Information for First Responders on Maintaining Operational Capabilities during a Pandemic

Table of Contents

Disclaimer

This document, in conjunction with the DHS *Pandemic Influenza Best Practices and Model Protocols* (2007), is intended to support the first responders' efforts to provide the best possible service to their team and their community. In the midst of a pandemic, first responder leaders and operators should integrate this information with their existing planning efforts, knowledge, experience, and training and apply it to their specific situation when appropriate.

"America's first responders stand at the front lines of all emergencies."

--Secretary Janet Napolitano

Executive Summary

First responders have a critical role in prehospital emergency care and must continue to provide this essential service and fill the many emergency response roles in a community. The first responder community includes: fire, emergency medical services, law enforcement, emergency management, and 9-1-1 telecommunications.

During a severe pandemic, workloads will increase and staff sizes will diminish as employees and their families become ill. Contingency planning now can help reduce the worst impacts: smart planning can save lives.

To help with planning for the impacts of a severe pandemic, this document provides the following kinds of information for first responders:

- Potential ways to adjust operations to maintain readiness and response
- Potential ways for leaders in the first responder community at the local level, including two planning tools
- Reference sheets with discipline-specific potential action steps

This document was a joint effort by the Department of Homeland Security's Office of Health Affairs and U.S. Fire Administration with major contributions from a working group of first responders. It provides supplemental information to *Pandemic Influenza: Best Practices and Model Protocols* (April 2007) and to the FEMA *IS-520 Introduction to COOP for Pandemic Influenza* on-line course (August 2009).

While background information about pandemic influenza is also provided, updated influenza information should be gathered regularly. Current information about circulating influenza viruses, including important guidance, is provided by the Department of Health and Human Services at www.flu.gov. State and local public health organizations will have the most current information regarding the status of pandemic in your jurisdiction. Communication and coordination with these entities is an essential part of planning as well as actual operations.

Better-protected first responders can better protect their communities. We hope this information contributes to a safer and healthier first responder workforce.

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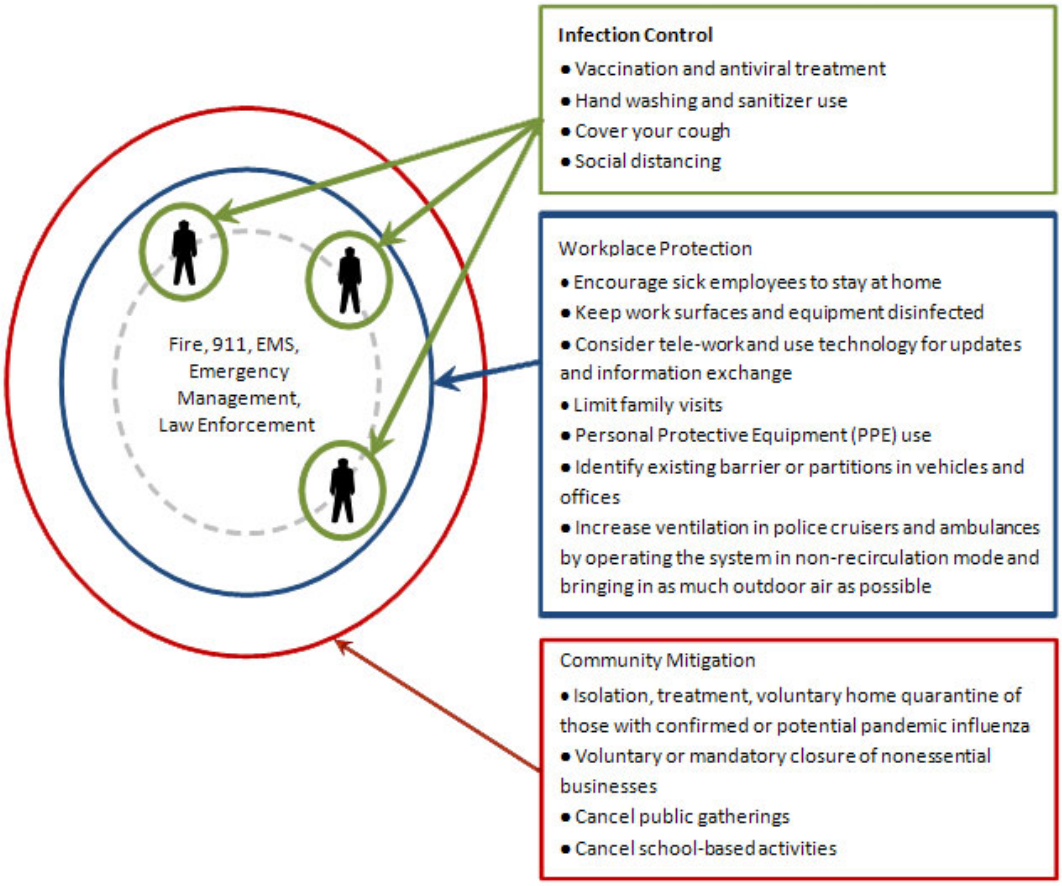
Protecting First Responder Workforces and their Families

Protecting first responder workforces and their families contributes to the safety and security of a community during a pandemic influenza. As a component of the Nation's critical infrastructure, emergency services play a vital role in responding to requests for assistance, triaging patients, and providing emergency treatment to influenza patients. Coordination among public safety answering points, EMS, healthcare facilities (such as emergency departments), and the public health system is important for a coordinated response to pandemic influenza.

Layered Defense

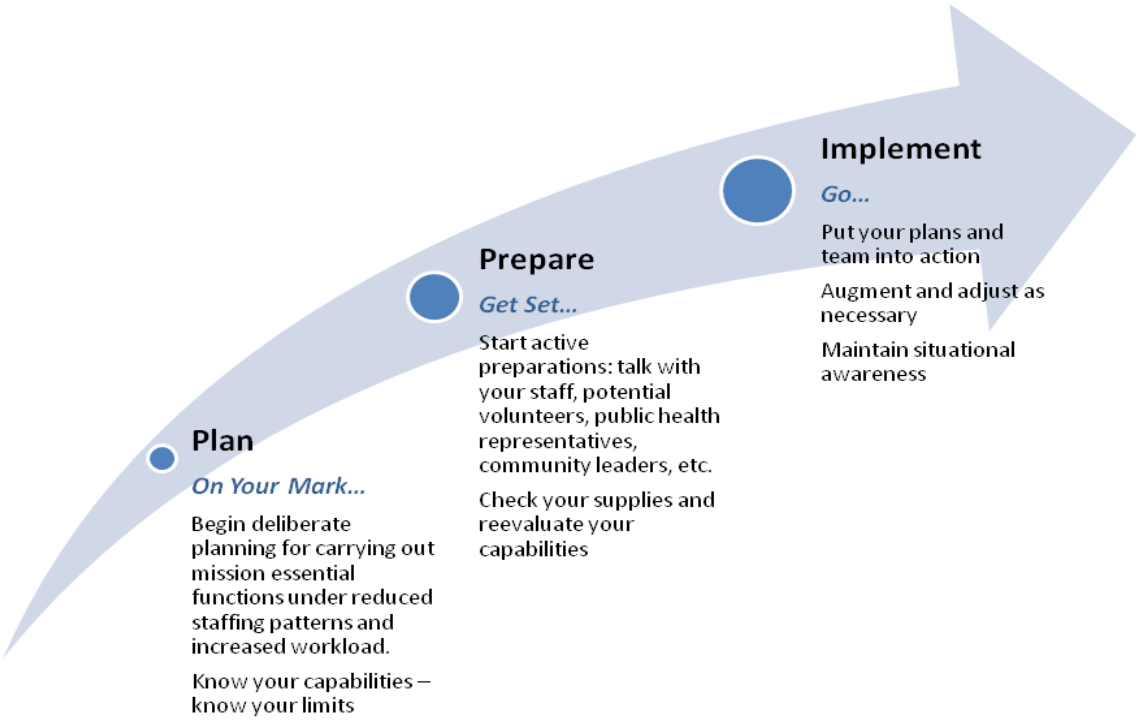
A common security concept is that of layered defense or layered protection. The goal is to create multiple layers of protective measures against exposure to the influenza virus for the first responder. The more layers of protection, the better protected a person will be. For first responders, the goal is to protect the emergency service or function that is performed by the emergency service responder. The responders, in turn, protect their families, their workplaces, and the community at large. Better-protected first responders are thereby better able to protect their communities.



Adjusting Operations to Maintain Readiness and Response

As incidents change in size, scope, and complexity, first responders must adapt to meet requirements. End-to-end operational planning for a pandemic event includes scaling up preparedness efforts to meet the acute workload surge. This will include reaching out to former employees and others in the community who can serve as volunteers. Conversely, scaling down is equally important as the workload demand subsides and conditions return to normal operating tempo.

Scaling up can be done vertically and horizontally - vertically, by adding more resources to a single capability or service; horizontally, by adding more capabilities or services to one first responder system. A suggested model is shown below that shows leadership actions to be implemented as the pandemic situation increases in intensity and severity.



As the urgency and intensity of the pandemic situation subsides, leaders must closely monitor the re-entry of regular paid staff back to the workforce and begin the process of appropriately dismissing volunteers. Additionally, other urgent or non-traditional measures that were implemented in the beginning of the pandemic event to manage the workload intensity can be adjusted to meet the changing situation.

Leadership Actions during a Pandemic

Employee risks of occupational exposure to influenza during a pandemic may vary widely. The level of risk depends in part on the severity of the influenza, whether jobs require proximity to people actually or potentially infected with the pandemic influenza virus, or whether the employees are required to have either repeated or extended contact with known or suspected virus sources such as coworkers, the general public, outpatients, school children or other similar individuals or groups.

- Employers of first responders may consider upgrading protective measures for these employees beyond what would be suggested by their exposure risk due to the necessity of such services for the functioning of society as well as the potential difficulties in replacing them during a pandemic.[1]
- Employees in high-risk occupations may have heightened concern about their own safety and possible implications for their families. Such workplaces may experience greater employee absenteeism than other, lower-risk workplaces. Talk to your employees about resources that can help them in the event of a pandemic crisis.[2]

While each first responder and first responder organization will need to consider resources and work through options together, consider the following ideas when planning:

Staffing

During a pandemic, a major challenge could be the reduction in the workforce due to absenteeism. It is important to identify resources for use during a pandemic before there are severe impacts in your community. Responding to a pandemic is a shared community responsibility. Consider some of the following ideas:

- Establish relationships with local Community Emergency Response Teams, high schools, junior colleges, faith-based organizations, and local industry.
    - Train and use those people with transferable skills, such as school bus drivers and truck drivers as ambulance drivers if allowable under State and local law.
- Check with retirees or previously active members on their availability for duty if needed.
- Post up-to-date flu information in your station or office and where workers can access the information any time (via electronic social media, agency websites, etc.).
- Work with your community to create adult day-care centers for sick families so that employees are confident that their families are cared for while they are at work.

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[1] OSHA. *Guidance on Preparing Workplaces for an Influenza Pandemic*, p. 10-12. www.osha.gov/Publications/OSHA3327pandemic.pdf.

[2] OSHA. *Guidance on Preparing Workplaces for an Influenza Pandemic*, p. 33. http://www.osha.gov/Publications/OSHA3327pandemic.pdf.

- Track your sick employees and plan for replacements.
- Re-purpose or reassign available employees to the most mission essential jobs: use available employees for mission essential jobs; use unskilled volunteers for nonessential work.
- Ensure that all mission essential tasks, rosters, training and proficiency are maintained to ensure coverage is three-deep.

Training

- Identify core skills that may be able to be taught quickly to new volunteers—for example, how to pull fire hoses, provide basic care, check meters, and record incoming calls.
- Put aside non-essential routine training in favor of specific pandemic influenza training.
- Cross-train first responders to perform different duties.

Workforce Protection

- Strongly encourage vaccinations: Work with your state leadership to authorize EMT-Intermediates, paramedics, dentists, etc., to provide vaccines to your workforce and the community at large.
    - Provide incentives to employees to get vaccinated.
- Active monitoring: screen your employees for flu symptoms at the beginning of their shift.
- Provide telecommuting tools for employees and leadership. Ensure that they have the appropriate technology to do so (phone line, Internet access, home computer, etc.).
- Provide videoconferencing (webcams) for first responders and families to maintain daily contact.
- Watch for fatigue and stress: ensure that employees are taking care of themselves with proper nutrition, breaks, hydration, etc.
- Provide emotional support and consider:
    - Aggressively engage peer support.
    - Telephone use for counseling to reduce exposure.
- Limit workplace visits by nonessential personnel.
- Offer longer-term on-site housing (if appropriate) for your employees during the height of the pandemic.
- Plan for and use basic hygiene precautions and workplace policies.
- Plan for and use social distancing precautions.
- Provide and use personal protective equipment (PPE).
    - The use of a respirator is likely to be of most benefit when a properly fitted respirator is used consistently. Note that most influenza viruses are droplet spread and the science is not clear.

- Implement support services to address stresses to worker health.
- Communicate exposure risk and selection of controls to workers.
- Install sneeze guards, windows at intake areas, and other barriers between workers and the general public.
- Rearrange or reorient service areas and workspaces so that workers are separated from co-workers, patients, visitors, and the general public by at least 6 feet.

Potential Volunteers in Your Community	What Duties Can Supplemental Volunteers Be Considered To Contribute?
• Community Emergency Response Teams (CERT) • Medical Reserve Corps • Retired professionals: police, fire, EMS, dispatchers, telecommunicators/dispatchers, emergency managers • Security Officers • Other adults in the community: teachers, school PTA members, ski patrols • Available government employees • Faith-based organization members; church groups • Youth groups, such as Scouts • High school and college students • Bus and school bus drivers and truck drivers	• Answer telephones; refer public inquiries • Shop for and prepare meals • Triage calls • Relay public information messages to local media outlets • Resupply fire trucks and ambulances • Decontaminate gear, fire trucks, and ambulances • Maintain nonessential services, such as fire hydrant inspection • Drive emergency vehicles • Assist with transporting patients to and from medical facilities • Provide temporary staffing if they have similar skill sets • Direct traffic, manage crowds, check meters

- Identify existing barriers or partitions in vehicles and offices. Determine ways to modify service areas to increase space between workers, coworkers, and the public (e.g., install partitions, use stand off distance).
- Increase ventilation in police cruisers and ambulances by operating the system in non-recirculation mode and bringing in as much outdoor air as possible by opening windows.
- Try not to use other workers' phones, desks, offices, or other work tools and equipment.
- For more detailed information, see the OSHA guidance at: http://www.osha.gov/dsg/topics/pandemicflu/index.html and the CDC Interim Guidance at: http://www.cdc.gov/h1n1flu/masks.htm.

Sustainability

- Plan for alternative sources of food and water during a pandemic.
    - Store a supply of dry, non-perishable food and potable water onsite.
- Include local private-sector companies (big-box retail stores, supermarkets, department stores, local medical supply stores, local restaurants, etc.) in your planning.

- Discuss how private-sector companies could provide goods and services in an emergency, with reimbursement coming later (i.e. pre-approved lines of credit).

Resource Sharing

- Do not assume business as usual. Current mutual-aid agreements may not be reliable during a pandemic.
    - Communicate daily with your mutual-aid partners to understand their situation and how you can help one another.
- Consider regional response: work with agencies in your region or community and take turns standing down if too many employees from one station are out ill.

Public Communication and Education

- Educate the general population on basic first aid and other forms of self care in order to reduce reliance on emergency services.
- Teach families basic strategies to care for ill family members in their own homes.
- Change public expectations of services.
- Tell the public what to anticipate: you may not get the service you need when you need it.
- Prepare community guidance on fatality management.
- Establish a flu hotline for the general public to obtain the most current information.
- Contact local business to provide support and basic preparedness materials for needy families.

Quick Reference Sheets

The set of potential action steps in this section is provided as a quick reference that can be used when preparing for a flu pandemic. The reference sheets are divided into discipline-specific sections (Fire, EMS, Law Enforcement, 9-1-1 Telecommunications and Emergency Management). Users should cross reference each section since many emergency service organizations handle multiple components of service delivery.

The following pages provide simple, practical and useful steps every person in an organization can adopt to help better protect themselves, their co-workers and their families. They are grouped by "mottos." They can be tailored as necessary to suit the needs of each service based on its unique circumstances (i.e., workload, staffing, location, area of responsibility, etc.).

The potential action steps are the result of a workshop from members of the first responder disciplines. A complete list of the participating departments and agencies is included in Appendix A.

Disclaimer

The potential action steps listed here are not all inclusive and do not represent the official position of the Federal Government. The user should understand that laws, rules, regulations, standard operating procedures and standard operating guidelines, as well as limited resources, may exist precluding emergency service organizations and providers from implementing some of the following ideas. Each emergency service organization must reference its own pandemic response plan and needs accordingly and seek applicable work around alternatives for their respective jurisdiction. The possible consequences of a pandemic warrant attention to the possibilities associated with workforce depletion.

Fire Service

Motto	Potential Action Steps for Fire Service
"Put the wet stuff on the red stuff"	• Stop all nonemergency tasks, such as hydrant inspection, code inspection, outreach, and drills. • Reassign personnel from nonemergency tasks to field operations. • Backfill less-essential functions with supplemental volunteers and personnel from other departments and agencies.
"Manage expectations"	• Keep government officials and leadership informed of potential impacts on response times caused by loss of personnel. • Include labor and other municipal components in planning. • Inform the public. • Contact your local public health officials—be informed. • Ensure that everyone is on the same page.
"Keep your distance"	• Assess patients at a distance—6 feet away at first – in order to determine the presence of a respiratory illness. • If possible, meet patients in open air. • If you must enter a home, assess the patient from the doorway first. • Do not have your entire crew exposed when only one or two could conduct initial patient assessment. • Follow guidance from CDC, State and local public health, and EMS officials.
"Fresh air is your friend"	• Ventilate vehicles during transport. • Ventilate vehicles after transport.
"Wipe it down, wipe it out"	• Use wipes—not sprays—to decontaminate equipment and exposed surfaces in vehicles post-response. Wipes are recommended to avoid re-aerosolizing the germs or bacteria on contact. • Place alcohol-based sanitizer in easily accessible locations. • Do not touch your face with gloved or unwashed hands. • Wash hands after cleaning equipment.
"Train the way you fight"	• Postpone routine training or conduct training specific to pandemic influenza instead. • Train your volunteer force.
"Cleanliness is non-negotiable"	• Establish a location away from the firehouse where patients can come to you for assessment. • Control the living and working environment (ventilation, contamination, and patient flow). • Decontaminate! Decontaminate! Decontaminate! • Ensure facilities are available for individuals to wash their hands.
"Assume the worst—hope for the best"	• Assume that patients with respiratory symptoms have the flu. • Always don recommended PPE before entering the environment of a patient with respiratory symptoms. • If possible, place a mask on patients with respiratory symptoms. • Wash hands, Wash hands, Wash hands. • Change bunk bedding daily and clean linen and surfaces. • Follow guidance from CDC, State and local public health, and EMS officials.
"Green is not always clean"	• Do not recycle or reuse anything that could be contaminated. • If you cannot clean it adequately, dispose of it. • Do not reuse any disposables, particularly masks and gloves.
"Mobilize your reserves"	• Identify potential volunteers now such as non-traditional volunteer fire fighting forces (i.e. CERT Medical Reserve Corps, Red Cross members). • Call up volunteers (fire fighters, support personnel).

Motto	Potential Action Steps for Fire Service
	• Identify tasks for volunteers—for example, decontaminating vehicles and protective clothing. • Provide only the essential training needed for their role. • As time allows provide additional training for volunteers.
"Rise to the occasion"	• Reduce the number of shifts and lengthen shifts—for example, "12 on, 12 off." • Consider special shift for two earner families so one can stay home to care for sick children. • Require overtime when needed to manage adequate staffing levels. • If people have had the flu and returned to work, ask more of them. • Identify who is double-booked—for example, "I work in one community, but I serve as a volunteer in another community."
"Let's work together"	• Cross train with EMS, Law Enforcement and 9-1-1 • Know what you can expect from your partners and do not assume business as usual. • Do not assume that mutual-aid will be there—contact mutual-aid partners to coordinate. • Communicate daily with your mutual-aid partners to determine who is able to help. o Your first responders may be sick while someone else's in the next county may not be so hard hit. • If your region is unaffected, surge to help those regions that are affected.
"Fireproof your family"	• Recognize that personnel have to take care of their families and plan accordingly. • Allow personnel to take the equipment home and possibly even respond from home. • Encourage personnel at the firehouse to communicate with their families when possible to relieve stress. • Encourage availability of webcams to enable firefighters to keep in touch with their families.
"Stock up"	• You have to have food, water, and supplies for your station. • Stockpile the right things now. • Purchase and store nutritious emergency food, such as beans and rice. • Make contingency plans for water in case the city water supply is compromised or bottled water is no longer delivered.
"Business as *un*-usual"	• Acknowledge the acceptance of increased risk (depleted workforce and increased call volume) • Anticipate that the situation will last for a long time. • Fill fuel tanks more often. • Use recommended PPE. • Minimize size and deployment of response teams to minimize exposure. • Reduce alarm responses. Consider alternatives to initial automatic alarms reported hazardous materials incidents – initial response could be Officer in Charge (OIC). • Limited staff may mean reduced crews on apparatus; consider doubling apparatus response to meet staffing needs. • Cross train other municipal workers or applicable volunteers to drive apparatus if allowable under the law. (ie. Plow truck operators may be able to operate a fire engine – You may need to provide basic pump operations training)
"Two in, two out"	• Watch for fatigue and stress. • Increase hydration. • Aggressively engage peer support. • Augment peer support with auxiliaries. • Use the telephone for counseling to reduce exposure. • Provide counseling and support for firefighters' families.
"We are all in this together"	• Encourage 100% vaccination for all personnel. • Vaccinate families if the vaccine is available for them.

Motto	Potential Action Steps for Fire Service
	• Vaccinate at the station, on shift. (Contact your local public health director or agency to provide vaccine to the station.) • If EMS personnel have authority to vaccinate in your state, coordinate with your EMS medical director to have them do so. • Develop local incentives for rewarding those who get vaccinated and strongly encouraging those who do not. • Squelch rumors and provide education. • Lead by example: leaders get vaccinated first.

Law Enforcement

Motto	Potential Action Steps for Law Enforcement
"Brief early, brief often"	• Inform the force of pandemic flu plans. • Brief on the status of operations: staffing, equipment, and support. • Brief on the status of pandemic flu: geography, virulence, etc. • Review emergency health and operational policies.
"Call for backup"	• Alert volunteers, reserves, retirees, and others for potential use. • Recall retirees or previously employed sworn personnel. • Integrate trained volunteers and retired officers into the workforce. • Allow probationary officers to work individually when approved by the field training officer. • Accelerate the movement of academy cadets to field positions as possible. • Transfer cross-trained employees to backfill staff vacancies. • Cancel all out-of-town training and work-related travel. • Cancel all in-service and other nonessential training. • Cancel vacations and leaves. • Begin staggered shifts and increased flex time among civilian employees. • Expand patrol shifts to 12 hours (or another increment as determined by the local jurisdiction). • Staff high-priority functions first. • Include labor and other municipal components in planning • Encourage overtime. • Expand flex time. • Implement a work-at-home policy wherever technically feasible. • Implement extended sick leave with pay where permissible.

"Triage your workload"	• Do what is important to protect and serve the community.
	  o Delay or do not respond to lower-priority calls for service.
	  o Limit officer response to lesser non-violent crimes.
	  o Issue citations in lieu of arrest whenever possible.
	• Establish an alternative call center for minor crimes, offenses, and issues.
	• Use a telephone reporting unit for reporting of select nonviolent or less-serious crimes.
	  o Expand the telephone reporting unit to the fullest extent practicable where solvability factors are limited.

"Keep your distance"	• Implement all department-wide sanitation and personal hygiene measures. • Provide added distance between workstations and erect environmental controls. • Implement a mandatory stay-at-home policy for symptomatic employees. • Close the community service desk or implement engineering controls to minimize employee exposure. • Stockpile PPE.
"Come out with your hands clean!"	• Cover your coughs. • Wash your hands and/or use hand sanitizer frequently. • Wear a face mask and gloves when working within an isolated law enforcement facility. • Use only recommended PPE.

Motto	Potential Action Steps for Law Enforcement
"Dress the part"	• Change clothes before leaving work—go home clean! • Bag your uniform for cleaning. • Wipe down all leather and shoes with antibacterial wipe. • Wear a clean uniform every day. Clean uniforms and clothing frequently.
"Fresh air is your friend"	• Wipe down all equipment used during apprehensions (such as handcuffs and batons) with antibacterial wipes, not sprays. Wipes are recommended over sprays to avoid re-aerosolizing the germs or bacteria on contact. • Don an N95 mask if engaging a person with noticeable flu-like symptoms. • Frequently ventilate facilities. • Frequently ventilate police vehicles.
"Radio talk"	• Substitute teleconferencing or group email for group meetings. • Conduct roll call or patrol briefings by phone, digital status unit, or internet. • Expand use of a telephone reporting unit and implement work-at-home complaint-taking capabilities.
"Neighborhood roll call"	• Alert the community to departmental contingency plans that may affect them if the flu spreads. • Coordinate with the media and city/county health care and governmental agencies. • Alert neighborhood watch to reduced response to calls for service. • Encourage more vigilant neighborhood watch activities.
Prisoner transportation	• Develop special procedures to separate and isolate prisoners. • Develop special procedures to reduce the number of prisoners required to be in court. • Ventilate the vehicle cab when transporting prisoners.
Prisoner housing	• Establish special units for potentially contaminated prisoners. • Reduce the number of prisoners, reducing the number of officers needed.
Prisoner isolation and distancing	• Assume prisoners with respiratory symptoms have the flu. • Develop special procedures to separate prisoners awaiting court appearances. • Establish videoconferencing and video testimony capability. • Hold court by video teleconferencing.
Staffing and posting court security officers	• Cross-train road deputies and investigators as court security officers. • Cross-train with EMS, Fire and 9-1-1. • Modify court calendars to reduce the number of simultaneous court proceedings, reducing the number of officers needed. • Recall retired court security officers or deputies.
Protection of court security officers	• Implement mandatory sanitary precautions. • Adjust work schedules. • Modify work stations to reduce exposure. • Redeploy staff to minimize contact with the public.
Alternative facilities	• Establish agreements with owners to use local buildings. • Use alternative facilities during decontamination or for overflow of detainees, etc.
"Access denied"	• Deny access to facilities for unauthorized or nonessential personnel. • Establish videoconferencing capability for regular nonessentials: o Clergy, Public defenders, Family visitors , Others (as determined by jurisdiction)

Motto	Potential Action Steps for Law Enforcement
Temporary morgue	• Identify an area within the law enforcement facility to use as a temporary morgue.
"Business as *un*-usual"	• Acknowledge the acceptance of increased risk (depleted workforce and increase call volume) • Anticipate that the situation will last for a long time. • Fill fuel tanks more often. • Minimize response teams to minimize exposure.
"Fireproof your family"	• Recognize that personnel have to take care of their families and plan accordingly. • Allow personnel to take the equipment home and possibly even respond from home. • Encourage personnel at the precinct to communicate with their families when possible to relieve stress. • Encourage and expand webcams to enable officers to keep in touch with their families.
"We are all in this together"	• Encourage 100% vaccination for all personnel. • Vaccinate families if the vaccine is available for them. • Vaccinate at the station, on shift. (Contact your local public health director or agency to provide vaccine to the station.) • If EMS personnel have authority to vaccinate in your state, coordinate with your EMS medical director to have them do so. • Develop local incentives for rewarding those who get vaccinated and strongly encouraging those who do not. • Squelch rumors and provide education. • Lead by example: leaders get vaccinated first.

Emergency Medical Services (EMS)

Motto	Potential Action Steps for EMS
"Manage expectations"	• Leadership should make decisions about the level of service to provide with diminished staff. (i.e., BLS v. ALS; only respond on ALS incidents) – involve medical direction. • Communicate daily with health partners and the public to manage expectations about EMS capabilities with lower staffing levels. • Leadership should have a clear plan. • Leadership should preplan a clear chain of command. (i.e., who is in charge when the chief and/or supervisors are ill?). • Leadership decisions about changing services should be made and communicated through the established chain of command. • Set up triage centers. • Redirect calls to the flu hotline. • Use designated flu vehicles (i.e.: respiratory emergency response units). • Keep Government officials and leadership informed of potential impact on response times caused by loss of personnel. • Inform the public. • Contact your local public health officials – be informed. • Ensure everyone is on the same page.
"Support your troops"	• Keep track of colleagues who are sick. • Include labor and other municipal components in planning. • Actively engage in peer support. • Clarify policy for pay during sick leave. • Reach out to other professionals online. • Change bunk bedding daily and clean linen and surfaces.
"Keep your distance"	• Request more information from dispatch when sent to respiratory, sick person, and fever-related calls. • Assess patients at a distance—6 feet away. (Determine respiratory illness then don appropriate PPE prior to physical contact with patient) • Do not have your entire crew exposed when only one or two could conduct initial patient assessment. • Place a mask on the patient if it is tolerated. • Use recommended PPE. Follow guidance from CDC, and State and local public health and EMS officials. • Alert the receiving hospital to the possibility of an infectious patient. • Participate in alternative screening processes coordinated with local public health.
"Fresh air is your friend"	• Ventilate vehicles. • Ensure good ventilation at all times.
"Wipe it down, wipe it out"	• Use wipes—not sprays—to decontaminate equipment and exposed surfaces in vehicle post-response. Wipes are recommended over sprays to avoid re-aerosolizing the germs or bacteria on contact. • Place alcohol-based sanitizer in easily accessible locations. • Do not touch your face with gloved or unwashed hands. • Wash hands after cleaning equipment.
"Cleanliness is non-negotiable"	• Establish a location away from the station where patients may come to you for assessment. • Control living and working environment (ventilation, contamination and patient flow). • Decontaminate! Decontaminate! Decontaminate!

Motto	Potential Action Steps for EMS
"Assume the worst – hope for the best"	• Assume patients with respiratory symptoms have the flu. • Don approved PPE before entering the environment of a patient with respiratory symptoms. • Place a mask on a patient with respiratory symptoms. • Follow guidance from CDC, and State and local public health, and EMS officials.
"Green is not always clean"	• Do not recycle/reuse anything that could be contaminated. • If you cannot clean it adequately - dispose of it. • Do not reuse any disposables … particularly gloves!
"Rise to the occasion"	• Reduce number of shifts and lengthen shifts, e.g., "12 on, 12 off," • Consider special shift for two-earner families so one can stay home to care for sick children. • Require overtime. • If someone has had the flu and returned to work, ask more of them. • Identify who is "double-booked" (e.g., "I work in one community, but I serve as a volunteer in another community").
"Stock Up"	• You have to have food, water, supplies for your station. • Stockpile the right things <u>now.</u> • Purchase and store nutritious emergency food (e.g. beans, rice). • Make contingency plans for water in case the city water supply is compromised or if bottled water is no longer delivered.
"Two in, two out"	• Watch for fatigue and stress. • Increase hydration. • Aggressively engage peer support. • Augment peer support with auxiliaries. • Use telephone for counseling to reduce exposure. • Provide counseling/support for EMS provider families.
"We are all in this together"	• 100% vaccination should be encouraged for all personnel. • Vaccinate families if the vaccine is available for families • Vaccinate at the station, on shift. (Contact your local public health director/agency to provide vaccine to the station). • If EMS personnel have authority to vaccinate in your state, coordinate with your EMS medical director to have them do so. • Develop local incentives for rewarding those who get vaccinated and strongly encouraging those who do not. • Squelch rumors and provide education. • Lead by example: leaders get vaccinated first.
"Mobilize the reserves"	• Identify volunteers. (i.e. Personnel with basic first aid and CPR skills, CERT, Red Cross, Medical Reserve Corp, stay-at-home parents) • Identify tasks for volunteers (first aid, vitals, driving, and transporting patients to vehicles). • Identify potential conflicts with local regulations.
"Come out with your hands clean!"	• Cover your coughs. • Wash your hands and/or use hand sanitizer frequently. • Wear appropriate PPE when working within an isolated area. • Use only recommended PPE.
"Train the way you fight"	• Cancel routine training or do pandemic influenza training instead. • Train the volunteer force.

Motto	Potential Action Steps for EMS
"Business as *un*-usual"	• Acknowledge the acceptance of increased risk (depleted workforce and increase call volume) • Anticipate that the situation will last for a long time. • Cross train staff. • Cross train with Fire, Law Enforcement and 9-1-1. • Familiarize neighboring EMS personnel with your equipment and vice versa. • Cross train alternative drivers to drive ambulances if permissible under the law (ie. Bus drivers, security officers). • Fill fuel tanks more often. • Check with hospitals about disposal of biohazard material. • Use recommended PPE. • Review fatality management plans. • Minimize response teams to minimize exposure. (i.e., send limited number of units to incidents).

9-1-1 Telecommunications and Emergency Management

Motto	Potential Action Steps for 9-1-1 Telecommunications and Emergency Management
"Manning and planning"	• Keep your staff in the loop—listen to all their ideas and opinions. • Define the triggers for calling up volunteers. • Identify sources for your volunteer workforce. • Identify potential volunteer assignments and tasks. • What's your action plan? Plan for getting the word out that you need volunteers. • Train your volunteers now. Encourage 100% vaccination for all personnel. • Vaccinate families if the vaccine is available for them. • Vaccinate at the station, on shift (contact your local public health director or agency to provide vaccine to the station). • Develop local incentives for rewarding those who get vaccinated and strongly encouraging those who do not. • Squelch rumors and provide education. • Lead by example: leaders get vaccinated first.
"Manage expectations"	• Meet with key government officials for public health and emergency response. o Establish relationships early. o Review operation plans for call centers and information lines. o Plan to educate the community: decrease expectations for care. • Meet with other state and local call center officials. o Plan for a single point of service in your community. o Consider multi-community aid. o Combine police, fire and EMS into one PSAP. • Meet with local hospital and public health officials. • Meet with telecommunications providers to plan for telephone trees, hotlines, information lines, additional trunk lines, and potential lines for dispatchers telecommuting. • Review 9-1-1 pandemic influenza protocols from national professional organizations.
"Business as *un*-usual"	• Acknowledge the acceptance of increased risk (depleted workforce and increased call volume) • Determine who receives service (visits to home or office by EMS). • Determine who does *not* receive service. • Determine how the "worried well" will be referred. • Determine who is marginal to receive services.
"Working from home—The 'what if' model…"	• Define who is eligible to work from home. • 9-1-1 dispatcher/call center manager recovering from flu or staying at home as caretakers. • Work toward an all-9-1-1 dispatch home-based workforce to reduce exposure.
"Calls come in—calls go out"	• Prepare a series of statements and be prepared to blast out informational messages to the community via the reverse 9-1-1 call system, traditional media, blogs, email lists, social networks, text messaging, etc.
"Prepare for the next wave"	• Host or participate in a stakeholders roundtable meeting; discuss lessons learned. • Contact officials in surrounding communities to coordinate efforts and compare notes. • Continue searching for key partners to bolster infrastructure and resource needs. • Develop a coordinated call center system, if one is not currently available.

Motto	Potential Action Steps for 9-1-1 Telecommunications and Emergency Management
"Come out with your hands clean!"	• Train staff on infection control. • Cover your coughs. • Wash your hands and/or use hand sanitizer frequently. • Disinfect consoles and related surfaces. • Use only recommended PPE.
"Fireproof your family"	• Recognize that personnel have to take care of their families and plan accordingly. • Allow personnel to take the equipment home and possibly even respond from home. • Encourage personnel at the operations center to communicate with their families when possible to relieve stress. • Encourage and expand webcams to enable staff to keep in touch with their families.
"We are all in this together"	• Encourage 100% vaccination for all personnel. • Vaccinate families if the vaccine is available for them. • Vaccinate at the station, on shift (contact your local public health director or agency to provide vaccine to the station). • If EMS personnel have authority to vaccinate in your state, coordinate with your EMS medical director to have them do so. • Develop local incentives for rewarding those who get vaccinated and strongly encouraging those who do not.

Tools

Two tools are provided to help the first responder community plan for a pandemic influenza:

Staff Planning Tool

First is a tool to help an organization think about how it will continue to provide its essential functions during a pandemic—and what functions may need to be deferred. It may help first responders identify their essential activities, staffing, and needed skills.

- The columns for "Reduction in Workforce" are for planning for the impact of a pandemic:
    - What changes in operations will be needed to continue to perform the essential activity?
    - What skills are necessary?

Table 1. This is a sample form, using information from a police department. Organizations may have different priorities, terms, and skill sets, depending on the needs of the communities they serve.

Table 2. This is a blank form for a planner to use as a pullout; either to write in organization-specific information or to use as a Word document.

Please refer to the section entitled "Staff Planning Tool."

Activity to Identify Gaps in Planning

An activity to identify gaps in planning is provided in a scenario format with a timeline of events designed to help first responders think through what they would do if faced with a pandemic scenario. It is designed with some specific dates, but those dates are fictional. A pandemic could affect a community at any time.

Table 1: Staff Planning Tool

Sample: Adapted from the Critical Issues in Policing Series[3]

		Current Personnel on staff		Scenario 1: Anticipate a 25% Reduction in Workforce		Scenario 2: Anticipate a 40% Reduction in Workforce			
List Your Core/Essential Tasks	**Unit to Support or Deliver Task**	**Officers**	**Staff**	**List any Necessary Changes in Operations to Continue Performing This Task**	**Standard of Delivery Acceptable? Yes/No**	**List any Necessary Change in Operations to Continue Performing This Task**	**Standard of Delivery Acceptable? Yes/No**	**Minimum Number of People Required**	**Specific Skills Necessary**
Command and control	CAD room	8		Require staff to work on rest days and/or longer shifts	Yes	As for Scenario 1. Also, take officers from response teams.	Yes	12	CAD trained staff only
					Yes				
					Yes				
Other "Must Do"	Critical incident gold groups, respond to PQs, process pay, briefings	11	30		Yes		Yes	7	
Other "Should Do"	Crime pattern analysis, pay invoices, man front counters	12	18	Staff required to work on rest days and/or longer shifts	Yes	As for Scenario 1. Also, open front counters only 7am-7pm	Yes	15	
Discretionary	Schools liaison, local recruiting, open days	4	3	Continue with activities at a reduced capacity	Yes	Cease activities: move resources to essential	No	2	
	Total Force	400	120						

Enter your organization's core tasks in this column

List the team or group that performs this task.

List the total number of staff (including volunteers) that typically perform or support this core task

If 25% of your staff are absent, write down what operational changes will allow your organization to perform this core task

If 40% of your staff are absent, write down what operational changes will allow your organization to perform this core task

List the fewest number of people you need to perform this core task

List 1-3 essential skills that are necessary to perform this core task.

[3] Luna, Andrea M., Corina Sole Brito, and Elizabeth A. Sanberg. Critical Issues in Policing Series, *Police Planning for an Influenza Pandemic: Case Studies and Recommendations from the Field*. Washington, DC: Police Executive Research Forum, October 2007.

Table 2: Staff Planning Tool (Template)

		Current Personnel On Staff		Scenario 1: Anticipate a 25% Reduction in Workforce		Scenario 2: Anticipate a 40% Reduction in Workforce			
List Your Core/Essential Tasks	Unit to Support or Deliver Task	Volunteers	Staff	List any Necessary Changes in Operations to Continue Performing This Task	Standard of Delivery Acceptable? Yes/No	List any Necessary Changes in Operations to Continue Performing This Task	Standard of Delivery Acceptable? Yes/No	Minimum Number of People Required	Specific Skills Necessary
Other Activities									
Other "Must Do"									
Other "Should Do"									
Discretionary									
	Total Staffing								

Activity to Identify Gaps in Planning

The following activity is designed to generate discussion among your senior leadership about how to effectively respond to the range of impacts of an influenza pandemic. It is a notional scenario designed to allow communities to consider what resources they have and plan accordingly.

First Responders Pandemic Activity: A Notional Scenario

Imagine if…

Day 1. Local and national media outlets begin running stories on influenza cases throughout the nation, increasing public concerns.

Day 14. Your state health department confirms five deaths within your state.

Day 15. The Federal Government reports that it has begun vaccine production for the novel influenza strain.

Day 20. Local public school officials report increased absenteeism. Public health officials cannot conclude to what degree this is self-quarantining or the result of actual infection.

Day 23. Your state health department confirms the first case in your region. Local public schools close as a precaution.

Day 28. A number of staff members call out of work as a result of childcare issues due to the closure of their children's school.

Day 30. Local hospitals and clinics report a large increase in patients presenting flu-like symptoms. Large numbers of "worried well" are clogging the medical system due to media coverage of the situation.

Day 33. Seven employees arrive at work with flu-like symptoms.

Day 34. You receive a call from a staff member asking whether he should come to work, as his child is ill with flu-like symptoms.

Day 35. The union official calls asking for documentation of personal protection, sick leave, and health insurance issues. Will persons who are out of sick leave still be paid if they stay home or should they report to work ill?

Day 40. Several key managers and administrators stay home from work to care for ill family members (no daycare is available).

Day 44. Human resources reports that 15% of your workforce that has direct interaction with the public is on leave. Additionally, over 40% of one division is on leave.

Day 49. Your personal protective equipment (PPE) supplier is unable for at least two months to provide you with the N95 masks and hand gel you ordered.

Day 54. Human Resources reports that 25% of your total workforce is on leave. Over 10% of your workforce is on leave without pay because they have exhausted their sick leave.

Day 60. A key staff member is in critical condition at the local hospital with a confirmed case of the novel influenza virus.

Day 65. You receive a request to provide assistance to a neighboring jurisdiction due to its diminished workforce.

Consider the events in this box, and take the time to ask these questions:

- How would you adjust the performance of your mission-essential functions while dealing with these scenarios?
- How would you protect the workforce *and* their families?
- Can you continue to provide the expected level of services within your area of responsibility?
- How many days of supplies and equipment do you have now?
- What are your capabilities for communicating with your community to manage the large influx of people seeking care?
- What is the best way to deal with union rules and regulations? Deal with them now rather than later?
- Who is in charge when the usual leaders are not available?
- How and where may I get the vaccine?
- What is the contact information for the state or local public health office that will be distributing the vaccine?

Background Information

This *Information for First Responders* is designed to help first responders identify potential actions to maintain operations and ensure workforce protection in a pandemic influenza environment. This document was developed as a result of a joint effort by the Department of Homeland Security's Office of Health Affairs and U.S. Fire Administration with major contributions from a working group of first responders (see Appendix A). It provides supplemental information to *Pandemic Influenza: Best Practices and Model Protocols* (April 2007) and to the FEMA IS 520 *Introduction to COOP for Pandemic Influenza* on-line course (August 2009).

First responders have a critical role in prehospital emergency care and must continue to provide this essential service as well as the many emergency response roles in a community. The first responder community includes the following services: fire, emergency medical services (EMS), law enforcement, emergency management, and 9-1-1 call centers. For many of these services, volunteers make up a significant portion of the workforce.

During a pandemic, workloads will increase and staff sizes will diminish as employees and their families become ill. Contingency planning now can help reduce the worst impacts: smart planning can save lives.

Continuity of Operations

Key objectives of COOP are:

- Ensure the performance of an agency's essential functions
- Reduce loss of life by minimizing damage and losses
- Ensure successful succession for leadership positions
- Reduce or mitigate disruptions to operations
- Ensure that agencies have alternative facilities from which to operate
- Protect essential facilities, equipment, vital records, and other assets
- Achieve a timely and orderly recovery and resume normal full services

For more information on COOP, go to http://training.fema.gov

As incidents change in size, scope, and complexity, first responders must adapt to meet requirements. The number, type, and sources of resources must be able to expand rapidly to meet needs associated with a given incident. For the duration of a response, and as needs grow and change, responders must remain nimble and adaptable. Equally, the overall response should be flexible as it transitions from the response effort to recovery.

Continuity of Operations during an Influenza Pandemic[4]

An influenza pandemic threatens to disrupt the essential services and operations within and across our nation. Whenever national disease containment strategies fail, first responders may find themselves thrust to the frontlines in this public health battle.

While the severity of any particular disease

[4] Department of Homeland Security. *Pandemic Influenza: Preparedness, Response, and Recovery—Guide for Critical Infrastructure and Key Resources.* September 2006. www.flu.gov/plan/pdf/cikrpandemicinfluenzaguide.pdf.

outbreak may vary, the potentially catastrophic impact of a pandemic demands that organizations engage in contingency planning and preparedness efforts. Traditional business contingency planning requires identifying essential functions and people. Pandemic planning recommends that organizations refine their definition of "essential" if they are to continue providing critical goods and services.

Planning for a Pandemic[5]

Seasonal influenza in the United States results in approximately 36,000 deaths and 226,000 hospitalizations each year. A pandemic occurs when a new strain of influenza virus emerges that is able to infect humans and be passed among them.

Three human influenza pandemics have occurred in the past 100 years. Each resulted in illness in approximately 30% of the world population and death in between 0.2% and 2% of those infected. It is projected that a modern pandemic could lead to the deaths of between 200,000 and 2 million U.S. citizens.

Planning Principles

The challenge of developing an all-hazards plan for protecting lives, property, and the environment is made easier if the emergency planners apply the following principles to the planning process:

- **Planning is an orderly, analytical, problem-solving process.** It follows a set of logical steps from plan initiation to analysis of objectives, to development and comparison of ways to achieve the objectives, and to selection of the best solution.
- **Plans guide preparedness activities.** They provide a common framework to guide preparedness by establishing the desired end state and the tasks required to accomplish it. This process identifies the capabilities required.
- **Planning helps deal with complexity.** Homeland security problems are most often a complex set of interrelated problems. The National Strategy for Homeland Security attaches special emphasis to planning for catastrophic events with "the greatest risk of mass casualties, massive property loss and immense social disruption."
- **Emergency planning addresses all hazards.** The causes of emergencies can vary greatly, but many of the effects do not. This means planners can address emergency functions common to all hazards in the basic plan instead of having unique plans for every type of hazard.
- **Emergency planning does not need to start from scratch**. Planners should take advantage of others' experience. The state is a valuable resource for the local jurisdiction. Many states publish their own standards and guidance for emergency planning, conduct workshops and training courses, and assign their planners to work with local planners.
- **Planning depicts the anticipated environment for action.** This promotes early understanding and agreement on planning assumptions and risks, and it provides the context for interaction. Effective planning identifies clear tasks and purposes, promotes frequent interaction among stakeholders, guides preparedness activities, establishes procedures for implementation, provides measures to synchronize actions, and allocates or reallocates resources. It can also serve, at least in part, as a substitute for experience.
- **Planning must involve all partners.** Just as a coordinated emergency response depends on teamwork, good emergency planning requires a team effort. The most realistic and complete plans are prepared by a team that includes representatives of the departments, agencies, the private sector and NGOs that will have to execute the plan.

[5] Homeland Security Council. *Implementation Plan for the National Strategy for Pandemic Influenza*. May 2006. www.flu.gov/plan/federal/pandemic-influenza-implementation.pdf.

The U.S. Federal Government recommends that government entities and the private sector plan with the assumption that there will be substantial absenteeism among staff during a severe pandemic. Absenteeism will increase due to personal illness or incapacitation and because employees may be caring for ill family members, caring for children dismissed from school, following public health guidance, or simply staying at home out of safety concerns.

During a pandemic, the appropriate and thorough application of infection control measures in health care facilities, the workplace, the community, and for individuals at home can limit transmission and delay the spread of the virus.

State, territorial, tribal, and local officials should be prepared to face challenges in the availability of essential commodities, demands for health care services that exceed existing capacity, and public pressure to enforce infection control measures in ways that may hinder the delivery of emergency services and supplies and exacerbate the economic repercussions of the pandemic.

Influenza Symptoms, Prevention and Treatment: Stay Updated

Keep informed about both seasonal influenza and novel (or pandemic) influenza. Visit www.flu.gov.

Typical influenza symptoms. Influenza usually starts suddenly. Symptoms of flu include the following:

- Fever
- Cough
- Sore Throat
- Chills
- Runny or stuffy nose
- Body aches
- Headache
- Fatigue
- Possible diarrhea or vomiting

It is difficult to distinguish the flu from other infections on the basis of symptoms alone.

Vaccines for influenza. Besides a seasonal vaccine, a pandemic vaccine (if available) may offer protection. The dosages required may vary (two shots or one) and the time to protection can take up to two weeks (possibly longer for a novel vaccine).

Influenza antivirals. There are antivirals available to treat people who become sick with the flu. The effectiveness of these antivirals will vary depending on the virus in circulation.

Information will be updated regularly: there will be some uncertainty about the influenza virus and its impact during the course of a pandemic. It is important, therefore, to keep updated at www.flu.gov

Potential Impacts of a Pandemic

No area of the United States is likely to be spared. In terms of its scope, the impact of a severe pandemic may be more comparable to that of a war or a widespread economic crisis than to a hurricane, earthquake, or act of terrorism. A pandemic influenza presents significant challenges to public-service response organizations and the communities they serve.

Typical approaches to obtaining or providing mutual-aid assistance across jurisdictions will be hindered by an anticipated substantial absenteeism of the local workforce as well as that of neighboring communities. All sector planning groups should work together to implement effective preparedness and protective strategies.

Plans and procedures must be developed, tested, and refined to ensure that public-service responders remain healthy and that essential capabilities to protect communities remain viable and available in the event of a pandemic.

Potential impacts of a pandemic include these:[6]

- *Workforce absenteeism.* In a pandemic, absenteeism rates may be substantial.
- *Global reach and rapid spread.* Typical disaster response mechanisms and methods (for example, shifting available resources from safe areas to affected areas) may prove impossible when all areas are affected.
- *Duration and "waves."* A pandemic wave may linger in a community for six to eight weeks, and several waves can occur in the same community.
- *Supply chain and delivery networks.* Anticipate the loss of critical services and delivery of essential commodities, such as chlorine (for water purification), gasoline, food, and medical supplies. Develop contingency plans.
- *Healthcare delivery and public health.* An estimated 50% of those who get the flu may require medical intervention.

[6] *Pandemic Influenza: Preparedness, Response, and Recovery—Guide for Critical Infrastructure and Key Resources.* DHS. September 19, 2006. www.flu.gov/plan/pdf/cikrpandemicinfluenzaguide.pdf

Appendix A: Acknowledgements

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- Department of Homeland Security, Office of State and Local Law Enforcement
- Department of Homeland Security, U.S. Fire Administration
- Department of Transportation – National Highway Traffic Safety Administration, Office of EMS
- Farmington Hills Fire Department (MI)
- Grand Rapids Fire Department (MI)
- International Association of Emergency Managers
- International Association of EMS Chiefs
- International Association of Fire Chiefs
- International Association of Fire Chiefs – EMS Section
- International Association of Fire Fighters
- Kittitas Valley Fire & Rescue (WA)
- Lamar County Fire Coordinator (MS)
- National Academies of Emergency Dispatch
- National Association of Emergency Medical Technicians
- National Association of EMS Physicians
- National Association of Police Organizations
- National Association of State Emergency Medical System Officials
- National Center for Emergency Preparedness at Vanderbilt University Medical Center
- National EMS Management Association
- National Sheriffs' Association
- National Volunteer Fire Council
- Police Foundation
- Virginia Information Technologies Agency—Public Safety

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50 sec. *Test, Training, and Exercise Program*, 2 min., 11 sec. *Devolution*, 2 min., 41 sec. *Reconstitution*, 2 min., 36 sec. *Program Management*, 2 min., 17 sec. www.usfa.dhs.gov/coop/.

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