persons carrying out the task and to enforce public health requirements.

### PHASE 4

Small cluster(s) with limited human-to-human transmission but spread is highly localized, suggesting that the virus is not well adapted to humans

### PHASE 5

Larger cluster(s) but human-to-human spread still localized, suggesting that the virus is becoming increasingly better adapted to humans, but may not yet be fully transmissible.

#### Actions in Phases 4 and 5

- ✧ NIPPTF reviews and evaluates preparedness status (stocks of drugs for chemoprophylaxis, availability of monovalent vaccine etc.) and makes proposal to the head of OAWP regarding necessary actions.
- ✧ The Chief Medical Officer takes initiative at MoH to obtain budgetary resources in order to allow for the implementation of actions and measures as identified in the Pandemic Preparedness Plan and falling within the ambit of NPHMOS.

- ✧ MoH, with due regard to the levels of phases, immediately informs NEC on the contents of documents concerning influenza that it received from the EU as well as from the Ministry of the Interior and the Ministry of Foreign Affairs.
- ✧ NIPPTF holds extended meeting with heads and epidemiologists of county institutes of NPHMOS attending in order to clarify and fine-tune tasks of pandemic preparedness and response.
- ✧ The National Institute of Inventory Management reviews stockpiles of pharmaceuticals, supplies of health materials and equipment in the National Medical Stockpiles which may be deployed to support healthcare institutions in the event of a pandemic, and reports the quantities and availabilities to the Ministry.
- ✧ NPHMOS coordinates and clarifies with NDGDM the scope of tasks that require the involvement of disaster management agencies.
- ✧ NEC continues routine surveillance, furthermore, NPHMOS introduces, without any delay, epidemiological measures concerning persons coming from the country of origin of the new virus subtype and related to diseases that might be imported from said country.
- ✧ NPHMOS, in collaboration with the Border Guard, implements controls of persons coming from areas of outbreak, the identification and isolation of persons suspected of having influenza, at the designated border crossing stations and points.
- ✧ NEC evaluates, on an ongoing basis, incoming international data and other epidemiological information concerning Hungary and Europe, including information received from the medical services of the Hungary Army.
- ✧ County institutes of NPHMOS enhance virological surveillance and implement a 50% increase in virological sampling within the influenza surveillance scheme in all ages and regions, regardless of the current epidemiological situation in the country.
- ✧ NPHMOS designates healthcare institutions for the provision of care to suspected cases of influenza identified at border crossing stations and points.
- ✧ MoH and OCMO provide regular information and updates to healthcare providers and the media, on the basis of information received about the outbreak of influenza.
- ✧ OCMO takes the necessary measures to ensure that the production of a new vaccine against the pandemic virus provided by WHO is launched.
- ✧ MoH approaches Government to request that funds are released to allow the production of the new vaccine in order to protect the population.
- ✧ MoH informs public at large of the epidemic threat, on what response and protection measures to take and on the arrangements for vaccine production and distribution.
- ✧ MoH provides technical support to MoFA to organise protection of staff at foreign representations from the outbreak, and makes vaccines available for use in staff at foreign representations.
- ✧ Ministry of Education collaborates in order to ensure that information leaflets and brochures on influenza made available by NEC are disseminated to educational institutions.



## CHAPTER FIVE

### THE PANDEMIC PERIOD

#### PHASE 6

New influenza virus subtype spreads with increased and sustained transmission in general population.

The pandemic period is subdivided into different levels according to the geographical area that are affected by the outbreak.

**Level 6/a** Spread of the new influenza virus subtype in initially affected country.

**Level 6/b** New influenza virus subtype appears in other countries.

**Level 6/c** New influenza virus subtype appears in Europe.

- ✧ NEC enhances integrated epidemiological and virological surveillance.
- ✧ When the virus subtype appears in Europe outside the seasonal influenza period, the Chief Medical Officer issues orders to activate influenza surveillance.
- ✧ NPHMOS, in collaboration with the Border Guard, heightens controls of persons coming from areas of epidemic threat, the identification and isolation of persons suspected of having influenza, at border crossing stations.
- ✧ NPHMOS extends notification requirement of respiratory infection outbreaks and orders specially prompt reporting of severe acute respiratory diseases.
- ✧ NPHMOS orders that virological tests be carried out in influenza-like cases with fatal outcome occurring in hospitals.
- ✧ NIPPTF holds extended meeting with heads and epidemiologists of county institutes of NPHMOS attending in order to clarify and fine-tune new measures.
- ✧ The ministry orders, through the Chief Medical Officer, that the bed volume of infectious disease wards be specified that are available for the treatment of influenza cases and that may be reassigned temporarily for the duration of the pandemic.
- ✧ OCMO reviews and updates the plan for distributing vaccines required to vaccinate high-risk population groups and population groups to be provided increased protection. Furthermore, it reviews and updates the therapeutic antivirals stockpiles and specifies distribution plans.
- ✧ NPHMOS orders that vaccination of healthcare workers and essential workers in essential services shall begin, and in the event of the non-availability of the necessary vaccines, the launch of antiviral prevention in healthcare workers, until such time as vaccination may begin.
- ✧ OCMO, with the collaboration of NEC, takes the necessary steps to ensure that diagnostics are procured in the necessary quantities and regional laboratories are supplied with reagents.
- ✧ Following announcement of the appearance in Europe of the virus, the Minister of Health and the Chief Medical Officer hold joint press conference.

**Level 6/d** First verified cases caused by the new influenza virus subtype in Hungary.

**Level 6/e** New subtype causes regional outbreak in Hungary.

**Level 6/f** New subtype causes national outbreak in Hungary.

- ✧ The Chief Medical Officer
  - if necessary, considers limiting public gatherings, such as schools and amusement places
  - orders that vaccination of at-risk groups should begin, and free-of-charge influenza vaccine should be distributed and delivered.
  - orders the distribution of preventive and antiviral preparations needed for the treatment of cases.
- ✧ NPHMOS introduces expansion of data provision by influenza reporting system to include daily reporting of the number of deaths from influenza-like diseases and number of influenza positive cases.
- ✧ Upon initiative of the chief medical officer, the Administrative Secretary of State of MoH advises the head of the GCC to mobilize OAWP. He will inform the head of GCC Operative Staff without any delay that OAWP has been mobilized.
- ✧ The head of OAWP mobilizes OAWP and begins operative management of epidemic response. OAWP shall be extended by members of NIPPTF, and it assesses and evaluates the situation as it evolves and takes measures with a frequency as set by the head of OAWP.
- ✧ NPHMOS heightens its laboratory capacities in order to be able to carry out, in all cases, typisation and antigenic structure and genetic characterisation of strains.
- ✧ OCMO provides information and updates on the epidemic situation and measures taken to relevant international organisations on an ongoing basis.
- ✧ NPHMOS provides continuous information on domestic and international epidemic situation to the profession and the public at large via EPINFO, the intranet network of NPHMOS and via the internet. MoH and NPHMOS hold regular press conferences on the development of the epidemiological situation.
- ✧ If made necessary by the course of the epidemic, upon initiative of the chief medical officer, the Minister of Health may declare state of public health emergency in counties affected by the outbreak or for the entire territory of the country, and informs the president of GCC and the head of GCC Operative Staff accordingly.
- ✧ If the epidemic increases, the Minister of Health proposes to the Government, upon the initiation of the head of OAWP and with the agreement of the president of GCC, the declaration of epidemic emergency.
- ✧ In the event that international assistance becomes necessary, the minister of health proposes to the Government the initiation of requesting international assistance,
- ✧ The dispatching unit of HNAES is tasked with setting rescue and patient transportation assignments for ambulance and rescue organisations and patient transportation businesses outside HNAES.
- ✧ Healthcare institutions deliver their activities in keeping with their contingency plans.
 

They increase their infectious disease care capacities by putting in extra beds, making beds available through discharges, temporary profile modification, limiting of admissions while applying specific priorities, rescheduling elective interventions and by reassigning staff.

If necessary, retired physicians and allied health personnel who volunteered in advance are called in to work.

Individually reporting volunteers or voluntary nursing personnel from charity organisations as well as students at medical and health training institutions are dispatched to healthcare institutions by NPHMOS.

- ✧ MoH, through NPHMOS, issues orders to hospitals to report free bed capacities, as well as free capacities of priority health technology need to treat influenza cases, on a daily basis.
- ✧ The National Institute of Inventory Management operates a continuous on-call service in order to ensure that medical supplies and equipment required in the treatment of patients may be released to hospitals from the National Medical Stockpiles without any delay.
- ✧ MoH invites Hungarian Red Cross, as well as civil and faith-based charity organisations to enhance their attention and assistance activities towards elderly persons in need of support (shopping, purchase of drugs etc.).
- ✧ The Chief Pharmaceutical Officer (CPO) monitors continuously the turnover and stocks of medicinal drugs and antivirals needed to treat influenza and its complications. In order to ensure seamless supply, CPO takes the necessary measures, makes proposals and provides regular update on them to OAWP.
- ✧ County (Budapest Metropolitan) chief medical officers, if necessary, prohibit visiting in healthcare institutions, and urge patient care at home rather than in clinics or doctor's offices.
- ✧ NPHMOS issues orders to provide vaccination to those who have not been vaccinated yet, with due regard to priorities set.
- ✧ The Chief Pharmaceutical Officer monitors the provision of vaccine supplies to the network of retail pharmacies, on an ongoing basis.
- ✧ NPHMOS ensures continuously that those involved in delivering care and the public at large are provided information and teaching, and that regular communication activities are maintained.
- ✧ Psychological and spiritual support is provided to address increased physical, psychological and biological stress on staff involved in pandemic response and control activities.
- ✧ If necessary, NPH collaborates in implementing and enforcing epidemiological measures issued by the health authority.

**Level 6/g** First wave of pandemic subsides in Hungary.

In the event of an influenza pandemic, the recovery period, unlike other emergencies, includes activities of preparedness for a subsequent pandemic wave, in addition to activities related to end of events and return to normal situation.

**POSTPANDEMIC PERIOD; END OF THE FIRST WAVE OF PANDEMIC IN HUNGARY**

- ✧ As proposed by OAWP, NPHMOS declares the end of the epidemic, the Minister of Health declares lifting of a status of public health emergency and the Government declares the end of an epidemic emergency.
- ✧ OAWP, NPHMOS and NEC assess and evaluate experiences gained and lessons learnt with epidemic control and response, based on which they will update and reassess the tasks and documents for subsequent preparedness.
- ✧ NPHMOS and NEC carry out epidemiological analysis of the outbreak, and analyse data on morbidity, complications and mortality, on the basis of data by the Hungarian Central Statistical Office.

- ✧ NPHMOS takes measures to vaccinate persons at risk, but not yet vaccinated with monovalent vaccine, as well as to revaccinate chronic patients.
- ✧ The hospitals' activities gradually resume regular operation characteristic of inter-pandemic periods. Executive managements of the healthcare institutions assess and evaluate experiences gained during the epidemic within one week following end of the outbreak, and take measures to review, and update as necessary, institutional pandemic plans.
- ✧ OAWP prepares consolidated report for the Minister of Health, in which it evaluates preparedness and actions and measures taken. Based on this report, the Minister informs the Government, through GCC, on control and containment of the epidemic.
- ✧ The Minister of Health takes initiative with the Government to reimburse extra costs not yet compensated to those taking part in pandemic response and control, as well as restocking the supplies used up from the from the National Medical Stockpiles.
- ✧ In the postpandemic period, tasks in the preparedness period are put on the agenda. NIPPTF reviews issues concerning a possible second wave of the pandemic and makes proposals to OAWP regarding further actions and measures of preparedness.

**Level 6/h** Second/third wave of pandemic in Hungary.

During a subsequent influenza pandemic, the actions and measures as defined in the first pandemic wave are implemented.

All other activities, evaluation and assessment exercise, reporting and notification as well as processing of experiences take place with identical objectives and contents as was the case in the preceding pandemic phase

## CHAPTER SIX

### POSTPANDEMIC PERIOD

The recovery period in the event of an influenza pandemic includes actions and measures to ensure return to the usual situation.

- ✧ WHO declares end of the pandemic.
- ✧ As proposed by OAWP, NPHMOS declares the end of the epidemic, the Minister of Health declares lifting of a status of public health emergency and the Government declares the end of an epidemic emergency.
- ✧ OAWP, NPHMOS and NEC assess and evaluate experiences gained and lessons learnt with epidemic control and response, based on which they will update and reassess the tasks and documents for subsequent preparedness.
- ✧ NPHMOS and NEC carry out epidemiological analysis of the outbreak, and analyse data on morbidity, complications and mortality, on the basis of data by the Hungarian Central Statistical Office.
- ✧ The hospitals' activities gradually resume regular operation characteristic of inter-pandemic periods. Executive managements of the healthcare institutions assess and evaluate experiences gained during the epidemic within one week following end of the outbreak, and take measures to review, and update as necessary, institutional pandemic plans.
- ✧ OAWP prepares consolidated report for the Minister of Health, in which it evaluates preparedness and actions and measures taken. Based on this report, the Minister informs the Government, through GCC, on control and containment of the epidemic.
- ✧ The Minister of Health takes initiative with the Government to reimburse extra costs not yet compensated to those taking part in pandemic response and control, as well as restocking the supplies used up from the from the National Medical Stockpiles.

All other activities, evaluation and assessment exercise, reporting and notification as well as processing of experiences take place with identical objectives and contents as was the case in the pandemic phase 3.

## ACRONYMS

English		Hungarian	
<b>NIPPP</b>	National Influenza Pandemic Preparedness Plan	<b>NIPT</b>	Nemzeti Influenza Pandémiás Terv
<b>EU</b>	European Union	<b>EU</b>	Európai Unió
<b>WHO</b>	World Health Organisation	<b>EVSZ</b>	Egészségügyi Világszervezet
<b>NATO</b>	North Atlantic Treaty Organisation	<b>NATO</b>	Észak-atlanti Szerződés Szervezete
<b>GCC</b>	Governmental Coordinating Committee	<b>KKB</b>	Kormányzati Koordinációs Bizottság
<b>OpS</b>	GCC Operative Staff	<b>OpT</b>	Operatív Törzs
<b>MoH</b>	Ministry of Health	<b>EüM</b>	Egészségügyi Minisztérium
<b>OAWP</b>	Outbreak Assistance Working Party	<b>JVM</b>	Járványügyi Védekezési Munkabizottság
<b>NIPPTF</b>	National Influenza Pandemic Prevention Task Force	<b>NIPP</b>	Nemzeti Influenza Pandémia Preventációs Bizottság
<b>OCMO</b>	Office of the Chief Medical Officer	<b>OTH</b>	Országos Tisztifőorvosi Hivatal
<b>NPHMOS</b>	National Public Health and Medical Officers' Service	<b>ÁNTSZ</b>	Állami Népegészségügyi és Tisztiorvosi Szolgálat
<b>NEC</b>	National Epidemiological Centre	<b>OEK</b>	Országos Epidemiológiai Központ
<b>HNAES</b>	Hungarian National Ambulance and Emergency Service	<b>OMSZ</b>	Országos Mentőszolgálat
<b>NDGDM</b>	National Directorate-General for Disaster Management, Ministry of the Interior	<b>OKF</b>	BM Országos Katasztrófavédelmi Főigazgatóság
<b>NPH</b>	National Police Headquarters	<b>ORFK</b>	Országos Rendőrfőkapitányság
<b>EISS</b>	European Influenza Surveillance Scheme	<b>EISS</b>	Európai Influenza Surveillance Rendszer
<b>MARD</b>	Ministry of Agriculture and Regional Development	<b>FVM</b>	Földművelési és Vidékfejlesztési Minisztérium
<b>MoFA</b>	Ministry of Foreign Affairs	<b>KÜM</b>	Külügyminisztérium