

GUIDELINES FOR WORKPLACE PROTECTION AGAINST NOVEL H1N1 FLU

A NYCOSH PRIMER FOR WORKERS AND UNIONS

(current as of January 6, 2010)

NOVEL H1N1 VIRUS is the new influenza virus popularly known as swine flu. It is related to but different than seasonal flu.

MODES OF TRANSMISSION OF H1N1 VIRUS

- **droplet transmission** – Large virus-laden droplets produced when an infected person coughs, sneezes, or speaks can travel up to 6 feet. If these droplets directly contact the upper respiratory tract of another person, infection can occur.
- **contact transmission, direct** – Physical contact with another person can transfer the virus from his/her skin to yours. Touching your mouth, nose, or eyes after physical contact can result in infection.
- **contact transmission, indirect** – Touching a contaminated object or surface and then touching your mouth, nose, or eyes can result in infection.
- **airborne transmission** – Very small infectious particles (droplet nuclei) sprayed into the air during coughing, sneezing, or talking can remain suspended in air for long periods. Inhalation of droplet nuclei can cause infection.

Scientists are uncertain about the relative role of each mode of transmission in the infection process. *Workers must be protected against all transmission routes to be fully protected.*

COMPREHENSIVE INFECTION CONTROL PROGRAM

Reliance on vaccination alone will not prevent infection in every single individual and may not be adequate to prevent the spread of infection. Where workers are at risk of exposure to the flu virus, employers must take additional steps to prevent infection by implementing a written, site-specific, comprehensive infection control program. Unions should be involved in this process.

The program should cover:

- risk or exposure assessment
- pharmaceutical interventions (immunizations and drugs)
- safe work practices and personal hygiene
- respiratory protection and other personal protective equipment (PPE)
- engineering controls (changing the workplace to make it safer)
- medical and personal leave policies
- cleaning and disinfection
- occupational safety and health training
- identification and isolation of infected persons
- medical care and surveillance,
- emergency communication, and
- applicable legal requirements.

Risk/exposure assessment

Risk of workplace exposure to novel H1N1 flu depends on whether, how often, and under what circumstances workers may come into close contact with people infected or potentially infected with the H1N1 virus. OSHA has identified the following risk categories:

Very high exposure risk –

- Healthcare employees who perform aerosol-generating procedures on known or suspected H1N1 patients (for example, cough induction procedures, bronchoscopies, intubation, resuscitation, some dental procedures, invasive specimen collection, etc.).
- Healthcare or laboratory personnel who collect or handle specimens from known or suspected H1N1 patients.

High exposure risk –

- Healthcare delivery and support staff exposed to known or suspected H1N1 patients (for example, doctors, nurses, and other hospital staff who enter patients' rooms).
- Medical transport of known or suspected H1N1 patients in enclosed vehicles (for example, emergency medical technicians).

Medium exposure risk –

- Workers with high-frequency contact with the general population (such as workers in schools, in high-population density work environments, in some high-volume retail, etc.).

Lower exposure risk –

- Workers who have minimal occupational contact with the general public and other coworkers (for example, office employees).

Exposure assessment should be based on actual job tasks, not simply on job title.

H1N1 vaccine

Ensuring that personnel are immune to vaccine-preventable diseases is an essential part of an infection control program. NYCOSH strongly encourages at-risk workers to be vaccinated against H1N1 influenza. When properly matched against the strains of influenza in circulation, flu vaccines have been very effective. Because the injected vaccine is based on inactivated (not live) virus, there is no risk of contracting flu from the vaccine. However, persons who have had adverse reactions to eggs may be at increased risk for allergic reactions to the vaccine.

...government agencies and employers should emphasize comprehensive infection control plans

Although the H1N1 vaccine is expected to be very effective, its actual degree of effectiveness is not yet known. Occasionally, the flu vaccine formulation is not closely matched to current influenza viruses and the effectiveness of the vaccine is reduced. (This is one reason why government agencies and employers should emphasize comprehensive infection control plans and put additional protective measures in place.)

NYCOSH encourages unions and employers to promote voluntary vaccination and other H1N1 control measures. Voluntary vaccination programs that rely upon worker education have a demonstrated record of effectiveness. While we encourage workers to be vaccinated, we believe workers should have the right to opt out, without penalty, for religious or personal reasons. (After a successful court challenge by unions, the NYS Department of Health has withdrawn its emergency regulation that required mandatory seasonal and H1N1 influenza vaccinations for “health care facility personnel.”).

Safe work practices and personal hygiene

Safe work practices include:

- Frequent handwashing with soap and water or use of alcohol-based disposable hand wipes or gel sanitizer
- Regular cleaning of surfaces that are frequently touched and could be contaminated, such as telephones and computers
- Distancing guidelines – avoiding close contact (within 6 feet) with co-workers, customers and clients, and the general public
- Cough etiquette – covering the nose and mouth for all coughs and sneezes with disposable tissues or coughing into your elbow when tissues are not available
- Stopping or reducing the practice of sharing desks or other office equipment
- Staying home from work when ill, and not returning until at least 24 hours after your fever is gone without the use of fever-reducing medications.

Respiratory protection and other personal protective equipment (PPE)

OSHA and PESH require employers to evaluate the potential hazardous exposures of employees and to provide appropriate PPE. Hazard evaluation and PPE selection must take into account *worst-case scenarios*.

OSHA requires disposable N95 respirators (or more protective respirators) when caring for patients with confirmed, suspected, or probable H1N1 (very high or high exposure risk). “Caring includes all activities that bring a worker into proximity of patients, including providing both direct medical care and support activities like delivering a meal tray or cleaning a patient’s room. Perform a workplace hazard assessment in accordance with 29 CFR 1910.132(d) and/or 29 CFR 1910.134(d)(1)(iii) to determine the tasks which would necessitate the use of PPE.” Disposable respirators must not be re-used except in the most dire circumstances.

More protective respirators such as half-face elastomeric (rubber-like) respirators with P100 filter cartridges or powered air purifying respirators (PAPRs) should also be considered. Surgical masks are not respirators and do not protect workers against exposure to very small airborne H1N1 particles. On the other hand, surgical masks worn by infectious persons will help protect workers and others by reducing droplet transmission.

When respirators are used, the OSHA/PESH respiratory protection standard requires a written plan, hazard

assessment, engineering controls to reduce hazards and exposures, training, fit-testing, and medical evaluation. Workers who are unable to use respirators due to medical or fit-test issues cannot be penalized in any way.

Respiratory protection for workers in OSHA's medium exposure risk category is generally not indicated, although exposure assessments may indicate exceptions in some cases.

In addition to respirators, health care workers who give direct care to patients or who have close contact with patients should wear gloves (disposable nitrile or vinyl, not latex), gowns (disposable and resistant to fluids), eye protection (face shield or goggles), and headcover and shoe covers (optional). Other workers who do not provide direct care, like janitors, but may enter rooms of known or potential H1N1 patients should wear gloves, gowns, eye protection, and disposable N95 respirators, or better.

Respiratory protection and PPE, if any, for workers in other employment contexts, should be determined by exposure/risk assessments. Wash thoroughly after removing PPE.

Engineering controls (changing the workplace to make it safer)

Employers should consider increasing general room ventilation rates where possible. Increasing air supply and exhaust can serve to dilute concentrations of infectious airborne particles.

Building mechanical ventilation should also be checked or adjusted to ensure that rooms or areas where persons with known or potential H1N1 infections congregate, such as ER waiting rooms and school nurses' offices, are placed under negative pressure, if possible, with respect to adjoining rooms to minimize the spread of airborne infectious particles.

Health care facilities equipped with isolation rooms should use them when performing aerosol generating procedures such as bronchoscopy, elective intubation, suctioning, etc., for patients with known or suspected H1N1 influenza. Airborne infection isolation rooms (AIIRs, formerly called negative pressure isolation rooms) should be under negative pressure and provided with 6 to 12 air changes per hour. Air can be exhausted directly outdoors or re-circulated after high efficiency particulate air (HEPA) filtration.

Although current CDC guidance does not call for isolation of known or suspected H1N1 patients, use of isolation rooms may be prudent.

Employers also should consider installing physical barriers, such as clear plastic sneeze guards, to protect employees where possible (such as at cashier stations).

Medical and personal leave policies

Health care workers and other workers who are unable to work due to contracting H1N1 while engaged in work duties should be guaranteed sick leave, should not face disciplinary action, and should be presumptively eligible for workers' compensation benefits.

Employers should end punitive sick-leave policies that encourage employees to work while sick. They should implement new policies that encourage sick employees to remain at home, without fear of discipline, until 24 hours after their fever is over (without the use of fever-reducing medications). This will enable full recovery and prevent infection of co-workers. In the best case scenario, sick workers would retain pay and benefits while out sick, thus removing an incentive to return to work while still sick and infectious.

Employers should also be prepared to have workers stay home to care for sick family members and to implement flexible schedules or other accommodations in the event of school closures.

Cleaning and disinfection

The H1N1 virus can remain alive for up to 8 hours on surfaces. Employers should develop a program for rigorous cleaning, and disinfection where appropriate, of equipment and surfaces that could be contaminated. If disinfecting in addition to cleaning, the least toxic EPA-registered disinfectant should be used. The program should also have guidelines for handling and disposing of contaminated or potentially contaminated wastes.

Occupational safety and health training

Employers should provide all workers who, in the course of their work, may come into close contact with persons infected or potentially infected with the H1N1 virus, with pandemic flu training. The training should cover:

- pandemic flu, its signs and symptoms, and its modes of transmission
- exposure scenarios and risk assessment
- the employer's infection control plan
- methods of infection control, including engineering and administrative controls, PPE, and safe work practices and personal hygiene
- the employer's medical surveillance program
- OSHA/PESH respiratory protection standard, and
- OSHA/PESH personal protective equipment standards.

Identification and isolation of infected persons

Employers should develop a written protocol for the early identification of workers, patients, or clients with H1N1 and for their physical isolation. Health care providers and other employers should separate persons with flu symptoms and other persons by allowing enough space between them in waiting rooms and common areas. Persons with flu symptoms in waiting rooms should be asked to wear surgical masks or to cover their nose and mouth with a tissue when coughing or sneezing (and to throw away the tissue in the trash). Health care facilities should provide separate entrances and passageways for pandemic flu patients, if possible.

Medical care and surveillance

Employers should implement protocols to identify workers with flu symptoms, to track flu-related illness and absence, and to provide prompt diagnosis and management of job-related illnesses and appropriate post-exposure prophylaxis and counseling after job-related exposures.

Emergency communication

Employers should develop emergency communication plans to report flu-related policies and developments to employees, including plans for internet-based distance communication. Communications should be 2-way, allowing for employee input and questions.

Legal requirements

OSHA and PESH have issued H1N1 enforcement guidelines that follow CDC recommendations. (See links below.) OSHA has issued serious violations to a NYC hospital for failure to provide appropriate respiratory protection for workers exposed to patients who had the H1N1 virus.

Employers must also comply with applicable legal requirements, including:

- the OSHA/PESH respiratory protection standard, which requires a written plan, hazard assessment, engineering controls to reduce hazards and exposures, training, fit-testing, and medical evaluation.
- the OSHA/PESH PPE standards, which require hazard assessment and training.
- the OSHA/PESH sanitation standard, which requires access to washing facilities.
- the OSHA/PESH access to employee exposure and medical records standard, which requires employers to provide workers and unions access to exposure and medical records upon request, including environmental and biological monitoring results.

- NYS workers' compensation regulations, which provide for lost work time payment and medical treatment for work-related injuries and illnesses.
- the Family Medical Leave Act (FMLA), which requires employers to grant unpaid leave to care for an immediate family member (spouse, child, or parent) with a serious health condition or to grant medical leave when the employee is unable to work because of a serious health condition.

RESOURCES

Centers for Disease Control and Prevention (CDC):

Interim Guidance on Infection Control Measures for 2009 H1N1 Influenza in Healthcare Settings, Including Protection of Healthcare Personnel. www.cdc.gov/h1n1flu/guidelines_infection_control.htm.

Interim Recommendations for Facemask and Respirator Use to Reduce 2009 Influenza A (H1N1) Virus Transmission. www.cdc.gov/h1n1flu/masks.htm.

Institute of Medicine:

Respiratory Protection for Healthcare Workers in the Workplace Against Novel H1N1 Influenza A. www.iom.edu/Reports/2009/RespProH1N1.asp.

Occupational Safety and Health Administration, U.S. Department of Labor (OSHA): Enforcement Procedures for High to Very High Occupational Exposure Risk to 2009 H1N1 Influenza. www.osha.gov/OshDoc/Directive_pdf/CPL_02_02-075.pdf.

Guidance on Preparing Workplaces for an Influenza Pandemic. www.osha.gov/Publications/OSHA3327pandemic.pdf.

Healthcare Workplaces Classified as Very High or High Exposure Risk for Pandemic Influenza. www.osha.gov/Publications/exposure-risk-classification-factsheet.html.

Proposed Guidance on Workplace Stockpiling of Respirators and Facemasks for Pandemic Influenza. www.osha.gov/dsg/guidance/proposedGuidanceStockpilingRespirator.pdf.

Respiratory Infection Control: Respirators Versus Surgical Masks. www.osha.gov/Publications/respirators-vs-surgicalmasks-factsheet.html.

Workplace Safety and H1N1. www.osha.gov/h1n1/index.html.

Public Employee Safety and Health, N.Y.S. Department of Labor (PESH):

Enforcement Procedures and Scheduling for Occupational Exposure to H1N1 Influenza. www.labor.state.ny.us/workerprotection/safetyhealth/PDFs/PESH/H1N12.pdf.



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