

PanCAP Adapted

U.S. Government

COVID-19 Response Plan

March 13, 2020



UNCLASSIFIED // FOR OFFICIAL USE ONLY // NOT FOR PUBLIC DISTRIBUTION OR RELEASE

Table of Contents

Situation 1

- Purpose..... 1
- Background..... 1
- Threat 2
- Risk Assessment 2
- Facts 3
- Assumptions..... 4
- Critical Considerations..... 5
- Authorities..... 6
- Guiding Doctrine 6

Mission..... 6

- Senior Leader Intent..... 6
 - Purpose and End States 7
 - Strategic Objectives 7
- Scope..... 7
- Roles and Responsibilities 7

Execution 7

- Concept of Operations 8
 - Interagency Coordination Constructs 8
 - Phase Indicators and Triggers..... 10
 - Lines of Effort..... 11
 - Key Federal Decisions 13
 - Interagency Support 14

Sustainment..... 14

- Administration 14
- Resources 14
- Funding 14

Communications, Coordination, and Oversight..... 15

- Communications 15
- Coordination 15
- Oversight..... 15

Annex A. Task Organization 16

Annex C. Operations..... 18

 USG Phasing Constructs..... 18

 Transitions Between Phases..... 20

 Preparing for Future Epidemic Trends – Striking Balance Between Mitigation and Containment..... 23

 Appendix 1. Surveillance..... 25

 Appendix 2. Communication and Public Outreach 29

 Appendix 3. Healthcare Systems Preparedness and Resilience..... 34

 Appendix 4. Medical Countermeasures Development 38

 Appendix 5. Supply Chain Stabilization..... 41

 Appendix 6. Community Mitigation Measures 49

 Appendix 7. Continuity of Operations & Essential Services..... 54

Annex D. Logistics 58

Annex E. HHS Information Collection Plan..... 66

Annex F. Federal Roles and Responsibilities 67

Annex G. Regional Operational Coordination..... 80

Annex X. Execution..... 87

Annex Y. Glossary 97

 Definitions..... 97

 Acronyms..... 98

Situation

Purpose

This plan outlines the United States Government (USG) coordinated federal response activities for COVID-19 in the United States (U.S.).¹ The President appointed the Vice President to lead the USG effort with the Department of Health and Human Services (HHS) serving as the Lead Federal Agency (LFA) consistent with the Pandemic and All Hazards Preparedness Act (PAHPA) and Presidential Policy Directive (PPD) 44. Under the National Response Framework (NRF) and the Biological Incident Annex (BIA) to the Response and Recovery Federal Interagency Operational Plans (FIOP), other federal agencies will support HHS through the Emergency Support Functions (ESFs). The response will be carried out according to the NRF and in accordance with established departmental authorities and standing policies and procedures. This plan identifies anticipated roles and responsibilities of HHS, other federal departments and agencies, and supporting organizations, to establish lines of authority and avoid overlap and duplication of effort.

Background

Late December 2019, authorities from the People's Republic of China (PRC) announced a possible epidemic of pneumonia of unknown etiology centralized on a local large seafood and live animal market in Wuhan, China. Estimated case onset was early December. The clinical syndrome includes fever and difficulty breathing with bilateral lung infiltrates on chest x-rays. The virus was identified as a novel coronavirus. Since identification, the virus has been named "SARS-CoV-2" and the disease it causes has been named "coronavirus disease 2019" (abbreviated "COVID-19"). Shortly afterwards the HHS Centers for Disease Control and Prevention (CDC) established a formal response in order to provide ongoing support in response to the outbreak.

CDC established a COVID-19 Incident Management System on January 7, 2020, and has been operationalizing its pandemic preparedness and response plans, working on multiple fronts to meet these goals, including specific measures to prepare communities to respond to local transmission. On January 10, PRC health authorities preliminarily identified a novel coronavirus as the cause of an outbreak of pneumonia in Wuhan City, Hubei Province, China. Most initial patient cases in China had some link to a large local seafood and animal market, suggesting a possible zoonotic origin to the outbreak. HHS established a response effort from the Secretary's Operations Center on January 24.

The first U.S. case of COVID-19 was confirmed in Washington State on January 20 and was travel-related. CDC deployed a multidisciplinary team to Washington to assist with case identification, contact tracing, clinical management, and communications. Additional cases continue to be identified and CDC continues to deploy multidisciplinary teams to assist health departments. On January 30, the International Health Regulations Emergency Committee of the World Health Organization declared the outbreak a public health emergency of international

¹ On February 11, 2020, the World Health Organization announced an official name for the disease that is causing the 2019 novel coronavirus outbreak, first identified in Wuhan, China. The new name of this disease is coronavirus disease 2019, abbreviated as COVID-19. In COVID-19, 'CO' stands for 'corona,' 'VI' for 'virus,' and 'D' for disease. Formerly, this disease was referred to as "2019 novel coronavirus" or "2019-nCoV".

concern (PHEIC). On January 31, the White House 2019 Novel Coronavirus Task Force announced the implementation of new travel policies regarding entry into the U.S. On January 31, the HHS Secretary declared a Public Health Emergency (PHE) for the U.S. to aid the nation's healthcare community in responding. On February 10, at HHS request, FEMA established an embedded incident support team at HHS to support the response, providing support for crisis action planning, situational awareness, and operational coordination. On February 28, HHS requested ESFs 1, 6, 13, 14, and 15 activation.

Threat

COVID-19 is in the same family as other human coronaviruses that have caused global outbreaks, such as severe acute respiratory syndrome (SARS) and Middle East respiratory syndrome (MERS). Coronaviruses cause respiratory tract illnesses, which can lead to pneumonia and, in severe cases, death. Known transmission routes for coronaviruses include sustained human-to-human transmission via respiratory droplets produced when an infected person coughs or sneezes. As with all novel and emerging infectious agents, it is possible that continued spread of the coronavirus could result in a pandemic. The complete clinical picture with regard to COVID-19 is not fully understood. Reported illnesses have ranged from mild symptoms to severe illness resulting in death.

Current understanding about how the virus that causes COVID-19 spreads is that it is mainly from person-to-person, between people who are in close contact with one another (within about 6 feet) and through respiratory droplets when an infected person coughs or sneezes. People may be able to contract COVID-19 by touching a surface or object that has the virus on it and then touching their own mouth, nose, or, possibly, eyes, but this is not thought to be the main way the virus spreads.

Risk Assessment

Outbreaks of novel virus infections among people are always of public health concern. The risk to the general public from these outbreaks depends on characteristics of the virus, including how well it spreads between people; the severity of resulting illness; and the medical or other measures available to control the impact of the virus (for example, vaccines or medications that can treat the illness). That this disease has caused severe illness, including illness resulting in death is concerning, especially since it has also shown sustained person-to-person spread in several places. These factors meet two of the criteria of a pandemic. As community spread is detected in more and more countries, the world moves closer toward meeting the third criteria, worldwide spread of the new virus.

This is a rapidly evolving situation and CDC's risk assessment will be updated as needed.

Current risk assessment as of March 11:²

- For the majority of people, the immediate risk of being exposed to the virus that causes COVID-19 is thought to be low. There is not widespread circulation in most communities in the United States.

² The CDC COVID-19 risk assessment is updated regularly at <https://www.cdc.gov/coronavirus/2019-nCoV/summary.html>.

- People in places where ongoing community spread of the virus that causes COVID-19 has been reported are at elevated risk of exposure, with increase in risk dependent on the location.
- Healthcare workers caring for patients with COVID-19 are at elevated risk of exposure.
- Close contacts of persons with COVID-19 also are at elevated risk of exposure.
- Travelers returning from affected international locations where community spread is occurring also are at elevated risk of exposure, with increase in risk dependent on location.

CDC has developed [guidance to help in the risk assessment and management](#) of people with potential exposures to COVID-19.

Pandemic Severity Assessment Framework³

Projection of COVID-19 on the Pandemic Severity Assessment Framework (PSAF) will help amplify why the targeted layered mitigation actions are needed. Based on limited data to date, placement of COVID-19 is projection between quadrant B and D.

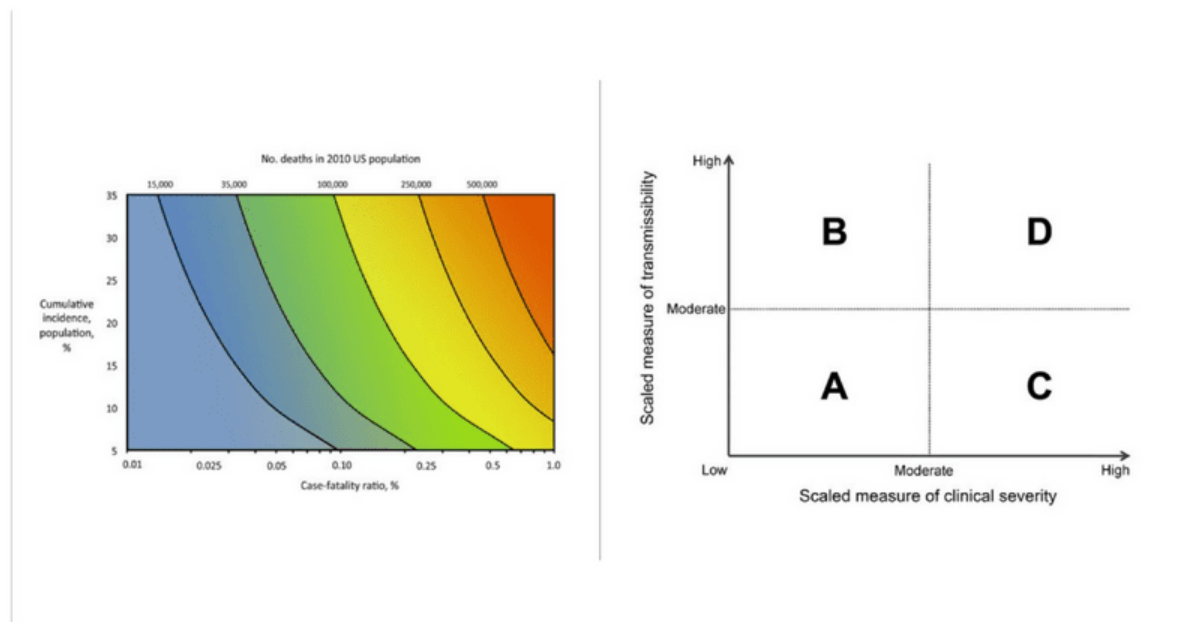


Figure 1. CDC Pandemic Severity Assessment Framework

Facts

Facts are statements of known data concerning the situation that can be substantiated. The following facts assisted in the development of an operational environment for this plan.

1. State and local health departments and CDC are confirming COVID-19 in the U.S. with no links to travel history from the PRC, excluding the special administrative regions of

³ Additional information about the CDC Pandemic Severity Assessment Framework is available here: https://wwwnc.cdc.gov/eid/article/19/1/12-0124_article.

Hong Kong and Macau, or any other foreign country or jurisdiction impacted with community COVID-19 spread.

2. Travel advisories and travel health notices are being issued by the State Department and the CDC in response to the COVID-19 outbreak.⁴
3. COVID-19 vaccine research, development, production, and distribution are under rapid development and will take extended time to develop.
4. Clinical research of effectiveness of existing medications as COVID-19 antivirals requires extended time for U.S. Food and Drug Administration (FDA) review and Emergency Use Authorization (or other approval designation).
5. Department and agency continuity of operations (COOP) plans include succession planning and procedures for performing essential functions. COOP planning and capabilities also provide strategies for management and prioritization of function performance during a pandemic.

Assumptions

In the absence of facts, planning assumptions represent information deemed true. They are necessary to facilitate planning development efforts. Assumptions set a baseline for planning purposes and do not take the place of specific activities or decision points that will occur during a COVID-19 outbreak. The following planning assumptions assisted in the development of an operational environment for this plan.

1. Universal susceptibility and exposure will significantly degrade the timelines and efficiency of response efforts.
2. A pandemic will last 18 months or longer and could include multiple waves of illness.
3. The spread and severity of COVID-19 will be difficult to forecast and characterize.
4. Increasing COVID-19 suspected or confirmed cases in the U.S. will result in increased hospitalizations among at-risk individuals, straining the healthcare system.
5. States will request federal assistance when requirements exceed state, local, tribal, and territorial (SLTT) capabilities to respond to COVID-19. This may include requests for assistance of HHS through the HHS Region based on the scope of assistance available through an emergency supplemental appropriation and may include additional assistance under the Stafford Act.
6. Supply chain and transportation impacts due to ongoing COVID-19 outbreak will likely result in significant shortages for government, private sector, and individual U.S. consumers.
7. As the federal response to COVID-19 evolves beyond a public health and medical response, additional federal departments and agencies will be required to respond to the outbreak and secondary impacts, thereby increasing the need for coordination to ensure a unified, complete, and synchronized federal response.

⁴ For the most up to date travel advisories issued by the State Department, reference <https://travel.state.gov/content/travel.html>. For the most up to date travel health notices issued by the CDC, reference <https://www.cdc.gov/coronavirus/2019-ncov/travelers/index.html>.

Critical Considerations

Critical considerations are key elements of information that planners must take into account when developing a plan. The following should be addressed when planning for COVID-19.

1. COVID-19 outbreaks or pandemic response require short-notice federal asset coordination and response timelines and a national response that is scalable to the severity of the incident and the needs of the affected jurisdictions (e.g., SLTT-level critical infrastructure and government).
2. Response to COVID-19 must involve vertical and horizontal integration between federal interagency partners at the headquarters and regional levels and with SLTT public health, emergency management officials, and the private sector.
3. Different regions of the U.S. are in different operational response phases depending upon the COVID-19 spread and illness severity in impacted communities.
4. Aggressive containment of exposed, suspected, and confirmed COVID-19 individuals (both arriving from foreign locations and identified as part of domestic spread) may continue while community mitigation efforts are implemented in the U.S.
5. Critical resources need to be prioritized and directed to meet evolving demands and to maximize mission effectiveness.
6. Federal supply chain management should include prioritization and redirection of essential critical resources to meet evolving demands and to facilitate USG mission effectiveness, public health, and safety.
7. COVID-19 outbreaks or pandemic will require social distancing and telework to continue government operations, lengthening execution times for some tasks. Workplace controls will be implemented to the extent practical during a pandemic.
8. Implementation of community mitigation measures may adversely impact sustained operations of U.S. healthcare facilities, critical infrastructure, and government.
9. Clear and coordinated messages to key audiences (e.g., public health authorities, healthcare providers, SLTT governments, and private sector partners) are important to avoid confusion; to prompt customizable preventive measures at the SLTT and private sector level; to minimize adverse impacts to critical structure and continuity of operations; and to limit misinformation.
10. Revisions in the scenarios, modeling, and projections used to inform planning, and consequent changes in planning, should be made to accommodate changes in knowledge about COVID-19 characteristics affecting the parameters used for the modeling.
11. A COVID-19 pandemic environment will require modification to concurrent disaster response operations (e.g., increased levels of personal protective equipment [PPE], restricted interactions with survivors and stakeholders, resource prioritization).
12. Planning and response activities should address protective actions for older persons and those with underlying medical conditions, who are particularly susceptible to the effects of SARS-CoV-2 during an outbreak.

Authorities

Primary authorities are listed here. For a full list of authorities, reference the BIA or Pandemic Crisis Action Plan (PanCAP) Annex A: Authorities.

1. Public Health Service Act, Pub L. No. 78-410, 58 Stat. 682 (1944) (codified as amended at 42 U.S.C. §§ 201 et seq.; 42 U.S.C. §§ 300hh-1 and 16).
2. Public Readiness and Emergency Preparedness Act, Pub. L. No. 109-148 (codified as amended in the Public Health Service Act at 42 U.S.C. §§ 247d-6d).
3. Economy Act, Pub. L. No. 73-2 (1933) (codified as amended at 31 U.S.C. §1535).
4. Robert T. Stafford Disaster Relief and Emergency Assistance Act, Pub. L. No. 93-288 (as amended at 42 U.S.C. §§ 5121-5207).
5. Presidential Policy Directive 44 (PPD 44), Enhancing Domestic Incident Response (2016).
6. Homeland Security Presidential Directive 5 (HSPD-5), Management of Domestic Incidents (2003).

Guiding Doctrine

The BIA to the FIOP, approved in January 2017, provides strategic guidance for the coordination of the interagency during response to a biologic incident. The PanCAP, approved in January 2018, operationalizes the BIA with a focus on potential viral pandemic pathogens. The COVID-19 Response Plan outlines adapted federal response actions for the response to this disease.

Mission

HHS is the LFA and reports to the Office of the Vice President, which is the task force lead for the whole of government response. In coordination with the interagency, HHS will take all necessary action to leverage available USG resources to prepare for, respond to, and recover from COVID-19. Federal departments and agencies will coordinate activities to limit the spread of COVID-19; to mitigate the impact of illness, suffering, and death; and to sustain critical infrastructure and key resources in the U.S.

Senior Leader Intent

The National Security Council (NSC) requested adaptation of the PanCAP to address the ongoing threat posed by COVID-19 in support of the Administration's efforts to monitor, contain, and mitigate the spread of the virus. The plan builds on objectives that prepare the USG to implement broader community and healthcare-based mitigation measures, to accelerate outreach to SLTT authorities, and to preserve and minimize disruptions to critical public and private sector services.

The USG will maintain unity of effort while developing and implementing operational plans that enable state and federal partners to detect and contain the spread of diseases in the U.S. The USG will implement a targeted, layered mitigation strategy with a phased approach to individual, community, business, and healthcare interventions aimed at slowing transmission and acceleration of disease; minimizing morbidity and mortality; preserving function of healthcare, workforce, and infrastructure; and minimizing social and economic impacts.

Purpose and End States

A nimble, effective COVID-19 response with flexible sustainable capabilities will save lives and mitigate social and economic disruption.

- Federal lifesaving and life-sustaining assistance addressing COVID-19 has been provided to SLTT and private sector entities.
- SLTT governments and private healthcare facilities can provide individuals and families with the means to rebound from the effects of COVID-19 through sustainment of their physical, emotional, social, and economic well-being.
- Critical infrastructure capability and capacity, including adequate commodity availability, have been restored, or impacts minimized.
- COVID-19 response and recovery worker safety and health protection measures have been developed and compliance measures have been implemented.
- Members of the public have been provided the necessary information to protect themselves against or recover from COVID-19, including at-risk individuals and particularly susceptible populations.
- Practices for sustainable prevention of SARS-CoV-2 transmission, identification of cases, and treatment of COVID-19 patients address all elements of communities, including access and functional needs of children, older adults, people with English as a second language, people with low literacy, and people with chronic conditions.
- Federal and SLTT government continuity of operations plans are fully in place. If appropriate, these plans are successfully executed to ensure primary mission essential functions (MEFs) are maintained.

Strategic Objectives⁵

- Implement broader community and healthcare-based mitigation measures.
- Accelerate outreach to state and local authorities.
- Preserve and minimize disruptions to critical public and private sector services.

Scope

This plan outlines coordinated federal response activities for COVID-19 in the U.S.

Roles and Responsibilities

HHS is the LFA for this federal response. The Federal Emergency Management Agency (FEMA) coordinates federal support for consequence management. The federal interagency supports HHS, as requested, to assist SLTT partners with related preparedness and response activities. For detailed descriptions of interagency roles and responsibilities, see Annex F: Federal Roles and Responsibilities.

Execution

This plan outlines key federal decisions, federal actions, and interagency coordination structures that may be used during the COVID-19 response. Further detail regarding department and

⁵ These objectives were directed by the NSC Resilience DRG PCC on February 24, 2020.

agency responsibilities, activities, integration, synchronization, and phasing is outlined in the annexes and appendices to this plan.

Concept of Operations

This concept of operations aligns interagency triggers to the CDC intervals for each phase and groups key federal actions according to response phase. It also layers in the COVID-19 Containment and Mitigation Strategy developed by the NSC.

Interagency Coordination Constructs

As the LFA for this federal response, the HHS Secretary activated the Secretary's Operations Center (SOC) on January 24, 2020, as the center of gravity for interagency coordination. Within HHS, CDC leads the public health response (e.g., epidemiology, countermeasures, assistance to SLTT health departments). The HHS SOC supports interagency information management and coordination. Other federal departments and agencies execute their related statutory responsibilities and provide additional support to HHS on request.

On January 27, the President's Coronavirus Task Force was formed and charged with leading the USG response. The Task Force was initially led by the Secretary of Health and Human Services and coordinated through the NSC. On February 28, the Task Force transitioned to the Office of the Vice President (OVP). OVP leads and coordinates all federal communication and messaging, both across the USG and internationally with the World Health Organization and affected countries.

On February 10, at HHS request, FEMA embedded a team with ASPR to support crisis action planning, situational awareness, and operational coordination. The DHS National Operations Center (NOC), DHS Joint Incident Advisory Group (JIAG), and U.S. Coast Guard (USCG) have liaison officers (LNOs) collocated with this team. Liaisons from Emergency Support Function (ESF) #1 Transportation; ESF #6 Mass Care, Emergency Assistance, Temporary Housing, and Human Assistance; ESF #13 Public Safety; ESF #14 Cross-Sector Business and Infrastructure; and ESF #15 External Affairs are also activated in support of ongoing response operations. The current coordination construct is displayed in Figure 2.

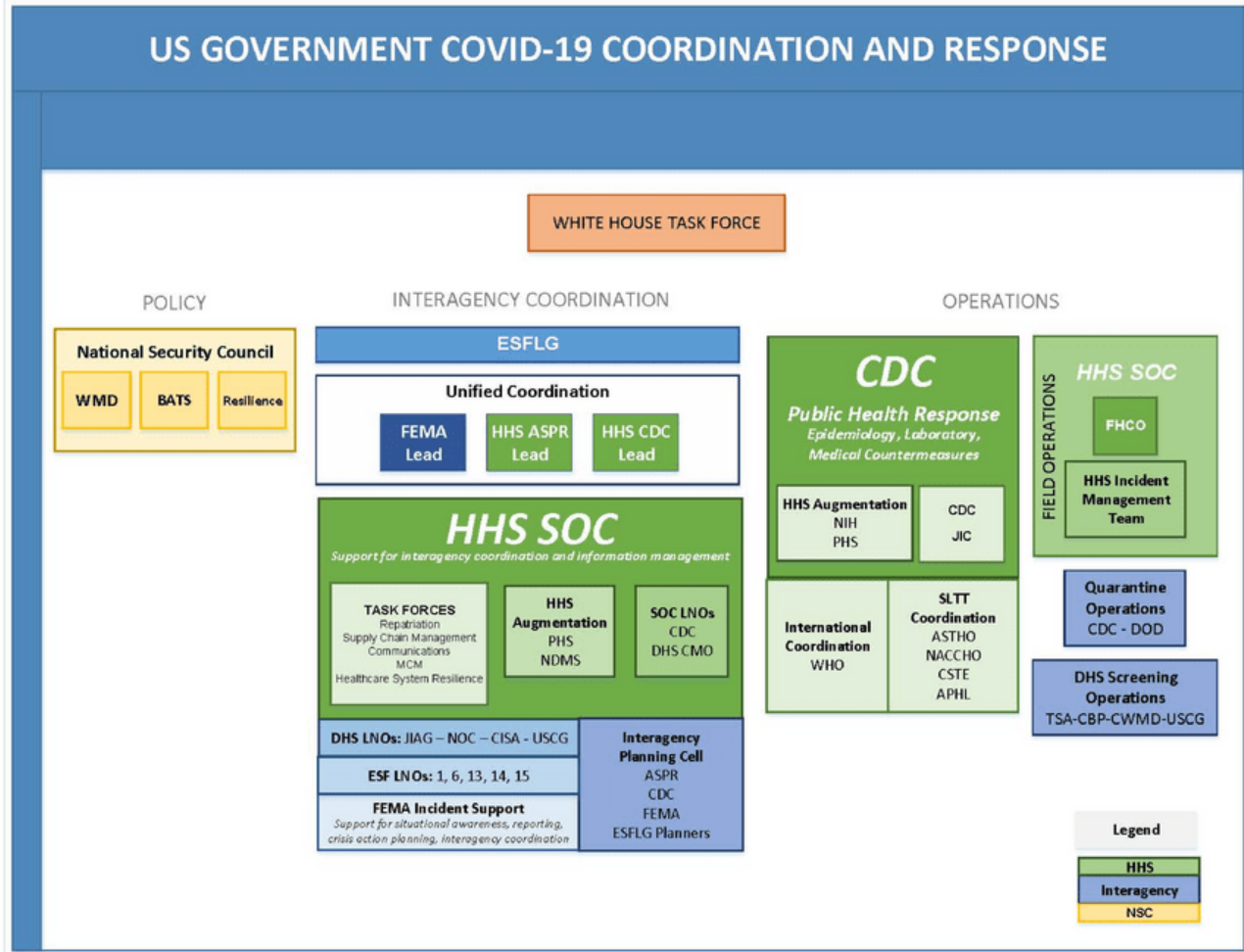


Figure 2. US Government COVID-19 Coordination and Response

As the COVID-19 response evolves, the coordination construct, location, and participants may similarly be adapted to address interagency coordination and synchronization challenges.

If the impacts of COVID-19 become widespread and require a coordinated federal response to deliver substantial consequence management capabilities beyond those related to public health and medical assistance, HHS may, consistent with PPD-44 and/or HSPD-5, request FEMA coordination support to the overall federal response while HHS continues to lead the public health and medical response to contain and mitigate the COVID-19 virus. Potential coordination structures for a Unified Coordination Group (UCG) are depicted in Figure 3.

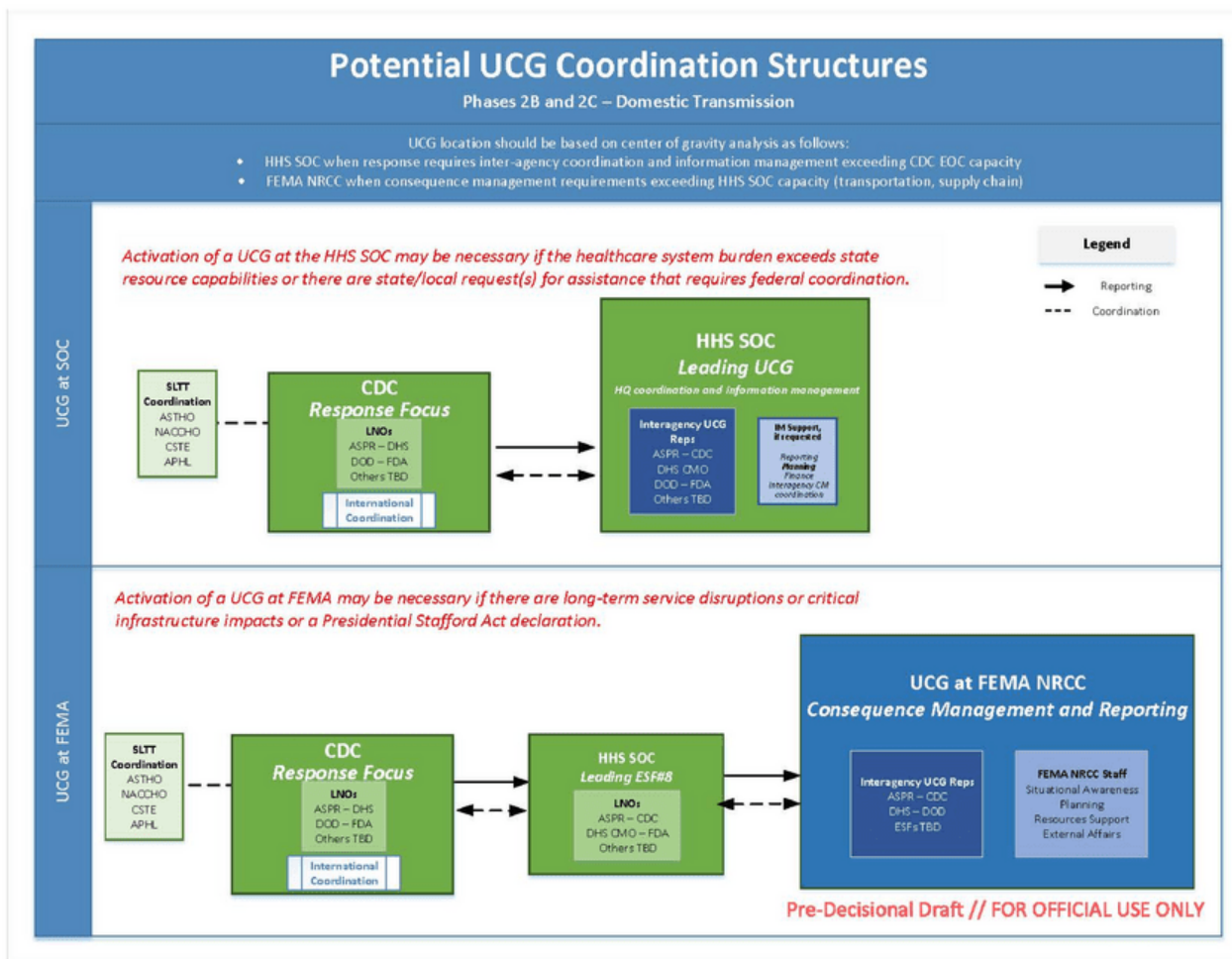


Figure 3. Potential UCG Coordination Structures

Phase Indicators and Triggers

The COVID-19 Response Plan triggers are adapted from the PanCAP for this threat and are harmonized with the *Phases of U.S. Government Response to the 2019 Novel Coronavirus (2019-nCoV)*, dated February 11, to provide a targeted, layered mitigation strategy across the federal government. The crosswalk shown in Figure 4 aligns the federal operational response phases⁶ outlined in the Response FIOP and BIA with the CDC intervals⁷ outlined in the Pandemic Intervals Framework (PIF). The crosswalk also identifies triggers that move action between the phases, and it is used to organize interagency response activities, as reflected in the Synchronization Matrix (Annex X). The PanCAP triggers that move action between the phases have also been adapted by ASPR, CDC, and FEMA for COVID-19.

⁶ The Response FIOP describes the response to an incident across three operational phases (two for response, one for recovery). The two response phases are divided into three sub-phases. For more information about the federal operational response phases, reference the Response FIOP.

⁷ The PIF describes the progression of an influenza pandemic using six intervals. This framework is used to guide influenza pandemic planning and provides recommendations for risk assessment, decision-making, and action in the United States. These intervals provide a common method to describe pandemic activity, which can inform public health actions. The duration of each pandemic interval might vary depending on the characteristics of the virus and the public health response. For further, reference the PIF.

Phase	1C	2A	2B	2C
Operational Phase	Near Certainty or Credible Threat	Activation, Situational Assessment, and Movement	Employment of Resources and Stabilization	Intermediate Operations
CDC Interval	Recognition	Initiation	Acceleration	
COVID-19 Containment/Mitigation Strategy	Containment	Aggressive Containment	Transition from Containment to Community Mitigation	Full Community Mitigation
Triggers	<ul style="list-style-type: none"> Confirmation of multiple human cases or clusters with virus characteristics indicating limited human-to-human transmission and heightened potential for pandemic Determination of a Significant Potential for a Public Health Emergency 	<ul style="list-style-type: none"> Demonstration of efficient and sustained human-to-human transmission of the virus Declaration of a Public Health Emergency One (1) or more clusters of cases in the U.S. 	<ul style="list-style-type: none"> Increasing number of cases or increasing rate of infection in U.S. Healthcare system burden exceeds State resource capabilities National healthcare supply chain management unable to surge production and/or distribution to meet demand State/local request for assistance that requires federal coordination Increasing private-sector request for assistance to support cross-sector operations Greater than three (3) generations of human-to-human transmission, or detection of cases in the community without epidemiologic links in a single U.S. contiguous jurisdiction with evidence that public health systems in that jurisdiction are unable to meet the demands for providing care 	<ul style="list-style-type: none"> Increasing rate of infection in United States indicating established transmission, with long-term service disruption and critical infrastructure impacts Industry business continuity plans cannot be executed due to insufficient personnel leading to significant disruption across sectors Presidential Stafford Act declaration State/local request for assistance that requires federal coordination Greater than three (3) generations of human-to-human transmission, or detection of cases in the community without epidemiologic links, two (2) or more non-contiguous jurisdictions with evidence that public health systems in those jurisdictions are unable to meet the demands for providing care. Widespread transmission of disease

Figure 4. Phase Indicators and Triggers

Lines of Effort

The COVID-19 USG response is organized along seven lines of effort (LOEs). These focus areas include the core capabilities necessary for mitigating the public health and medical impacts and other consequences of a novel virus outbreak. An effective public health response relies upon the successful use of multiple mitigation strategies in a targeted layered approach. The *Targeted Layered Mitigation Strategy* is a phased approach to individual, community, business, and healthcare interventions aimed to slow transmission and acceleration of disease; to minimize morbidity and mortality; to preserve function of health care, workforce, and infrastructure; and to minimize social and economic impacts. For additional detail, including purpose and end state, objectives, primary coordinating federal departments and agencies, key federal responsibilities, operational assessment, resources, potential shortfalls, and critical information requirements for each line of effort, reference the appendices to Annex C. Operations.

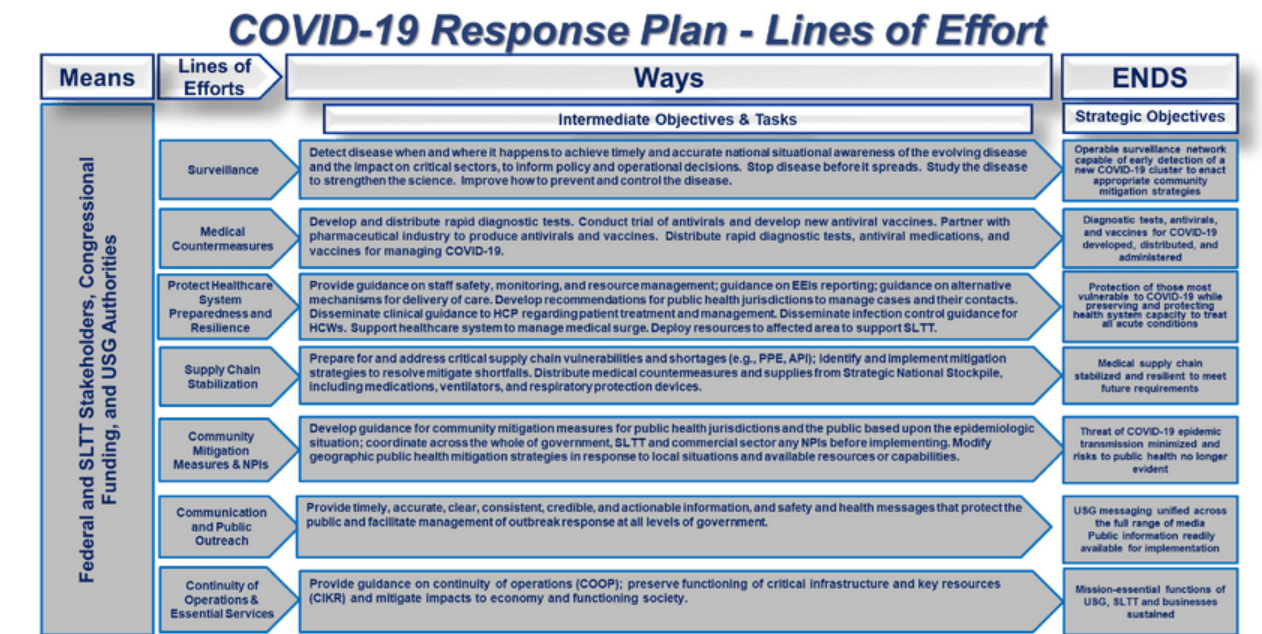


Figure 5. COVID-19 Lines of Effort

Surveillance

The objective of this line of effort is timely and accurate national situational awareness and monitoring critical infrastructure impacts. Surveillance promotes USG unity of effort by providing a common baseline of information relevant to COVID-19 impact to public confidence in government and sustaining essential services. In addition, this line of effort aims to prevent, delay, and mitigate introduction of additional cases to the U.S. through detection and containment of viral transmission and disease spread in the U.S.

Medical Countermeasures Development

The objective of this line of effort is development, distribution, and administration of diagnostic tests, antivirals, and vaccines for COVID-19. This line of effort also includes:

- Research and development of antiviral and other treatment regimens.
- Development and maintenance of a stockpile of safe and effective vaccines.

Healthcare System Preparedness and Resilience

The objective of this line of effort is to protect those who are most vulnerable to hospitalization and mortality during sustained transmission of COVID-19 in the U.S. while preserving and protecting health system capacity to treat all acute conditions. This line of effort also includes developing and disseminating guidance on:

- Recommendations for public health jurisdictions to manage cases and their contacts.
- Clinical guidance to healthcare professionals (HCP) regarding patient treatment and management.
- Infection control guidance for healthcare workers (HCWs).
- Staff safety and monitoring.
- Medical surge management.
- Alternative mechanisms for delivery of care.
- Resource management, including supply chain shortage impacts and vulnerabilities.

- Health care and medical response coordination in support of ESF-8 (to include EEI reporting).
- Operational best practices and tools based on clinical management lessons learned.

Supply Chain Management

The objective of this line of effort is medical supply chain stabilization and ensuring resilience for future requirements. This line of effort also includes:

- Preparation for and response to critical healthcare supply chain vulnerabilities and shortages (e.g., PPE, API).
- Distribution of medical countermeasures, including medications, ventilators, and respiratory protection devices and other supplies from the strategic national stockpile (SNS).

Community Mitigation Measures and NPIs

The objective of this line of effort is to support SLTT and the private sector development and implementation of community-customized mitigation measures. This line of effort also includes:

- Developing guidance for community mitigation measures for public health jurisdictions and the public based upon the epidemiologic situation.
- Coordinating across the whole of government, SLTT, and commercial sector any non-pharmaceutical interventions (NPIs) before implementing.
- Establishing and operating a federal information plan.

Communication and Public Outreach

The objective of this line of effort is to ensure USG facilitates accurate, coordinated, and timely information to affected audiences, including governments, media, the private sector, and the local populace:

- Developing and amplifying lifesaving, life-sustaining information in coordination with interagency partners.
- Developing a transparent risk communication strategy plan for development, clearance, and dissemination of clear, concise, accurate critical public health messages to both targeted audiences and the general population.
- Developing and disseminating messaging that reflects both unknown issues and facts as they become acknowledged.

Continuity of Operations & Essential Services

The objective of this line of effort is sustainment of MEFs across USG, SLTT, and the private sector. This line of effort includes:

- Provide COOP guidance.
- Implement COOP plans, if needed.
- Preserve functioning of critical infrastructure and key resources (CIKR) and mitigate impacts to economy and functioning society.

Key Federal Decisions

To date, the following Key Federal Decisions from the PanCAP have been executed:

- HHS Secretary declares a Public Health Emergency.
- HHS requests supplemental funding.

- HHS, Department of Homeland Security (DHS), and the Department of State (DOS) issue border measures and travel health notices and advisories.
- The President of the United States (POTUS) declares a National Emergency.

Additional Key Federal Decisions at the federal level may include:

- HHS initiates COVID-19 Vaccine Program and issues distribution and prioritization guidance.
- HHS provides funding to states.
- HHS, in coordination with education departments and state health authorities, issues recommendations for non-pharmaceutical interventions such as school dismissals and cancellations of mass gatherings.
- HHS distributes Strategic National Stockpile (e.g., antiviral drugs, ventilators, etc.).
- Depending on the resource in question, HHS/interagency/NSC prioritize distribution of essential resources.
- NSC considers international donation/sharing of vaccine and other medical countermeasures request(s).
- HHS/DHS/Department of Defense leverages Defense Production Act authorities.

Interagency Support

HHS may request interagency assistance from other departments and agencies, including ESF activations, support for additional capability, operational coordination, planning, situational assessment, logistics and supply chain management, and operational communications core capabilities.

Sustainment

Administration

HHS is the LFA responsible for managing the federal response to COVID-19. In the event of a Stafford Act declaration, FEMA is responsible for coordinating federal support for consequence management. The federal interagency supports HHS, as requested, to assist SLTT partners with related preparedness and response activities.

Resources

Resources will be prioritized for life safety, life sustainment, and workforce protection. Departments and agencies will be responsible to provide for the logistical requirements of their personnel and missions.

Funding

Departments and agencies fund initial response activities out of their respective budgets. HHS requested supplemental funding based on mission requirements and may use the Economy Act to reimburse incremental costs for activities required of other departments and agencies that are

specifically requested by HHS to provide support during the COVID-19 response. In the event of a Stafford Act declaration, response activities covered by the declaration cannot duplicate supplemental appropriations provided by Congress for the COVID-19 operations. Reimbursement is through established mechanisms.

Communications, Coordination, and Oversight

Communications

HHS leads and coordinates all federal communication, messaging, and release of public health and medical information both across the USG and internationally with the World Health Organization and affected countries, jurisdictions, or areas.

The HHS Secretary's Operation Center is the primary national-level hub for situational awareness and information sharing related to this incident, publishing the Senior Leadership Brief and hosting the Emergency Support Function Leadership Group (ESLFG) VTC. In addition, HHS develops and publishes key public messages and talking points to SLTT and private sector/NGO stakeholders on COVID-19 measures in synch with the described LOE.

The DHS National Operations Center is the primary national-level hub for domestic situational awareness, a common operating picture, information fusion, and information sharing pertaining to domestic incident management.

Coordination

HHS is the LFA responsible for managing the federal response to COVID-19. The federal interagency supports HHS, as requested, to assist SLTT partners with related preparedness and response activities. Ongoing coordination actions include: (1) coordination calls with federal partners to provide situational awareness and clarify priority federal response tasks and (2) interagency future planning for the COVID-19 response.

Oversight

The White House Coronavirus Response Task Force, led by the Vice President, will coordinate a whole-of-government approach, including governors, state and local officials, and members of Congress, to develop the best options for the safety, well-being, and health of the American people. HHS is the LFA for coordinating the federal response to COVID-19.

Annex A. Task Organization

As the LFA for this federal response, HHS makes the initial determination that interagency coordination beyond day-to-day processes is required. The interagency coordination structure, including participants, organization, and location (e.g. virtual or assembled) will be identified by HHS. If a pandemic threat evolves internationally, this organizational construct will integrate foreign and domestic USG preparedness and response operations. As the threat evolves, the coordination construct, location, and participants will similarly evolve to address interagency coordination challenges.

Current Structure

The HHS Secretary activated the Secretary’s Operations Center (SOC) on January 24, 2020, as the center of gravity for interagency coordination. Within HHS, CDC leads the public health response (e.g., epidemiology, countermeasures, assistance to SLTT health departments). The HHS SOC supports interagency information management and coordination. Other federal departments and agencies execute their related statutory responsibilities and provide additional support to HHS on request.

On January 27, the President’s Coronavirus Task Force was formed and charged with leading the USG response. The Task Force was initially led by the Secretary of Health and Human Services and coordinated through the NSC. On February 28, the Task Force transitioned to the Office of the Vice President (OVP). OVP leads and coordinates all federal communication and messaging, both across the USG and internationally with the World Health Organization and affected countries.

On February 10, at HHS request, FEMA embedded a team with ASPR to support crisis action planning, situational awareness, and operational coordination. The DHS NOC, DHS JIAG, and USCG have LNOs collocated with this team. Liaisons from Emergency Support Function (ESF) #1 Transportation; ESF #6 Mass Care, Emergency Assistance, Temporary Housing,

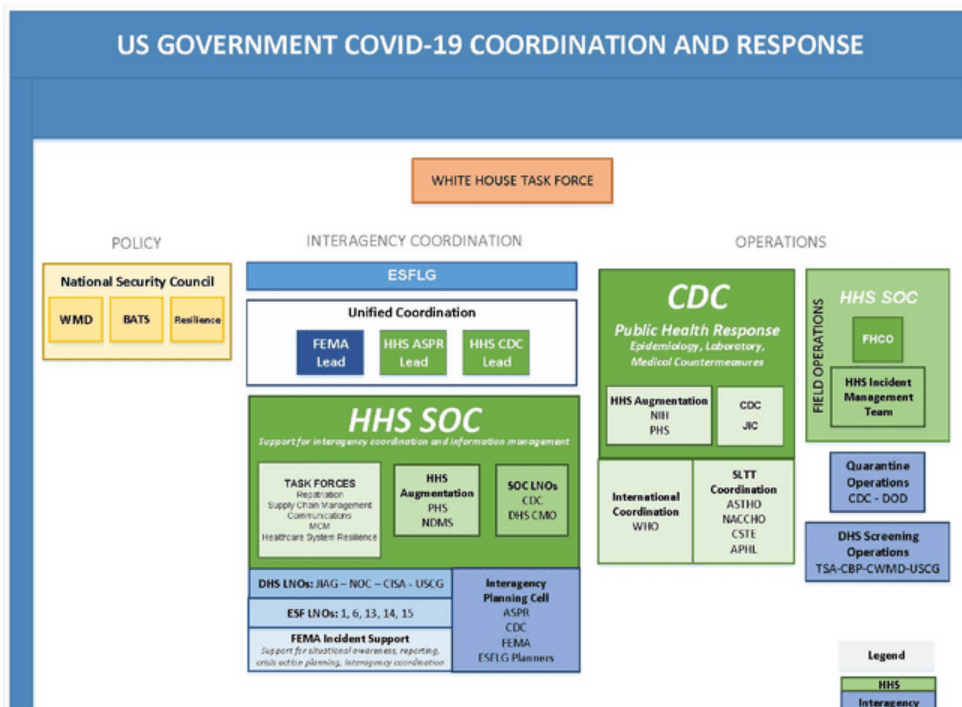


Figure 6. US Government COVID-19 Coordination and Response

and Human Assistance; ESF #13 Public Safety; ESF #14 Cross-Sector Business and Infrastructure; and ESF #15 External Affairs are also activated in support of ongoing response operations. The current USG coordination construct is displayed in Figure 6. The HHS Response Structure is depicted below is displayed in Figure 7.

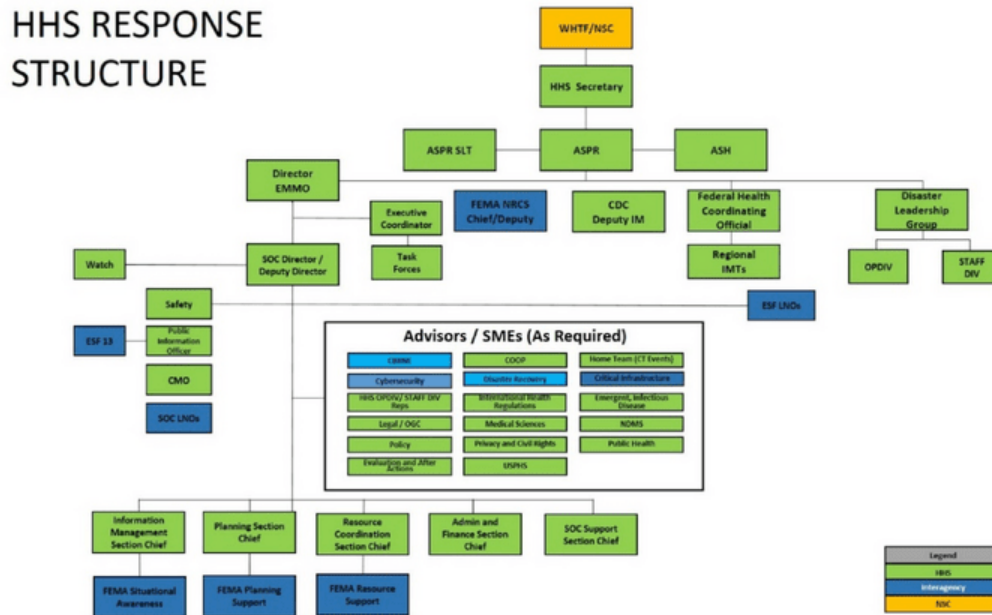


Figure 7. HHS Response Structure

Potential UCG Coordination Structures

This incident may continue to evolve in unique ways, providing a challenge for interagency coordination. As noted above, some departments or agencies will be responding as part of their statutory authorities before unified coordination is initiated by the lead federal agency. As previously stated, as part of that initial response, they might be engaging with entities external to the federal government. There are several critical decisions that the LFA should make early in the interagency coordination process. The discussion of unified coordination in this document should be considered a starting point, but unified coordination must adhere to the basic tenets of the National Incident Management System (NIMS), scaled appropriately to the incident response.

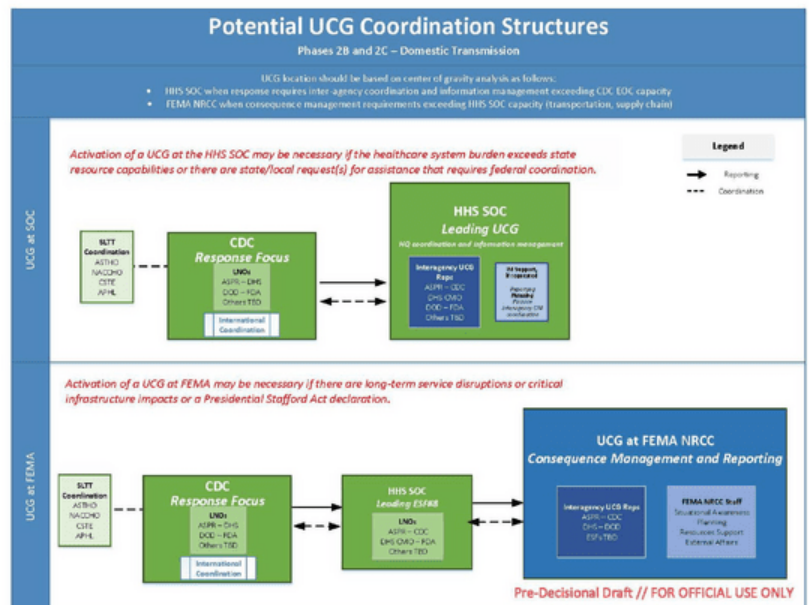


Figure 8. Potential UCG Coordination Structures

Annex C. Operations

The COVID-19 USG response is organized along seven lines of effort. This annex provides detail for each line of effort, including objectives, end states, key federal responsibilities, operational assessment, resources, shortfalls, and critical information requirements.

USG Phasing Constructs

Containment

Pandemic Crisis Action Plan Phase

The federal response will be implemented consistent with the Phase 1C (Near Certainty or Credible Threat).

*Trigger*⁸

The trigger for the containment phase is uncontained human-to-human transmission in Hubei Province, China.

*Actions*⁹

Foreign nationals who have been in PRC (excluding the Special Administrative Regions [SARS] of Hong Kong and Macau) within 14 days prior to their actual or attempted entry into the U.S. are ineligible for entry to the U.S. under Section 212(f) of the Immigration and Nationality Act (INA), subject to certain exceptions. U.S. citizens, lawful permanent residents (LPRs), and other individuals not covered by the 212(f) proclamation (1) who have been in Hubei province within the past 14 days may be subject to 14-day mandatory quarantine; and (2) who have been in PRC (excluding the SARS of Hong Kong and Macau), and outside Hubei province, within the past 14 days may be subject to medical screening and self-isolation for 14 days based on federal, state, and local quarantine authorities. All flights carrying passengers who have recently traveled from, or were otherwise present within, the PRC (excluding the SARS of Hong Kong and Macau) are funneled to 11 U.S. airports with enhanced CDC medical screening. U.S. Customs and Border Protection (CBP) is referring to CDC all incoming passengers traveling by air, land, or sea and who have been in PRC (excluding the SARS of Hong Kong and Macau) during the previous 14-days. CDC is coordinating with state and local health care clinicians to identify domestic cases, to isolate cases, and to conduct appropriate contact tracing.

Objectives

(1) Contain the outbreak at its source; (2) minimize domestic importation of additional cases; (3) limit the potential for a domestic epidemic; (4) prepare domestic response mechanisms; (5) begin outreach to state and local authorities to prepare for mitigation; (6) implement domestic quarantine of imported and repatriated cases and contacts; and (7) begin federal planning to prepare for mitigation.

⁸ Note: The use of “trigger” throughout is intended to provide a helpful tool to principals for when to consider certain responsive actions and does not necessarily mean that a particular action is automatically required.

⁹ Updated information for travelers is available at <https://www.cdc.gov/coronavirus/2019-ncov/travelers/index.html>.

Chokepoints/Critical Gaps

Potential chokepoints or critical gaps may be associated with the aims (1) for reliable and accessible traveler tracking for monitoring or contact-tracing, (2) for sufficient quantities of diagnostics and test kits for SARS-CoV-2, especially for medical facilities around the 11 airports and U.S. military bases, which are points of entry/care.

Messaging

Daily HHS and CDC briefings and on-camera task force briefings will be provided, as appropriate, using coordinated top-line talking points.

Aggressive Containment

Pandemic Crisis Action Plan Phase

The federal response will be implemented consistent with the PanCAP Phase 2A (Activation, Situational Assessment, and Movement).

Trigger

The trigger for the aggressive containment phase is sustained human-to-human transmission (third generation) and exportation of cases to a non-U.S. area or nation beyond the level described above in “Containment.” The public health infrastructure of the affected area(s) could also be a relevant factor.

Actions

This phase involves transition from the federal government’s containment posture to one with federal coordination, but execution primarily at state and local government levels. This execution will include the application of quarantine and isolation measures to people, with or without clinical symptoms, not covered by the existing or potential future INA 212 (f) proclamations, and who have traveled to any additional countries, jurisdictions, or areas that meet the trigger criteria. Symptomatic people with high-risk travel as noted will proceed to direct airport medical screening first. Direct flights, as well as flights with passengers traveling indirectly from these additional locations will be funneled to designated airports (11 as of early March 2020) based on airport capabilities and capacity to support additional passenger load, CBP targeting rules and operational requirements, and enhanced CDC medical screening.

Objectives

(1) Limit the outbreak to the source and additional outbreak areas; (2) minimize importation of additional cases; (3) limit the potential for a domestic epidemic; (4) undertake additional preparation of the domestic response mechanisms and in some cases execute those plans; (5) accelerate outreach to state and local authorities to prepare for mitigation, including widespread distribution of newly developed diagnostic tests, and ensure that state and local public health labs are properly equipped for testing capacity; and (6) slow the spread of the epidemic.

Chokepoints/Critical Gaps

Broad implementation of INA 212 (f) entry restrictions for foreign nationals may have unintended consequences, including supply chain disruption, repatriation issues, and other factors that could result in a direct transition to mitigation becoming the preferred option. Assuming state and local health authorities have the capacity and capability, a shift from the current CDC medical screening and quarantine posture will be heavily dependent upon the

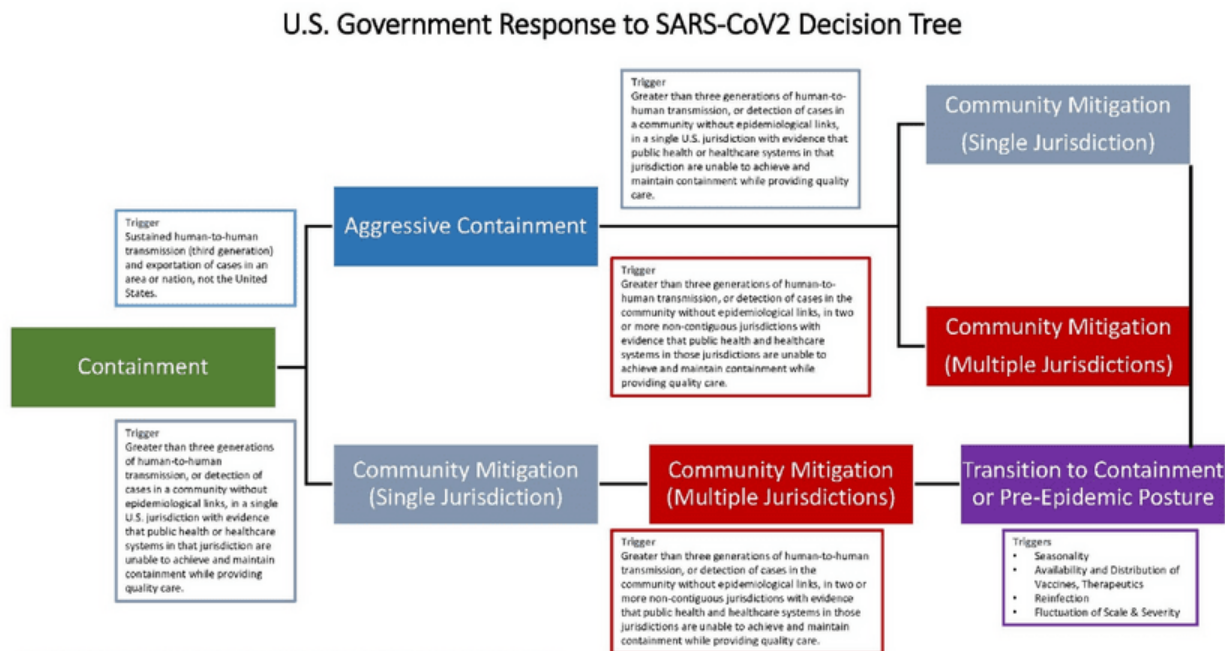
ability to capture and operationalize accurate passenger data. Further, the United States government may need to modify and/or expand the list of 11 airports to which flights are funneled, depending on the location of the additional countries, jurisdictions, or areas meeting the triggers above and the availability of screening and other public health resources. Airport capabilities and capacity to support the additional passenger load, CBP targeting rules and operational limitations, and enhanced CDC medical screening will likely become more challenging in this posture.

Messaging

Using plain language and accessible formats, provide timely messaging with a focus on foreshadowing potential mitigation measures in a manner to mitigate the risk of causing unnecessary alarm. The public will need to be assured and informed about the types of medical countermeasures (e.g., vaccines, therapeutics) and societal measures the government is developing and recommending to maintain the highest level of health and safety for the American public. Other focus areas should include amplifying the importance of good public health hygiene and infection control (akin to flu mitigation measures), empowerment of state and local public health services in preparation for future phases, and continued promotion of everything the USG is doing to support Americans dealing with the virus and slow the spread to others.

Transitions Between Phases

Transitions between phases are informed by plan triggers outlined in the base plan. The decision tree below displays these transitions.



UNCLASSIFIED//FOR OFFICIAL USE ONLY PRE-DECISIONAL AND DELIBERATIVE DRAFT

Figure 9. U.S Government Response to SARS-CoV-2 Decision Tree

Transitioning from Containment to Community Mitigation Activities in Single Affected Jurisdictions

Pandemic Crisis Action Plan Phase

The federal response would be implemented consistent with the PanCAP Phase 2B (Employment of Resources and Stabilization) and 2C (Intermediate Operations).

Trigger

The trigger for a transition from containment to community mitigation activities in a single affected jurisdiction is recognition of greater than three generations of human-to-human SARS-CoV-2 transmission, or detection of cases in the community without epidemiologic links, in a single U.S. jurisdiction with evidence that public health or healthcare systems in that jurisdiction are unable to achieve and maintain containment while simultaneously providing quality care.

Actions

Public health measures may need to be adjusted to accommodate for the changing epidemiology and risk. CDC would likely recommend a phased transition from aggressive containment to an approach focused on mitigation in places where evidence indicates ongoing human-to-human transmission of SARS-CoV-2 in the United States. If flights and/or passengers from PRC (excluding the SARS of Hong Kong and Macau) and/or other locations are still being funneled, the federal government will determine if existing measures need to continue or be modified. Those who are tasked to support the earlier phases for enhanced screening at points of entry would likely need to be redirected to duties in support of the health system or public safety. Those who remain at the ports of entry would provide education and guidance to ill travelers and triage those who appear to be ill for immediate transport to a designated health center for specialty care.

Objectives

Implement broader community and healthcare-based mitigation measures proportionate to disease severity and impact on healthcare systems in the jurisdiction of concern. Consideration should be given to regional triggers and decisions, depending on the epidemiology, severity, capacity, and capabilities of the available public health resources.

Chokepoints/Critical Gaps

Shortages of products may occur, impacting healthcare, emergency services, and other elements of critical infrastructure. This includes potentially critical shortages of diagnostics, medical supplies (including PPE and pharmaceuticals), and staffing in some locations. This could be due either to illnesses or to exposure (requiring home quarantine) among public health and medical workers, but may also be due to fear of contracting the virus, exhaustion, or the need to take care of sick family members and maintain home isolation as a family unit. State and local governments, as well as critical infrastructure and communications channels, will be stressed and potentially less reliable. These stresses may also increase the challenges of getting updated messages and coordinating guidance to these jurisdictions directly.

Messaging

Using plain language and accessible formats, provide timely messaging with a focus on keeping the public service and healthcare providers assured and educated during this key period of transition. Core message should be that the USG and SLTT officials are carrying out pre-planned

responses to address the changing conditions. Messaging should highlight the role USG is taking to support state and local partners, as they implement their own mitigation activities. International messaging should underscore the active public health measures in place in the U.S. and communicate the intent to minimize foreign restrictions on U.S. travelers and trade.

Transitioning from Containment to Community Mitigation Activities in Multiple Jurisdictions Across the Nation

Pandemic Crisis Action Plan Phase

The federal response would be implemented consistent with the PanCAP Phase 2B (Employment of Resources and Stabilization) and 2C (Intermediate Operations).

Trigger

The trigger for a transition from containment to community mitigation activities in multiple affected jurisdictions is recognition of greater than three generations of human-to-human SARS-CoV-2 transmission in each, or detection of cases in the communities without epidemiologic links, in two or more non-contiguous jurisdictions in the U.S. with evidence that public health systems in those jurisdictions are unable to meet the demands to achieve and maintain containment while simultaneously providing quality care.

Actions

Continue to reinforce home isolation strategies and ensure that those who are most at risk and severely ill are able to receive care. Recommend significantly limiting public gatherings and cancellation of almost all sporting events, performances, and public and private meetings that cannot be convened by phone. Consider school closures. Issue widespread “stay at home” directives for public and private organizations, with nearly 100% telework for some, although critical public services and infrastructure may need to retain skeleton crews. Law enforcement could shift to focus more on crime prevention, as routine monitoring of storefronts could be important. Local health systems (e.g., public health and local healthcare facilities) may need to alter standards of care to “contingency” or “crisis” standards of care, to conserve resources, including for illnesses and conditions that are not related to SARS-CoV-2; altered standards of care involve shifts in priority of care when resources are or are projected to be inadequate to administer conventional standards of care.¹⁰ SLTT governments, in coordination with social services providers, should identify courses of action to ensure at-risk individuals continue to receive life-sustaining services. Consider removing INA 212 (f) entry restrictions if the public health benefits of such restrictions do not outweigh the costs. Funneling would likely be rolled back given the need to redirect personnel to engage in full domestic mitigation efforts.

Objectives

(1) Reduce the acceleration of the number of cases; (2) reduce the peak number of cases, which also affects availability of hospitals and functionality of infrastructure; and (3) preserve the

¹⁰ (1) Altevogt, BM; C Stroud; SL Hanson; D Hanfling; LO Gostin, Editors, 2009, Guidance for Establishing Crisis Standards of Care for Use in Disaster Situations: A Letter Report, Washington DC: National Academies Press, 160 pp., available at <https://www.nap.edu/catalog/12749>; (2) Hanfling D; BM Altevogt; K Viswanathan; LO Gostin; Editors, Committee on Guidance for Establishing Crisis Standards of Care, Institute of Medicine, 2012, Crisis Standards of Care: A Systems Framework for Catastrophic Disaster Response, Washington DC: National Academies Press, 516 pp., available at http://www.nap.edu/catalog.php?record_id=13351.

functioning of critical infrastructure and mitigate impact to the economy and functioning of society.

Chokepoints/Critical Gaps

Shortages of products may occur, impacting healthcare, emergency services, and other elements of critical infrastructure. This includes potentially critical shortages of diagnostics, medical supplies (including PPE and pharmaceuticals), and staffing in some locations. This could be due either to illnesses or to exposure (requiring home quarantine) among public health and medical workers, but may also be due to fear of contracting the virus, exhaustion, or the need to take care of sick family members and maintain home isolation as a family unit. State and local governments, as well as critical infrastructure and communications channels, will be stressed and potentially less reliable. These stresses may also increase the challenges of getting updated messages and coordinating guidance to these jurisdictions directly. Health systems may predict running low on cash resources, and may have difficulty paying (or promising to pay) staff and logistics invoices, especially if workers have an expectation of considerable overtime.

Messaging

Using plain language and accessible formats, provide timely messaging with a focus on encouraging citizens to listen to their state/local health officials implementing mitigation measures. Messaging should continue to promote everything the USG is doing to support state and local partners. Messaging should also address protection of hospitals, continuity of operations, and other critical infrastructure.

Preparing for Future Epidemic Trends – Striking Balance Between Mitigation and Containment

Trigger

The trigger for preparing for future epidemic trends could include triggers such as seasonality of the epidemic, availability of vaccines and therapeutics, and fluctuation of the scale and severity of disease.

Actions

Actions could include vaccine deployment if available, modifications to the INA 212 (f) foreign national entry restrictions, quarantine, isolation, and reversible transition or “deceleration” of approach from full mitigation to a posture poised to facilitate enhanced recovery, resilience, and readiness.

Objectives

Strike appropriate balance between mitigation and containment postures to minimize societal and economic disruption while continuing to pursue actions to end the epidemic.

Chokepoints/Critical Gaps

Potentially critical shortages may occur of medical supplies (including PPE and pharmaceuticals) and staffing, due to illnesses among public health and medical workers, and potentially also due to exhaustion. SLTT governments, as well as health systems will be stressed and potentially less reliable. Health systems may run low on resources inhibiting the ability to make timely transitions between postures and maintenance of efficacy.

Messaging

Public messaging would need to comport with potentially varying local and national status.

Appendix 1. Surveillance

The objective of this line of effort is timely and accurate national situational awareness of the disease and of the impact on critical infrastructure, to inform policy and operational decisions. Surveillance promotes USG unity of effort by providing a common baseline of information relevant to COVID-19 impact (a) to public confidence in government and (b) to sustaining essential services. This line of effort both prevents, delays, and mitigates introduction of additional foreign-acquired cases to the U.S. and leverages detection and containment to limit domestic viral transmission and disease spread within the U.S.

Purpose and End State

In coordination with the CDC and with designated federal, SLTT, and private sector healthcare/laboratory stakeholders, this line of effort ensures an operable surveillance network capable of screening inbound foreign-acquired cases and early detection of new COVID-19 cases or clusters to enact appropriate community mitigation strategies.

Objectives

Key stakeholders will ensure that these objectives are accomplished to achieve the given end-state.

- Update established surveillance methods for COVID-19 in an effort to ensure early identification and efficient reporting of new COVID-19 cases.
- Communicate the updated COVID-19 surveillance methods to ensure a common operating picture.
- Monitor surveillance networks to detect potential clusters of COVID-19.
- Evaluate the COVID-19 surveillance methods and modify based on transmission analysis.

Primary Coordinating Federal Departments and Agencies

Specific Response Tasks	Designated Primary Coordinating Federal Departments/Agencies within Line of Effort
Epidemiological investigations	CDC
Development, upgrades, review/approval, and distribution to SLTT public health and academic/private-sector laboratory entities	CDC FDA
Healthcare systems monitoring to include PPE and other healthcare supplies/equipment	ASPR
Surveillance of other health resources	ASPR
Federal workforce	OPM
Private-sector workforce	DHS/CISA

Key Federal Responsibilities

In accordance with the Biological Incident Annex, the following federal roles and responsibilities are designed to achieve the objectives and end-state:

- Confirm COVID-19 outbreak and diagnosis.

- The USG has a supporting role to SLTT and private sector healthcare/laboratory facilities in the collection, presumptive determination, and confirmation of the SARS-CoV-2 virus in infected individuals. This responsibility is executed in the following manner:
 - Assure that clinical specimens collected, tested, and deemed positive for COVID-19 are reported (as either presumptive or confirmed, using reliable and FDA-approved test kits) promptly from the SLTT health authorities to the CDC in accordance with CDC guidelines.
 - Epidemiological investigations of suspected, presumptive, or confirmed COVID-19 individuals include examination of travel history (to/from impacted countries, jurisdictions, or areas and, if appropriate, from U.S. communities with reported COVID-19 cases), and contact-tracing for other individuals potentially exposed to these primary cases.

Operational Assessment

The following assessment criteria will determine effectiveness in achieving the given end-state:

- Establishment and efficient operation of COVID-19 surveillance methods.
- Adequate utilization of the surveillance network to detect clusters (e.g., Integrated Clinical Laboratory Network).
- Identification of COVID-19 clusters with little to no delays from identification, collection, maintenance of chain-of-custody, sampling and laboratory quality assurance and control compliance, and prompt laboratory reporting of the results.
- Sustainment of a resilient COVID-19 surveillance network, with minimal impacts from resource or non-resource shortfalls from COVID-19 outbreaks in the US communities.

Resources

The following resources can contribute to achieving the intermediate objectives and end-state even though such resources apply to all reportable diseases other than COVID-19:

- Surveillance networks include, but are not limited to, the following elements to facilitate information sharing and reporting of COVID-19 cases:
 - The CDC's Epidemic Information Exchange (Epi-X) is a secure, web-based network that serves as a powerful information exchange among authorized users.
 - The Electronic Surveillance System for the Early Notification of Community-Based Epidemics (ESSENCE) is the primary syndromic surveillance tool, and practitioners across the surveillance community have used variations of ESSENCE successfully for years.
- The Epidemiological Intelligence Service (EIS) serves on the front lines of public health, protecting Americans and the global community, while training under the guidance of seasoned mentors. When disease outbreaks or other public health threats emerge, EIS officers investigate, identify the cause, rapidly implement control measures, and collect evidence to recommend preventive actions.

- Career epidemiology field officers (CEFOs) are CDC employees who assist state, local, tribal, and territorial health departments in building and sustaining epidemiologic capacity by serving in a variety of functions tailored to the needs of the individual state.
 - The CEFOs serve as liaisons between CDC (and other federal agencies) and the host-state health departments. The CEFOs' knowledge of epidemiology, and of federal preparedness and response requirements, helps strengthen the states' own preparedness programs and enhance their ability to prepare for and/or respond to acts or threats of terrorism, natural disasters, pandemics, and other public-health emergencies.
- Epidemiologists at the SLTT public health departments develop and issue surveillance guidance for their jurisdictions in adherence to CDC recommendations, but are tailorable to the jurisdictional community.

Potential Shortfalls

The following potential resource shortfalls are tied to the achievement of this line of effort's end-state and intermediate goals, and thus, are critical information requirements for the USG to monitor and to appropriately respond with adequate augmentation and resourcing:

- Personal protective equipment (PPE). Shortage in this commodity will lead to avoidance of suspected or confirmed patients by public health epidemiologists, hindering their capacity to conduct close-contact interviews.
 - Mitigation of a PPE shortage may include leveraging USG authorities and business incentives for U.S manufacturers either to either initiate or to expand production.
- Laboratory diagnostic test kits: Shortage of SARS-CoV-2 viral test kits at the SLTT or private sector laboratory will delay the confirmation of COVID-19 patients.
 - Development of additional tests may be delayed for many reasons, including approval for use, distribution difficulties, or validation testing. Continued partnership between the public and private sectors is needed to develop, distribute, and implement the necessary laboratory and diagnostic needs of this response.
 - Although one mitigation measure is to send clinical specimens to the CDC, the significant workload and required staffing and resources at CDC will result in backlog and delay in transmitting disease confirmation.
 - Mitigation measures for shortages of test kits may include business incentives for U.S manufacturers either to initiate or to expand production to mass-produce sufficient quantities of quality test kits for use at the SLTT and private sector hospital/laboratory level.
- IT and communications disruptions. Much of the surveillance and reporting depend on an IT and communications infrastructure to share information among federal, SLTT and private healthcare providers.
 - In addition to identifying early disruptions of IT and communication capabilities, alternative mechanisms such as manual reporting and mailing of appropriate

forms (e.g., via first-class or priority status delivery) are required to ensure as timely of COVID-19 surveillance reporting as possible.

- Information-sharing channels. The information-sharing pathways described are well-established and used daily.
 - Federal, SLTT, and private sector healthcare/laboratory facilities should collaborate on ensuring redundant systems are in-place and utilized to ensure COVID-19 surveillance information is shared quickly among the appropriate stakeholders to implement community mitigation strategies.

Critical Information Requirements

Based on the resources and potential shortfalls described, the following CIRs for this line of effort inform key federal and SLTT decisions to address potential response gaps:

CIR#1 Do SLTT entities have adequate quantities of clinical test kits for presumptive (or confirmatory) identification of SARS-CoV-2 virus in potentially exposed or ill individuals?

CIR#2 Do clinical test kits approved by FDA have adequate capabilities for presumptive or confirmatory identification of SARS-CoV-2 infection?

CIR#3 Are SLTT public health laboratories, hospitals, or private laboratories able to adequately test and report test results to the CDC, through the established networks, in a timely manner given the volume of medical referrals for such testing?

CIR#4 Are adequate quantities of PPE available among SLTT and federal epidemiologists to fully conduct investigations of COVID-19 contacts, as appropriate?

CIR#5 Is the production capacity for PPE, clinical test kits, and other required resources sufficient to maintain adequate surveillance for extended periods (indefinitely) at the federal and SLTT levels?

CIR#6 Is the CDC adequately staffed with trained/qualified epidemiologists and support personnel to support epidemiological investigations and advise SLTT health authorities on public health measures?

CIR#7 Are the SLTT public health departments adequately staffed with trained/qualified epidemiologists and support personnel to lead epidemiological investigations and to develop and implement public health measures within their jurisdictions?

CIR#8 Are the surveillance data received and evaluated at the headquarters level sufficient to inform given triggers and operational phasing to guide USG COVID-19 response?

Appendix 2. Communication and Public Outreach

The objective of this line of effort is to ensure that the USG facilitates accurate, coordinated, and timely information to affected audiences, including governments, media, the private sector, and the local populace. The following activities contribute to this objective:

- Develop and amplify lifesaving, life-sustaining information in coordination with interagency partners.
- Develop a transparent risk-communication strategic plan for development, clearance, and dissemination of clear, concise, accurate, accessible critical public health messages to both targeted audiences and the general population.
- Develop and disseminate messaging that reflects newly developing issues and facts as they become recognized and acknowledged.

Purpose and End State

Ensure USG unified messaging across the full range of media as well as public information readily available for consumption and implementation.

Objectives

Key stakeholders will ensure that the following objectives are accomplished to achieve the given end-state:

- Provide preparedness information, the federal pre-cluster posture, and actions taken through integration of public messaging staff at key federal and SLTT locations.
- Continually communicate accurate and timely information to address public health concerns about COVID-19 in the U.S.
- Continually coordinate dissemination of unified public health information with SLTT partners.
- Continually amplify public health messaging to public and external stakeholders.
- Continually message response actions and federal support to the public.

Primary Coordinating Federal Departments and Agencies

Specific Response Tasks	Designated Primary Coordinating Federal Departments/Agencies within Line of Effort
Joint Information Center (JIC)	CDC with Embedded ASPR, DHS/OPA, and FEMA
Emergency management	FEMA
Business	DHS/CISA
Healthcare	CDC and ASPR

Key Federal Responsibilities

In accordance with the Biological Incident Annex, the following federal roles and responsibilities of the LFA provide coordination with the federal interagency and as appropriate, SLTT entities, to achieve the objectives and end-state:

- Provide timely and coordinated messaging to the public for both warning and guidance throughout the incident.
- Provide behavioral health messaging to the public, healthcare workers, and responders to the incident.
- Coordinate associated messaging for all of the above activities through an interagency process. Response and recovery outcomes for COVID-19 are significantly tied to public reception and compliance with public health guidance on personal protective measures and access to health and medical interventions.

Operational Assessment

The following assessment criteria will determine effectiveness in achieving the given end-state:

- COVID-19 clusters in U.S. are being consistently reported as they develop. This includes the following activities:
 - Provide guidance on essential elements of information to report.
 - Develop a risk communication strategic plan for development, clearance, and dissemination of critical public health messages for multiple audiences.
- Key points are being consistently distributed to staff and partners. This includes the following activities:
 - Release a CDC press release, which may include a CDC press briefing or possibly, White House Office of Communications-driven press conferences.
 - Promptly post information on CDC.gov and social media handles.
 - For travel to/from the United States, update airline, cruise ship, or commercial maritime commerce contact investigation communication materials.
 - Inform and provide guidance to clinicians, the public health community, and labs.
- Daily coordination is ongoing with the State Coordination Task Force. This includes the following activities:
 - Coordinate the Clinical Outreach and Communication Activity (COCA).
 - Organize and execute federal and non-governmental organization (NGO) partner calls, including calls with ASTHO, NACCHO, CSTE, NPHIC, DoD.
- Updated COVID-19 related key points and information are being consistently distributed to spokespersons informing the public. This includes the following activities:
 - Monitor and assess news media, social media, and public inquiries.
 - Brief with recognized spokespersons (e.g., news media assigned physicians and/or public health spokespersons) to reinforce messaging.
- Updated key points and information are being consistently distributed to the designated LFA and federal partners. This includes the following activities:
 - Update CDC travel notices and messaging at ports of entry, as needed.

- Provide information on COVID-19 trends impacting U.S. and foreign countries or jurisdictions.
- Provide CDC key messages related to preventive measures and context for the emerging COVID-19 threat (e.g., reinforcing comparisons with seasonal influenza in terms of disease transmission, and at-risk individuals for clinical severity).
- Outreach is being consistently conducted with the business community through ESF-14 and the critical infrastructure protection partnership structure.

Resources

The following resources can contribute to achieving the intermediate objectives and end-state of this line of effort:

- Surveillance Networks. As described in the Surveillance line of effort, the following networks are included among those tapped for informing the Communication and Public Outreach line of effort:
 - The CDC's Epidemic Information Exchange (Epi-X) is a secure, web-based network that serves as a powerful information exchange among authorized users.
 - The Electronic Surveillance System for the Early Notification of Community-based Epidemics (ESSENCE), developed by Johns Hopkins University (JHU), is the primary syndromic surveillance tool, and practitioners across the surveillance community have used variations of ESSENCE successfully for years.
- State/territorial coordination task forces. These, formed by the state governor, as needed, can provide jurisdictional situational awareness for adequate analysis and reporting of validated and appropriate information.
- Other federal agency (OFA) public information officers (PIOs). Other than HHS, HHS/ASPR, and CDC, the following critical PIOs are among those who may engage in supporting this line of effort:
 - DHS ESF-15
 - Department of Defense
 - U.S. Food and Drug Administration
 - National Institutes of Health (NIH)
- National Joint Information Center (NJIC). An NJIC is established early, typically at the CDC, and as the COVID-19 increasingly impacts U.S. citizens, the NJIC shall coordinate public communications and messaging to SLTT and private-sector entities.
- Incident communications conference lines
 - Generally, national/state/private-sector incident communications conference lines (NICCL, SICCL, PICCL, respectively) aim to coordinate public communications and messaging among information officers at the federal, state, and private-sector levels to achieve consistent information shared across all jurisdictions and businesses related to COVID-19.

- (a) For this incident, the NICCL has been replaced by the OVP communications calls.
- (b) For this incident, the PICCL calls are not being held. Instead, the NBEOC call and Cybersecurity and Infrastructure Security Agency (CISA) calls disseminate messaging to the private sector and industry partners. ESF-14 works in conjunction with ESF-15 to develop messaging.
 - The LFA is responsible for determining the frequency and duration of these conference lines in coordination with federal partner PIOs.
- Social media communication
 - Listening. The LFA will create a federal interagency social media listening team since large portions of population communicate with each other via various social media platforms.
 - Transmitting. The LFA will use social media platforms to transmit appropriate, clear, accurate, accessible, and succinct COVID-19 messages, as frequently as necessary, to provide clear, accurate, accessible, and succinct messages frequently, to reinforce information issued through other resources described, and especially to counter false information or invalid health concerns.

Potential Shortfalls

The following potential resource shortfalls are tied to the achievement of this line of effort's end-state and intermediate goals, and thus, inform critical information requirements for the USG to monitor and to appropriately respond with adequate augmentation and resourcing:

- PIOs. An inadequate quantity of qualified PIOs will be unable to meet the information demand from the public, Congressional leaders, and the media.
- Subject-matter experts. An inadequate quantity or subject range of federal or SLTT-level subject matter experts will be unable to develop, to review, or to fully vet COVID-19 public messaging.
- Message dissemination. Delays or inadequate distribution in publishing messages may result in misinformation, outdated information, unfounded rumors, and false or negative perceptions of the federal or SLTT government response to COVID-19.

Critical Information Requirements

Based on the resources and potential shortfalls described, the following CIRs for this line of effort inform key federal and SLTT decisions to address potential response gaps:

CIR#1 Is the established NJIC adequately staffed to meet the public, media, and SLTT demands for information on COVID-19 cases, public health measures, and assurances?

CIR#2 Are key stakeholders such as the healthcare providers, hospitals, nursing homes, home health organizations, and other health-related institutions adequately informed of COVID-19 public health measures to prevent or mitigate exposures, disease and death?

CIR#3 Are LFA and CDC adequately staffed with subject-matter experts to review public messaging to verify accuracy, clarity, and succinctness both for the general audience and for

certain individuals that may benefit from tailored messaging (e.g., older adults, people with disabilities and others with access and functional needs, people who speak English as a second language)?

CIR#4 Are the LFA, CDC and engaged federal interagency partners adequately staffed with PIOs to monitor news media, social media, and concerns from SLTT and private sector PIOs on COVID-19?

CIR#5 Are public messages developed and released in a timely manner and with adequate distribution by the LFA and CDC, particularly in response to open-source media reports of great numbers of presumptive or confirmed cases in communities or in regions within the U.S., or any associated impacts related to COVID-19 (e.g., commodity shortages).

Appendix 3. Healthcare Systems Preparedness and Resilience

The objective of this line of effort is to protect those who are most vulnerable to hospitalization and mortality during sustained transmission of COVID-19 in the U.S., while preserving and protecting health system capacity to treat acute conditions and ensure continuity of care for essential healthcare services, providers, suppliers and vendors. This line of effort also includes developing and disseminating guidance on the following topics:

- Recommendations for public health jurisdictions to manage cases and their contacts
- Clinical guidance to HCP regarding patient treatment and management
- Infection-control guidance for HCWs
- Staff safety and monitoring
- Medical surge management
- Alternative mechanisms for delivery of care
- Resource management, including supply chain shortage impacts and vulnerabilities
- Health care and medical response coordination in support of ESF-8 (including EEI reporting)
- Operational best practices and tools based on clinical management lessons learned

Purpose and End State

Ensure SLTT healthcare systems are able to manage COVID-19 patient care, to mitigate spread and community exposure, and to be resilient to future outbreaks.

Objectives

Key stakeholders will ensure that the following objectives are accomplished to achieve the given end-state:

- Inform and engage SLTT healthcare systems on official COVID-19 guidance and resources available.
- Assess potential shortfalls in SLTT capacity/capability to mitigate SARS-CoV-2 infection and COVID-19 illness.
- Develop and monitor response-specific EEIs for SLTT healthcare systems.
- Pushing out response EEIs and get feedback from SLTT requests for federal assistance.
- Deploy resources to affected area to support SLTT capability/capacity.

Primary Coordinating Federal Departments and Agencies

Specific Response Tasks	Designated Primary Coordinating Federal Departments/Agencies within Line of Effort
Epidemiological investigations	CDC
Development, upgrades, review/approval and distribution to SLTT public health and academic/private-sector laboratory entities	CDC FDA
Healthcare systems monitoring to include PPE and other healthcare supplies/equipment	ASPR
Surveillance of other health resources	ASPR
Federal workforce	OPM
Private-sector workforce	DHS/CISA

Key Federal Responsibilities

In accordance with the Biological Incident Annex, the following federal roles and responsibilities of the LFA provide coordination with the federal interagency and as appropriate, SLTT entities, to achieve the objectives and end-state:

- Include the following elements in health services assistance/augmentation specific to COVID-19:
 - Guidance
 - Tools to inform preparedness and response
 - Subject matter expertise/technical assistance
 - Assistance to integrate health services with non-medical disciplines (e.g., emergency management, law enforcement)
 - Other support not already covered under other operational areas
- Provide medical services assistance/augmentation.
 - Healthcare delivery is predominantly conducted in the private sector.
 - Delivery mechanisms exist within the federal government (e.g., Veterans Affairs Medical Centers) that require integration and support as well.
 - The government can provide medical assistance in response to COVID-19 illness or prevention of SARS-CoV-2 transmission in the following forms:
 - (a) Guidance
 - (b) Tools
 - (c) Resource support to healthcare facilities, including (but not limited to) support in the following categories:
 1. Personnel
 2. Supplies (e.g., PPE, ventilators, pharmaceuticals)
 3. Facilities
 4. Patient transportation (e.g. movement of patient populations away from an area of outbreak to open space for care of infected/ill individuals)

- In certain select cases related to COVID-19, the federal government may be primarily responsible for services (e.g., the evacuation of federal government employees or U.S. citizens under State Department authorities).
 - (a) The existence of interrelated international and domestic issues associated with COVID-19 highlights the need for coordination of international and domestic response activities.
 - (b) Support of behavioral health and mental health for communities may require federal assistance.

Operational Assessment

The following assessment criteria will determine effectiveness in achieving the given end-state:

- Regional Emergency Coordinators (RECs) and Hospital Preparedness program field project officers are fully engaged with healthcare stakeholders in their jurisdictions on COVID-19 preparedness and response activities.
- Coordination and reporting communication channels are established and sustained with healthcare stakeholders to report on appropriate COVID-19-specific EEIs.
- The Surveillance line of effort described in this document applicable to healthcare systems is operating, involving both prompt and accurate reporting and active/operational enhanced surveillance activities.
- Resource requests specific to COVID-19 preparedness and responses to achieve the intermediate objectives and end-state for this line of effort are identified, processed and assigned disposition.
- Resources requested to augment healthcare systems are promptly deployed and actively engaged in support of SLTT Partners.

Resources

The following resources can contribute to achieving the intermediate objectives and end-state of this line of effort:

- Federal or SLTT epidemiologists. As described, these professionals can conduct epidemiological investigations of COVID-19 cases in healthcare facilities, and provide guidance to healthcare providers and staff on effective mitigation measures, while also balancing need for these systems to maintain effective operational continuity.
- Laboratory Response Network (LRN). The LRN provides healthcare systems with access to clinical testing kits and supplies for laboratory COVID-19 confirmation.
- Surveillance Networks. Ensuring the resources described in the Surveillance line of effort.
- Regional emergency coordinators (RECs). The HHS RECs ensure that emergency management coordination occurs seamlessly among public health authorities, healthcare systems, and state emergency management agencies.
- Disaster Medical Assistance Teams (DMATs), U.S. Public Health Service (USPHS), and Commissioned Corps. These resources can augment healthcare systems significantly

impacted by COVID-19 (e.g., staff shortages, due to overwhelming numbers of COVID-19 [suspected, presumptive, or confirmed] patients and/or absenteeism).

- ASPR TRACIE/CIP/HPP FPOs. These programs are trusted sources of technical assistance for private-sector healthcare system stakeholders and can also be leveraged to ensure coordination and communication between the federal government and the healthcare system.
- Strategic National Stockpile (SNS). The SNS includes medical equipment, supplies, and medical countermeasures (MCMs). Personnel may accompany deployments.

Potential Shortfalls

The following potential resource shortfalls are tied to the achievement of this line of effort's end-state and intermediate goals, and, thus, inform critical information requirements for the USG to monitor and to appropriately respond with adequate augmentation and resourcing:

- Epidemiologists. Insufficiency in quantities of qualified federal and SLTT epidemiologists would result in inability to conduct sufficient prompt epidemiological investigations.
- Staffing support. Insufficient DMATs and USPHS personnel would result in inadequate capacity to augment staffing for requesting healthcare facilities.
- Medications and medical supplies. Insufficient or no availability of effective anti-viral medications, other medical countermeasures, or medical supportive care equipment and supplies (e.g., ventilators) in the SNS would result in shortfalls in care.

Critical Information Requirements

Based on the resources and potential shortfalls described, the following CIRs for this line of effort inform key federal and SLTT decisions to address potential response gaps:

CIR#1 What SLTT authorities are requesting federal assistance for augmentation of healthcare staff or capabilities in response to COVID-19?

CIR#2 What resource shortfalls are reported by impacted healthcare facilities that significantly degrade quality medical and public health services to COVID-19-affected communities (e.g., laboratory testing)?

CIR#3 Do the LFA and the CDC have adequate staffing to research, develop, and publish prompt and effective guidance on NPI and other mitigation strategies?

CIR#4 Are federal DMAT and USPHS capabilities and capacities adequate to meet the requested federal assistance to support healthcare systems impacted by COVID-19?

Appendix 4. Medical Countermeasure Development

The objective of this line of effort is development, distribution, and administration of diagnostic tests, antivirals, and vaccines for COVID-19. This line of effort includes the following activities:

- Research and development of antiviral and other treatment regimens
- Development and maintenance of a stockpile of safe and effective vaccines

Purpose and End State

Diagnostic tests, antivirals, and vaccines for COVID-19 are developed, distributed, and administered.

Objectives

Key stakeholders will ensure that the following objectives are accomplished to achieve the given end-state:

- Develop and distribute rapid diagnostic tests.
- Conduct trials of antivirals and vaccines to develop new antivirals and vaccines.
- Partner with the pharmaceutical industry to mass-produce antivirals and vaccines.
- Distribute rapid diagnostic tests and antivirals and vaccines for treatment of COVID-19.

Primary Coordinating Federal Departments and Agencies

Specific Response Tasks	Designated Primary Coordinating Federal Departments/Agencies within Line of Effort
Research to include clinical research as well as field epidemiological investigations of the disease	NIH CDC
Medical product safety, efficacy and approval	FDA
Development of product-specific requirements, acquisition, procurement, and production	BARDA
Distribution and dispensing	ASPR

Key Federal Responsibilities

In accordance with the Biological Incident Annex, the following federal roles and responsibilities of the LFA as well as all federal departments and agencies (whether supporting the LFA or not) are designed to achieve the objectives and end-state:

- Research and develop appropriate pharmaceutical interventions for COVID-19.
- When available, deploy medical countermeasures to address COVID-19, which includes a layered approach using regional and national rapid MCM planning, in coordination with SLTT public health departments and state emergency management agencies.
- Develop courses of actions and appropriately implement formal agreements between HHS and the pharmaceutical retail industry to distribute safe and efficacious medical countermeasures (e.g., antivirals, vaccines, when available) to impacted communities

under an HHS Secretary decision to execute the Public Readiness and Emergency Preparedness (PREP) Act to provide liability protections to these private sector entities.

Operational Assessment

The following assessment criteria will determine effectiveness in achieving the given end-state:

- Medical countermeasures for COVID-19 are determined to be efficacious and safe for use on ill patients or, for vaccines, sufficiently safe and protective against SARS-CoV-2.
- Pharmaceutical production capacities for medical countermeasures to COVID-19 are adequate and product quality validated to meet the demand in the U.S. to treat and/or protect against COVID-19.
- The LFA, through the HHS RECs, has coordinated with both the SLTT public health departments and state emergency management agencies on review of SLTT medical distribution and dispensing plans for mass prophylaxis once efficacious medical countermeasures to COVID-19 are available.
- The LFA, in coordination with federal partners, has reviewed and validated federal department and agency MCM requirements to vaccinate the federal workforce, including for D/A-specific points of dispensing and distribution.

Resources

The following resources can contribute to achieving the intermediate objectives and end-state of this line of effort:

- Efficacious and safe MCM production capabilities and capacities.
- MCM storage. At the federal and SLTT level (which includes private healthcare or retail pharmacy chains), storage requirements are adequate to store the newly developed MCM for distribution and dispensing.
- Staffing, equipment, and supplies to distribute and dispense MCMs. At the federal and SLTT level (which includes private healthcare or retail pharmacy chains), the staffing, equipment, and supplies (both medical and non-medical items, including power and potable water) are available to fully execute distribution and dispensing.
- MCM guidance for dispensing. Based on limited MCM quantities initially, the LFA, in coordination with the HHS operating divisions, national advisory groups, and federal interagency partners, prioritizes those at greater risk associated with COVID-19 to receive appropriate MCMs.

Potential Shortfalls

The following potential resource shortfalls are tied to the achievement of this line of effort's end-state and intermediate goals, and, thus, inform critical information requirements for the USG to monitor and to appropriately respond with adequate augmentation and resourcing:

- MCM production capabilities and capacities. Insufficient MCM production capabilities or capacities domestically would result in insufficient supplies of MCMs.
- MCM imports. Insufficient MCM imports of MCMs manufactured in foreign countries or jurisdictions would result in insufficient supplies of MCMs.

- Staffing, equipment, and supplies. Insufficient staffing, equipment and supplies at the SLTT, federal and/or retail pharmacy level to conduct mass distribution and dispensing would result in shortfalls in these activities.
- Prioritization of MCM recipients. Inadequate guidance on prioritization of human populations to receive MCMs may result in inefficiencies and/or unfairness in provision of healthcare.

Critical Information Requirements

Based on the resources and potential shortfalls described, the following CIRs for this line of effort inform key federal and SLTT decisions to address potential response gaps:

CIR#1 When is the projected window of availability of MCMs (e.g., antivirals and vaccines) for COVID-19?

CIR#2 Are the SLTT public health departments' plans for MCM distribution and dispensing developed and in-place to conduct mass prophylaxis?

CIR#3 Do the federal D/A, or the USG, have a strategic plan to conduct prioritized MCM distribution and dispensing for the federal workforce?

CIR#4 Based on the SLTT public health departments' plans for MCM distribution and dispensing, are SLTT jurisdictions requesting or likely to request federal assistance to augment or to execute mass prophylaxis?

CIR#5 What are the federal policy, workforce, and resource gaps to augment SLTT requests to augment MCM distribution and dispensing?

Appendix 5. Supply Chain Stabilization

COVID-19 will impact supply chains across the globe.

The healthcare supply chains affecting PPE, devices, pharmaceuticals, and other components contributing to the production, completion, and distribution are interdependent with other commercial supply chains across the marketplace, inclusive of critical infrastructure function and operational resilience of industry nationally in businesses of all sizes.

As such, the line of effort for Supply Chain Stabilization is segmented as follows:

- A. Healthcare Supply Chain Stabilization
- B. Cross-Sector Supply Chain Stabilization

Supply Chain Stabilization End State

Provide global strategic and focused domestic supply chain information to inform key leader decisions intending to limit the effects of the COVID-19 on the U.S. population and to facilitate stabilization of the healthcare and other commercial supply chains, to support economic resilience nationally.

Primary Coordinating Federal Departments and Agencies

Specific Response Tasks	Designated Primary Coordinating Federal Departments/Agencies within Line of Effort
Healthcare supply chain	ASPR
Supply chain and economic assessment	FEMA and CISA
USG resource management	ASPR, FEMA, and Defense Logistics Agency
Industry engagement & integration	CISA and FEMA
Global engagement	White House Trade Office, Commerce, State

Healthcare Supply Chain Stabilization

The objective of this line of effort is medical supply chain stabilization and ensuring resilience for meeting future requirements. This line of effort also includes the following activities:

- Preparation for and response to critical healthcare supply chain vulnerabilities and shortages (e.g., PPE, API)
- Distribution of medical countermeasures, including medications, ventilators, and respiratory protection devices and other supplies from the SNS

Purpose and End State

The healthcare supply chain is stabilized and resilient, able to meet future requirements.

Objectives

Key stakeholders will ensure that the following objectives are accomplished to achieve the given end-state.

- Assess critical healthcare supply chain requirements and engage stakeholders to identify gaps and/or shortfalls.
- Conduct clinical trials for therapeutics, antivirals, and vaccines to determine product safety and efficacy.
- Identify and implement strategies to resolve and mitigate gaps or shortfalls in production and supply.
- Obtain healthcare commodities for the Strategic National Stockpile (SNS) to meet future requirements.
- Develop contingency capacity and capability to address future gaps or shortfalls.

Key Federal Responsibilities

In accordance with the Biological Incident Annex, the following federal roles and responsibilities of the LFA as well as all federal departments and agencies (whether supporting the LFA or not, with the exception of federal agencies to which this section has no relevance) are designed to achieve the objectives and end-state:

- Research and develop pharmaceuticals and vaccines effective against COVID-19 and SARS-CoV-2, respectively.
- Provide recommendations and guidance on types of PPE for healthcare workers to use while treating suspected or confirmed COVID-19 patients.
- Support medical supportive equipment, supplies, and PPE needs through utilization of appropriate federal authorities such as the Defense Production Act.
- Provide resources for potential expansion of basic medical care support for COVID-19-impacted individuals with disabilities and others with access and functional needs, to help reduce burden on high-demand components of healthcare infrastructure.

- Assist or augment SLTT medical supply chain management to identify and support management and care of dependents at congregate care facilities when normal caregivers are absent (e.g., nursing homes, prisons, and congregate animal facilities such as zoos).

Operational Assessment

The following assessment criteria will determine effectiveness in achieving the given end-state:

- Identification, quantification, and communication is in progress for healthcare supply gaps and shortfalls in both U.S. and foreign supply and production.
- A federally executable healthcare supply chain management strategy is developed and up-to-date to achieve the objectives and end-state described and includes prioritized commodities to sustain the healthcare infrastructure.
- Monitoring and/or reporting of measures is in place for external stakeholders (e.g., healthcare facilities, SLTT public health departments) receiving medical commodities to meet patient needs associated with COVID-19.
- Strategies are in place and being implemented, with tracking, to address potential or anticipated future production and supply shortfalls, particularly those due to foreign manufacturing being impacted by COVID-19 outbreaks.

Resources

The following resources can contribute to achieving the intermediate objectives and end-state of this line of effort:

- Healthcare sector input. Through the CDC, ASPR, SLTT public health departments, non-governmental organizations (e.g., American Medical Association, healthcare coalitions) and state emergency management agencies, the healthcare sector can communicate resources required to meet the patient demand for treatment or prophylaxis either for COVID-19 or for other illnesses, while operating in a COVID-19 disease environment.
- Strategic National Stockpile (SNS). When available, vaccines, antivirals, and other medical supportive care equipment and supplies are dispensed for COVID-19 patients.
- Domestic production. This capability and capacity within the U.S. can significantly contribute to providing sufficient MCMs to meet requirements for the USG (other countries or jurisdictions impacted with COVID-19 may restrict exports to the U.S.).

Potential Shortfalls

The following potential resource shortfalls are tied to the achievement of this line of effort's end-state and intermediate goals, and, thus, inform critical information requirements for the USG to monitor and to appropriately respond with adequate augmentation and resourcing:

- Production capacity. Insufficient production capacity would result in an inability to meet demands of the healthcare supply chain.
- Imports. Insufficient import of prioritized commodities from foreign manufacturers would result in an inability to meet the demands of the healthcare supply chain.
- Delivery systems. Effective and efficient delivery systems are important to provide the prioritized commodities to healthcare facilities that need these supplies and equipment.

- Staffing for points of dispensing. Inadequate staffing of SLTT or healthcare-established points of dispensing of efficacious antivirals or vaccines, when available, would result in inadequate provision to those that need the medical countermeasures.
- Reporting. Delayed or inadequate reporting of healthcare facility resource needs would result in an inability to inform the broader USG strategy, and consequently, to meet the needs.

Critical Information Requirements: Healthcare Supply Chain Stabilization

Based on the resources and potential shortfalls described, the following CIRs for this line of effort inform key Federal and SLTT decisions to address potential response gaps:

CIR#1 What are the reported medical equipment and supply shortages, by facility type (e.g., hospitals, nursing homes), to adequately address COVID-19 patient supportive care?

CIR#2 What are the reported PPE shortages, by facility type (e.g., hospitals, nursing homes) to protect healthcare providers while treating suspected or confirmed COVID-19 patients?

CIR#3 What are the reported shortages of other pharmaceuticals, medical devices, and related healthcare supply commodities indirectly impacted by COVID-19, but used to diagnose, treat, and/or provide supportive care for other medical conditions?

CIR#4 Does the CDC have sufficient staff, space, and supplies to do national-level testing of SARS-CoV-2 in suspected patients in support of SLTT health departments and the private healthcare sector?

Cross-Sector Supply Chain Stabilization

The objective of this line of effort is to provide a pulse of private -sector operations; develop understanding of economic considerations and impacts; frame the supply chains of concern for which the federal government may be able to take action; and consolidate data and reporting from multiple sources into a cross sector context. An associated objective is to provide structure for unity of effort on interagency activities enabling cross sector operational resilience to *mitigate effects* of COVID 19 calibrated with safe conduct of commercial activity and supply chains supporting Community Lifelines and National Critical Functions.

Purpose and End State

Commercial supply chains across business, industry, and infrastructure sectors are stabilized for marketplace function, resistant and resilient to future disruption.

Objectives

Key stakeholders will ensure that the following objectives are accomplished to achieve the given end-state:

- Harmonize industry engagement for integration into planning and to enable private-sector situational awareness for ongoing coordination with business, industry, and infrastructure across USG throughout the crisis.
- Provide understanding of economic impacts resulting from COVID-19 and the subsequent aggressive containment and/or community mitigation abroad and/or domestically (e.g., non-pharmaceutical interventions [NPIs]) implemented at the federal, SLTT, and private-sector level.
- Consolidate non-healthcare supply chain data from across the reporting spectrum of federal, SLTT, and private-sector entities, and establish processes to achieve cross-sector assessment and a common operating picture of non-healthcare supply chains.
- Support whole-of-government resourcing alignment by identifying USG (and state government) requirements (including standards) for PPE and other protective measures dependent upon the healthcare supply chain; by closing policy gaps including DPA enabling government intervention as needed; and by balancing workforce protection measures with available, reasonable PPE requirements. Identify, prioritize, and address indicators of degradation of critical infrastructure and supply chains that impact national security and the national economy.

Key Federal Responsibilities

In accordance with the newly established COVID-19 Supply Chain Task Force, the following key federal responsibilities are designed to achieve the objectives and end-state:

- Activate ESF#14 Cross-Sector Business and Infrastructure. As the newest Emergency Support Function, created as part of the update to the National Response Framework, ESF #14 supports the coordination of cross-sector operations, including stabilization of key supply chains and community lifelines, among infrastructure owners and operators, businesses, and their government partners. Coordinated by CISA with FEMA designated as a co-primary agency, ESF-14 is complementary to all other ESFs and to the following sector-specific agencies (SSAs):

- Department of Agriculture
 - Department of Commerce
 - Department of Defense
 - Department of Energy
 - Department of Homeland Security
 - Department of Health and Human Services
 - Department of Housing and Urban Development
 - Department of Labor
 - Department of State
 - Department of Transportation
 - Department of the Treasury
 - Environmental Protection Agency
 - General Services Administration
 - Small Business Administration
 - U.S. Army Corps of Engineers
- The National Business Emergency Operations Center (NBEOC) is FEMA's clearing house built on operational trust for two-way information sharing connecting public and private sectors during incidents. The NBEOC offers a consistent platform to share information on COVID-19 impacts beyond supply chains, including operating status, community mitigation challenges implementing NPIs, as well as access to information to support business continuity, humanitarian needs, and support connecting states with businesses as needed.
 - The National Risk Management Center (NRMC) supports CISA's cyber and infrastructure security mission by creating an environment in which government and industry can collaborate within and across sectors to develop plans and solutions for reducing cyber and other systemic risks to national and economic security. NRMC turns analysis into action by developing risk-management solutions. CISA works in close coordination with other federal agencies, the private sector, and other key stakeholders in the critical infrastructure community to identify, analyze, prioritize, and manage the most important strategic risks to the nation's critical infrastructure.

Operational Assessment

The following assessment criteria will determine effectiveness in achieving the given end-state:

- Information-sharing on non-healthcare supply chains between government and private sector entities is well established and used regularly to inform key federal decisions.
- In tandem with information sharing of data, risk analysis and projections are developed of potential disruptions to the community lifelines and are used to inform course-of-action development to mitigate COVID-19-related effects to achieve stability.
- Coordinated prioritization of critical federal contracts of non-healthcare supplies (and equipment) (e.g., Defense Production Act [DPA] synchronization) has occurred with a broad input from federal departments/agencies.
- Risk analysis and projections of COVID-19 impacts lead to appropriate international trade actions (or arrangements) involving coordination among the State Department, the Department of Commerce, and the U.S. Trade Office to sustain federal department/agency mission requirements.

- Through the above-described operational assessment activities, barriers to the commercial supply chains, business continuity, and infrastructure resilience are identified, with particular attention to limits on return to normalcy (affected by implementation of domestic or international COVID-19 containment and/or community mitigation measures).
- Solutions are developed and priorities are established to integrate cross-sector capabilities to achieve unity of effort, coordinated messaging, and stabilization needed for effective consequence management.

Resources

The following resources can contribute to achieving the intermediate objectives and end-state of this line of effort:

- Data models of the national and global supply chains. These can project scenarios of shortfalls and economic impacts resulting from COVID-19 disease spread and from implementation of aggressive containment abroad and/or community mitigation measures.
- A common operating picture (COP) of private-sector operations. A COP, for the private sector both in the U.S. and abroad, can provide USG situational awareness inclusive of non-healthcare supply chains impacting community lifelines and the critical infrastructure sectors.
- National critical functions of concern. These may require USG attention, which as appropriate, may implement intervention measures to prevent, minimize, or mitigate significant disruptions of those functions.
- Engagement of various industry sources/sectors as part of the non-healthcare supply chain analysis. Such engagement may contribute to the identification of “triggers” to prompt USG actions or guidance issuance to federal, SLTT and private-sector level entities to achieve positive impacts mitigating COVID-19 effects.
- Sustained engagement with the business community. This type of engagement may help identify how the business community can contribute to the domestic response at the national, state, and local levels.

Potential Shortfalls

The following potential resource shortfalls are tied to the achievement of this line of effort’s end-state and intermediate goals, and thus, inform critical information requirements for the USG to monitor and to appropriately respond with adequate augmentation and resourcing:

- Production capacity. Insufficient production capacity could result in an inability to meet needs for the given products.
- Imports. Insufficient import of prioritized commodities from foreign manufacturers could result in an inability to meet the needs for such commodities in the commercial marketplace at the retail level and could result in a need for (some or additional) domestic manufacturing.

- Delivery systems. Effective and efficient delivery systems are important to provide the prioritized non-healthcare commodities to healthcare facilities that need these supplies and equipment.
- Staffing. Inadequate staffing of SLTT BEOCs could hamper private-public coordination.
- Reporting. Delayed or inadequate reporting of private sector resource needs would result in an inability to inform the broader USG strategy implementation, and, consequently, the USG's ability to help meet the resource needs.
- ESF#14. As the newest emergency support function, ESF#14 has yet to achieve full operational capability.
- Community mitigation measures. Business and industry grappling with community mitigation measures could create disruption to supply chains and business functions.

Critical Information Requirements: Commercial Supply Chain Stabilization

Based on the resources and potential shortfalls described, the following CIRs for this line of effort inform key federal and SLTT decisions to address potential response gaps:

CIR#1 What the critical non-healthcare commodity shortages result from global or domestic aggressive containment and/or community mitigation measures implemented in response to COVID-19?

CIR#2 What critical data gaps can be identified to fully inform key federal decisions to achieve this line of effort objectives and end-state?

CIR#3 What community lifelines are negatively impacted due to effects either on production capabilities and/or on delivery systems of COVID-19 or of the federal, SLTT, or private-sector-directed containment and/or community mitigation measures?

CIR#4 What critical shortages of non-healthcare commodities required to sustain mission-essential functions are reported by federal and SLTT authorities due to COVID-19 or due to the resulting containment and/or community mitigation measures?

CIR#5 What limiting factors of normal operations across the 16 critical infrastructure sectors result from global or domestic aggressive containment and/or community mitigation measures implemented in response to COVID-19?

CIR#6 What anticipated commercial supply chain challenges arise for products that are reliant on non-domestic manufacturing, including for raw materials, and especially for products with key economic contributions?

CIR#7 What potential private sector solutions are available for innovative approaches to continue commerce safely and effectively while NPIs are in effect nationally, with communities potentially executing them inconsistently?

CIR#8 What administrative or policy barriers can be addressed to increase commercial operational resilience and foster consistent economic output?

Appendix 6. Community Mitigation Measures

The objective of this line of effort is to support SLTT and the private sector development and implementation of community-customized mitigation measures. This line of effort includes the following activities:

- Develop guidance for community mitigation measures for public health jurisdictions and the public based upon the epidemiologic situation.
- Coordinate across the whole-of-government, SLTT, and commercial sector any NPIs before implementing them.
- Establish and operate a federal information plan.

Purpose and End State

The threat of COVID-19 epidemic transmission is minor or non-existent, risks to public health are no longer evident, and economic, social, and business disruptions due to COVID-19 are also minor or non-existent.

Objectives

Key stakeholders will ensure that the following objectives are accomplished to achieve the given end-state:

- Monitor emergence of the domestic threat for COVID-19 exposure and positive cases and provide a public health strategy for containment.
- Monitor and identify potential initial domestic clusters of COVID-19 cases and provide a public health strategy for community mitigation measures.
- Coordinate and refine public health mitigation strategies with impacted SLTT jurisdictions.
- Support SLTT authorities in implementation of social distancing mitigation measures (e.g., school dismissals, workplace measures and closures, bans on public gatherings, closures of public spaces) while factoring in the needs of the community (e.g., people with disabilities or access and functional needs who need transportation to the doctor's office, grocery stores, etc.).
- Assess the prevalence of COVID-19 and modify functional and geographic public health mitigation strategies commensurate with available resources and capabilities.

Primary Coordinating Federal Departments and Agencies

Specific Response Tasks	Designated Primary Coordinating Federal Departments/Agencies within Line of Effort
Guidance and technical assistance	CDC
Monitoring, implementation, and assuring effectiveness	CDC with Embedded ASPR

Key Federal Responsibilities

In accordance with the Biological Incident Annex, the following federal roles and responsibilities of the LFA, in coordination with the federal interagency and, as appropriate, SLTT entities, are designed to achieve the objectives and end-state:

- Provide recommendations and guidance on research and development of PPE and associated infection-control practices (e.g., cleaning/disinfection methods for healthcare facilities, as well as for the transportation sector).
- Assist SLTT authorities in prevention of intrastate COVID-19 disease spread among communities by providing community mitigation guidance and advising SLTT on customizable mitigation actions (based on that guidance) to minimize business, economic, and social service disruptions.
- Provide national-level mitigation guidance to businesses that operate across state lines.
- Support long-term public health capacity to guard against the reemergence of disease.

Operational Assessment

The following assessment criteria will determine effectiveness in achieving the given end-state:

- An updated and targeted layered mitigation strategy has been developed and issued, with a phased approach to individual, community, business, and healthcare interventions aimed to accomplish the following goals:
 - Reduce rate of transmission and acceleration of the disease.
 - Minimize morbidity and mortality.
 - Preserve functions of healthcare, workforce, infrastructure, and minimize social and economic impacts.
 - Ensure coordination and reporting communication channels are established and sustained with healthcare stakeholders to report on appropriate COVID-19-specific EEIs.
- Establish a multi-disciplinary decision-making process.
 - Although the decision to implement community mitigation measures is often based on public health, the consequences of these measures and/or implementation of these measures often is accomplished by or disruptive to other disciplines (e.g., public safety, emergency management, volunteer organizations, education, social service providers).
 - Communities should include multiple departments, agencies, and organizations in the decision-making process for mitigation measures.
- Consider community mitigation measures both in isolation and as groups of actions to implement.
 - In some instances, based on incident parameters, actions can be tailored to meet the need or the situation may require multiple mitigation measures to achieve the end result.

- As an example, closure of schools may achieve little to reduce spread of disease if mass gatherings that host children continue.
- Evaluate each mitigation measure considered for implementation for the following considerations:
 - Scientific validity
 - (a) Determine if the current science and the parameters of COVID 19 outbreak in that community provide a reasonable scientific chance of substantially diminishing spread of the disease.
 - (b) Most community mitigation measures studied by the CDC demonstrate some ability to reduce spread of the disease, but each needs to be evaluated in the context of the particular outbreak situation in that community.
 - (a) For example, if the disease is already widespread in a community, mitigation measures may require a more tailored approach focusing on protecting at-risk individuals rather than imposing restrictions on the entire population.
 - Ability to implement
 - (a) Determine if the considered measures are feasibly implementable and are sustainable.
 1. Some measures have significant support requirements; require assistance from other departments, agencies, or organizations; or are too costly from an economic or societal impact standpoint to implement.
 2. Decision-makers should evaluate how long these measures can be sustained before implementing them (to discontinue a mitigation measure may be harder once it is implemented).
 3. Critical shortages and gaps can occur with the implementation or sustainment of any measure.
 - Trade-offs
 - (a) Determine if the considered measures provide enough return on investment for the disruptions they will generate.
 - (b) Individual mitigation measures are often easy to support (e.g., frequent hand-washing), but community measures targeting social distancing or restrictions on travel can be disruptive, and each community should evaluate the potential gains from those measures.
 1. For example, before considering suspension of service, the transit agency may exercise its discretion and methodology to advise passengers to decide whether to use transit based on their knowledge of their own risk level (e.g., immune-compromised, infected with COVID-19, whether symptomatic or asymptomatic).
 2. People with disabilities, people who are older, and people with access and functional needs will have difficulty getting to necessary services, such as doctor's appointments and other community services.

- In the federal decision-making process to develop and to issue community mitigation guidance, consider the following actions:
 - Identify other jurisdictions in close proximity performing activities to address community mitigation.
 - (a) Although incident parameters may be different across jurisdictional boundaries, uneven application of public health measures is often viewed critically by the public when more or less restrictive compared to that of neighboring jurisdictions.
 - (b) If varying approaches are utilized, a component of messaging should include reasoning as to why different approaches are being utilized in neighboring jurisdictions.
 - Evaluate critically mitigation measures for the potential to cause unintended or perceived inequities across populations.
 - (a) For example, restrictions on movement in a geographic area with poorer populations could be perceived as inequitable.
 - (b) If incident parameters support the action, messaging will be critically important.
 - Prioritize protection of at-risk individuals.
 - (a) In early stages (as of early March 2020), those that are older or that have co-morbidities appear more vulnerable to significant illness with COVID 19.
 - (b) Some mitigation measures can be targeted or tailored to protect these populations.
 - Prioritize protection of the healthcare workforce and first responders.
 - (a) Some mitigation measures can be targeted or tailored to protect these populations.
 - (b) Some measures, such as quarantine of exposures in this population, can have significant impacts on the availability of the workforce.
 - (c) Alternative workarounds may have to be considered, depending on the extent of the outbreak, to permit enough persons to staff these critical positions (e.g., use of PPE to prevent asymptomatic spread, workforce active monitoring, limiting access to at-risk individuals).
 - Provide messaging to impacted populations.
 - (a) Messaging will be a significant component of any community mitigation measure, and early, consistent, accessible, and frequent plain-language messaging will be required.
 - (b) A consistent message across the public sector will be vital to a successful messaging campaign.
 - (c) As is frequently the case with public health messaging, advice may change based on new understandings of the disease and its progress in a community.
 - (d) The public should be made aware in advance that community mitigation measures and hence advice to the public may change as time progresses.

Resources

The following resources can contribute to achieving the intermediate objectives and end-state of this line of effort:

- Federal or SLTT epidemiologists. These professionals, based on epidemiological investigations conducted on COVID-19 cases, provide mitigation guidance to the community, while also balancing need for these systems to maintain effective operational continuity.
- Regional emergency coordinators. The HHS RECs ensure that emergency management coordination occurs seamlessly among public health authorities, healthcare systems, and state emergency management agencies.
- The Strategic National Stockpile (SNS). The SNS provides medical countermeasures (MCMs) and supplies required to implement community mitigation measures.

Potential Shortfalls

The following potential resource shortfalls are tied to the achievement of this line of effort's end-state and intermediate goals, and, thus, inform critical information requirements for the USG to monitor and to appropriately respond with adequate augmentation and resourcing:

- Epidemiologists: Insufficient federal and SLTT epidemiologists result in shortfalls in development of community mitigation guidance.
- Subject-matter experts. Inadequate technical assistance or unclear guidance to SLTT jurisdictions or to the public on effectively tailoring federal community mitigation guidance may result from a lack of enough qualified subject-matter experts.
- MCMs. Insufficient MCM supplies can result in a failure to implement MCM-related community mitigation measures effectively.

Critical Information Requirements

Based on the resources and potential shortfalls described, the following CIRs for this line of effort inform key federal and SLTT decisions to address potential response gaps:

CIR#1 Is federally issued community mitigation guidance adequate for SLTT communities to effectively customize implementation to achieve reduction of SARS-CoV-2 transmission while minimizing business, social, and economic disruptions?

CIR#2 What resource shortfalls are reported by SLTT jurisdictions that prevent implementation of effective community mitigation measures?

CIR#3 Do the LFA and the CDC have adequate staffing to research, develop, and publish prompt and effective guidance on NPI and other mitigation strategies?

CIR#4 Are business, social, and economic impacts monitored to determine if community mitigation guidance at the SLTT communities requires appropriate adjustment while preventing or minimizing SARS-CoV-2 spread?

Appendix 7. Continuity of Operations and Essential Services

The objective of this line of effort is sustainment of national essential functions (NEFs), primary mission-essential functions (PMEFs), and mission-essential functions (MEFs) across the USG, SLTT jurisdictions, and the private sector. This line of effort includes the following activities:

- Provide guidance on continuity of operations programs and plans.
- Implement continuity of operations plans, if necessary.
- Preserve functioning of critical infrastructure and key resources (CIKR) and mitigate impacts to the economy and to functioning society.

Purpose and End State

Maintain NEFs, PMEFs, and MEFs of the USG and continue to support SLTT and external stakeholders.

Objectives

Key stakeholders will ensure that the following objectives are accomplished to achieve the given end-state:

- Assess requirements and conditions for adoption and dissemination of USG continuity of operations (COOP) implementation.
- Alert the USG for potential COOP directives to implement plans.
- Prepare the USG for continuity of operations in areas of concern (AOCs), validate the notification process, and report status.
- Adopt and distribute a continuity of operations posture for the USG in AOCs in accordance with the federal department and agency continuity plans.
- Preserve functioning of NEFs, PMEFs, and MEFs and key federal resources; mitigate future disruptions to operations; and monitor degradation of continuity status and situational awareness.
- Prepare to transition to new normal or return to primary operating status from a dispersed posture.

Primary Coordinating Federal Departments and Agencies

Specific Response Tasks	Designated Primary Coordinating Federal Departments/Agencies within Line of Effort
Federal departments/agencies	FEMA National Security Council

Key Federal Responsibilities

In accordance with the Biological Incident Annex, the following federal roles and responsibilities of the LFA as well as all federal departments and agencies (whether supporting the LFA or not) are designed to achieve the objectives and end-state:

- Coordinate activities to ensure continuity across the USG, which includes the following actions:
 - Identify tasks and individuals, including non-healthcare-critical missions, that require PPE, and prioritize PPE resources, as needed.
 - Coordinate messaging to ensure consistency for the federal workforce.
 - Issue NPI implementation to the federal workforce specific to workplace activities (e.g., daily office environment, telework, Joint Field Office or other field locations).
 - Exercise continuity plans to prompt revision and implementation for operating in a COVID-19 environment.

In accordance with Federal Continuity Directive 1, federal departments and agencies address the pandemic threat as part of preparedness and continuity planning.

- Review existing standard operating procedures that establish the activities executed to support HHS and/or relate to a pandemic, including workforce and personal protective equipment policies and procedures.
- Determine which employees are required to have remote access capabilities, ensure these employees have been issued the necessary equipment, and maintain their accounts for remote access.
- Develop plans to ensure continued contractor support during a pandemic, with emphasis on those who perform or support medium-exposure-risk operations and/or mission-critical services within the parameters of the terms and conditions of already existing contracts.
- Identify appropriate backup essential personnel, including those in different geographic locations, by position and ensure that all personnel needed to perform those essential functions receive continuity training and any agency-specific pandemic training. Consider on-the-job training requirements to allow non-mission-critical personnel to perform mission-critical functions in extreme circumstances. Incorporate transportation requirements of dispersed personnel supporting headquarters crisis operations into continuity planning.
- Plan for the sustained operations of essential functions based on business process analysis factors for maximum downtime.
- Identify appropriate social distancing protective measures by personnel category or function, including assignment to alternate facilities, telework locations, or shift work, in accordance with direction provided by public health and medical officials and the Office of Personnel Management (OPM), in coordination with HHS, FEMA, and other departments and agencies.
- Adjust execution of essential functions during the period of pandemic upon receipt of guidance from the OPM or HHS.
- Address the distribution of personnel to alternate sites or varied shifts to enact social distancing protective measures, in accordance with the plan developed in Phase 2C.

Operational Assessment

The following assessment criteria will determine effectiveness in achieving the given end-state:

- Federal D/A continuity plans fully addresses sustained workforce absenteeism greater than 25 percent.
- Continuity guidance is reviewed and vetted by NSC, OPM, the LFA (due to potential federal-to-federal requests for assistance, and DHS/FEMA as the lead for national continuity programs).
- Federal D/A leadership, personnel, facilities, and communications (IT) are ready to operate in a continuity-of-operations posture as determined by the White House NSC, OPM, the LFA, and DHS/FEMA.
- When directed or upon meeting of COVID-19 triggers described in this COVID-19 Response Plan, the USG is promptly activated, relocated, and operational.
- FEMA/NCP may change the frequency with which federal D/A continuity status reports are submitted and continuity calls occur with the aim to achieve the following aims.
 - No degradation to continuity status
 - Monitoring of absenteeism
 - No gaps or shortfalls in delivery/availability of PMEFs, MEFs, and government services
- The COVID-19 disease outbreak ultimately reaches a level that returns the USG to Operational Phase 1, allowing federal departments and agencies to begin reconstitution and resume normal operations.

Resources

The following resources can contribute to achieving the intermediate objectives and end-state of this line of effort:

- IT and communications network. These capabilities are critical to ensure messaging pathways for the federal workforce, and for the workforce to execute telework or operations from continuity sites /alternate work locations to sustain MEFs
- Continuity plans and policies. Federal departments and agencies are responsible for their own continuity plans and policies, in adherence to WH NSC and OPM policies and guidance, which require frequent and consistent exercise among designated mission-critical personnel.
- Personal protective equipment (PPE). Part of continuity of operations may entail performing PMEFs and MEFs in and around COVID-19-impacted communities (e.g., disaster-support activities in a Stafford incident; law enforcement and physical security functions at federal facilities; or special security events).
- Hygiene supplies and equipment. At both field and fixed federal department and agency facilities, hygiene supplies and equipment to conduct adequate handwashing and/or sanitizing are critical non-pharmaceutical interventions to keep a workforce healthy and safe against COVID-19.

- Social distancing. This can be implemented using alternate facilities, telework, shift work, and other practices.

Potential Shortfalls

The following potential resource shortfalls are tied to the achievement of this line of effort's end-state and intermediate goals, and, thus, inform critical information requirements for the USG to monitor and to appropriately respond with adequate augmentation and resourcing:

- Continuity plans and policies. Insufficient federal department and agency continuity plans and policies to address operating in a COVID-19 environment (both in normal day-to-day facilities and field locations) can lead to insufficient performance of federal functions during the incident.
- PPE and hygiene supplies. Insufficient PPE and hygiene supplies and equipment to protect the mission critical personnel implementing continuity of operations can result in unnecessary illness and absenteeism in the mission-essential workforce.
- IT and communications systems. Disruptions in these systems due to the overload of "last mile" may delay execution of MEFs.

Critical Information Requirements

Based on the resources and potential shortfalls described, the following CIRs for this line of effort inform key federal and SLTT decisions to address potential response gaps:

CIR#1 What specific federal department and agency continuity-of-operation activities and policies are *NOT* currently adequate to address the COVID-19 environment?

CIR#2 What PPE and hygiene supplies/equipment shortages reported by federal departments and agencies hamper performance of PMEFs and MEFs by mission-critical personnel?

CIR#3 When implemented, what is the federal department and agency continuity status for NEFs, PMEFs, and MEFs?

Annex D. Logistics

Purpose

The purpose of this annex is to describe the National Logistics Systems (NLSs) for response operations to support Health and Human Services (HHS) as the Lead Federal Agency (LFA) with resources in response to COVID-19.

Scope

The scope of this annex describes the logistics concept of support in collaboration with HHS, CDC, interagency partners, and the private sector, for strategically developed coordinated plans. An additional aim is to delineate efforts during response operations (stabilization and restoration of lifelines), with oversight and coordination with the Cybersecurity and Infrastructure Security Agency (CISA) for ESF #14. FEMA and its interagency partners may be asked to coordinate with regions and state, local, territorial, and tribal (SLTT), and insular area governments to execute a coordinated plan of action for managing the efficient distribution of logistics supplies and services in support of HHS as the lead federal Agency (LFA)

Situation

See COVID-19 Base Plan.

Mission

Delineated by HHS-LFA, the Whole Community may be requested to mobilize, manage end-to-end, and deliver governmental, nongovernmental, and private sector resources within the designated area(s) to stabilize, save, and sustain lives and to facilitate a successful transition return to steady state.

Mission Objectives

- Coordinate planning and operational analysis among LFA, governmental, nongovernmental, and private sector entities.
- Analyze, prioritize, allocate, and mobilize public and private resources to support SLTT jurisdictions and to facilitate a transition to long-term recovery.
- Coordinate and implement international assistance resources and capabilities.

Execution

Concept of Support

The HHS SOC manages the coordinated delivery of essential resources, equipment, and services to impacted communities and survivors in support of HHS, including emergency power and fuel support, with state requests for assistance processed through the HHS Regions. This core capability also synchronizes logistics capabilities and enables, to the extent legally appropriate or stipulated, the support for stabilization, sustainment, and restoration of impacted supply chains.

Planning support critical tasks are as follows:

Mobilize to coordinate the delivery of governmental, nongovernmental, and private sector resources within and outside of the impacted area to save and sustain lives, meet basic human needs, set conditions, stabilize the incident, and facilitate a transition to steady state. This includes alternate courses of action (COAs) for increased social distancing.

ESF #7 (Logistics and Supply Chain Management) implements an interagency end-to-end (E2E) supply chain system for a COVID-19 response as delineated by the LFA.

The NLS maintains resource support capability, with the ability to implement and sustain the operational tempo of response operations. This line of effort uses organic capabilities including contracts, as well as the resources of other federal agencies (OFAs), ESF #6 will collaborate with nongovernmental organizations (NGOs), voluntary organizations active in disasters (VOADs), faith-based organizations (FBOs), and private sector partners. Additionally, through inclusion of ESF #14, it integrates and engages both the FEMA National Business Emergency Operations Center (NBEOC), and CISA National Risk Management Center (NRMC) to facilitate business-led, government-supported incident response and to stabilize community lifelines to optimize survivor access to critical services and business community.

Supply chain management integrates national supply chain processes with those at state and local levels, from planning for customer-driven requirements for resources and services to resource delivery to disaster survivors and responders. Figures D-1 and D-2 depict relationships between COVID-19 operational response phases and the basic supply chain approach.

Phase	1C	2A	2B	2C
Operational Phase	Near Certainty or Credible Threat	Activation, Situational Assessment, and Movement	Employment of Resources and Stabilization	Intermediate Operations
CDC Interval	Recognition	Initiation	Acceleration	
COVID-19 Containment/Mitigation Strategy	Current Posture	Aggressive Containment	Transition from Containment to Community Mitigation	Full Community Mitigation

Figure D-1: COVID-19 Phase Indicators

OPERATIONAL PHASES								
PHASE 1 Pre-Incident Operations			PHASE 2 Post-Incident Operations			PHASE 3 Recovery and Restoration Operations		
1a	1b	1c	2a	2b	2c	3a	3b	3c
Monitor Threat	Elevated Threat	Credible Threat	Activation and Immediate Response	Community Repopulation	Sustained Operations	JFO Program Delivery Continues	Sustained Operations	Disaster Closeout
PRE-INCIDENT OPERATIONS			STABILIZATION	SUSTAINMENT		RESTORATION	LONG TERM RECOVERY	
Identify Logistics Requirements	Balance Logistical Resources Against Requirements	Pre- Stage Logistical Resources	Set Conditions for Stabilization	Establish and Maintain Ongoing Sustainment		JFO Program Delivery Continues with delivery of TTHU & Continued Sustained Operations		Disaster Closeout & Logistics Recovery After Incident
Identify Logistics Resources			Provide Logistics Response to Incident					
SUPPLY CHAIN APPROACH								

Figure D-2: Operational Phases

Key Resource Support Systems

The objective of logistics/resource support is to facilitate a more rapid response for deploying the most commonly requested resources.

Community Lifelines

A lifeline enables the continuous operation of government and critical business and is essential to human health and safety or economic security. Lifelines are designed to highlight priority areas and interdependencies, focus attention on actions being taken, communicate coordination efforts towards stabilization, and integrate information.



Figure D-3: Community Lifelines

Staged Resources

The primary locations for pre-staged resources is the HHS Strategic National Stockpile with mass care and other lifesaving/life sustaining resources available from the FEMA Distribution Centers (DCs) and partners storage areas or vendors.

Allocation and Adjudication of Resources

Resource requests from the States are processed through the HHS Region and determined by the HHS ASPR headquarters for consideration for sourcing and employment. The allocations will need to be adapted based on the actual incident impact assessment and planning factors.

Critical Considerations

Resources phasing considers the critical considerations in Figure D-4 for the movement of resources.

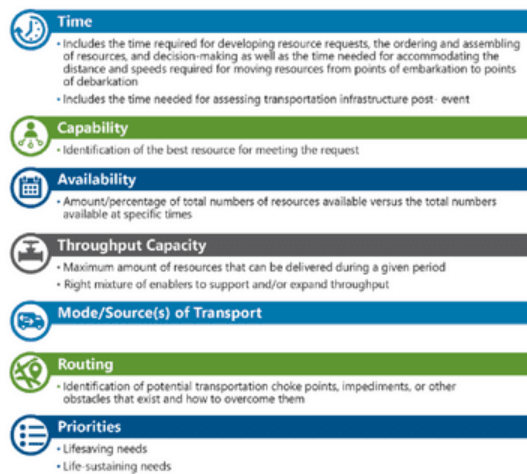


Figure D-4: Resource Movement Critical Considerations

Considerations for Sourcing National-level Resources to Achieve Lifelines

Sourcing national-level resources will prioritize Strategic National Stockpile (SNS) distribution to those areas of intense SARS-CoV-2 transmission while preserving an appropriate allocation availability for all affected states and balancing the need to maintain a standing strategic reserve at the Strategic National Stockpile.

Logistics relies on an integrated, interagency approach to effectively source and allocate resources during catastrophic and non-catastrophic incidents to support requirements driven by Lifelines. ESF #7 has capabilities for supporting other ESFs that serve a primary role in an incident, depending upon the nature of the incident and resources required through the sourcing of the Resources Management Group; ESF #7 depends upon other ESFs for support in incidents where ESF #7 has a primary role. In all cases, numerous factors could impact the allocation and adjudication of resources. *Figure D-5* highlights the major factors that ESFs should consider in coordinating the allocation of national-level resources to the community lifelines in *Figure D-3*.








ESF	Major ESF #7 Considerations
 <p>All ESFs</p>	<ul style="list-style-type: none"> • Number of states affected • Affected population
 <p>ESF #1 Transportation</p>	<ul style="list-style-type: none"> • Major highways/bridges/airports/ports damaged/closed to traffic • Estimated time to repair/restore transportation critical infrastructure • Transportation infrastructure assessments
 <p>ESF #2 Communications</p>	<ul style="list-style-type: none"> • Location of deployed ISB/FSA teams • Support to IMATs and state EOC(s) • Support to IOF and JFO
 <p>ESF #3 Public Works and Engineering</p>	<ul style="list-style-type: none"> • Major transportation routes with non-functioning equipment, e.g., traffic lights • Major transportation routes blocked by debris • Status of power grid/critical facilities and estimated time until restoration; generator requirements • Status of navigation infrastructure
 <p>ESF #6 Mass Care, Emergency Assistance, Temporary Housing, and Human Services</p>	<ul style="list-style-type: none"> • Population requiring lifesaving/life-sustaining support, to include food and emergency supplies • Affected populations: <ul style="list-style-type: none"> • Survivors requiring food/meals, water, and sheltering • Survivors requiring only food/meals and water
 <p>ESF #7 Logistics</p>	<ul style="list-style-type: none"> • Commodity requirements for shelter-seeking population, as determined by ESF #6 • Number of responders requiring shelter support • Number of generators required for supporting critical infrastructure • Maintenance of situational awareness and management of logistical movements • Integration of private sector capabilities and resources • Other disaster survivor resource support needs
 <p>ESF #8 Public Health and Medical Services</p>	<ul style="list-style-type: none"> • Number of injured that require medical care; demand for consumable medical supply (CMS) and durable medical equipment (DME) • Number of fatalities; body bag demand • Number of potentially exposed individuals who may require prophylaxis

Figure D-5: Major Considerations for Allocation of National-Level Resources

National Level

The HHS SOC serves as the single integrator for federal logistics resources. This position synchronizes federal logistics efforts with those of other federal agencies, NGOs, faith-based organizations, and national VOADs (NVOADs), NGOs and ESF #6 during response and recovery operations as part of a unity of effort.

NORTHCOM and the U.S. Pacific Command represent the DOD and coordinate Defense Support of Civil Authorities (DSCA) support. HHS may request DOD support to assist in the augmentation of logistics support sites or operational capabilities.

HHS may also use PSMAs/MAs directed to the General Services Administration (GSA) to provide emergency leasing services for space. Typical requests include sites for JFOs, ISBs, FSAs, or RSCs.

Office of Business, Industry, and Infrastructure Integration (B3I)

Our increasingly interdependent society requires both public and private sectors to share risk and responsibility before, during, and after disasters. Effective cross-sector collaboration for all hazards is critical and can foster operational resilience for survivors and their communities during disaster response and recovery. This requires a transformation of how private-public partnerships develop, collaborate, and align to confront societal shared all hazards risks.

FEMA has established the Office of Business, Industry, and Infrastructure Integration (B3I), aligned in the Logistics Management Directorate (LMD), to build unity of effort that is more inclusive of non-governmental capabilities as described in the fourth edition of the National Response Framework (NRF) and the establishment of Emergency Support Function (ESF) #14 - Cross-Sector Business and Infrastructure. B3I's mission is connecting private and public sector capabilities before, during, and after disasters, enabling efficient response operations, and shaping community economic resilience and recovery.

B3I will advance the FEMA Strategic Plan goals in three areas:

1. *Community Lifelines.* Stabilize Community Lifelines to expedite recovery by establishing the necessary business-related relationships, processes, and doctrine before, and effective public and private alignment after disasters.
2. *Cross-sector Collaboration.* Serve as the FEMA lead for ESF-14 as a primary agency to fulfill the outcomes listed in the NRF ESF-14 Annex.
3. *Agency Operations.* Ensure agency-wide cohesion for supporting non-procurement business/industry/infrastructure-related partnership activities to enable effective economic response and resilience for impacted communities.

The DHS Cyber Infrastructure Security Agency (CISA) as the co-primary agency with FEMA as ESF-14 leads play a key role in supporting coordination, information sharing, and analysis and reporting on matters of infrastructure and cybersecurity. They manage and coordinate with stakeholders through the National Risk Management Center and the Protective Security Advisor Program.

For recovery efforts, the primary recovery support functions (RSFs) that would require assistance from FEMA Logistics would be these:

- Housing
- Health and Social Services
- Economic
- Infrastructure Systems

The CISA Integrated Operation Coordinating Center (CIOCC) currently works with 16 Critical Infrastructure sectors and serves as the coordinating mechanism for critical infrastructure and the private sector. Other coordinating structures include the NBEOC, the Small Business Administration, and chambers of commerce.

Regional Level

HHS regions are integrated decision makers for all logistics functions prior to, during, and following an incident. Regional personnel staff JFOs and ISBs/staging areas and identify, develop, and coordinate the distribution of regional resource requirements and capabilities with SLTT responders.

Administration and Support

Each Federal department/agency that supports ESF #7 will follow its own standard protocols for activation, notification, deployment, and deactivation while continuing to execute its roles and responsibilities provided for within federal laws and regulations.

During a catastrophic incident, under provisions of the Trade Agreement Act (19 U.S.C. 2501), the President has delegated the waiver for the Buy American Act to the U.S. Trade Representative for eligible products. Federal Acquisition Regulation (FAR) Part 18 gives flexibility to acquisition offices during a Stafford Act declaration to procure needed items from sources other than U.S. manufacturers during a response.



Appendix 1 to Annex D. Critical Transportation

Purpose

The purpose of this appendix is to describe the delivery of the Critical Transportation core capability within the FEMA response mission area.

Critical Transportation provides transportation (including infrastructure access and accessible transportation services) for response priority objectives, including the evacuation of people and animals and the delivery of vital response personnel, equipment, and services into the affected area. Critical Transportation capabilities are coordinated through the FEMA NRCC utilizing the Movement Coordination Center (MCC), Response Operations, Department of Transportation (DOT), and other interagency partners.

Critical Transportation Critical Tasks are as follows:

Establish physical access through appropriate transportation corridors and deliver required resources to save lives and meet the needs of disaster survivors in support of the LFA.

Ensure basic human needs are met, stabilize the incident, facilitate a transition to recovery, and restore basic services and community functionality in the affected area.

The Critical Transportation supports the movement of life-saving and life-sustaining resources and services through its support of assessment and reconstitution of the transportation infrastructure to meet operational response priorities. Critical to assessment support is the ability for core capability stakeholders to mobilize assessment teams prior to full deployment of resources for the response. All requirements will be delineated by HHS as the LFA.

Mission

Within the affected area, federal interagency partners will establish physical access through appropriate transportation corridors to deliver the required resources to save and sustain lives and facilitate a seamless transition to Recovery, in conjunction with state and local whole community partners, as appropriate.

Transportation Tasks

- Coordinate planning and operational analysis to deliver Transportation requirements.
- Conduct assessments of the condition and safety of transportation routes and plan accordingly.
- Prioritize the restoration of damaged/unusable routes, identify alternate routes, and coordinate rapid repairs to facilitate responder access and provide basic services.
- Assess resource requirements to support the reconstitution of the transportation infrastructure.
- Prioritize, adjudicate, and allocate resources for the delivery of Transportation requirements.
- Support the evacuation of disaster survivors.

- Provide delivery of vital response personnel, equipment, and services into the affected area.
- Respond to, coordinate, and prioritize the delivery of resources to disaster survivors and responders in the affected area.

Administration and Support

Each federal department or agency that supports the Critical Transportation will follow their own standard protocols for activation, notification, permits and waivers, deployment, and deactivation while continuing to maintain their roles and responsibilities provided for within Federal laws and regulations.

Annex E. HHS Information Collection Plan

HHS COVID-19 Information Sharing & Decision-Making Flow Chart



Annex F. Federal Roles and Responsibilities

The Department of Health and Human Services (HHS) is the Lead Federal Agency (LFA) for this incident. The federal interagency supports HHS, as requested, to assist state, local, tribal, and territorial (SLTT) partners with related preparedness and response activities as outlined below.

Department of Agriculture (USDA)

USDA conducts surveillance for disease in livestock and poultry, as well as for viruses with pandemic potential. USDA will determine which animal products or live animals have the potential to introduce or spread a pandemic virus and which animals must be quarantined and inspected prior to entry into the United States.¹¹ USDA will also determine which live animals must undergo USDA-supervised quarantine and health examination prior to final entry into the United States. USDA ensures the safety of the Nation's supply of meat, poultry, and processed egg products through inspection. USDA, in coordination with Department of the Interior (DOI), monitors wild bird and animal populations throughout the United States for indications of viral activity. The Centers for Disease Control (CDC) coordinates with USDA, as required, to assist in identifying, sequencing, and confirming laboratory findings and containment efforts as required. Additionally, USDA will—

- Provide personnel to the Regional Response Coordination Center (RRCC) and/or National Response Coordination Center (NRCC) to perform duties of Emergency Support Function (ESF) #11— Agriculture and Natural Resources, in support of pre- or post-declaration support.
- Provide U.S. Forest Service personnel to the NRCC and/or RRCC to coordinate support agency duties identified in the ESF Annexes of the National Response Framework (NRF).
- Provide personnel for area joint information centers.
- Provide personnel to ensure control against the spread of animal disease agents in support of disaster operations.
- Provide personnel and technical expertise to planning and preparation efforts for event-specific food safety inspections of the Food Safety and Inspection Service (FSIS) regulated product, if necessary.
- Provide goods and services for the states to meet regulatory requirements if resources and USDA FSIS personnel are available.
- Provide personnel, equipment, and supplies, as needed and if available, primarily for communications, aircraft, and base camps for deployed federal public health and medical teams, as identified in the ESF #8 Annex of the NRF.
- Develop plans to maintain continuity of operations for other Stafford Act declarations.

¹¹ Information regarding foreign animal disease/veterinary response is available at: https://www.aphis.usda.gov/aphis/ourfocus/animalhealth/emergency-management/ct_fadprep.

- Collaborate with HHS and DOI to deliver an effective, multisector "One Health" response that includes coordinated human, animal, plant, and environmental health messaging.
- Provide technical expertise in support of animal and agricultural emergency management.
- Provide support to the states regarding waivers to the school lunch and other nutrition assistance programs.
- Provide personnel to ensure control against the spread of animal disease agents in support of disaster operations.
- Coordinate with federal departments to prevent the importation of infected birds and animals into the United States.

Department of Commerce (DOC)

In coordination with the Department of Homeland Security (DHS), DOC works with private sector, research, academic, and government organizations to promote sustaining infrastructure and mitigating impact to the economy and functioning of society, including using its authority under the Defense Production Act to ensure the timely availability of industrial products, vaccines, antiviral drugs, materials, and services to meet homeland security requirements. DOC coordinates as needed with HHS/CDC to expedite export licenses of strains, test kits/equipment, and technology to specified destinations in order to allow rapid identification of strains, and provide on ground support to contain/mitigate a pandemic. The CDC works with DOC and its governmental, nongovernmental, business, and alliance partners to ensure pandemic response includes all critical entities to minimize the economic impact of the pandemic.

Department of Defense (DOD)

DOD conducts medical surveillance and detection domestically and abroad, for the primary purpose of force health protection and support to National Defense Missions, in coordination with HHS and the CDC. DOD will, consistent with statutory authority, provide support in response to a pandemic when requested by HHS or another federal department or agency, when approved by the Secretary of Defense or as directed by the President. This assistance may include support to reduce the spread of a pandemic disease as well as mitigate pandemic consequences to the public. DOD operations are conducted under the control of the geographic and functional commanders in accordance with the NRF domestically and Department of State-led processes and procedures internationally based on the overall global threat environment. The CDC works with DOD to plan and coordinate epidemiological surveillance, laboratory surge, and support for Strategic National Stockpile (SNS) transportation and security when required to minimize travel disruptions and consequent impact on economic activity. Examples of other potential DOD support activities include these:

- Enhance global surveillance efforts and detection of human infections with new and unknown subtypes.
- Augment public health and medical surveillance, laboratory diagnostics and confirmatory testing.

- Deploy available personnel, including public health and medical personnel, to maintain operation of the highest priority critical health care infrastructure and key resources (e.g. hospitals) and points of distribution.
- Provide available deployable medical facilities and personnel to temporarily augment hospital emergency department and medical treatment capacity in overwhelmed critical areas.
- Provide logistics (e.g., transportation) and distribution of SNS assets.
- Provide available fatality management assistance capabilities including victim identification, remains transport, and mortuary affairs processing.
- Provide available medical and other health screening capability at priority ports of entry.
- Provide public health and medical surveillance, laboratory diagnostics, and confirmatory testing (e.g., Armed Forces Health Surveillance Branch, Defense Laboratory Network) in coordination with HHS and CDC's Laboratory Response Network.
- Provide modeling assistance.
- Provide a liaison representative to the HHS Secretary's Operation Center (SOC) as needed.
- Provide support as described in the NRF.

DOD National Guard Bureau (NGB)

State-controlled National Guard military operations are conducted under the control of the Governors. The Chief, National Guard Bureau, is responsible for communications between the states and the Secretary of Defense for matters involving National Guard forces.

- Provide liaisons to HHS (and FEMA, if activated)
- Provide support per the NRF.

Department of Education (ED)

ED coordinates with HHS/DHS and public and private education entities to collect and disseminate model pandemic plans for adoption at the state levels, as well as information on exercises and training, and monitors and shares information on pandemic impacts. The CDC will coordinate with ED to ensure public information response actions include information to schools about disseminating health information; planning for staff and student absences, school closures or early dismissals; and maintaining a learning environment.

Department of Energy (DOE)

The Department of Energy's mission is to ensure America's security and prosperity by addressing its energy, environmental and nuclear challenges through transformative science and technology solutions. Within DOE, the National Nuclear Security Administration (NNSA) protects the American people by maintaining a safe, secure, and effective nuclear weapons stockpile; by reducing global nuclear threats; and by providing the U.S. Navy with safe, militarily-effective naval nuclear propulsion plants.

The Office of Environment, Health, Safety and Security, is DOE's pandemic lead through its role as chair and coordinator of the Department's Biological Event Monitoring Team (BEMT). The BEMT ensures DOE readiness in the event of a pandemic or other biological threat.

DOE is a science mission agency that stewards 17 National Laboratories which have served as the leading institutions for scientific innovation in the United States for more than 70 years. The DOE National Laboratories have provided decades of biodefense expertise and world class capabilities in many relevant technology areas including chemistry, computational biology, materials science, high-performance computing, modeling and simulation, and risk analysis. DOE's world class analytical capabilities are being used to characterize biological samples to inform the rapid development of detection assays, and for the development or repurposing of medical countermeasures that are needed for an effective response to emerging biological threats. DOE user facilities and other scientific assets are used by the Department of Defense, the National Institutes of Health, and non-government entities such as universities and companies.

DOE, in coordination with interagency and industry partners, works to monitor and manage the Nation's energy infrastructure and execute incident management responsibilities, as the coordinating agency for Emergency Support Function #12, under the National Response Framework, and as the Sector Specific Agency for the energy sector, to include responding to energy infrastructure disruptions, and assisting in the rapid recovery of energy supplies.

General Services Administration (GSA)

In a co-lead capacity under ESF#7 and in a supporting role under ESF#8, GSA provides logistics and real estate acquisition, management, and disposal support services. GSA ensures that facility operations in public buildings and leased space under GSA's custody and control--which house a substantial portion of the federal workforce--incorporate the means and methods necessary to reduce risk of infection as defined by the CDC. Additionally, GSA allows eligible ordering entities to access all Federal Supply Schedules for the purchase of supplies and services, when expending federal grants funds in response to Public Health Emergencies. Information at this link: <https://www.gsa.gov/acquisition/purchasing-programs/gsaschedules/state-and-local-government-customers/public-health-emergencies-program>. GSA's PMEF is to lead and coordinate Federal Government physical reconstitution efforts, including acquisition and provisioning of real property, commercial goods, information technology and contract services.

- Provide resource support for ESF #6, #7 and #8 requirements as requested by the FEMA Logistics Management Directorate (LMD) to meet the needs of the affected population. Other government agencies, including HHS, may request GSA ESF #6, #7 and #8 resource support through the FEMA LMD.
- Determine accessibility status for GSA owned/leased buildings.
- Provide design, construction, and project management services.
- Provide facilities management, energy management, damage assessments, fire protection, and environmental management services.
- Provide emergency provisioning of real estate, leasing, and asset disposal functions.

Department of Health and Human Services (HHS)

HHS is the U.S. Government's (USG) principal agency for protecting the health of all Americans and provides essential human services, especially for those who are least able to help themselves. During a pandemic, the HHS intent is to stop pathogen transmission within U.S. borders; ensure the affected population is receiving treatment, appropriate medical countermeasures, or other interventions to protect or restore health; and provide federal assistance to SLTT and private sector entities to enable and restore activity to meet the demand of the population.

In addition to federal statutes, a number of National Strategies and Presidential Directives establish HHS as the lead federal department responsible for the protection of the health of the civilian population against both intentional and accidental or naturally occurring threats. It is also responsible for coordinating with other federal agencies and impacted SLTT, private sector, and nongovernmental partners, as appropriate, in responding to a biological incident. HHS leads public health efforts to advance the behavioral health of the Nation and maximize the independence, well-being and health of older adults and people with access and functional needs. The Secretary of HHS leads all federal public health, medical, and human services response to public health and medical emergencies covered by the NRF and the NDRF. HHS may request related to support from other departments and agencies, including additional, planning support, information management support, supply chain sustainment, and external affairs support.

Assistant Secretary for Preparedness and Response (ASPR)

ASPR leads the nation and its communities in preparing for, responding to, and recovering from the adverse health effects of public health emergencies and disasters. Key activities during a pandemic include these:

- Manages the Incident Response for the Department through the Secretary's Operations Center and Incident Support Team.
- Leads the Public Health Emergency Medical Countermeasures Enterprise, which comprises the CDC, the National Institutes of Health, the Food and Drug Administration, and interagency partnerships with the Department of Veterans Affairs (VA), DOD, DHS, and USDA.
- Provides federal support to augment state and local capabilities during an emergency or disaster, including the provision of medical professionals through ASPR's National Disaster Medical System, technical assistance to healthcare system stakeholders, and resource coordination.
- Implements and operationalizes pertinent authorities authorized by the Public Health Service Act.
- Distributes required medical equipment and supplies (e.g., PPE) from the Strategic National Stockpile (SNS), as required/directed.
- Supports the development and sustainment of Healthcare System Resilience
- Supports of the Healthcare and Public Health (private) sector
- Lead ESF #8.
- Manages the International Health Regulations (IHR) National Focal Point, which serves as the official pathway for notifications to the World Health Organization.
- Leads the Health and Social Services Recovery Support Function.

- Provides support and funds through ASPR Hospital Preparedness Program (HPP), including technical assistance from Field Project Officers (FPOs).

Administration for Children & Families (ACF)

The ACF is an operating division of HHS that promotes the economic and social well-being of families, children, individuals and communities with funding, strategic partnerships, guidance, training and technical assistance. Significant responsibilities during the Coronavirus response include these:

- Lead planning and execution of emergency and non-emergency repatriation operations of US citizens and dependents of US citizens that are identified by the Department of State as having returned, or been brought, from a foreign country or jurisdiction to the United States.
- Provide guidance and recommendations to STTL and federal partners to support the continued provision of human services.
- Providing relevant risk communications and mitigation strategies developed by CDC to grantees providing services to at-risk individuals (i.e. children, pregnant women, 65+ population).
- Collaborate with partners to identify and mitigate gaps and shortfalls of human services provided to at-risk individuals.
- Provide technical assistance to block grant recipients (ex., states) for re-allocation of funding to support state mitigation strategies (when requested by a grantee);
- Collaborate with ACF grantees to monitor capacity to continue providing human services to at-risk individuals. This includes, but is not limited to, collaborating with grantees of the following ACF offices: Office of Child Care, Office of Head Start, Office of Refugee Resettlement, and the Family and Youth Services Bureau;

Centers for Disease Control and Prevention (CDC)

CDC is an operational component of HHS that is responsible for the nation's health protection. The CDC's administration, scientists, and staff track diseases, research outbreaks, and respond to emergencies to protect the nation from health, safety, and security threats, both foreign and in the United States. The following critical functions may be executed by the CDC to effectively prepare for, respond to, and recover from a pandemic:

- Conduct epidemiologic and surveillance activities to define cases and identify the populations at risk.
- Provide laboratory support for the identification, confirmation, characterization, and drug susceptibility of the pathogen.
- Provide guidance on identification, diagnosis, and clinical management of human cases.
- Provide guidance on use of NPIs that may be utilized for prophylaxis and treatment.
- Develop effective infection control practice recommendations for healthcare settings.
- Prevent the entry of communicable disease into the United States through quarantine orders and isolation measures that may be used at U.S. ports of entry.
- Provide guidance on non-pharmaceutical mitigation strategies to assist with the containment and control of infectious agents.

- Conduct assessments and identify mitigation solutions for worker safety and health issues related to exposure to the biological agent and other hazards workers face during response and recovery options.
- Provide technical assistance to SLTT, federal, and international partners to support public health activities.
- Disseminate key public health and risk mitigation messages to the public to provide timely, accurate, clear, consistent, credible, and easily accessible information relevant to needs of all stakeholders.
- Work with appropriate agencies to assess threats to human health from exposed animals and develop policies for appropriate control measures in animal populations.
- Provide rapid and sustained public health assessment, leadership, expertise, and support by deploying personnel both to the impacted area for select issues and to the CDC Emergency Operations Center (and other emergency operation centers) for technical and administrative mission.
- Provide technical assistance to USDA as they assess if programmatic changes to school lunch and other programs are warranted to reduce secondary effects of pandemic mitigation measures.
- Coordinate with the Occupational Safety and Health Administration regarding guidance for use of personal protective equipment (PPE) in healthcare settings and other workplace settings.

Food and Drug Administration (FDA)

FDA regulates, licenses, and approves vaccines, antiviral drugs, and diagnostic tests and oversees the Nation's medical products to protect and promote public health during public health emergencies. FDA conducts the following activities during a pandemic:

- Conduct surveillance of the medical product supply chain, including potential disruptions to supply or shortages of critical medical products in the U.S.
- Provide FDA inspections and monitoring compliance of FDA products manufactured overseas.
- Monitor, evaluate, and approve all imported shipments of FDA-regulated products.
- Create a cross-agency task force dedicated to closely monitoring for fraudulent products and false claims related to COVID-19.
- Provide regulatory advice, guidance, and technical assistance to advance the development and availability of vaccines, therapies, and diagnostic tests for COVID-19.
- Evaluate and issue emergency use authorization (EUA) or emergency dispensing orders when appropriate.

National Institutes of Health (NIH)

NIH is an operational component of HHS and lead agency for the U.S. biomedical research response. NIH conducts research on emerging and re-emerging infectious diseases and facilitates the discovery and development of MCMs including diagnostics, therapeutics, and vaccines to prevent, treat, and control diseases in the U.S. and globally. NIH's critical functions contributing to pandemic response include the following activities:

- Conduct research to understand the pathogenesis of COVID-19 and the virology of its causative agent, SARS-CoV-2.

- Develop and make available to the research community reagents (including viral isolates) and animal models.
- Conduct preclinical and clinical research to develop and evaluate medical countermeasures, including diagnostics, therapeutics, and vaccines.
- Understand the ecology and natural history of COVID-19, understanding its spread and clinical manifestations to inform development and evaluation of medical countermeasures.
- Provide care for COVID-19 patients at the NIH Clinical Center under a research protocol and build our understanding of disease pathogenesis while simultaneously maintaining the safety of other patients and continuing the important research being conducted there.

Department of Homeland Security (DHS)

The Secretary of DHS is the principal federal official for domestic incident management. The Secretary is responsible for coordinating federal operations within the United States to prepare for, respond to, and recover from terrorist attacks, major disasters, and other emergencies, including biological incidents. The DHS Secretary coordinates the federal response as provided in HSPD-5.

Chief Medical Officer

The Chief Medical Officer serves as the Department's primary point of contact with HHS and other federal departments or agencies on medical and public health issues.

Customs and Border Protection

Per the Biological Incident Annex, for biological incidents suspected or detected inside or at U.S. borders or those individuals that may travel to the United States from abroad, CBP may detain and/or quarantine individuals until medical authorities have been alerted. CBP may deny the admission of an alien not lawfully admitted for permanent residence who is infected with COVID-19, as with any reportable communicable disease of public health significance.

- Analyze passenger travel data relevant to the movement of persons from impacted international locations with COVID-19 and provide this information to the interagency, in conjunction with operational considerations, to help inform the selection of U.S. airports for enhanced health screening for coronavirus.
- Implement targeting rules relating to travel from PRC (excluding the SARS of Hong Kong and Macau) or other impacted COVID-19 areas, per State Department and CDC Travel Advisories to identify travelers meeting the criteria of the proclamation, while having a minimal impact to operations.
- For COVID-19, assess persons at, or between, POEs (legal or unlawful entry) for travel history in PRC (excluding the SARS of Hong Kong and Macau) or other designated area (per State and CDC) within the past 14 days and/or showing signs or symptoms in accordance with CDC guidance.

Cybersecurity Infrastructure Security Agency (CISA)

- Coordinates with private sector and government partners to provide situational awareness and assist in recommending guidelines, best practices, and mitigating activities to promote infrastructure sustainment.
- Assist in identifying, analyzing, and managing consequences to national critical functions.
- Execute ESF #2 and ESF #14 responsibilities.

Federal Emergency Management Agency (FEMA)

FEMA is an operational component of DHS that coordinates ESFs, Recovery Support Functions (RSFs), and funding support to impacted areas during Stafford Act disasters. FEMA's Administrator is the principal advisor to the President, the Secretary of Homeland Security, and the Homeland Security Council regarding emergency management. The FEMA Administrator's duties include advising the President in carrying out the Stafford Act; operating the NRCC; supporting all ESFs and RSF's; and preparing for, protecting against, responding to, and recovering from an all-hazards incident. A Federal Coordinating Officer, appointed by the President in a Stafford Act declaration, coordinates federal activities in support of the states and tribal and territorial governments. Reporting to the Secretary of Homeland Security, the FEMA Administrator is also responsible for managing the core DHS grant programs that support homeland security activities. FEMA develops, with the Office of Personnel Management and federal departments and agencies, DHS Surge Capacity Force personnel requirements.

During a pandemic, FEMA—

- Supports HHS requests for interagency planning and coordination through ESF #5 and consistent with PPD-44 and HSPD-5.
- Reports the status of National Essential Functions to the White House in accordance with PPD-40.
- If the President invokes the Stafford Act, FEMA will coordinate federal support for consequence management through the National Response Coordination Center.

Federal Protective Service (FPS)

- Coordinate with the Facility Security Committee and/or Designated Official to implement and enforce any new requirements as necessary, this included restricting access or closing the facility.

National Operations Center (NOC)

- Serve as the primary national-level hub for domestic situational awareness, common operating picture, information fusion, information sharing, communications and strategic-level operations coordination.
- Maintain situational awareness and the common operating picture via the Homeland Security Information Network.

Transportation Security Administration (TSA)

TSA is an operational component of DHS with broad authority to protect aviation safety, security in all modes of transportation, and national security. The Administrator is responsible for security in all modes of transportation, an authority that includes assessing threats to transportation; developing policies, strategies, and plans for dealing with threats to transportation security; and carrying out such other duties, relating to transportation security as the Administrator considers appropriate, to the extent authorized by law. Pursuant to this statutory authority, TSA issues emergency amendments (EAs) to foreign air carriers and security directives (SDs) to domestic carriers. If the Administrator decides that a particular threat cannot be addressed in a way adequate to ensure, to the extent feasible, the safety of passengers and crew of a particular flight or series of flights, he may cancel the flight or series of flights. During a pandemic, TSA uses its authority to mitigate the spread of disease, as well as maintain continuity of transportation security operations at commercial airports to mitigate impact on commerce and travel.

U.S. Coast Guard

The Coast Guard is the principal Federal agency responsible for maritime safety, security, and environmental stewardship in U.S. ports and waterways. The Coast Guard, working in cooperation with CDC, CBP and other government agencies and port stakeholders, will assess maritime vessel situations on a case-by-case basis. If necessary, the Coast Guard can issue a Captain of the Port order to restrict a vessel's movement and/or withhold entry to establish best course of action prior to allowing entry.

- In accordance with the Biological Incident Annex, the USCG will conduct ports and waterways coastal security, search and rescue, and marine safety missions during a COVID-19 disease outbreak.
- These missions include exercising of port control authorities, enforcement of security zones, alien migrant interdictions, and counter terrorism operations.
- For COVID-19 and any other highly infectious disease outbreaks, the USCG under its cognizant authority shall enforce quarantines, per the direction of the CDC, in the maritime environment.

U.S. Department of the Interior (DOI)

DOI, in coordination with the U.S. Forest Service, monitors wild bird and animal populations throughout the United States for indications of viral activity disease and offers advanced capabilities to detect, identify and characterize newly emerging pathogens of wildlife. It provides permits and inspects wildlife and wildlife products being imported into and exported out of the United States. DOI enforces and publicizes wildlife border controls and, if appropriate, utilizes them, permitting authorities to restrict the import or export of wild birds. In addition, DOI manages federal lands in which humans and animals engage in a wide variety of activities and interact. DOI also provides personnel to manage zoonotic disease risk from wildlife on DOI lands. DOI collaborates with HHS and USDA to deliver effective "One Health" response that integrates human, animal, plant and environmental health messaging.

Department of Justice (DOJ)

- Provide security for the SNS, secure movement of inbound medical equipment, supplies, blood, and tissues.
- In conjunction with SLTT partners, provide security for vaccine production facilities.
- Provide credible threat information regarding SNS transportation and vaccine distribution.

DOJ – Department of Alcohol, Tobacco, and Firearms

- Provide personnel to designated operations center to perform duties of ESF #13 – Public Safety and Security, if requested.

Department of Labor (DOL)

DOL fosters, promotes, and develops the welfare of the wage earners, job seekers, and retirees of the United States; improves working conditions; advances opportunities for profitable employment; and assures work-related benefits and rights.

DOL – Occupational Safety and Health Administration (OSHA)

OSHA assures safe and healthful working conditions by setting and enforcing standards and by providing training, outreach, education, and assistance. Before and during pandemics, OSHA provides compliance assistance and guidance for workers and employers, including information about control measures to prevent pandemic diseases in the workplace. OSHA also can provide specialized expertise to other federal agencies and state, local, territorial, tribal, and insular governments, including state-run occupational safety and health programs (state plans), as requested.

OSHA leads implementation of the NRF Worker Safety and Health Support Annex preparedness and response actions to protect response workers. OSHA can provide specialized expertise to protect response and recovery workers, including through the following: Risk assessment and management; identification, assessment, and control of health and safety hazards; development and oversight of health and safety plans; worker exposure monitoring, sampling, and analysis; PPE selection, including respirator fit-testing, and decontamination; and incident-specific worker safety and health training.

Corporation for National and Community Service (CNCS)

- Provide personnel to RRCC and/or NRCC in support of various emergency support functions (e.g., Mass Care, Emergency Assistance, Housing, and Human Services, etc.).

American Red Cross (ARC)

- Support mass care requests.
- Coordinate with HHS and/or local public health authorities for the medical screening of sheltered populations and the provision of limited, outpatient medical support to sheltered populations.

- Provide for disaster-related health and behavior health needs through direct services and/or referrals, based on volunteer staff availability.
- Provide a liaison to HHS.
- Provide close coordination with other nongovernmental organization volunteers who may not be aware of the technicalities of the pandemic.

Small Business Administration (SBA)

- Execute pandemic elements of continuity plan and consider any actions that may be required to effect long-term recovery from a pandemic.

Department of State (DOS)

- Carry out diplomatic activities and international U.S. government messaging related to disease outbreaks—whether domestic, regional, or global—in coordination with other U.S. agencies and international partners, as appropriate.
- Draft and revise policies and plans for the potential donation of anti-viral, vaccine, diagnostic tests, and medical equipment and supplies to international partners, in coordination with HHS and National Security Council.

Department of Transportation (DOT)

DOT coordinates transportation sector efforts and works to ensure that appropriate, coordinated actions are taken by the sector to limit the spread and impact of a pandemic while preserving the movement of essential goods and services.

- Coordinate through the appropriate interagency processes and partners to identify and discuss threat-specific policy considerations and decisions.
- Provide Emergency Medical Services (EMS) technical assistance, and guidance for 911 public safety answering points to Interagency partners, the Federal Interagency Committee on EMS, and the National EMS Advisory Council.
- Coordinate with HHS and CDC to address the equities and needs of the EMS community.

Performs Emergency Support Function #1 (ESF-1) responsibilities in accordance with the National Response Framework, ESF-1 - Transportation Annex, and the Interagency Pandemic Crisis Action Plan Synchronization Matrix in Annex X. Supporting actions include, but are not limited to, these:

- Providing DOT personnel to fill positions in operations centers and emergency response teams and other entities, as necessary.
- At the request of Interagency partners, providing technical support to assist logistical movement operations.
- Assisting FEMA/HHS, or other interagency partners, to identify alternative, accessible transportation solutions for those who require assistance to access medical care.

- Facilitating the movement of first responders and other FEMA, or Lead Federal Agency-identified teams, through regulatory relief and routing assistance.
- Assisting FEMA/HHS to identify alternative methods to transport contaminated solid materials, Category A Infectious Substances, or suspected biohazard contaminated substances.¹²

Department of the Treasury (TREAS)

TREAS monitors and evaluates the economic impacts of a pandemic, helps formulate the economic policy response and advises on the likely economic impacts of containment/mitigation efforts. The Secretary of the Treasury is also responsible for preparing policy responses to pandemic-related international economic developments; for example, leading the federal government's engagement with the multilateral development banks (MDB) and international financial institutions (IFI), including encouraging the MDB and IFI efforts to assist countries to or jurisdictions address the impact of an pandemic. The CDC will work with TREAS to facilitate medical countermeasure production and procurement.

Department of Veterans Affairs (VA)

- Provide PPE fit-testing, medical screening, and training for ESF #8 and other federal response personnel.
- Provide VA staff as ESF #8 liaisons to FEMA Incident Management Assistance A Teams deploying to the state emergency operations center.
- Provide VA planners currently trained to support ESF #8 teams.
- Provide vaccination services to VA staff and VA beneficiaries in order to minimize stress on local communities.
- Furnish available VA hospital care and medical services to individuals responding to a major disaster or emergency, including active duty members of the armed forces as well as National Guard and military Reserve members activated by state or federal authority for disaster response support.
- Provide ventilators, medical equipment and supplies, pharmaceuticals, and acquisition and logistical support through VA National Acquisition Center.
- Provide burial services for eligible veterans and dependents and advises on methods for interment during national security emergencies.
- Designate and deploy available medical, surgical, mental health, and other health service support assets.
- Provide one representative to the NRCC during the operational period on a 24/7 basis.

¹² Currently, the USG's classification recommendation is that the 2019-nCoV is a Category B infectious substance, that is "not in a form generally capable of causing permanent disability or life-threatening or fatal disease in otherwise healthy humans." If the classification remains Category B, existing processes at hospitals and landfills can handle waste transport and disposal without a special permit, under exceptions for regulated medical waste (RMW).

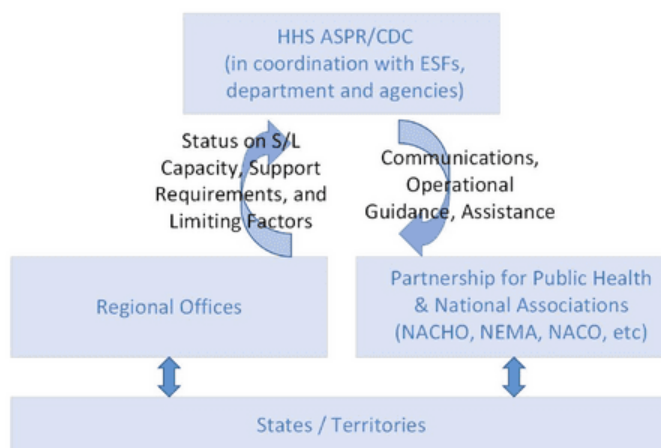
Annex G. Regional Operational Coordination

The concept for the receipt, adjudication, and delivery of federal assistance should follow normal operational coordination mechanisms to the greatest extent possible. The types and level of Federal assistance provided may be adjusted based on the impact of the outbreak across the Nation. See corresponding Messaging Factsheet for external affairs guidance.

Limited COVID-19 Spread within the United States (Phase 1c)

The HHS and FEMA Regions maintain coordination with their respective State and Territory public health and emergency management counterparts, with the FEMA regions amplifying HHS public health messaging and guidance to do the following as needed:

- Deliver and promulgate community mitigation and medical care messaging including:
 - Community Intervention Guidance
 - Medical Treatment Guidance
 - Medical Care Surge Operations Guidance
- Receive and process to the HHS national Incident Management Team (IMT) and Incident Support Team (IST) established at the Secretary's Operation Center (SOC) all Federal/State/Local requests for information, requests for assistance, and limiting factors
- Provide subject matter expertise and planning guidance
- Logistics supply chain analysis
- Support HHS/ASPR Region-led SLTT and health sector engagement on Virus Mitigation Preparations (see guidance below)
- CDC will provide technical support and guidance directly to SLTT public health agencies, and facilitate timely information exchange and resource support in coordination with HHS and their Regional Emergency Coordinators (RECs)



Confirmed Cases of COVID-19 Spread in Select Areas (i.e., few clusters, Phase 2a)

Should the outbreak spread to multiple locations, some federal medical team capabilities (e.g., HHS Incident Management Teams, Disaster Medical Assistance Teams) may be deployed to support specific mission requirements. These requirements may include additional repatriation, quarantine, isolation, case investigations, and SLTT medical care augmentation. These missions are expected to decrease as the overall response posture adjusts to the spread of cases in communities.

States and territories may be expected to request federal assistance through HHS including, but not limited to, these items:

- Funding to augment enhanced health and medical operations
- Waivers to increase flexibility (e.g., CMS § 1135)
- Operational guidance
- Expert technical assistance
- Emergency medical care (limited deployable federal resources as these may be tasked with response in their home jurisdiction or agencies)
- Temporary medical facilities
- Purchase and distribution of food, water, medicine, and other consumables
- Movement of supplies and persons
- Security, barricades fencing, and warning devices
- Communicating health and safety information to the public
- Technical assistance on disaster management and control
- Support to medical examiners and mass mortuary services (limited deployable federal resources as these may be tasked with response in their home jurisdiction or agencies)

Regionalized Posture for Response Operational Support

The ASPR Regional Response Plan (Annex C to the Incident Management Framework) affirms that the fundamental purpose of the ASPR Regional Offices is to assess evolving incidents, coordinate with (F)SLTT and NGO partners, give technical assistance/guidance regarding relevant federal support, and provide notification and analysis of such incidents to ASPR leadership and the SOC. ASPR Regional Administrators (RAs) are responsible for making recommendations to the Director of Emergency Management and Medical Operations (EMMO) and Federal Health Coordinating Officers/Incident Managers (FHCO/IM), if designated, for additional staffing and resource requirements for public health/medical incidents and events. CDC will provide technical support and guidance directly with public health agencies to facilitate information exchange and resource support.

Coordinated as necessary by the ASPR RA, HHS Regional Offices will provide support to their impacted states and healthcare coalition partners, leveraging the individual agency capabilities of HHS operating divisions (OPDIVs) and Staff Divisions (STAFFDIVs), including flexibilities of granting mechanisms already established with the states.

In coordination with the ASPR RA, other HHS regional leaders may utilize their established relationships to enhance communications with SLTT leaders (e.g., the Regional Director [RD] to the governor; mayor or executive branch officials; Regional Health Administrator (RHA) to public health and medical officials).

ASPR Regional Emergency Coordinators (RECs) who remain in the Regions may virtually deploy to State EOCs or Health Department Operations Centers as Agency Representatives to coordinate requests for assistance through a procedure established by the ASPR RA. The ASPR RA will submit appropriate requests for information (RFIs) and Requests for Resources (RFRs) through the established process to the national IMT for adjudication and assignment/deployment of approved resources. The ASPR RA will establish a procedure to ensure the communication of the disposition of such requests to the originator.

The applicable FEMA Regional Response Coordination Center(s) (RRCC) may be activated to augment HHS coordination. In each Region, the FEMA RA and ASPR RA will establish a joint unified coordination group (UCG) and a task organization comprised of ASPR and FEMA personnel to facilitate the planning and implementation of collaborative response efforts.

FEMA may activate a Response Operations Cell (ROC) at its National Response Coordination Center (NRCC) to coordinate emergency management guidance and messaging, liaise with HHS, and facilitate headquarters intra- or inter-agency coordination.

The FEMA Crisis Action Task Force presence at HHS headquarters will remain and ensure headquarters-level coordination among FEMA and HHS.

The FEMA Region may deploy its pre-rostered IMAT-Advance personnel to the State EOCs or RRCCs to help facilitate multi-agency coordination and information sharing upon request by the receiving state to the respective Regional Administrator with approval from the FEMA ORR Associate Administrator. IMAT-A personnel may be employed by the Region to participate in readiness activities prior to activation (e.g., training, exercises, planning).

Nationwide Spread of COVID-19 (Phase 2b/2c)

During this Phase, there may be widespread illness and scarce resources available across the Nation. Assuming most, if not all, states are impacted and are requesting assistance, federal support may be limited to these activities:

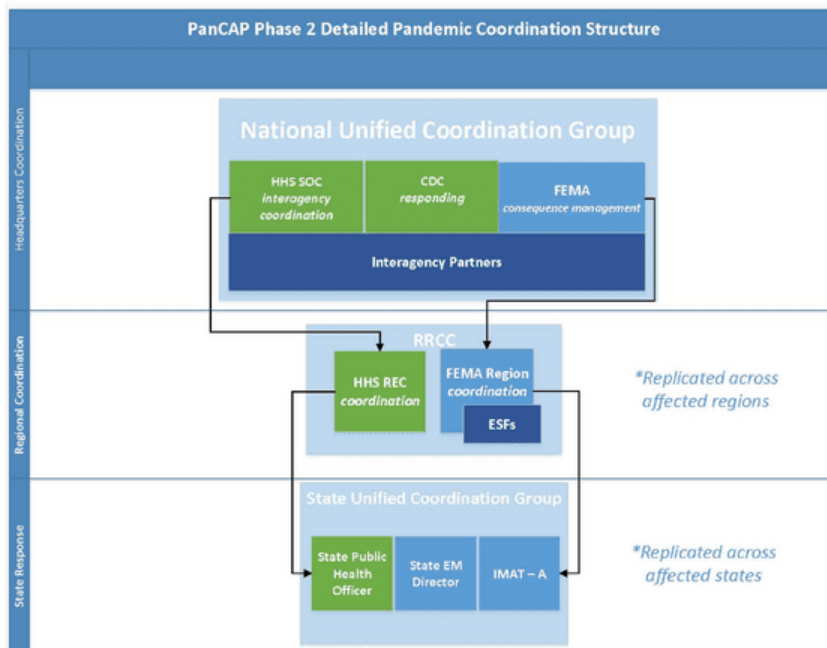
- Funding to augment enhanced medical operations and execution of emergency protective measures through existing mechanisms
- Operational guidance and reach-back support
- Expert technical assistance
- Emergency management coordination and liaison support (e.g., IMAT-A), as needed

Regionalized Posture for Response Operational Support

The HHS Incident Management Team (IMT) remains the lead for coordinating support to impacted states, leveraging HHS mechanisms already established through the Regions as well as national assets. The HHS IMT will facilitate the prioritization and adjudication of ESF-8 support in a national response, should widespread transmission create competing needs in a scarce resource environment. The joint ASPR-FEMA UCG and task organization in applicable FEMA RRCCs may serve to augment HHS-coordination and provide consequence management support.

State COVID-19 responses and declarations have the following characteristics:

- Led by respective joint ASPR-FEMA UCGs, the RRCCs will function as the primary source of incident support to facilitate the provision of any requested emergency protective measures for their state partners, communicating directly with impacted states.
- The FEMA NRCC will function as the source of incident support to the ten Regions to facilitate the prioritization and adjudication of emergency protective measures support, coordinate guidance and messaging, and facilitate headquarters inter- and intra-agency coordination.
- FEMA IMAT-Advance personnel may be deployed to the impacted states to provide emergency management operational coordination and liaison support at State EOCs.



State Presence

IMAT-A personnel at affected states and territories have the following purposes:

- Achieve **unity of effort** with HHS field elements and the State/Territory.
- Manage **information** and provide non-public health and medical situational awareness.
- Coordinate State/Territory **resource** requirements to the RRCC.
- Provide consistency and clarification of federal **messaging**.

An IMAT-A team is comprised of four FEMA personnel serving in the positions of Team Leader, External Affairs, Logistics, and Planning to conduct the following functions:

- **Team Leader.** Responsible for all aspects of team management including serving as a liaison to state officials including public health leadership and the Emergency Management Director, and providing an analysis of the State/Territory's efforts to the joint ASPR-FEMA UCG at the RRCC. Prior to a declaration, the leader performs Federal Resource Coordinator duties within the State/Territory's Emergency Operation Center (EOC) and a Federal Coordinating Officer may be appointed in the event the President issues an Emergency Declaration.
- **Logistics.** Responsible for analyzing and maintaining visibility on the State/Territory's resource status to stabilize lifelines with a focus on identifying potential State/Territory shortfalls. If internal team support or an expanded FEMA presence is required in the State/Territory, Logistics will coordinate ordering, delivery, management, and transportation functions.
- **Planning.** Establish and maintain a clear and consistent reporting of non-public health and medical situational status using standard situational reporting format to the HHS SOC and FEMA NRCC, and participate in regular situational awareness synchronization calls. Develop planning factors for resource requirements and help project future operations for the next and subsequent operational periods.

- External Affairs. Ensures consistency and clarity of HHS-generated messaging using the standard ESF #15 construct and provides situational awareness on all aspects of External Affairs (EA). Assists HHS and State/Territory External Affairs leadership, if requested, providing cleared national releases and facilitates media opportunities. Refers state/territory, local, and congressional inquiries to HHS and assists with response coordination if requested. Ensures responses to national media queries are coordinated with HHS and the National-Joint Information Center.

IMAT-A teams may remain to help coordinate issues associated with state/territory support for any stand up of traditional FEMA Response and recovery operations for traditional disasters (e.g., flood, hurricane).

Determination of Response Effectiveness in Impacted Communities

In a biological incident, community lifelines serve as the USG indicators of the effects of the incident as well as the effectiveness of response actions.

HHS, through its ESF#8 Primary Authority and its supporting agencies, are charged with determining the Health and Medical Lifeline of both the nation and impacted communities. Medical care, public health, patient movement, medical supply chain, and fatality management are the five components comprising the Health and Medical lifeline. HHS/ASPR Regional Administrators and other HHS OPDIV and STAFFDIV leaders will monitor, through SLTT engagement, these various components and to report their status to the HHS Assistant Secretary for Preparedness and Response (ASPR).

FEMA, as coordinator for consequence management preparations for all-hazard threats, is charged with determining the overall management of tracking and reporting of all seven community lifelines in coordination with the respective Federal Department and Agency primary authorities, per the NRF. FEMA, through its Regional Administrators or deployed Incident Management Teams – Advanced personnel (e.g., Regional and/or National-levels), in coordination with HHS ASPR Regional Administrators (for Public Health and Medical Lifeline) and other Federal partners (for remaining community lifelines), will assess and report to headquarters senior leadership on the status, impacts, response actions, limiting factors, and estimated to achieve (ETA) “green” conditions for all lifelines.

Useful factors for assessing Public Health/Medical impacts include these:

- Establishment and use of alternative care facilities for less critically ill patients that exceeds capabilities of Authority Having Jurisdiction (AHJ)
- State medical officer availability
- Percentage of government or first responder absenteeism
- Jurisdictions issuing Non-Pharmaceutical Intervention (NPI) Orders that require assistance to comply with NPI
- National Guard deployment
- Inability to conduct adequate surveillance (data collection, analysis and reporting)
- Telemedicine requirements to keep minimally symptomatic out of the healthcare system that AHJ cannot support
- Inability to manage fatality case loads
- Impacts to community lifelines at state/local levels such as supply chain indicators (e.g. shortage of critical supplies (medical, food, fuel), transportation, etc.)

- Implementation of crisis standards of care at the local, county, and/or state/territory level
- Health and Medical Community Lifeline elements including medical care (e.g., hospital status, dialysis, pharmacies, long term care facilities, VA health system, veterinary services, and home care), public health, patient movement, emergency medical services, fatality management, and medical supply chain

Region-Facilitated State, Local, Tribal, and Territorial and Sector Engagement Support

The following is a template for HHS-led and FEMA-supported engagement for adaptation or specialization to meet the unique needs of each Region.

HHS-FEMA Region Coordination

- Designated points of contacts among Regional Office and State/Tribe/Territory public health and emergency management officials
- Weekly operations tempo and engagement schedule
- Participation in HHS HQ-Regional coordination calls
- Process for transferring public health/medical related requests for information, requests for assistance, or situational updates to the HHS SOC through the HHS Region
- Process for transferring emergency protective measure related requests for information, requests for assistance, or situational updates to the FEMA Regional Watch Center/RRCC
- Synchronization of HHS-generated community and sector virus mitigation guidance and messaging
- Process for compiling and sharing answers to RFIs and FAQs related to HHS virus mitigation guidance messaging and engagements

State / Local / Sector Engagements (to be adjusted per pending WH IGA Strategy)

- Identification of State, Territory, Tribe, and major city Public Health Officer and Emergency Management POCs.
- Regular engagement with SLTT public health officials by CDC to provide technical assistance.
- Weekly outreach schedule for Regional States, Tribes, and Territories.
- Weekly outreach schedule for Regional ESF and interagency partners.
- Linkage of HHS POC for all applicable NSSE and SEAR event coordinators.
- Roster maintenance and linkage of IMAT-Advance personnel with respective States/Territories.
- Routine coordination of workforce protective measures and business continuity with local Federal agency partners through applicable Federal Executive Boards (FEB).

Engagement Objectives

- Assessment of operational requirements, readiness capacity, and limiting factors.
- Effective robust communication of HHS Mitigation Guidance, situational updates.
- Manage requests for information and correct myths and rumors.
- Direct requests and information flow through appropriate HHS and other D/A channels based on the function and subject matter.
- Synchronize workforce protection and business continuity measures.
- Provide technical expertise and planning assistance.
- Ensure unified coordination among the public health/medical mission with the emergency management mission.
- Share best practices and lessons learned across the regions that could have an immediate positive impact on containment and mitigation.

Annex X. Execution

Interagency Pandemic Crisis Action Plan (PanCAP) Synchronization Matrix – COVID – 19

*All activities are on order and at the direction of the Secretary of HHS. Staff Estimates are based on worst case forecast. Please refer to the Biologic Incident Annex for specifics on coordinating mechanisms. Finally, though this matrix covers domestic operations, links with international response will be required in anticipation of disease entry into US.

Phase	Phase 1			Phase 2		
	1A – Normal Operations	1B – Increased Likelihood or Elevated Threat	1C – Near Certainty or Credible Threat	2A – Activation, Situational Assessment, and Movement	2B – Employment of Resources and Stabilization	2C – Intermediate Operations
Trigger	No specific threat of pandemic	Identification of a confirmed human case of a novel or re-emerging virus infection anywhere with potential to cause significant human disease and potential for pandemic	<ul style="list-style-type: none"> Confirmation of multiple human cases or clusters with virus characteristics indicating limited human-to-human transmission and heightened potential for pandemic Determination of a Significant Potential for a Public Health Emergency 	<ul style="list-style-type: none"> Demonstration of efficient and sustained human-to-human transmission of the virus Declaration of a Public Health Emergency One (1) or more clusters of cases in the U.S. 	<ul style="list-style-type: none"> Increasing number of cases or increasing rate of infection in US Healthcare system burden that exceed state resource capabilities National healthcare supply chain management unable to surge production and/or distribution to meet demand State/local request for assistance that requires federal coordination Increasing private-sector request for assistance to support cross-sector operations Greater than three (3) generations of human-to-human transmission, or detection of cases in the community without epidemiologic links in a single U.S. contiguous jurisdiction with evidence that public health systems in that jurisdiction are unable to meet the demands for providing care 	<ul style="list-style-type: none"> Increasing rate of infection in US indicating established transmission, with long term service disruption and critical infrastructure impacts Industry business continuity plans cannot be executed due to insufficient personnel leading to significant disruption across sectors Presidential Stafford Act declaration State/local request for assistance that requires federal coordination Greater than three (3) generations of human-to-human transmission, or detection of cases in the community without epidemiologic links, two (2) or more non-contiguous jurisdictions with evidence that public health systems in those jurisdictions are unable to meet the demands for providing care Widespread transmission of disease
FEMA HQ Coord.	Monitor and coordinate with Region(s) and federal partners		<ul style="list-style-type: none"> Monitor and coordinate with Region(s) and federal partners Brief FEMA leadership on disease parameters as known Consider initial coordinating call between FEMA, HHS/ASPR, HHS/CDC leadership (recurring as necessary) Consider ESFLG initial and periodic situational awareness brief Consider initial and periodic FEMA Regional Administrator's call to provide situational awareness brief <p>Consider Activation of Interagency Planning Cell</p> <ul style="list-style-type: none"> FEMA Future Planning HHS (ASPR, CDC) DHS Office of Health Affairs 	<ul style="list-style-type: none"> Pre-identify personnel to staff FEMA IMAT-A teams Orient team members on emerging pandemic threat Review FEMA Continuity of Operations Plan (COOP) Consider FEMA Enhanced Watch (Logistics, Future Planning, Mass Care, Recovery, Situational Awareness) HHS may request NRCC Level III activation (IAA) Situational Awareness Section (most positions including GIS) Planning Section (most positions) Resource Support Section (log, comptroller, transportation, MCC), Liaisons, Support Staff (NRCC Support, IT, WebEOC) 	<ul style="list-style-type: none"> HHS may request NRCC Level I or II activation (IAA) to support state requests for assistance and Fed to Fed deployments and missions Re-evaluate and adjust deployed staffing to optimize support to states and tribes Implement protective measures for FEMA workforce (in the field or regular duty stations), as needed Evaluate and implement actions that facilitate continuity of FEMA response to other disaster and emergency declarations Make determinations, as needed, to enable use of Defense Production Act (DPA) authorities 	<p>HHS may request NRCC Level I activation (IAA or SA) as lead for interagency coordination consequence management and infrastructure impacts beyond public health and medical requirements</p>
FEMA Regional Coord.	Monitor and coordinate with state(s), Tribe(s), and partners		<ul style="list-style-type: none"> Monitor and coordinate with state(s), tribe(s) and partners Consider briefing to state(s), tribe(s) and partners (HHS may assist) 	<ul style="list-style-type: none"> Pre-identify regional personnel to staff FEMA IMAT-A teams Orient regional team members on emerging pandemic threat Consider Enhanced Watch or L3 determined by severity of events and activation level of state EOCs Consider activation of FEMA RRCC to level 3 in impacted regions in support of HHS RECs Deploy regional team members on request of HHS and/or state 	<ul style="list-style-type: none"> Consider elevation of the Activation Level of Region/s RRCC to Level 2 Deploy team members on request of HHS and/or state 	<p>Consider elevation of the Activation Level of Region/s RRCC to Level 1</p>

Interagency Pandemic Crisis Action Plan (PanCAP) Synchronization Matrix – COVID – 19

*All activities are on order and at the direction of the Secretary of HHS. Staff Estimates are based on worst case forecast. Please refer to the Biologic Incident Annex for specifics on coordinating mechanisms. Finally, though this matrix covers domestic operations, links with international response will be required in anticipation of disease entry into US.

Phase	Phase 1			Phase 2		
	1A – Normal Operations	1B – Increased Likelihood or Elevated Threat	1C – Near Certainty or Credible Threat	2A – Activation, Situational Assessment, and Movement	2B – Employment of Resources and Stabilization	2C – Intermediate Operations
Trigger	No specific threat of pandemic	Identification of a confirmed human case of a novel or re-emerging virus infection anywhere with potential to cause significant human disease and potential for pandemic	<ul style="list-style-type: none"> Confirmation of multiple human cases or clusters with virus characteristics indicating limited human-to-human transmission and heightened potential for pandemic Determination of a Significant Potential for a Public Health Emergency 	<ul style="list-style-type: none"> Demonstration of efficient and sustained human-to-human transmission of the virus Declaration of a Public Health Emergency One (1) or more clusters of cases in the U.S. 	<ul style="list-style-type: none"> Increasing number of cases or increasing rate of infection in US Healthcare system burden that exceeds state resource capabilities National healthcare supply chain management unable to surge production and/or distribution to meet demand State/local request for assistance that requires federal coordination Increasing private-sector request for assistance to support cross-sector operations Greater than three (3) generations of human-to-human transmission, or detection of cases in the community without epidemiologic links in a single U.S. contiguous jurisdiction with evidence that public health systems in that jurisdiction are unable to meet the demands for providing care International operational disease 	<ul style="list-style-type: none"> Increasing rate of infection in US indicating established transmission, with long term service disruption and critical infrastructure impacts Industry business continuity plans cannot be executed due to insufficient personnel leading to significant disruption in sectors Presidential Stafford Act declaration State/local request for assistance that requires federal coordination Greater than three (3) generations of human-to-human transmission, or detection of cases in the community without epidemiologic links, two (2) or more non-contiguous jurisdictions with evidence that public health systems in those jurisdictions are unable to meet the demands for providing care International operational disease
HHS HQ Coord.	<ul style="list-style-type: none"> LFA for health issues Coordinate inter-agency public health and medical preparedness for pandemic-related activities Lead and coordinate federal communication and release of public health and medical information Maintain awareness of emerging infectious diseases Provide regulatory guidance to sponsors and review submissions (antivirals, vaccines, diagnostics) Develop and stockpile antiviral drugs, vaccines, and other medical countermeasures (MCM) 	<ul style="list-style-type: none"> Consider convening Disaster Leaders Group (DLG) Initiate HHS Senior Leaders Coordination and situational awareness meetings to approve strategy for the response RECs maintain situational awareness and facilitate bidirectional information flow between regional partners (federal and SLTT) and HHS components 	<ul style="list-style-type: none"> HHS SOC IST activation level 2 – LNOs and SMTs requested HHS designated LFA – ASPR LFO? ASPR LNO at CDC, CDC LNO at SOC HHS Disaster Leaders Group (DLG) convened for policy leadership and coordination Initiate ASPR Senior Leaders Team (SLT) Coordination and Situational Awareness meetings to approve strategy for the response HHS ASPA Lead clearance public health messaging and risk communication in coordination w/ CDC JIC – TPs, HHS FHCO designated and national IMT rostered ASPR RECs monitor and engage with SLTT Partners – State Health Departments, and other Federal regional authorities for situational awareness Interagency planning coordination calls between FEMA, HHS/ASPR, HHS/CDC leadership (recurring as needed) Senior Leader Briefs (SLBs) to HHS Sec and WH Determine availability SMS, MCM vaccine and antivirals Execute International Health Regulation (IHR) notification protocol reporting cases in US. Engage with WHO for international coordination, monitor PHEIC designation (CDC consultants deployed) International outreach: HHS/OGA, CDC, and ASPR outreach to China and other foreign governments, State, Embassies, and multilateral institutions (e.g., WHO) through formal channels (IHR NFP) and partnerships (e.g., GISA and NAPAPI) for coordination of preparedness, information sharing, and policy development. Promote and facilitate interagency coordination of CDC recommendations and protocols for the appropriate implementation and use of countermeasures including NPIs Disseminate, promote and facilitate interagency coordination of HHS approved risk communication messages Development of diagnostic tests and strain specific medical countermeasures (developing new products and testing products already approved for other indications) CDC and ASPR discuss modified triggers/conditions for elevated response Repatriation evacuation of AMCHTs with ACF/ASPR/CDC/DOD/DOCS Activate NDMs and PHS CC personnel Conduct enhanced screening at designated airports (F-111) to delay 	<ul style="list-style-type: none"> HHS SOC IST activation level 1 to support national response HHS Sec declares PHE w/ authorities and flexibilities ES-8 Public Health and Medical Coordination Calls and weekly Federal Interagency VTCs Alert and activate ES-8 resources as needed Modeling and predictive analysis projecting short-term impacts and requirements HHS Regional staff (RECs/RAs/POs) engage STTL health officials and execute regional coordination concept w/FEMA Execute on HHS IEA and WH IGA Stakeholder Engagement Plans Expand production distribution diagnostic testing capacity to STTL Evaluate/develop therapeutics (Remdesivir studies) Conduct vaccine clinical trials Alert staff regarding potential deployments Acquire funding to meet projected mission requirements (consider request for supplemental or IAAs to execute Fed-to-Fed support if no Stafford Dec) Evaluate need for enhanced federal inter-agency coordination construct Provide emergency medical services (EMS), hospitals, healthcare coalitions, other medical treatment facilities, home care, and primary care, guidance in establishing or updating their action plans / care protocols. Programmatic technical assistance and guidance on service provision to HHSIA program participants/grantees - FQHCs, HIV/AIDS, pregnant women and mothers, training of health professionals (e.g., flexibilities, waivers), clinical guidance an outreach to Conduct outreach to Indian Health Service (IHS) staff, Tribes, and clinical provider communities to ensure knowledge of available resources, current clinical and other guidance, and overall outbreak status Coordinate with FEMA to provide housing, transportation and other support for quarantine activities 	<ul style="list-style-type: none"> HHS SOC IST to Level 1 w/ Federal interagency support and LNOs HHS FHCO and national IMT deployed at HQ – coordinating assignments and deployment of resources Select ESFs activated supporting HHS SOC and monitoring lifelines RECs virtually deployed to State EOCs to coordinate/validate RFAs Reevaluate interagency coordination mechanism and restructure or relocate as needed (e.g. FEMA Crisis Action Team to HHS) Supplemental budgets funding ESF support thru IAAs under Economy Act Track STTL public health responses (e.g., implementation of NPIs) Provide EMS, hospitals, and healthcare coalitions assistance in identifying needed resources for capability and capacity building Monitor ACF grantees capacity to continue providing childcare and Head Start and other services to children and families Continue medical supply chain analysis, sourcing and surge production, procurement and stockpiling and allocation of RPDs and other PPE, critical pharmaceutical, medical equipment and supplies Distribute SNS materiel as needed Process Medicare/Medicaid waivers as requested Monitor healthcare system stress and provide guidance to support surge requirements Distribute emergency funding to STTL 	<ul style="list-style-type: none"> Reevaluate interagency coordination mechanism and restructure as necessary NRCC Level 1 with all ESFs and FEMA coordinating consequence management, impacts to Lifelines and CIKR Reevaluate funding mechanisms (supplemental vs SA) RECs provide coordination and information to regional emergency management partners Renew PHE declaration Rotate and resupply HHS personnel/teams Facilitate coordination and information sharing regarding behavioral health services and the access and functional needs of at-risk individuals being provided and identify gaps or shortfalls Re-assess supply chain vulnerabilities to produce critical medical materiel Monitor and disseminate effective clinical strategies and the outcomes of severe disease outcomes Consider updated health care system surge guidance and continue monitoring stress Prepare for allocation, distribution MCM therapeutics when available

Interagency Pandemic Crisis Action Plan (PanCAP) Synchronization Matrix – COVID – 19

*All activities are on order and at the direction of the Secretary of HHS. Staff Estimates are based on worst case forecast. Please refer to the Biologic Incident Annex for specifics on coordinating mechanisms. Finally, though this matrix covers domestic operations, links with international response will be required in anticipation of disease entry into US.

Phase	Phase 1			Phase 2		
	1A – Normal Operations	1B – Increased Likelihood or Elevated Threat	1C – Near Certainty or Credible Threat	2A – Activation, Situational Assessment, and Movement	2B – Employment of Resources and Stabilization	2C – Intermediate Operations
Trigger	No specific threat of pandemic	Identification of a confirmed human case of a novel or re-emerging virus infection anywhere with potential to cause significant human disease and potential for pandemic	<ul style="list-style-type: none"> Confirmation of multiple human cases or clusters with virus characteristics indicating limited human-to-human transmission and heightened potential for pandemic Determination of a Significant Potential for a Public Health Emergency 	<ul style="list-style-type: none"> Demonstration of efficient and sustained human-to-human transmission of the virus Declaration of a Public Health Emergency One (1) or more clusters of cases in the U.S. 	<ul style="list-style-type: none"> Increasing number of cases or increasing rate of infection in US Healthcare system burden that exceed state resource capabilities National healthcare supply chain management unable to surge production and/or distribution to meet demand State/local request for assistance that requires federal coordination Increasing private-sector request for assistance to support cross-sector operations Greater than three (3) generations of human-to-human transmission, or detection of cases in the community without epidemiologic links to a single U.S. contiguous jurisdiction with evidence that public health systems in that jurisdiction are unable to meet the demands for providing care 	<ul style="list-style-type: none"> Increasing rate of infection in US indicating established transmission, with long term service disruption and critical infrastructure impacts Industry business continuity plans cannot be executed due to insufficient personnel leading to significant disruption across sectors Presidential Stafford Act declaration State/local request for assistance that requires federal coordination Greater than three (3) generations of human-to-human transmission, or detection of cases in the community without epidemiologic links, two (2) or more non-contiguous jurisdictions with evidence that public health systems in those jurisdictions are unable to meet the demands for providing care Widespread transmission of disease
CDC HQ Coord.	<ul style="list-style-type: none"> Engage with state and tribal public health authorities Conduct baseline monitoring and surveillance activities domestically and internationally, to evaluation of risk to public health Support ongoing development and improvement of relevant MCM including vaccines Maintain a stockpile of critical countermeasures, including vaccine, therapeutic drugs and medical supplies Research, develop, and implement guidance on the use of NPI Review predetermined NPI for applicability 	<p>CDC Investigation Interval</p> <ul style="list-style-type: none"> Enhance surveillance for human cases and assess the potential for the strain to cause significant disease in humans Provide laboratory confirmation of human infections Assess the need for initiation of vaccine candidate development, manufacture, and/or stockpiling Review and update all guidance documents as needed Promote community mitigation preparedness activities Provide technical assistance to partners for reviewing and updating pandemic plans Develop or update risk communication messages and guidance, and share information with stakeholders With World Health Organization (WHO), convene international experts to implement risk assessments as appropriate (e.g. the Influenza Risk Assessment Tool (IRAT)) and assess the potential for the strain to cause significant disease in humans 	<p>CDC Recognition Interval</p> <ul style="list-style-type: none"> Consider CDC Incident Management Structure (IMS) activation Conduct enhanced surveillance for infections nationwide Assess performance of commercially available diagnostic kits to detect human infections or the need to develop novel technologies Develop, qualify, and distribute diagnostic reagents to public health laboratories to diagnose infections Continue disease characterization and according to perceived risk, adjust or develop medical countermeasures and NPI's as needed Provide updated guidance for border health and travelers' activities Review options for provision of mass health care with scarce resources Establish decision framework for initiating national vaccine campaign Develop or update a media relations and outreach plan Identify a source of financial support for states and localities to carry out response 	<p>CDC Initiation Interval</p> <ul style="list-style-type: none"> Consider CDC IMS activation Integrate with interagency coordinating mechanism as established by ASPR Conduct analyses and field studies-disseminate data regarding transmission, treatment, and prognosis Initiate targeted studies of clinical course and treatment response Implement and monitor existing vaccine distribution as appropriate Initiate action to award funds, as available, for SLTT response Consult with USDA to determine the applicability of possession and transfer regulations for this pathogen In rare instances where border screening may prevent disease entry, coordinate actions/guidance regarding international border controls with DHS Update and provide new risk messaging (including NPIs) and update guidance for detection, diagnosis, and treatment Update Travel Advisories 	<p>CDC Acceleration Interval</p> <ul style="list-style-type: none"> Continue CDC IMS activation As appropriate, transition surveillance to severe disease and syndromic surveillance Transition virologic testing to a sampling of viruses submitted by states Monitor antiviral use, effectiveness, and adverse events Implement vaccination campaign if stockpiled pandemic or newly developed antigen-specific pandemic vaccine is available Support state and tribal surveillance systems Update and disseminate risk messaging and guidance as needed Update Travel Advisories 	<p>CDC Acceleration Interval</p> <ul style="list-style-type: none"> Continue CDC IMS activation Monitor vaccination coverage levels, antiviral use, and adverse events Consider updated recommendations for control measures, surveillance protocols, etc. Continue to update and disseminate risk messaging and guidance, as needed.

Interagency Pandemic Crisis Action Plan (PanCAP) Synchronization Matrix – COVID – 19

**All activities are on order and at the direction of the Secretary of HHS. Staff Estimates are based on worst case forecast. Please refer to the Biologic Incident Annex for specifics on coordinating mechanisms. Finally, though this matrix covers domestic operations, links with international response will be required in anticipation of disease entry into US.*

Phase	Phase 1			Phase 2		
	1A – Normal Operations	1B – Increased Likelihood or Elevated Threat	1C – Near Certainty or Credible Threat	2A – Activation, Situational Assessment, and Movement	2B – Employment of Resources and Stabilization	2C – Intermediate Operations
Trigger	No specific threat of pandemic	Identification of a confirmed human case of a novel or re-emerging virus infection anywhere with potential to cause significant human disease and potential for pandemic	<ul style="list-style-type: none"> Confirmation of multiple human cases or clusters with virus characteristics indicating limited human-to-human transmission and heightened potential for pandemic Determination of a Significant Potential for a Public Health Emergency 	<ul style="list-style-type: none"> Demonstration of efficient and sustained human-to-human transmission of the virus Declaration of a Public Health Emergency One (1) or more clusters of cases in the U.S. 	<ul style="list-style-type: none"> Increasing number of cases or increasing rate of infection in US Healthcare system burden that exceed state resource capabilities National healthcare supply chain management unable to surge production and/or distribution to meet demand State/local request for assistance that requires federal coordination Increasing private sector request for assistance to support critical operations Greater than three (3) generations of human-to-human transmission, or detection of cases in the community without epidemiologic links in a single US contiguous jurisdiction with evidence that public health systems in that jurisdiction are unable to meet the demands for providing care 	<ul style="list-style-type: none"> Increasing rate of infection in US indicating established transmission, with long term service disruption and critical infrastructure impacts Industry business continuity plans cannot be executed due to insufficient personnel leading to significant disruption across sectors Presidential Stafford Act declaration State/local request for assistance that requires federal coordination Greater than three (3) generations of human-to-human transmission, or detection of cases in the community without epidemiologic links, two (2) or more non-contiguous jurisdictions with evidence that public health systems in those jurisdictions are unable to meet the demands for providing care. Wide-spread transmission of disease
ESF#1	Monitor and coordinate with partners			<ul style="list-style-type: none"> Provide technical assistance to federal and SLTT to determine the most viable transportation networks to, from, and within the incident area and on availability of accessible transportation Provide guidance on non-pharmaceutical interventions that impact or restrict transportation Maintain and revise continuity of operations plan, as needed At the request of Interagency partners, provide technical support to assist logistical movement operations Assist FEMA/HHS, or other interagency partners, to identify alternative, accessible transportation solutions for those who require assistance to access medical care Facilitate the movement of first responders and other FEMA, or Lead Federal Agency-identified teams, through providing regulatory relief and routing assistance Assist FEMA/HHS to identify alternative methods to transport contaminated solid materials, Category A Infectious Substances, or suspected biohazard contaminated substances Provide regulatory relief to transportation industry when appropriate 		
ESF#2	Monitor and coordinate with partners			<ul style="list-style-type: none"> Provide tactical communications support through Mobile Emergency Response Support (MERS) Develop strategies to support increased communications with separation of populations Develop plans to maintain continuity of operations for other Stafford Act declarations Coordinate with communications government and industry partners to exchange situational awareness, planning, and support activity execution 		
ESF#3	Monitor and coordinate with partners			<ul style="list-style-type: none"> Monitor for and redress impacts to critical USACE infrastructure resulting from incapacitated employees being unable to perform project site duties As ESF #3 lead, support FEMA concerning impacts to the power grid, water, waste water, and other critical infrastructure Deploy response teams as directed by FEMA mission assignments Develop and maintain continuity of operations plans to maintain USACE mission essential functions and meet national engineering requirements 		
ESF#4	Monitor and coordinate with partners			<ul style="list-style-type: none"> Provide U.S. Forest Service personnel to NRCC/RRCC (if activated) to coordinate primary agency and support agency duties identified in the ESF #4 Annex and other ESF annexes of the NRF Provide personnel, equipment, and supplies, as needed and if available, primarily for communications, aircraft, and base camps for deployed federal public health and medical teams, as identified in the ESF #8 Annex of the NRF Identify, train, and deploy personnel to support IMAT-A teams Develop plans to maintain continuity of operations for other Stafford Act declarations 		
ESF#5	DHS serves as the primary national-level hub for domestic situational awareness, common operating picture, information fusion, information sharing, communications and strategic-level operations coordination			<p>DHS:</p> <ul style="list-style-type: none"> Maintains situational awareness and review existing plans (air, land, maritime) to delay entry of a virus to the US (as appropriate) Monitor CIKR impacts <p>FEMA:</p> <ul style="list-style-type: none"> Support HHS as the LFA to develop overall incident situational awareness, including information collection, information management, modeling and analysis, and development of reports and information analysis (status of operations and impacts) Support HHS as the LFA in the update of federal plans to manage and support incident activities In coordination with HHS, ensure integration of domestic operations with international operations Collect, analyze, and disseminate non-health related capability and requirements/shortfall information from states Facilitate the provision of non-health emergency federal support to states, with or without a Stafford Act declaration Develop plans to maintain continuity of operations for other Stafford Act declarations 		

Interagency Pandemic Crisis Action Plan (PanCAP) Synchronization Matrix – COVID – 19

*All activities are on order and at the direction of the Secretary of HHS. Staff Estimates are based on worst case forecast. Please refer to the Biologic Incident Annex for specifics on coordinating mechanisms. Finally, though this matrix covers domestic operations, links with international response will be required in anticipation of disease entry into US.

Phase	Phase 1			Phase 2		
	1A – Normal Operations	1B – Increased Likelihood or Elevated Threat	1C – Near Certainty or Credible Threat	2A – Activation, Situational Assessment, and Movement	2B – Employment of Resources and Stabilization	2C – Intermediate Operations
Trigger	No specific threat of pandemic	Identification of a confirmed human case of a novel or re-emerging virus infection anywhere with potential to cause significant human disease and potential for pandemic	<ul style="list-style-type: none"> Confirmation of multiple human cases or clusters with virus characteristics indicating limited human-to-human transmission and heightened potential for pandemic Determination of a Significant Potential for a Public Health Emergency 	<ul style="list-style-type: none"> Demonstration of efficient and sustained human-to-human transmission of the virus Declaration of a Public Health Emergency One (1) or more clusters of cases in the U.S. 	<ul style="list-style-type: none"> Increasing number of cases or increasing rate of infection in US Healthcare system burden that exceed state resource capabilities National healthcare supply chain management unable to surge production and/or distribution to meet demand State/local request for assistance that requires federal coordination Increasing private-sector request for assistance to support cross-sector operations Greater than three (3) generations of human-to-human transmission, or detection of cases in the community without epidemiologic links in a single U.S. contiguous jurisdiction with evidence that public health systems in that jurisdiction are unable to meet the demands for providing care 	<ul style="list-style-type: none"> Increasing rate of infection in US indicating established transmission, with long term service disruption and critical infrastructure impacts Industry business continuity plans cannot be executed due to insufficient personnel leading to significant disruption across sectors Presidential Stafford Act declaration State/local request for assistance that requires federal coordination Greater than three (3) generations of human-to-human transmission, or detection of cases in the community without epidemiologic links, two (2) or more non-contiguous jurisdictions with evidence that public health systems in those jurisdictions are unable to meet the demands for providing care. Widespread transmission of disease
ESF #6	Monitor and coordinate with partners			<ul style="list-style-type: none"> Begin planning for Stafford Declaration due to a declared disaster during a pandemic (e.g., social distancing) Facilitate ESF #6 information coordination between federal agencies, NGOs, and state, tribe, territory, and local governments (SLTT) as required Assess supply chain impacts and their effects on Mass Care service delivery Coordinate with Regions to monitor and support MC/EA related requests from states, and determine need for support with modified MC/EA activities Coordinate with Logistics regarding availability of additional Mass Care supplies Deploy staff and resources as requested by HHS Determine congregate and non-congregate sheltering needs in support to HHS requirements for delivery of mass care and human services for other incidents in an area experiencing pandemic conditions 	<ul style="list-style-type: none"> Begin planning for Stafford Declaration during a pandemic (e.g., social distancing) Convene a Mass Care Task Force to address concurrent support for Stafford Act Declaration event and Pandemic Assess supply chain impacts and their effects on Mass Care service delivery Coordinate with Regions to monitor and support MC/EA related requests from states, and determine need for support with modified MC/EA activities Coordinate with Logistics regarding availability of additional Mass Care supplies Deploy staff and resources as requested by HHS Determine congregate and non-congregate sheltering needs in support to HHS requirements Facilitate ESF #6 information coordination between federal agencies, NGOs, and state, tribe, territory, and local governments (SLTT) as required Convene a Mass Care Task Force to address concurrent support for Stafford Act Declaration event and Pandemic 	<p>Mass Care/Emergency Assistance:</p> <ul style="list-style-type: none"> Provide ongoing guidance and support to Regions, State, Tribal, Territorial and national organizations on all components that support ongoing Mass Care operations. Determine the targeted Mass Care capability. Monitor and respond to resource requests to meet identified shortfalls. Gather and maintain situational awareness on the evolving needs of survivors; the fluctuating capabilities of response organizations and private sector entities; and the shifting goals and priorities of local, State, Tribal and Territorial government. <p>Community Services/Human Services:</p> <ul style="list-style-type: none"> In the event of an Individual Assistance declaration, utilize partner resources as a force multiplier for public information distribution (e.g., Department of Labor press releases, hotline numbers, etc.) Coordinate closely with NPSC to ensure survivors are not bombarded by calls. Ensure that all call-outs and socially distanced communications are accessible. Execute programs as described above with partners. Provide support to existing response structures using CSS programs (e.g., CCP services for first responders).

Interagency Pandemic Crisis Action Plan (PanCAP) Synchronization Matrix – COVID – 19

**All activities are on order and at the direction of the Secretary of HHS. Staff Estimates are based on worst case forecast. Please refer to the Biologic Incident Annex for specifics on coordinating mechanisms. Finally, though this matrix covers domestic operations, links with international response will be required in anticipation of disease entry into US.*

Phase	Phase 1			Phase 2		
	1A – Normal Operations	1B – Increased Likelihood or Elevated Threat	1C – Near Certainty or Credible Threat	2A – Activation, Situational Assessment, and Movement	2B – Employment of Resources and Stabilization	2C – Intermediate Operations
Trigger	No specific threat of pandemic	Identification of a confirmed human case of a novel or re-emerging virus infection anywhere with potential to cause significant human disease and potential for pandemic	<ul style="list-style-type: none"> Confirmation of multiple human cases or clusters with virus characteristics indicating limited human-to-human transmission and heightened potential for pandemic Determination of a Significant Potential for a Public Health Emergency 	<ul style="list-style-type: none"> Demonstration of efficient and sustained human-to-human transmission of the virus Declaration of a Public Health Emergency One (1) or more clusters of cases in the U.S. 	<ul style="list-style-type: none"> Increasing number of cases or increasing rate of infection in US Healthcare system burden that exceed state resource capabilities National healthcare supply chain management unable to surge production and/or distribution to meet demand State/local request for assistance that require federal coordination Increasing private-sector request for assistance to support cross-sector operations Greater than three (3) generations of human-to-human transmission, or detection of cases in the community without epidemiological links, two (2) or more non-contiguous jurisdictions with evidence that public health systems in those jurisdictions are unable to meet the demands for providing care 	<ul style="list-style-type: none"> Increasing rate of infection in US indicating established transmission, with long term service disruption and/or critical infrastructure impacts Industry/business continuity plans cannot be executed due to insufficient personnel leading to significant disruption across sectors Presidential Stafford Act declaration Strategic request for assistance that requires federal coordination Greater than three (3) generations of human-to-human transmission, or detection of cases in the community without epidemiological links, two (2) or more non-contiguous jurisdictions with evidence that public health systems in those jurisdictions are unable to meet the demands for providing care Widespread transmission of disease
ESF#7	Monitor and coordinate with partners		<ul style="list-style-type: none"> Alert, activate, and initiate deployment of resources to pre-incident locations Monitor to alert, activate, and initiate deployment of resources to pre-incident locations Monitor the various supply chains through LMD's Office of Business Industry, Infrastructure, and Integration (OB3I) Coordinate with Environmental, Safety, and Health, (ESH) to determine PPE requirements for deployed staff (and disposal requirements if any) Coordinate with ESH and OCF/Comptroller for funding Coordinate with ESF #6 for projected Mass Care requirements for implementation of logistics support to Mass Care services for the affected population Support initial operating facility (state EOC) and Joint Field Office if activated Execute logistics actions to support requirements throughout affected area(s) Develop initial plans to maintain continuity of operations for other Stafford Act declarations GSA determines which federally owned and leased buildings under GSA's jurisdiction, custody, or control, are safe to remain open and which should be closed and kept off limits to entrants Identify alternate shipping means if truckers are unavailable Provide Operational Staging Area support including retail fuel distribution and all non-medical logistics and base operating support for deployed medical personnel and support personnel to include food, shelter, fuel, and ground transportation GSA provides resource support for ESF #8 requirements as requested to meet needs of affected population Coordinate with Office of Policy and Program Analysis regarding Defense Production Act implementation Continue to monitor, assess and balance whole community resources with national logistics requirements Coordinate planning and operational analysis to deliver Transportation requirements Conduct assessments of the condition and safety of transportation routes and plan accordingly. Include routes to and within the quarantine area. ICW ESF 1. GSA: Provide public lands or facilities for the purpose of temporary internment (e.g., quarantine or isolation) GSA: Provide public lands or facilities to serve as temporary medical facilities Coordinate with ESF#6 and commercial transportation providers to determine PPE requirements, follow-up personnel assessment, and rules of engagements for those entering quarantine area. 	<ul style="list-style-type: none"> When required, initiate deployment of initial response resources in support of the event/natural disaster When required, deploy resources from distribution centers or vendors to Incident Support Base and other operating locations Monitor the various supply chains through LMD's Office of Business Industry, Infrastructure, and Integration (OB3I) Coordinate with Office of Policy and Program Analysis regarding Defense Production Act implementation Coordinate with ESF #6 for projected Mass Care requirements for implementation of logistics support to Mass Care services for the affected population Coordinate with Environmental, Safety, and Health, (ESH) to determine PPE requirements for deployed staff (and disposal requirements if any) Coordinate with ESH and OCF/Comptroller for funding Support initial operating facility (state EOC) and Joint Field Office if activated Implement logistics actions to support requirements throughout affected area(s) GSA determines which federally owned and leased buildings under GSA's jurisdiction, custody, or control, are safe to remain open and which should be closed and kept off limits to entrants Identify alternate shipping means if truckers are unavailable When required, initiate deployment of initial response resources in support of the event/natural disaster GSA provides resource support for ESF #8 requirements as requested to meet needs of affected population Coordinate with Office of Policy and Program Analysis regarding Defense Production Act implementation Prioritize transportation routes and identify control measures Assess resource requirements (trucks, trailers, MHE, warehousing, personnel) to support the transportation infrastructure and distribution pipeline Prioritize, adjudicate, and allocate resources for the delivery of Transportation requirements If required support ESF#6 with the movement of support and infected personnel—i.e. buses, mass transit 	<ul style="list-style-type: none"> Monitor the various supply chains through LMD's Office of Business Industry, Infrastructure, and Integration (OB3I) Develop retrograde operations plan Coordinate with ESH and OCF/Comptroller for funding Coordinate with ESF #6 for projected Mass Care requirements for implementation of logistics support to Mass Care services for the affected population Support initial operating facility (state EOC) and Joint Field Office if activated Implement logistics actions to support requirements throughout affected area(s) Execute plans to maintain continuity of operations for other Stafford Act declarations GSA determines which federally owned and leased buildings under GSA's jurisdiction, custody, or control, are safe to remain open and which should be closed and kept off limits to entrants Identify alternate shipping means if truckers are unavailable GSA provides resource support for ESF #8 requirements as requested to meet needs of affected population Coordinate with Office of Policy and Program Analysis regarding Defense Production Act implementation When required, initiate deployment of initial response resources in support of the event/natural disaster Monitor the various supply chains through LMD's Office of Business Industry, Infrastructure, and Integration (OB3I) Provide delivery of vital response personnel, equipment, and services into the affected area Respond to, coordinate, and prioritize the delivery of resources to disaster survivors and responders in the affected area 	

Interagency Pandemic Crisis Action Plan (PanCAP) Synchronization Matrix – COVID – 19

*All activities are on order and at the direction of the Secretary of HHS. Staff Estimates are based on worst case forecast. Please refer to the Biologic Incident Annex for specifics on coordinating mechanisms. Finally, though this matrix covers domestic operations, links with international response will be required in anticipation of disease entry into US.

Phase	Phase 1			Phase 2		
	1A – Normal Operations	1B – Increased Likelihood or Elevated Threat	1C – Near Certainty or Credible Threat	2A – Activation, Situational Assessment, and Movement	2B – Employment of Resources and Stabilization	2C – Intermediate Operations
Trigger	No specific threat of pandemic	Identification of a confirmed human case of a novel or re-emerging virus infection anywhere with potential to cause significant human disease and potential for pandemic	<ul style="list-style-type: none"> Confirmation of multiple human cases or clusters with virus characteristics indicating limited human-to-human transmission and heightened potential for pandemic Determination of a Significant Potential for a Public Health Emergency 	<ul style="list-style-type: none"> Demonstration of efficient and sustained human-to-human transmission of the virus Declaration of a Public Health Emergency One (1) or more clusters of cases in the U.S. 	<ul style="list-style-type: none"> Increasing number of cases or increasing rate of infection in US Healthcare system burden that exceeds state resource capabilities National healthcare supply chain management unable to surge production and/or distribution to meet demand State/local request for assistance that requires federal coordination Increasing private sector request for assistance to support cross-sector operations Greater than three (3) generations of human-to-human transmission, or detection of cases in the community without epidemiologic links in a single U.S. contiguous jurisdiction with evidence that public health systems in that jurisdiction are unable to meet the demands for providing care 	<ul style="list-style-type: none"> Increasing rate of infection in US indicating established transmission, with long term service disruption and critical infrastructure impacts Industry business continuity plans cannot be executed due to insufficient personnel leading to significant disruption across sectors Presidential Stafford Act declaration State/local request for assistance that requires federal coordination Greater than three (3) generations of human-to-human transmission, or detection of cases in the community without epidemiologic links, two (2) or more non-contiguous jurisdictions with evidence that public health systems in those jurisdictions are unable to meet the demands for providing care Widespread transmission of disease
ESF#8	<p>HHS:</p> <ul style="list-style-type: none"> Provides public health and medical expertise and guidance for pandemic planning Conduct surveillance for emerging virus threats 	<p>HHS:</p> <ul style="list-style-type: none"> Emergency Management Group (EMG) at steady state normal operations (Level III) Develop risk communication messages and share information stakeholders <p>DOD:</p> <ul style="list-style-type: none"> Augment public health and medical surveillance, laboratory diagnostics and confirmatory testing 	<p>HHS:</p> <ul style="list-style-type: none"> HHS SOC normal operations Level 2 Model and forecast impact of novel viruses for the interagency community Enhance surveillance for human cases and assess potential for human to human transmission Develop/update guidance for control measures (i.e., antiviral treatment and prophylaxis; personal protective equipment (PPE) use; community mitigation measures; and antiviral and vaccine prioritization, allocation, distribution, usage, and safety monitoring, etc.) Disseminate risk communication messages Provide public health and medical guidance that informs the risk communications campaign and public messaging regarding the pandemic Provide guidance and assistance to STTL on implementing control measures <p>VA:</p> <ul style="list-style-type: none"> Enhance VA facility surveillance 	<ul style="list-style-type: none"> HHS SOC at level 1 activation for interagency coordination Publish ESF-8 Operations Orders as appropriate Provide ESF #8 Liaison Officers (LNO) virtually to State EOCs/DOH as required Coordinate HHS federal assistance as needed Update recommended infectious disease control measures Disseminate updated risk communications messages Provide guidance to health care providers on strategies/ protocols for surge capacity, crisis standards of care, alternate care facilities, allocation of scarce resources Coordinate enhanced entry screening at designated airports with IA Develop plans to maintain continuity of operations for other disasters or Stafford Act declarations Identify and request interagency LNO(s) to support the HHS SOC in the SOC (e.g., DOD, FEMA, VA, ARC, DOJ, FEMA) 	<p>HHS continue actions from prior phases and:</p> <ul style="list-style-type: none"> Deploy resources Implement recommended control measures and begin to assess effectiveness Monitor for health care system stress and surge capability and potential need for Federal assistance Monitor health sector CIKR for early warning shortages <p>VA:</p> <ul style="list-style-type: none"> Designate and deploy available medical, surgical, mental health, and other health service support resources Provide liaisons as ESF #8 assets to federal and state emergency coordination entities <p>DOD:</p> <ul style="list-style-type: none"> Deploy available personnel to provide technical assistance and/or medical support <p>DOL:</p> <ul style="list-style-type: none"> If worker safety and health support is needed beyond what DOL/OSHA provides under its authorities and funding, facilitate DOL coordination of safety and health assets of cooperating agencies and the private sector through an IAA with HHS or a mission assignment to implement the Worker Safety and Health Support Annex (if there is a Stafford Act declaration) 	<p>HHS continue actions from prior phases and:</p> <ul style="list-style-type: none"> Support point of distribution (POD) operations and medical screening Deploy available ESF-8 assets to supplement community-based medical and alternate care facilities Rotate and resupply ESF #8 personnel and teams <p>VA:</p> <ul style="list-style-type: none"> Provide mortuary assistance in the interment of human remains Furnish available VA hospital care and medical services in a major disaster or emergency Provide acquisition and logistic support to public health/medical response operations <p>ARC:</p> <ul style="list-style-type: none"> Provide for disaster related health and behavior health needs through direct services or referrals <p>DOD:</p> <ul style="list-style-type: none"> Provide available logistical support (e.g., transportation, security) to public health/medical response ops Provide available epidemiological and occ. health support, telemedicine, and other specialized medical support Provide available fatality management assistance, preparation of remains and temporary interment facilities Provide available medical supplies and materiel for use at points of distribution, hospitals or clinics, or medical care locations operated for exposed populations, incident victims, or ill patients Provide available temporary medical facilities to decompress hospital emergency department surge

Interagency Pandemic Crisis Action Plan (PanCAP) Synchronization Matrix – COVID – 19

*All activities are on order and at the direction of the Secretary of HHS. Staff Estimates are based on worst case forecast. Please refer to the Biologic Incident Annex for specifics on coordinating mechanisms. Finally, though this matrix covers domestic operations, links with international response will be required in anticipation of disease entry into US.

Phase	Phase 1			Phase 2		
	1A – Normal Operations	1B – Increased Likelihood or Elevated Threat	1C – Near Certainty or Credible Threat	2A – Activation, Situational Assessment, and Movement	2B – Employment of Resources and Stabilization	2C – Intermediate Operations
Trigger	No specific threat of pandemic	Identification of a confirmed human case of a novel or re-emerging virus infection anywhere with potential to cause significant human disease and potential for pandemic	<ul style="list-style-type: none"> Confirmation of multiple human cases or clusters with virus characteristics indicating limited human-to-human transmission and heightened potential for pandemic Determination of a Significant Potential for a Public Health Emergency 	<ul style="list-style-type: none"> Demonstration of efficient and sustained human-to-human transmission of the virus Declaration of a Public Health Emergency One (1) or more clusters of cases in the U.S. 	<ul style="list-style-type: none"> Increasing number of cases or increasing rate of infection in US Healthcare system burden that exceed state resource capabilities National healthcare supply chain management unable to surge production and/or distribution to meet demand State/local request for assistance that requires federal coordination Increasing private-sector request for assistance to support cross-sector operations Greater than three (3) generations of human-to-human transmission, or detection of cases in the community without epidemiologic links in a single U.S. contiguous jurisdiction with evidence that public health systems in that jurisdiction are unable to meet the demands for providing care 	<ul style="list-style-type: none"> Increasing rate of infection in US indicating established transmission, with long term service disruption and critical infrastructure impacts Industry business continuity plans cannot be executed due to insufficient personnel leading to significant disruption across sectors Presidential Stafford Act declaration State/local request for assistance that requires federal coordination Greater than three (3) generations of human-to-human transmission, or detection of cases in the community without epidemiologic links, two (2) or more non-contiguous jurisdictions with evidence that public health systems in those jurisdictions are unable to meet the demands for providing care. Widespread transmission of disease
ESF#9	Monitor and coordinate with partners			<ul style="list-style-type: none"> Monitor impacts of pandemic on search and rescue force readiness Ensure availability of adequate supply of respiratory PPE and any other required PPE Develop plans to maintain continuity of operations for other Stafford Act declarations 		
ESF#10	Monitor and coordinate with partners			<ul style="list-style-type: none"> Maintain situation awareness and coordination with affected Regions Consider elevated operational status of HQ EOC Coordinate with all Region(s) in the US regarding logistics, planning, potential Mission Assignments in support of other ESFs, and SA Support ESF#10 Mission Assignments and other ESFs as requested Support the NRCC and RRCCs as requested Consider requests for assistance from state, tribal, local governments Initiate appropriate portions of COOP plans/policies such as social distancing including reduced staffing of HQ and Regional EOCs Implement Crisis Communication Plan Develop plans to maintain continuity of operations for other Stafford Act declarations 		
ESF#11	Monitor and coordinate with partners	<ul style="list-style-type: none"> Deploy support as available and mission assigned Implement plans to maintain continuity of operations 		<ul style="list-style-type: none"> Provide personnel to RRCC/NRCC, HHS SOC, Task Force/IMTs (if activated or funded under Economy Act, an IAA, Stafford Act or other federal-to-federal approved funding mechanism) to perform duties of ESF #11, Agriculture and Natural Resources Coordinate with all Region(s) regarding planning for potential ESF #11 Mission Assignments for multi-region responses Maintain situation awareness with affected Regions Contribute to public health messages regarding animal/veterinary and/or food safety Coordinate with ESF #8 if virus has animal host and develop and assist states and Regions implement animal control measures as applicable Provide personnel to ensure control against the spread of animal disease agents in support of disaster operations Provide technical expertise in support of animal and agricultural emergency management Develop plans to maintain continuity of operations for other Stafford Act declarations USDA coordinates with federal departments to prevent importation of infected birds and animals into US USDA APHIS coordinates with Federal, State and local agencies providing a comprehensive, nationally coordinated system throughout the US in conducting disease surveillance and emergency response for diseases of concern in wildlife. DOI USGS identifies and characterizes viruses in wildlife that have pandemic potential and works with USDA's APHIS regarding wildlife zoonotic disease <ul style="list-style-type: none"> DOI: Provide public lands or facilities for the purpose of temporary interment (e.g., quarantine or isolation) Provide technical expertise in support of nutrition assistance programs Coordinate with states to support nutrition assistance, including approving requested waivers and flexibilities to nutrition assistance programs Coordinate with HHS Interagency Task Force(s) and SOC activates to ensure the USDA and DOI collaboration with HHS to deliver effective "one health" response that integrates human, animal, and environmental health Ensure ongoing coordination with ESF#8, that animal/veterinary health issues (including both disease management and medical management) are supported Coordinate with ESF #8 on management of zoonotic disease and on animal/veterinary issues Consider requests for assistance from state and tribes 		

Interagency Pandemic Crisis Action Plan (PanCAP) Synchronization Matrix – COVID – 19

**All activities are on order and at the direction of the Secretary of HHS. Staff Estimates are based on worst case forecast. Please refer to the Biologic Incident Annex for specifics on coordinating mechanisms. Finally, though this matrix covers domestic operations, links with international response will be required in anticipation of disease entry into US.*

Phase	Phase 1			Phase 2		
	1A – Normal Operations	1B – Increased Likelihood or Elevated Threat	1C – Near Certainty or Credible Threat	2A – Activation, Situational Assessment, and Movement	2B – Employment of Resources and Stabilization	2C – Intermediate Operations
Trigger	No specific threat of pandemic	Identification of a confirmed human case of a novel or re-emerging virus infection anywhere with potential to cause significant human disease and potential for pandemic	<ul style="list-style-type: none"> Confirmation of multiple human cases or clusters with virus characteristics indicating limited human-to-human transmission and heightened potential for pandemic Determination of a Significant Potential for a Public Health Emergency 	<ul style="list-style-type: none"> Demonstration of efficient and sustained human-to-human transmission of the virus Declaration of a Public Health Emergency One (1) or more clusters of cases in the U.S. 	<ul style="list-style-type: none"> Increasing number of cases or increasing rate of infection in US Healthcare system burden that exceed state resource capabilities National healthcare supply chain management unable to surge production and/or distribution to meet demand State/local request for assistance that requires federal coordination Increasing private-sector request for assistance to support cross-sector operations Greater than three (3) generations of human-to-human transmission, or detection of cases in the community without epidemiologic links in a single U.S. contiguous jurisdiction with evidence that public health systems in that jurisdiction are unable to meet the demands for providing care 	<ul style="list-style-type: none"> Increasing rate of infection in US indicating established transmission, with long term service disruption and critical infrastructure impacts Industry business continuity plans cannot be executed due to insufficient personnel leading to significant disruption across sectors Presidential Stafford Act declaration State/local request for assistance that requires federal coordination Greater than three (3) generations of human-to-human transmission, or detection of cases in the community without epidemiologic links, two (2) or more non-contiguous jurisdictions with evidence that public health systems in those jurisdictions are unable to meet the demands for providing care. Widespread transmission of disease
ESF#12	Monitor and coordinate with partners			<ul style="list-style-type: none"> Deploy teams as needed Develop plans to maintain continuity of operations for other Stafford Act declarations 		
ESF#13	Monitor and coordinate with partners			<ul style="list-style-type: none"> Provide credible threat information regarding SNS transportation and vaccine distribution Provide security for the transport and distribution of SNS and vaccine Develop plans to maintain continuity of operations for other Stafford Act declarations 		
ESF#15	Monitor and coordinate with partners	Disseminate HHS initial risk communication messages to all internal and external stakeholders		<ul style="list-style-type: none"> Conduct national and state communication coordination calls to exchange critical information Disseminate and amplify HHS-cleared messaging to provide incident-related information through the media and other platforms in accessible formats and multiple languages to individuals, households, businesses, and industries directly or indirectly affected by the incident Support HHS in establishing contact with congressional, SLTT offices representing affected areas to provide information on the incident and organize congressional briefings and congressional visits, as required Promote federal interaction and implement information sharing with local, state, tribal, territorial, and insular area governments Inform local, state, tribal, territorial, and insular area elected and appointed officials on response efforts and recovery programs Coordinate incident information, public affairs activities, and media access to information regarding the latest developments Ensure Unified Coordination Group ESF #15 activities are coordinated with the Offices of Public Affairs within HHS and DHS (e.g., NJIC) Coordinate with HHS to conduct social listening and create public sentiment reports as requested If requested by HHS and State/Territorial government, deploy an External Affairs Liaison with an Incident Management Action Team (IMAT) 		

Interagency Pandemic Crisis Action Plan (PanCAP) Synchronization Matrix – COVID – 19

*All activities are on order and at the direction of the Secretary of HHS. Staff Estimates are based on worst case forecast. Please refer to the Biologic Incident Annex for specifics on coordinating mechanisms. Finally, though this matrix covers domestic operations, links with international response will be required in anticipation of disease entry into US.

Phase	Phase 1			Phase 2		
	1A – Normal Operations	1B – Increased Likelihood or Elevated Threat	1C – Near Certainty or Credible Threat	2A – Activation, Situational Assessment, and Movement	2B – Employment of Resources and Stabilization	2C – Intermediate Operations
Trigger	No specific threat of pandemic	Identification of a confirmed human case of a novel or re-emerging virus infection anywhere with potential to cause significant human disease and potential for pandemic	<ul style="list-style-type: none"> Confirmation of multiple human cases or clusters with virus characteristics indicating limited human-to-human transmission and heightened potential for pandemic Determination of a Significant Potential for a Public Health Emergency 	<ul style="list-style-type: none"> Demonstration of efficient and sustained human-to-human transmission of the virus Declaration of a Public Health Emergency One (1) or more clusters of cases in the U.S. 	<ul style="list-style-type: none"> Increasing number of cases or increasing rate of infection in US Healthcare system burden that exceeds state resource capabilities National healthcare supply chain management unable to surge production and/or distribution to meet demand State/local request for assistance that requires federal coordination Increasing private-sector request for assistance to support cross-sector operations Greater than three (3) generations of human-to-human transmission, or detection of cases in the community without epidemiologic links in a single US contiguous jurisdiction with evidence that public health systems in that jurisdiction are unable to meet the demands for providing care 	<ul style="list-style-type: none"> Increasing rate of infection in US indicating established transmission with long term service disruption and critical infrastructure impacts Industry business continuity plans cannot be executed due to insufficient personnel leading to significant disruption across sectors Presidential Stafford Act declaration Statutory request for assistance that requires federal coordination Greater than three (3) generations of human-to-human transmission, or detection of cases in the community without epidemiologic links, two (2) or more non-contiguous jurisdictions with evidence that public health systems in those jurisdictions are unable to meet the demands for providing care Witnessed transmission of disease
ESF#14	<p>Monitor and coordinate with partners</p> <ul style="list-style-type: none"> Coordinate with ESF and Cross Partners to determine scale of private sector is appropriate Support HHS and CDC messaging. Continue monitoring and assessment of situation with partners. Coordinate potential messaging. 	<ul style="list-style-type: none"> Coordinate with ESF and Cross Partners to determine scale of private sector is appropriate Support HHS and CDC messaging. Continue monitoring and assessment of situation with partners. Coordinate potential messaging. 	<ul style="list-style-type: none"> ESF#14 activated at request of LFA Coordinate cross sector engagement, assessments, collaboration and messaging. Begin analysis on potential cross sector, Lifeline and supply chain impacts. Coordinate supply chain and economic impact analysis. Identify private sector response plans. NBEOC activated conducting calls weekly to identify private sector challenges and reinforce HHS ASPR and CDC messaging and information sharing through NBEOC dashboard Develop RFIS for each critical sector to shape awareness of containment/mitigation actions, operational resilience challenges, and actions Federal government can take Disseminate guidance for business continuity in coordination with HHS ASPR, CDC. Identify barriers to normal supply chain functions, business continuity, and infrastructure resilience – identifying limits on return to normalcy impacting domestic containment and potential mitigation. NBEOC produce PULSE business landscape report for incident and update as needed Coordinate with FEMA OPPA DPA Program Office to develop potential COAS for industry support Build understanding of private sector capacity, capabilities and operational limiting factors related to mitigation. Obtain indicators and estimates of HC supply chain disruption Identify alternate sources of production and distribution based on ASPR scenarios Obtain indicators and estimates of HC supply chain disruption. Identify private sector plans and activities for commercial continuity, commodity resupply, and Lifelines stabilization. 	<ul style="list-style-type: none"> Identify and assess viability of key supply chain nodes for potential realignment activity of global supply chains and develop supply chain scenarios to assist planning for containment and mitigation. Assist CDC and HHS APR with subject matter expertise and data-driven dynamic products to inform global supply chain insights. Convene industry stakeholders on specific current or anticipated supply chain concerns including alleviating tension with use of the Defense Production Act (DPA). Identify alternate sources of production and distribution based on ASPR scenarios Channel humanitarian and other offers of assistance for response in coordination with Mass Care (ESF-6) NRMC produces Infrastructure Outlook Briefing for COVID19 & National Critical Functions of concern. Convene SCC/GSS and Cross Sector Coordinating Council as appropriate NRMC produces Infrastructure Outlook Briefing as appropriate for COVID19 & National Critical Functions of Concern Conduct information sharing call with Regions & state private sector programs to identify SLTT program postures and support required Identify data sets useful for assessing economic levers that will need to be addressed inclusive of domestic and international trade. Identify trade barriers impeding flow of HC product and critical components to CONUS Develop estimate of long-term business recovery challenges and economic risks to impacted communities in coordination with National Economic Council and Council of Economic Advisors Identify cascading effects of mitigation measures and courses of action for realigning supply chains and commercial activity supporting Community Lifelines. 	<ul style="list-style-type: none"> ESF-14 activated as needed for Regional Response Coordination Center supporting SLTT operations Compile reports and assess business status, supply chain impacts, and vulnerabilities PULSE economic data sources and analytics platform implemented to assist interagency, Regions, and SLTT with community mitigation planning and implementation Coordinate with National Economic Council, Department of State and Department of Commerce on ensuring USG global economic interests are safeguarded through supply chain stabilization Develop understanding of industry and sector mitigation plans for alignment with Federal and State planning efforts. Enable resource allocation and adjudication decision support with ESF-5. Provide status reports on commercial resource shortages and associated impacts, and identify options for stabilization Identify commercial capabilities enabling community mitigation in support of affected jurisdictions Convene ESF-14 coordinating calls as appropriate with Primary and Supporting Agencies to develop priority actions Identify business and supply chain impacts and community lifeline interdependencies with targets of stabilization as required Identify economic consequence potential effects of mitigation measures under consideration for tradeoff consideration Notify interagency economic stakeholders, develop indicators and triggers relevant to stabilization of community lifelines. Convene Economic Assessment Group. 	<ul style="list-style-type: none"> Assist in facilitating commercial movement in coordination with Federal family and jurisdictions Monitor, analyze, and assess impacts of changes in the operating environment to infrastructure (or cyber) vulnerabilities and threats Identify business resumption requirements; support development of solutions to enable private sector restoration of goods and services for Community Lifeline Stabilization. Identify private sector plans and activities to restore commercial activity, commodity resupply, and economic viability; facilitate ongoing alignment into operations Continue assessing National Critical Functions of concern and provide options for alleviating disruption to National Critical Functions. Continue consolidating status of private sector operations for situational awareness Continue providing ESF#14 mechanisms as platforms for delivering messaging to stakeholders and consistent, open lines of communication. Develop anticipated restoration timeline for supply chains and economic indicators for stabilization Continue informing Whole of Government procurement decisions with situational awareness of viable commercial capability as needed.

Annex Y. Glossary

Definitions

For additional definitions, reference the BIA.

Investigation – Pandemic interval reflecting investigation of cases of novel virus infection in humans.

Recognition – Pandemic interval reflecting recognition of increased potential for ongoing transmission of a novel virus.

Initiation – Pandemic interval reflecting the initiation of a pandemic wave.

Isolation – The restriction of movement of persons having or suspected of having a communicable disease in order to minimize contact with susceptible persons.

Mitigation - The Mitigation Phase, often referred to in CDC doctrine as community mitigation, leverages individual and community nonpharmaceutical interventions (NPIs) to help slow the spread of respiratory virus infections. Early, targeted, and layered use of multiple NPIs should be initiated early in a pandemic before local epidemics grow exponentially, be targeted toward those at the nexus of transmission (in affected areas where the novel virus circulates), and be layered together to reduce community transmission as much as possible. These include actions an individual or family can take, actions our healthcare system can take, and actions our community (schools, faith-based organizations, businesses) can take. Examples of NPIs include voluntary home isolation of ill persons (staying home when ill); respiratory etiquette and hand hygiene; self-monitoring for illness and understanding homecare and knowing when to seek care; taking infection control measures when caring for patients who may be ill; telecommuting and remote-meeting options in workplaces; mass gathering modifications, postponements, or cancellations; and routine cleaning of frequently touched surfaces and objects in homes, child care facilities, schools, and workplaces.

Acronyms

ASPR	Assistant Secretary for Preparedness and Response (HHS)
BIA	Biological Incident Annex
CDC	Centers for Disease Control and Prevention (HHS)
CIKR	Critical Infrastructure Key Resources
CIR	Critical Information Requirement(s)
CNCS	Corporation for National and Community Service
COOP	Continuity of Operations
DHS	Department of Homeland Security
DLG	Disaster Leaders Group
DOC	Department of Commerce
DOD	Department of Defense
DOH	Department of Health (state)
DOI	Department of Interior
DOL	Department of Labor
DOT	Department of Transportation
DPA	Defense Production Act
ED	Department of Education
EEI	Essential Element(s) of Information
EMG	Emergency Management Group
EOC	Emergency Operations Center
ESFLG	Emergency Support Function Leaders Group
FEMA	Federal Emergency Management Agency
FIOP	Federal Interagency Operational Plan
FPO	Field Project Officer
FSIS	Food Safety and Inspection
GIS	Geospatial Information Systems
GSA	General Services Administration
HAZMAT	Hazardous Materials
HHS	Department of Health and Human Services
HPP	Hospital Preparedness Program
IHR	International Health Regulations

IAA	Interagency Agreement
IATAC	Individual Assistance Technical Assistance Contract
IMS	Information Management Structure
IRAT	Influenza Risk Assessment Tool
FIOP	Federal Interagency Operations Plan
JIAG	Joint Incident Advisory Group
LFA	Lead Federal Agency
LFO	Lead Federal Official
LNO	Liaison Officer
MC/EA	Mass Care/Emergency Assistance
MCM	Medical Countermeasures
MDB	Multilateral Development Bank
MERS	Mobile Emergency Response Support
MERS	Middle East Respiratory Syndrome
MCC	Movement Coordination Center
NDMS	National Disaster Medical System
NGB	National Guard Bureau
NJIC	National Joint Information Center
NRCC	National Response Coordination Center
NRF	National Response Framework
NOC	National Operations Center (NOC)
NPI	Non-pharmaceutical intervention
NSC	National Security Council
NSS	National Shelter System
OPM	Office of Personnel Management
OSHA	Office of Safety and Health Administration
PanCAP	Pandemic Crisis Action Plan
PHE	Public Health Emergency
PHEIC	Public Health Emergency of International Concern
PIF	Pandemic Intervals Framework
PIO	Public Information Officer
POTUS	President of the United States
PUI	Person Under Investigation

PPE	Personal Protective Equipment
REC	Regional Emergency Coordinator
RRCC	Regional Response Coordination Center
SARS	Severe Acute Respiratory Syndrome
SHRM	Safety, Health, and Medical Readiness
SLB	Senior Leader Brief
SLTT	State, Local, Tribal, and Territorial
SNS	Strategic National Stockpile
SOC	HHS Secretary's Operation Center
TREAS	Department of Treasury
UCG	Unified Coordination Group
U.S.	United States
USCG	United States Coast Guard
USDA	United States Department of Agriculture
USG	United States Government
VA	Veterans Affairs