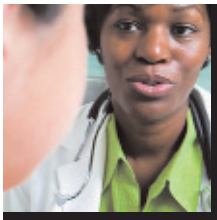
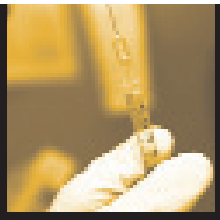


POLICY SUMMARY
February 2007

APHA's Prescription for Pandemic Flu

In November 2006, the American Public Health Association (APHA) adopted a new policy (2006-3: Preparing for Pandemic Influenza) that supports comprehensive national planning for an influenza pandemic and recommends key changes to the current preparedness and response strategy. APHA believes that current federal plans and strategies—the National Strategy for Pandemic Influenza, the U.S. Department of Health and Human Services (HHS) Pandemic Influenza Plan and the Implementation Plan for the National Strategy for Pandemic Influenza—are blueprints that can be used as the nation moves forward to prepare for pandemic flu. However, they can be strengthened, especially in the following subject areas, to ensure that all individuals, families and communities are able to prepare for and respond to a flu pandemic, especially in the care for vulnerable populations.

- **Who Will Respond: Public Health Workforce Issues**
- **Slowing the Spread of Pandemic Flu: The Role of Non-Pharmaceutical Interventions**
- **Medical Countermeasures**
- **Ensuring Access to Care**
- **Pandemic Flu on the Job: Business and Occupational Health Considerations**
- **Incorporating Mental Health into Pandemic Flu Preparedness and Response**
- **Ensuring Public Health Leadership**

APHA American Public Health Association

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www.getreadyforflu.org

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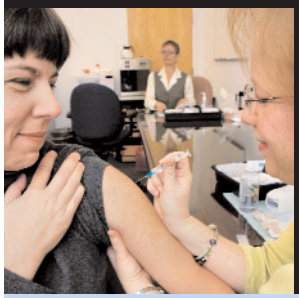
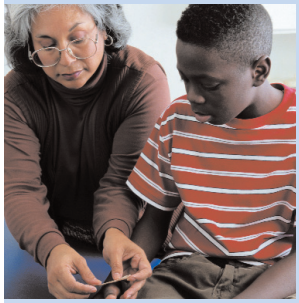


Who Will Respond:
Public Health Workforce Issues



Public Health Workforce at a Glance

46.6 Average age of a member of the state public health workforce.[1]

45-50 Maximum percentage of workforce of federal and some state public health agencies eligible for retirement within the next few years.[4,2]

20% vacancy rate in several state public health systems.[4]

14% annual turnover rate on the state level.[4]

500,000 Minimum number of individuals in the public health workforce (does not include those working for the private sector, non-profit entities and unions, and those who work for the public sector in nontraditional public health professions, ranging from transportation planning to housing development to hospital health educators and nutritionists).[3]

6,399 Individuals who graduated from the 36 U.S. accredited schools of public health in 2004,[4] most of whom initially work somewhere other than local, state or federal public health agencies.[5]

19% of public health workforce employed in federal agencies.[8]

33% of public health workforce employed in state agencies.[8]

34% of public health workforce employed in local public health agencies.[8]

14% that works in other settings, including teaching and research.[8]

Who Will Respond: Public Health Workforce Issues

Current local public health efforts in preparedness have already strained an over-burdened workforce that must balance the day-to-day needs of ensuring healthy and safe communities with the labor-intensive activities of pandemic flu planning. Cross-training of existing staff in issues related to planning, training and evaluation for pandemic flu, as well as other possible epidemics, is necessary but will not adequately cover the anticipated surge in demands during a pandemic.

During this time of federal, state and local budgetary restraint, positions have been lost,[6] seriously compromising local ability to meet these demands. Year after year, HRSA programs that fall under Titles VII and VIII of the Public Health Service Act — aimed at increasing the capacity of and diversifying the physician, public health and nursing workforces — have been targeted for funding cuts. Without an adequate, well-prepared workforce, the prospect of reducing the impact of a pandemic is severely impaired. In addition, projections estimate that up to 40 percent of the active workforce may be seriously ill and therefore unable to work during some portion of a flu pandemic. Therefore, if staffing levels remain stagnant, the current health care workforce cannot be depended on in event of a flu pandemic.

Therefore, APHA recommends that:

1. Congress enact legislation to provide incentives, including scholarship or loan repayment support in return for a commitment to public health service, to attract and retain public health students and professionals, especially racial and ethnic minorities, in local, state and federal public health agencies.

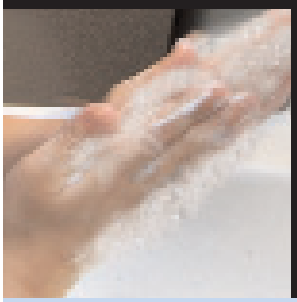
2. Congress increase funding directed towards HRSA health professions programs that fall under Titles VII and VIII of the Public Health Service Act, including public health traineeships and preventive medicine residencies.

3. Public health officials plan for improving surge capacity of the public health workforce to engage in core public health activities during a pandemic. Advance registry systems should be developed to coordinate volunteer health professionals, as these are preferable to relying on ad hoc or spontaneous volunteers.

4. Existing voluntary entities such as the Medical Reserve Corps be utilized to facilitate an adequate workforce surge capacity.

5. Training programs be developed for volunteers listed on registry systems.

6. Federal and state legal protections for health professionals responding to meet surge capacity during a pandemic be enacted, including
   - *Licensure reciprocity,*
   - *Protections from legal liability,*
   - *Workers' compensation coverage, and*
   - *Employment protection.*



Slowing the Spread of Pandemic Flu: The Role of Non-Pharmaceutical Interventions

The United States currently does not have the capacity to produce enough vaccine for the public in a timely manner after a pandemic is declared. The Implementation Plan for the National Strategy for Pandemic Influenza states that within five years, the nation should have the domestic vaccine production capacity to be able to provide vaccine for the entire U.S. population within 6 months after the development of a vaccine reference strain. Regardless of whether the nation has expedited vaccine production capacity, the response to pandemic flu will rely on non-pharmaceutical interventions—respiratory hygiene, hand washing and social distancing—to slow the spread of the virus, especially in the first six months of a pandemic.

Isolation and Quarantine

Although widely used in Asia and Canada during the SARS outbreaks, isolation of infected persons, quarantine of exposed persons and quarantine of a geographic area (cordon sanitaire) are likely to only play a limited role in the early stages of pandemic influenza, and are not considered effective or practical during later stages.[7] How flu spreads allows little time for isolation and quarantine, and it is difficult to detect flu before the onset of symptoms and highly contagious spread of the infection.[10]

Legal authority for isolation and quarantine must be clear and constitutionally acceptable, with criteria based on risk and fair procedures. Containment powers principally are exercised at the state level. While some state isolation and quarantine powers derive from old and outdated statutes, at least 38 states have modernized their laws based on the Model State Emergency Health Powers Act.[8] Federal containment powers are reserved for interventions at U.S. borders and to mitigate the interstate spread of infection. In 2005, novel influenza viruses with pandemic potential were added as a quarantinable federal disease.[9] CDC's proposed rule permits provisional quarantine for three business days[10] and full quarantine not to exceed the period of incubation and communicability of the disease.[13] Provisional quarantine can generally be ordered without a hearing, but full quarantine requires due process.[13]

Modern conceptions of isolation and quarantine often do not envisage formal confinement, but rather "sheltering in place" ("snow days"), protective cloistering, or voluntary sequestering. Public concerns with quarantine include overcrowding, exposure to infection and inability to work, shop or contact family.[11] These concerns may represent accurate logistical problems of large-scale quarantines: assuring safe and hygienic locations, medical and nursing care, necessities of life (food, water, clothing) and communications.[12] Monitoring and enforcement of quarantines could also be problematic. Authorities often enforced SARS quarantines by intrusive surveillance such as thermal scanners, electronic bracelets, Web cameras, or placards.[13] Military enforcement has been proposed, although the Posse Comitatus Act prohibits military personnel under federal authority from acting as a domestic police force unless authorized by the Constitution or Congress.[14] On the state level, governors can order the National Guard to provide support to law enforcement upon request. Overall, there is concern with the use of the military in this regard, as few military personnel are trained in civilian police actions.

Therefore, APHA recommends that:

1. Laws and policies be created and implemented that grant federal, state and local health officers the authority to make decisions about quarantine and isolation orders. These decisions should be made on the basis of scientific risk and use the least restrictive alternative.

2. State and local health officials clarify who has the power to impose quarantine and isolation orders in their jurisdiction and who does not.

3. Informal or voluntary isolation or quarantine be imposed whenever possible. Compulsory isolation and quarantine powers should only be used when necessary. People subject to quarantine and isolation orders should have the ability to appeal these orders.

4. State and local governments plan for the types of isolation and quarantine that will likely be used during an influenza pandemic and make provisions to support the logistics of the plans. Food, water, medications, mental health services and other necessities may need to be delivered to people under quarantine.

5. People placed under quarantine orders in institutional settings not be confined to the same space as people subject to isolation orders.

6. State and local government support public education campaigns communicating the importance of isolation and quarantine orders and the need to prepare to shelter at home for at least two weeks.

7. HHS, in consultation with state and local health officials, develop national standards for sheltering in place ("snow days").

8. HHS, in collaboration with state and local health departments, develop public education and risk communication plans related to containment, including the need for continuing and increasing mental health services.

9. Congress provide additional resources for quarantine activities at ports of entry to identify persons with pandemic flu symptoms.

10. International collaboration in surveillance and international travel activities be carried out to minimize the spread of disease over international borders.

11. The CDC quarantine regulations be implemented.

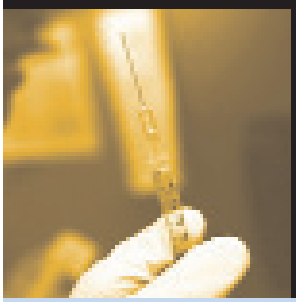
School Closures and Other Health Issues

Schools and school systems are critical to improving our nation's readiness for and response to pandemic influenza, as planning efforts anticipate that illness rates will be highest among school-aged children (about 40 percent).[1] In fact, school closures are being considered as a primary containment strategy early on in a flu pandemic in order to slow the spread of the disease. As such, the HHS Pandemic Influenza Plan stresses the need for school systems to develop pandemic influenza plans that deal with such issues as school closings and keeping students, faculty, and workers at home while they are infectious. This recommendation for children to stay at home can also be applied to children in day care. Schools also must work with public health officials, community leaders and partners to determine whether school facilities will be used as alternative sites of care.[1]

Pandemic influenza preparation guidance from the World Health Organization stresses that hand washing and respiratory hygiene/cough etiquette should be routinely encouraged in public health messages, and that such practices should be facilitated by making hand-hygiene facilities available in schools, workplaces and other settings where amplification of transmission would be expected.[15] The HHS and CDC recommend that, in advance of a pandemic of influenza, schools implement effective infection prevention policies and procedures that help limit the spread of influenza, including providing sufficient and accessible infection prevention supplies such as soap, alcohol-based/waterless hand hygiene products, and receptacles for their disposal.[16]

Therefore, APHA recommends that:

1. HHS and the U.S. Department of Education, in consultation with state and local health and education officials, develop and disseminate national criteria for school closings so state education agencies, school districts, and public and private schools are aware of the triggers for this containment measure.
2. State legislatures or education agencies adopt and enforce standards for the provision of adequate hand washing facilities and supplies in preK-12 school restrooms, classrooms, cafeterias, gymnasiums and sport facilities.
3. Education curricula at all levels to teach students, caregivers, faculty and staff about preventing the transmission of influenza be developed and utilized, including hand hygiene knowledge, skills and behaviors in a culturally and linguistically appropriate manner.



Medical Countermeasures

Vaccine Manufacturing, Distribution, Tracking and Administration

Vaccine development, research and purchase should be priority activities in planning for pandemic influenza on the federal level, as pandemic viruses might be resistant to antivirals or develop drug resistance due to widespread use.[17,18] The goal of developing and utilizing a vaccine for pandemic flu will differ from the seasonal flu vaccine because of the expected severity of the illness. Ultimately, vaccine use should prevent mortality and severe morbidity associated with pandemic influenza.[34] Vaccine administration may also be different if two doses of vaccine are required to achieve a protective level of immunity. If two doses of vaccine are required, then the education of the public will be a key component, as they are accustomed to the one-dose seasonal influenza vaccine.[9]

The HHS plan did not clearly outline whether federal purchase of influenza vaccine and centralized distribution will continue beyond the onset of a pandemic. Our current system of private purchase, reliant on supply and demand, will not give vaccine manufacturers ample incentive to produce all the necessary pandemic influenza vaccine, as there is no guarantee that they will have leftover vaccine due to insufficient purchasing levels. Also of concern is that the distribution of pandemic vaccine to health departments and providers may occur through private-sector vaccine distributors or directly from the manufacturer(s), without adequate federal oversight, and state and local public health input. Thus, the vaccine may not be available to those at highest risk.

Therefore, APHA recommends that:

1. A substantial, if not complete, federal purchase of pandemic influenza vaccine, with some buyback provision included, be guaranteed by the federal government. This will ensure that there are a number of vaccine manufacturers committed to produce adequate amounts of the vaccine most effective against the pandemic influenza strain.
2. Congress appropriate additional resources to research activities targeted at manufacturing and utilizing cell-culture influenza vaccines.
3. Additional research be carried out targeted at pandemic vaccine development, including reducing the amount of HA antigen required to reach a protective level of immunity, alternative means to administer the vaccine and use of known and novel adjuvants to enhance immunogenicity.
4. Additional funds be made available to the CDC for developing and testing vaccine distribution and tracking systems.

Antiviral Drug Distribution, Tracking and Use

Antiviral medications such as oseltamivir and zanamivir have been shown to reduce the severity and duration of seasonal influenza, typically reducing the duration of illness by one or two days.[19,20] However, their efficacy in effectively treating many individuals during an influenza pandemic is uncertain at best.[23] The problem is that influenza strains can become resistant to antivirals, the medication needs to be administered within the first two days of the onset of symptoms to be effective, and the supply will likely be dramatically less than the projected need.[24]

The HHS plan, considering that an effective pandemic vaccine will not be in general circulation during the first months of an influenza pandemic, calls for the purchase of enough antivirals — oseltamivir and zanamivir — to treat 25 percent of the population. Efforts center on the federal purchase of 44 million courses of antiviral drugs for treatment, with another 6 million courses for containment. However, the federal plan contains a strategy to leverage state tax dollars to purchase the remaining 31 million courses of antiviral drugs with a 25 percent federal subsidy. Public health officials must have the flexibility to provide the medication where outbreaks are most severe, as certain states and communities will likely be affected more than others. Also, the plan does not account for the fact that with current antiviral production capacity, there will likely be a shortage of antivirals at the advent of a flu pandemic as well.

Therefore, APHA recommends that:

1. Congress require the federal government protect Americans by purchasing all of antiviral treatment courses deemed necessary, as the level of protection Americans receive should not be determined by where they live and the current fiscal position of their states.
2. The U.S. government examine the effects of and consider increasing incentives for pharmaceutical companies to invest in the research concerning new drug development, efficacy assessments, and production capacity of antivirals to determine the most effective drugs, doses, timing for administration, the best methods of administration, and its integration into plans for vaccination.
3. Congress appropriate additional resources to bolster U.S. production capacity of antivirals to ensure that the supply of antivirals in the event of a flu pandemic is sufficient to meet national demand.
4. Congress appropriate additional funds to CDC to develop and test antiviral drug distribution and tracking systems.
5. HHS formulate guidelines that outline strategies and priority groups for both treatment and prophylaxis.

Medical and Lab Supply Stockpiling and Use

The Strategic National Stockpile plays a key role in amassing medical material. However, there are still inadequate funds for critical medicines and supplies, such as ventilators, syringes, gloves and intravenous antibiotics that will be in high demand during a pandemic. Equal priority should be given to assuring such material is available to permit a comprehensive response to a pandemic. Without it, manufacturers of key medical and lab supplies will not have the incentive necessary, or be able to invest in increasing their capacity, to produce such a high quantity of goods. Lessons learned from the Hurricane Katrina response include the need to stockpile response-related equipment and medication as well.[3] Stockpiling efforts must include durable medical equipment and assistive devices and medications for children with special health needs, immunizations, and equipment and medication needed to maintain the health status of those with chronic illness, HIV/AIDS and other health problems.

Therefore, APHA recommends that:

1. Congress appropriate new, additional and sufficient resources towards the stockpiling of critical medicines and supplies, such as ventilators, syringes, gloves, intravenous antibiotics, reagents and N95 respirators.
2. Funds be dedicated towards the stockpiling of equipment and medication needed to maintain the health status of those with chronic illness, HIV/AIDS and other health problems during a pandemic, including insulin, dialysis machines and oxygen.
3. HHS work in cooperation and coordination with state and local health departments to create guidelines for the public use of certain stockpiled supplies, such as surgical masks, which may be necessary to transport patients from one location to another.
4. The Food and Drug Administration review its guidelines that limit the supply of prescription medication to be dispensed per prescription, so that individuals with serious health problems can access the prescriptions they need in the event of isolation or quarantine orders during a pandemic.

Liability/Compensation Issues

Countermeasures administered in advance of or in response to an influenza pandemic may pose health risks to individuals receiving prophylaxis or treatment. Vaccines, antiviral medications and other medical countermeasures are necessary tools to slow or halt the spread of the pandemic and to treat affected, or infected, individuals. However, all medical counter-measures carry some risk of adverse effects. Individuals who experience illness, disability or death as a result of the administration of a medical countermeasure to combat pandemic influenza should have some method to receive compensation for their losses.

Immunity from tort liability for industry and fair compensation for patients offers a sound dual approach to vaccine policy. The national Vaccine Injury Compensation Program (VICP) has created a no-fault system that pays for injuries caused by specific immunizations.[21] To recover compensation from the VICP, claimants must show that a listed vaccine caused their injury. Compensation comes from a Compensation Trust Fund financed by a tax on each administered dose.[25] Congress added influenza to VICP in 2004.[25] However, the VICP only covers trivalent (annual) influenza vaccine.

Health care workers and patients would be less likely to volunteer without a fair compensation system, as the failed smallpox vaccination campaign demonstrated.[22] A no-fault system, like VICP, would provide relief for injured patients and greater certainty for industry. A reformed VICP system would have to take account of important issues: an overwhelmed program, resulting in delays; assuring there is sufficient money in the compensation trust fund; and injustices caused by excessive burdens placed on patients injured by a new vaccine. In return, the industry should be spared lawsuits based on strict liability, but should answer to claims of recklessness or gross negligence.

Therefore, APHA recommends that:

1. Recommends that a federally funded compensation program be established for those who become ill or are injured, disabled or die as a result of receiving the pandemic or experimental influenza vaccine.

Ensuring Access to Care

Preventing the transmission of and limiting morbidity and mortality related to pandemic influenza will ultimately depend on Americans' access to the vaccine as well as care and treatment should they become ill. The health care utilization patterns of the uninsured need to be factored into pandemic influenza preparedness and response efforts. In general, studies have shown that being uninsured or underinsured leads to a decreased utilization of preventive care, as affected individuals only seek necessary health care in urgent situations. This is shown in the reality that the uninsured tend to have diagnoses of malignancies at more advanced stages[23] and have higher mortality rates resulting from hospitalizations when compared to insured individuals.[24] In the event of pandemic influenza, the uninsured would be less likely to seek health care quickly if they developed symptoms of influenza. And when they sought care in later stages, it would be uncompensated care provided in hospitals.

It is important to recognize that local providers in many cases do not have the resources to provide basic primary health care under normal circumstances, much less to provide surge capacity. Volunteers during Hurricane Katrina observed that chronic health conditions were as significant a concern as acute problems in the affected populations.[25] Populations that are already vulnerable will become much more so in a pandemic situation.[26] Hospital bed capacity is lacking in many areas, even those that are not under-served, due to cost cutting initiatives that reduce the availability of inpatient beds.

Efforts to increase surge capacity also need to include how to care for individuals who are in need of medical care not related to the prevention and treatment of pandemic influenza. For example, as pregnancy and childbirth account for almost one out of four hospital stays for women,[27] measures must be taken to ensure that there are separate medical facilities to specifically cater to women in labor and delivery and pregnant women with complications. Persons with other health problems ranging from broken bones to heart conditions need to be able to access medical care in alternate facilities.

Therefore, APHA recommends that:

1. The federal government purchase vaccines and antivirals at least for uninsured individuals and children eligible for the Vaccines for Children (VFC) program.
2. Congress and HHS establish an emergency Medicaid designation for uninsured individuals during an influenza pandemic that would require states to provide medical assistance to these individuals under state Medicaid plans, but increase the federal medical assistance percentage (FMAP) for providing edical assistance to these individuals.
3. Public health officials follow the steps recommended by the HHS Pandemic Influenza Plan to improve surge capacity during a pandemic in the areas of staffing, bed supply, consumable and durable goods and continuation of essential medical services.
4. Populations in need of medical care not related to pandemic influenza, ranging from women in labor and delivery to individuals with severe heart conditions, be able to access such care in facilities separate from those treating individuals infected with pandemic influenza.
5. Congress provide sufficient resources to state and local governments and health departments, hospitals and laboratories to prepare for influenza epidemics and pandemic. Resources should be targeted to areas most in need of assistance as determined by public health experts.

Pandemic Flu on the Job: Business and Occupational Health Considerations

Most businesses do not have pandemic preparedness plans in place.[28] Business plans need to cover issues including: absenteeism policies for pandemic-related situations (such as closed schools, ill family); social distancing policies; remote work opportunities; reinforced workforce availability and trained flexibility; for supply sources, production, and distribution; and communication plans for pandemic response and public health advisories. Although HHS has released a Business Pandemic Influenza Planning Checklist to provide guidance to businesses in preparing for pandemic influenza, more education is needed at the state and local levels to ensure that businesses understand the threat to the public's health and the economy posed by pandemic flu and are ready to respond.

There are no federal legal requirements for paid sick leave. Although companies subject to the Family and Medical Leave Act are required to offer unpaid sick leave,[29] most employees without a paid sick leave benefit do not have the financial security that would allow them to stay home from work when they are sick. This problem could be especially problematic in the event of pandemic flu.

Over 15 million first responder personnel, including health care and law enforcement workers, may be required to protect the public from and manage a pandemic outbreak in the United States. Other workers will be occupationally exposed prior to awareness of an epidemic, including poultry and agricultural workers, laboratory workers, and transportation workers. Finally, workers who provide essential services will be needed to continue working throughout an epidemic, including those in health care, laboratories, transportation, public infrastructure, institutions such as prisons and group homes, child and elder care professionals, and mortuary workers. These workers will face enormous risks and make great sacrifices on the public's behalf. Protecting them goes beyond a moral obligation; the U.S. public depends on these workers.

There is no program in place that would ensure that governmental resources address increased workplace expenses for pandemic preparedness and for providing exposure controls, mental health support and assistance with family and outside commitments. There are no clear job or workers' compensation protections for ill workers, increasing the likelihood that individuals might continue to work while contagious. In addition, many health care workers tend to continue to come to work, especially in the very early phases of illness.

Although OSHA has issued "Guidance for Protecting Workers Against Avian Flu" focusing primarily on H5N1 avian influenza,[30] it lacks a standard specifically relevant to infection control during a flu pandemic. Mandatory provisions in an emergency standard are needed because of the urgency to protect workers and remove barriers to their participation in response efforts. The National Pandemic Influenza Plan[1] does not provide adequate worker protection. The plan does not recommend respiratory protection at the level required in the Occupational Safety and Health Administration (OSHA) Respiratory Protection Standard,[35] including NIOSH-certified respirators provided with training and fit-testing.[31] The plan instead recommends surgical masks, which are not actually intended to protect the wearer from a virus. The plan does not recommend comprehensive infection control plans, as have been required for other agents. Further, the plan relies only on voluntary compliance.

Therefore, APHA recommends that:

1. The following additional amendments be incorporated in the National Pandemic Influenza Plan:

- *Develop guidelines about establishing work-relatedness of influenza cases, for use in workers' compensation cases.*
- *Provide governmental support for: essential employers who must hire or replace workers on Medical Removal Protection (MRP); laboratory surveillance; worker mental health services; emergency assistance to enable workers to stay at work while managing outside commitments; and extreme business expenses for worker protection.*
- *Require employers to provide MRP policies such that workers who are removed from work due to symptomatic flu are paid to remain off work until cleared to return.*
- *Develop and maintain a list of key occupations and workplaces at risk, to aid in assuring workers are protected, including prioritization for distribution of limited vaccine or prophylaxis.*
- *Require employers of first responders and health care workers (often local government) to stockpile respirators and other protective equipment.*
- *Require employers to develop pandemic preparedness plans similar to those in OSHA's Bloodborne Pathogens standard.*
- *Require employee training in prevention and exposures control.*
- *Require appropriate respiratory protection as provided in the OSHA Respiratory Protection Standard.*

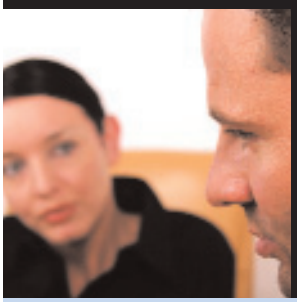
2. Businesses establish policies for employee compensation and sick leave that would be used during a pandemic that are not punitive and provide employees with adequate financial security to enable them to stay home from work when they or a family member are sick.

3. OSHA issue the proposed Emergency Temporary Standard for protecting first responders and health care workers in the event of pandemic flu.

4. OSHA, in the absence of such a standard, increase enforcement of the Personal Protective Equipment Standard and General Duty Clause in affected workplaces during a pandemic situation.

5. Businesses be intimately involved in planning efforts for pandemic flu on the local and state level, in collaboration with state and local health departments, schools and government.

6. Businesses conduct education programs related to pandemic influenza to ensure that employees are aware of how to prevent transmission of the flu, signs and symptoms of the virus, and the need to stay home from work when they are sick.



Incorporating Mental Health into Pandemic Flu Preparedness and Response

While there have been relatively few large outbreaks to inform an appropriate response to a potential flu pandemic, the existing data on infectious disease outbreaks, data from natural disasters and public mental health principles can be brought to bear on the development of such a response. Public mental health measures must address numerous areas of potential distress, health risk behaviors, and psychiatric disease. In anticipation of significant disruption and loss, promoting health protective behaviors and health response behaviors will be imperative. Areas of special attention include: (1) the role of risk communication; (2) the role of safety communication through public/private collaboration; (3) psychological, emotional, and behavioral responses to public education, public health surveillance and early detection efforts; (4) preventing and responding to panic (5) psychological responses to community containment strategies (quarantine, movement restrictions, school/work/other community closures); (6) health care service surge and continuity; and (7) responses to mass prophylaxis strategies using vaccines and antiviral medication. Attention needs to be focused both on global-level and community issues, such as the possibility of panic and other crowd or mob mentalities and reactions, and personal health related issues that focus on individuals.

Therefore, APHA recommends that:

1. Leadership preparation activities be carried out, including ensuring that public officials understand which members of the population will be most vulnerable and who will need the highest level of health services, including mental health services.
2. Community leaders, spokespersons, and natural emergent leaders be identified who can affect community and individual behaviors and who can endorse and model protective health behaviors.
3. Uncomplicated, empathically informed information on normal stress reactions be disseminated widely, which can serve to normalize reactions and emphasize hope, resilience, and natural recovery.
4. The public be informed about the rationale and mechanism for distribution of limited supplies (e.g., Tamiflu).
5. Community rituals (e.g. speeches, memorial services, funerals, collection campaigns, television specials) be used as important tools for managing the community-wide distress and loss and coping with such situations as deaths of important or particularly vulnerable individuals (e.g., children), new unexpected and unknown risk factors and shortages of treatments.
6. Federal, state and local public health partners plan at societal, local and individual levels for the psychological and behavioral responses of the health demand surge, the community responses to shortages, and the early behavioral interventions after identification of the pandemic, and especially during the time frame prior to availability of vaccines.
7. A sense of community be maintained to manage community and organizational distress and untoward behaviors, especially as in-person social supports may be hampered by the need to limit movement or contact due to concerns of contagion. Virtual contact — via Web, telephone, television, and radio — will be particularly important at these times.
8. Officials plan for mass fatality and management of bodies, as well as the community responses to such situations and activities, including taking into consideration various religious rituals of burial and disseminating public health announcements addressing (if known) how long the virus remains in the corpse and what should be done with the bodies.
9. Good safety communication be disseminated, as promoting clear, simple and easy-to-do measures can be effective in helping individuals protect themselves and their families.
10. Care for first responders be provided to maintain their function and workplace presence, including providing assistance to ensure the safety and care of their families.
11. Mental health surveillance, at both the societal and individual level, be conducted in tandem with disease surveillance. Such surveillance should address PTSD, depression and altered substance use, psychosocial needs (e.g. housing, transportation, schools, employment), and loss of critical infrastructure necessary to sustaining community function or which might foster panic.

Ensuring Public Health Leadership

The current federal response plan for pandemic flu uses the framework of the National Response Plan (NRP), a multi-party effort that includes all federal agencies.[32] An influenza pandemic would be deemed an Incident of National Significance — a categorization that would also be given to a terrorist attack or hurricane. The NRP names the Department of Homeland Security (DHS) as the agency responsible for coordinating the overall federal response. The Department of Health and Human Services (HHS) only would have authority over very traditional public health and medical issues, which are outlined in Emergency Support Function (ESF) #8 of the NRP — Public Health and Medical Services. Within the current response structure, it is unclear how the relationship between HHS and DHS would be operationalized in the event of an influenza pandemic — where one agency's power would end and the other's would begin.

The current response structure is problematic because HHS is named the primary federal agency for only ESF #8 — not for the entire federal response — even if the emergency requires public health expertise in every facet of the response, like what would be needed for pandemic influenza.[33] Responding to pandemic flu is much different than responding to a terrorist attack or a hurricane. Public health experts should determine when roads should be closed, when trade in certain goods should be suspended and other key response steps over which health agencies such as HHS do not traditionally have authority in decision-making. Therefore, public health officials — the Department of Health and Human Services — should have the formal authority to take the lead in the federal response to pandemic flu. However, should the situation migrate from a health to a non-health emergency, there should be a clear, orderly process in place to allow for a change of command.

Therefore, APHA recommends that:

1. HHS, not DHS, be the lead federal agency on issues related to domestic preparedness for and response to pandemic influenza, and should have wide authority to plan for a national response to the recurrent flu epidemics.
2. Cooperation and coordination between HHS and DHS be improved.
3. The National Response Plan be reworked or a different multi-party response framework be formulated to ensure that all actors at the federal, state and local levels are coordinated in their responses to pandemic influenza, as the NRP is an insufficient framework due to its lack of focus on public health leadership, preparedness and response.
4. DHS and HHS continue to provide training about the National Incident Management System (NIMS) to public health and response partners at the state and local levels to ensure familiarity with the system, as all emergencies involve the local level.
5. Congress appropriate new and additional resources to state and local levels to improve overall surveillance and response plans, including influenza preparedness efforts, including monies for states and localities to draft and vigorously test their systems and plans, including their pandemic influenza plans.

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