

# **Pandemic Planning**

A practice management guideline

Respectfully submitted:

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## **WHAT IS A PANDEMIC?**

A pandemic is a global disease outbreak. An influenza pandemic occurs when a new flu virus emerges for which people have little or no immunity, and for which there is no vaccine. The disease spreads easily person-to-person, causes serious illness and death, and can sweep across the country and around the world in very short time. As a result, advanced, large scale planning is required.

Pandemics historically occur three to four times each century. The first pandemic was recorded in 1590; since then there have been 28 pandemics. In the last century, three influenza pandemics killed millions of people worldwide – the Spanish flu (1918–1919), the Asian flu (1957–1958) and the Hong Kong flu (1968–1969). During each of these pandemics, the greatest death rates were among those under the age of 60. The pandemics of the last century were separated by intervals of 11 to 44 years; it is now 38 years since the last pandemic.

Experts agree the next pandemic will first emerge outside of Canada, and will be present in Canada within three months after it emerges in another part of the world. Because of the volume and speed of global air travel, this could occur much sooner. The first peak of illness is likely to appear within 2-4 months after the virus arrives in Canada, with the first peak in mortality about one month later. A pandemic wave will sweep across Canada in 1-2 months affecting multiple locations simultaneously. The influenza pandemic will occur in two or more waves. In any locality, the length of each wave of illness will be 6-8 weeks. The pandemic will last 12-18 months and more than one wave may occur within a 12 month period.

## **WHY DO DENTISTS NEED TO PLAN FOR A PANDEMIC?**

The overall goal of pandemic influenza preparedness and response is first to minimize serious illness and overall deaths, and second to minimize societal disruption among Canadians as a result of the pandemic.

As responsible health care providers, and employers, we must be prepared for that eventuality. The dental profession may be asked to assist provincial authorities carrying out its responsibilities in the event of a pandemic. This may include providing office space as tertiary care sites. Dentists may also be called upon to assist in vaccinations, dispensing medications and surveillance of health outcomes. Dentists need to plan for managing their practices during a pandemic from both a financial and an organizational aspect.

## **FINANCIAL CONSIDERATIONS OF A PANDEMIC INFLUENZA OUTBREAK**

During a pandemic, dentists will experience a drastic reduction in the number of patients presenting for treatment. This will, of course, reduce the gross revenue generated by the practice. Some expenses will be reduced due to the decreased patient flow, but significant office expenses will remain unchanged. At the first confirmation of local cases of influenza, the Nova Scotia Department of Health will mandate the closure of all community facilities, including schools, and day care centres. Cancellation of other public events, including non-essential health services such as dental offices may also occur.

Dentists should consider how staffing issues would be handled during a pandemic. Payroll policies should be in place to deal with decreased staff needs, staff absenteeism or unwillingness to work. These arrangements should be discussed with employees beforehand, so that all employees are aware of these office policies when a pandemic occurs.

Employee absenteeism will affect other business as well, including banks. Dentists should be prepared to complete financial transactions using cash.

The Canadian Dentist's Insurance Program (CDSPI) has recently introduced a program that will help dentists during a pandemic. CDSPI now offers a Pandemic Outbreak Extension as part of the Triple Guard Insurance policy. The Triple Guard policy now automatically, at no additional cost, includes the replacement of up to \$1,000 of gross practice income per day. There is a \$20,000 annual aggregate limit. Additional insurance can be purchased. Additional coverage up to \$2,500 per day, with a \$50,000 annual aggregate limit, is available for approximately \$300 per year. Additional coverage up to \$5,000 per day, with a \$100,000 annual aggregate limit, is available for approximately \$600 per year. It is important to emphasize that the coverage is in affect only on days the dental office is closed by regulation of a civil authority.

Appropriate selection of Pandemic Outbreak Extension insurance will reduce the financial impact of an outbreak. The policy will provide some financial security for the office, the staff and the dentist.

## **PRE-PANDEMIC PLANNING**

Although the impact of a pandemic is unpredictable, it is advisable to expect a major disruption in critical community services. Now is the time to ensure you:

1. Stock-pile critical office and dental supplies. This should include gloves, masks and eye protection shields. Not only will the supply chain be disrupted during a pandemic, it will take some time for suppliers to recover to pre-pandemic mode.
2. Have an 8-12 week supply of food, water and money on hand. You need to be prepared to pay employees in cash during a pandemic, as bank services are likely to be interrupted.
3. Maintain a current list of office staff contact numbers. Plan how you will operate your office with reduced numbers of staff (and likely patients).
4. Strictly enforce hygiene policies and universal precautions. Ensure staff follows the principles of respiratory hygiene/cough etiquette and wash their hands frequently with soap and water.
5. Screen patients carefully. Patients with fever and cough should be advised not to come to the office until asymptomatic.
6. Consider having a stock of antiviral agents in the office in case you or your staff is exposed. Tamiflu is approved in Canada by prescription; however at the beginning of a pandemic, there may be inadequate supplies available. NOTE: Be wary of buying Tamiflu on-line. There are no authorized generic versions on the market.
7. Familiarize yourself with local public health contacts. Do you know what local health authority your practice is in?

## **DURING THE PANDEMIC**

Three types of Influenza viruses are known to cause disease in humans – A, B and C. Influenza B and C viruses generally cause milder illness than those caused by Influenza A viruses.

Influenza A viruses are readily isolated from birds, pigs and other animals. They cause moderate to severe illness and affect all age groups. The onset of Influenza A is typically sudden and may include fever, cough, sore throat, headache and prostration. The disease process may lead to primary pneumonia or give rise to secondary bacterial complications such as streptococcal, staphylococcal and *Haemophilus influenzae* infections that may lead to death from pulmonary complications.

Minimizing Impact:

1. Arrange for vaccination of yourself and your staff.

2. Isolate infected individuals.
  - a. Any staff with signs and symptoms of influenza must be immediately removed from clinical activity and transferred to the local health authority for isolation and treatment.
  - b. Any patient with signs and symptoms of influenza must be immediately transferred to the local health authority for isolation and treatment.

In the Event of Exposure:

1. Anyone who has been exposed to an infected individual, within 6.5 feet, and any of their contacts, should be referred to the local health authority for antiviral prophylaxis
2. In the event of droplet exposure, consult public health officials and consider starting prophylactic doses of an antiviral agent immediately. Continue these drugs beyond two full incubation periods (seven days) or until there is no chance of further exposure. At present, the only recommended prophylactic agent is oseltamivir 75 mg orally once daily.

If the Practice Remains Open:

1. Continue to enforce strict patient screening.
2. Enforce whatever infection control processes are deemed necessary by public health officials during procedures where exposure would be likely (i.e. procedures that produce aerosol).
3. Enforce strict hand-washing before and after contacts with anyone coming into the office.

If the Practice Closes:

1. Keep staff up to date about situation and projected reopening of the office.
2. Consider either paying staff or providing a stipend, as social services offices may not be open or may be overwhelmed if a general quarantine.

## **PANDEMIC LINKS:**

Government of Canada  
[www.influenza.gc.ca/index\\_e.html](http://www.influenza.gc.ca/index_e.html)

Public Health Agency of Canada  
[www.phac-aspc.gc.ca](http://www.phac-aspc.gc.ca)

American Dental Association  
[www.ada.org/prof/resources/topics/avian\\_influenza.asp](http://www.ada.org/prof/resources/topics/avian_influenza.asp)

FluWatch  
The Centre for Infectious Disease Prevention and Control (CIDPC) produces weekly or bi-weekly FluWatch reports, summarizing influenza surveillance activities in Canada. Weekly reports are produced during the influenza season (October-May) and bi-weekly reports are produced during the off season (June-September).  
<http://www.phac-aspc.gc.ca/fluwatch/index.html>

Furst I, Fulford M. Point of Care: The avian flu is all over the news – should I be doing anything? *Journal of the Canadian Dental Association* 2005 71: (11):10 – 11  
<http://www.cda-adc.ca/jcda/vol-71/issue-10/733.html>

CDSPI  
[http://www.cdspi.com/html\\_eng/cdspi\\_what\\_bulletin\\_1c3.html](http://www.cdspi.com/html_eng/cdspi_what_bulletin_1c3.html)

Nova Scotia Department of Health  
[www.gov.ns.ca/govt/pandemic](http://www.gov.ns.ca/govt/pandemic)