Factsheet #2

What Workers Need to Know About Pandemic Flu

Worker Protection and Infection Control for Pandemic Flu

An influenza pandemic will have a huge impact on workplaces throughout the United States. Absenteeism could be as high as 40% to 60% during the peak of a flu pandemic. Health care workers and emergency responders will be at greatest risk of being exposed to the pandemic flu virus. Workers who have close and frequent contact with the public will also be at high risk. Where there is potential for workers to be exposed to the virus, employers must take steps to control infection.

OSHA (the Occupational Safety and Health Administration) is the federal agency whose role is to assure the safety and health of America's workers. One way OSHA does this is by issuing and enforcing standards. Unfortunately, there is no OSHA standard for pandemic flu or infectious disease. However, even without a standard, employers do have a responsibility to take action in their workplaces to protect workers.

The time to plan and prepare for the safety and health issues associated with pandemic flu is before the pandemic occurs – not after. Taking action to put together an infection control program before there is a flu pandemic is essential to protect workers.

This fact sheet outlines the basic elements of an infection control program that employers can implement to make their workplaces safe during a pandemic.

How Influenza is Spread

In order to understand the proper ways to protect workers during a flu

pandemic, it is important to know how influenza is spread. The flu is spread through contact with an infected person or an object that is contaminated with the virus. Workers can be exposed to the influenza virus in three different ways, all of which can result in becoming infected with the pandemic flu.

1. Large droplets (droplet transmission): Workers can be exposed to large droplets containing the virus when an infected person coughs, sneezes, or even talks. The droplets, suspended in the air, can come into direct contact with the other person's nose, mouth and eyes if they are close enough to the infected person.

2. Small particles (airborne or aerosol transmission): Workers can also be exposed to small particles containing the virus when an infected person coughs, sneezes, or talks. Unlike the large droplets, these infectious particles are small enough to be inhaled into the respiratory system and the lungs.

3. Direct contact (contact transmission): Direct contact can occur when a worker touches his or her mouth, eyes, or nose after touching an infected person or a surface covered with the virus.

Workers need to be protected from all three of these ways of spreading influenza.

Elements of Infection Control

The basic elements of an infection control program that can be used for any workplace include the following:

1. **Develop an Exposure Control Plan**

   An exposure control plan determines, in advance of a pandemic, those workers who are at risk of being exposed to the virus (being exposed to persons who are infected with pandemic flu or who are suspected of being infected). The plan identifies the activities, operations and locations within a workplace where risk of exposure is likely. The plan should be in writing. It should include how exposures will be

determined and the methods and schedule for putting into place all of the pieces of the entire infection control program.

2. **Determine Effective Methods of Exposure Control**

The employer should develop a set of methods for protecting workers from exposure to the pandemic flu virus using the "hierarchy of controls". The hierarchy says that the most effective ways of protecting workers should be used first where possible and supplemented by other methods that are less effective if necessary. The order of effectiveness, from most to least effective, is: engineering controls, work practice and administrative controls, and personal protective equipment.

Engineering Controls

Engineering controls prevent workers from coming into contact with the influenza virus. Approaches that could be used include portable ventilation systems, physical barriers like plastic sneeze guards worn by infected individuals, and negative pressure infection isolation rooms.

Work Practices

A number of work practices can be very effective in protecting workers from exposure, including:

- Frequent handwashing with soap and water or other handwash substances.
- Routine cleaning of potentially hazardous surfaces like telephones, computer equipment, and other frequently touched surfaces.
- Avoiding close contact and shaking hands with co-workers and customers and clients ("social distancing").
- Covering the nose and mouth for all coughs and sneezes with disposable tissues and discarding them in no-touch receptacles ("cough etiquette").
- Prohibiting eating, drinking, or smoking in areas of the workplace where risk of exposure exists.
- Minimizing or eliminating the sharing of equipment and desks/offices.

Administrative Controls

These are employer policies that alter work scheduling and assignments in order to minimize exposure. Examples of administrative approaches include:

- Reducing contact between workers by using email, phone calls, and teleconferences.
- Establishing flexible work hours to reduce the number of workers at the workplace at any point in time.
- Encouraging workers to "telecommute" from their homes where possible.
- Decreasing travel assignments in order to minimize worker exposure to other high risk workplaces.
- Having a policy that permits workers to stay home when they are sick or taking care of a sick family member, with no loss in pay or discipline.

Personal Protective Equipment (PPE)

While personal protective equipment is the least effective means of protecting workers against exposure, the use of PPE will play an important role during a flu pandemic. Selection of PPE must follow the provisions of OSHA Standard 1910.132. Examples of PPE that can be used include:

- Gloves,
- Disposable clothing,
- Face shields,
- Aprons,
- Goggles,
- Disposable shoe covers, and
- Respirators.

Respiratory Protection

Because the pandemic flu virus is a particle, "particulate filtering" respirators are recommended for workers to protect against inhalation of the virus.

- Surgical masks must not be used for protection against airborne hazards.

- OSHA recommends that high exposure risk workers, such as health care employees and emergency medical technicians, be provided with N95 or higher-rated filter respirators for most situations involving people known or suspected to be infected with pandemic influenza. For procedures that are likely to generate aerosols, such as broncoschopy and intubation, OSHA recommends use of a powered air purifying respirator (PAPR).
- For workplaces where employees have high frequency contact with the general population (such as schools, high population density work environments, and some high volume retail establishments), OSHA advises that the use of a respirator may be considered if there is close contact with people who are suspected of being infected with pandemic influenza.
- CDC has made recommendations similar to OSHA's. CDC (Centers for Disease Control) is a federal agency whose role is to protect the public's health and safety and to provide reliable health information,
- Note that the AFL-CIO recommends, **as the minimum level of respiratory protection**, that high risk workers, such as health care workers and emergency responders, wear a P100 respirator with an elastomeric facepiece seal or a PAPR equipped with high efficiency filters.
- Any time workers are required to wear respirators, employers must follow OSHA's comprehensive respiratory protection standard 1910.134 which includes "**fit-testing**". Fit testing is making sure that a particular make, model and size of a respirator fits the individual workers' face correctly.

3. **Medical Surveillance**

Workers' health needs to be monitored. Workers should know how to recognize the symptoms of pandemic flu virus. Employers must establish procedures to identify workers who are suspected of being infected and send them home until they are well. Workers who are sent home should be provided with medical removal protection

(MRP) so that they will not suffer loss of pay, benefits, or other rights for the duration of their illness. If a pandemic flu vaccine or anti-viral medications are available, employers will need to determine priorities for which workers receive them based on the level of risk of being exposed to the virus.

4. **Worker Training**

   Employers need to train workers about pandemic influenza in the workplace. Workers must be taught the nature and risks of exposure in their workplace, how workers may be exposed, the symptoms of pandemic flu, the uses and limitations of all the exposure control methods being used, and the medical surveillance program. OSHA's respiratory protection standard requires training related to the standard.

5. **Communication of Hazards**

   Employers need to post warning signs and labels in the workplace that let workers know where potential exposure exists. Signs and labels should also indicate the control methods to be used to protect workers from those exposures.

6. **Housekeeping**

   A housekeeping program that deals with cleaning and disinfection of potentially contaminated equipment and surfaces needs to be developed. The program should also have policies and procedures for handling and disposal of potentially contaminated waste materials.

7. **Recordkeeping**

   Employers should keep records of medical surveillance and of each worker's exposure to the pandemic flu virus. Employers must make these records available to workers and their unions in accordance with OSHA's standard 1910.1020 for access to employee and medical records.

Advance Planning is the Key

If and when a pandemic virus reaches the United States, and there is not advance preparation, the virus it will spread too quickly for employers to respond to it. That means **the time to prepare is now** – it is critical that employers put into place programs and policies for safety and health before a pandemic arrives.

Employers need to develop their infection control plans now and determine who is at risk of being exposed. They need to identify the exposure control methods that will be used and obtain the equipment and supplies (respirators, gloves, cleaning supplies, etc.) in advance. Workers should receive training on how to recognize symptoms and be fit tested for respirators before they get sick. Without advance planning and preparation, employers will fail in their responsibility to protect their workforce.