

UPDATE: COVID-19, Influenza, and Face Mask Use Amid a Limited Supply

The 2019 novel coronavirus has now been renamed COVID-19 by the World Health Organization.

Alberta Health Services has published a one-stop shop webpage for all their information and guidance on COVID-19. Updates are expected daily.

- <https://www.albertahealthservices.ca/topics/Page16944.aspx>

For details on the symptoms and treatment of coronavirus you can also visit the [Public Health Agency of Canada](#) website. You can also find up-to-date information at the following link:

- [Coronavirus disease \(COVID-19\): For health professionals](#)

At present, federal and Alberta health officials advise that the risk of contracting COVID-19 is low. Further, Alberta's Chief Medical Officer of Health advised Albertans that it is more likely they would contract the influenza virus. The flu is presently active in the province with nearly 5000 laboratory confirmed cases and 19 laboratory confirmed deaths this flu season. Influenza vaccination is still available in Alberta and encouraged.

View the Alberta Respiratory Virus Dashboard for [current data](#) on influenza in Alberta.

Implementing the following office protocols will help minimize the transmission of the influenza virus:

- Screen clients prior to their appointments, both when confirming and in-office
- Remind clients that if they have flu-like symptoms, such as fever, cough or difficulty breathing, they should cancel their appointments and see a medical professional
- Ensure hand sanitizer is available at the front desk and encourage its use by all clients upon arrival
- Enforce standard infection control protocols including use of appropriate Personal Protection Equipment (PPE), especially when aerosols are created

Additionally, asking clients who have travelled or been in contact with someone who has travelled outside of Canada in the last 21 days and who experience flu-like symptoms to self-quarantine and to refrain from visiting the clinic will help minimize the risk of transmission of COVID-19.

Now may be a timely reminder to review your workplace's pandemic and emergency preparedness policies and protocols. An influenza pandemic (worldwide flu) occurs when a new strain of influenza virus emerges and spreads quickly around the world. Pandemics may occur 3 to 4 times each century. The last one was in 2009 (H1N1). COVID-19 has not presently been declared a pandemic.

Organizational risk assessment for pandemic influenza and risk mitigation is a necessary component of Infection Prevention and Control (IPC) and Occupational Health and Safety (OHS) policy and procedure in all oral healthcare settings.

For pandemic preparedness checklists for individuals, families and businesses, visit:

- <https://open.alberta.ca/dataset/pandemic-influenza-preparedness-checklists>

For more information on Alberta's pandemic preparedness plan visit:

- <https://www.alberta.ca/pandemic-influenza.aspx>

When a health risk like a pandemic affects a population, public health ethics predominate, and higher value is placed on collective as opposed to individual interests. In a moderate to severe scenario, healthcare service providers would no longer be able to continue all activities. This may include non-emergency dental treatment. For dental and dental hygiene clinics, this may be decreed by Alberta Health and/or Alberta Health Services or simply be a result of client choice coupled with staff availability, supply issues (such as for face masks or other PPE), public transportation issues and building closures.

Currently, Alberta dental supply companies are reporting low inventory on American Society for Testing and Materials Standard Specifications (ASTM) Level 1, 2 and 3 face masks and order quantities are being limited. ADA&C's 2010 Infection Prevention and Control (IPC) Standards stipulate that a face mask have a Bacterial Filtration Efficiency (BFE) of greater than 95%. BFE is the percentage of aerosol particles filtered at a size of 3 microns. All ASTM levels of mask are single-use only and begin with a BFE of 95% or more at start of use. However, this BFE efficiency degrades as moisture accumulates on the mask. The lower the grade level, the quicker the degradation. Based on testing, these are the ASTM performance level recommendations for use:

- ASTM Level 1 – for use where low levels of aerosol are produced
- ASTM Level 2 – for use where moderate to light amounts of aerosol are produced
- ASTM Level 3 – for use where heavy to moderate amounts of aerosol are produced

It is critical that the right mask (level 1, 2 or 3) is chosen to match the protection needs of each procedure or level of risk and changed during the procedure as recommended. The [Dental Advisor](#) identifies the procedures deemed safe for wearing a level 1 mask to consist of exams, operatory cleaning, taking impressions, laboratory work, and orthodontics. Procedures deemed safe for a level 2 mask include scaling and root planing, prophylaxis, and sealant application. Air polishing and ultrasonic or piezo instrumentation requires a level 3 mask. **For dental hygienists, this means that air polishing and ultrasonic or piezo instrumentation needs to be postponed unless Level 3 face masks are available and used.**

Individuals and businesses should be cognizant of the economic and social implications of a pandemic and/or PPE shortage and plan accordingly.