



HEALTH AND SAFETY **FACT SHEET**

Pandemic influenza

What is pandemic influenza?

Pandemic influenza is an outbreak of a new strain of the influenza virus that is easily spread from person to person. It can cause severe illness and death because people have no immunity to the new virus.

Pandemic influenza should not be confused with seasonal influenza, which rarely threatens the lives of most healthy people. Seasonal influenza causes local outbreaks each year in the fall and winter. Most people recover from seasonal influenza within a week to ten days.

There have been three influenza pandemics in the 20th century:

- The 1918 Spanish flu caused 40 to 50 million deaths.
- The 1957 Asian flu caused one million deaths.
- The 1968 Hong Kong flu caused one million deaths.

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 in close proximity to another person. Large droplets from saliva travel short distances (about one to two metres) and land 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. It's possible that the virus can be dispersed over long distances (greater than two metres) causing infection in people who have not had face-to-face contact with infected individuals. 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. For example, a healthy person shakes hands with an infected

person or touches a doorknob that is contaminated. The healthy person then touches her hand to her mouth and gets infected.

What are the symptoms?

Pandemic influenza symptoms will be similar to seasonal influenza with additional complications. Seasonal influenza symptoms include sudden onset of fever, headache, cough, muscle aches and pains, sore throat and a stuffy or runny nose. Pandemic influenza could also include severe nausea, vomiting, diarrhoea and pneumonia. Past pandemics like the Spanish flu caused acute pneumonia resulting in a high number of deaths.

Who is affected?

A pandemic influenza virus will be new and the general population will have little or no immunity. All Canadians 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.

The World Health Organization estimates that between 15 and 35 per cent of the general population could become ill. This estimate means that between 4.5 million and 10.5 million Canadians could become ill. Between 2 million and 5 million Canadians would require medical care and between 34,000 and 138,000 people could be admitted to hospitals. Between 11,000 and 58,000 people could die.

Frontline health, social service, school and municipal workers are particularly

at risk. However, when it comes to pandemic influenza all workers can be exposed in workplaces.

Why is there concern about avian influenza?

Avian influenza (or the bird flu) is a disease that affects birds but also people. So far it has not easily spread among people. It is a concern because one way that pandemic influenza could develop would be if the avian influenza virus changed to be easily transmitted among people. If the avian influenza virus changed so that it could spread easily from person to person, the results could be devastating due to the severity of the virus. The World Health Organization has reported human avian influenza death rates of over 50 per cent.

What are the hazards?

Workplaces should recognize that there are no safe exposure limits. It is unknown if a single or many infectious virus particles are capable of causing infection. Pandemic influenza will affect the physical and psychological health of CUPE members. Suspected major outcomes of a pandemic include:

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

Identify the problems

Pandemic influenza must be recognized as an occupational health and safety hazard in your workplace. Inspections are important in identifying potential ways in which a pandemic could affect the workplace. For example, contact with clients or the public should be noted and minimized during a pandemic.

Inspections can help identify poor work organization and practices that can lead to occupational exposure to pandemic influenza.

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. Employers need to recognize that a pandemic is not business as usual. It is a situation requiring 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

Engineering controls should be a key component of a pandemic influenza infection control plan. Planning and actions include:

- 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, exit and triage areas in health care workplaces for those with suspected pandemic influenza.

Administrative controls

- Develop an exposure control plan before a pandemic occurs.
- Using precaution and assume that pandemic influenza can be spread by multiple transmission routes.
- Stocking and managing the distribution of personal protective equipment (PPE).
- Staffing that accommodates high rates of sick leave.
- Testing exercises that identify weak planning on the part of the employer.
- 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, gowns and other appropriate PPE.
- Develop 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.
- Workers need to receive training on all aspects of PPE (putting on, wearing, removal, disposal, etc.)

Advice on vaccination and antivirals:

- A vaccine that provides good protection against a pandemic virus can only be produced after the virus appears. It could take several months or longer to develop and produce an effective vaccine.
- The seasonal flu vaccine will not protect against pandemic influenza.
- The effectiveness of antivirals for treating pandemic influenza is unclear. The ongoing administering of antivirals during a pandemic could deplete the supply but not necessarily prevent 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 be voluntary and members cannot be forced to undergo immunization or medical monitoring for symptoms of influenza.

Housekeeping

Infectious waste, patient-care equipment, laundry, dishes and eating utensils must be properly cleaned and disinfected to eliminate or reduce exposure to potentially infectious materials.

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.
- Ask for better workplace design and work procedures to prevent occupational exposure to influenza.
- 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.
- Plan collective job action around the issue of occupational pandemic influenza where employers fail to address workers' concerns.

Workers' compensation

CUPE members who contract occupational influenza need to file a workers' compensation claim. Filing a claim is an important step in getting occupational influenza recognized as a compensable disease. If you get sick and don't file a claim right away, you

could limit your chances of receiving compensation when occupational influenza becomes recognized as a compensable disease.

Collective agreement and other rights

CUPE members will be called upon to assist in the event of a pandemic influenza outbreak. During an outbreak, members must have the confidence to know that their collective agreement rights will be respected. If workers become ill, they should not suffer loss of pay, benefits or other rights for the duration of their illness. In addition to contract rights, this is an important public health measure. It encourages workers to be vigilant about their own health and their potential to infect others with the influenza virus. A failure to respect workers' rights and to guarantee pay will serve as a disincentive to report symptoms and to stay away from public contact at work.

Conclusion

The potential threat of a pandemic influenza outbreak demands that employers work with unions to ensure a comprehensive prevention strategy is in place. It is important that the strategy 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*.

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