EXPOSURE CONTROL PLAN
PANDEMIC INFLUENZA

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Health hazards of pandemic influenza

The effects of pandemic influenza are expected to be much more severe than for seasonal influenza because most people will not have any immunity to the virus.

Symptoms
Seasonal flu affects people to varying degrees, with symptoms including headache, fever, prostration (fatigue severe enough to force a person to lie down), sudden onset and myalgia (muscle aches and pains). In some cases, secondary infections such as pneumonia may develop. Symptoms of pandemic influenza are likely to include high fever (higher than 38°C), significant vomiting, and diarrhea.

Transmission
The BC Centre for Disease Control advises that influenza is communicable for 24 hours before the onset of symptoms and 7 days afterward.[i]

Pandemic influenza is spread in the same way that seasonal influenza is spread. Exposure to the virus may occur in a variety of ways, including the following:

- Shaking hands with an infected person or touching a surface contaminated with the virus, followed by touching one's eyes, nose, or mouth
- Infectious droplets (from a coughing or sneezing person) landing in the eye or onto the mucosa (moist inner surfaces) of the nose or mouth
- Breathing infectious airborne droplets or particles (from coughing, sneezing, or aerosol-generating medical procedures on infected patients)
- Sharing food items or utensils with an infected person

Statement of purpose

The University of Victoria is committed to providing a safe and healthy workplace for all of our employees, students and visitors. A combination of measures will be used to minimize employee exposure to pandemic influenza. Our work procedures will protect not only our staff, but also other workers who enter our facilities. All employees must follow the procedures outlined in this plan to prevent or reduce exposure to pandemic influenza.

Responsibilities

University of Victoria:

- Support the implementation of this exposure control plan
- Ensure that the materials and other resources required to implement and maintain the plan are available where and when they are required
- Ensure that a copy of the exposure control plan is available to employees
- Utilize an Emergency Operation Centre (EOC) to support UVic in the event of pandemic influenza

Occupational Health, Safety and Environment:
- Maintain and review this exposure control plan
- Provide general health and safety advice and assistance to UVic in the event of a pandemic influenza

University Communications:
- Communicate with the UVic community regarding pandemic events on campus
- Communicate educational and awareness information regarding pandemic influenza

Health Services:
- Provide medical advice to UVic on the prevention and transmission of influenza
- Provide medical services to patients experiencing influenza like symptoms
- Report incidences of pandemic influenza on campus
- Supervisors will ensure that employees are trained on site-specific controls selected, which may include administrative controls and personal protective equipment (PPE).
- Supervisors will select, implement, and document the appropriate site-specific risk control measures.

Campus Security Services:
- Supervisors will ensure that employees undertaking first aid are trained on site-specific controls selected, which may include administrative controls and personal protective equipment (PPE).
- Supervisors will select, implement, and document the appropriate site-specific risk control measures.

Employees will:
- Know the hazards of workplace
- Follow established work procedures as directed by the employer or supervisor
- Use any required PPE as instructed
- Report any unsafe conditions or acts to the supervisor
- Know how and when to report incidents
- Self monitor for symptoms of influenza and report any symptoms to supervisor and health care professionals

Risk identification and assessment

Three primary routes of transmission are anticipated for pandemic influenza, all of which need to be controlled. These include contact, droplet, and airborne transmission.

Contact transmission, both direct and indirect
Direct contact involves skin-to-skin contact, such as patient care or emergency response activity that requires direct personal contact. Indirect contact involves an individual touching a contaminated intermediate object such as a table, doorknob, telephone, or computer keyboard, and then touching the eyes, nose, or mouth. Contact transmission is important to consider because influenza viruses can persist for minutes on hands and hours on surfaces.

Droplet transmission
Large droplets may be generated when an infected person coughs or sneezes, and also during certain medical procedures such as cough induction. Droplets travel a short distance through the air, and can be deposited on inanimate surfaces or in the eyes, nose, or mouth.

Airborne transmission
Airborne (inhalable) particles can be generated from some medical procedures and from coughs and sneezes.

Coughs and sneezes produce both large droplets and smaller airborne particles. The smaller particles remain suspended in air for longer periods, and can be inhaled. The large droplets can also evaporate quickly to form additional inhalable particles. As the distance from the person coughing or sneezing increases, the risk of infection from airborne exposure is reduced.

The level of risk for the various groups on campus is listed in the table below. The general UVic community has a low risk of infection as they are not likely to be exposed to people infected with pandemic influenza. However, there are a few UVic groups listed that have a higher risk of infection such as First Aid Attendants and Medical Service Providers.

Risk assessment for pandemic influenza

	Low risk Employees who typically have no contact with people infected with pandemic influenza	**Moderate risk** Employees who may be exposed to infected people from time to time in relatively large, well-ventilated workspaces	**High risk** Employees who may have contact with infected patients or with infected people in small, poorly ventilated workspaces
Hand hygiene	Yes (washing with soap and water, using an alcohol-based hand rub, or using hand wipes that contain effective disinfectant)	Yes (washing with soap and water, using an alcohol-based hand rub, or using hand wipes that contain effective disinfectant)	Yes (washing with soap and water, using an alcohol-based hand rub, or using hand wipes that contain effective disinfectant)
Disposable gloves	Not required	Not required (unless handling contaminated objects on a regular basis)	Yes, in some cases (e.g. when working directly with pandemic influenza patients)
Aprons, gowns, or similar body protection	Not required	Not required	Yes, in some cases (e.g. when working directly with pandemic influenza patients)
Eye protection: goggles or face shield	Not required	Not required	Yes, in some cases (e.g. when working directly with pandemic influenza patients)
Airway protection: N95 respirators	Not required	Not required (unless likely to be exposed to coughing and sneezing)	Yes (minimum N95 respirator or equivalent)
Classification of UVIC groups	*General UVIC community including staff, faculty and students*	*First Aid Attendants (CSEC)*	*Medical Services staff (HEAL)*

Risk control

At UVic the risk of exposure can be controlled using administrative controls (e.g. hand washing and cough/sneeze etiquette) and in some cases PPE (e.g. respirators) or engineering controls (e.g. workplace design).

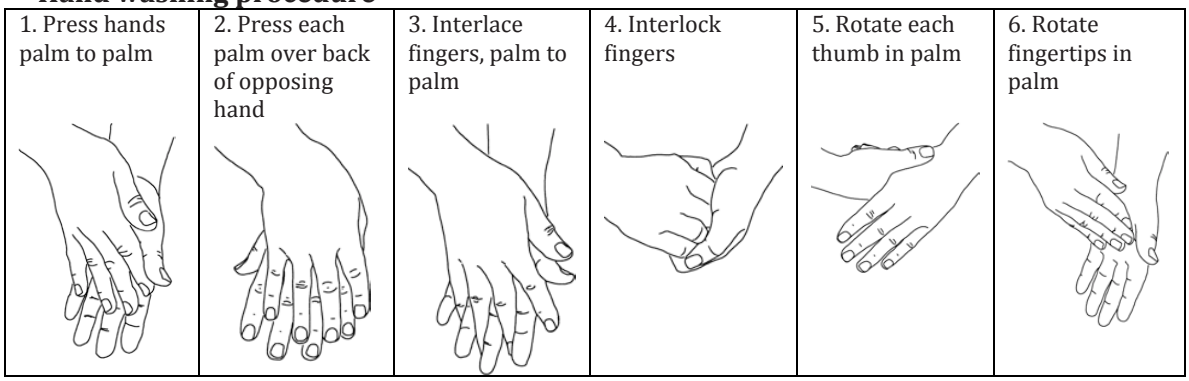
Hand washing

Hand washing is one of the best ways to minimize the risk of infection. Proper hand washing helps prevent the transfer of infectious material from the hands to other parts of the body — particularly the eyes, nose, and mouth — or to other surfaces that are touched.

Wash your hands immediately:

- Before leaving a work area
- After handling materials that may be contaminated
- Before eating, drinking, smoking, handling contact lenses, or applying makeup

Hand washing procedure



Use soap and warm running water. (It doesn't have to be hot to do the job.) If water is unavailable, use a waterless hand cleanser that has at least 70% alcohol. Follow the manufacturer's instructions on how to use the cleanser.

Cough/sneeze etiquette

UVic employees are expected to follow cough/sneeze etiquette, which is a combination of measures that minimizes the transmission of diseases via droplet or airborne routes.

Cough/sneeze etiquette includes the following components:

- Cover your mouth and nose with a sleeve or tissue when coughing or sneezing
- Use tissues to contain secretions, and dispose of them promptly in a waste container
- Turn your head away from others when coughing or sneezing
- Wash hands regularly

Respirators

N95 Respirators and other personal protective equipment (gloves, eye protection and gowns) may be supplied for some employees based on a risk assessment. If respirators are provided then appropriate fit testing and documentation must be completed. Any employee using personal protective equipment must follow established work procedures.

Note: In contrast to a respirator, a surgical mask is a protective barrier that is worn on the face, covers at least the nose and mouth, and is used to contain large droplets generated during coughing and sneezing by the influenza infected person using the mask. Surgical masks help minimize the spread of potentially infected material from the wearer to other people. However, according to VIHA, the use of surgical masks for prevention of influenza in the general public remains unproven.[ii]

Workplace Design
Work areas may be re-arranged to minimize the spread of infection from patients receiving medical care. This includes creating a safe working distance between patients and staff, and may also include the use of isolating rooms in medical facilities (e.g. Health Services) to further restrict contact to only those providing direct patient care.

These measures will ensure patients exhibiting symptoms of influenza like illness (ILI) maintain the Public Health Agency of Canada's recommended 2 meter distance away from others whenever practicable.[iii]

Education and Communication

UVic community will receive information regarding the following:

- The risk of exposure to pandemic influenza, and the signs and symptoms of the disease
- Safe work procedures to be followed, including hand washing and cough/sneeze etiquette
- Location of washrooms
- Where to obtain first aid
- How to report an exposure to or symptoms of pandemic influenza
- Training on proper use of PPE, if required based on a risk assessment

Employees, students and visitors will also receive pandemic information through the UVic website and posted signage, as required. UVic employees may receive additional information through UVic Emergency Alerts, which includes mobile text messages, broadcast voice messages and email notifications.

Health monitoring

If employees are ill with influenza, they should stay home. If they develop symptoms of influenza while at work, they should leave the workplace. Employees should only return to the workplace once they have recovered from influenza and no longer show symptoms. UVic employees will promptly report any symptoms of pandemic influenza to their manager or supervisor and health care provider.

Record keeping

UVic will keep records of fit testing, exposure reports and first aid records.

Annual review

UVic will review the exposure control plan every year and update it as necessary, in consultation with our University Safety Committee.

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[i] HealthLinkBC. October 2009. Pandemic H1N1 Influenza Virus.
http://www.healthlinkbc.ca/healthfiles/hfile108a.stm

[ii] BC Ministry of Health Services. November 20, 2009. Pandemic Influenza Preparedness Factsheet.
http://www.gov.bc.ca/h1n1/attachments/fs_dispelling_h1n1_flu_myths_aug09.pdf

[iii] Public Health Agency of Canada. December 15, 2009. Guidance: Infection Prevention and Control Measures for Occupational Health Management for all Health Care Settings.
http://www.phac-aspc.gc.ca/alert-alerte/h1n1/guidance_lignesdirectrices/humpan-eng.php