

Yale University

EliScholar – A Digital Platform for Scholarly Publishing at Yale

Public Health Theses

School of Public Health

1-1-2021

Developing A Framework For Civilian-Military Public Health Operations Involving Non-State Armed Groups

Andrew James Chambers
chambers.vet@gmail.com

Follow this and additional works at: <https://elischolar.library.yale.edu/ysphtdl>



Part of the [Public Health Commons](#)

Recommended Citation

Chambers, Andrew James, "Developing A Framework For Civilian-Military Public Health Operations Involving Non-State Armed Groups" (2021). *Public Health Theses*. 2031.
<https://elischolar.library.yale.edu/ysphtdl/2031>

This Open Access Thesis is brought to you for free and open access by the School of Public Health at EliScholar – A Digital Platform for Scholarly Publishing at Yale. It has been accepted for inclusion in Public Health Theses by an authorized administrator of EliScholar – A Digital Platform for Scholarly Publishing at Yale. For more information, please contact elischolar@yale.edu.

Developing a Framework for Civilian-Military Public Health Operations
Involving Non-State Armed Groups

Andrew J. Chambers, DVM

A Thesis submitted in partial fulfillment of the requirements for the degree of

Master of Public Health

Yale School of Public Health

Department of Epidemiology of Microbial Diseases

Date Completed: May 2021

Primary Advisor: Kaveh Khoshnood, PhD

Secondary Advisor: David Polatty

ABSTRACT

Introduction: The interface of military forces, civilian actors and non-state armed groups (NSAGs) during a public health emergency within an active conflict is a situation fraught with legal and ethical challenges not adequately addressed in established doctrine or international guidance documents. Ongoing public health crises in Yemen and Afghanistan represent the real-world consequences of threats to population health and security if these critical gaps are not addressed.

Methods: A list of five diverse medical scenarios was developed as an initial attempt to produce a practical, historically-informed framework for use in future civilian-military (CIV-MIL) training events and guidance. Ten virtual interviews with experts from the humanitarian, US government and academic communities were conducted and qualitatively analyzed in order to identify overarching issues surrounding NSAGs and to solicit feedback on the proposed scenario framework.

Results: Analysis of the interviews resulted in three broad areas of interest and concern surrounding NSAGs: 1. definitional challenges; 2. the value of historical precedence; 3. ethics and international humanitarian law. Patterns that were identified from discussion of the scenario framework include: 1. gaps in public health specific CIV-MIL training; 2. relationship building and trust; 3. critical feedback and assessment for each of the five specific scenarios.

Discussion: The guidance documents within the CIV-MIL community surrounding NSAGs and public health emergencies should be revised with a focus on integration of the two concepts. Updates are required in order to ensure existing institutional knowledge and critical planning factors are captured and considered. The scenario framework was well-received and should be propagated among additional stakeholders in the humanitarian ecosystem for further examination and analysis, as well as included in future CIV-MIL humanitarian workshops and training events.

TABLE OF CONTENTS

| | |
|--|----|
| <u>Introduction</u> | 4 |
| Challenges Associated with Public Health Operations and NSAGs: Examples..... | 5 |
| <u>Background</u> | 7 |
| Civilian-Military Relations..... | 7 |
| Literature and Doctrine Review..... | 8 |
| <u>Methods</u> | 15 |
| Development of a Public Health Scenario Framework..... | 15 |
| Interview Analysis..... | 18 |
| <u>Results</u> | 19 |
| 1) NSAGs..... | 19 |
| a. Definitional Challenges..... | 19 |
| b. Value of Historical Precedence..... | 21 |
| c. Ethics and IHL..... | 24 |
| 2) Scenario Framework..... | 27 |
| a. Gaps in Public Health Specific CIV-MIL Training..... | 27 |
| b. Individual Scenario Commentary..... | 28 |
| c. Relationship Building and Trust..... | 34 |
| <u>Discussion</u> | 36 |
| <u>Study Limitations</u> | 38 |
| <u>Future Directions</u> | 39 |
| <u>References</u> | 41 |
| <u>Appendices</u> | 45 |

INTRODUCTION

National armed forces are being utilized more frequently to respond to situations of significant public health concern during which they may be required to interact with non-state armed groups (NSAGs).¹ While mission objectives vary, they may include the full range of military activities from routine, peacetime engagement to active conflict settings in areas influenced by those NSAGs or rival state powers with a variety of regional interests. The resulting interface of military forces, civilian actors and NSAGs during a public health emergency within an active conflict is a situation fraught with legal and ethical challenges not adequately addressed in established doctrine or international guidance documents.² These challenges can be conceptually divided into three elements: 1) joint response to public health concerns in cooperation with NSAGs; 2) material support to NSAGs during public health operations; 3) decisions of whether to allow third party organizations to collaborate with NSAGs within humanitarian-related operations.

Western foreign policy during counter-terrorism operations has emphasized the threat that failed or failing states pose to global security and global health, and that threat remains today.³ Recent proliferation and entrenchment of NSAGs such as the Islamic State in Iraq and Syria (ISIS) across the Middle East and Boko Haram in Nigeria are not addressed within current civilian-military (CIV-MIL) international guidance and training programs for both armed actors and humanitarian organizations. Only by acknowledging and addressing this gap is it possible to ensure that conflict scenarios with substantial risk to public health operations and national security efforts do not deteriorate due to a lack of institutionalized knowledge surrounding NSAGs. Potential real-world challenges that necessitate CIV-MIL-NSAG cooperation must be

identified and sufficiently addressed if the end goal is to protect vulnerable populations and national strategic interests during complex public health emergencies.

Challenges Associated with Public Health Operations and NSAGs: Examples

The enduring crisis in Yemen illustrates how the presence of one or more NSAGs can significantly impair international CIV-MIL humanitarian response. Although the conflict in Yemen is multifaceted, opposition to Houthi rebel forces by the US Government (USG) stems partly from suspected Houthi ties to Iran.⁴ As such, the USG has previously supported the opposing side in the conflict led by Saudi Arabia and a broad coalition of partners from across the Middle East, although the Biden administration recently declared an end to US support for offensive operations against Houthi forces. Tens of millions of Yemenis remain at risk of starvation, food and water-borne disease such as cholera, and other medical issues due to lack of basic sanitation and healthcare infrastructure.⁵ Complicating matters even further has been the reluctance of Houthi forces to agree to terms of aid provision with humanitarian groups.⁶ The World Food Programme famously threatened to cut aid provisions in 2019 if Houthi forces did not agree to a biometric tracking system used to ensure food distribution was actually reaching those in need of aid, which the Houthis openly opposed as a security threat.⁷ These tensions and delays create additional hardships for those with no other alternatives for survival aside from outside assistance. Suffice it to say that the absence of doctrine and agreed upon practices centered on NSAG engagement within a crisis such as Yemen has resulted in the worsening of an already catastrophic humanitarian emergency.

Many public health programs and initiatives that have proven effective in other settings can quickly fall apart when faced with a complex humanitarian emergency populated by NSAGs. Examining the compounding effects of the SARS-CoV-2 (COVID-19) pandemic in a region under the control of NSAGs provides an ongoing example. Afghanistan and Pakistan remain a significant concern for the international medical community as efforts to eradicate poliomyelitis (polio) have once again stalled and case numbers have risen.⁸ In March 2020, the World Health Organization (WHO) recommended that many vaccination campaigns to cease temporarily due to the COVID-19 pandemic.⁹ While the order was subsequently lifted a few months later, this gap in vaccination coverage coupled with the active efforts of the Taliban to suppress vaccinator access to vulnerable populations has created a perfect storm for polio resurgence in the region, particularly among children. Historical distrust among the local population from foreign military occupation and the influence of the Taliban are obvious impediments to implementation of one of the most successful global health campaigns that has been broadly effective in other contexts.

This study contends that the lack of defined parameters regarding the engagement of NSAGs during public health crises will continue to threaten population health as well as human and national security if steps are not taken to address existing doctrine and training gaps. The research seeks to answer two overarching questions: First, what are the prevailing challenges surrounding CIV-MIL interactions with NSAGs during a complex humanitarian emergency? Second, is a training framework for public health-specific scenarios something that is needed in the CIV-MIL humanitarian ecosystem, and if so, how would it be received?

BACKGROUND

Civilian-Military Relations

The interaction of humanitarian actors and national armed forces is not a new phenomenon. As with any activity that has the potential for scholarly disagreement and frequently shifting policies, there is a plethora of literature and published guidance related to CIV-MIL relations during humanitarian operations. Before continuing, there is an important distinction to make between domestic, or *civil*, relations with militaries, and those relationships that exist with civilian humanitarian agencies that are the focus of this research. In most Western societies such as the US, overall control of military forces is implemented by the civilian government. This study does not consider the complexities that exist regarding proper governance of military forces within domestic disaster contexts. Within this discussion, 'CIV-MIL' refers to relationships and interactions between national militaries and civilian agencies outside of the government structure such as humanitarian international non-governmental organizations (INGOs) and intergovernmental organizations like the United Nations (UN).

One complication surrounding humanitarian CIV-MIL relations is the lack of a standardized acronym or shorthand that is universally utilized within the field. Although a seemingly minor issue, multiple descriptors that refer to essentially the same phenomenon may create complications with basic communication and difficulty in examining published literature. The UN Office for the Coordination of Humanitarian Affairs (UNOCHA) utilizes the phrase humanitarian civil-military coordination, or CMCoord. Many European militaries and academics use the term civil-military cooperation (CIMIC), while the US military may use civil-

military operations (CMO) along with CIV-MIL cooperation. Interestingly, the use of CIMIC appears to be largely absent from USG and US military doctrine. Military forces may engage with civilian agencies for many purposes other than humanitarian operations, so vague distinctions may be intentional. Regardless of which acronym is used, the definition from UNOCHA is appropriate in the case of CIV-MIL humanitarian assistance operations: “UN-CMCoord is the essential dialogue and interaction between civilian and military actors in humanitarian emergencies that is necessary to protect and promote humanitarian principles, avoid competition, minimize inconsistency, and when appropriate, pursue common goals”.¹⁰ Whether dialogue, relationships or coordination, all the various terms refer to scenarios where civilian and military personnel are required to function in close proximity to accomplish joint operational objectives.

Literature and Doctrine Review

The existing literature surrounding humanitarian CIV-MIL relations was examined to better understand the extent of discourse surrounding NSAGs and public health emergencies as a unique disaster context. Utilizing multiple databases and search strategies allowed for a broad overview of relevant literature, to include military doctrine and international humanitarian guidance documents. Existing publicly available documents can be conceptually separated into three broad categories: international humanitarian guidance documents, academic literature and official military doctrine. In collaboration with members of the Yale library team, three primary electronic databases were explored: PubMed, Google Scholar and Dimensions.

PubMed was selected due to the primary focus on biomedical literature, which includes relevant discussions of public health and humanitarian action. The search terms included: *humanitarian[tw] AND (civil-military[tw] OR civilian-military[tw] OR military-civil*[tw] OR civ-mil[tw] OR mil-civ[tw] OR CIMIC[tw])*, which yielded 44 results. Text words (tw) were searched to ensure that any of the various CIV-MIL acronyms would be detected by the database search engine. Google Scholar and Dimensions were utilized using similar search strategies. Both of these databases allowed for full-text examination for the following search terms: *humanitarian & "civil-military coordination" & health & "non-state armed groups"*. These terms yield 86 results in Dimensions and 80 from Google Scholar. The search terms were modified multiple times for both databases and slight modification to the terms did not yield additional significant results overall. For example, by removing "non-state armed groups" and including "armed groups", the results increased to approximately 250. This is likely due to authors utilizing the term 'armed group' to refer to more formal military forces and not NSAGs specifically. Also, including the term 'public' rather than just 'health' triggered the inclusion of many non-relevant studies for this project, so public was intentionally left out of the searches for these databases. A true systematic literature review was not performed, but the strategy utilized allowed for an efficient review of readily available documents in the CIV-MIL literature. International guidance documents and military doctrine were inconsistently present within the search results. These sources were obtained via consultation with the US Naval War College (USNWC) Humanitarian Response Program and through publicly accessible USG websites.

A user-friendly, comprehensive single source for humanitarian practitioner guidance on CIV-MIL operations exists as the UNOCHA UN-CMCoord Field Handbook Version 2.0 (2018).¹¹

This 88-page document contains summaries of humanitarian concepts and coordination mechanisms, as well as discussions of military functions and structure targeted at those humanitarians who have little familiarity with typical (Western) military structure. Chapter 3 of the handbook contains a summary of the four guidelines developed by the humanitarian community for planning and execution of CIV-MIL operations. The four guidance documents central to UN-CMCoord are:

1. Oslo Guidelines (2007)¹²
2. Military and Civil Defense Assets (MCDA) Guidelines (2006)¹³
3. Interagency Standing Committee (IASC) Reference Paper on CIV-MIL Relationship in Complex Emergencies (2004)¹⁴
4. The IASC Non-Binding Guidelines on the Use of Armed Escorts for Humanitarian Convoys (2013)¹⁵

While these documents provide a wealth of information and have been critical to the positive progress seen within CIV-MIL humanitarian relations, they are quite dated. Significant changes have occurred globally over the past 15+ years, and two areas not specifically addressed in detail are NSAGs and public health emergencies.

The Field Handbook states that NSAGs interactions are not dealt with in UN-CMCoord guidelines and refers readers to the OCHA Manual on Humanitarian Negotiation with Armed Groups (2006).¹⁶ This 97-page document details recommendations and practices for negotiations with NSAGs during humanitarian operations. Unfortunately, there seems to be a gap within the UN guidance documents concerning humanitarian emergencies that require

interactions and/or cooperation between civilians, military actors and NSAGs. **In a form of circular reasoning, each document refers the reader to the other while never addressing how to conduct operations when all three actors are involved.** Although the UN does not represent the only source for humanitarian guidelines and recommendations for effective CIV-MIL or CIV-NSAG interactions, given the international recognition and role of the UN it is very unlikely that the gap of CIV-MIL-NSAG interaction has been thoroughly addressed elsewhere in the humanitarian community. The International Committee of the Red Cross (ICRC) is recognized as a leader among humanitarian organizations regarding engagement with NSAGs, with a recently published position paper discussing critical legal issues and challenges to engagement.¹⁷ While detailing many significant aspects of the complications that may result from establishing relationships with NSAGs from a humanitarian perspective, this document does not address those situations that also involve national military forces.

A recent work by researchers in the United Kingdom reviewed the major international humanitarian guidance documents with a focus on specific application to complex public health emergencies.² This paper raises the concern that classification of a developing emergency as either 'humanitarian' or 'public health' may trigger vastly different response from the international aid community as well as militaries, and additional efforts are needed to address the gaps that exist to include complications that may arise from NSAG involvement. There are numerous other examples in the literature that examine gaps and inefficiencies in the CIV-MIL humanitarian response system, and response to the 2014 Ebola outbreak in West Africa is one of the most well analyzed. One study described the Ebola outbreak as illuminating "numerous problems with regard to coordination of humanitarian disasters that have public health

implications of international consequence”.¹⁸ The US Department of Defense (DoD) also released a lengthy analysis of its’ operations in West Africa, known as Operation United Assistance, which is recognized as “the first US military operation to support a disease-driven foreign humanitarian assistance mission”.¹⁹ Many shortfalls were acknowledged by DoD in the report, including lack of cohesive planning efforts and a shortage of appropriate training opportunities for DoD personnel that may be involved in complex public health emergency response.

An important note from the literature review relates to the differentiation of public health-driven humanitarian response and natural disaster scenarios. CIV-MIL coordination in certain natural disaster scenarios has produced results that would not have been possible without contributions from both sides and this success must be acknowledged. In the aftermath of the 2004 Indian Ocean tsunami disaster, an unprecedented humanitarian response from the global community unfolded which included international military forces.²⁰ Although the military response was relatively short-lived compared with most other organizations, the joint report from the Tsunami Evaluation Coalition (TEC) recognized the critical role of the military in the early phases of response as well predicting the inevitability of military involvement in future global humanitarian efforts. Other reports of successful military support to natural disasters are prevalent in the literature, and one repository for reports from military sources (such as the service war colleges) is the Defense Technical Information Center (DTIC). Examples include support to Hurricane Mitch recovery efforts in Central America in 1998 and Joint Task Force-Haiti earthquake response in 2010.^{21,22} While recognizing successes within CIV-MIL coordination during natural disaster response, the responses were by no means without issue. The TEC

report emphasized the lack of opportunities for training between the military and humanitarian actors, and that “field coordination between them remains weak”.²⁰ This is especially relevant for public health emergencies which often entail complexities beyond the scope of traditional response to natural disasters that are much better deliberated prior to initiation of response efforts.

Finally, a brief mention of US military doctrine is warranted to highlight relevant gaps specific to NSAGs and CIV-MIL public health operations. While other national militaries may more substantially address these issues within their formal policies, they are outside the scope of the authors’ expertise and were not considered for this research. Additionally, US service component doctrine was not analyzed, as these are based on higher level guidance and, by design, aligned with higher level joint doctrine.

Joint Publication (JP) 3-57: Civil-Military Operations was updated in 2018 and addresses medical CIV-MIL operations in Annex C to Appendix A.²³ This annex specifically addresses the planning considerations for military medical planners when analyzing mission requirements, and references the importance of interagency collaboration within the USG, as well as including civilian health partners such as WHO and INGOs in the process. While this doctrine provides a well-reasoned approach for joint public health operations in a humanitarian context, there is no discussion of NSAGs and no specific scenarios or case studies mentioned aside from Ebola response and Operation United Assistance in 2014.

JP 3-29: Foreign Humanitarian Assistance was updated in 2019 and “describes the scope and purpose of the DoD foreign humanitarian assistance activities”, to include relationships

with INGOs, private sector partners and other non-USG agencies.²⁴ This document also contains a robust discussion of public health, preventive medicine and internally displaced persons (IDP) to help guide military planners during preparation for Health Services Support within humanitarian operations. Legal issues surrounding certain processes of information sharing and eligibility for medical care are also addressed, as are the humanitarian Sphere Project standards and descriptions of important international aid organizations such as ICRC, multiple UN agencies and the International Organization for Migration.²⁵ Similar to JP 3-57, there is no mention of NSAGs or recommendations for conducting operations where these groups have considerable influence. Training is referenced frequently within JP 3-29, and the importance of including INGOs and other international organizations in the mission planning process is stressed as critical to operational success. The document also outlines DoD activities involved in humanitarian assistance operations such as the Center for Excellence in Disaster Management and Humanitarian Assistance and the Center for Global Health Engagement. While mostly comprehensive, JP 3-29 and JP 3-57 do not include references of specific scenarios to reference within CIV-MIL training events as have been proposed in this study.

The findings of the literature review were consistent with assumptions held prior to initiation of the research: **a doctrinal gap exists in CIV-MIL humanitarian relations regarding relevant joint planning and training considerations for public health operations involving NSAGs.** While public health and NSAGs are extensively addressed in a variety of sources, there is a lack of publicly available, evidence-based documentation on how and why the integration of these two areas should be formally addressed during preparation and training events for CIV-MIL humanitarian operations. In an attempt to help bridge the identified gap between theory

and practice, this study proposes a new planning framework to assist humanitarians and militaries with conceptualizing scenarios and potentially contentious legal and ethical situations that may arise when engaging with NSAGs throughout a complex public health emergency.

METHODS

Development of a Public Health Scenario Framework

A list of five diverse medical scenarios was developed as an initial attempt to produce a practical, historically-informed framework for use in future CIV-MIL training events and guidance. A similar training methodology applicable to public health was not uncovered via literature review. A 2020 study from the British Medical Journal proposed a typology to better define medical CIV-MIL interactions, but the authors state that their typology is not intended to directly address engagement with NSAGs.²⁶

Historically, doctrine and guidance within both the humanitarian community and militaries are based on areas of activity (logistics, medical, intelligence, etc.). Examining operational scenarios within a specific area of activity allows for identification of ethical, legal and technical challenges that may arise within a specific context. By ascertaining limitations and determining what capabilities each group member possesses, civilian actors, military forces and NSAGs can begin to understand the situationally specific alliances that will be required for provision of public health or medical assistance. This research considered various situations that may arise necessitating CIV-MIL interactions with NSAG, and determined that joint

response with NSAGs, material support of NSAGs and third-party collaboration with NSAGs are the most relevant activities that should be addressed.

Natural disasters were intentionally omitted from this framework since the focus is on medical engagements and conflict settings, although depending on the specific context of the humanitarian operation natural disaster particulars may be critical to address in planning efforts. This framework is also not intended to cover every possible situation that may arise throughout a complex public health emergency. The framework is designed to serve as a mechanism to highlight ethical, legal and technical points for discussion and consideration that could support deconfliction of future tensions or mitigation of friction points prior to initiation of a real-world humanitarian response.

The following five operational scenarios represent the initial effort in the development of a standardized methodology that could eventually be included in peacetime CIV-MIL joint exercises as well as pre-deployment trainings for both humanitarians and military forces (see Appendix 1 for a detailed rationale and scenario list with examples presented during virtual interviews):

- 1. Infectious disease / Pandemic response**
- 2. Emergency medical operations as part of urban clearance operations**
- 3. Provision of non-emergency, clinical medical assistance**
- 4. Joint distribution of non-clinical public health assistance**
- 5. Public health & humanitarian operations coupled with intelligence collection**

In order to assess interest and garner critical feedback on this framework, virtual not-for-attribution interviews were conducted with subject matter experts from throughout the humanitarian community, members of academia and current and former members of USG agencies. Interviewee experience included various UN agencies, US DoD, US Department of State (DoS), US Health and Human Services, multiple academic institutions and INGOs such as Save the Children. Potential study participants were identified via the director of the USNWC Humanitarian Response Program, who has an extensive professional network of both civilian and military professionals with experience applicable to this study. Faculty at the Yale Jackson Institute for Global affairs also assisted with identification of potential study participants via previously established relationships.

A standard recruitment email was sent to all participants, along with a consent form detailing the intent of the research and how the interviews would be utilized to inform refinement of the initial scenario list (Appendix 2 & 3). The research protocol was deemed exempt via the Yale Institutional Review Board. A total of 10 interviews were completed, each approximately 45-60 minutes in length. Each interview was recorded via the Zoom platform to facilitate qualitative analysis and to minimize note-taking during the discussions. All interviewees provided affirmative written or verbal consent prior to the start of the interview. The interviews were semi-structured to allow for varied experiences and expertise as well as to stimulate a natural flow of conversation. A general list of interview questions was referenced for the interviews, with slight modifications made depending on the background of each interviewee. Although each interview was necessarily different, certain key questions were asked of all participants in order maintain continuity. Participants were sent a two-page primer

prior to the interview that introduced the rationale for the development of the five scenarios and the list of scenarios (Appendix 1). Each of the scenarios was complemented with real-world examples and additional details to assist the participants in conceptualizing why scenarios were chosen and to highlight important legal and ethical considerations. Points of emphasis during the interviews included NSAGs definition in theory and practical terms, ethical decision processes surrounding CIV-MIL engagement with NSAGs, effectiveness of existing CIV-MIL training opportunities and the evolution of cooperation between humanitarians and militaries.

Interview Analysis

Key informant interviews were analyzed through extensive review of digital recordings and detailed note taking. Full interview transcripts were not created for this study, and qualitative analysis software was not utilized. The approach to analysis was adopted after evaluation of qualitative methods literature, and a modified framework approach was used to accomplish familiarization with the data, identification of key issues, concepts and themes, and finally to assist with interpretation of the interview findings and notes.²⁷ While full transcription of each interview is often the ideal scenario, there are alternative methods within qualitative research that can facilitate proper data management in a reasonable timeframe and support the strategy utilized in this study.²⁸ Steps described in this method include audio recording, reflective journaling post-interview, reviewing the interview recordings in depth, content analysis and thematic review. Data analysis for this study was accomplished through a similar stepwise approach. Interviews were reviewed individually and manual notes taken, with a mixture of verbatim quotations and summary points recorded. These notes were then reviewed

in order to identify themes that emerged from the responses to specific questions asked of each participant.

The interviews were structured to cover two main topic areas: NSAGs and the scenario framework. Discussions and critiques from the interviews were synthesized to form a better understanding of current issues surrounding CIV-MIL humanitarian operations involving NSAGs, and to consolidate recommendations and criticism of the framework.

RESULTS

In an attempt to inform and answer the research questions, interview responses were grouped and analyzed according to topic area and then further classified within a particular theme. Relevant responses were clustered into three themes for NSAGs and three for the scenario framework.

1) NSAGs

a. Definitional Challenges

While each of the study participants was familiar with the concept of a NSAG, there was significant variation in responses when each interviewee was asked to provide their own working definition of what the term encompasses. Unsurprisingly, each participant highlighted some form of separation from an internationally recognized state government, although many remarked that there are often unofficial affiliations that occur 'off the record' where the state

may be providing the funding and the NSAG executing the plan on the ground. Participants commented that NSAGs are currently a nebulous idea:

“(NSAGs are) a well-recognized concept, but ill-defined.”

“One man’s terrorist is another man’s freedom fighter – it’s all about perspective.”

Perspective was an important point for many during the interviews, as classification of a particular group may have political consequences within an operation where humanitarian efforts are underway. One participant from the INGO community noted:

“The term itself is politicized... it is extremely context specific and it depends on who you ask.”

There was broad agreement that one of the biggest challenges in addressing issues surrounding interactions with these groups is the lack of defined parameters of what criteria must be met to label an actor as a NSAG.

There were varied responses regarding whether or not a NSAG are considered ‘violent’ armed actors in the context of a humanitarian action. A USG-affiliated participant stated that NSAGs should not always be considered simply as non-governmental groups with weapons, but should be conceptualized by their ability to influence the effectiveness of the humanitarian community in accomplishing their goals. An interviewee with substantial UN experience described the importance of addressing these definitional challenges:

“One of the biggest shortfalls in engaging with NSAGs is the definitional piece... does it include those who are on terrorist lists?... a lot of the problems stem from the lack of a common definition or a common understanding.”

There was additional disagreement on the scope of organizations that may qualify as NSAG, which seemed to vary with the particular experiences of the interviewee. One expert from academia noted:

“the biggest generalizable factor is their interest in legitimacy amongst both the civilian population and the international community.”

The idea of legitimacy amongst these actors is a concept of critical importance when attempting to engage during CIV-MIL humanitarian operations, as underlying motivations can vary widely depending on the context in which the group operates. One participant included within their definition a *“local ‘cartel’ or networks of illegal activities,”* while another had the opinion that a NSAG is *“not a simple ‘for-profit’ operation.”* Their belief is that a NSAG must have some sort of political agenda even if it is very loosely defined, which was not an opinion shared among all of those interviewed for this study.

Overall, nine of the ten participants commented on the lack of commonly agreed upon definitions surrounding NSAG both generally and within humanitarian settings, and how this has resulted in past frustrations and likely will result in complications during future operations if left unresolved.

b. Value of Historical Precedence

When asked whether or not there is value in addressing historical examples of NSAG when planning or conducting a humanitarian operation, there was general agreement that not accounting for past experiences is a mistake. However, given the incredibly diverse population of NSAGs present globally today, generalizability presents a difficult challenge. The ICRC estimates that “between 60 to 80 million people live under the direct State-like governance of armed groups”.¹⁷ This variability represents a unique situation within CIV-MIL humanitarian operations as simply knowing there are NSAGs present in the vicinity will not provide any significant planning or operational value. One interviewee from academia did see a possible avenue to work through this issue, and stated:

“There is way to look at NSAG today and be able to generalize: Sources of pressure, who do they care about impressing?”

This viewpoint will allow for past experiences involving NSAG to inform future scenario planning, while not explicitly dictating the specifics of the mission, which was a sentiment supported by multiple participants. These groups are in a constant struggle for legitimacy among the local populace, and in many cases with the international community at large. Understanding who NSAGs are looking to appease is a critical component to realize prior to engagement if at all possible, given that each context is unique. There was also a suggestion to begin viewing NSAG in a similar way that the international community views national military forces. Referencing a tiered-type classification system:

“We don’t look at all militaries as the same, but we do have criteria for what makes up a national army.”

This approach would allow for a basic separation of military forces by level of organization, funding, etc., and could be broadly applicable when analyzing specific NSAGs.

Other respondents were more pessimistic about the overall value of analyzing the past behavior of NSAGs, viewing differences as largely personality based as well as widely varying levels of knowledge, training and technical ability even among groups that seem quite similar from an outsider's perspective. There are also examples of evolutions within NSAGs over time, such as the Taliban changing behavior and developing different agendas as the years progress. An interviewee with experience in the Middle East remarked:

"It is very difficult to ever come into any of those situations, from the outside, thinking you have a good enough understanding of the complexities on the ground."

The differences between Yemen, Syria and Afghanistan were brought up in multiple discussions as settings that while on the surface may seem like similar crises in fact have little commonality due to vast differences in international military involvement and whether or not a functioning state government actually exists. While cultural sensitivity to regional variation is increasingly being recognized as critical to the success of humanitarian operations, one interviewee declared:

"We don't build a humanitarian force to work within that environment."

This was discussed more frequently in regard to militaries, but was also acknowledged by those with experience in the civilian humanitarian sector as an ongoing problem. The responses support the assertion that within the field of CIV-MIL humanitarianism there is a lack of

documentation and institutional knowledge surrounding NSAG, and that the CIV-MIL field needs a more interdisciplinary historical perspective.

c. Ethics and IHL

Ethical issues were of particular interest to many of the participants, especially in terms of application of and adherence to international humanitarian law (IHL) by NSAGs. In terms of policy and specific guidance, however, there were very few concrete examples discussed. Most of the ethical scenarios that arise are dealt with at the sub-national level within the humanitarian community, and lower levels of military organizations (i.e. – below the traditional Western military Brigade or Division Commander level of authority). There was general support for the idea that many of these matters that could be considered ethically ‘questionable’ are intentionally left vague as to allow those at lower levels to make decisions in real time based on the best available information. A participant from the humanitarian sector observed:

“There is an intentional degree of flexibility that you get through fuzzier definitions; if you get overly precise then there is a rigidity to the application of that doctrine or guidance in many different contexts.”

One interviewee with DoD experience also indicated the same sentiment as they described ambiguous orders or restrictions that are put in place, with room for significant latitude at the lowest levels in terms of engagement with NSAGs in certain contexts but not others. The idea of ‘shared understanding’ arose in multiple interviews, which supports the idea of higher-level policies supporting the freedom for those with up-to-date information to make their own decisions in real time. This can, however, lead to decisions being made in the heat of the

moment that could be questioned from both legal and ethical standpoints after the fact. This supports the argument that those making the choices should be properly trained and informed about scenarios they are likely to encounter during a crisis.

There was concern among multiple interviewees about the application of IHL as it relates to NSAGs. One participant remarked that NSAGs are often unlikely to adhere to IHL in many cases for political or personal reasons:

“They weren’t a part of creating IHL; if they had a more active hand in creating it (IHL) they would be more willing to follow it.”

There are organizations such as Geneva Call that have done extensive engagement with NSAGs on IHL which has allowed much greater insight in recent years, as well as the previously mentioned work by ICRC.²⁹ While a positive sign in many ways, the reality remains that even though high-level members of certain NSAGs have respect for IHL in some cases, the level of awareness and interest in IHL often declines with increasing distance from top leadership. This was raised as an issue that must be considered, as although a NSAG may have a documented stance on IHL publicly those members interfacing directly with CIV-MIL humanitarian operations may have different motivations altogether.

An issue was also raised by one interviewee regarding IHL and the responsibilities of an occupying force when it comes to provision of humanitarian aid. Referring to the current crisis in Syria:

“I think there needs to be a better identification inside the USG in general about what are our responsibilities as the controlling (occupying) power when we control a territory

in a foreign country? What are our responsibilities in terms of providing healthcare to the population that is physically under our control?"

This is an important consideration during future complex emergencies, as often the ethical decision-making process and application of IHL is inconsistent among CIV-MIL actors as well as NSAGs, and perhaps discussing these issues beforehand may alleviate certain difficulties.

While ethically contentious issues may not ever be amenable to formalized policy or doctrine, ethics should be discussed openly and honestly in various forums such as CIV-MIL training events and humanitarian conferences. Multiple interviewees acknowledged that ethical decision making will always be inherently subjective and context specific:

"You have to be realistic about where you're trying to get, and if where you're trying to get is a better place then it may be necessary to cut an ethical corner here and there to get there... it's a subjective judgement."

"If you know you are going to run into ethical situations, contend with it up front honestly and openly so when those situations occur you are not hiding behind the curtain, and it has already been established what you are doing."

There were also multiple instances where medical ethics were explicitly mentioned, which can in some cases act as a bridge between the humanitarian and military communities. Medical professionals on both sides have the same desire: to save lives and alleviate suffering. While each side will have their own mission objectives that are context specific, in a public health emergency there is often a common ground that is identified in order to provide lifesaving interventions. This was clearly demonstrated during the 2014 international response

to Ebola in West Africa. Multiple interviewees discussed the importance of this response and the unprecedented cooperation that ensued between INGOs, military forces, host nation governments and local actors. The one important caveat to the Ebola response as it relates to this study is that the outbreak did not occur in an active conflict setting where NSAGs held significant power. Had this been the case, the prevailing sentiment among interviewees is that legal and ethical compromises with NSAGs would likely have been made and unorthodox approaches utilized when faced with a rapidly evolving complex crisis such as an infectious disease outbreak. The Ebola outbreak in the Democratic Republic of the Congo (DRC) beginning in 2018 has exemplified the fears surrounding infectious disease response in a conflict zone, and researchers have demonstrated a correlation of increased Ebola incidence per capita with increasing rates of conflict within certain regions of DRC.³⁰

2) Scenario Framework

a. Gaps in Public Health Specific CIV-MIL Training

The general response was positive across participants when presented with the basic framework that was developed for CIV-MIL complex public health emergencies involving NSAGs. There were no other frameworks or similar ongoing efforts identified by the interviewees, although UNOCHA was identified as an organization that recognizes the importance of NSAG engagement in health emergencies and is working toward more effective training in the CIV-MIL community. Humanitarian agencies were noted to have made substantially more progress on NSAG engagement when compared to the USG which has little formalized policy on NSAGs, particularly within the Military Health System.

Joint training events were identified as desired and are available in many cases, but difficulties remain on ensuring the right mix of stakeholders are attending to maximize the outcome. In general, the idea of a training framework to be utilized in a pre-deployment setting or in peacetime joint exercises was very well received and multiple experts indicated their belief that the time to act is now:

“This is the kind of specialized guidance that CIV-MIL has been lacking for far too long... to focus in on PH as a specific domain that requires specific tailored guidance, I think is extremely welcome and could not be more timely given that the COVID crest is going to wane over the next 1.5 years and now is the time to frontline public health as a priority in all sectors, including CIV-MIL coordination.”

“I think there is a demand signal out there, but it’s been neglected because most humanitarians aren’t medical and we don’t necessarily come from the public health side so we don’t design trainings that meet this gap – but there is definitely a gap.”

The idea of separating natural disaster contexts from those situations that involve a significant public health component was understood in a logical sense, but multiple participants voiced their concern that if natural disaster scenarios were completely excluded during joint training events that critical discussion would not occur. Situations will most likely arise that encompass both domains, particularly with increasing population displacement in the face of climate change and environmental degradation. There is also the risk of alienating certain segments of the humanitarian response community, who may feel as they are not being consulted and thus may be less likely to engage in these public health-specific discussions.

b. Individual Scenario Commentary

i. Infectious Disease / Pandemic Response

This scenario was the least controversial and received the fewest comments overall. All participants agreed that infectious disease outbreaks represent a unique challenge to the humanitarian community and CIV-MIL operations. Whether the responses would have been the same in 2019 vs 2021 is impossible to know, but there is no doubt that the COVID-19 pandemic has solidified the importance of identifying and addressing gaps in infectious disease response planning on a global scale. A participant with UN ties stated:

“We are desperately trying to come up with better guidance for humanitarians engaging with the military, especially in pandemic response.”

There were additional cautions noted within this scenario if engagement with NSAGs is necessary, specifically surrounding misinformation and NSAGs trying to disrupt medical operations in the areas under their control or influence:

“Misinformation is a huge challenge in infectious disease responses at the community and NSAG level.”

Given that these groups are struggling for legitimacy among the local population, they may actively attempt to spread false information to discredit foreign aid workers or military forces which may limit humanitarian access and potentially prolong or worsen an outbreak.

ii. Emergency Medical Operations as Part of Urban Clearance

There was significant disagreement among the interviewees on whether this scenario should be specifically urban in nature, or be broadened to encompass emergency medical operations in all settings. The urban environment was recognized as extremely important to consider during planning sessions, as it contains particular dangers and complications that need to be addressed prior to an operation. The 2016-2017 Battle of Mosul trauma response is a critical case study for this scenario, as the humanitarian community was largely split into two camps about whether the proposed level of engagement with armed forces was appropriate in the first place.³¹ On the other hand, multiple participants were concerned that if the focus was on only urban environments CIV-MIL planners may become too narrowly focused and miss important details that fall outside of urban boundaries:

“By pigeon-holing urban you can effectively limit military planners – they will basically pull out the ‘urban warfare’ guide.”

Additionally, a participant with DoD background referenced the fact that many operations will quickly transition between rural and urban settings, necessitating a flexible and mobile approach to emergency medical care in a CIV-MIL environment. Overall, a majority of participants felt that this scenario should be broadened to encompass emergency medical care in all operational environments, not just urban:

“I wonder why you have framed this as urban clearance, as opposed to emergency medical operations in armed conflict more broadly? ... I’m thinking of Afghanistan and providing medical aid to wounded Taliban fighters and managing relations with the international coalition.”

Regardless of whether the framework is altered to broaden the scenario to include all operational environments, the fact remains that the urban context is unique as it pertains to NSAGs and the consequences of existing doctrinal gaps have proven deadly in the past. The 1993 US-led Operation Gothic Serpent, widely known as ‘Black Hawk Down’, reveals the dangers of underestimating the potential lethality of a NSAG in an urban environment where they own popular support. After Somalia, the USG became wary of involvement in other humanitarian crises such as Rwanda and Darfur and the loss of American lives “contributed to a reluctance to engage for purely humanitarian reasons where there was a reasonable risk of combat”.³² The lingering trauma of this operation is still influential in USG humanitarian policy decisions nearly two decades later.

iii. Provision of Non-emergency, Clinical Medical Assistance & Joint Distribution of Non-clinical Public Health Assistance

These two scenarios were each recognized as important to consider by the participants, but did not receive a large number of critiques or additional recommendations. One concern raised relates to provision of non-emergency clinical assistance and the increasing number of displaced persons on a global scale:

“This is the context we are seeing all over the world today that USG isn’t involved in: humanitarian action for migrant populations (but the US is involved in its’ own border crisis) that has major public health implications. This will become a major issue for the US military in the future and we will not be able to not participate in this given how migration is expanding globally.”

There were also concerns about how to prioritize certain populations given that priorities often differ between the CIV-MIL teams providing aid and the host nation population:

“In the real world on the field, USG health resources are often limited. Not because we’re bad people but because we are far from home... host country people (government or NSAG) ... they may want us to prioritize certain populations or medical actions that our own experts don’t agree with, so how do you work that out?”

The issue of prioritization and communication with the local populations was raised frequently, as it was recognized by many participants that humanitarian operations often do not address the important factor of community perception, meaning examining how the external actors are perceived by the local populace. Particularly in these two scenarios, community perception of NSAG will be critical to understand and address if these public health interventions are to be successful.

iv. Public health & humanitarian operations coupled with intelligence collection

This scenario was by far the most controversial, with significant concern about how it would be received by the non-military community if framed inappropriately. The infamous example that has shaped perception on this issue is the US-led effort to locate Osama bin Laden and the use of a vaccination campaign as cover for an intelligence gathering operation within Pakistan.³³ The eventual exposure of USG involvement resulted in backlash against vaccinators in the region and is implicated as a major setback in efforts to eradicate polio within the region. As the fallout from this operation is still fresh in the minds of many in the humanitarian

community, any discussion of intelligence or data collection that is coupled with provision of aid must be approached with extreme caution.

Although controversial, many interviewees highlighted the importance of directly addressing this topic in CIV-MIL training events and in mission planning discussions. The importance of overt discussion was of critical importance, so that all parties involved can make informed decisions on their comfort with the plan. This issue becomes even more complicated when partnering with NSAG for humanitarian operations:

"I do think there is value in discussing it (Scenario #5) ... NSAGs are far more sophisticated in mining information than we would usually give them credit for... this has caused humanitarians to rethink their engagements."

The main risk identified by members of the humanitarian community is the potential of alienation from the affected communities they are trying to assist. If these vulnerable communities perceive the outside agencies as spies, then access will be limited and those in need may suffer the fatal consequences. As a counter point, the question was raised if intelligence collection is inherently inappropriate as long as it is not tied directly to the provision of medical care or humanitarian aid? This highlights the importance of having these discussions prior to initiation of response efforts, as while some agencies may see no problems with data collection others may vehemently object if they feel the information could be used for nefarious purposes at a later date.

There should also be open discussion surrounding differences between intelligence collection and the routine military process of relaying certain information along the chain of

command known among US forces as Commander's Critical Information Requirements (CCIRs).³⁴ A military Commander establishes a set of information requirements that they deem necessary to enable timely decision-making during mission execution, and subordinates are required to provide this information in the most expedient manner possible. These requirements may not sit well with humanitarians involved in joint operations who may view the CCIRs as an avenue for military forces to gather intelligence on the local populace for purposes other than provision of relief. If discussions of CCIRs were broached in training events and other forums, perhaps civilian agencies would be more understanding of the requirements of militaries during CIV-MIL operations in the field. Regardless of the disagreement on the best way to handle this scenario among the participants, there were no instances where the interviewee recommended removing this scenario from the list altogether and many said it is critical to address as soon as possible during the planning process.

c. Relationship building and trust

The issue of trust between civilians and military forces was an issue that was uncovered during multiple interviews, although it was not specifically addressed by one particular line of questioning. This same topic emerged across many interviews, highlighted particularly by those with significant field experience in CIV-MIL operations. There is wide recognition that CIV-MIL humanitarian relationships have been trending positively in recent years, but there are still deep seeded issues that can only be addressed with intentional action:

“There is a strong concern among humanitarian actors that isn’t always borne out by evidence, or let’s say hasn’t been documented by evidence, in terms of the compromises that working with military actors produce by that relationship.”

“You can only build the trust over time; you can’t surge that in... we don’t keep staff on the ground for extended periods of time.”

Trust was tied to relationship building by many of the interviewees, and joint training events prior to a crisis were identified as a way to bridge the cultural gap between the two worlds. Given the high turnover rate in military assignments and throughout the humanitarian community, relationships must be intentionally cultivated and maintained. References were made to misconceptions about capabilities for both sides, with militaries tending to underestimate humanitarian capabilities and civilians overestimating militaries. Cultural differences abound between the two groups and even across the USG interagency among those who may not be used to working in close proximity to military forces. One former USG official remarked about these cultural differences:

“I found it, in many ways, easier to deal with the Iraqis than the US Military.”

Although differences are evident between the different groups, multiple respondents noted that face-to-face meetings and events that are designed to foster collaborative discussion and comradery can result in a much smoother emergency response, as relationships have been established and those involved have already developed a shared sense of purpose in their own way.

There was an optimistic outlook for the future of CIV-MIL humanitarian operations as long as efforts are made to address identified shortfalls such as engagement with NSAGs and lack of stakeholder diversity at CIV-MIL training events. Also frequently cited was that while many organizations, particularly within the INGO community, may state their direct opposition to cooperation with military actors, the reality is quite the opposite:

“We’ve made huge strides since early 2000’s, both on natural disaster response and how we work with militaries, which I think has helped move us toward a more positive engagement with military actors within complex emergencies... the reality is there is nowhere in the world where we are not operating together (humanitarians and militaries).”

This opinion was also prevalent when discussing CIV-MIL interactions with NSAGs, and how there will continue to be a need for understanding the interests of each party prior to conducting a joint public health operation principally within a non-international conflict setting. The increased prevalence and variety of NSAGs across the humanitarian space will necessitate engagement at a more frequent rate, and the participants agreed that the CIV-MIL community must better prepare for this eventuality.

DISCUSSION

Through analysis of the interviews conducted with subject matter experts from humanitarian organizations, USG agencies and academia, this study sought to better understand the current challenges and gaps surrounding CIV-MIL public health operations

occurring in unstable locations populated by NSAGs. **The interview findings coupled with the literature review demonstrate widespread agreement that NSAGs and health threats represent a critical factor to address within these complex humanitarian emergencies, but little documented guidance or training material to effectively accomplish the task.** There was also significant support for a scenario-based training framework that could be utilized in joint CIV-MIL training events. A recent article published in Joint Force Quarterly discusses the prominent role of US military involvement in disaster response and humanitarian operations that is likely to continue with the increasing frequency of major global crises.³⁵ The authors recommend development of tailored training for use within the Military Health System to systematically address shortfalls within public health and medical training for these operations.

The definitional challenges surrounding NSAGs signify the importance of establishing which of these groups may be willing to partner with a CIV-MIL humanitarian operation, and which groups are unwilling to engage or may actively oppose humanitarian action in the areas under their influence or control. There are organizations and researchers currently working through the many legal issues of cooperating with NSAGs as it relates to IHL, but by no means has a consensus been reached at the international level on best practices for engagement.³⁶ A relevant, working definition for NSAGs in the context of public health humanitarian operations should encompass two points at a minimum: **1) the group is not directly affiliated with an internationally recognized state government; 2) the group has the potential to deny, delay, or disrupt humanitarian assistance operations in the area of concern.** If a universal definition is created that is narrower in scope there is risk of excluding important actors in certain contexts that should be addressed during the planning process and throughout the operation.

Based on the positive responses from interviewees, a framework of this style with a public health and medical focus would likely be well received among both the humanitarian community and military forces. The framework could be utilized as a supplement to or a basis for existing and future CIV-MIL training events. An ideal starting point may be the Civilian-Military Humanitarian Response Workshop that is hosted annually by Brown University and the USNWC.³⁷ While the audience may not be explicitly populated by physicians or public health experts, the workshop could act as an additional clearing house for the framework to receive additional criticism and refinement. Given that the target audience for the framework includes civilian INGOs, there would need to be acceptance from within UNOCHA as well as they typically function as a conduit for information exchange among the CIV-MIL actors. Although the framework was not presented in a finalized form that is ready to be included in guidance or doctrine, there was broad agreement that the topic is of critical importance and that this discussion could not come at a more critical time.

Study Limitations

Although an in-depth literature and doctrine review was conducted, a true systematic review was not performed for this study. As such, we may have unintentionally missed certain documents that could have helped inform the research. Fortunately, there are recent studies and articles highlighting much of the relevant guidance documents utilized in the humanitarian CIV-MIL community, so there is less concern that a major omission was made within that body of evidence.

While ten interviews provided for a variety of experiences and opinions to be examined, this relatively small number leaves potential for biased responses. There were certain voices that were absent from the research, particularly from within the INGO community and non-Western organizations. There was also no conversation with members of non-US governments or militaries, which again may introduce bias based on experiences specific to the USG over the last few decades.

Future Directions

The guidance documents within the CIV-MIL community surrounding NSAGs and public health emergencies should be revised with a focus on integration of the two concepts. Multiple organizations, including UNOHCA and ICRC, are actively involved in efforts to develop recommendations and best practices surrounding engagement with NSAGs. Other international medical organizations are working on similar issues for use during complex public health emergencies. However, the fact remains that existing guidance does not adequately address CIV-MIL public health operations in the presence of NSAGs and updates are required in order to ensure institutional knowledge and critical planning factors are captured and considered.

The scenario framework should be propagated among additional stakeholders within the humanitarian network for additional examination and analysis. Multiple interviewees suggested that medically-focused INGOs will be important voices in this discussion, with Médecins Sans Frontières (Doctors Without Borders) and the International Medical Corps mentioned explicitly. This would likely be best accomplished through UNOCHA coordination, or

through academic institutions acting as a neutral middle-ground for civilians and members of military forces. Ideally, UNOCHA or the Brown-USNWC partnership could utilize a refined version of this framework as an engagement tool during future CIV-MIL workshops. Military sponsored training events are also an ideal place to field-test this framework, although intentional efforts must be made to ensure members of civilian organizations are in attendance. Training events and schools within the US Military Health System or other national military medical forces are another potential avenue for propagation of this framework.

This study represents an important first step in addressing shortfalls within the CIV-MIL humanitarian community regarding the substantial influence of NSAGs during current and future complex humanitarian emergencies. The many unique aspects of engagement with NSAGs must be acknowledged in public forums and joint training events. By utilizing a basic training framework that is historically informed and flexible for use across multiple contexts, it is possible to address ethical, legal and technical challenges inherent in these interactions in a more systematic manner. Addressing these issues in a collaborative setting will allow joint CIV-MIL public health operations to maximize the provision of humanitarian assistance while limiting problematic friction points identified during previous response efforts.

REFERENCES

1. Michaud, J., et al. (2019). Militaries and global health: peace, conflict, and disaster response. *Lancet* (London, England), 393(10168), 276–286. [https://doi.org/10.1016/S0140-6736\(18\)32838-1](https://doi.org/10.1016/S0140-6736(18)32838-1).
2. Boland, S. T., McInnes, C., Gordon, S., & Lillywhite, L. (2021). Civil-military relations: a review of major guidelines and their relevance during public health emergencies. *BMJ military health*, 167(2), 99–106. <https://doi.org/10.1136/bmjilitary-2020-001505>.
3. Hirschfeld K. (2017). Failing States as Epidemiologic Risk Zones: Implications for Global Health Security. *Health security*, 15(3), 288–295. <https://doi.org/10.1089/hs.2016.0077>.
4. Sharp J. (2021). Yemen: Civil War and Regional Intervention. U.S. Congressional Research Service (R43960); Available: https://www.everycrsreport.com/files/20190917_R43960_0ae8aef063532aa48081bbedecd442b10277aa42.pdf [Accessed: April 22, 2021].
5. UN Office for the Coordination of Humanitarian Affairs – Yemen. (n.d.). Available: <https://www.unocha.org/yemen/about-ocha-yemen>.
6. Deadly Consequences: Obstruction of Aid in Yemen During COVID-19 | Human Rights Watch. (2020). Available: <https://www.hrw.org/report/2020/09/14/deadly-consequences/obstruction-aid-yemen-during-covid-19> [Accessed: April 22, 2021].
7. World Food Programme begins partial suspension of aid in Yemen | WFP. (2019). Available: <https://www.wfp.org/news/world-food-programme-begins-partial-suspension-aid-yemen> [Accessed: April 22, 2021].
8. Yusufzai, A. (2020). Efforts to eradicate polio virus in Pakistan and Afghanistan. *The Lancet Child & Adolescent Health*, 4(1), 17.
9. Protecting lifesaving immunization services during COVID-19: New guidance from WHO | WHO. (2020). Available: https://www.who.int/immunization/news_guidance_immunization_services_during_COVID-19/en/ [Accessed: April 22, 2021].
10. UN Office for the Coordination of Humanitarian Affairs - Humanitarian Civil-Military Coordination. (n.d.). Available: <https://www.unocha.org/es/themes/humanitarian-civil-military-coordination> [Accessed: April 22, 2021].
11. UN Office for the Coordination of Humanitarian Affairs – UN-CMCoord Field Handbook. (2018). Available: <https://www.unocha.org/publication/un-cmcoord-field-handbook> [Accessed: April 22, 2021].

12. UN Office for the Coordination of Humanitarian Affairs - Oslo guidelines: guidelines on the use of foreign military and civil defence assets in disaster relief. (2007). Available: <https://www.unocha.org/publication/oslo-guidelines-use-foreign-military-and-civil-defence-assets-disaster-relief> [Accessed: April 22, 2021].
13. UN Office for the Coordination of Humanitarian Affairs - Guidelines on the use of military and civil defence assets to support United Nations humanitarian activities in complex emergencies (2006). Available: <https://www.unocha.org/publication/guidelines-use-military-and-civil-defence-assets-support-united-nations-humanitarian> [Accessed: April 22, 2021].
14. UN Office for the Coordination of Humanitarian Affairs - Civil-Military guidelines & reference for complex emergencies. (2011). Available: <https://www.unocha.org/publication/civil-military-guidelines-and-reference> [Accessed: April 22, 2021].
15. UN Office for the Coordination of Humanitarian Affairs – IASC non-binding guidelines on the use of armed escorts for humanitarian convoys. (2013). Available: <https://www.unocha.org/publication/iasc-non-binding-guidelines-use-military-or-armed-escorts-humanitarian-convoys%E2%80%9D> [Accessed: April 22, 2021].
16. UN Office for the Coordination of Humanitarian Affairs – Humanitarian Negotiations with Armed Groups: A Manual for Practitioners. (2006) Available: <https://www.unocha.org/publication/humanitarian-negotiations-armed-groups> [Accessed: April 22, 2021].
17. International Committee of the Red Cross - ICRC Engagement with Non-State Armed Groups: Why, how, for what purpose, and other salient issues. (2021). ICRC Position Paper. Available: https://www.icrc.org/sites/default/files/wysiwyg/Activities/Humanitarian-diplomacy/icrc_engagement_with_non-state_armed_groups_position_paper.pdf [Accessed: April 22, 2021].
18. Kamradt-Scott, A., Harman, S., Wenham, C., & Smith III, F. (2015). Saving lives: the civil-military response to the 2014 Ebola outbreak in west Africa. The University of Sydney.
19. Operation United Assistance: The DoD Response to Ebola in West Africa | JCOA. (2016). Available: https://www.jcs.mil/Portals/36/Documents/Doctrine/ebola/OUA_report_jan2016.pdf [Accessed: April 22, 2021].
20. Telford, J., & Cosgrave, J. (2006). Joint evaluation of the international response to the Indian Ocean tsunami: Synthesis report. Tsunami Evaluation Coalition (TEC).
21. Lidy, A. M., & Kunder, J. (2005). Large-scale military humanitarian assistance. Combatant Command Support Program; Carlisle, PA.

22. Keen, P. K., Elledge, M. G., Nolan, C. W., & Kimmey, J. L. (2010). Foreign disaster response: Joint task force-Haiti observations. Army Combined Arms Center Fort Leavenworth, KS. Military Review.
23. Joint Chiefs of Staff (2018). Joint Publication 3-57: Civil-Military Operations.
24. Joint Chiefs of Staff (2019). Joint Publication 3-29: Foreign Humanitarian Assistance.
25. The Sphere Handbook: Humanitarian Charter and Minimum Standards in Humanitarian Response. (2018). Sphere Project. Available: <https://handbook.spherestandards.org/en/sphere/#ch001> [Accessed: April 22, 2021].
26. Horne, S., & Boland, S. (2020). Understanding medical civil-military relationships within the humanitarian-development-peace 'triple nexus': a typology to enable effective discourse. BMJ military health, jramc-2019-001382. Advance online publication. <https://doi.org/10.1136/jramc-2019-001382>.
27. Pope, C., Ziebland, S., & Mays, N. (2000). Qualitative research in health care. Analysing qualitative data. BMJ (Clinical research ed.), 320(7227), 114–116. <https://doi.org/10.1136/bmj.320.7227.114>.
28. Halcomb, E. J., & Davidson, P. M. (2006). Is verbatim transcription of interview data always necessary?. Applied nursing research: ANR, 19(1), 38–42. <https://doi.org/10.1016/j.apnr.2005.06.001>.
29. Jackson, A. (2016). In their words: Perceptions of armed non-state actors on humanitarian action. Geneva Call, Geneva.
30. Kraemer, M., et al. (2020). Dynamics of conflict during the Ebola outbreak in the Democratic Republic of the Congo 2018-2019. BMC medicine, 18(1), 113. <https://doi.org/10.1186/s12916-020-01574-1>.
31. Spiegel, P. B., Garber, K., Kushner, A., & Wise, P. (2018). The Mosul trauma response: A case study. Centre for Humanitarian Health: Johns Hopkins. Available: http://hopkinshumanitarianhealth.org/assets/documents/Mosul_Report_FINAL_Feb_14_2018.pdf [Accessed: April 22, 2021].
32. Dotson, P. B. (2016). The Successes and Failures of the Battle of Mogadishu and Its Effects on US Foreign Policy. Channels: Where Disciplines Meet, 1(1), 3.
33. Mullaney, A., & Hassan, S. A. (2015). He led the CIA to Bin Laden—And unwittingly fueled a vaccine backlash. National Geographic, 27.

34. The Joint Staff J7 (2020). Commander's Critical Information Requirements (CCIRs): Insights and Best Practices Focus Paper. Fourth Edition.
35. Reed, P. L. & Kirsch, T. D. (2021). Military Health System Preparedness in Humanitarian Action. Joint Force Quarterly, 100 (1st Quarter, January 2021).
36. Gillard, E. C. (2017). Humanitarian action and non-state armed groups: the international legal framework. The Royal Institute of International Affairs: Chatham House.
37. Levine, A. C. & Polatty, D. P. IV. (2017). Civilian-Military Humanitarian Response Workshop Summary Report. Workshop Reports. 1. Available: <https://digital-commons.usnwc.edu/workshop-reports/1> [Accessed: April 22, 2021].

APPENDIX 1

Slide #1

Rationale –

CIV-MIL-NSAG intersection within Public Health/Medical Operations + Conflict

- Historically– doctrine/guidance developed based on areas of activity
- Operational scenarios within the area of activity– helps us identify legal, ethical and technical challenges related to that area of activity against operational context
- What activity and what context?
 - Determines contextually specific limitations
 - What does each member know how to do, and what capabilities do they possess?
 - What skills are provided from each side?
 - Ethical and technical contexts– transactional alliances
- Mandate against Mission
 - Collision of mission objectives among multiple stakeholders
 - Identify mutual primary and secondary objectives in the temporary alliance
 - Often will be timebound and situation specific (interests may temporarily align)
- Starting from things we know we can do– MIL, HUM and NSAG begin to understand the “field of intersection”

Slide #2

Our 5 Operational Areas/Scenarios, and ethically contentious interactions within each:

- i. **Infectious disease (pandemic) response** – in the context of ongoing conflict or engagements as a result of pandemic response
 - Ebola, Zika or COVID-19; Polio eradication campaigns in Yemen and Afghanistan – transboundary threats and national security concerns
- ii. **Emergency medical operations as part of urban clearance** – how do we deal with the issues of applying IHL (Geneva conventions)? Does IHL adequately cover dealings with NSAG? Ethical considerations for military forces outside of the established Rules of Engagement?
 - Mosul, Iraq – coalition of US, Iraqi and Kurdish forces and provision of trauma care for CIV population through CIV-MIL-NSAG coordination
- iii. **Provision of non-emergency, clinical medical assistance**, and equity questions within inherently unequal disaster scenarios – politics vs real-world assessments; relationship building can be critical to success, but are relationships appropriate (legally and ethically)?
 - Deployment of USN hospital ship in tsunami response – local GOV may not be in control; who is in charge of coordinating treatment plans on shore?
- iv. **Joint operations and distribution of (non-clinical) public health assistance** - sharing of data with NSAGs – biometrics, assessment counts, call detail records, etc. If we know that NSAGs will operate as multi-purpose, how do we engage and potentially share information when we have this knowledge if the goal is increased stability in the region and provision of humanitarian aid?
 - Iraq/Syria – NFI distribution (including cash-based interventions) in partnership with Kurdish forces
 - Central Africa – Protection and WASH needs of hundreds of thousands of IDPs with NSAG as major influence in the region
- v. **Use of public health and humanitarian operations coupled with intel collection** - is potential backlash worth the risk? Are we prioritizing short term gains and possibly sacrificing long-term relationships and trust?
 - Pakistan – Neptune Spear and ripple effects of intelligence gathering under the guise of a vaccination campaign

APPENDIX 2

Sample Recruitment E-mail Text

Hello,

My name is A.J. Chambers and I am a second-year student at Yale School of Public Health and a Major in the US Army. I am excited to work with you and to learn more about your experiences in the CIV-MIL arena which will help inform my Master's thesis research.

The purpose of this project is to conduct semi-structured interviews with subject matter experts in the field of CIV-MIL relations and analyze themes and gaps that emerge regarding dealings with Non-State Armed Groups (NSAG), with a focus on legal and ethical implications.

I am particularly interested in your personal experiences with NSAG, and the intersection of militaries and humanitarian organizations with these actors. Given the fact that much of the current UN and USG doctrine/guidance does not address medical or public health-related complex emergencies, I also hope to focus on these situations rather than natural disaster scenarios, but this will of course depend on your experience and the flow of our conversation. I am particularly interested in the ethical implications of interactions with NSAG during a public health emergency in conflict settings, where conditions may necessitate establishing unorthodox relationships in order to conduct infectious disease surveillance, emergency medical care, or other medical operations.

The overall goal of my project is to conduct interviews with a range of individuals representing USG (DOD, HHS, DOS), Humanitarian organizations (INGO and UN agencies), and academics as well as to review current literature and international guidance documents in order to identify relevant gaps that exist. I will then synthesize the findings in order to inform a basic training framework. Hopefully this will result in inclusion of legal, ethical and moral decision-making strategies for civilian and military personnel interacting with NSAG during a protracted public health emergency within a conflict setting (such as Ebola in West Africa, Cholera outbreaks in Yemen, COVID-19 and IDP, etc.).

I am happy to answer any questions or concerns you may have about the project, and would be happy to discuss via email or over the phone. Your identity will be kept anonymous in the final manuscript, with only agency identification used (i.e. – no name, rank, position held).

If you are interested in participating, I will send you a consent form that has been approved by Yale University with some additional information on what to expect. The interviews will be conducted via Zoom - I will send a calendar invite with the proper link once we have agreed on a date/time that works.

Thank you!

APPENDIX 3

INFORMATION SHEET FOR PARTICIPATION IN A RESEARCH STUDY

YALE UNIVERSITY
(IRB Protocol# 2000030202)

Study Title: *The Intersection of Humanitarians, Militaries and Non-State Armed Groups during Public Health Emergencies in Conflict Settings: A Recommended Framework for Future Doctrine*

Principal Investigator (the person who is responsible for this research):

A.J. Chambers, DVM; [REDACTED]; [REDACTED]@yale.edu

Research Study Summary:

- We are asking you to join a research study.
- The purpose of this research study is to conduct semi-structured interviews with subject matter experts in the field of CIV-MIL relations and analyze themes and gaps that emerge regarding dealings with Non-State Armed Groups (NSAG). I am particularly interested in personal experiences with NSAG, and the intersection of militaries and humanitarian organizations with these actors. Given the fact that much of the current doctrine/guidance does not address medical or public health-related complex emergencies, I also hope to focus on these situations rather than natural disaster scenarios, but this will be dependent on the participants experiences. The overall goal is to discuss personal experiences of the interviewee, gaps that exist and why, and synthesize the findings in order to develop a basic framework for legal, ethical and moral decision-making for civilian and military personnel interacting with NSAG during a protracted public health emergency within a conflict setting (such as Ebola in West Africa, Cholera outbreaks in Yemen, COVID-19 and IDP, etc.).
- Study activities will include: **Virtual Interviews (via Zoom or other agreed upon platform) will be conducted for approximately 45-60 minutes. The interviews will be recorded and kept on a local computer for further review, and will not be uploaded to any cloud-based software or external websites.**
- Your involvement will require 45-75 minutes for the recorded interview.
- We do not expect any risks from taking part in this study. All responses will be kept anonymous and no personally identifiable information will be collected during the interview.
- The study may have no benefits to you, other than interesting discussion and reflection on past experiences. The benefit to the broader civilian and military community will, hopefully, entail identification of overarching themes that are urgently needed to address gaps in international CIV-MIL guidance documents.

- Taking part in this study is your choice. You can choose to take part, or you can choose not to take part in this study. You also can change your mind at any time. Whatever choice you make will not have any effect on your relationship with Yale School of Public Health.
- Ask the study staff questions about anything you do not understand. Once you understand the study, we will ask you if you wish to participate; if so, we will continue with the study procedures described in this form.

Are there any costs to participation? Will I be paid for participation?

You will not have to pay for taking part in this study. You **will not** be paid for taking part in this study.

How will you keep my data safe and private?

All of your responses will be **anonymous**. Only the researchers involved in this study and those responsible for research oversight (such as representatives of the Yale University Human Research Protection Program, the Yale University Institutional Review Boards, and others) will have access to any information that could identify you that you provide. We will share it with others if you agree to it or when we have to do it because U.S. or State law requires it.

Each interview participant will be assigned a random ID number to be used during qualitative analysis of the interview content. All files will be password protected on a local computer system (and not uploaded to any external websites or platforms).

When we publish the results of the research or talk about it in conferences, we will not use your name.

We may share information about you with other researchers for future studies, but we will not use your name or any other identifiers. We will not ask you for any additional permissions.

What if I want to refuse or end participation before the study is over?

Taking part in this study is your choice. You can choose to take part, or you can choose not to take part in this study. You also can change your mind at any time. Whatever choice you make will not have any negative consequences.

Who should I contact if I have questions?

Please feel free to ask about anything you don't understand.

If you have questions later or if you have a research-related problem, you can call the Principal Investigator at [REDACTED]

If you have questions about your rights as a research participant, or you have complaints about this research, you call the Yale Institutional Review Boards at (203) 785-4688 or email hrpp@yale.edu.

Would you like to participate?

Please feel free to respond directly via email, or provide verbal consent via the phone number listed above