Chairman Peters, Ranking Member Portman, and Members of the Committee, thank you for the opportunity to speak with you today regarding the *Preparedness for COVID-19: The Initial Pandemic Response and Lessons Learned*. My name is Elizabeth Zimmerman. I am the former Associate Administrator for the Federal Emergency Management Agency’s (FEMA) Office of Response and Recovery (ORR), serving in that role from 2014 – 2017 and as the ORR Deputy Associate Administrator from 2009-2014. I’ve been an emergency manager for over 35 years at both the state and federal levels and remain actively involved in emergency management since leaving FEMA.

The opinions expressed are my own.

The COVID-19 Pandemic is a *maximum of maximum* event that stressed and challenged the United States’ health, social, and economic systems. For the first time in our Nation’s history, all 50 states, the District of Columbia, and the U.S. territories are under a state of emergency and granted Presidential declarations at the same time because the consequences of COVID-19 were so severe that the state, local, tribal and territorial (SLTTs) governments were overwhelmed.

The last major disaster with a majority of the country involved in simultaneous response was during Hurricane Katrina when most of the states received and supported evacuees from Louisiana. COVID-19 differs in that every SLTT government was responding and focused on saving the lives of their residents, while attempting to prevent the collapse of their economy and medical systems. SLTT governments were competing for the same scarce resources, such as medical personnel, personal protective equipment (PPE) and ventilators, while simultaneously attempting to prepare for the unknowns of the COVID-19 global Pandemic.

There were several issues that arose in the early days of COVID-19 that in hindsight could have been handled more effective and efficiently. As a nation, and as emergency response and public health systems, we must learn from our mistakes. Now is the time to take action and develop effective and efficient plans and procedures and better define authorities to be ready for the next pandemic, or any event that could impact us as COVID-19 has done.
During this testimony, I outline six areas that I believe require further exploration as we gather lessons learned and implement change. For each area, I provide some background, the issues or concerns associated with that area, and then recommendations for future action.

**The Plans**

The goal of preparedness and planning activities and their coordination is to ensure better response outcomes during incidents.

Federal and SLTT governments and the private sector must work together now to develop a national pandemic plan and approach for unity of effort, unity of command, and unity of delivering scarce resources. This plan must be trained, exercised, analyzed for lessons learned, and once established be maintained with repeated training and exercising to be ready for the next event. This pandemic plan must be national in scope with the assumption that jurisdictions are overwhelmed and unable to assist each other, just as we have seen during COVID-19.

In researching disaster response plans to refresh my memory for this hearing, I found several detailed plans that were publicly available and saw mention of plans and directives that were not publicly available. The time spent searching for these plans and directives was frustrating for an experienced emergency manager and I imagine the lack of publicly available directives makes incidents like COVID-19 even more confusing for SLTT end users to know which response plan is the guiding document.

The National Response Framework (NRF) is the known national foundational framework for all incident responses and is designed to be scalable and agile for all supporting plans to fall under. Following the Anthrax attacks in 2001, the federal government invested a lot of money on processes and plans centered on public health response – bioterrorism and pandemics in particular. Communities developed anthrax and smallpox response. One of the latest plans, January 2017, is the Biological Incident Annex (BIA) to the Response and Recovery Federal Interagency Operational Plans (FIOPs). The BIA is the federal organizing framework for responding and recovering from a range of biological threats, including pandemics.

However, it was not publicly seen that these plans were being used during the on-set of COVID-19 nor does it seem that there was a national COVID-19 response plan.

Also, there was a 2018 Pandemic Crisis Action Plan (PanCAP) that was customized for COVID-19 specifically and adopted in March 2020 by HHS and FEMA; the plan identified the U.S. Department of Health and Human Services (HHS) as the Lead Federal Agency (LFA) with FEMA supporting for coordination. However, a mere five days after the national COVID-19 emergency was announced, FEMA became the LFA.
**Issues:**

The established federal plans were not publicly referenced, used or coordinated with stakeholders during the COVID-19 event. No national level plan was developed and shared with SLTT governments and/or the private sector. Everyone was left to their own response. Many of the SLTT governments had developed public health emergency plans following the 2001 anthrax attacks. These plans were refreshed or SLTT governments created new pandemic plans following H1N1 and Ebola. It is unknown if the SLTT governments adapted and utilized these plans specific for COVID-19 that included medical countermeasures (MCMs) points of dispensing operations. Despite Operation Warp Speed being publicly touted, it does not appear that the federal government nor SLTT governments invested in vaccination planning prior to the Emergency Use Authorization (EUA) of the COVID-19 vaccines being granted.

The bottom line is that too many potential plans and also the lack of national strategic plan created confusion across stakeholders.

**Recommendations:**

There needs to be a strategic review and updating of national-level as well as SLTT-level public health emergency plans. These plans need to be streamlined, coordinated, exercised and remain as living documents, revised from lessons learned as incidents occur as to not become stagnant or forgotten. If not revised, then there are only lessons experienced and not learned.

In national level events, there needs to be one national plan that is socialized with stakeholders at all levels for their review and input, that is then adopted and exercised on blue sky days and implemented during the crisis creating a coordinated outcome.

Plans must be developed in coordination with the operational needs of the entire response team. No one should plan in a vacuum, isolated from the response, that takes place at the local level.

**Lead Federal Agency**

HHS has statutory authority for health and medical events, to include the Health and Human Services Secretary signing a National Public Health Emergency for COVID-19 in January 2020. The PanCAP adopted March 2020, identifies HHS as the Lead Federal Agency (LFA), and HHS is also the designated lead for the NRF’s Emergency Support Function (ESF) #8 - Public Health and Medical Services. Soon after the PanCAP adoption in March 2020, FEMA was asked to take lead for the COVID-19 response and operations. FEMA immediately consolidated HHS’s operations into FEMA’s National Response Coordination Center (NRCC). While it is smart to rework a plan when needed, one must question if the PanCAP was ever exercised, since within five days of the COVID-19 unified response kicking off, the PanCAP was changed to name FEMA as the LFA.
Issues:

HHS does not have the structure to quickly respond to events. Based on my prior experience and observations, HHS’s components are internally stove piped and do not coordinate well. COVID-19 is not the first time FEMA has been called upon to organize and/or lead events that are HHS’s core responsibility. From H1N1, Ebola, and Zika, to the Flint Water Crisis and the surge in Unaccompanied Minor Children, FEMA was directed to coordinate and lead despite it being HHS’s mission and authority.

One of FEMA’s missions during Ebola was to deploy an Incident Management Assistance Team (IMAT) to the U.S. Centers for Disease Control (CDC) to organize, support and coordinate their operations center. During the Unaccompanied Minor Children emergency at the Southwest Border in 2015, FEMA coordinated HHS’s Administration for Children and Families (ACF) Leadership Group to convene other federal government agencies to assist in finding accommodations for these children within the proscribed 72-hour timeframe under the Flores decision.

At that time, HHS leadership noted that they did not have the authority to mission assign other federal agencies (OFAs) nor did they have funding to support these types of events.

Many times, during national crises, FEMA becomes the federal government’s 9-1-1. In addition to supporting HHS in the incidents noted above, FEMA has been called upon to exercise its authority in support of other federal agencies outside of Stafford Act events. For example, FEMA was intimately involved in the Environmental Protection Agency and U.S. Coast Guard’s Deep Water Horizon response, the Department of Agriculture’s Avian Flu response, and the U.S. Housing and Urban Development’s long-term recovery and housing mission. FEMA has, and will always quickly respond should the President request that the Agency exercise its expertise to lead OFA’s events, but it is must be noted that a successful response is likelier to occur when FEMA is brought in at the front of the emergency rather than late in the game. In addition, while FEMA has successfully exercised its authority in response to OFA’s events, if FEMA is going to be the 9-1-1 for the federal government, they should be given the authority, staffing and resources to ensure their success.

Recommendations:

A decision must be made to determine who is the lead for the unity of effort in events that fall outside of the Stafford Act, such as pandemics. Clear, strong leadership is required for national level events with a direct connection to the White House.

If HHS is going to be the lead agency for all health and medical events, their defining statutes should be revised with clear authority granted to lead, mission assign OFAs, and be funded and staffed at the appropriate level for these events.
All agencies with a LFA authority should be mandated and funded to train and maintain full staffing to ensure they can perform the duties required to lead disaster operations, no matter the type of disaster. Agencies also need to have the urgency and operations tempo for quick response. FEMA has this in their DNA.

**Data Management/Models/Forecasting**

The plans mentioned earlier are high level frameworks; they do not detail the information required for situational awareness. Decision-makers need data and information to help them see trends and to formulate mitigation strategies. Good data is necessary for evidence-based decision making and is key in critical response operations when lives are at stake. During the COVID-19 pandemic, gathering reliable and timely data from SLTT governments proved to be very difficult.

**Issues:**

It took days, weeks to get vital data from the private and public hospitals, manufacturing companies, and U.S. Government stockpiles as well as global counterparts. There was no system in place ahead of COVID-19 to determine the necessary data points for true situational awareness. Information was not forthcoming nor quickly shared.

There were no pre-event standardized data points established for what information would be needed to successfully model and forecast a COVID-19 type event, e.g., commodities in storage (federal, private sector), use-rates on commodities, re-supply (time frame), total number of hospital beds and available beds, other hospital supplies.

Hospitals and hospital systems are often reluctant to share data to prevent their competitors from knowing their operating status and business practices. Federal attempts to collect hospital data were challenging.

Different federal and private industry systems were used to gather COVID-19 hospitalization data, and these systems experienced difficulties with hospital participation, obtaining accurate data, and sharing data across platforms. At least initially, there was no one centralized data collection agency for the reporting.

Without comprehensive data sets, many COVID-19 models were developed with fragments of data, using algorithms to fill in blanks and not always accurately doing so. Universities or other entities became the source of COVID-19 case forecasting models versus HHS or CDC.

**Recommendations:**

In the future, a systematic approach is required to ensure a better, synchronized gathering and sharing of data, particularly hospitalization data, for outbreaks and public health threats. The
information technology infrastructure, data protocols and standards, and any necessary Memorandum of Understanding (MOU) must be developed now to prepare for the next public health threat.

We should be taking lessons learned from historic events to plan better data management for future events. On a blue-sky day, we should be establishing the specific data points and sources of information necessary for forecasting and modeling to enable better situational awareness and evidence-based decision making. We should use lessons learned from past events to model the number of deaths, injuries, property losses, etc. against what happened and what could have been mitigated with interventions. Define what the outcome was versus how the outcome could have been improved with mitigation strategies.

The National Security Council should determine the agency that should lead data collection for what events, working with the National Institute for Standards and Technology (NIST) to create data standards. For all events involving critical infrastructure, the Cybersecurity & Infrastructure Security Agency (CISA) could play a vital role to coordinate with the 16 Critical Infrastructure Sectors to establish the data collection requirements. CISA serves as the NRF’s ESF #14 – Cross-Sector Business and Infrastructure Coordinator and Primary Agency, and they seamlessly work each day with the private sector to share information.

Also, the private sector should be engaged early on in the discussion, planning and coordination. They are an integral part of the team. For public health events, HHS should pre-establish agreements with the medical and health industry to share data during events.

FEMA also has an example for private sector inclusion – the National Business Emergency Operations Center (NBEOC). There are hundreds of private sector companies registered to participate and coordinate with the NBEOC. CISA also has established frameworks in place through sector-specific Information Sharing and Analysis Centers (ISACs).

**Commodities/Logistics**

National level emergencies require a strong, coordinated, and unified logistics system with an agile distribution system. The purchasing and storage of commodities is cumbersome, requiring a unity of effort and precision prior to shipping to distribution points. HHS’s Strategic National Stockpile (SNS) is not designed to support a national, global pandemic. It is a buffer for smaller contained events.

**Issues:**

The SNS warehousing, and distribution system is not agile. The process is cumbersome at best. Commodities had to be unpacked, counted, expiration dates verified, and repacked before they could be shipped to state and local distribution points.
Just-in-time logistic does not work in nationwide, global events. Manufacturing cannot keep up with urgent unplanned demands, or even regular supply chains when manufacturing locations are critically impacted by an event. We saw this during COVID-19 and as recently as the 2011 earthquake in Japan.

There was no unity of effort for the purchasing of commodities during the COVID-19 pandemic.

**Recommendations:**

HHS should review the SNS for the intended use of the commodities that are required for pandemics and other events, the shipping process, and the international supply chain for re-stocking. HHS and the federal government should be using best practices to modernize the SNS, looking at efficient and effective private-sector models, e.g., Walmart, Amazon.

The federal government, in coordination with stakeholders, must determine what the minimum supply is needed for a stockpile, and work with the private sector to determine necessary production ramp up. Specifically for medical supplies where mass warehouse quantities do not exist, there should be established partnerships with the manufacturers to determine the minimum supply needed on hand and have them manage the supply to keep commodities rotated and current in inventory.

Agencies need to develop strong partnerships with private sector companies to build a robust U.S. supply chain plan.

The federal government should investigate and consider one unified purchasing system in national level incidents to avoid competing for the scarce resources and to ensure the resources get to where they are needed the most, when they are needed.

Going forward, resilience must be built into the whole of government logistics and supply chain.

**Funding**

In the end, everything always comes down to who, how and when the funds are available in emergencies and disaster events, especially for COVID-19.

Similar to natural weather disasters, the SLTT governments’ tax base was decimated with the closure of businesses and individuals quarantined. Along with the unprecedented number of COVID-19 disaster declarations, many SLTTs are on the brink of financial ruin and looking for funding streams to reimburse their unanticipated costs. Successful response and recovery operations often comes down to who, how and when the funds are available in emergencies and disaster events, especially for COVID-19.
Issues:

COVID-19 had a multitude of federal funding mechanisms. HHS funds, FEMA Disaster Relief Fund (DRF), other existing grants or programs repurposed to assist as well as supplemental Congressional appropriations, e.g., the CARES Act and American Rescue Plan Act. These funds are much appreciated and needed by the SLTTs although they are not easily accessed. There is no one-stop-shop for federal funds.

Duplication of benefits is a high risk for many applicants based on the variety of funding sources. Some applicants may have submitted claims for the same costs to multiple agencies, in hopes one of them would reimburse them. It is contingent upon the applicant to track all of their funds to re-pay any duplicates.

Recommendations:

The federal government should consider one overarching funding framework that is outcome focused. The framework needs a lead agency; needs simplicity and flexibility; and for funds to be quickly disbursed. There was confusion as several of the funding options could be used for the same expenses and many federal agencies were slow to develop guidance or issued interim guidance that was later changed leaving SLTT governments frustrated by the process.

The federal government should take the lessons learned from COVID-19 and build the structure and policies now ahead of the next event.

The CARES Act, Department of Treasury’s Coronavirus Relief Fund (CRF) funds appear to be a good example for ease of access and use for the end user. The CRS funds provided the applicants with the flexibility to use the funds as they best saw fit, with minimal requirements.

Workforce

HHS has over 70,000 employees and FEMA has more than 20,000 employees.

Typically, this time of year, FEMA’s workforce will have some down time among responding to tornados, severe storms and river flooding; however, that is not the case in 2021. FEMA’s workforce is stretched thin and focused on missions outside of their core responsibility – COVID-19 and the recent surge in unaccompanied minor children.

Issues:

FEMA’s workforce is stretched thin with climate change and the resultant increase in natural disasters, and now they are focusing on missions outside of their core responsibility.
The majority of FEMA’s workforce are on-call, temporary workers that support Stafford Act events.

**Recommendations:**

If FEMA is going to be the 9-1-1 for the federal government, they should be given the authority, staffing and resources to be successful.

The FEMA Reservist Program needs to be professionalized, similar to the military reserve corps, where individuals can take a leave of absence from their jobs to serve their country and have the guarantee of returning to their job. Currently, FEMA’s Reservist Program consists of individuals who are retired, at the beginning their career, or risk not having a job when their assignment is over. There is little incentive for individuals to be reservists, which causes higher rates of staff turnover.

FEMA needs to be focused on hurricane season preparation, using the time to coordinate and exercise with the SLTTs and other federal agencies. Hurricane season is fast approaching with another year of a high number of hurricanes predicted, and it is important to remember that it only takes one bad hurricane to impact the nation and resources will be stretched even thinner. Currently, FEMA’s number of deployed staff is the second highest on record only to the 2017 hurricane season – Harvey, Irma and Maria – and they expect to top this number of deployed staff in early May. In addition, FEMA’s resources have seen cuts, for example, the FEMA Corps program went from over 1,000 participants to 150 in the last four years.

**Conclusion**

While it is important to move deliberately and quickly to resolve issues that arose during the COVID-19 pandemic, we need to be careful not to be hasty in our reaction. Before overhauling federal, state, local, tribal and territorial response powers and capabilities, all governments should take a comprehensive review of what is necessary to meet emergencies. For example, before creating new legislative mandates that limit the ability for emergency responders and other officials to effectively meet the challenge of new events, there needs to be an analysis of both the problem and what might be the unintended consequences of proposed solutions.

In conclusion, thank you for the opportunity to participate in this hearing on *Preparedness for COVID-19: Initial Pandemic Response and Lessons Learned*. As a lifetime emergency manager, it is important for us as a country to include the whole community (e.g., federal, state, local, territory, tribal, private sector, non-governmental entities) in preparing for, mitigating against, responding to, and recovering from all events. We need to be prepared and planning for the next pandemic, NOW, as COVID-19 demonstrated it’s the proverbial not if rather when it will happen. We must take action now to ensure better outcomes in the future.