Call to Action

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VERSATILE
Call to Action for “Unprecedented” Events
By Catherine L. Feinman

News agencies often use the term “unprecedented” when referring to COVID-19 and other recent disasters and events. Unprecedented refers to something that was not known or experienced before. However, it is often used synonymously with the word “unexpected.” Of course, COVID-19 did not exist before 2019, Hurricane Sandy did not exist before 2012, the U.S. was not attacked by terrorists on the scale of 9/11 before 2001, and so on.

Yes, each of these disasters were firsts in different ways, but the word unprecedented seems to negate the ongoing efforts of all the emergency preparedness professionals who work tirelessly to predict and prepare for these types of events. Yes, the exact where and when these incidents would occur were unknown, but experts did warn that they were inevitable.

Gaps in planning efforts have led to failures in response, but it is not too late to make corrective actions now. For the COVID-19 response, fewer lives will be lost if the healthcare industry uses some caution in its recruiting process and reconsideration of other groups like home health care workers that could serve as force multipliers or military personnel for law enforcement efforts.

The current pandemic has certainly exposed the nation’s lack of preparedness. However, through all the uncertainties, public health experts knew and have warned for years that a pandemic was coming and that the nation was unprepared for it. With so much foreshadowing, unprecedented does not seem to be the right word to describe this disaster. But the past is the past, and the future still has many uncertainties. Among these uncertainties are inventions that will be spurred to bridge the current response gaps.

As with all large disasters, there is a new (yet recurring) call to action for communities to build resilience so that the nation as a whole will be more prepared to face the next big disaster – one that will likely be called unprecedented, but once again is anticipated by many knowledgeable emergency preparedness professionals. Will the nation make the same mistakes again, or will we finally learn the lessons of the past, incorporate best practices, and collectively plan for the worst while never giving up hope for the best?
Dear DomPrep Readers,

I hope you and yours are safe and healthy and let us not forget, the many DomPrep readers who currently are serving on the front line.

With all the noise coming from traditional media, I thought it would be of interest to provide an update from DomPrep. Please find attached an audience summary, gathered from Google Analytics. The numbers serve an important reminder that our work continues to be highly relevant, particularly to those who need clear, non-political, non-hysterical preparedness and resilience solutions.

Last week, I received an email from a DomPrep contributor, Jerry Mothershead, MD, USN (Ret.). Here is a shortened version of his note to me.

Marty

One of my colleagues sent me a link to one of the articles I wrote for DOMPREP back in 2005 or so about pandemic planning – my God that was 15 years ago. I read it, and then looked to see what else I had written, seems like I wrote 4-5 on issues related to pandemics...change a few words, and these could apply to the current situation.

People never learn. Hope you are well.

Jerry Mothershead
April 16, 2020

Here’s a link to his articles. I particularly like “Love Thy Neighbor, But Keep Your Distance.” Back in 2007, Jerry precisely described what we are living today!

Dr. Mothershead’s insights are not unique. Thousands of articles, submitted by amazing practitioner/writers, continue to offer insight, best practice and lessons learned to a professional operational audience.

With your support, our work continues. Please feel free to share within your community.

Sincerely,

Martin D. (Marty) Masiuk, Founder & Publisher
Preparedness Leadership Council http://PLCouncil.org
DomPrep Journal http://DomesticPreparedness.com
Inventions Birthed by Necessity
By Daniel M. Gerstein

If necessity is the mother of invention, the new coronavirus is quickly birthing a lot of innovations. Parts of U.S. society may be forever changed by this pandemic. As of 13 April 2020, the United States had over 550,000 confirmed cases and 22,000 deaths, with emergency preparedness and response agencies preparing for much more to come. Combinations of social distancing, home quarantine, closure of schools and universities, and case isolation are now being extensively practiced. Creativity is being implemented each day to overcome response barriers to those at work and meet the needs of those asked to stay at home.

Although it is unclear how long current social distancing, quarantine, closure, and isolation measures will be required, most experts agree it will be months, if not longer. Laboratories around the world are working on developing a vaccine. However, mass production of vaccines and antivirals typically take 12-18 months. Limits on in-person interactions require new approaches to keep society functioning and the economy running. Companies have been quick to create workarounds to keep people virtually connected in a physically disconnected environment.

Keeping Society Connected

New solutions are being developed to keep society connected. Teledmedicine consultations are being used to determine if someone requires testing and to limit unnecessary face-to-face interactions. An artificial intelligence platform called AskSophie allows patients to conduct self-assessments of their risk of contracting the virus. Many schools are now using virtual classrooms and teleconferencing to finish their spring semesters, though it seems possible this national emergency will extend into the next school year. Even in states without broad stay-at-home orders, governments and industries are encouraging employees to work from home so as to limit exposure to the virus.

By necessity, global supply chains are being reengineered to deliver goods and services right to the front door. Trends started by the likes of Amazon, FedEx, and even grocery store deliveries over the past several years are expanding. Local retailers and restaurants also are expanding their services in this way in order to survive. Some industries are in an “adapt or die” moment.

Additive manufacturing (3D printing) is being used to support industrial supply chains severed by the virus. For example, when one Italian hospital needed replacement valves for an oxygenation mask and the supplier had none in stock, FabLab in Milan was able to meet the request by 3D printing the
valves. Others are repurposing or innovating new uses of available technologies. There are anecdotal reports of physicians using continuous positive airway pressure (CPAP) machines normally used for treating sleep apnea for respiratory therapy short of intubation. Cell phone location data is being considered as a tool to trace possible virus exposure (although this has raised privacy concerns).

Perhaps there will soon be widespread use of augmented- or virtual-reality systems for tele-vacationing, socializing, or other methods of relieving stress. These tools provide the means for people to feel connected even if they are many miles apart. New uses of the technology continue to be found. The digital environments have literally gone from novelties to technologies that are being used in the fight against COVID-19, as doctors use the technology to “virtually” peer into the lungs of victims to make diagnoses.

Addressing Public Concerns
Governments are also going to have to innovate to manage a plethora of policy and regulatory questions resulting from COVID-19:

- How will the presidential election take place if the nation is still in the midst of this national emergency?
- How will social safety nets be expanded quickly?
- How long will social distancing be required?
- How will the timelines for relaxing social distancing measures be determined?

Government agencies will need to prioritize new areas of scientific discovery and technology development. Timelines for development and approval of vaccines and therapeutics such as antivirals must be shortened and testing capability – particularly point-of-care diagnostics – ramped up. But that is just one area. The suddenly expanded use of online services is also likely to cause a reevaluation of underlying issues such as extending broadband communications to underserved communities and providing a minimum level of information, communication, and technology to students of all ages. Workers or students cannot be expected to participate in tele-work and tele-education without the necessary tools.

This national emergency will eventually end, but the longer it lasts, the less likely that the pre-pandemic business-as-usual ways will return. Businesses that were teetering on the brink will likely not survive. The continued use of virtual interactions in some nontraditional settings such as in schools, work, and medicine will likely continue. Going back to the old ways of long commutes may not be as desirable when one will be able to interact just as effectively without being physically in the same space.

Use Caution: Retirees & the Direct Clinical Setting

By Matthew Minson

To help with the increasing surge of COVID-19 patients, there have been a number of calls to re-enlist retired physicians and nurses in the healthcare setting. These calls from those within the government and the clinical setting are understandable on the surface. However, some elements are not being fully considered and could actually have harmful effects if not implemented effectively.

In some situations, senior citizens could deploy in disaster response and recovery efforts. For example, at 80 years old, Samuel Whittemore provided vital assistance despite being the oldest known combatant of the American Revolution in 1775. However, senior healthcare and social issues must be considered. For inherent and evident reasons, healthcare and government agencies should use caution when rallying retired physicians and nurses to bolster the healthcare workforce in the time of COVID-19.

Benefits & Caveats for a Senior Workforce

There are many good reasons for retirees to volunteer or re-enlist in order to fill gaps to meet surge demands. For example, in 2010, the Federal Emergency Management Agency Urban Search and Rescue team in Texas recruited the retired physician’s organization of the Harris County Medical Society in order to enhance manpower needs. During the pre-deployment phase of multiple incidents, those retirees assisted with physicals and medical screenings. Although their efforts were impressive and inspiring, those same noble men and women would not be as well suited to respond on the front line of the current COVID-19 threat for several reasons:

- **Severity of illness** – Older adults and those with underlying medical conditions are at the greatest risk of severe illness should they contract the virus. The risk of severe outcomes and death increases with age.
- **Comorbidities** – As people age, they are more likely to develop chronic health conditions such as heart disease, diabetes, and lung disease. Coupled with COVID-19, these conditions become even more life-threatening.
- **PPE shortages** – Personal protective equipment (PPE) shortages have been reported around the world due to increasing demand, buying and hoarding out of fear, and misusing PPE. In some cases, shortcuts are being taken (e.g., reusing single-use resources) that increase risk of infection. Introducing retirees back into the system would increase PPE needs and deplete resources at an even faster rate.

Reconsider re-enlisting retirees for response in the clinical setting. There are better and safer uses for this precious intellectual resource.
Any one or combination of the above risk factors would increase the number of critically impacted and dependent patients. Under these circumstances, encouraging seniors to exponentially increase their contact with this very contagious virus could, in fact, counteract the intended response goal.

**Recommendations for Re-Enlisting Retirees**

In terms of enhancing the response, perhaps the best use of this precious intellectual resource would be in remote video oversight of junior physicians and nurses, nontraditional aide and caregiving in a virtual capacity, and home health consultation via telephone and other remote and protected situations. Additionally, if provided tele-triaging templates, these retirees could be a massive force multiplier for public health and healthcare.

Regardless of age, those considering volunteering in a direct clinical setting should review their risks. Those who are older, immunosuppressed, or recently post-surgical, or those having moderately or poorly controlled medical conditions should consult their trusted healthcare providers to determine how they could best serve.

The poet, John Milton famously wrote in a 1650s poem, “They also serve who only stand and wait.” This might be a time when art and life have a potential for mutual enhancement. A nurse or physician who maintains the greatest PPE of all, social distance, may sustain much longer, serve much longer, and ultimately avoid becoming one in need for these limited medical resources.

There is much truth in the grim adage, “A dead responder doesn’t save anybody.” In the age of COVID-19, ill-planned utilization of retirees could doubly rob the response by depleting an intellectual resource and creating another in-patient requirement. It is critical to consider all the potential risks and consequences of such decisions before making or responding to these calls for action.

*Matthew Minson, MD is a physician and has served as a senior health official at the local, state and federal level. He is the author of a series of books championing individual health and social advocacy published by Texas A&M University press and has been a contributor to C-Span, NPR, and PBS. His website is [www.preparetodefendyourself.com](http://www.preparetodefendyourself.com)*

10 April 2020, DomPrep Journal
A Family Tradition – Old School Florida Smuggling

By Robert C. Hutchinson

The evolution of drug smuggling and related crimes in south Florida can be viewed through one family and its many criminal associates. The Barker Family entered the smuggling business in the 1970s and transitioned from marijuana to cocaine and illegal aliens by the 1990s. Through drug and alien loads, broad conspiracies, and multiple deaths, the smuggling group was active, successful, and notorious. This is an account of old school Florida smuggling through the long thread of one small family. It is a bit of a history lesson and a fascinating journey back in time.

Follow this intriguing true story in a new 16-part DomPrep series. Catch up on this month's installments:

Ch. 14: The arrest and sentencing of fugitive Richard Barker and the pursuit of the remainder of the Barker Family associates

Ch. 15: The rest of the story about the Barker Family and Richard Barker's perspective of his life

Ch. 16: The Barker Family today and the end of the long family tradition

Revisit all 16 chapters from the beginning at www.DomesticPreparedness.com
At about 6:15 a.m. on 8 November 2018, an iron hook holding up a 115,000-volt line broke, dropping the live wire and sparking a blaze. Thirty minutes later, what would come to be known as the Camp Fire was out of control. Officials ordered the evacuation of the nearby town of Paradise, home to 26,000 people. The town was soon burned to the ground. Within hours, the fire destroyed 13,893 homes and killed more people (85), than any other California wildfire.

This article chronicles the story of a mega-disaster. However, it turns out the Camp Fire was just one piece of a much larger catastrophe that began a decade before. Part one of a three-part feature begins here.

The Villain Evolves

While most who live in highly populated areas of America are dealing with the COVID-19 pandemic, responders in California and many areas of the great Northwest are beginning preparation for the coming annual fire season. California officials know from experience and academic studies from consultants, prestigious universities, and governmental agencies what to expect.

Beginning with the dry and windy conditions that are sure to come in just a few months, the nation's most populous state may face more risk than previously imagined. Add to the coming firestorm such factors as:

- The fire season being longer than it was 40 years ago;
- The impact of the changing climate on soil moisture; and
- Approximately a fourth of the population now living in the wildland-urban interface.

With these three factors, it is easy to see the potential for disastrous fires to occur. Some of the most recent fires have even followed the same path of previous major fires, except for one major point...there are thousands of homes and businesses in the way that were not there in years past.

State and federal foresters have increased the number of controlled burns and allowed increased logging in efforts to limit the fire load. Most experts would argue that it has not yet made much of a difference in resolving the problem.

One of the major utility companies in California is Pacific Gas and Electric (PG&E), which provides service in most of the central and northern areas of the state. Headquartered in San Francisco, PG&E has become the villain in this story. But first, here is a short background sketch to help clarify how the situation has gone from bad to worse and many would argue how PG&E has become the epitome of failure.
History of PG&E

PG&E, like many major organizations, has and is suffering through major changes brought on over the past two decades. Aging infrastructure, dated technology, distractions from constant growth in California, climate change, governmental pressure (such as green-energy mandates, consumer concerns, and legal battles), and a deteriorating public image have all had a severe impact on the company.

PG&E covers a utility service area that contains 70,000 square miles. By comparison, that is equal in size to the state of North Dakota and just misses equaling the entire New England area of the United States, which has six states.

Currently in their second bankruptcy in the past ten years, PG&E has caused many officials, regulators, and the general public to question PG&E’s competence and its ability to safely function in today’s demanding environment. Many consumers openly question if PG&E may be too large to continue safe operations.

Aging infrastructure currently tops the utility’s list of problems. Yet, while replacement and repair funds have increased about 50% over the last few years, the changing leadership direction and past strategic plans seem to be tone-deaf to its crucial impact on success. In fact, leadership philosophy over the past decade has ranged from maximizing cost-saving efforts designed to improve the stock price, to failed political moves, such as proposition 16. Of course, the obligatory “back to basics” program appeared regularly, as well as the constant program of annual rate increases. For sure, all forms of the company’s reimaging efforts did not change the public perception.

During this same period, PG&E and other state utilities experienced what has become the expected fire activity during a normal fire season. Then, on 9 September 2010, San Bruno, California experienced a huge gas line explosion. Over 200 firefighters responded to the 8-Alarm blaze. Eight people died and 38 homes were destroyed. PG&E’s future changed for the worse.

Legal Battles

In the months following the San Bruno explosion, PG&E took a proverbial beating by the local government, state regulators, the media, and the public in general. Federal prosecutors filed criminal charges against PG&E on 14 April 2011 for “knowingly and willfully” failing to maintain gas pipeline records. In early 2015, state regulators levied a $1.6 billion fine, which was the largest penalty ever charged against a utility in the state. The good news was that no PG&E employees were personally charged. With no one to file criminal charges against, the situation seemed to gradually change. The prosecutors dropped the charges and a judge reduced the maximum liability for the company to only $6 million. However, there was an outcry from citizens who thought that PG&E was not being held accountable. PG&E was forced to file for bankruptcy because of the state fine. Shares of PG&E stock fell 8% within days after the explosion, and the company’s value dropped $1.57 billion.
PG&E was also placed on federal probation, overseen by a U.S. district judge. The National Transportation Safety Board began an investigation and ruled in January 2011 that they found numerous defective welds in the San Bruno pipeline. A few months later in 2011, the chief executive officer left the company with little fanfare and a sizeable payout.

During the next few years, PG&E would try various new leaders and philosophies, turning to solar and green-energy programs to move into the future as a viable entity. Executives buried themselves in the details of running the utility, managing the legal requirements of the first bankruptcy, dealing with increasing regulatory requirements, and facing an ever-increasing wildfire environment in the state. The state of California added new regulations, which required utilities to report fires that they started.

The Camp Fire on 8 November 2018 was the 408th of the year started by PG&E powerline failures and the 1,961st reported since 2014.

The story continues in part two of this article.

William H. Austin, DABCHS, CFO, CHS-V, MIFire, currently teaches in the Emergency Management master’s degree program at the University of New Haven in Connecticut (2016-present). He formed his own consulting firm, The Austin Group LLC in 2011. He served as fire chief of West Hartford, CT (1996-2011), and as the fire chief of Tampa, FL (1985-1995). He has a master’s degree in security studies (defense and homeland security) from the United States Naval Postgraduate School (2006) and a master’s degree in public administration from Troy State University (1993). He is a member of the Preparedness Leadership Council and has served on various governing councils both in Florida and Connecticut.
As the United States continues to respond to the coronavirus pandemic, police departments across the country are beginning to feel the impact of the virus on their day-to-day staffing. In New York, three officers have died, more than 900 members of the NYPD have tested positive for the coronavirus and 5,200 have called out sick. In Detroit, Michigan, two officers have died due to the coronavirus, including a 38-year old dispatcher and nearly one-fourth of the force is quarantined. In Puerto Rico, the entire police department of Rincón is quarantined. In California, law enforcement officials are exploring the option of assigning detectives, administrative personnel, and special operations personnel to street duty. However, the country has other reinforcements that should be deployed.

In addition to their normal tasks, some police departments are being called on to enforce social distancing orders, while others are cutting back on services. Routine enforcement of impounding cars, issuing traffic citations, and even minor arrests are being put on hold as departments struggle to ensure the health and safety of law enforcement officials.

In Philadelphia, Pennsylvania, thefts of vehicles nearly doubled to the highest numbers in almost a decade, after the police department issued new guidance altering the arrest policy. Under the new policy, offenses such as retail theft, automobile theft, narcotics offenses, vandalism, and prostitution would not be sent to jail. Instead, they will be given paperwork and released.

Understanding Military Roles & Services

As experts warn that the worst of the pandemic is yet to come, it is unclear if some police departments will be able to continue to provide services. Previous pandemic planning assumptions indicate that as much as 40% of the workforce may be absent during the peak of a pandemic. One possible solution is to utilize the military to help enforce law and order. Generally, this option would be considered as one of last resort – as military personnel are not trained in law enforcement techniques and tactics. However, this pandemic calls for the examination of nontraditional methods and solutions.

The role of the military in a domestic response assignment is limited by the Posse Comitatus Act of 1878 (PCA). The PCA is a law designed to act as a limitation, so that the military does not infringe on the police powers reserved to the states. Importantly, in this context, PCA limits the law enforcement role that military forces may perform. There are nuanced differences in the types of activities allowed. Activities typically fall into one of two categories – direct active use or support of law enforcement.

Direct active use refers to traditional law enforcement activities, such as writing tickets, conducting searches and seizures, investigating crimes, and pursuing escaped prisoners.
These types of activities are not allowed under the PCA. However, activities such as providing vehicles, technical assistance, transporting criminals, or providing aerial surveillance are deemed as being in support of law enforcement – and thus allowed.

When applying the PCA to the National Guard there are further considerations. There are three activation options for National Guard troops: state active duty, full active duty under Title 32, or federalized duty under Title 10.

Currently, more than 8,000 of the approximately 350,000 National Guard troops are assisting with the pandemic response effort. These troops have been deployed under Title 32 status, which was approved by President Trump on 22 March 2020. Title 32 provides federal funding for the Guard while having them remain under gubernatorial command.

The PCA does not apply to National Guard personnel that are operating under the command of a governor. As PCA does not apply, these troops are able to provide a wide range of supporting functions. This includes providing law enforcement functions, which may be needed if local police departments see a dramatic uptick in illness.

Calling on the National Guard to respond in this time of crisis allows for much greater flexibility than using federal forces. In addition to the PCA, Department of Defense regulations prohibit the types of assistance that federal forces could provide. Specifically, federal troops are prohibited from any civil law enforcement activity, including enforcing quarantine or isolation orders, enforcing curfews, or providing security at medical treatment sites.

Although the use of federal forces for law enforcement activities is limited, there are many other services they can provide. A Robert T. Stafford Act disaster declaration, coupled with a request from a governor to the president can allow for Department of Defense assistance. Under this mechanism, presidential direction can be issued to the defense secretary that allows for emergency assistance, “essential for the preservation of life and property. . . for a period not to exceed 10 days.” Using this mechanism allows for federal troops to provide assistance, such as providing medical care.

**Responding to the Current & Past National Emergencies**

On 17 March 2020, President Donald Trump declared the COVID-19 pandemic a national emergency. This follows the declaration of a public health emergency from the U.S. Department of Health and Human Services on 31 January 2020.

So far, President Trump has approved major disaster declarations for New Jersey (March 26), Illinois (March 26), Maryland (March 26), Missouri (March 26), Texas (March 25), Florida (March 25), North Carolina (March 25), Iowa (March 24), Louisiana (March 24), Washington (March 22), California (March 22), and New York (March 20). Since he declared a national emergency, territories and tribal governments are not required to request individual emergency declarations.
As the pandemic continues to impact the United States, all options must be on the table. The PCA limits the ability of federal forces to be used as backup for local law enforcement. However, the National Guard, under Title 32 status, could be used to bolster law enforcement ranks depleted due to illness.

One other important consideration is the invocation of the Insurrection Act of 1807, which allows the president “to suppress, in any state, any insurrection, domestic violence....that hinders....or opposes or obstructs the laws.” The Insurrection Act is an exception to the general prohibition against using the military for domestic law enforcement activities. When invoked, the PCA does not apply.

The use of Insurrection Act powers would not be unprecedented. In 1989, President George H. W. Bush issued a proclamation and sent troops to the Virgin Islands after the governor requested federal intervention. Over 1,100 federal troops, including military police, helped to restore order and quell looting on St. Croix.

In 1992, President Bush again used Insurrection Act powers and sent in federal forces to provide assistance with the Rodney King riots in Los Angeles, California. During these riots, local, county, and state police were bolstered by the National Guard and federal forces. During this time, the National Guard was federalized and brought under Title 10 jurisdiction.

It seems that the infection of more law enforcement officials is inevitable. As such, governors should begin considering how the National Guard and federal forces may serve as a backstop to ensure law and order are maintained during this public health crisis. In any event, it is of vital importance to ensure the brave men and women who are upholding peace and order during this time are provided with the latest medical information and guidance, as well as appropriate personal protective equipment.

For further information on this topic, see Practical Implications of Posse Comitatus Act on Military Integration into Local Health Department Disaster Planning and Response by Andrew Roszak, Sara Rubin, and Jack Herrmann (published in October 2013)

Andrew Roszak, JD, MPA, EMT-paramedic, serves as the executive director for the Institute for Childhood Preparedness. Roszak has worked on emergency preparedness issues at the local, regional, state, and federal level for the past twenty years. He was formerly senior public health advisor for the U.S. Department of Health and Human Services’ Emergency Care Coordination Center and senior director of environmental health, pandemic preparedness, and catastrophic response at the National Association of County and City Health Officials, where he worked each day to help prepare communities for pandemics and disasters.
Lately, there have been a number of discussions about protecting healthcare workers, bolstering the ranks with volunteerism, and utilizing alternative care sites and providers. There have been call-ups of retired clinicians of all stripes, field promotions of health sciences students, and alternative venues for care like telemedicine. However, one group that does not seem to be as considered or fully addressed is that of home health workers. Although they are often tangentially referenced in healthcare environment conversations, this unique, variable, and incompletely accounted landscape is potentially an area of increased risk for providers, patients, public spread, and mortality.

In many discussions, publications, and public callouts by leadership, public health, and others, this quiet and large workforce is generally not mentioned. There are specific instructions for some cohorts of care-provision such as emergency medical services (EMS) or the healthcare setting writ large. There is also long-term care and nursing home guidance.

Underreported & Underprotected

However, it appears that home healthcare is called out only to distinguish arbitrarily between certain considerations of infection potential and the protection requirements of said personnel. The guidance appears to assume that personal protective equipment (PPE) requirements differ from other settings when, in fact, a patient receiving home care may actually be capable of aerosol-generation in close approximation to the caregiver.

This healthcare sub-environment is at risk for not being fully and properly captured in terms of data collection. In part, this is because the participants in home healthcare often vary substantially in training, credentialing, and advocacy at public health strategic levels. Considerations and assumptions of patient contact and a lack of inherent engineering and infection controls make this a potentially devastating vulnerability for all parties concerned and could be a hidden vulnerability in the overall healthcare strategy. In fact, in assessments performed in 2016, distinct state requirements of accountability for “who is providing home care” and the potential effects listed a cohort of personnel that included: community attendant services (CAS), registered nurses (RN), licensed vocational nurses (LVN), home health aides (HHA), personal care assistants (PCA), dialysis technicians, and medical equipment suppliers, among others. This is a large and
stratified group with significant risk profiles who deserve more attention in terms of PPE guidance and inclusion in the “healthcare system” universe.

**Additional Guidance Needed**

In terms of consideration, most of these settings are not mentioned or included in terms of PPE requests and priority, even as those personnel are being asked in many states to engage in the healthcare setting as part of surge. One might consider that they are already engaged. Additionally, they are not part of the PPE prioritization. In a time of shortage, of course, the first consideration should go to the high aerosol-generating and proximal areas such as critical care, respiratory therapy, and the interventional theater. Admonition, however, for all who may be at risk should not be overlooked.

In some guidance, the home health setting calls out masks distinct from N95-mask protections. One gap that needs to be closed would be additional guidance for an assessment of the risk factors in terms of procedures, aerosol generation, distance, barriers, and more as well as the allowance of the more sophisticated respiratory and other barrier provisions. The healthcare system is, after all, an ever-broadening universe in the 21st century.

*Matthew Minson, MD, is a physician and has served as a senior health official at the local, state, and federal level. He is the author of a series of books championing individual health and social advocacy published by Texas A&M University press and has been a contributor to C-Span, NPR, and PBS. His website is [www.preparetodefendyourself.com](http://www.preparetodefendyourself.com)*
One trusted advisor in homeland security salutes another

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In contrast to experts' estimates of millions of deaths, the U.S. Department of Homeland Security (DHS) pandemic influenza planning scenario refers to just 87,000 casualties – not much more than a bad seasonal flu. This version of the scenario seen in public forums has planning assumptions on virus lethality, worker absenteeism, and maintenance of law and order that are irresponsibly optimistic. When planning for security, it is better to err on the side of worst-case scenarios. The DHS uses 15 National Planning Scenarios. Scenario 3 is “Biological Disease Outbreak – Pandemic Influenza,” and Scenario 4 is “Biological Attack – Pneumonic Plague.”

None of these scenarios involve a genetically modified organism (GMO) or bioengineered agent used to generate a viral pandemic with truly catastrophic levels of deaths. None of these scenarios deal with large nation-state levels of attack. There is no official, released version of DHS Scenario 3, but references to Scenario 3 usually cite just 87,000 casualties, less than what many scientists and biologists fear would result. The assumptions of the virus not being that bad, worker absenteeism not much problem outside the health care sector, and no problems from lawlessness, lead to all forms of critical infrastructure operating and no cascading effects. However, the 2006 National Influenza Pandemic Implementation Plan noted that “a modern pandemic could lead to the deaths of 200,000 to 2 million people in the United States alone,” compared to the 87,000 fatalities most often cited for Pandemic Influenza Scenario #3.

Realistic vs. Unrealistic Projections

A doctor, pandemic expert, and associate DHS director, writing in New England Journal of Medicine in 2005 estimated that, “even a relatively ‘mild’ pandemic” (relative to the lethality of the 1918-1919 Influenza pandemic) “could kill many millions of people.” Avian flu (H5N1) may be worse than past H1N1 influenza pandemics. The contrasts between the 1918 Spanish Flu pandemic, seasonal flu, and the anticipated avian flu pandemic cited earlier that experts say could kill a billion people. The realistic Clade X simulation estimated hundreds of millions of fatalities. Yet U.S. National Planning Scenarios uses only tens of thousands of fatalities.

The National Planning Scenarios (NPS), while marked “FOR OFFICIAL USE ONLY” are readily available on the internet in sanitized, abbreviated form. Detailed versions that were accidentally posted a decade ago are still available on some state websites. The NPS occasionally refer to but ignore the consequences of a collapse in their “secondary hazards/events,” in casualty estimates, or recovery resources and preparations needed.
The official modeling and studies of the Pandemic Influenza scenario show optimistic assumptions, ignoring many politically contentious issues. For example, the 2007 OSHA description highlighted changes in shopping behavior, desired items, and preferred shopping times and methods, but does not address panic buying, looting, and violence that are also likely to occur.

A Council on Foreign Affairs sponsored conference in 2005 considered the impacts of an avian flu outbreak. The fatality estimate used was not thousands, but a pandemic that would kill 130-150 million people, about 2% of the world’s population. Their predictions of impacts:

- Air service to infected areas will shut down (with unions/employees refusing to fly, even if governments do not prohibit international flights).
- The pandemic would last 18 to 24 months (not less than a year like the mild H1N1 pandemic).
- Some political leaders will decide to close borders at national, state, and city levels.
- Basic services such as food and fuel will be significantly affected.
- The weakest link may be the physical distribution system, just-in-time delivery.

The consequence of unrealistic scenario planning for a mild pandemic and no loss of law and order, no collapse, is likely to be millions of lost lives due to politically correct plans and gross unpreparedness. The assumptions of DHS Pandemic Influenza Scenario 3 contradict the “Lessons Learned” from Katrina that DHS and the Bush White House published:

*While the National Planning Scenarios have been effective tools for generating dialogue on response capabilities, they do not fully anticipate some of the worst disaster scenarios. . . If the purpose of the National Planning Scenarios is to provide a foundation for identifying the capabilities required to meet all hazards, the Scenarios must press us to confront the most destructive challenges . . . [W]e must revise the planning scenarios to make them more challenging.*

Like many government reports, little was done to execute the recommendations in that report.

Another dangerous set of assumptions involve levels of worker absenteeism, particularly in law enforcement and the food and transportation sector, which are key to avoiding lawlessness and higher casualties in a collapse. Government publications on pandemic preparedness often cite worker absenteeism rates of up to 40%. A 2009 study of health care workers who were asked about their willingness to report to work for a smallpox, SARS
(severe acute respiratory syndrome), or other dangerous diseases found worker absenteeism rates above 40%. Many people are going to stay home rather than risk exposure to a deadly virus, risk getting killed by marauders, or risk having their family or home attacked while they are at work.

Studies thus far do not support the reasoning behind the 40% absenteeism rate used by national planners. When developing these rates, the numbers must reflect the risk people take at work combined with the risks they take of endangering their families by unknowingly bringing home a deadly virus or leaving their families vulnerable to other dangers while they are away. Considerations must be made for the impacts of the trigger event (e.g., a pandemic, no electric system, no reliable law enforcement due to some other widespread big disaster) in addition to the impacts of lawlessness on a scale the United States has yet to experience. The impacts of social media spreading rumors and panic could also affect absenteeism rates.

Businessmen who attended a conference on dealing with an H1N1 influenza pandemic (not a very lethal form of flu) in 2009 said worker absenteeism was their greatest concern. They were uncertain what absenteeism rates would be but, in a poll taken, their estimates were much higher than the “baseline” or “anticipated” rates of modeling cited earlier.

Deadly Combination: Supply Chains & Violence

The National Planning Scenarios ignore human nature, past disaster experiences (which are less significant than a pandemic, loss of the electric system, or other widespread disaster), exercises like Clade X and Dark Winter, and common sense. After Katrina, lawlessness, looting, and worse was a significant problem. Most of the Guard troops who deployed for disaster recovery were used in a law enforcement and security role. For a longer lasting, far more deadly pandemic or loss of the electric system, the loss of law and order and its impact will be far worse.

Looting and violence will occur in a disaster, particularly to secure food and essential supplies. Whether avoiding exposure to viruses or avoiding marauders, truck drivers eventually will determine that it is unsafe to haul food. There is vague references to this in some DHS influenza pandemic documents: “movement restrictions and/or quarantines will
disrupt the supply chains and municipal services”; “Business planners should assume some level of social disruption and plan for direct security risks to their operations and along their supply chain.” Katrina provided evidence that truck drivers will need military escort and protection, or they may refuse to work.

Chief of the National Guard, Lt Gen. Blum reported that, “truck drivers coming in with the most needed supplies, water, food, ice, shelter, medicine . . . were afraid to come in. They had to be escorted in by National Guard convoys, which took other manpower away from the relief efforts to go help get the commercial truckers.” Due to security concerns, 1,000 FEMA employees set to arrive in New Orleans had to turn back, which agitated storm survivors in the Superdome. The level of demands on law enforcement personnel and lawlessness in a pandemic or no electrical power situation will be far worse than Katrina.

The consequence of unrealistic scenario planning is likely to be millions of lost lives due to politically correct plans and gross unpreparedness.

Failure of one link in the food production, processing, distribution, and retail chain could stop food deliveries. Depending on the time of year, much of the migrant labor workforce in the southwest U.S. may simply go home to avoid the virus, the risks of being exposed to crime, and desire to be with family during a crisis. The jobs in food harvesting and food manufacturing are generally low-skill, low-wage, and high-turnover jobs. Many of these workers may reason that they would be safer calling in sick or quitting their jobs. When people cannot get food, or fear they will not be able to, it is not just gangs that may steal and sometimes kill for food, but many common people who are just trying to keep themselves and their families alive. People will not simply stay home and die when faced without food and water.

It is not just grocery stores with a few days of perishable food that may disappear in hours due to panic buying, and probable looting. Gas stations need deliveries every one to three days (with normal demand). Hospitals do not have more than a few days of supply for daily patient needs. Water treatment plants keep only one to two weeks supply of chlorine on hand for water treatment. Whether there is panic buying or not, truck drivers will be urgently needed to replenish food and other essential supplies, as well as other workers needed in food processing and retail stores, water and power systems, etc.

Threats to transportation workers were noted in the 2006 Homeland Security Council pandemic influenza implementation plan, including the risk of lawlessness: “Transportation providers will be concerned about protecting their employees, risks to travelers and goods, and the potential impact on facilities and vehicles.” “Risks to travelers and goods” refers
to fear of crime. Government officials are understandably nervous about accusing citizens of being criminal threats, so vague references to lawlessness are often used. The report went on to warn that “Due to expected high absenteeism, transportation services may be limited. Interstate movement will become increasingly constrained as the pandemic peaks and local travel restrictions may increase.” The national, high-level guidance was to assume quarantine road closures. This is not what was modeled or used for the assumptions of Scenario 3. Many trucking operations are small businesses. The national plan warns that some may “permanently cease operations due to the operational/financial burdens caused by the pandemic.”

The U.S. Department of Defense’s (DOD) planning assumptions for pandemic influenza states that, “provision of routine security services for the protection of critical infrastructure will require Federal augmentation.” Such augmentation includes helping with quarantine enforcement, supporting overwhelmed medical facilities, backing up civilian law enforcement, and protecting transportation and logistics. The DOD plan anticipated that security support would also be needed for pharmaceutical and vaccine production as well as assistance during civil disturbances, “DOD will augment civil law enforcement efforts to restore and maintain order.”

National planning scenarios assume that most people will go to work rather than stay at home. Most infrastructure systems outside of the public health and healthcare sector are predicted to continue to function at or near normal levels. These scenarios assume the economy keeps functioning, people stay calm, and there is no loss of law and order and no collapse. Large-scale lawlessness is a grossly neglected aspect of disaster consequence management planning. In terms of total fatalities, the fate of food production and transport as well as law enforcement may be most important in minimizing casualties.

This article is Part 5 of a six-part series on closing disaster recovery gaps and preparing for triggering events that could cascade into long-term societal disruptions:

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*Triggered Collapse, Part 5: Gaps in National Disaster Planning Scenarios*
*Triggered Collapse, Part 6: A Nationwide Call to Action*

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Triggered Collapse, Part 6: A Nationwide Call to Action

By Drew Miller

Similar to pandemic preparedness, the U.S. government is not doing enough to prepare for failure of municipal water systems when the electric grid goes down. Government programs do not address loss of law and order or cessation of food production and delivery services. Elected and appointed officials often downplay the number of deaths to be expected and the lack of preventative measures. They also do not acknowledge people taking advantage of stresses on law enforcement to loot and maraud in the event of a collapse. Swift action is needed now to mitigate potential consequences of a future triggered collapse.

Official government-funded reports of Katrina, Congressional testimony on Dark Winter, and Congressional testimony from the EMP Commission acknowledge that expectations of major disasters should include panic, riot, looting, and murder. However, in the 2006 National Planning Scenarios, there is only a footnote mention of social unrest:

Disclaimer: Disaster literature has established that people don’t panic or act irrationally in a disaster as long as they have credible information and purposeful activities to undertake in response. While one must plan for the worst, this is not a prediction of violence and mass panic. There is no evidence that the public will respond in a lawless manner in a real influenza pandemic.

The disclaimer acknowledges panic and violence while denying they will occur, then insisting that they must plan for the worst while refusing to do so because they assume panic and violence will not occur. The document also includes “maintaining security in communities” in a list of emergency management responses.

Reasons Behind Not Preparing

The pandemic scenario itself is anything but planning for the worst. It assumes a low fatality rate, only 10% worker absenteeism, and no consequences from any ensuing violence. In sum, the National Planning Scenarios are designed to ensure that government preparations look good, but not necessarily plan or prepare for high-likelihood consequences of major disasters. In addition to bad press and political-bureaucratic factors, major reasons the federal government is not addressing the need to prepare for a pandemic are outlined below:

- The Department of Health and Human Services is lead agency on pandemic planning, while also a significant supporter of bioengineering research.
- Scaring the public about bioengineering or encouraging regulations could stifle U.S. research being conducted by scientists, universities, and biomedical companies.
- Only a small percentage of victims can be hospitalized and treated. Since it takes six months or more to develop a vaccine for a new flu variant or genetically modified organism (GMO) virus, hospital beds and vaccine administration has to be prioritized.
• Hardening the electric system and reducing its vulnerability would cost tens of billions, with increases in rates that will lead to loss of votes for elected officials.

• Estimating that millions of Americans may die – and stating that it cannot be prevented – is detrimental to elected officials.

• Government officials do not explicitly address impacts of looting, breakdown in law and order, stealing, and sometimes killing to obtain food.

• Ethical issues of a pandemic are controversial: who gets medical treatment and supplies determines life and death, and many people will never receive them.

• Preparations like equipping the Federal Emergency Management Agency or National Guard for crowd control could lead some conspiracy/anti-government critics to protest government takeover preparations. For example, President Bush’s call for military support in a pandemic and preparations for dealing with law and order problems were condemned by groups ranging from the American Civil Liberties Union to the Cato Institute.

• Standard “prepper” measures like having guns and ammunition to protect homes as well as food and water are politically controversial for governments to address.

• No big company or organization stands to benefit from increased preparedness for a pandemic, so there is no lobbying similar to that for a weapons system acquisition.

• Officials who warn of vulnerabilities may be accused of tipping off terrorists.

• Government officials want to avoid charges of scare mongering and overreaction, which were raised following the 2009 swine flu and other warnings of flu pandemics that did not occur.

• The Department of Defense (DOD), which is the federal agency most capable of dealing with a collapse, focuses on and leads overseas operations, with little interest in pandemic recovery operations, where Department of Homeland Security (DHS) is lead.

The reluctance to warn and prepare for what many scientists say is inevitable – a natural avian flu pandemic or a bioengineered virus attack – is reprehensible, but understandable. Spending billions to harden the electric system will increase electric costs and anger voters. Until the first instance of disaster, it is doubtful there will be strong action to prepare for a pandemic, loss of the electric system, or other disaster-caused collapse. Politicians can avoid some responsibility because of public assumptions that government is watching out for them, despite periodic warnings in the newspapers.

Black Swan Events

The Defense Threat Reduction Agency, which is the nation’s leading agency for protecting against weapons of mass destruction, warned in 2012 that the nation faces the “inevitable emergency of a new threat from biological and chemical agents.” The Commission on the
Prevention of Weapons of Mass Destruction Proliferation and Terrorism, the international police agency INTERPOL, and the former president of the Royal Society of London all warn that bioterror attacks could kill millions. When Dr. Henderson, who led the World Health Organization global smallpox eradication campaign, estimated in 2012 that a human transmissible form of Avian flu could injure and kill billions, that was a credible warning of an existential threat.

Nassim Taleb’s *The Black Swan: The Impact of the Highly Improbable* offers insights into why warnings of these pending disasters are ignored. A black swan is an extreme impact event that is outside the realm of regular expectations; nothing in the past can convincingly point to its possibility. Concerning such events, Taleb warned that, “things have a bias to appear more stable and less risky in the past, leading us to surprises... The history of epidemics, narrowly studied, does not suggest the risks of the great plague to come that will dominate the planet.”

Taleb cited 27 widespread errors in human thinking processes and misapplications of statistics to explain why black swan disasters like a coming bioengineered viral pandemic or North Korean EMP attack that takes down the electric system are neglected. People cling to current truths and past experiences that new technologies and changing conditions may soon render wrong. Taleb cited as examples the diaries of people prior to WWII – they did not know that something momentous was taking place, that large-scale war was coming.

“Disaster blindness” for a bioengineered viral pandemic may be stronger in the United States because of a strong military and feeling of immunity from attack. This is precisely why a bioengineered viral pandemic is a likely weapon of choice for attacking the United States. It could kill more people than a large nuclear attack, cause more lasting devastation, and create an economic collapse. In addition, retaliation is less likely since the origin of the attack is difficult to prove who released the virus. If the attackers developed a vaccine, they could also avoid the worst impacts of the devastation as it spreads around the world.

**Action Plan for the Government & Citizens to Prepare for a Collapse**

Citizens need honest disclosure of the nation’s many vulnerabilities:

- The likelihood of a natural or bioengineered pandemic and difficulty to prevent it;
- The fragility of the nation's electric system, and warning that the grid could go down for a year or more;
- Disclosure of dozens of other threats, known (pandemics, asteroids, super volcanoes, cyberattacks, etc.) as well as black swan, largely unknown, and new threats (nanotechnology disaster, artificial intelligence misuse, etc.); and
- Frankness in admitting that the economy may not function and law and order may be lost.
According to experts like Dr. Arturo Casadevall, Department of Microbiology and Immunology and Division of Infectious Diseases at Albert Einstein College of Medicine, preventing bioattacks and pandemics is not possible. During a Bioterrorism International Tabletop Exercise in 2007, Ronald K. Noble, Secretary General of INTERPOL, also called for accepting the inevitability of bioattacks and preparing to manage them.

Since it is not possible to prevent small nation states, terrorist groups, or dedicated individuals from modifying viruses and unleashing a pandemic, honest and responsible acceptance would help warn and prepare communities for the aftermath of pandemics and other highly possible collapse-level disasters. However, there does not need to be a disastrous trigger event for communities to experience widespread loss of law and order. A sudden economic downturn or a disputed election could – with the aid of social media, press hysteria, hostility toward government, and opposing political parties – escalate and degenerate into a collapse.

Every person needs to be prepared for a collapse, that could last for months or worse. The focus should be on dealing with a collapse more than specific trigger events. Citizens should know that they need the means to protect themselves when law enforcement is overwhelmed and there is a breakdown in law and order. People in big cities should be advised to consider plans and preparations to get out, since supplying major cities and maintaining law and order there will be particularly difficult.

For most Americans, sheltering at home, the ability to get food and potable water, while feeling safe from marauders, may be the most critical need in avoiding a collapse in the economy, lawlessness, and potentially high casualties from the disorder that ensues. Military support to back up law enforcement, directly transport or escort civilian truck drivers, and distribute food and vaccines (or protect food retailers), may be decisive in avoiding a collapse and far more casualties.

To reduce the breakdown in law and order, escort truck drivers, and move key suppliers, the Army National Guard needs to be trained and equipped to conduct crowd control and massive support of local law enforcement. Although the Guard and Reserve do a formidable job in domestic disaster, it is not expected that all members will report to or stay on duty during a long-term collapse if they cannot be sure their families are safe.

Due to a potential decrease in active and reserve military during a long-term collapse, state and local governments should pursue a massive expansion in reserve law enforcement forces:
• Encourage all separated and retired law enforcement and military personnel to join in local law enforcement emergency reserve forces
• Do not subject reserve policemen to huge training requirements, make them study local laws, or burden them with onerous regulations.
• Let them get quick, simple, minimal training in serving as guards and truck escorts.
• Stockpile small arms and ammunition for them.
• Issue uniforms labeling them as reserve police forces.
• Follow the National Guard model (and consider drills with and getting trained by Army Guard MPs and Air Guard Security Police)
• Conduct periodic (but much less than one weekend a month) paid training.
• Favor using them in their hometowns so they can serve as reserve policemen in their community and also keep watch over their homes.

The Pentagon should create a Civil Ground Patrol, modeled on the all-volunteer, Air Force sponsored Civil Air Patrol, to start training civilians to assist with pandemic response and recovery operations. The Army National Guard, not DHS, would be the best sponsor for Civil Ground Patrol. Civil Ground Patrol units should be dual aligned with a local law enforcement agency and the state Army Guard, and train with both organizations.

Although these are just some of the preparations needed, these are relatively low-cost solutions compared to purchasing an additional aircraft carrier or adding an armored division to the Army. Barriers for government officials and politicians to implement these vital preparedness measures include the risk of spending funds and raising costs to citizens for measures the public is not demanding and businesses and special interest groups do not offer as campaign donations. Law enforcement’s priority in a disaster is to ensure continuity of government. However, while police assets are allocated to guard City Hall, congressmen, mayors, and city councilmen, citizens will lack responses to their calls for help. In a collapse, elected officials would be more incentivized to address security concerns and better prepare for collapse if they knew they would not receive priority protection.

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U.S. disaster planning should focus more on avoiding or recovering from a collapse than on the initial or “triggering” disaster.

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