What’s happening in Alberta?

Alberta continues to see cases of COVID-19. For the most current information impacting AHS staff, visit the COVID-19 in site page or review the staff FAQ. For current case count and additional information for all Albertans, visit www.alberta.ca/covid19.

Staff can also review the COVID-19 Relaunch Playbook which provides information and details to support staff as we move through the next phases of the pandemic.

Other COVID-19 resources:
- Infection Prevention and Control
- Personal Protective Equipment
  - Review the PPE FAQ for further information.
  - Questions? Email the PPE Taskforce at ppe@ahs.ca.

General questions

Aerosol-generating procedures or activities

General Questions

1. I’ve received communication regarding PPE from my professional body that differs from AHS guidelines/recommendations. Which guidelines should I follow when working in an AHS facility?

We acknowledge that there may be differences between the guidelines put forth by AHS to protect the health and wellbeing of our staff, and those shared by your professional body. When there is a difference, staff working in an AHS facility are to follow our guidelines. On March 26th, this direction was supported by a joint agreement reached by AHS, Covenant Health, and three major health care unions (AUPE, HSAA AND UNA) regarding the safe and effective use of personal protection equipment (PPE) in response to COVID-19.

2. I have determined that the procedure I’m about to perform requires an N95 respirator, however my leader/team members disagree. What should I do?

As well as wearing a surgical/procedural mask continuously, staff should continue to use Routine Practices for all patients at all times, which includes a point of care risk assessment (PCRA). Use of a fit-tested N95 respirator replaces a surgical/procedural mask when performing an aerosol-generating medical procedure (AGMPs) in addition to gloves, gown and eye protection. To learn more about when to use N95 respirators, visit www.ahs.ca/covidppe. For more guidance on AGMP’s, visit www.ahs.ca/agmp.

If, after performing a PCRA, there is a clinical disagreement on the level of PPE required, the clinician and leader should refer back to the PPE guidelines appropriate for the task at hand. It is critical that staff refer to and comply with the AHS Infection Prevention and Control (IPC) recommendations when treating patients. These recommendations outline the circumstances and situations where personal protective equipment is required and appropriate to respond to COVID-19.

If an agreement cannot be reached, the leader may choose to reassign the clinician to another task while clarification is sought from a Workplace Health and Safety advisor and/or Infection Prevention and Control.
3. I have a patient with suspected or confirmed COVID-19. How do I support this person to complete documentation (e.g. a personal directive) safely without increasing the risk of virus transfer?

Paper, including charts and files, are not vectors for transmission of COVID-19. Forms completed by a patient with suspected or confirmed COVID-19 are not considered to be a significant risk.

All staff are advised to use Contact and Droplet precautions in addition to routine practices when caring for a patient with suspected or confirmed COVID-19, including a procedure mask, gown, gloves and eye protection (e.g. goggles, face shield, or procedure mask with built-in eye shield).

Staff can also:
- Keep charts in a clean area outside of the patient environment.
- Perform hand hygiene before and after handling charts.
- Refrain from handling charts with gloved hands.
- Use a disinfectant wipe to clean a solid surface where the patient can sign, cleaning the pen after use.
- Place the completed form on a clean surface outside the patient’s room while doffing PPE.

Patients should be asked to perform proper hand hygiene and don a face mask before completing paper forms. Hand hygiene remains the best method to prevent the spread of infection.

**Aerosol-generating medical procedures or activities**

4. What is the difference between droplets, airborne particles and particles generated by aerosol-generating medical procedures?

The difference between these terms lies in the size of the particles, how the particles are created, and the route of transmission. The World Health Organization states that respiratory infections can be transmitted through droplets of different sizes.

**Droplets**
Droplets greater than five to 10 micrometers are referred to as respiratory droplets, or droplets. These droplets are generated naturally by a patient when they cough, sneeze or talk. They are not considered to be airborne because, once expelled, they quickly fall out of the air within two meters from the patient. This larger-sized droplet doesn't penetrate surgical/procedure masks. However, some infectious organisms are able to survive and be transmitted after landing by being picked up by contact with a person’s hand.

Staff are reminded to continue to use Routine Practices for all patients at all times, which includes a point of care risk assessment (PCRA).

**Airborne particles**
Particles that are less than five micrometers in size are referred to as droplet nuclei or airborne particles. These particles may be expelled if a patient is infected by bacteria or viruses, such as Tuberculosis and Measles. Airborne particles are able to travel more than two meters through the air and require a minimum settling time, or mechanical removal via air exchanges. As a result, airborne precautions including N95 respirators are required.

**Aerosol-generating medical procedures**
As stated by Health Canada, an AGMP mechanically generates droplets of varying sizes. The aerosols released during an AGMP may contain bacteria or viruses such as SARS, COVID-19, or influenza-like illness. Unlike an airborne particle, these aerosols quickly fall out of the air and do not require settle times. These aerosols may drop onto surfaces creating potential for contact spread. Routine practices such as hand hygiene and environmental cleaning in addition to contact and droplet precautions are important measures to reduce the risk of transmission. When performing an AGMP, follow the IPC Respiratory Algorithm which includes wearing an N95 respirator instead of a surgical mask if the patient has:
• influenza-like illness (ILI) of unknown etiology
• confirmed infection with Influenza A or B
• MERS-CoV, COVID-19, avian influenza, or other emerging/novel respiratory pathogens
• or suspected or confirmed viral hemorrhagic fever

All staff are advised to perform a PCRA and use Contact and Droplet precautions in addition to routine practices when caring for a patient with suspected or confirmed COVID-19. Wearing an N95 respirator in addition to gloves, gown, and eye protection when performing an AGMP reduces the likelihood of transmission of these diseases to healthcare workers. For more guidance on AGMPs, visit www.ahs.ca/agmp. You can learn more about when N95 respirators should be used in this guidance document for personal protective equipment (PPE).

Staff are also reminded to post the AGMP in progress sign on the patient's door for the duration of an AGMP. This sign is only to be used for AGMP when the patient is also on Contact and Droplet precautions. If a patient is on a continuous AGMP this poster may be up for the duration of admission.

When treating any patient including those with suspected or confirmed COVID-19, staff are required to wear a surgical/procedural mask continuously unless they are performing an AGMP.

5. What is the difference between sputum inductions – considered an AGMP – and treatments such as chest physiotherapy or swallowing assessments that are not considered an AGMP?

The aerosol generating medical procure working group, consisting of experts from fields across AHS, reviewed a variety of procedures to determine if each would be considered an AGMP. The findings, published in the AGMP guidance tool, highlighted that very few procedures actually generate aerosols.

Prior to the development of COVID-19, chest physiotherapy was not considered an AGMP. The working group reviewed evidence and determined that manual chest physio is highly unlikely to generate significant aerosols. Although this procedure may cause the patient to cough, the droplets expelled are larger in size, quickly fall out of the air and do not meet the criteria of an aerosol or AGMP. Other procedures that may also result in a cough such as chest compressions, swallowing assessments, nasogastric tube placement and others were also found to not generate aerosols.

For more guidance on AGMPs, visit www.ahs.ca/agmp. Questions? Email ppe@ahs.ca.

6. The rapid review on singing and COVID-19 risk stated that singing should be restricted while the virus is circulating. How does this information impact other activities such as diaphragmatic breathing or therapeutic activities that use an increase of speech volume?

The Scientific Advisory Group (SAG) rapid review agreed that the possibility that singing could lead to COVID-19 transmission could not be excluded and that restrictions on singing should be maintained while the virus is circulating. The review found that singing may be an aerosol-generating respiratory activity that could generate more particles (including aerosols) than normal talking. However, it was unclear whether the risk of transmission of COVID-19 from singing was caused by aerosolization of respiratory particles, large droplets being expelled, or through a combination of both, or if other social behaviors associated with being in close quarters (close contact, handshaking) could have also contributed.

The potential aerosolization of respiratory particles during singing is different than aerosols artificially generated during certain medical procedures that manipulate the airway (AGMPs). Singing is not considered an AGMP as the droplets generated spontaneously from patients are unlikely to travel as far as the smaller infectious droplets generated by an AGMP. For more guidance on AGMP's, visit www.ahs.ca/agmp.
7. **What PPE/IPC recommendations should I follow when preforming these activities?**

All staff are required to wear a *surgical/procedural mask continuously*, and should continue to use *Routine Practices* for all patients at all times, which includes *a point of care risk assessment (PCRA)*.

For patients who are asymptomatic or have no risk factors for COVID-19, it is safe to proceed with activities that specifically target vocal loudness such as diaphragmatic breathing, yelling or other similar therapeutic activities.

Elective treatments for patients with *influenza-like illness*, or suspected or confirmed COVID-19 should:
- be deferred, if possible
- if unable to defer, treatment should take place in a single patient room and *physical distancing* should be maintained
  - The two meter separation is sufficient to prevent contact with aerosols/droplets produced during these activities.
- be completed virtually (Video or Zoom)
- be scheduled at end of day

For more details refer to *IPC Resources for Resuming Ambulatory Care Clinics during COVID-19 Pandemic*. Questions, connect with a *Workplace Health and Safety Advisor*. 