# Personal Disaster Preparedness Levels In the National Guard

A Monograph

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**Abstract**

Personal Disaster Preparedness Levels in the National Guard, by Lieutenant Colonel Christopher M. Ellis, 57 pages.

The Federal Government’s model of Tiered Response for disasters assumes that National Guardsmen, when given a no-notice call to respond to an incident, will actually respond. This assumption may be true if the Guardsmen's area was unaffected, but might not be if it was affected. Surveys reveal a moderate level of disaster preparedness for civilians and a slightly higher level of preparedness for emergency responders. Unfortunately, there is no published data on emergency preparedness levels of households of National Guardsmen. This monograph helps fill that gap in the literature. Specifically, it asks and then answers the question: how prepared are National Guardsmen and do they meet, as a collective, FEMA’s minimum criteria for preparedness levels? The collected data indicates National Guardsmen in the surveyed population of their respective states are more prepared for disaster than the general public, have comparable rates of preparedness as compared nationally to first responders, but do not meet FEMA’s minimum preparedness goals.

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## Acronyms

| | |
|---|---|
| ADRP | Army Doctrine Reference Publication |
| CGSC | Command and General Staff College |
| CHE | Catastrophic Health Event |
| DNI | Director of National Intelligence |
| DSCA | Defense Support of Civil Authorities |
| EMAC | Emergency Management Assistance Compact |
| EMT | Emergency Medical Technician |
| FEMA | Federal Emergency Management Agency |
| FM | Field Manual |
| HSPD | Homeland Security Presidential Directive |
| NGDPS | National Guard Disaster Preparedness Survey |
| NMSZ | New Madrid Seismic Zone |
| PPD | Presidential Policy Directive |

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## Introduction

National Guardsmen occupy a unique position in disaster Tiered Response because of their citizen-soldier status. Many Guardsman have mobilization experience either to a theater of combat or in response to a natural disaster. These individuals have personally witnessed the effects of man-made or natural catastrophes and bring that understanding back home. In a state role, they are often the first military presence on scene and bring numerous skill sets including law enforcement, engineering, and medical aid. And, like local and first/emergency responders,[1] it is possible that they, their family members, or their friends would be personally effected by an event. Given their dual-status position and obligations, are they prepared for a disaster that may affect them personally?

Multiple agencies, from school districts to businesses to the Federal Emergency Management Agency (FEMA), have studied and surveyed various populations to gather data on the emergency preparedness levels of their designated populations.[2] Their reasons were typically the same: gain an understanding of the group to establish a baseline, compare against trends, or update future contingency plans. However, when reviewing the literature, a gap emerges; there is no data on emergency preparedness levels of National Guardsmen households. This gap is a significant hole in research since the Tiered Response model for Defense Support of Civil Authorities (DSCA) makes a considerable assumption. The assumption is National Guardsmen, when given a no-notice call for service to respond to an incident, will actually respond. This assumption may be true if the Guardsmen's area was unaffected, but may not hold true if they were. Surveys of first responders show a moderate level of preparedness and mixed levels of predicted absenteeism if a disaster affects their household personally. Yet, there is no parallel

[1] The terms “first responder” and “emergency responder” are used interchangeably throughout this monograph.

[2] FEMA’s Citizen Corps Survey Database catalogues many of these. The Fall 2014 edition listed 485 surveys since 2001. None were on National Guardsmen or any other members of the military.

research for National Guardsmen. How prepared are National Guardsmen households for disaster?

The Federal Government plans for events that are small to large in scale exampled by chemical explosions, earthquakes, nuclear detonations, and pandemic flu that cover multi-county, multi-state, or even national geography. It is therefore reasonable to conclude that a future event will, in fact, impact the households of National Guardsmen who at the same time are mobilized to react to that same disaster. By extension, it is necessary to query the level of emergency preparedness of these households and compare this to individuals, first responders, and FEMA goals. This data will prove useful to the National Guard and to the Department of Homeland Security in modifying disaster response planning assumptions.

The specific questions this monograph seeks to ask and answer are: What is the emergency preparedness level in the households of National Guardsmen as compared to 1) the general public 2) first responders, and 3) the Federal Emergency Management Agency's goal of 80 percent disaster preparedness levels? Reports indicate around half of civilians nationally are ready for a disaster with first responder rates slightly better. However, the data is not uniform and large ranges exist. I predict readiness rates for households of National Guardsmen to be 65 percent ready or better based upon FEMA's readiness definition, but below FEMA's goal of 80 percent preparedness.

The rest of this monograph is organized into four parts. Part One is the literature review. It first explains how the Federal Government plans emergency response holistically with a specific focus on guidance given to individuals for disaster preparedness as well as how FEMA defines success for a prepared populace. The Federal Government emphatically places individuals as the foundation for disaster preparedness. The literature review then provides data and analysis on actual individual preparedness levels, how they fall short of FEMA's mark, and discovered barriers and beliefs as to why civilians are not prepared. After that, the review moves on to first responders and displays their levels of individual preparedness.

These data points for civilians and first responders establish a baseline of comparison. The depth of this literature review has a three-fold purpose, each of which reflect the three primary monograph questions. First, disaster preparedness and response is a serious concern at multiple government echelons, but especially at the federal level. Considerable training, communication efforts, advertising, and threat analysis goes into disaster planning and execution for the express purpose of saving lives, preventing human suffering, or mitigating great property damage.[3] Dissecting this information is necessary to fully understand the statistics and conclusions presented later in the monograph.

Second, National Guardsmen are citizen-soldiers. For those not on full-time active duty or mobilized, their minimum obligation is one weekend of duty per month and two weeks of annual training. Since they spend a far greater portion of their time as civilians than as active soldiers, it is necessary and appropriate to delve deeply into how well civilians are prepared for disaster, what influences this disaster preparedness, how FEMA communicates with the general populace, and challenges the average civilian faces. And third, as trained soldiers with a DSCA mission set, National Guardsmen have a natural parallel with first responders. As such, there is a *prima facie* case that there could be analogous lessons learned from study of first responder disaster preparedness levels.

Part Two is methodology. The methodology was via a formal survey created specifically for this monograph, the National Guard Disaster Preparedness Survey (NGDPS). Questions were based on a compilation of FEMA and first responder investigations found in the literature review. The survey was cleared and administered through the Human Protections Board of the Command and General Staff College. An introduction and a link was sent via email to National Guardsmen of two states in two separate FEMA regions. By querying multiple states, I hoped to raise the validity of my results. More information is found below in the methodology section.

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[3] Army Doctrine Reference Publication (ADRP) 3-28, *Defense Support of Civil Authorities* (Washington, DC: Government Printing Office, 2013), 1-28.

Part Three shows the results of the NGDPS. There is analysis and comparisons on rates of readiness against levels for civilians, first responders, and FEMA's goal. Part Four concludes the paper with overall recommendations and key facts discovered. It also provides conjecture as to why National Guardsmen rates are not meeting FEMA's goals and recommendations for future research.

## Part One: Literature Review

### The Wide Span of Emergency Plans and Exercises at the Federal Level

The Federal Government has multiple forums in which it conducts contingency planning for future emergencies and disasters. It actively plans and rehearses for events across the full spectrum of possibilities from natural occurrences to industrial accidents to terrorism. Prior to the terror attacks of September 11, 2001, the Robert T. Stafford Disaster Relief and Emergency Assistance Act (Stafford Act) was the primary policy of the United States in regards to disasters in which the Federal Government took action. A simple model (Figure 1) reproduced from the Catastrophic Disaster Response Staff Officer's Handbook produced by the US Army Center for Lessons Learned illustrates the generic line in which the Federal Government involves itself in disaster response.

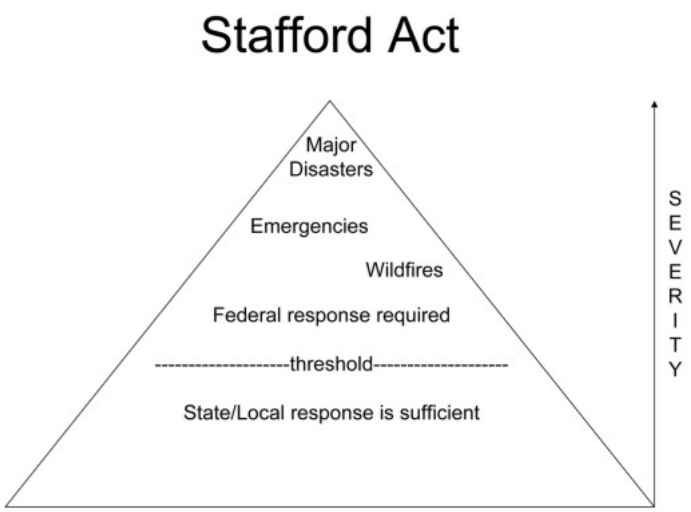


Figure 1. The Stafford Act

*Source*: *Catastrophic Disaster Response Staff Officer's Handbook* (Fort Leavenworth, KS: Center for Army Lessons Learned, 2006), 6.

The genesis of the modern system evolved from presidential directives in the wake of the terrorist attacks of 9/11 and other larger terror attacks from the previous decade (e.g. Oklahoma City Bombing). The precursor to the current Presidential Policy Directive 8 under President Barack Obama was Homeland Security Presidential Directive 8 (HSPD 8) under President George W. Bush in December, 2003. HSPD 8 "directed the Secretary of Homeland Security to develop a national domestic all-hazards preparedness goal."[4] The directive charged The Department of Homeland Security as the lead agency for modernization and dissemination of the National Planning Scenarios. Collectively the National Planning Scenarios,

> depict a diverse set of high-consequence threat scenarios of both potential terrorist attacks and natural disasters. Collectively, the 15 scenarios are designed to focus contingency planning for homeland security preparedness work at all levels of government and with the private sector. The scenarios form the basis for coordinated federal planning, training, exercises, and grant investments needed to prepare for emergencies of all types.[5]

[4] "National Preparedness Guidelines," Department of Homeland Security, accessed October 6, 2015, http://www.dhs.gov/national-preparedness-guidelines.

[5] Ibid.

There are eight Key Scenario Sets with 15 National Planning Scenarios as listed here in Table One:

Table 1. Key Scenario Sets and National Planning Scenarios

| ***Key Scenario Sets*** | ***National Planning Scenarios*** |
|---|---|
| Set 1: Explosives Attack—Bomb Using Improvised Explosive Device | Scenario 12: Explosives Attack— Bomb Using Improvised Explosive Device |
| Set 2: Nuclear Attack | Scenario 1: Nuclear Detonation—Improvised Nuclear Device |
| Set 3: Radiological Attack—Radiological Dispersal Device | Scenario 11: Radiological Attack—Radiological Dispersal Device |
| Set 4: Biological Attack—with annexes for different pathogens | Scenario 2: Biological Attack—Aerosol Anthrax<br>Scenario 4: Biological Attack—Plague<br>Scenario 13: Biological Attack—Food Contamination<br>Scenario 14: Biological Attack—Foreign Animal Disease |
| Set 5: Chemical Attack—with annexes for different agents | Scenario 5: Chemical Attack—Blister Agent<br>Scenario 6: Chemical Attack—Toxic Industrial Chemicals<br>Scenario 7: Chemical Attack—Nerve Agent<br>Scenario 8: Chemical Attack—Chlorine Tank Explosion |
| Set 6: Natural Disaster—with annexes for different disasters | Scenario 9: Natural Disaster—Major Earthquake<br>Scenario 10: Natural Disaster—Major Hurricane |
| Set 7: Cyber Attack | Scenario 15: Cyber Attack |
| Set 8: Pandemic Influenza | Scenario 3: Biological Disease Outbreak—Pandemic Influenza |

*Source*: Field Manual (FM) 3-28, *Civil Support Operations* (Washington, DC: US Government Printing Office, 2010), 2-11.

Further evolutions, up to and including the National Response Plan of 2004 introduced additional terms into the disaster vernacular such as “Incident,” “Catastrophic Incident,” and “Hazards”[6] While each of these terms has a specific definition, there is overlap. For example, a Catastrophic Incident is roughly on par with a Major Disaster.[7] For a frame of reference as to occurrence, from Fiscal Year 2000-2005 there were 304 declared Major Disasters.[8]

[6] *Catastrophic Disaster Response Staff Officer’s Handbook* (Fort Leavenworth, KS: Center for Army Lessons Learned, 2006), 1-9.

[7] And the *Staff Officer Handbook* states these words are often used interchangeably. For ease of reading, this monograph roughly equates disaster with incident, and Major Disaster with Catastrophic Incident.

[8] Ibid, 6.

Given this frequency, a National Guard mobilization is plausible for many of the Major Disasters in the National Planning Scenarios based upon the doctrine of Tiered Response. Tiered Response dictates that local authorities respond to disasters first and can call for assistance from neighboring jurisdictions if necessary. Response efforts rise to the state level with its respective assets, including the National Guard. For larger disasters, states can invoke previously established mutual aid agreements, commonly referred to as Emergency Management Assistance Compacts (EMACs). If needed, states can then request federal support.[9]

Given the scope and frequency of many of the National Planning Scenarios, it is also plausible that Guardsmen's families could be impacted directly by an event. There are six things to bear in mind then. First, the purpose of this paper is not to prove or disprove the utility of FEMAs disaster planning guidance to civilians. However, as will be shown below, suboptimal disaster preparedness rates combined with expectations of rapid emergency response may impact mobilization rates if a larger and longer scale disaster were to personally effect a Guardsmen household. Second, it is important to show just how varied these Catastrophic Incidents are, how long lasting their effects could be, and that events could come without warning (nuclear bomb, earthquake) or with some lead time (influenza). Third, disasters come in all seasons (influenza is in the fall and winter seasons, earthquake and bombs have no preferences). Fourth, they have historical precedence (e.g. the Spanish Influenza of 1918, the San Francisco Earthquake of 1906, Hiroshima), that is to say none of the events are theoretical, but rather have happened – often repeatedly – and are likely to happen again. Fifth, as indicated by the Table 1 above, there are significant federal resources and planning efforts directed at these events. And finally – and most hopefully – while some of these Catastrophic Incidents are severe, proper preparation could save money and more importantly, lives.

As a final note to indicate the concern at the federal level, senior leaders habitually brief Congress on natural and manmade disasters. In a March 2013 briefing at the Senate Select

[9] ADRP 3-28, 1-29, 1-44.

Committee on Intelligence the Honorable James R. Clapper, Director of National Intelligence (DNI) spoke on several of larger scale scenarios listed above. He referenced the January, 2010, Haitian earthquake and noted 350,000 people are still homeless and living in tents.[10]

FEMA has explicitly stated goals for civilian preparedness levels. Of the eight stated goals from its Personal Preparedness in America survey, this paper looks at one specifically to see if National Guardsmen meet the standard: are 80 percent of residents prepared to shelter-in-place and have emergency supplies on hand as advised by local authorities.[11] Having explained federal scope and actions, this paper turns to the inherent and stated relationship between the Federal Government and the citizen in regards to disaster preparedness.

## The Role of the Federal Government and the Citizen in Disaster Preparedness

There may be a disconnect on whose responsibility it is to prepare for disaster. In the aftermath of September 11, 2001, the greatest attack on American soil since the 1941 attack on Pearl Harbor, the Federal Government took a hard look at policies and procedures for catastrophic response. While the overwhelming majority of recommendations from the 9/11 Commission focused on government planning and response, it did not leave citizen obligation at the door. "One clear lesson of September 11 is that individual civilians need to take responsibility for maximizing the probability that they will survive, should disaster strike."[12]

FEMA's 2004 "Are You Ready" pamphlet, places citizens at the base of the pyramid of disaster preparedness stating "[e]very citizen in this country is part of a national emergency

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[10] Office of the Director of National Intelligence, *Statement for the Record:Worldwide Threat Assessment of the US Intelligence Community*, James R. Clapper, Senate Select Committee on Intelligence (Washington, DC: 2013), 28.

[11] Federal Emergency Management Agency, *Personal Preparedness in America: Findings from the 2009 Citizen Corps National Survey* (Washington, DC: 2009), 3.

[12] National Commission on Terrorist Attacks. *The 9/11 Commission Report: Final Report of the National Commission on Terrorist Attacks Upon the United* States (New York: W.W. Norton and Company: 2004), 318.

management system that is all about protection–protecting people and property from all types of hazards."[13] The pyramid moves up next to local, then state, and finally the Federal Government whose primary job is to provide resources including "[p]ublic educational materials, such as this guide, that can be used to prepare the public for protecting itself from hazards."[14]

In 2006, one year after Hurricane Katrina, the Federal Government released "The Federal Response to Hurricane Katrina," also known as the Townsend Report, named after its primary author who served as the Assistant to the President for Homeland Security and Counterterrorism. The Townsend Report stated citizens, not government, are best suited to prepare themselves for emergencies:

> The United States has long operated on the general premise that governments exist to do those things that individuals, alone or in free and voluntary association (*e.g.*, families and charities), are not best positioned to do for themselves, such as ensuring public safety and providing law enforcement.[15]

The report traced Federal disaster response beginning in 1803 and its evolution over time, yet continually referenced the relationship and duties of the Federal government and the citizen. The Townsend Report summarized President Harry S. Truman's 1952 Executive Order 10427 "which emphasized that Federal disaster assistance was intended to supplement, not supplant, the resources of State, local, and private sector organizations."[16] It quoted “New Approaches to Federal Disaster Preparedness and Assistance” by President Richard M. Nixon in 1973 which stated "Federal disaster assistance is intended to supplement individual, local and state

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[13] Federal Emergency Management Agency, *Are You Ready? An In-depth Guide to Citizen Preparedness* (Washington, DC: 2004).

[14] Ibid.

[15] The White House, *The Federal Response to Hurricane Katrina: Lessons Learned*, Francis F. Townsend (Washington, DC: 2006), 11.

[16] Ibid, 12.

resources."[17] The Federalism history lesson ended with mention of the Robert T. Stafford Disaster Relief and Emergency Assistance Act (Stafford Act), which remains current law today and stipulates the procedure for State governors to request assistance if "an incident overwhelms State and local resources."[18]

The Townsend Report annotated "[w]hile we have constructed a system that effectively handles the demands of routine, limited natural and man-made disasters, our system clearly has structural flaws for addressing catastrophic incidents."[19] It called for the "creation of a Culture of Preparedness" which must "emphasize the importance of citizen and community preparedness" and that citizen preparedness is "most effective . . . in responding to, and recovering from all hazards.[20] The report included a statement from Max Mayfield, Director of the National Hurricane Center who noted individuals who had a disaster plan "faired far better than those who did not."[21] One year later William Jenkins, Director of the Government Accountability Offices' Homeland Security and Justice Issues continued the theme of shared duties from the national government to the citizen. Jenkins inferred it would take time for government resources to mobilize and respond to Major Disasters and that large scale response would initially be "insufficient to meet the immediate challenges" but that "individuals can also contribute to success through such things as . . . having a family and individual disaster preparation plan and supplies." [22] This prominence on the role of individual shared responsibility and culpability continues to the current administration.

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[17] Ibid, 12

[18] Ibid, 12.

[19] Ibid, 52.

[20] Ibid, 79-80.

[21] Ibid, 21

[22] Committee on Oversight and Government Reform, House of Representatives, Observations on DHS and FEMA Efforts to Prepare for and Respond to Major and Catastrophic

In 2011, The Department of Homeland Security released its first ever National Preparedness Goal that reinforces this concept of empowering the citizen with information so that he or she can make informed choices to protect his or her own life and property. It states that "[i]ndividual and community preparedness is fundamental to our success. By providing the necessary knowledge and skills, we seek to enable the whole community to contribute to and benefit from national preparedness."[23]

The bottom line in all of these reports is that the Federal Government recognizes that it can have the greatest effect on disaster preparedness by providing information and tools to the populace, but it is at the core, an individual responsibility to prepare. The impetus then on National Guardsmen to have their families prepared is, by inductive reasoning, even stronger.

Current Federal Guidance: FEMA's Ready.gov

Presidential Policy Directive 8 (PPD 8) charges the Secretary of Homeland Security the responsibility to lead the federal effort for disaster preparedness. In turn, FEMA, which resides within the Department of Homeland Security, retains the lead agency position for preparing and informing US citizens on disaster preparedness plans and kits. Nearly all other federal civilian websites refer directly to FEMA or DHS when discussing disaster preparedness. This guidance is important to civilians, first responders, and National Guardsmen, because it is the metric with which FEMA measures against for 80 percent disaster preparedness in the population.

The website Ready.gov is FEMA's flagship outreach presence online and provides advice and guidelines for adults, children, communities, members of the military, and businesses. Of the sites main themes, three are germane to this monograph. They are: specific disaster preparedness

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Disasters and Address Related Recommendations and Legislation, William O. Jenkins, Jr. (Washington, DC: 2007), 2, 14.

[23] Department of Homeland Security, *National Preparedness Goal: First Edition*, September (Washington, DC: 2011), 1.

steps, emergency plans, and emergency kits. In the theme of specific disaster preparedness steps, people can find tailored instruction on things to do before, during, and after an emergency situation; anything from a home fire to a terrorist attack. Next, Ready.gov covers planning preparation. Here the guidance is not tailored to a specific event, but rather covers holistic ideas like getting your home in order or building a plan for family members on how to link up after a disaster. There are also financial preparedness steps such as securing important paperwork and maintaining a small amount of cash at home if banks and ATMs stop functioning.[24]

Next in sequence are the actual items FEMA recommends on hand prior to a tragedy to survive for 72-hours. They roughly fall into three categories: food, water, and supplies. The majority of information is on food and water, what to store, how to store it and how much to have. Protein bars, nuts, peanut butter, crackers, and ready to eat canned foods are on the list.[25] Water is covered in an analogous fashion: how much to store per person, where to keep it, safe places to get more, and how to purify what you collect.[26]

With the emergency items list, clearly FEMA is covering the basic needs of immediate disaster response (fire extinguisher, first aid kit), dealing with power outages (flashlights, matches, sleeping bags), signaling and communication (whistle, battery or hand cranked emergency radio), and personal protection (dust mask, sturdy gloves).[27] Specialty items revolve around individualized family needs such as infant formula, extra eyeglasses, or prescription medicines.

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[24] "Make a Plan," Department of Homeland Security, accessed February 21, 2016, http://www.ready.gov/make-a-plan.

[25] Ibid, accessed February 21, 2016, http://www.ready.gov/food.

[26] Ibid, accessed February 21, 2016, http://www.ready.gov/water.

[27] "Emergency Supply List," Department of Homeland Security, accessed February 21, 2016, http://www.fema.gov/media-library/assets/documents/90354.

To see guidance beyond 72-hours, you have to go outside of Ready.gov. In its digital library, FEMA offers a booklet entitled "Food and Water in an Emergency." This resource discusses preparing beyond 72-hours and recommends having two weeks of supplies on hand.[28] A second FEMA booklet "Are You Ready?" talks about much of the same material as Ready.gov and regularly encourages having two weeks of supplies or more available.[29]

Individual levels of Disaster Preparedness

FEMA's own research into the disaster preparedness levels of Americans shows many are not prepared even for minor short-term emergencies. Under guidance from the DHS, a Citizen Corps National Survey was performed in 2009. Results were tabulated and compared to similar surveys conducted in 2003 and 2007. 61% of individuals felt confident or very confident in their own abilities to prepare for a disaster and 57% of respondents had an emergency kit of some sort at home (up from 50% in 2003); but when asked what was in the kit, 74% stated food and 71% water.[30] The biggest reason survey participants cited not preparing was the belief that first responders would help them (29%), followed by a lack of time (26%), and nearly a quarter (24%) indicating they did not know what they were supposed to do to be prepared.[31] When the question was rephrased to "In the first 72 hours following a disaster, please indicate how much you would expect to rely on the following for assistance," 70% said other household members and 61% indicated first responders, the two highest responses.[32] Increased education, income, and

[28] Federal Emergency Management Agency, *Food and Water in an Emergency* (Washington, DC: 2004), accessed on October 15, 2015 at http://www.fema.gov/pdf/library/f&web.pdf.

[29] Federal Emergency Management Agency, *Are You Ready* (Washington, DC: 2004).

[30] Federal Emergency Management Agency, *Personal Preparedness in America: Findings from the 2009 Citizen Corps National Survey* (Washington, DC: 2009), 25, 29.

[31] Ibid, 19.

[32] Ibid, 22.

religiosity all correlated positively to higher levels of preparedness and correlated negatively to dependence upon government entities.[33] An updated version of this FEMA study in 2012 indicated a drop in readiness from 2009. From that data, only 52% of respondents had an emergency kit at home, with a decrease in packaged food to 69% and bottled water to 66%.[34]

Another barrier to disaster preparedness was that participants did not think a disaster would affect them personally. When asked of the likelihood of any natural disaster ever happening in their community, only 40% indicated affirmatively.[35] The possibilities dropped when asked about a specific disaster with 28% believing in the likelihood of a disease outbreak, and 14% from an act of terrorism.[36] If an act of terrorism did occur, 59% believed it would be severe and 50% believed a generic natural disaster would be severe.[37] The national views in this study bore resemblance to the thoughts of individuals living in areas of elevated risk.

Following an educational outreach drive, in 2011 FEMA queried residents living in the New Madrid Seismic Zone (NMSZ, an area that runs from Alabama to Illinois and Missouri to Kentucky). This study found that 71% of residents thought a natural disaster would happen in their lifetime in their community (as compared to 40% of national respondents in the 2009 Citizen Corp survey).[38] Surprisingly though, their level of preparedness, as measured by the presence of disaster supplies was nearly identical to the 2009 national survey. 62% of NMSZ

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[33] Ibid, 9, 22-23.

[34] Federal Emergency Management Agency, *Personal Preparedness in America: Findings from the 2012 National Survey* (Washington, DC: 2013), 13-14.

[35] FEMA, *Personal Preparedness in America: Findings from the 2009 Citizen Corps National Survey*, 25.

[36] Ibid.

[37] Ibid, 26-27.

[38] Federal Emergency Management Agency, *2011 FEMA Central States Disaster and Earthquake Preparedness Survey Report* (Washington, DC: 2012), 20-21.

residents had a disaster plan (compared to 57% from the 2009 Citizen Corp survey).[39] This data from FEMA is used later to compare against rates of readiness for first responders and Guardsmen as well as reasons for a lack of preparedness to identify possible parallels or divergence.

Academic research confirms much of what FEMA has found but also adds color in the dimensions on readiness levels in regards to citizen preparedness and beliefs on first responder and government assistance after a disaster. It showcases some of the ebb and flow of disaster mindedness within the populace based on time and proximal location to disasters with a heavy spike in 2005-2006 reflecting the work done after Hurricane's Katrina and Rita. It also shows the prevalence of both rationality and irrationality in individual disaster preparedness and reaction decision-making. Scholarly works here are listed chronologically and then – if applicable – by scale (national first, then regional, then city) for ease of reference and to induce patterns. Patterns that the reader should note are the barriers to preparedness (disaster apathy and government response) and the failure of any survey to indicate a significant majority of Americans (over 60%) report they are ready for a disaster of any type and have a disaster kit. A summary of key trends and findings will follow this section.

In July 2004, a four-way partnership among public and private entities[40] hosted a "Public Preparedness" symposium which found:

> - About 10% of American households have a family emergency plan, a disaster kit, and training in first aid and CPR.
> - About 20% of Americans feel very prepared for a catastrophic event.[41]

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[39] Ibid, 32.

[40] The American Red Cross, the George Washington University Homeland Security Policy Institute, the U.S. Department of Homeland Security and the Council for Excellence in Government.

[41] The George Washington University, *Public Preparedness: A National Imperative Symposium Report* (Washington, DC: George Washington University, 2004), 9.

Additionally, while this gathering took place only seven months after HSPD 8, it annotated a heavy reliance on local communities communicating effectively with citizens on unique threats to the area as well as "[empowering citizens to be more independent during the first 24 hours of a disaster [to] prevent them from overwhelming emergency personnel and 9-1-1 with calls."[42]

A 2005 national survey conducted five weeks before Hurricane Katrina to gather data on citizen beliefs found nearly two-thirds of Americans believed that a terrorist bombing or release of a deadly disease was not likely in their communities in the next five years, but 70% thought those acts would be likely somewhere else in the United States.[43] The first and third highest reasons (over 30% cumulative) given for why this would not happen is that the US Government would prevent the attack or security measures would prevent the attack, respectively.[44]

Participants were also asked about their perception of readiness for local responders and indicated the following:

> - 51 percent believe their local fire departments are very prepared for a terrorist bombing, while 32 percent say the same about a deadly disease or virus.
> - 38 percent believe their local police departments are very prepared for a terrorist bombing, while 22 percent say the same about a deadly disease or virus.[45]

This survey did not ask about emergencies or disasters in general. However, a second survey conducted by the same group five weeks after Hurricane Katrina specifically did ask this. Querying perceived readiness levels of responders, the study found that 34% of Americans thought their local fire department was very prepared and 17% thought their local police were

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[42] Ibid, 13.

[43] Paul C. Light, *Preparing for the Unthinkable: A Report on the State of Citizen Preparedness* (New York: New York University, 2005), 3.

[44] Ibid. The second highest reason was that terrorist were weaker or less of a threat.

[45] Ibid, 6.

very prepared for a non-specified disaster.[46] Federal Government preparedness was also rated with people believing it was very prepared for a terrorist bombing (24%), a hurricane or flood (17%), or a flu epidemic (11%).[47] When the survey asked what might explain the challenges they face in fully preparing themselves for a potential emergency, 69% indicated they wished they were more organized, 57% wanted more time to prepare, 46% did not know where to turn for help, 27% did not want to think about it, and 18% did not think preparedness was necessary.[48] The study also highlighted the education gap where college educated individuals were nearly twice as likely to report "much more prepared" (15%) after Hurricane Katrina than those with a high-school education or less (7%).[49]

Also in 2005, a joint venture between the American Red Cross and the Council for Excellence in Government surveyed Americans in general but also included some regional data for disaster preparedness. Two surveys were conducted, one in the later days of Hurricane Katrina hitting "the Gulf Coast but before the full devastation in New Orleans was widely known" and the second survey one month after Hurricane Rita.[50] These phone surveys found that even after seeing both hurricanes and their aftermath nearly 40% of Americans had no motivation to prepare for an emergency and another 24% had "just some" motivation.[51] Nationally, 43% of citizens reported having a disaster kit (specifically with water, food, and medicine) with 56% of Hurricane Katrina or Rita affected residents having one, but one-third nationally said they had done

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[46] Paul C. Light, *The Katrina Effect on American Preparedness: A Report on the Lessons Americans Learned Watching the Katrina Catastrophe Unfold* (New York: New York University, 2005), 4.

[47] Ibid.

[48] Ibid, 3.

[49] Ibid, 2.

[50] Peter D. Hart, *The Aftershock of Katrina And Rita: Public Not Moved to Prepare* (Washington, DC: Peter D. Hart Research and Public Opinion Strategies, 2005), 1.

[51] Ibid, 3.

nothing.[52] When asked about barriers, 54% nationally did not think a disaster "would affect them personally", 44% did not know what to do, 37% cited cost, and 35% cited time.[53] Variations to barrier responses were found in race, region and family status. Threat fears also varied by time and region. Before Hurricane Katrina and Rita struck 49% of the country worried about a natural disaster and 42% about a terror attack, but afterwards northeastern states reported a move up to 52% for a terror attack and southern states saw an uptick to 60% over fears regarding a natural disaster (with a spike of 71% from those directly affected by Katrina or Rita).[54]

A 2006 Gulf State study (Alabama, Georgia, Mississippi, Florida, and Louisiana) conducted by Auburn University looked at individual preparedness and attitudes towards government response in the event of a disaster. While 84% of respondents were very confident or somewhat confident that they knew how to prepare for disasters and over 82% "[c]onfident that they would be adequately prepared with the necessary food and supplies", only 60% reported having a disaster kit.[55] Belief in the ability of local officials was higher than studies above indicated. In the region, two-thirds of people thought they were "adequately trained to effectively respond to a natural, geological or man-made disaster" with over 62% believing local officials had the resources they needed to respond.[56] Finally, when asked about a future event equivalent in destruction to Katrina, residents graded the predicted government response at all levels as very high. Combining positive responses (very optimistic and somewhat optimistic) 78% stated local

[52] Ibid, 5-6.

[53] Ibid, 7.

[54] Ibid, 3.

[55] Auburn University Center for Governmental Services, *Citizens' Perceptions of Disaster Preparedness and Emergency* Management (Auburn: Auburn University Center for Governmental Services, 2006), 14, 30.

[56] Ibid, 34.

officials would handle things better than Katrina, 78% thought state-level officials would handle things better, and 70% believed the federal response would be better.[57]

Naval Postgraduate School student Annemarie Conroy uncovered a high faith in officials coming to the rescue . . . and quickly at that. Citing literature from 2006-2007, her research indicated “66% of those surveyed were also confident that if they stayed at home, they would be eventually rescued.” [58] Another cited survey from her study found that 90% of New Yorkers, 74% of Louisianans, 79% of Mississippians, and 82% of the nation at large believed help would arrive within one day.[59]

Switching lenses, another survey from 2007 approached citizen preparedness strictly from a public health standpoint. The results however were equally bleak. 27% of Americans stated they were prepared for a public health crisis yet only 14% had "a three-day supply of food, water, and medication."[60] Figure 2 tabulates some of the granularity on what the citizenry had prepared.

[57] Ibid, 35-36.

[58] Annemarie Conroy, “What is Going to Move the Needle on Citizen Preparedness? Can America Create a Culture of Preparedness?” (Masters Thesis, Naval Postgraduate School, 2008), 64-65.

[59] Ibid.

[60] American Public Health Association, *National Opinion Survey to Determine Levels of Preparedness for a Public Health Crisis* (Washington, DC: American Public Health Association, 2007), 2.

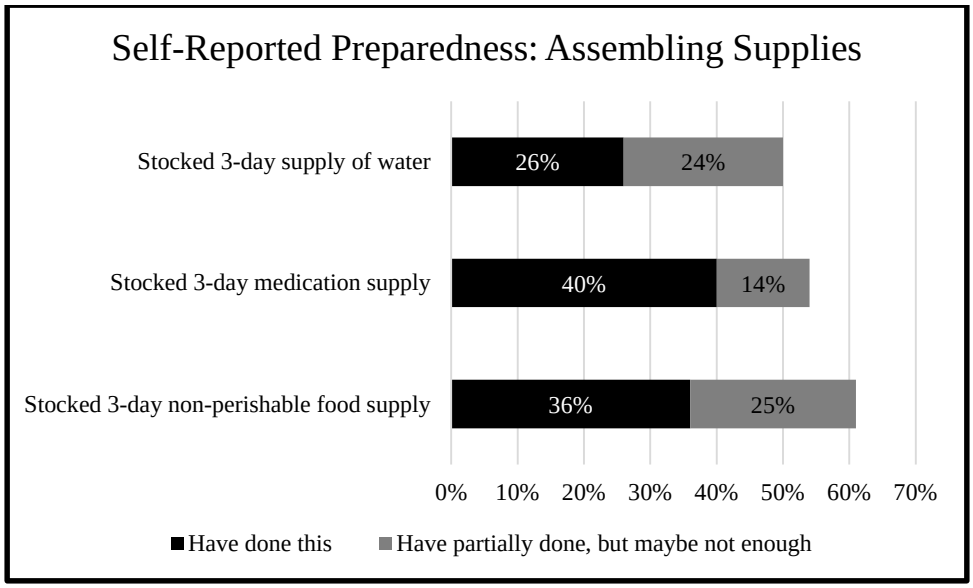


Figure 2. American Public Health Association Assembling Supplies Graph

*Source*: Created by author using data from the American Public Health Association, *National Opinion Survey to Determine Levels of Preparedness for a Public Health Crisis* (Washington, DC: American Public Health Association, 2007), 11.

55% of respondents had taken some steps to prepare but 32% had done nothing; overall 87% self-reported that they "have not taken enough steps to prepare for a public health crisis."[61] Numerous natural and man-made disasters were listed as likely to happen with severe storms at the top of the list at 57%.[62] A serious health crisis from common disease, a nuclear attack (or dirty bomb), and an earthquake were seen as likely by 47%, 24%, and 23%, respectively.[63]

Several of the trends continue as many of the above numbers are comparative to a 2011 survey conducted by Columbia University's National Center for Disaster Preparedness. This

[61] Ibid.

[62] Ibid, 7-8.

[63] Ibid.

survey indicated only 35% of survey participants had a basic disaster kit.[64] When asked how quickly first responders or the National Guard would respond, 81% indicated less than 24 hours.[65]

Several interesting points and trends appear from the combination and comparison of data between FEMA and the various academic studies. One important caveat that must be mentioned though is that these studies and surveys did not take place under identical situations and ask identical questions. Therefore, comparisons and trends can be induced, but not proven statistically. Indeed, there is exceptionally high variance in many of the responses.[66] Nevertheless, the data is highly illuminative and several conclusions can be made about federal plans and assumptions, individual actions, and the relationship between the government and the citizen. Overall, conclusions fall into the category of disaster apathy or attitudes on government response.

First, a sizeable number of Americans do not think disaster will affect them or their community (between 30-54%) and roughly half indicated it would be severe. People are highly confident that they are ready for a normal disaster, but only 20% are very prepared for a Catastrophic Incident. Secondly, at best roughly half of Americans could go for three days at home on their own without outside assistance. When asked a variation of the generic question "are you prepared?" up to 84% of people said yes, but as specifics were added the numbers dropped. In general, when asked about having food and water, the readiness numbers dropped. Third, a few studies seem to indicate that exposure to disasters may increase for a time the

[64] Columbia defined this as consisting "of at least two days' supply of food and water, a flashlight, a portable radio, spare batteries, and emergency phone numbers and meeting place." National Center for Disaster Preparedness, *Where the US Public Stands in 2011 on Terrorism, Security, and Disaster Preparedness* (New York: Columbia University, 2011), 6.

[65] Ibid.

[66] Variance comes from terminology "Public Health Crisis" versus "Natural Disaster", timing before or after a Major Disaster (i.e. the difference in responses roughly one month before and one month after Hurricane Katrina as found by NYU's CCPR), and asking about disasters in general or a specific event (terrorist bombing, flu epidemic).

disaster awareness and readiness of the majority of individuals but not to an overwhelming degree (e.g. Hurricanes Rita and Katrina, NMSZ residents).

Fourth, the public has mixed feelings about assistance from first responders and up. Confidence levels of civilians for official assistance measured by some studies were above 60% but one showed a sharp drop after witnessing the aftermath of a disaster. Also, there is a paradoxical belief in first responder or government assistance arriving quickly (with the overwhelming majority expecting help within 24 hours) but a sizable minority (roughly 30% or greater) of citizens do not feel that local responders are up to the task. Unfortunately, government officials at all levels indicated that the worst time for robust response after a disaster of any type would be in the first 24 hours. Fifth and finally, preparedness saves lives and money. But people often cite financial restrictions as a reason not to prepare. Having looked at overall citizen preparedness, this paper now turns to First Responders and health care workers.

## First Responders and Health Care Workers

*Ready Responder Toolkit* is an informational booklet produced by FEMA and directed towards emergency response agencies. The purpose of this booklet was to assist these entities in preparing their own workers and their families for a catastrophic event. Selected excerpts are highlighted below: [67]

> In a 2004 survey, members of the Executive Fire Officer Program at the National Fire Academy indicated that:
>
> - Only 34% of the departments they represented had taken steps to prepare themselves and their families for the implications of a multi-day disaster response.
> - 48 % responded that a multi-day event would create issues and hardships for the family unit.
> - However, only 40% had a family preparedness plan in place.

[67] Each of these surveys came from the *Ready Responder Toolkit* cited here, but the original sources are listed in the booklet. Federal Emergency Management Agency, *Emergency Planning for First Responders and Their Families* (Washington, DC: NA), 3-4.

> The Center for Homeland Defense and Security also conducted a series of enlightening surveys in the area of organizational preparedness. In 2005, Staff Inspector Tom Nestle conducted a survey of 75 police officers, of which . . . 55-66% indicated that they would refuse recall during a response that was posed from National Planning Scenarios.
>
> A 2007 study by John Delaney that focused on firefighters in the National Capital Region (NCR) revealed that family preparedness and safety were the determinant factors in firefighters' ability and willingness to report for assignment in a pandemic incident. A study by Shelley Schechter, published in 2007, shows that one of the barriers to Medical Reserve Corps (MRC) personnel's willingness and ability to fulfill operational roles in a disaster was family responsibilities."
>
> In 2009, local response personnel, including police and fire, in Payson, AZ, indicated that:
>
> - Only 18% had an individual or family preparedness plan.
> - 96 % indicated that they would participate in individual or family preparedness planning if their agency or department offered it.
> - 78% agreed that the existence of such a program would positively affect their willingness to respond to an incident.

FEMA concluded its survey section with this apropos comment:

> These studies reinforce the importance of organizational preparedness. There is a clear need to offer a way in which agencies, departments, their employees, and their families can be better equipped during a disaster so that family responsibilities and safety do not deter personnel from responding to their operational responsibilities.[68]

The data above takes on two trends, a lack of preparedness in responders and a decreased chance to answer the call to respond to a disaster in the responders' local area. Investigations into health care workers parallel these trends.

Research indicates a cause for concern for the health care system as a whole in response to a Major Disaster, or in the parlance of the medical community: a Catastrophic Health Event. Just as police officers, firefighters, and EMTs would face the dilemma of personal and professional conflict in deciding to report to work after an incident, so too do health care workers writ large.

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[68] Ibid.

One large n-survey indicated that 81% would come in after a mass casualty event, but only 48% would after an outbreak of severe acute respiratory syndrome (SARS).[69] A separate study on one local health department queried preparedness levels and respondents were asked which items they possessed from a modified list of items recommended by FEMA. Only two percent of health care workers had 16 or more of the 21 items on the intermediate disaster supply and planning list with another 16% having 11 items or more.[70]

Additional data are found from the Federal Government. In 2010, the Center for Biosecurity of UPMC (University of Pittsburgh Medical Center) published a report commissioned to them by the US Department of Health and Human Services. The key finding of the report was that "while much progress has been made in healthcare preparedness for common medical disasters, the U.S. healthcare system is ill-prepared for catastrophic health events (CHE), and there is as yet no clear strategy that will enable an effective response to such an event."[71] This report paints the best holistic overview of the medical challenges to be faced during a Catastrophic Incident that the monograph author found during his research. Additional studies that address Catastrophic Health Events across the spectrum find that hospitals and emergency rooms in the nation are woefully insufficient for disaster response [72] or the necessity of legal

[69] Kristine Qureshi et al., "Health Care Workers' ability and willingness to report to duty during catastrophic disasters," *Journal of Urban Health* Volume 82, Number 3 (2005), 378.

[70] James Blessman et al., "Barriers to At-Home-Preparedness in Public Health Employees: Implications for Disaster Preparedness Training," *Journal of Occupational and Environmental Medicine* Volume 49, Issue 3 (2007), 320-321.

[71] Eric Toner et al., *The Next Challenge in Health Care Preparedness: Catastrophic Health Events* (Baltimore: Center For Biosecurity of UPMC, 2010), i.

[72] Robert A. Cherry and Marcia Trainer, "The Current Crisis in Emergency Care and the Impact on Disaster," *BMC Emergency Medicine* Volume 8, Issue 7 (2008), 6.

immunity for health workers due to altered (lowered) standards of care based upon triage necessities.[73]

Each of the studies or surveys listed in this section were either small in scale or small in scope. Luckily, there is a national survey in which Law Enforcement officials, firefighters, and Emergency Medical Service personnel, from rookies to upper management and included full-time, part-time, volunteer, public, and private providers were interviewed as to their levels of personal disaster preparedness. Nearly 80% of respondents were confident or very confident in their personal level of emergency preparedness.[74] This is much higher than the average citizen and higher than the smaller studies in this section as shown earlier. The report indicated that just one-third of first responders were not prepared at all; possibly because in all of the previous disasters they faced, the power was out but they were able to keep regular contact with their family and buy food from the local store.[75] These repeated common disasters may provide an individual optimism for future Catastrophic Incidents.

The study also indicated one area of hope, that of incentives. While 90% of first responders disagreed that their agency required them to have a disaster kit and plan, the survey did show what enticements would increase levels of preparedness.[76] Nearly 73% believed that a formal policy requiring a disaster kit would raise the likeliness of creating and maintaining one.[77] Roughly the same number of respondents (74%) stated that tying the possession of a kit to performance evaluations would raise the likeliness also, but the biggest increase (77%) came if

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[73] Greg T. Galfano, "Altered Standards of Care: An Analysis of Existing Federal, State, and Local Guidelines" (Master's Thesis, Naval Postgraduate School, 2011), 12.

[74] Preparedness was measured as having a three-day disaster supply kit and a family disaster plan. Chris A. Kelenske, "Emergency Responder Personal Preparedness" (Master's Thesis, Naval Postgraduate School, 2011), 44-45.

[75] Ibid, 12, 41, 46.

[76] Ibid, 54-56.

[77] Ibid.

the department actually paid for the disaster kit.[78] Since this survey's methodologies and population are the most similar in scope to the NGDPS, it is further explored for comparisons in Part Three below.

## Part Two: Methodology

I created a National Guard Disaster Preparedness Survey (NGDPS) to use as a comparison to levels of civilian and first responder preparedness as explored in Part One. The survey was administered by, and data was collected through, the Command and General Staff College (CGSC) Institutional Research Department. It was anonymously sent to randomly selected members[79] of the National Guard in two separate states in different FEMA regions. One state is a mid-western state whose most common disasters are tornados. The second state is a western state whose most common disasters are forest fires. Both states have the potential for larger scale disasters including, but not limited to: earthquakes, biological incidents with their livestock, or terrorism. Two states were chosen for multiple reasons: 1) to mitigate regional and disaster specific responses from Guardsmen, 2) to query more than one FEMA region, 3) to increase the n-level and reduce sampling error, 4) to increase the face and construct validity of the results and, 5) since results of this survey are compared primarily against other national survey responses, to have more of a national flavor, thus increasing criterion validity.

There were 441 responses out of 3119 members queried, of which 366 individuals completed the entire survey. Only completed surveys were used for data analysis. Based on these numbers, the sampling error is +/- 5% at a 95% Confidence Interval.[80] I obtained permission from

[78] Ibid, 58-59.

[79] The random selection was based upon the current alert notification email rosters of the two states. The rosters were sent directly to the Institutional Research Department of CGSC.

[80] Rounded to the nearest percentage. Unrounded, the sampling error was 4.8% and calculated using the sampling error calculator on 11 February, 2016 at:

the National Guard Headquarters of both states prior to survey initiation. Each state was promised a copy of the completed monograph to use to modify planning assumptions at their discretion. Survey participants were invited to answer questions via a link sent to them in an email. At the beginning of the survey, an informed consent form clearly listed the purpose of the survey, my research in general, and the appropriate human protections. All appropriate human protection safeguards were taken.

Survey questions for the NGDPS came from several sources including: the 2011 FEMA Central States Disaster and Earthquake Preparedness Survey Report, the Personal Preparedness in America Findings from the 2009 and 2012 Citizen Corps National Survey for citizens across the USA, and academic reports and thesis works that queried first responders. Five questions of my own design were added. As shown from the sources, the above surveys focused on national civilian surveys or localized first responder surveys. Responses from the NGDPS were compared, when applicable, to the base survey from which the question came. Surveys in the literature review were not uniform in how they asked their questions. As a start point, I modeled the base of my survey from FEMA's questionnaires and then branched out using related inquiries from other surveys, even at the risk of some redundancy.

The overwhelming number of questions were ordinal (Likert) scale in composition. A few questions, especially those on biographical data, are nominal. Again, these question reflect the composition of their source surveys (FEMA, etc). As to data interpretation, two points. First, I was primarily interested in mean, mode, and frequency distribution. I compared those results to the FEMA and first responder data. Secondly, I had no intention of showing a definitive answer for my research question for all National Guardsmen across the country. This monograph is limited in scope to just the two sampled states Guardsmen populations.

The survey was administered from December 21, 2015 to January 29, 2016. Events in the

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https://www.dssresearch.com/KnowledgeCenter/toolkitcalculators/sampleerrorcalculators.aspx. Other calculators yielded results that all rounded to +/- 5%.

national news that may have impacted respondent attitudes towards preparedness were: the terrorist attacks in Paris in November 2015, the San Bernardino terrorist shooting in December 2015, the Mississippi River flooding, and a winter storm that brought exceptionally heavy snowfall to large swaths of the US east coast in January 2016. The Zika virus was not a mainstream news event prior to the survey closing.

## Part Three: Analysis and Comparison of the National Guard Disaster Preparedness Survey (NGDPS) Data

This monograph sought to answer three questions: What is the emergency preparedness level in the households of National Guardsmen as compared to 1) the general public 2) first responders, and 3) Federal Emergency Management Agency's (FEMA) goal of 80 percent disaster preparedness levels? However, to give those answers context a full review of the literature on disaster preparedness levels of the general populace and emergency responders was necessary. The data below indicates: National Guardsmen in the surveyed population of their respective states are more prepared for disaster than the general public, have comparable rates of preparedness as compared nationally to first responders, but do not meet FEMA's goals of 80 percent readiness. Guardsmen are as or more likely to think a disaster is probable as compared to the general populace, more likely to be confident in their ability to prepare for it and more likely to have disaster supplies at home and have them updated. But, while the Guard meets the prediction of this monograph of readiness levels above 65 percent, it does not meet FEMA's 80 percent goal.

While the literature review in Part Two above was expansive, comparison data here is scoped down mainly to FEMA's civilian surveys research (from 2009 and 2012) and from Chris Kelenske's Naval Postgraduate School Thesis which analyzed results from a survey of emergency responders. Those surveys were national in scope and provide in the monograph author's opinion

more accurate comparison set than some of the smaller (city, county, district) surveys from the literature review. Any exceptions to these comparisons are clearly annotated. All data here on Guardsmen come from the monograph author's National Guard Disaster Preparedness Survey, administered as described in Part Two. For the graphs and tables, n-levels are indicated in the notes and percentages are all rounded to the nearest percentage, thus not all percentages will total 100 percent.

As to structure, Part Three has three sections. The first section details beliefs on the probability of disaster happening. The second section covers individual preparedness levels. The third and final section provides expectations on response timing, confidence is survival timelines, and biographical data.

## Section One: Probability of disaster

This section assesses thoughts on the likelihoods and types of disaster in the respondent's community. The first question asked if any type of natural disaster such as earthquakes, hurricanes, floods, tornadoes, or wildfires would ever occur in their community. The response for National Guardsmen is shown in Figure 3. Figure 4 was phrased similarly, but asked about the likelihood of terrorism.

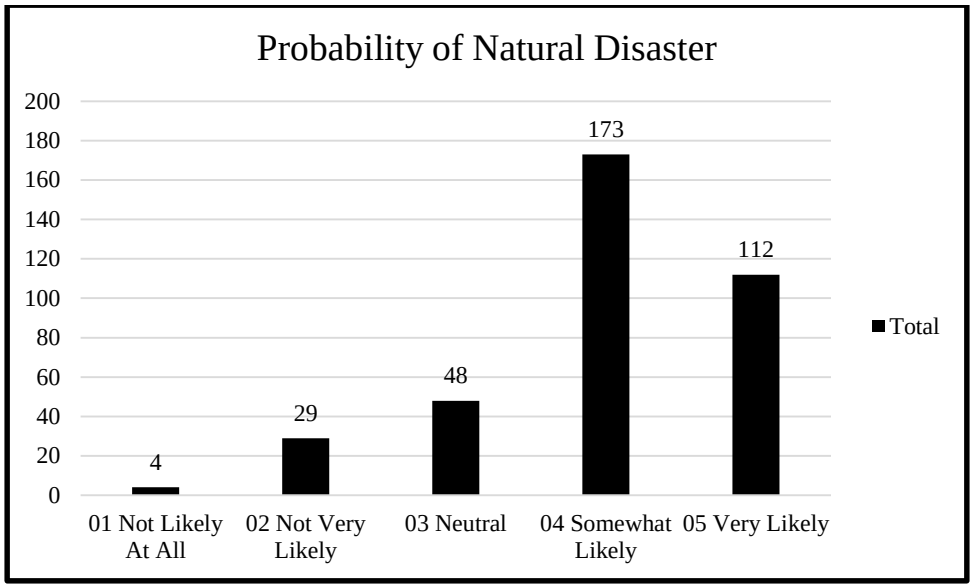


Figure 3. Probability of Natural Disaster

*Source*: Created by the author from the National Guard Disaster Preparedness Survey, February 5, 2016.
*Note*: n=366.

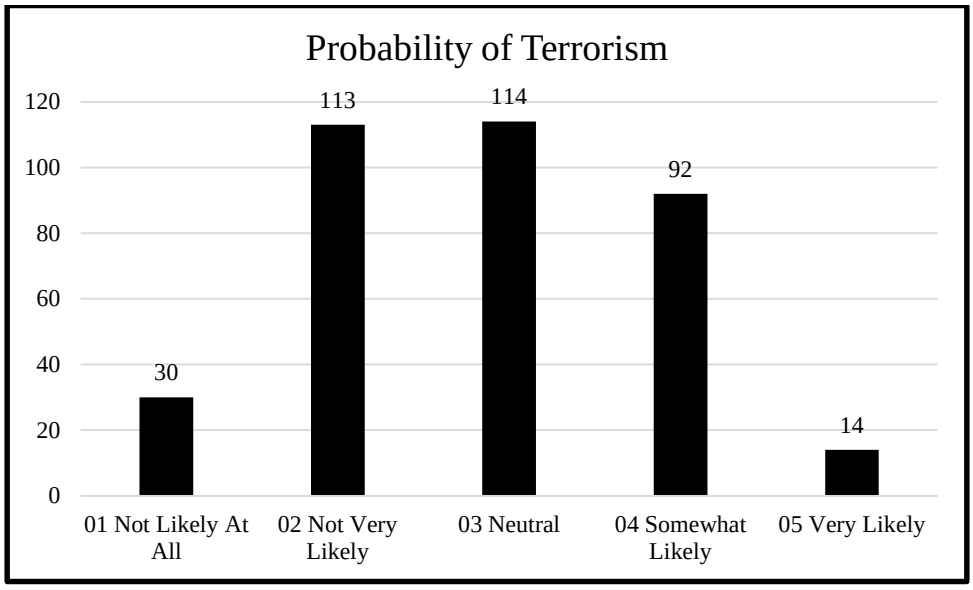


Figure 4. Probability of Terrorism

*Source*: Created by the author from the National Guard Disaster Preparedness Survey, February 5, 2016.
*Note*: n=363.

To give a comparison to the general populace and emergency responders, Figure 5 combined "somewhat likely" and "very likely" responses, converted them to percentages, and included one more type of disaster, a disease outbreak. This data shows National Guardsmen are twice as likely to believe a natural disaster or act of terrorism will strike their community than a member of the general populace. However, Guardsmen's beliefs are far closer to that of the general populace with regard to a disease outbreak and far closer to the average belief of emergency responders for all types of disaster.

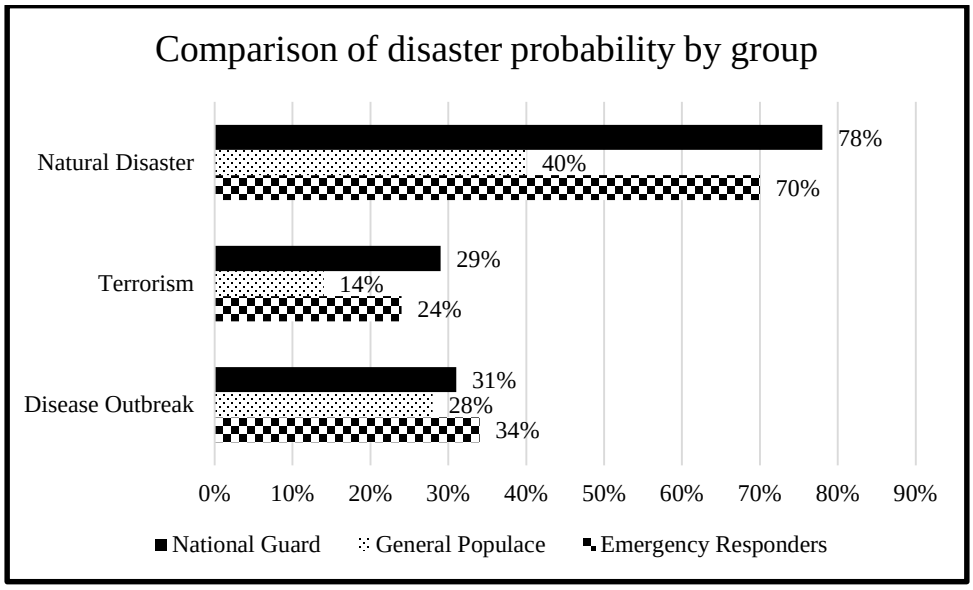


Figure 5. Comparison of disaster probability by group

*Sources*: Created by the author from the National Guard Disaster Preparedness Survey, February 5, 2016; Federal Emergency Management Agency, *Personal Preparedness in America: Findings from the 2009 Citizen Corps National Survey* (Washington, DC: 2009), 25; Chris A. Kelenske, "Emergency Responder Personal Preparedness" (Master's Thesis, Naval Postgraduate School, 2011), 62-63.
*Note*: n=366 for National Guardsmen.

Phrasing of the question had a large impact on response rate. Table 2 shows the responses of National Guardsmen when asked an identical question from the *National Opinion Survey to Determine Levels of Preparedness for a Public Health Crisis.*

Table 2. Comparison of beliefs on likelihood of a Public Health Crisis

| **What is the likelihood of the following public health crises occurring in your community in the next year or two?** | National Guard (% answering Very/Somewhat likely (6-9 ratings on a 9-point scale)) | General Populace (% answering Very/Somewhat likely (6-9 ratings on a 9-point scale)) |
|---|---|---|
| Severe Storm (hurricane, tornado, flood, blizzard) | 82 | 57 |
| Terrorist attack: bombing or plane hijacking | 21 | 29 |
| Bioterrorist attack | 14 | 23 |
| Public health crisis from hot/cold weather extremes | 52 | 43 |
| Nuclear attack, dirty bomb | 10 | 24 |
| Serious health crisis from food contamination | 30 | 43 |
| Serious health crisis from common disease | 31 | 47 |
| Chemical weapons attack | 9 | 22 |
| Wildfire | 37 | 28 |
| Serious health crisis from exotic disease | 14 | 33 |
| Environmental emergency, chemical spill | 27 | 31 |
| Earthquake | 46 | 23 |

*Sources*: Created by the author from the National Guard Disaster Preparedness Survey, February 5, 2016; American Public Health Association, *National Opinion Survey to Determine Levels of Preparedness for a Public Health Crisis* (Washington, DC: American Public Health Association, 2007), 8.
*Note*: n=366 for National Guardsmen.

Using this question phrasing, the average of all responses of Guardsmen was 31% for those thinking a public health crisis of any type was “somewhat” to “very likely” as compared to 33% of the general populace. The range for Guardsmen responses was also much larger (9 to 82) vs. the general populace (22-57).

There was a slight disagreement on what would be the most probable public health crisis as Figure 6 illustrates more clearly. Both Guardsmen and the general populace believed severe storms, extreme hot/cold weather events, and earthquakes ranked in the top five most likely crises. However, Guardsmen ranked earthquakes and wildfires higher than the general

populace.[81]

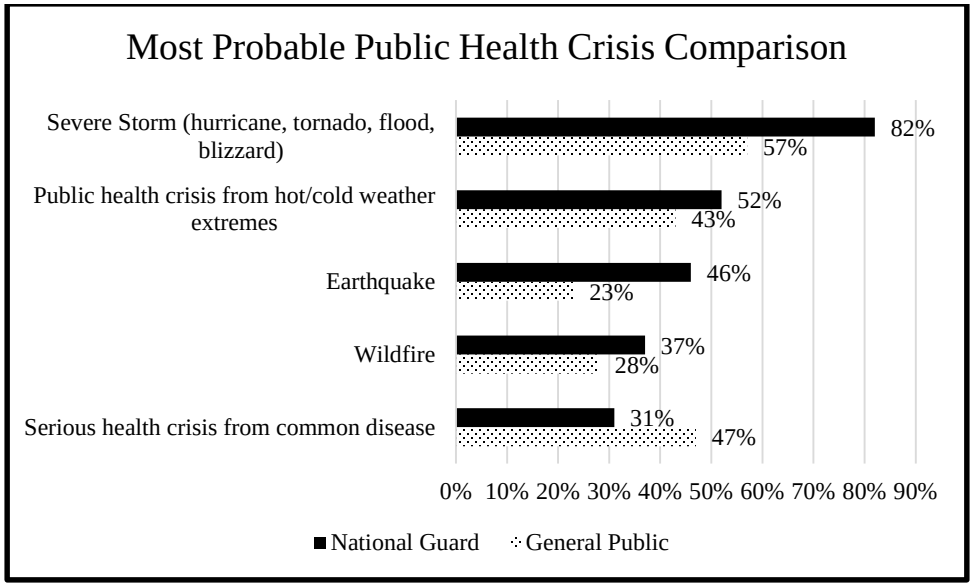


Figure 6. Most Probable Public Health Crisis Comparison

*Sources*: Created by the author from the National Guard Disaster Preparedness Survey, February 5, 2016; American Public Health Association, *National Opinion Survey to Determine Levels of Preparedness for a Public Health Crisis* (Washington, DC: American Public Health Association, 2007), 8.
*Note*: n=366 for National Guardsmen.

To summarize this section, comparing National Guardsmen's beliefs in the probability of disaster against FEMA data shows Guardsmen far more likely to believe a disaster will strike their community. Guardsmen have roughly the same response rates as compared to emergency responders nationally. However, framing the questioning in terms of public health, Guardsmen have a response rate whose mean (31%) is within the standard error (+/- 5%) as compared to the general populace (33%).

[81] The general populace had food contamination or exotic diseases higher than earthquakes or wildfires.

Section Two: National Guardsmen preparedness levels as compared to others

This section assesses confidence in, and preparation for, a disaster for National Guardsmen and compares this data to other groups. It provides the critical indicators, based on quantitative data, for the three questions this monograph sought to answer. To begin with, Figure 7 shows National Guardsmen have high confidence levels in their own ability to prepare for a disaster.

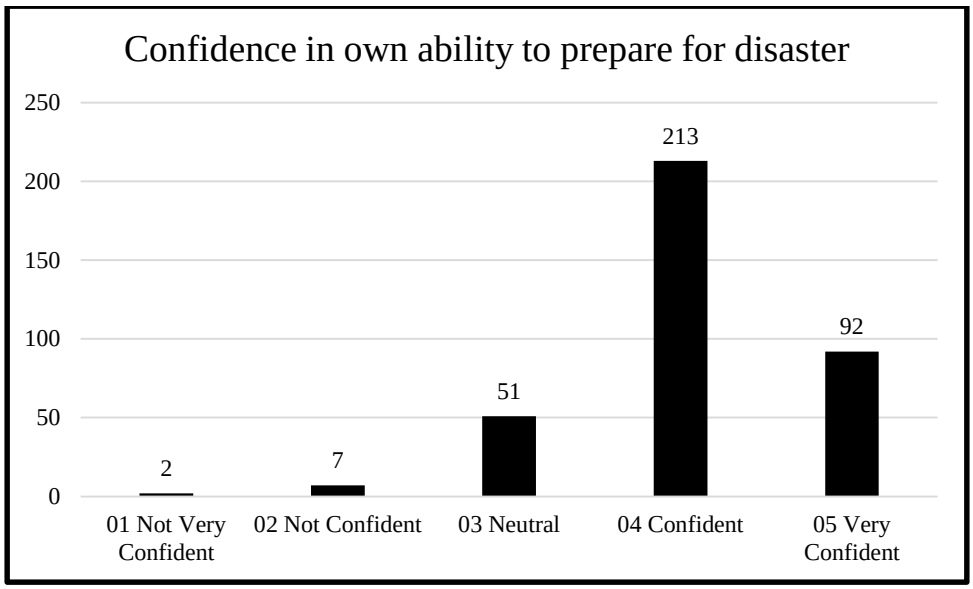


Figure 7. Confidence in own ability to prepare for disaster

*Source*: Created by the author from the National Guard Disaster Preparedness Survey, February 5, 2016.
*Note*: n=365.

Figure 8 compares these confidence levels to the general populace and first responders. Combining those who thought they were confident or very confident, 83% of Guardsmen believed in their abilities, a rate 20% higher than the general populace, but on par with emergency responders. Guardsmen are least likely to report low confidence (3%), far lower than any other group.

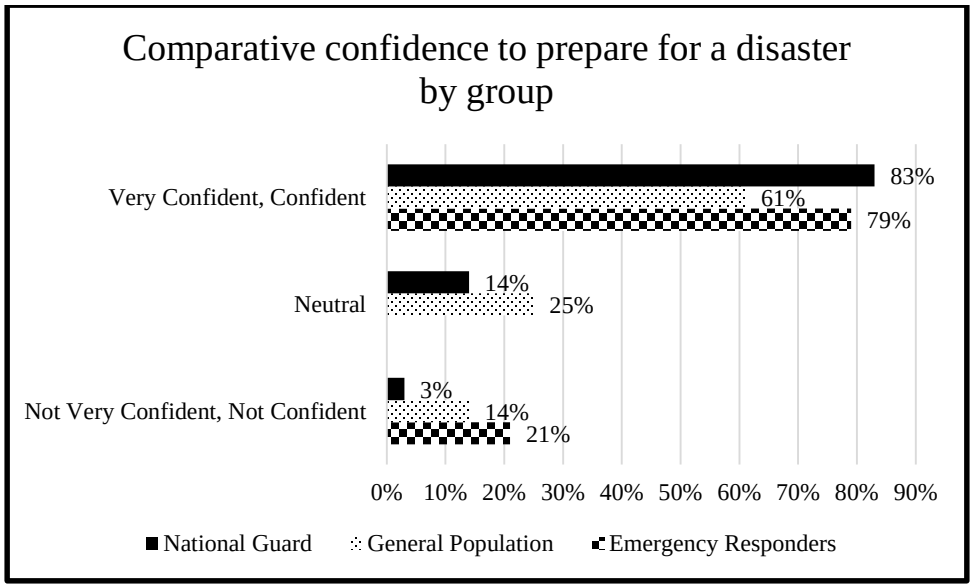


Figure 8. Comparative confidence to prepare for a disaster by group

*Sources*: Created by the author from the National Guard Disaster Preparedness Survey, February 5, 2016; Federal Emergency Management Agency, *Personal Preparedness in America: Findings from the 2009 Citizen Corps National Survey* (Washington, DC: 2009), 30-31; Chris A. Kelenske, "Emergency Responder Personal Preparedness" (Master's Thesis, Naval Postgraduate School, 2011), 44-45.
*Note*: Caveat: Emergency responders had a 4-point scale (no neutral).

The next level of analysis moves beyond beliefs alone and starts to measure action. FEMA utilizes a Stage of Change and Personal Disaster Preparedness Model to measure behavior and perception.[82] Using this FEMA model, Guardsmen report high levels of readiness as measured by their stage of preparation. Figure 9 shows the responses to the question "In thinking about preparing yourself for a major disaster, which best represents your preparedness?"

[82] FEMA, *Personal Preparedness in America: Findings from the 2009 Citizen Corps National Survey*, 2, 31-33.

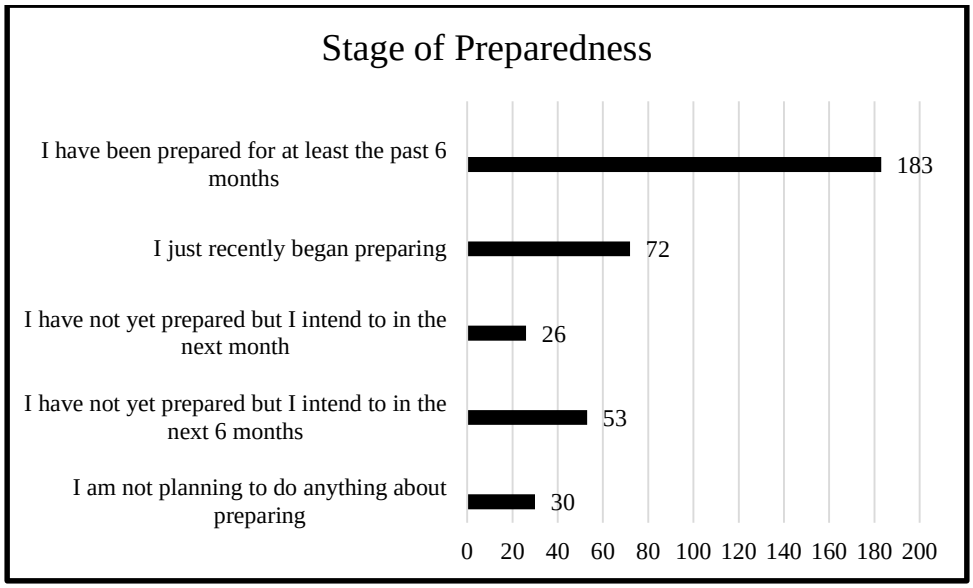


Figure 9. Stage of Preparedness

*Source*: Created by the author from the National Guard Disaster Preparedness Survey, February 5, 2016.
*Note*: n=364.

By converting Figure 9's responses to percentages and combining "I have been prepared for at least the past 6 months" and "I just recently began preparing," Table 3 shows a clear trend emerging. Guardsmen report higher levels of disaster preparation as compared to the general populace and similar levels as emergency responders.

Table 3. Comparative Stage of Preparedness by group

| Comparative Stage of Preparedness by group | | | |
|---|---|---|---|
| | National Guard | General Populace | Emergency Responders |
| I have been prepared for at least the past 6 months PLUS I just recently began preparing | 70% | 51% | 68% |

*Sources*: Created by the author from the National Guard Disaster Preparedness Survey, February 5, 2016; Federal Emergency Management Agency, *Personal Preparedness in America: Findings from the 2009 Citizen Corps National Survey* (Washington, DC: 2009), 2, 33. Chris A. Kelenske, "Emergency Responder Personal Preparedness" (Master's Thesis, Naval Postgraduate School, 2011), 45-47.

Just over half of the general populace (51%) report they have actually taken steps to get prepared for a disaster, but 70% of Guardsmen have done so. When looking at actual items on hand, while only half of the general populace reported having supplies set aside for a disaster, nearly seven in ten Guardsmen indicated such as shown in Figure 10.

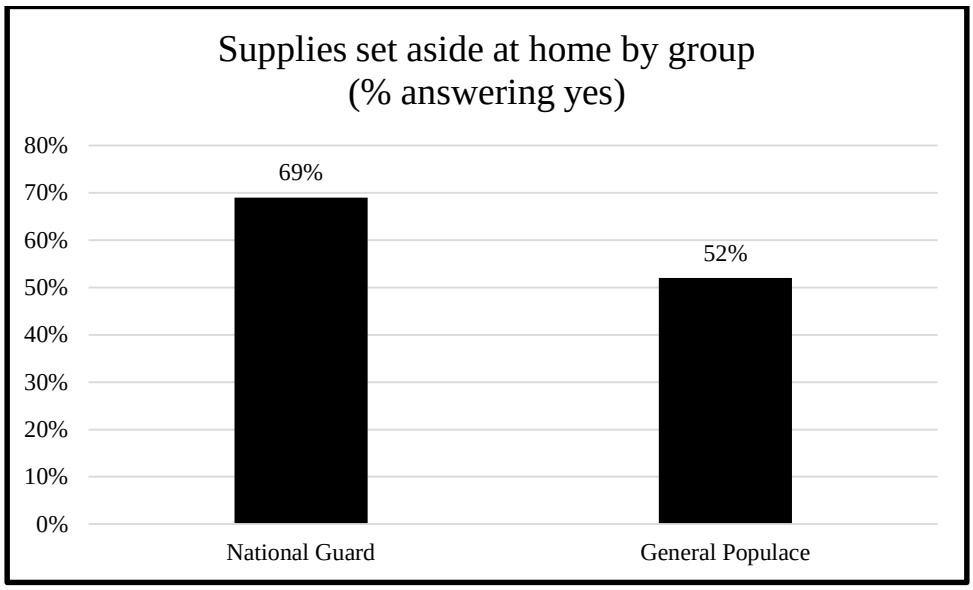


Figure 10. Supplies set aside at home by group

*Sources*: Created by the author from the National Guard Disaster Preparedness Survey, February 5, 2016; Federal Emergency Management Agency, *Personal Preparedness in America: Findings from the 2012 National Survey* (Washington, DC: 2013), 13-14.
*Note*: n=363 for National Guardsmen.

Finally, drilling down to specific items, in every individual category queried, National Guardsmen had more supplies set aside for a disaster than the general populace. Table 4 shows two interesting facts.

Table 4. Comparison of self-reported disaster supplies at home

| Comparison of self-reported disaster supplies at home | | |
|---|---|---|
| Supplies on hand for a disaster | % of individuals | |
| | National Guard | General Populace |
| Packaged food | 75% | 69% |
| Bottled Water | 71% | 66% |
| Flashlight | 94% | 42% |
| First Aid Kit | 81% | 32% |
| Batteries | 81% | 27% |
| Portable, Battery Powered Radio | 55% | 20% |
| Candles/Matches | 78% | 16% |
| Medications | 49% | 8% |
| Fuel | 52% | 8% |
| Generator/Electrical Backup/Alternative Power | 27% | 13% |
| Stove/Lantern/Lamps | 62% | 6% |

*Sources*: Created by the author from the National Guard Disaster Preparedness Survey, February 5, 2016; Federal Emergency Management Agency, *Personal Preparedness in America: Findings from the 2012 National Survey* (Washington, DC: 2013), 13-14.
*Note*: n=366 for National Guardsmen.

First, there are exceptionally large differences in several categories; for example, Guardsmen are six times more likely to report having fuel on hand and ten times more likely to report having a stove, lantern, or lamp. Secondly, for a back-of-the-envelope calculation, averaging across all supplies, 66% of Guardsmen have each of the items listed below while only 28% of the general populace possess these items. Additionally, while just 29% of the general population surveyed indicate they have updated their supplies in the past 6-months, 59% of Guardsmen have done so.[83]

One explanation for higher readiness rates in National Guardsmen could be due to agency requirements. From the literature review in Part Two, only 10% of first responders nationally indicated their agency required them to have a disaster kit and plan, but the NGDPS revealed 25% of Guardsmen said they were required to do so. Also, nearly three-quarters of first responders agreed they would be more inclined to get a kit if their agency required it or if it was

[83] FEMA, *Personal Preparedness in America: Findings from the 2012 National Survey*, 13.

tied to performance evaluations, but over 85% of Guardsmen answering the NGDPS agreed to those inducements.[84]

The data in this section provided indicators to all three questions this monograph sought to answer. In order then, the two questions were: what is the emergency preparedness level in the households of National Guardsmen as compared to 1) the general public and, 2) first responders? The data above show that Guardsmen are far more prepared for disaster than civilians in the general populace, but have readiness rates roughly on par with emergency/first responders. They are more likely to have disaster supplies set aside at home and more likely to have updated these supplies recently when compared to the general population. Speculation as to why will be answered in this monograph's conclusion.

The third question this monograph sought to answer was: what is the emergency preparedness level in the households of National Guardsmen as compared to the Federal Emergency Management Agency's (FEMA) goal of 80% disaster preparedness levels? Again, FEMA's definition was 80% of the population able to shelter in place with emergency supplies on hand. National Guardsmen did not meet this threshold. They came close, with various indicators showing readiness rates between 65-70% (the estimate this monograph offered in the introduction). The natural question to ask then is: why not? The following section introduces new data that forms the heart of speculation as to why, which will also be covered in the monograph's conclusion. While no definitive answer is found, it does portray a pathway to discovering the answer via future research and analyses.

Section Three: Expectations of Response and survival length, biographical data

This section looks at expectations on the timing of emergency response and additionally queries how long National Guardsmen believe their households could survive a disaster. As a

[84] Kelenske, "Emergency Responder Personal Preparedness," 54-59.

reminder, FEMA mainly gives guidance for people to be self-sufficient after a disaster for three days. However, it also offers advice on plans and kits for fourteen days.

First, Columbia University's National Center for Disaster Preparedness asked civilians in a national survey: "In the event of a major disaster where there was NO WARNING such as a terrorist attack or earthquake, do you think your community has an adequate emergency response plan currently in place, or not?" National Guardsmen were asked the same question in the NGDPS. Nationally, 44% of Americans believed their community had an adequate emergency response plan, but 62% of National Guardsmen thought the same.[85]

Columbia also asked about the speed of response and National Guardsmen were queried for comparison. Figure 11 shows the tabulation of National Guardsmen responses and Table 5 compares this data with Columbia's results.

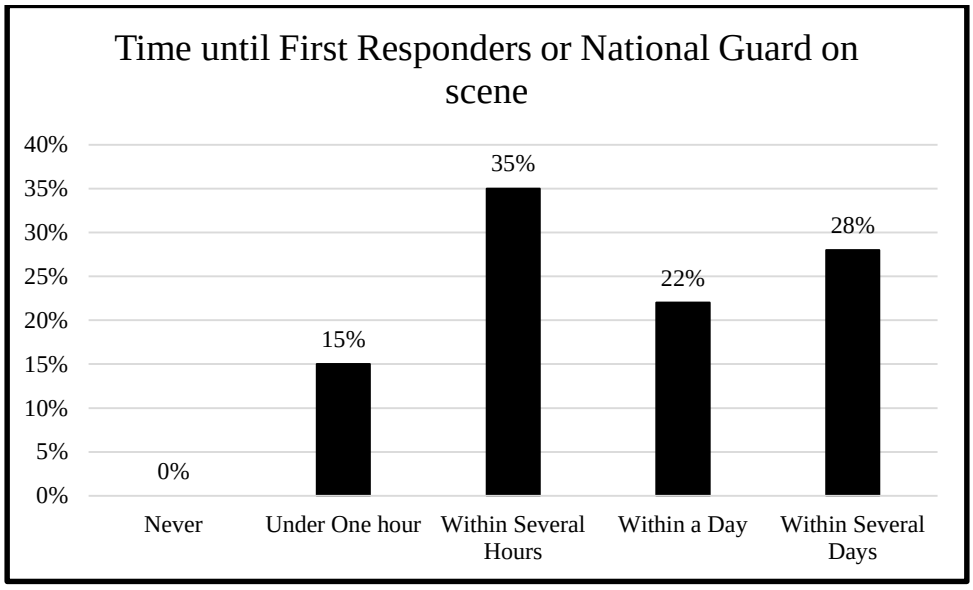


Figure 11. Time until First Responders or National Guard on scene

*Sources*: Created by the author from the National Guard Disaster Preparedness Survey, February 5, 2016.
*Note*: n=365 for National Guardsmen.

[85] National Center for Disaster Preparedness, *Where the US Public Stands in 2011 on Terrorism, Security, and Disaster Preparedness*, 6.

Table 5. Comparison of beliefs on response time to a natural disaster

| Comparison of beliefs on response time to a natural disaster | | | |
|---|---|---|---|
| | | General Populace | National Guardsmen |
| In the event of a major disaster in your community, such as a terrorist attack or a catastrophic natural disaster, how long do you believe it will take first responders, such as fire, police, paramedics, or others such as the National Guard to arrive and assist you if needed? | Under one hour | 32% | 15% |
| | Within several hours | 30% | 35% |
| | Within a day | 19% | 22% |
| | Within several days | 19% | 28% |
| | Never | 0% | 0% |

*Sources*: Created by the author from the National Guard Disaster Preparedness Survey, February 5, 2016; National Center for Disaster Preparedness, *Where the US Public Stands in 2011 on Terrorism, Security, and Disaster Preparedness* (New York: Columbia University, 2011), 6.

Aggregating answers, 81% of the general populace believed it would take just one day or less for help to arrive, while 72% of Guardsmen believed this. Looking back to the literature review, this rapid response expectation was a major reason why civilians indicated they had lower levels of preparedness for a disaster.

Finally, to ascertain beliefs on survival timelines, the following question was posed to National Guardsmen: How confident are you that your household could survive a disaster without outside assistance for three days with you at home? The question was then varied to a time period of fourteen days and whether or not the Guardsmen was at home. Figure 12 and Figure 13 show the results.

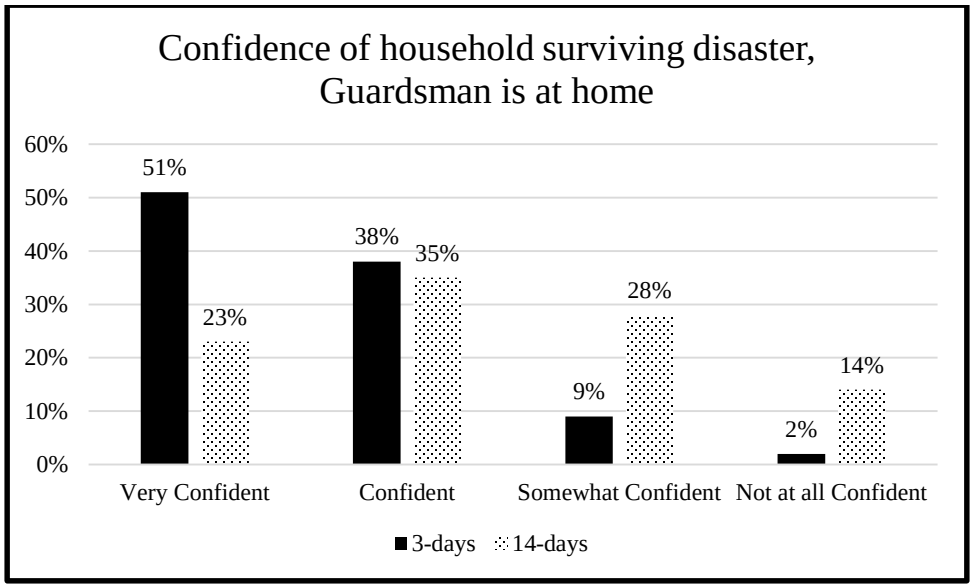


Figure 12. Confidence of household surviving disaster, Guardsman is at home

*Source*: Created by the author from the National Guard Disaster Preparedness Survey, February 5, 2016.
*Notes*: n= 357 for 3 days, n=355 for 14 days.

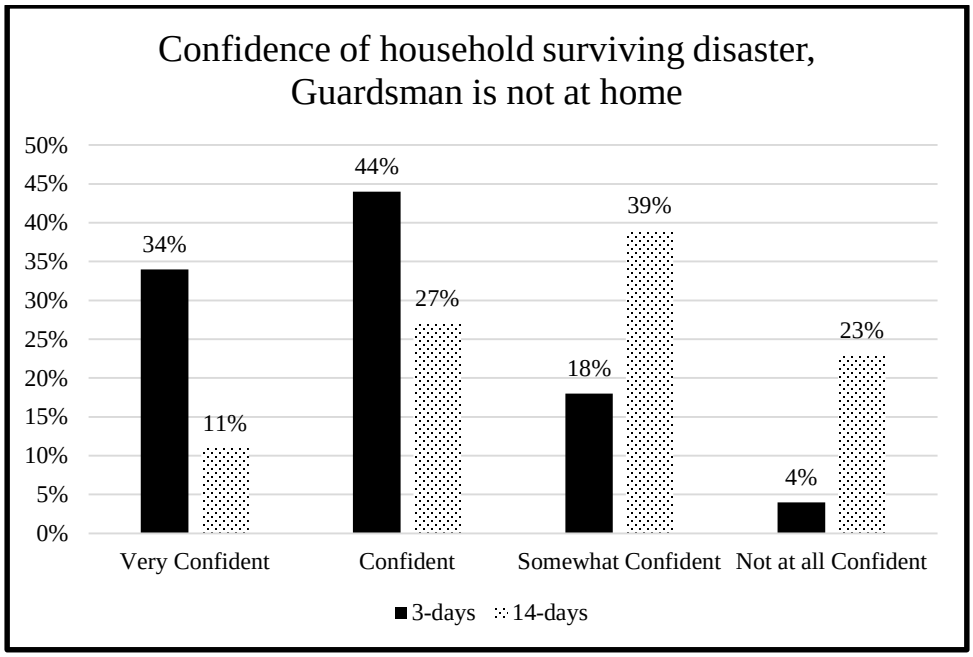


Figure 13. Confidence of household surviving disaster, Guardsman is not at home

*Source*: Created by the author from the National Guard Disaster Preparedness Survey, February 5, 2016.
*Notes*: n= 357 for 3 days, n=355 for 14 days.

These figures show that confidence decreases both with being away and with a lengthened timeline. Combining “confident” and “very confident” responses shows a clear trend as depicted in Figure 14.

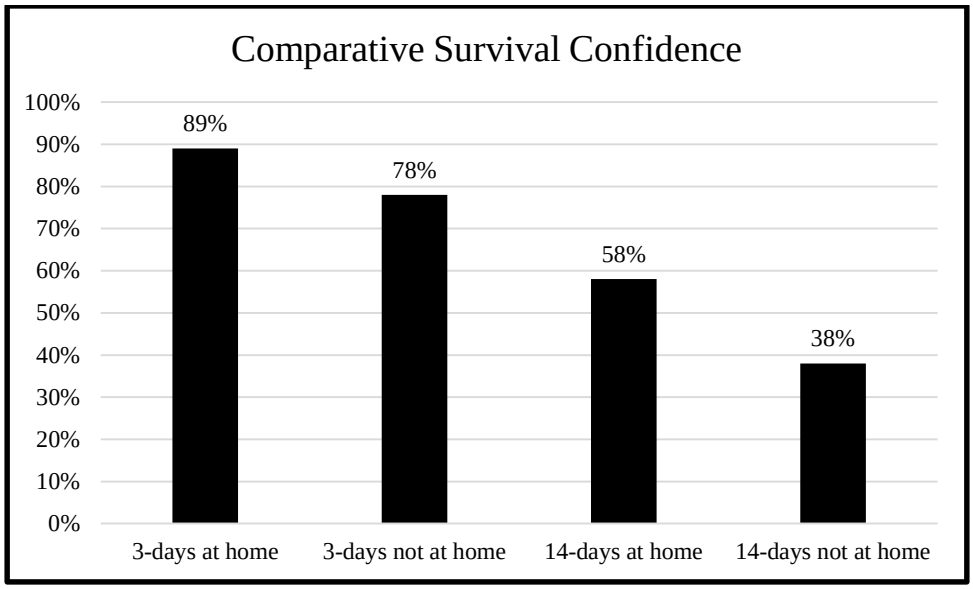


Figure 14. Comparative Survival Confidence

*Source*: Created by the author from the National Guard Disaster Preparedness Survey, February 5, 2016.

As a final touchpoint to understanding and interpreting results, listed here is key biographical data. Of those National Guardsmen who answered the survey, the modal grade was E5-E7 (corresponding to a rank of Sergeant to Sergeant First Class), see Figure 15.

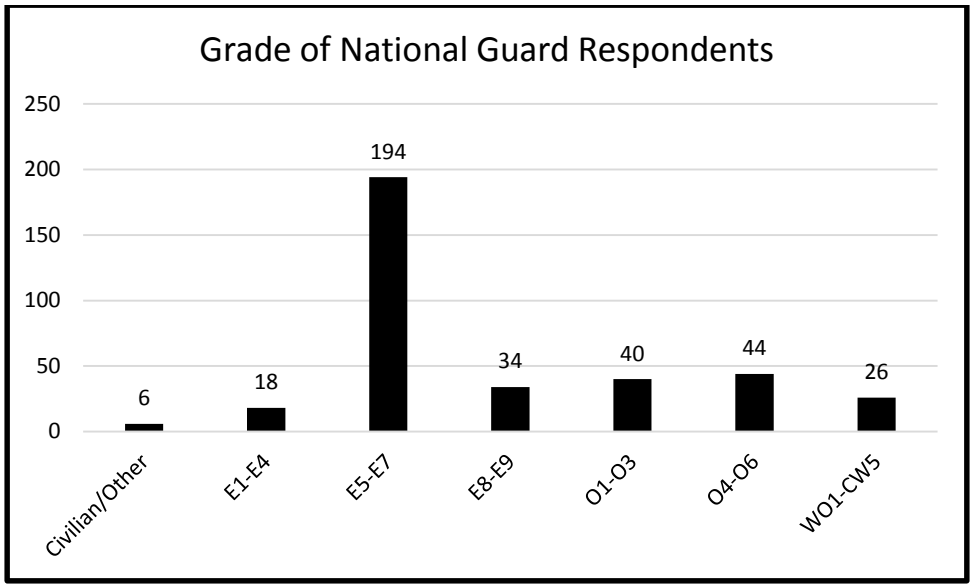


Figure 15. Grade of National Guard Respondents

*Source*: Created by the author from the National Guard Disaster Preparedness Survey, February 5, 2016.
*Note*: n=362.

Taken as a group, the overwhelming majority of respondents are advanced in grade or education (all Officers in the military must possess at least a bachelor's degree prior to promotion to Captain).[86] Additionally, survey results indicate six percent of the Guardsmen were policemen, firefighters, Emergency Medical Technicians (EMTs), or other medical provider in their civilian jobs. The Guardsmen reported an average of 1.90 mobilizations greater than thirty days in length.[87] Collectively then, the surveyed population is a very seasoned group.

This part of the monograph sought to present data from the National Guard Disaster Response Survey, compare it to results of surveys on civilians and first responders, provide factual interpretation, and answer the monograph's three main questions. Part Four below summarizes the key points of the monograph. It also offers speculation on why National

[86] The author assumes the reader is familiar with military rank and grade. If not, see the Department of Defense website accessed on 5 February, 2016 at http://www.defense.gov/About-DoD/Insignias/Enlisted and http://www.defense.gov/About-DoD/Insignias/Officers for Enlisted and Officer rank/grade conversion, respectively.

[87] Blanks were coded as zero.

Guardsmen responses parallel and diverge from the compared populations of the general populace and first responders in certain areas and recommends what further research could be done.

## Part Four: Conclusion and recommendations

The Department of Homeland Security plans for emergency response along a continuum of small-scale to large-scale disasters that vary in scope, impact, and frequency. Key to the flexibility required for such a task, the principle of Tiered Response allows a graduated effort, starting with the individual and expanding, if necessary, all the way to the Federal Government. The National Guard often plays prominently in this response at the state and federal level.

Given this position, and given the possibility of a large-scale natural or man-made disaster, understanding how well prepared Guardsmen households are for a disaster which effects them personally is key to proper planning and mitigation at the state and federal level. If the Federal Government has high expectations for personal readiness rates for civilians, it stands to reason that those same expectations would be higher for Guardsmen. The National Guard Disaster Preparedness Survey provides solid data that shows that while higher levels of preparedness are indeed prevalent in Guardsmen, more work needs to be done to meet minimum goals. This conclusion offers speculation on how to do this after summarizing key points and further analysis from the monograph.

Guardsmen tend to be more pragmatic when it comes to disaster probability. They are far more likely to believe in the possibility of natural disasters (earthquakes, storms) effecting their community than man-made disasters (terrorism, nuclear bomb, chemical attack). This mindset is not without merit. Data collected by the Centre for Research on the Epidemiology of Disasters indicates that America has more incidents per year (18) than any other country, but the annual

death toll is low.[88] As a comparison, Honduras and Venezuela average only one natural disaster per year but experienced 133 deaths and 67 deaths respectively, per million inhabitants versus 1.3 deaths per million for the US.[89]

Guardsmen are also far more confident in their abilities to prepare for disaster. Perhaps this is a function of their higher education or income as FEMA and other researchers found for civilians as cited in Part Two. Or, perhaps it is due to exposure. As indicated previously, the surveyed Guardsmen averaged just under two mobilizations over 30 days in length. Maybe these experiences away from home forced thinking on steps to prepare families for their long-term departure or possibly their deployments overseas to combat zones or to disaster areas in the United States caused reflection. As FEMA found for residents living in the New Madrid Seismic Zone, proximity to possible disaster was positively correlated to an uptick in beliefs regarding probability. It may be that Guardsmen feel "closer" to disaster based upon their job requirements. This could explain why their levels of probability, confidence, and preparedness levels more closely match those of emergency responders. It is also conceivable that the personality type of an individual who joins the National Guard is similar to that of an individual who becomes a first responder. As indicated above, there is some overlap between the two as six percent of the surveyed Guardsmen were policemen, firefighters, EMTs, or other medical providers in their civilian jobs. Further statistical analysis of the NGDPS might yield a correlation among some of these variables, but that analysis is beyond the scope of this monograph.

Many of the reasons just listed could also explain why National Guardsmen are, on average far more prepared with actual supplies on hand than the general populace. As indicated in Part Three, Section Two, 70 percent Guardsmen have supplies at home as compared to half the

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[88] Matthew E Kahn, "The Death Toll From Natural Disasters: The Role of Income, Geography, and Institutions." *The Review of Economics and Statistics 87, no. 2* (2005), 273.

[89] Ibid. Natural Disaster was defined in the work as "ten or more people were killed; 100 or more people were affected, injured, or homeless; significant damage was incurred; a declaration of a state of emergency and/or an appeal for international assistance was made."

general populace, and are twice as likely to have all the supplies listed by FEMA (66% vs. 28%, respectively) as compared to civilians. Guardsmen are also twice as likely to have updated these supplies in the past six months. Lastly, over twice as many Guardsmen indicate their agency requires them to have a disaster kit and plan as compared to first responders (25% vs. 10%). Fortunately, the Guardsmen also indicate that requirements for a kit or a connection of readiness to performance evaluations would raise their likelihood of being prepared.

Yet, with all this, Guardsmen do not meet FEMA's goal of 80 percent readiness. Why? Maybe it is correlated with the low death toll of US disasters as cited above. Maybe it has to do with over-confidence and their beliefs in their personal ability to prepare for a disaster. But neither of those suppositions square very well with the data. Perchance a paradoxical hypothesis maybe true: they strongly believe in their brethren. This should be the focus of further research on this topic.

As indicated above from the NGDPS, Guardsmen are roughly 40 percent more likely to believe their community is ready for a disaster as compared to the general populace. They are very confident that their family could survive a disaster without outside assistance for three days with or without the Guardsmen home and more likely than not to believe they could survive for up to fourteen days with the Guardsmen at home. They also expect help to arrive, but on average believe it will come later than civilians. Therein lies the paradoxical crux, just as they would answer the call to help out someone else in need, they believe their National Guard and first responder comrades will be there in their time of need. Help *will* arrive, the cavalry *will* come.

If true, this hypothesis poses a challenge for FEMA in general and the National Guard in particular: asking their members to be even more prepared for a disaster may be interpreted in asking them not to believe their comrades will respond in a timely fashion. The best way to help other victims after a disaster is not to be a victim yourself. The key then is to encourage home emergency preparation not as a contingency for other's failures, but rather as a foundation of

professional readiness. After all, the National Guard motto is: “Always ready, always there.”

**Appendix 1:**
**Questionnaire**

1. How confident are you about your own ability to prepare for a disaster? Please use a scale of 1 to 5, with 5 being "very confident" and 1 being "not at all confident."

05 Very Confident
04 Confident
03 Neutral
02 Not Confident
01 Not Very Confident

2. In thinking about preparing yourself for a major disaster, which best represents your preparedness?

I have not yet prepared but I intend to in the next 6 months
I have not yet prepared but I intend to in the next month
I just recently began preparing
I have been prepared for at least the past 6 months
I am not planning to do anything about preparing

3. Do you have supplies set aside in your home to be used only in the case of a disaster?

Yes
No

4. Could you tell me about the disaster supplies you have in your home? Please check all that apply.

Bottled Water
Packaged Food
A Flashlight
A Portable, Battery-Powered Radio
Batteries
A First Aid Kit
Eyeglasses
Medications
Photocopies of Personal Identification
Financial Documents
Cash
Blankets / Clothing / Bedding
Generator / Electrical Backup / Alternative Power
Candles / Matches
Stove / Lantern / Lamps
Fuel (Includes Gas, Propane, Firewood, Kerosene, Cooking Fuel)
Camping Gear / Tents / Sleeping Bags
Guns, Ammunition, Weapons, Hunting Gear
Boots
Whistle

5. Have you updated these supplies in the last 6 months?

Yes
No

6. If you were assigned to a multi-day response that would preclude you from returning home for several days, would that assignment create issues and hardships for your family?

7. How Confident are You about You and Your Family's Level of Emergency Preparedness?

Very Confident
Confident
Somewhat Confident
Not at all Confident

8. Does your family emergency preparedness plan include all, some, or none of the following: at least two days of food and water, a flashlight, a portable radio and spare batteries, emergency phone numbers, and a meeting place for family members in case of evacuation?

Yes
No

9. Have you and your family created a preparedness plan that would allow them to be self-sufficient for up to 72hours if a disaster occurred and you were called to duty for an extended time?

Yes
No

10. How confident are you that your household could survive a disaster without outside assistance ...

a. for 3-days with you at home?
b. for 14-days with you at home?

Very Confident
Confident
Somewhat Confident
Not at all Confident

11. How confident are you that your household could survive a disaster without outside assistance ...

a. for 3-days if you were mobilized and away from home?
b. for 14-days if you were mobilized and away from home?

Very Confident
Confident
Somewhat Confident
Not at all Confident

12. If you were an on-duty emergency responder assigned to a multi-day response involving a disaster in your community, would you be concerned with the safety and welfare of your community?

Very Concerned
Somewhat Concerned
Neutral
Not Concerned

13. If you are on duty and ... were to happen in your community how severe do you think the impact would be to you and your family?

a. a natural disaster, such as an earthquake, a hurricane, a flood, a tornado, or wildfires
b. an act of terrorism, such as a biological, chemical, radiological, or explosive attack
c. a hazardous materials accident, such as a transportation accident or a nuclear power plant accident
d. highly contagious disease outbreak, such as a bird flu epidemic

Very Severe
Severe
Somewhat Severe
Not at all Severe

14a. Has your department taken any steps to help staff members prepare themselves and families for the potential implications of a multi-day disaster response?

Yes
No

14b. If yes, what steps has your department taken?

15. My agency has a policy that requires me to have a Personal Preparedness Kit and Emergency Plan at my home?

Strongly Agree
Agree
Somewhat Agree
Somewhat Disagree
Disagree
Strongly Disagree

16a. If my agency required it by policy, I would be more likely to create and maintain a Personal Preparedness Kit and Emergency Plan at my home and for my family.

Strongly Agree
Agree
Somewhat Agree
Somewhat Disagree
Disagree
Strongly Disagree

16b. If my agency included Personal Preparedness and Emergency Planning into Annual Training, I would prepare a Personal Preparedness Kit and Emergency Plan at my home and for my family.

Strongly Agree
Agree
Somewhat Agree
Somewhat Disagree
Disagree
Strongly Disagree

17. A dependent care/family preparedness program would increase the likelihood that I would leave my family to respond to an extended recall should a disaster occur.

Highly Likely
Likely
Not Sure
Unlikely

18. Number omitted.

19. On a scale of 1 to 5, with 5 being ‘‘very likely’’ and 1 being ‘‘not likely at all,’’ how likely do you think…?

a. Any type of natural disaster such as an earthquake, a hurricane, a flood, a tornado, or wildfires will ever occur in your community?

b. Some Type of Terrorism Will Ever Occur in Your Community?

c. Some Type of Hazardous Materials Accident Will Ever Occur in Your Community?

d. Some Type of Disease Outbreak Will Ever Occur in Your Community?

Very Likely
Somewhat Likely
Neutral
Not very likely
Not likely at all

20. What is the likelihood of the following public health crises occurring in your community in the next year or two?

a. Severe Storm (hurricane, tornado, flood, blizzard)
b. Terrorist attack: bombing or plane hijacking
c. Bioterrorist attack
d. Public health crisis from hot/cold weather extremes
e. Nuclear attack, dirty bomb
f. Serious health crisis from food contamination
g. Serious health crisis from common disease
h. Chemical weapons attack
i. Wildfire
j. Serious health crisis from exotic disease
k. Environmental emergency chemical spill
l. Earthquake

9 Very Likely
8
7
6 Somewhat likely
5
4 Unlikely
3
2
1 Very unlikely

21. In the event of a major disaster where there was NO WARNING such as a terrorist attack or earthquake, do you think your community has an adequate emergency response plan currently in place, or not?

Yes
No

22. In the event of a major disaster in your community, such as a terrorist attack or a catastrophic natural disaster, how long do you believe it will take first responders, such as fire, police, paramedics, or others such as the National Guard to arrive and assist you if needed:

Under one hour
Within several hours
Within a day
Within several days
Never

23. How confident are you that the civilians in the area you would assist in a disaster mobilization are ...

a. self-sufficient for 3-days?
b. self-sufficient for 14-days?

Very Confident
Confident
Somewhat Confident
Not at all Confident.

24. What is the highest level of education that you attained?

Less than 12th Grade (no diploma)
High School Graduate or GED
Some College but No Degree
Associate Degree in College
Bachelor's Degree
Master's Degree
Doctorate Degree

25. Which of the following income ranges represents your annual household income in 2014?

Less than $25,000
$25,000 to less than $50,000
$50,000 to less than $75,000
$75,000 or more

26. What is your rank?

E1-E4
E5-E7
E8-E9
WO1-CW5
O1-O3
O4-O6
Civilian/Other

27. In your National Guard career, how many mobilizations/deployments have you had that were greater than 30 days?

28a. Are you a full time National Guardsman (example: Active Guard Reserve)?

Yes
No

28b. If no, is your civilian job as a policeman, firefighter, Emergency Medical Technician, or other medical provider?

Yes
No

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