Pandemic (H1N1) Personal Protective Equipment (PPE)
Continuing Care Providers Frequently Asked Questions

This document has been developed to assist Continuing Care Providers with the considerations necessary prior for the purchase of **Personal Protective Equipment (PPE**) or establishing N95 fit testing. It is not intended as a document to guide the delivery of client care.

What type of personal protective equipment should be provided for H1N1?

A decision regarding the selection of PPE for Infection Prevention and Control in any staff-client interaction is based on a Point of Care Risk Assessment and underlying Infection Prevention and Control Routine Practices and Additional Precautions.

Recommendations for which PPE are to be used for interactions with clients who have **Influenza-Like Illness (ILI)** can be found on the Alberta Health Services (AHS) website at: www.albertahealthservices.ca

PPE includes hand sanitizer, procedure gloves, gowns, procedure/surgical masks, respirators (N95 masks), eye protection and face shields.

Personal Protective Equipment Minimum Selection Criteria

NOTE: AHS is providing N95 respirators, face shields and gowns only. All other PPE will be provided by the continuing care organization and can be obtained through Bowers Medical Supply or the usual supplier.

Hand sanitizer/ Waterless Hand Rub:

- Alcohol based, contain 60% - 90% alcohol

Gloves:

- Clean, non-sterile
- Available in a variety of sizes
- Acceptable glove materials include latex, vinyl, polyethylene, neoprene and nitrile.
- Single-use, disposable
- Copolymer gloves are **NOT** appropriate

Gowns:

- Able to accommodate various sizes i.e., universal size or available in a variety of sizes
- Ensure coverage down the arms to the wrists and the body from the neck to knee
- Have ties or fasteners that allow the user to don and doff the gown, avoiding further contamination
- Wrists should be cuffed or elastic to secure the cuff to ensure the gown sleeves do not slide up the arm with movement and to allow for gloves to be secured over the gown

- Single use, disposable OR washable

Procedure/Surgical Masks

- Fit over both nose and mouth and be secured to the wearer's head.
- Prevent large particles expelled by the wearer (e.g. spit, mucous) from reaching the patient or work environment
- Help reduce the risk of splashes or sprays of blood, body fluids, secretions and excretions from reaching the wearer's mouth and nose.
- Single use, disposable

Respirator (N95 masks):

- NIOSH certified/approved to filter airborne particles that are 100 microns (µm) in size or smaller.
- Available in a variety of sizes
- Must be fit tested to each wearer
- Single use, disposable

Eye protection:

- Can include Goggles or Face Shields.

Personal prescription contact lenses or prescription eye glasses do not provide optimal eye protection and must not be used for eye protection

- **Goggles:**
  - Fit snuggly over and around the eyes or personal prescription lenses
  - Single use, disposable **or** single use, washable

- **Face Shields:**
  - Cover the forehead, extend below the chin, and wrap around the side of the face
  - Single use, disposable is recommended.
  - Single use washable shields must not have any gaps at the forehead where droplets may enter.

Reusable PPE (gowns or eye protection) must be decontaminated and thoroughly cleaned following manufacturers recommendations before reusing and/or storage.

All other PPE (gloves, masks and respirators) are considered single use.

Single use means worn once and then discarded.

<u>Each staff-client interaction requires donning a complete new set of PPE.</u> For example, if a health care worker is providing care in a room with a symptomatic client, they wear the same set of PPE until they exit the room or move on to provide care for another client.

In situations where N95 respirators are worn for extended periods they must be removed and replaced if they become moist or damaged.

What is N95 fit testing?
The Occupational Health and Safety Regulation and Code states that where N95 respirators are required, workers must be fit tested. Fit testing is done to ensure the respirator will provide maximum protection for the worker. The process involves selecting the right size and type of N95 respirator for each worker and making sure the worker knows how to use it correctly. Fit testing is done by an individual trained to fit test.

Are continuing care providers required to provide N95 fit testing for employees?
Occupational Health and Safety is an employer requirement as outlined in the Occupational Health and Safety Regulation and Code (2009). The Respiratory Dangers section describes employer requirements regarding respiratory protective equipment.

Which companies provide N95 fit testing?
The following are some companies that provide N95 fit testing:
This is not an exhaustive list and does not imply any endorsement by AHS.

3M – www.solutions.3mcanada.ca

PHH Environmental – www.phharcenv.com

Industrial Health Services – www.mobilehealth.ca

Levitt Safety - www.levitt-safety.com

MCO Hawc – www.mcohawc.ca

It is advised to determine whether the company can provide the fit testing services in your area and to ensure that they are fit testing to the N95 respirator that is provided by your organization. NOTE: AHS is providing 3M product for providers who have completed fit testing to this product (as long a supplies are available). Moldex or Gersen brands will be available for providers who have not initiated fit testing (as long as supplies are available).

Information for Continuing Care Providers to Access PPE

Alberta Health Services has worked with its suppliers to secure PPE supplies (N95 respirators, face shields, and disposable gowns) to support continuing care providers during the pandemic.
Refer to the information below to place orders.

NOTE: It is extremely important that discretion is used in placing orders and that items are not ordered in larger quantities than needed. This will help to ensure that each organization has equitable access to PPE supplies.
Staff must utilize the N95 respirator that they have been fit tested for. The two brands of N95 respirators that have been made available for continuing care providers by AHS are Moldex and Gersen.

Please note that it may take a few days before initial orders are completely filled as Bowers Medical prepares to provide this service.

VENDOR	CONTACT INFORMATION	ITEM DETAIL
Bowers Medical Supply	**Customer Service/Order Desk** **Tel:(780)454 – 1666** **Toll Free: 1-800-561-3687**	**N95 Respirators:** • **3M (only for those providers who have already fit test staff to 3M)** • **Moldex** • **Gersen** **(for providers who have not started fit testing)** **Face Shields** **Disposable Gowns**

If difficulties are encountered in ordering supplies from Bowers Medical Supply please contact:

Bizworx: bizworx@albertahealthservices.ca

Phone (Monday – Friday 0800 – 1600h):
Toll free: 1-877-595-0007
Edmonton: 780-735-0007

Email: cpsm.eoc@albertahealthservices.ca

Should qualitative or quantitative N95 fit testing be provided?

Qualitative Fit Testing
Many workers can be qualitatively fit tested in a relatively short period of time. Qualitative testing includes:

1. Sensitivity Test:
A large hood, used to contain and concentrate the solution, is placed over the head of the user. A dilute Bitrex solution is injected into the hood until the user experiences the taste. This step is required because people have different sensitivities to the taste (and a small number of people cannot detect Bitrex at all).

2. Testing:
Next, the N-95 respirator is donned and the hood is again placed over the staff member's head. This time, a more concentrated Bitrex solution is added (100 times more concentrated). A series of six exercises are performed, each lasting approximately 30 seconds. The exercises are designed to simulate movements that may occur while wearing the N-95 in an actual working environment. If no taste is experienced while wearing the respirator, it is assumed that the N-95 properly fits the face. Only the model of N-95 passed during the fit-test may be used by the individual in the future, as only this model has demonstrated a good seal.

If a worker fails qualitative fit testing, quantitative testing may be conducted.

Quantitative Fit Testing
Quantitative fit testing involves the use of computer equipment connected to the worker's respirator. It measures the amount of dust particles normally present in the air passing through the respirator. If an effective seal is present, the readings will be negligible and the worker would receive a "pass" with that model of respirator. Quantitative testing is more involved and time consuming so not as many workers can be fit tested as with qualitative testing.

If a worker fails quantitative fit testing, alternate brands of respirators or alternate work assignments should be investigated.

Who should be fit tested?
The employer is in the best position to determine who should be fit tested. A hazard assessment or risk of exposure assessment is a helpful tool to determine which workers would be at most risk of being exposed. A recommendation would be for fit testing to be provided for workers providing direct patient care within 2 meters of symptomatic clients based on the Point of Care Risk Assessment: http://www.albertahealthservices.ca/files/ns-point-of-care-risk-assessment-directive-007.pdf
http://www.albertahealthservices.ca/files/ns-pcra-handout.pdf
http://www.albertahealthservices.ca/files/ns-pcra-algorithm-colour.pdf
http://www.albertahealthservices.ca/files/ns-pcra-algorithm-bw.pdf

Any worker with a change in body weight of +/- 10% must be refit tested.

When should N95 masks be utilized?

Infection Prevention and Control advises that an N95 respirator should be worn based on a Point of Care Risk Assessment. These include situations where staff are:

- within 2 meters of all influenza-like illness symptomatic clients with a forceful cough who are unable to comply with respiratory etiquette or hand hygiene
- within 2 meters of all influenza-like illness symptomatic client when performing aerosol generating medical procedures. Aerosol generating procedures includes, but is not limited to: BiPAP, intubation, suctioning, tracheostomy care, chest physiotherapy, nebulization, bronchoscopy and collection of nasopharyngeal swabs.
- Please see www.albertahealthservices.ca for a complete listing of aerosol generating procedures.

What information is available for educating staff in donning and doffing PPE?
Posters and information are also available on the Alberta Health Services website: www.albertahealthservices.ca

Alberta Health Services

Putting on (Donning) Personal Protective Equipment (PPE) for Contact and Modified Droplet Precautions

All PPE should be put on before entering a patient room.

1 HAND HYGIENE

A Using an alcohol-based hand rub is the preferred way to **clean your hands.**

B If your hands look or feel dirty, soap and water must be used to wash your hands.

2 Gown

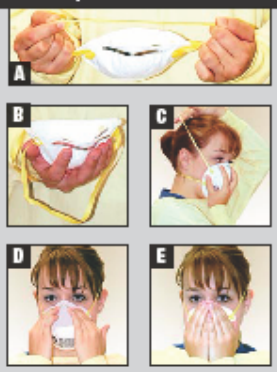
A Make sure the gown covers from neck to knees to wrist.

B Tie at the back of neck and waist.

3 Procedure/surgical mask

- Secure the ties or elastic bands around your head so the mask stays in place.
- Fit the movable band to the nose bridge. Fit snugly to your face and below chin.

N95 respirator



A Pre-stretch both top and bottom straps before placing the respirator on your face.

B Cup the N95 respirator in your hand.

C Position the N95 respirator under your chin with the nose piece up. Secure the elastic band around your head so the N95 respirator stays in place.

D Use both hands to mold the metal band of the N95 respirator around the bridge of your nose.

E Fit check the N95 respirator.

4 Eye protection or face shields

- Place over the face and eyes and adjust to fit.

5 Gloves

- Pull the cuffs of the gloves over the cuffs of the gown.

Donning PPE Poster
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Alberta Health Services

Taking off (Doffing) Personal Protective Equipment (PPE) for Contact and Modified Droplet Precautions

Remove gloves and gown inside the patient room. After leaving the patient room and closing the door, remove N95 respirator or mask and eye protection.

1 Gloves

A Grasp the outside edge of the glove near the wrist and peel away from the hand, turning the glove inside-out.

- Hold the glove in the opposite gloved hand.

B Slide an ungloved finger or thumb under the wrist of the remaining glove.

C Peel the glove off and over the first glove, making a bag for both gloves.

- Put the gloves in the garbage.

2 HAND HYGIENE

A Using an alcohol-based hand rub is the preferred way to **clean your hands.**

B If your hands look or feel dirty, soap and water must be used to wash your hands.

3 Gown

A Carefully unfasten ties.

B Grasp the outside of the gown at the back of the shoulders and pull the gown down over the arms.

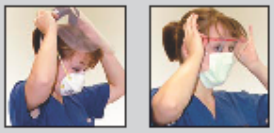
C Turn the gown inside out during removal.

- Put in hamper or, if disposable, put in garbage.

4 HAND HYGIENE

- **Clean your hands.** (See No. 2)
- Exit the patient room, close the door and **clean your hands** again.

5 Eye protection or face shield



- Handle only by headband or ear pieces.
- Carefully pull away from face.
- Put reusable items in appropriate area for cleaning.
- Throw disposable items into garbage.

6 Mask or N95 respirator

- Bend forward slightly and carefully remove the mask from your face by touching only the ties or elastic bands.
- Start with the bottom tie, then remove the top tie.
- Throw the mask in the garbage.

7 HAND HYGIENE

- **Clean your hands.** (See No. 2)

Doffing PPE Poster
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