

## **10. Infection Prevention and Control and Occupational Health and Safety Measures**

*[H]e demonstrated for them an innovation he had experimented with; the wearing of gauze masks by patients with respiratory disease... Welch called the mask 'a great thing...an important contribution in prevention of spray infections.' He encouraged Capps to write an article for the Journal of the American Medical Association and advised Pearce to conduct studies of the masks' effectiveness.*

The Great Influenza, John M. Barry

During an influenza pandemic, infection prevention and control and occupational health and safety measures can help protect the public, patients, and health care providers from exposure to the influenza virus. It is critical that everyone be aware of the type of measures they should take to reduce the spread of influenza. The first part of this section describes infection prevention and control measures the public and organizations should use. The second addresses occupational health and safety requirements for health care settings.

Legislated Occupational Health and Safety requirements designed to protect workers against infectious diseases involve more than just “personal protective equipment”. Protection from infectious diseases depends on having a hierarchy of controls in place and effective health and safety systems. This section describes those controls and systems.

This section refers to Occupational Health Services. In settings that do not have a designated Occupational Health Service, senior management is responsible for fulfilling those roles and responsibilities and for complying with legislation regarding confidentiality of personal health information.

### **10.1 Objective**

- To ensure the public knows how to reduce the risk of exposure to influenza.
- To ensure health care providers have access to the appropriate training, infection prevention and control practices and equipment, and other supports to reduce exposure to influenza.

### **10.2 Transmission of the Influenza Virus**

Influenza is primarily droplet spread. This means that it can be directly transmitted from person to person when people infected with influenza cough or sneeze and droplets of their respiratory secretions come into contact with the mucous membranes of the mouth, nose, and possibly eyes of another person. Scientists are not certain how far droplets from a coughing or sneezing person can travel. The MOHLTC recommends keeping about a one metre distance from a coughing or sneezing person; however this distance is currently under review. Because the virus in droplets can survive for

24 to 48 hours on hard non-porous surfaces, for eight to twelve hours on cloth, paper and tissue, and for five minutes on hands, the virus can also be contact spread. People can acquire influenza indirectly by touching contaminated hands, surfaces and objects, and then touching their mouth, nose or eyes.

The risk to health care workers in the workplace may be higher when staff are performing procedures on patients with pandemic influenza, that generate aerosols. In this situation, the droplets containing influenza virus may become aerosolized resulting in possible airborne spread of the virus. The issue of whether influenza can also be spread by airborne transmission during non-aerosol generating procedures is controversial. Current scientific literature and experience with other influenza viruses does not conclusively confirm or rule out airborne transmission.

Workplace health and safety measures will be particularly important in the early phase of a pandemic, when there are only a small number of cases and there may be an opportunity to contain the virus and slow community spread. Once the pandemic strain is widespread in the community, health care workers and all others will be at risk outside their workplace, and strict workplace controls will not prevent community-based transmission. Opinions differ on whether health care providers will be at a higher risk of exposure than the general public. Some experts believe that, because of the ease with which respiratory illnesses pass from person to person in the community, health care workers will be at no greater risk in their work environment; in fact, they may benefit from being in a controlled environment that has procedures in place to reduce disease spread. Others take the position that health care workers will be at greater risk because of the large number of people with influenza they will have contact with in their work setting. The risk of community-based transmission does not relieve employers of their obligation to take every reasonable precaution to protect workers in the workplace.

### **10.3 Infection Prevention and Control Practices for the Public**

All influenza viruses are primarily droplet spread; however airborne transmission cannot be conclusively ruled out. The public should be advised of the steps they can take to reduce the risk of being exposed to influenza, including:

- having the annual influenza immunization
- practicing hand hygiene: When hands are visibly dirty or contaminated with respiratory secretions, wash hands with soap and water. When cleaning hands with soap and water, wet hands first with water, apply liquid soap to the hands and rub hands together vigorously for at least 15 seconds, covering all surfaces of the hands and fingers. Rinse hands with water and pat dry thoroughly with a disposable towel. Use a disposable towel to turn off the faucet. If hands are not visibly soiled, use an alcohol-based hand sanitizer containing between 60% to 90% alcohol to decontaminate hands. When decontaminating hands with an alcohol-based hand sanitizer, apply product to the palm of one hand and rub hands together, covering all surfaces of hands and fingers, until hands are dry. Use hand hygiene particularly after coughing or sneezing and when entering or leaving a health care setting

- keeping one metre or an arms-length away from someone who is coughing or sneezing (Note: scientists are not certain how far droplets from a coughing or sneezing person can travel. This document recommends keeping approximately one metre from a coughing or sneezing person, but this distance is currently under review.)
- avoiding activities where large number of people gather in enclosed spaces (e.g., sporting events, concerts)
- thoroughly cleaning surfaces in the home when someone is ill with influenza
- complying with any public health measures recommended by the Medical Officer of Health (MOH)
- staying home from work or school when ill
- covering their mouth when coughing using a tissue or sleeve rather than your hands
- not visiting people in hospital or a long term care home when ill with influenza.

The wearing of masks by the public has not been proven to be an effective means of limiting the spread of influenza during a pandemic. Therefore, the use of masks in the community is not recommended; however, if individuals choose to wear masks, they should:

- wear a surgical/procedure mask
- learn the proper procedures to put masks on and off
- dispose of the mask immediately after removing it and then immediately perform hand hygiene
- know how to properly dispose of used masks without contaminating themselves and increasing the risk of infection
- understand that masks or any protective equipment is not a substitute for hand hygiene.

#### **10.4 Infection Prevention and Control Practices in Schools and Daycares**

Settings where children gather face particular infection prevention and control challenges because children shed virus longer than adults and because children – particularly young children – may not be capable of implementing some practices independently (e.g., hand washing, using tissues). This is one reason why the Medical Officer of Health for the PCCHU may consider closing schools or daycares during a pandemic. (See Section 6: Public Health Measures).

#### **10.5 Infection Prevention and Control Practices in Health Care Settings**

Employers of health care workers must have the following infection and prevention control measures:

- access to infection prevention and control expertise
- ongoing surveillance programs for febrile respiratory illness (FRI)
- immunization policies that encourage the yearly influenza vaccination
- active promotion of hand hygiene and accessible hand hygiene stations
- active promotion of cough etiquette

- consistent use of routine practices and droplet, contact and airborne precautions.

When providing care or services for someone with pandemic influenza or ILI, workers should use the following airborne precautions:

- wear an N95 respirator
- perform aerosol-generating procedures only when essential
- perform aerosol-generating procedures in negative pressure or airborne infection isolation rooms if available
- clean all contaminated surfaces and equipment following a high risk procedure
- restrict the number of persons entering the patient's room to the minimum required for patient care and support.

Health care workers are likely to be working extended or extra shifts in an environment with high level of stress caused by the demand for care and fear of the emerging pandemic. Employers should develop psychosocial support services which will help workers and their families. In addition, employers may consider providing counseling and assistance with home-related responsibilities (child-care, pets care, meals, etc.)

### **10.6 Occupational Health and Safety Legislation: The Workplace Partnership**

The purpose of the Occupational Health and Safety Act is to protect workers against health and safety hazards on the job. Workers and employers share the responsibility for occupational health and safety (i.e., the workplace partnership). This concept of an internal responsibility system is based on the principle that the workplace parties themselves are in the best position to identify health and safety problems and to develop solutions. Ideally, the internal responsibility system involves everyone, from the company chief executive officer to the worker. How well the system works depends upon whether there is a complete, unbroken chain of responsibility and accountability for health and safety. (See Chapter 7 of the OHPIP at [www.health.gov.on.ca/pandemic](http://www.health.gov.on.ca/pandemic).)

The joint health and safety committee or -- in smaller workplaces -- the health and safety representative has a role to play in monitoring the internal responsibility system. The Act sets out the basic rules of operation for both joint committees and health and safety representatives.

A joint health and safety committee is an advisory group of worker and management representatives. The workplace partnership to improve health and safety depends on the joint committee. It meets regularly to discuss health and safety concerns, review progress and make recommendations to improve workplace health and safety. This function is supported by inspections of the workplace (For more information on the composition and role of the joint health and safety committee, see the Ministry of Labour website at: <http://www.labour.gov.on.ca/english/hs/jhsc/index.html>.)

Personnel requiring restrictions during a pandemic will provide Occupational Health Services with medical documentation supporting their restrictions for accommodation. Appropriate alternative work will be provided where available.

#### **10.6.a. Role of the Workplace Safety and Insurance Board (WSIB)**

The WSIB is responsible for preventing workplace illness and injuries and for promoting health and safety in Ontario's workplaces. The Ontario health and safety associations funded by the WSIB provide training programs, products, and consulting services to the province's employers and workers. The Ontario Safety Association for Community & Healthcare is the designated safe workplace association for the health care and community care sector. The WSIB administers no-fault workplace insurance for employers and provides disability benefits, monitors the quality of healthcare, and assists in early and safe return to work for workers who are injured on the job or contract an occupational disease.

Employers must notify WSIB about a workplace injury or illness within three days after learning about it and notify the Ministry of Labour, the joint committee and the union within four days.

For more information, please visit the WSIB website at:

[file://localhost/http://www.wsib.on.ca/wsib/wsbsite.nsf:public:home\\_e](file://localhost/http://www.wsib.on.ca/wsib/wsbsite.nsf:public:home_e)

#### **10.7. Hierarchy of Infection Prevention and Control Measures**

A hierarchy of infection prevention and control measures in a health care setting are needed to prevent transmission of infectious disease and to protect health care providers from health care acquired infectious diseases. The hierarchy of controls operates at all levels, including the source, the path and the worker. Examples of controls include but are not limited to:

- engineering controls: These are the first and most effective line of defense because they involve permanent changes in the setting that reduce exposure to influenza and they eliminate the risk of “human error” or non-compliance with recommended practices or use of PPE. These include:
  - physical barriers (sneeze guards)
  - space design to ensure that waiting areas keep patients one metre apart
  - equipment such as sinks, tissues and disposable towels and hand sanitizer stations
  - easily cleanable surfaces (patient care areas) which are combined with appropriate cleaning procedures
  - ventilation systems designed and maintained in accordance with the CSA Standard Special Requirements for Heating, Ventilation and Air Conditioning (HVAC) Systems in Health Care Facilities
  - negative pressure rooms for aerosol generating procedures
- administrative and work practices: These include ways of organizing and providing care and services that reduce the risk of exposure to influenza. These include:

- managing patient flows by drawing individuals with influenza symptoms away from traditional health care settings to assessment centres. It also includes directing individuals with ILI to certain entrances and exits to minimize the exposure to individuals who do not have symptoms
- screening policies and procedures for ILI that would direct individuals to take appropriate steps to reduce risk
- human resource policies that encourage ill employees to stay home
- work practices which encourage maintaining a one metre distance from individuals with ILI (holding meetings in large rooms)
- encourage alternative communication methods to minimize contact between ill and non-ill individuals (e-mail, teleconferences, etc.)
- policies to delay non-emergency high risk procedures until the individual's symptoms have resolved
- processes and procedures for handling and cleaning equipment and clothing that reduce possible exposure
- cohorting policies which include:
  - separating patients with ILI from those without those symptoms
  - designating equipment to be used for those ILI
  - bringing services that would normally be delivered in a common area to influenza patients (meals, portable x-ray)
  - deploying staff to designated areas to reduce mixing and exposure (those who work with patients with ILI do not provide care for other patients)
- staffing plans that:
  - identify staff who may be at high risk of complications from influenza so that they can be offered work assignments that do not knowingly expose them to the influenza virus
  - describe how staff will be deployed and managed during a pandemic
  - cohort recovered staff to care for influenza patients
- personal protective equipment: The following table from the OHPIP Plan, Chapter 7 describes the equipment required in different situations. Employers will:
  - stockpile a four-week supply of PPE (See Section 11 of the PCCHU Pandemic Influenza Plan)
  - maintain a written respiratory protection program and provide fit-testing and training for staff using N95 respirators
  - ensure that workers are adequately trained in donning and doffing PPE
  - ensure that workers have easy access to PPE
  - develop procedures and providing training for use of PPE
  - instruct patients with ILI to perform hand hygiene and wear surgical/procedure mask
  - ensure the proper disposal of PPE
  - ensure procedures are in place to handle PPE shortages and thereby giving priority to staff involved in high risk activities (aerosol-generating procedures)

**Table 7.3: Personal Protective Equipment for Patient Care**

NOTE: PPE is only one component of the hierarchy of infection prevention and control measures required to protect health care workers

	Seasonal Influenza (including ILI <sup>1</sup> ) no risk factors for airborne diseases	Pandemic Influenza (including ILI <sup>1</sup> )	Aerosol Generating Procedures on Patients with Pandemic Influenza (including ILI <sup>1</sup> )
Patient accommodation	Single patient room AIIR <sup>2</sup> not required	Single patient room or cohort AIIR <sup>2</sup> not required	In AIIR <sup>2</sup> if available
Precautions	Routine/Droplet/Contact	Routine/Droplet/ Contact	Routine/Droplet/ Contact/ Airborne
Hand hygiene	Yes	Yes	Yes
Gloves	If indicated by Routine Practices <sup>3</sup>	If indicated by Routine Practices <sup>3</sup>	If indicated by Routine Practices <sup>3</sup>
Gown	If indicated by Routine Practices <sup>3</sup>	If indicated by Routine Practices <sup>3</sup>	If indicated by Routine Practices <sup>3</sup>
Surgical mask for HCW	Yes	—	—
N95 respirator for HCW	Not routinely	Yes	Yes
Eye Protection	If indicated by Routine Practices <sup>3</sup>	If indicated by Routine Practices <sup>3</sup>	Yes
Surgical Mask on Patient	At triage and if outside of room	At triage and if outside of room	If outside of AIIR and if outside of room

Notes to table:

<sup>1</sup>ILI: Influenza-like illness

<sup>2</sup>AIIR: Airborne infection isolation room

<sup>3</sup> See PIDAC fact sheet on routine practices: Figure 7.3

## 10.8 Infection Prevention and Control Measures

All health care settings must have accessible hand hygiene stations in appropriate locations, and signage instructing all staff, patients, residents, visitors and volunteers on when to practice hand hygiene. Hand hygiene has been shown to be effective in preventing and controlling infections in both institutions and community settings. Signage and hand hygiene stations help raise awareness about the risk of disease transmission in health care settings, and reinforce personal/individual responsibility for hand hygiene.

All health care settings should establish a clear expectation that staff do not come into work when ill with a febrile respiratory illness and support this expectation with appropriate attendance

management policies. It is recommended that all health care settings should ensure that they: provide sick leave benefits for all staff (either in the form of paid sick days for full-time staff or in compensatory wage rates in lieu of benefits to part-time staff); avoid reward programs for staff who have no sick days; avoid penalizing staff for taking sick days; and actively exclude staff who are ill (i.e., send staff home who arrive at work ill).

#### **10.8.a. Precautions for Patients with Influenza Symptoms**

Patients who have influenza symptoms (i.e., fever, cough) who come to a health care setting for care should be asked to:

- practice hand hygiene or clean their hands using alcohol based hand sanitizer
- wear a surgical or procedure mask
- wait in a separate area or keep one metre away from other patients and staff.

The purpose of asking symptomatic patients to wear masks is to protect other patients/staff in common waiting areas. While masking is preferable, not all patients will be able to tolerate masks (e.g., children, people with chronic breathing problems, and people with dementia). In these cases, the setting should, if possible, have the patient wait in a separate area or keep at least a one metre distance from other patients. Each health care setting's capacity to separate patients with respiratory symptoms will depend on space. In crowded waiting areas, precautions like hand hygiene and masks become even more important. If masks are not available, patients should be encouraged to use another method to cover their mouth and nose when coughing or sneezing (e.g., tissue).

Patients who have symptoms of influenza-like illness and a travel history to an area with a health alert should be moved immediately out of the waiting room and put in a separate room. (See [http://www.who.int/csr/disease/avian\\_influenza/country/en/](http://www.who.int/csr/disease/avian_influenza/country/en/))

Whenever possible, patients who have influenza symptoms who are admitted to a hospital should be:

- accommodated in a single room or cohorted with other influenza patients in designated multi-bed rooms or wards
- have their own hand washing sink, toilet, bath facilities
- limit their movements and contacts with other patients and workers
- wear a surgical mask when outside their room

#### **10.8.b. Precautions for Health Care Workers**

Health care workers providing care for all patients, including those with influenza-like symptoms should consistently use the following droplet/contact precautions:

- perform hand hygiene before seeing the patient; after seeing the patient and before touching one's face; and after removing and disposing of personal protective equipment (PPE)

- wear a mask and protective eye wear when working in the patient room or near a coughing patient
- use examination procedures that minimize contact with droplets (e.g., sitting next to rather than in front of a coughing patient when taking a history or conducting an examination)
- wear appropriate gloves when likely to have contact with body fluids or to touch contaminated surfaces
- wear gowns during procedures and patient care where clothing might be contaminated
- clean and disinfect:
  - surfaces touched by a patient with influenza during a visit (arms of the chair in waiting rooms, examination table, edge of desk)
  - communal or shared equipment after use
  - frequently touched work surfaces (door knobs, stair rails, etc., light switches, etc.)(Commercial cleaning or disinfectant wipes that are easily accessible to all workers allow efficient cleaning of surfaces between patients) (See the Provincial Infectious Diseases Advisory Committee (PIDAC)  
[http://www.health.gov.on.ca/english/providers/program/infectious/diseases/ic\\_cds.html](http://www.health.gov.on.ca/english/providers/program/infectious/diseases/ic_cds.html))
- take only the equipment required to provide care into the patient's room (See also the College of Physicians and Surgeons of Ontario document: Infection Control in the Physician's Office, 2004 at <http://www.cpso.on.ca/Publications/publications.htm>)
- whenever possible, use disposable equipment which can be safely discarded with regular garbage immediately after leaving the patient's room

All contaminated surfaces and equipment should be cleaned following a high risk procedure. Surfaces should be cleaned and disinfected, and equipment disinfected or discarded, by staff performing the high risk procedure before leaving the room and before removing personal protective equipment. Staff should not re-enter the room until it has been cleaned. For more information on droplet/contact precautions, see the Public Health Agency of Canada publication: Infection Control Precautions for Respiratory Infections Transmitted by Large Droplet/Contact: Infection Control Guidance in a Non-Outbreak Setting, When an Individual Presents with a Respiratory Infection. (See: [http://www.phac-aspc.gc.ca/sarssras/pdf/sars-icg-nonoutbreak\\_e.pdf](http://www.phac-aspc.gc.ca/sarssras/pdf/sars-icg-nonoutbreak_e.pdf) Guide to Health Care Provider Personal Protective Equipment (PPE) by Type of Influenza.)

### **10.9 Training and Education for Health Care Workers**

Best practices in infection prevention and control assume that health care settings in Ontario have basic infection and prevention control systems/programs in place. These should be reviewed in consultation with Joint Health and Safety Committee and include the necessary training and education to provide health care workers with the knowledge and skills necessary to implement good infection control practices.

In addition to the training requirements laid out in legislation and regulation, MOHLTC is developing influenza pandemic training curricula. (See Ontario Health Plan for an Influenza Pandemic, Chapter 7A: Tools, Training and Education for Health Care Workers at [http://www.health.gov.on.ca/english/providers/program/emu/pan\\_flu/pan\\_flu\\_plan.html](http://www.health.gov.on.ca/english/providers/program/emu/pan_flu/pan_flu_plan.html))

The curriculum for the components outlined in the Ontario plan is currently in development.

### **10.10 Occupational Health Management of Health Care Workers**

The Canadian Pandemic Influenza Plan Annex on Infection Control contains the following definition of Fit to Work: “Terminology used in occupational health to communicate a worker’s ability to remain at or return to work.” This ability includes three categories: fit for work, unfit for work, fit with restrictions. This categorization allows the occupational health nurse to maintain confidentiality about a worker’s diagnosis, symptoms, and immune status.

- Fit for Work - Fit to work with no restrictions.
- Unfit for Work - Defined as a medically determinable illness that prevents an employee from performing the regular or modified duties of their occupation.
- Fit for work with restrictions - Allows for the re-assignment of duties or re-integration into the workplace in a manner that will not pose an infection risk to the HCW or to the patients and other individuals in the workplace.

Recommendations for managing workers with ILI are as follows:

- Fit for Work: Ideally, health care workers are fit to work when one of the following conditions applies:
  - they have recovered from influenza-like illness (ILI)
  - they have been immunized against the pandemic strain of influenza
  - they are on appropriate antivirals

Health care workers who meet these criteria may work with all patients and may be selected to work in units where there are patients who, if infected with influenza, would be at high risk for complications.

Whenever possible, well, unexposed health care workers should work in non-influenza areas.

Asymptomatic health care workers may work even if influenza vaccine and antivirals are unavailable. Meticulous attention should be paid to hand hygiene and health care workers should avoid touching mucous membranes of the eye and mouth to prevent exposure to the influenza virus and other infective organisms.

- **Unfit for Work:** Ideally, staff with ILI should be considered ‘unfit for work’ and should not work; however, due to limited resources, these HCWs may be asked to work if they are well enough to do so.
- **Fit to Work with Restrictions:** Ideally, symptomatic staff who are considered ‘fit to work with restrictions’ should only work with patients with ILI. Health care workers who must work with non-exposed patients (non-influenza areas) should be required to wear a mask if they are coughing and must pay meticulous attention to hand hygiene.

Symptomatic health care workers who are well enough to work should not be redeployed to intensive care areas, nurseries or units with severely immunocompromised patients (i.e., transplant recipients, hematology/oncology patient, patients with chronic heart or lung disease, or patients with HIV/AIDS and dialysis patients).

Occupational health and infection prevention and control practices for health care workers during the pandemic period should include:

- Respiratory hygiene programs
- Access to antivirals
- Febrile respiratory illness case finding/surveillance
- Precautions for cleaning/disposing of equipment and cleaning the environment
- Annual influenza immunization
- Accommodating patients with ILI in a single room
- Practices to limit contact with influenza patients
- Postponing elective high risk procedures; appropriate equipment and precautions for high risk procedures
- Implementing reporting requirements
- Criteria to assess staff who are ‘fit to work’
- Attendance management policies that encourage workers to stay home when ill
- Personal protective equipment
- Consistent use of droplet and contact precautions
- Accessible hand hygiene stations
- Access to vaccine
- Education about influenza, protective practices and safe use of PPE
- Accurate complete and timely information about the pandemic

### **10.11. Infection Prevention & Control Guidelines for Emergency Operations Centres**

This Infection Prevention & Control Guidelines (IPCG) for Emergency Operations Centres (EOCs) is intended for use in EOCs only.

Its purpose is twofold:

- To identify the issues that may impact or affect EOCs; and
- To identify infection prevention and control measures that can be implemented to help the operational continuity of EOCs, especially during influenza season or a pandemic.

This document should be considered in the design and implementation of a specific emergency response program tailored to the needs of the EOC and / or the unique situation. Each EOC should have a designated Safety Officer.

In this document, EOCs refer to the following:

- Community EOCs;
- Ministry EOCs;
- The Provincial EOC (PEOC);
- EOCs for industry partners responsible for critical infrastructure; and
- Any other EOC, as appropriate (e.g., Fire, Police, volunteer organizations, schools and institutions).

#### **10.11.a. Infection Prevention and Control to Help Ensure Continuity of Operations**

The primary concern for EOCs is maintaining essential services while experiencing potential workforce shortages due to employee illness as a result of an infectious disease outbreak, ranging from a cold to potentially serious respiratory illnesses such as influenza.

The primary goal for EOCs is to ensure that preventive practices are established to decrease the risk of transmission of febrile respiratory illness in an EOC setting, thus helping to ensure continuity of operations (business continuity), which is especially important during emergency operations. Note: for the purposes of this document the emphasis is on influenza viruses.

Transmission of influenza - Human influenza is transmitted from person-to-person primarily via virus-laden large droplets (particles >5 µm in diameter) that are generated when infected persons cough or sneeze. These large droplets can then be directly deposited onto the mucosal surfaces of the upper respiratory tracts of susceptible persons who are near (e.g., within 3 feet) the droplet source. Transmission may also occur through direct and indirect contact with respiratory secretions. Droplet-spread infections pass from one person to another with ease. Droplet-spread illness can also be transmitted indirectly when people touch or have contact with hands, surfaces and objects contaminated with droplets of respiratory secretions, and then touch or have contact with their own or someone else's mucous membranes or eyes. Transmission of influenza from environmental surfaces has not been demonstrated by epidemiologic studies.

#### **10.11.b. Infection Prevention and Control Measures in the EOC**

It is recommended that EOCs establish policies about infection prevention and control measures that will minimize influenza virus infection and transmission. It is expected that all EOCs will have a designated Safety Officer who will provide orientation to infection prevention and control policies in place, which should include the following components:

- Promotion of influenza immunization -- Influenza immunization is strongly recommended for all involved in the operations of an EOC, unless medically contraindicated. In Ontario, annual influenza immunization is recommended and available free to everyone over the age of 6 months who lives, works, or studies in Ontario.
- Education on hand hygiene -- Practicing frequent hand washing, the use of alcohol-based sanitizers, care when disposing of tissue, and hand hygiene after using tissues, are recommended. An appropriate alcohol based hand sanitizer is one containing 60% to 90% alcohol (isopropyl or ethanol).
- Assessment -- Continuous assessment of the potential risk of infection and the appropriate use of personal protective equipment must be done.
- Regular cleaning -- The work environment, focusing on frequently touched surfaces, must be subject to a regular cleaning schedule.
- Policy on individual responsibility -- It is each individual's responsibility to keep him/her, and fellow staff members, safe, including staying home when ill. EOCs should establish a clear expectation that staff do not come to work when ill with a febrile respiratory illness and support this expectation with appropriate attendance management policies.
- Procedures for personnel screening - Procedures must be established for the screening of personnel for febrile respiratory illness, based on the MOHLTC document 'Preventing Febrile Respiratory Illnesses', MOHLTC (See [http://www.health.gov.on.ca/english/providers/program/infectious/diseases/ic\\_fri.html](http://www.health.gov.on.ca/english/providers/program/infectious/diseases/ic_fri.html))

#### **10.11.c. Hand-Hygiene and Cough Etiquette in the EOC**

Frequent and thorough hand-hygiene and routine infection control practices are important measures in preventing the spread of many infectious illnesses, including influenza.

Frequent and thorough hand hygiene, either with soap and warm running water (for at least 15 seconds) or alcohol-based hand sanitizer, is the single most important measure for preventing infections. Alcohol-based hand sanitizers are not effective when hands are visibly dirty. Hands should be washed thoroughly with soap and warm running water, or wiped with moist wipes to remove

visible dirt prior to using alcohol-based hand sanitizers.

EOCs should design, implement and reinforce an awareness campaign to educate all personnel regarding routine infection-control practices that can prevent the spread of respiratory illness.

A routine ‘infection control practices’ education campaign should also include cough etiquette: covering one’s nose and mouth with a tissue when coughing or sneezing; washing one’s hands after coughing/sneezing; appropriate disposal of tissues; and hand-hygiene after tissue use.

Some suggestions for consideration by EOCs are:

- accessible hand hygiene stations in multiple locations, and signage instructing staff when and how to perform hand hygiene
- posted guidelines/signage, and regular education about hand hygiene and cough and respiratory etiquette
- quick and easy access to hygiene supplies (soap, hand-washing gels, single use paper towels, tissues, etc).

#### **10.11.d. Workspace and Equipment Disinfection in the EOC**

EOCs should maintain routine cleaning practices to keep the working environment clean; 24/7 operation of an EOC should be reflected in the frequency of cleaning. In addition, protocols may be instituted to clean the individual workplace before handing over to the next shift of personnel. Guidelines to be considered include the following:

- scheduled cleaning of the personal workplace at the beginning or end of each shift
- following manufacturer’s instructions for cleaning agents
- containers for cleaning materials should be covered and kept separate from food preparation and rest areas
- surfaces to be cleaned should include frequently touched surfaces, such as: telephones, desktop, and keyboard
- appropriate cleaning agents can be prepackaged single-use cleaning towels or prepared for specific use (see: <http://www.phac.aspc.gcca/publicat/ccdrmtc/98pdf/cdr24s8e.pdf>)
- individual headphones for each person stationed in the EOC.

#### **10.11.e. Personnel Screening in the EOC**

Workplace screening supports sustained operational capability during an outbreak/pandemic situation. Screening questions will be provided by the MOHLTC at the onset of an infectious disease emergency. Personnel conducting workplace screening at building or departmental entrances need not be health professionals but should be advised as to the protocols to be followed.

Personnel ill with a febrile respiratory illness (fever and cough) should be denied admission to the EOC until assessed by a health professional. Non-essential personnel should not be permitted access to the EOC.

#### **10.11.f. Personal Protective Equipment (PPE) in the EOC**

There is no indication for PPE in an office setting like the EOC. If key personnel must enter the EOC when symptomatic, they should:

- maintain >1 meter distance from others
- wear a mask to contain expelled droplets
- practice frequent hand hygiene
- ensure their workspace and any equipment they touch is disinfected (e.g. keyboards, phones).

#### **10.11.g. Safety Officer for the EOC**

Under the Incident Management System (IMS), a Safety Officer (within the Command Section), is responsible for the health and safety for all EOC personnel. The duties of the Safety Officer should include the development/adaptation, review and update of the infection prevention and control initiatives. The duties and responsibilities of Safety Officer must be clearly identified to all personnel in the EOC.