Pandemic Influenza



HEALTH AND SAFETY FACT SHEET



What is pandemic influenza?

Commonly called the flu, influenza is a highly contagious viral infection that infects the respiratory system and may cause cough, fever, runny nose, sore throat, fatigue and muscle pains and other symptoms. A pandemic influenza is an outbreak of a new strain of the influenza virus that easily spreads from person to person. It can cover multiple countries, even continents. It can cause severe illness, or even death, because people have no immunity to the new strain.

Pandemic influenza is not the same as seasonal influenza. While dangerous for vulnerable populations with weak immune systems, seasonal influenza rarely threatens the lives of most healthy people. But the pandemic flu is new to the body, so there are less natural defenses, leading to more severe symptoms and possible complications. Pandemic flues are also harder to combat because medicine may be in short supply and vaccines may not be ready. During a pandemic, hospitals and the overall medical system may be quickly overwhelmed.

The most recent pandemic occurred in 2009. It was caused by the influenza A (H1N1) virus. It is estimated to have caused between 100 000 and 400 000 deaths around the globe, in the first year alone.

How does pandemic influenza spread?

Influenza is spread from person-to-person contact or through touching a contaminated surface. There are three potential ways that a pandemic influenza virus can infect a person:

Large droplet transmission – The virus spreads when an infected person coughs, sneezes or talks near another person. Large droplets from saliva travel short distances (about one to two metres) and are deposited on the mucous membranes of the nose, mouth or eyes, causing infection.

Fine droplet or aerosol transmission

- The virus spreads when an infected person coughs, sneezes or talks and the large droplets begin to evaporate, creating very small particles that stay suspended in the air. There are also medical procedures (e.g., intubations, open suctioning, bronchoscopy) that create aerosols, which could cause the spread of the virus.
- **Contact transmission** The virus spreads by direct contact with contaminated hands, skin or objects that is contaminated with the virus.

Historically, pandemic influenzas were spreading around the world in 6 to 9 months. However, with today's international air flights, a modern pandemic can spread to all parts of the world in less than 3 months! This is due to influenza not being detectable, with no visible symptoms for up to two days after infection.

Who is affected?

Since a pandemic influenza virus will be new, the general population will have little to no immunity. All humans will be at risk, but it is difficult to predict who will be most affected. Previous pandemics have affected different age groups and have had varying illness and death rates.

Due to contact with the general public, frontline health, social services, school and municipal workers are at a higher risk of being exposed. However, when it comes to pandemic influenza, all workers can be exposed in any workplace.

What are the hazards?

Beyond the actual results of people getting sick, workplaces should recognize that there are no safe exposure limits. Pandemic influenza will affect the physical and psychological health of CUPE members, especially those who work in the medical field. Potential major outcomes of a pandemic include:

- Shortage of health care workers to care for the sick.
- Stress and burnout for workers.
- Panic and anxiety for all workers due to fear of contracting pandemic influenza.
- Severe illness and death caused by pandemic influenza and related complications.

What can be done to prevent worker exposure?

Employers must be ready to implement a pandemic influenza prevention plan that should be created with the input of CUPE members. It requires new resources and new work processes to prevent the pandemic from spreading. The goal of a prevention plan must be to eliminate exposure to the infectious virus as much as possible. Methods of control should be the same as for other occupational hazards, and should follow the hierarchy of controls:

- Engineering controls
- Administrative controls
- Personal protective equipment

Engineering Controls

- Using isolation and negative pressure rooms to reduce exposure.
- Proper ventilation with high efficiency particulate air (HEPA) filtration units.

- Plans for altering the physical space of workplaces to prevent the spread of pandemic influenza.
- Segregation in self-contained areas for those with pandemic influenza.
- Separate entrance exits and triage areas in health care workplaces for those with suspected pandemic influenza.

Administrative controls

- Develop an exposure control plan before a pandemic occurs.
- Stocking and managing the distribution of personal protective equipment (PPE).
- Staffing that accommodates high rates of sick leave.
- Education of workers, patients and visitors on pandemic influenza.
- Grouping infected patients in health care settings and limiting worker exposure to infected patients.
- Combining tasks to limit the number of workers entering areas with infected patients.
- Good cleaning procedures to reduce spread of pandemic influenza.
- Access to effective hygiene and hand-washing facilities.

Personal Protective Equipment

The use of surgical-type masks will not provide protection for workers or the general public. Workers must have the proper personal protective equipment (PPE). PPE should include:

- Fit-tested N95 respirators or more protective NIOSH-certified respirators for all workers.
- Gloves, face shields, and gowns.
- Policies and procedures to ensure N95 respirators are fit-tested annually or if facial features change.

All workers who are fit-tested with N95 respirators must carry identification indicating the type and size of respirator. Additionally, workers need to receive training on all aspects of PPE (putting on, wearing, removal, disposal, etc.).

Vaccination and antivirals:

A vaccine that provides good protection against a pandemic virus can only be produced after the virus appears. It can take several months or longer to develop and produce an effective vaccine.

The seasonal flu vaccine does not protect against pandemic influenza. It is important to remember that vaccines and antivirals are only one part of a broader response to a pandemic. Vaccinations for influenza should also be voluntary, members cannot be forced to undergo immunizations or medical monitoring for symptoms of influenza.

Strategies for change

The following strategies can help prevent exposure to pandemic influenza:

- · Put pandemic influenza planning and prevention on the joint occupational health and safety committee agenda.
- · Demand regularly scheduled cleaning and disinfection of all equipment and facilities.
- Put the issue on the bargaining table.
- Sponsor CUPE education on the issue of occupational pandemic influenza.
- Create an occupational pandemic influenza policy for CUPE workplaces, starting with a statement acknowledging that occupational pandemic influenza is a health and safety hazard. Every step should be taken to prevent the hazard.

Conclusion

The potential threat of a pandemic influenza outbreak demands that employers work with unions to ensure a comprehensive prevention strategy is in place. The strategy must protect workers who will be expected to respond to the needs of the public in the event of an outbreak. The strategy must above all protect the health of frontline public sector workers, including health care workers and emergency responders.

Employers have a legal duty to provide a healthy and safe workplace. This responsibility is known as the general duty clause. Preventing occupational pandemic influenza is necessary for a healthy workplace.

This fact sheet provides some information to assist CUPE members to address the hazard. Related information is in the CUPE Health and Safety Guideline, Controlling Infectious Agents in the Workplace.

FOR MORE INFORMATION CONTACT:



