

FACT SHEET

Influenza Pandemic Preparedness

Many employers identify influenza pandemic illness as a potential threat to operations. Companies providing products and services that are critical to maintaining public health and safety infrastructures must be especially well-prepared to respond efficiently and effectively in the event of a widespread health crisis.

An influenza pandemic can occur when a non-human (novel) influenza A virus gains the ability for sustained human-to-human transmission and spreads globally. For example, flu viruses that circulate among birds are novel among humans; people have little or no immunity to them.

Pandemic Risk



Influenza pandemics have occurred four times in the 20th century: 1918 (H1N1, called Spanish flu, responsible for an estimated 20 to 50 million deaths), 1957 (H2N2, Asian flu, estimated 1-2 million deaths), 1968 (H3N2, Hong Kong flu, estimated 1-4 million deaths) and 2009 (H1N1, swine flu, now a seasonal flu virus, estimated up to 575,400 deaths).

Experts believe another influenza pandemic is highly likely, if not inevitable. However,

scientists cannot predict when the next pandemic will occur, nor can they accurately forecast who will become ill and suffer adverse health outcomes, according to the Centers for Disease Control and Prevention (CDC). Based on existing data, for example, infectious diseases experts can only guess what the rate of outpatient visits or hospitalizations would be among non-high-risk adult employees under age 65.

A severe influenza pandemic would affect a significant percentage of the global population. Illness outbreaks typically occur in waves that can last from six to eight weeks and may continue for a year or more. In a pandemic, the federal Occupational Health and Safety Administration (OSHA) reports that employers will likely experience:

- **Significant absenteeism** affecting as many as 40 percent of the workforce during peak periods.
- **Changes in patterns of commerce** influenced by consumer demand for products and services.
- **Interrupted or cancelled supply and delivery** in geographic areas severely affected by a pandemic.

Preparedness and Prevention

Planning is essential to minimize influenza pandemic-related morbidity, mortality and social disruption. OSHA officials say lack of preparedness can result in a “cascade of failures” in business and industry. However, it’s possible for employers to experience a surge of successes with the development and implementation of a comprehensive preparedness plan.



The U.S. Department of Health and Human Services and the CDC have published a [pandemic preparedness checklist](#) for business. Occupational health-related recommendations on the checklist include, but are not limited to, the following:

1. Identify a pandemic coordinator and/or team with defined roles and responsibilities for preparedness and response planning.
2. Assess the availability of medical advice, health care, prescription medications, mental health services, social services and other resources for employees during a pandemic.
3. Identify reliable pandemic information available from community public health, emergency management and other sources (e.g., occupational medicine physicians with expertise in infectious diseases) and create sustainable linkages.
4. Forecast employee absences during a pandemic attributed to factors such as personal or family member illness, community containment measures and quarantines.
5. Establish policies for preventing influenza spread at the worksite (e.g., promoting respiratory hygiene/cough etiquette, prompt exclusion of people with influenza symptoms); provide sufficient and accessible infection control supplies in all business locations.
6. Encourage and track annual employee influenza vaccination rates.
7. Identify employees and key customers with special needs and incorporate the requirements of these individuals into the preparedness plan.
8. Establish policies for restricting travel to affected geographic areas, evacuating employees when an outbreak begins and guidance for employees returning from restricted areas.

Additional Strategies

The CDC's pandemic preparedness efforts include ongoing surveillance of human and animal influenza viruses, risk assessments of influenza viruses with pandemic potential, and the development and improvement of preparedness tools.

Vaccination is just one measure that may be used to fight the spread of influenza when a pandemic emerges. Unlike seasonal influenza, a vaccine would need to be developed and produced, delaying the opportunity to protect large populations. Additional preventive approaches include:

- non-pharmaceutical public health measures in communities, businesses and households to reduce the spread of infection
- antiviral medications
- personal protective equipment (PPE) such as facemasks and respirators in appropriate settings
- consistent use of good personal hygiene (e.g., washing hands with soap and water for at least 20 seconds, covering coughs and sneezes, tissue disposal)

In combination, these strategies will be the initial mainstay of a pandemic response before a vaccine is available and continue to have important effects throughout a pandemic, it says in the U.S. government's [Guidance on Allocating and Targeting Pandemic Influenza Vaccine](#).

Response Framework

An [Updated Preparedness and Response Framework for Influenza Pandemics, Recommendations and Reports](#) was published Sept. 26, 2014, in the *Morbidity and Mortality Weekly Report* (63 RR06; 1-9). The framework features two pre-pandemic and four pandemic intervals:

1. Investigation of cases of novel influenza
2. Recognition of increased potential for ongoing transmission
3. Initiation of a pandemic wave
4. Acceleration of a pandemic wave
5. Deceleration of a pandemic wave
6. Preparation for future pandemic waves

Each interval incorporates eight domains: incident management; surveillance and epidemiology; laboratory; community mitigation; medical care and countermeasures; vaccine; risk communications; and state/local coordination. State and local planning intervals describe the progression of the pandemic within communities and how to respond.

[FluAid](#), a CDC software model, is designed to provide a range of estimates for deaths, hospitalizations and outpatient visits.

There are numerous pandemic influenza resources available to employers. The following is a sampling:

1. About Pandemics: www.flu.gov/pandemic/about/
2. Centers for Disease Control and Prevention Resources for Pandemic Flu: www.cdc.gov/flu/pandemic-resources/
3. Guidance on Preparing Workplaces for an Influenza Pandemic (OSHA): https://www.osha.gov/Publications/influenza_pandemic.htm
4. Occupational Health Issues Associated with H1N1 Influenza virus (Swine Flu) (NIOSH): <http://www.cdc.gov/niosh/topics/h1n1flu/>
5. How to Protect Yourself in the Workplace During a Pandemic (OSHA): <https://www.osha.gov/Publications/protect-yourself-pandemic.html>
6. WorkCare, Inc.: www.workcare.com