

## **H1N1 Precautions and Risk in Oral Health Settings**

The CDHNS has been in touch with the Department of Health regarding any specific infection control precautions and risk in the oral health settings concerning the H1N1 influenza. The following is a summary of the information from work prepared for the department by Patsy Rawdings and Suzanne Rhodenizer Rose, Infection Control Consultants.

### **Face Masks and Aerosols**

On the 28 July 2009, The Public Health Agency of Canada released a guidance document entitled *Guidance: Infection Prevention and Control Measures for Health Care Workers in Acute Care Facilities*. This document provided infection prevention and control guidance for health care workers (HCWs) dealing with patients with suspect or confirmed H1N1 influenza. More specifically, it recommended that HCWs don an N95 respirator whenever conducting aerosol-generating medical procedures (AGMPs). A list of AGMPs was provided however it was not entirely inclusive and only considered procedures that would be provided in acute care settings.

### **Assessment**

Procedures that involve the use of suction, the high speed hand piece, or the ultrasonic instrumentation have the potential to generate aerosols. A literature review was conducted however most information found that although aerosolization can occur during procedures using this equipment, the bacteria and viruses studied were isolated primarily from the oral cavity rather than the nasopharyngeal cavity. Influenza viruses do not replicate in the oral mucosa where the aerosolization is occurring.

Two experts in infectious diseases and virology were consulted regarding the risk associated with procedures. In the absence of specific literature related to aerosolization of nasopharyngeal secretions during dental procedures, there is a theoretical risk if the aerosolizing procedures that are being conducted induce a cough.

### **Recommendations**

1. Pre-appointment screening should be occurring at the point that reminder calls are being made. If the patient is experiencing influenza like illness\*, then the appointment should be deferred until that patient is feeling well and able to resume normal activities.
2. Patients who present to the office with obvious signs of respiratory illness should be instructed on proper hand hygiene and respiratory etiquette, and asked to don a surgical mask. The patient should be isolated away from other patients in the waiting room as best as possible (minimum of 2 meters). If the appointment can be rescheduled, this would be the preferred option.
3. If the patient requires emergent dental care, is symptomatic for influenza like illness or has a confirmed diagnosis of influenza (or is experiencing other symptoms that would indicate presence of a droplet transmitted disease), and is

in need of a procedure that could generate aerosolized particles, then an N95 respirator and eye protection should be worn by the dentist and any other care providers in the room. Personnel should be kept to a minimum. The door to the treatment room should remain closed.

4. Appropriate work practices, including use of dental dams and high-velocity air evacuation, should minimize dissemination of droplets, spatter, and aerosols.
5. If a patient requires emergent dental care, is symptomatic for influenza like illness or has a confirmed diagnosis for influenza (or is experiencing other symptoms that would indicate presence of a droplet transmitted disease), but is NOT in need of a procedure that could generate aerosolized particles, then a surgical mask and eye protection is required.
6. All personnel that would be involved (in the room) during an AGMP on a suspect or confirmed case of influenza should be fit tested for an N95 respirator as per Occupational Health & Safety regulations.
7. Signage posted at the entrance to the dental clinic or office instructing patients on proper respiratory etiquette and hand hygiene would be beneficial. Providing patients with access to hand washing facilities or alcohol-based hand sanitizer, and surgical masks if needed will assist in prevention efforts.
8. Having a physical barrier (e.g.: window or plexiglass barrier) between the receptionist and the patient and/or maintaining a physical distance of 2 metres can assist in prevention of transmission. It is recognized that physical space limitations in your office may make this difficult to implement. These are source control measures that we recommend you implement to the best of your ability to minimize the risk of transmitting ILI in the dental setting.
9. As per *Routine Practices*, the level of care provided to all patients, in all settings, regardless of diseases status requires the care providers to ensure that the following occur:
  - a. Hand hygiene conducted before and after all patient contact, after contact with contaminated environmental surfaces, or after removal of personal protective equipment
  - b. Gloves worn for direct contact with the patient or when handling contaminated equipment
  - c. Surgical mask and eye protection worn if there is a risk of splash or spray of body secretions
  - d. Personal protective equipment worn only once and removed prior to exiting the treatment room
  - e. Gowns worn if contamination of clothing or arms is possible
  - f. Appropriate cleaning/ disinfection/ sterilization of dental care equipment and instruments (level of disinfection/ sterilization dictated by Spaulding classification of item as non-critical, semi-critical, or critical).

## References

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