



nH1N1 Influenza Update

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What is influenza?

Viral infection that circulates from November to April in Canada

Symptoms of influenza

- Sudden onset of fever
- Headache, fatigue, muscle aches, cough, sore throat, nasal congestion
- Self-limiting illness with recovery in 2-7 days
- Pneumonia can occur
 - Viral or bacterial
- Complications and death from seasonal influenza are mostly in the very young, very old, or immune compromised

How influenza spreads

Droplets produced when coughing or sneezing

- Travel 1-2 metres
- **Settle on surfaces (most important for transmission)**
- Virus survives on on hard surfaces for 24-48 hours
- Virus survives on hands for 5 minutes



Annual impact of influenza

Each year:

- 5 million Canadians (1 in 6) are infected
- 50,000 will be hospitalized
- 4,500 will die
- **1.5 million work-days will be lost**
- In BC about 1,400 people die from the flu and pneumonia
 - ★ Pneumococcal vaccination can prevent secondary pneumonia

Influenza pandemics

Pandemic = A global outbreak of influenza

1. New influenza A virus subtype emerges
2. Causes serious illness
3. Spreads easily from person-to-person

Seasonal influenza outbreaks (“epidemics”):

1. Localized to city, province or country
2. Subtypes of influenza A viruses that are already in existence among people – new strains

Truth or myth

Now that a Pandemic has been declared, novel H1N1 is a more severe illness.

Myth. An influenza pandemic may be mild or severe. An influenza pandemic means the virus is spread easily between humans, and affects a wide geographic area. A pandemic influenza does not necessarily cause more severe illness.

What do we know about nH1N1 so far?

Overwhelming majority of people have typical influenza

Severe and fatal cases do occur but remain in small numbers

Certain groups at higher risk of complications (not higher risk of infection)

- Chronic conditions (diabetes, asthma, COPD, cancer, immune suppressed)
- Very young (less than 2 years old)
- Pregnant women
- Very similar risk profiles to seasonal influenza

Few cases in people over age 60

- nH1N1 similar to H1N1 circulating before 1957

Who is doing what ?

Federal Gov't (PHAC and Health Canada)

National guidelines / recommendations for
Health care, first responders, infection control
Schools, Day Cares, Universities / Colleges
Individuals, Family, Public, Business

Vaccine – purchase and priority

Provincial Gov't (Provincial Health Officer, BCCDC)

Coordination of cross ministry / cross health authority
response

Contingency planning for anticipated increase in demand
Information to health care workers and the public

Regional Health Authority (Chief MHO, local MHOs)

Implementation of guidelines / recommendations
Coordination of response at regional / local levels

Pandemic plans

The overall goal of a pandemic response plan is:
First, to minimize serious illness and overall deaths, and
second to minimize societal disruption and economic loss as a result of an influenza pandemic.

Health impact estimate of nH1N1

What we can expect in VCH based on data from Australia

- 8-10 deaths
- 130 hospitalizations with the highest rate among children under 5
- 5-6 patients in ICU at any one time (that is a lot)
- Deaths are lower than for seasonal influenza; hospitalizations higher

Nobody should predict what influenza will do with too much confidence but...

- the virus appears to be genetically stable, with no evidence of mutation to a more virulent or lethal strain

Impact from nH1N1 so far as of September 10, 2009

BC

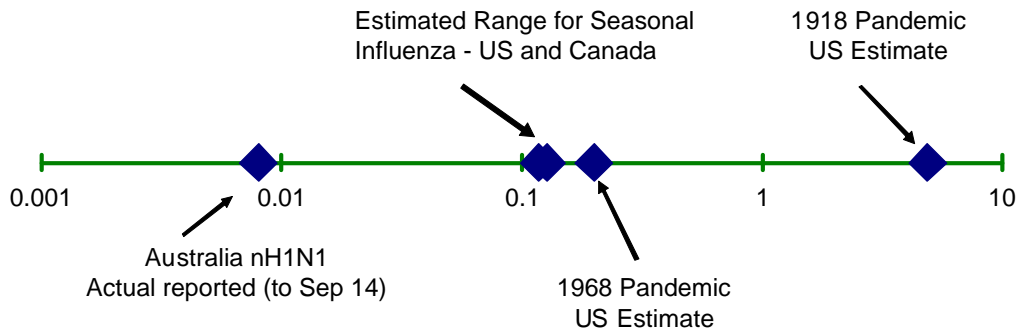
- 44 Hospitalizations
- 4 deaths in BC

Canada

- 1454 Hospitalizations (to August 29)
- 74 deaths
- 23 deaths in Ontario
- 26 deaths in Québec

nH1N1 health impact summary

Mortality Rate Comparison



Deaths Per 1000 Population (Log Scale)

- mortality may be similar to or lower than in seasonal influenza
- mortality and morbidity shifted to younger age groups
- greatest health care impact can be expected to be in:
 - ICU for the very sick
 - Primary Care for the mild to moderately ill and the worried well

nH1N1 surveillance

What are we doing to monitor the situation?

- Surveillance of:
 - Hospitalized influenza cases
 - **School absenteeism**
 - We've been doing this for some years
 - Laboratory surveillance
 - Sentinel physician surveillance

nH1N1 in schools

- As with seasonal influenza, we expect circulation in school and greater absenteeism
- In partnership with schools, public health will continue to monitor rates of absenteeism
 - In order for this to be effective, in each school, someone needs to have the responsibility of monitoring absenteeism and promptly advising public health
- Influenza is a community spread infection: school is one part of the community where influenza spreads
- School-based nH1N1 immunization campaigns are being considered (support of the school in such a campaign is necessary for success)

nH1N1 in schools

Schools should reinforce with parents that:

- Ill children should not come to school
- Children who are ill at school will be sent home

Hand hygiene in schools should be promoted by:

- Announcements and in-class instruction
- Maintaining hand-washing supplies in the bathroom (soap and towels)

School closures are no longer recommended anywhere in Canada

Pregnant school teachers should get the vaccine as soon as it becomes available. If a pregnant teacher becomes ill with influenza-like-symptoms, she should seek medical care right away.

Prevention in the community

Hand-washing

- Simple, important, effective
- Evidence that having access to hand washing facilities reduces respiratory and GI illness

Cough etiquette

Get immunized

If symptoms develop, self-isolation

- People are most infectious in the first few days of illness
- Stay at home when you are sick
- Don't go to school/work/birthday parties etc..

Masks

- No role in prevention of community transmission
- Low on the hierarchy of infection control measures even in health care

nH1N1 self-care

Recognize influenza

If have high risk medical conditions, seek medical attention right away

Otherwise, recover at home

Self-isolate to limit spread to others

Seek medical care if symptoms worsen

- 811, family physician, hospital if SOB, decreased LOC, chest pain
- Antivirals for treatment and not prophylaxis

Return to work/school when feeling well

Recognizing nH1N1

- Fever (94%)*, chills, malaise
- Cough (92%)*, sore throat (66%)*
- Diarrhea (25%)*, nausea, vomiting(25%)*
- Elderly may not have fever
 - Delirium
 - Decreased LOC

* of 642 cases in USA

nH1N1 communications

VCH updating website with information organized as per chapters of the pandemic plan

<http://www.vch.ca>

Provincial website for physicians launched

<http://www.hls.gov.bc.ca/pho/physh1n1.html>

BCCDC website

<http://www.bccdc.ca>

Public Health Agency of Canada website

<http://www.phac-aspc.gc.ca/index-eng.php>

Your pandemic plans

Need to be flexible, quickly adaptable to the current pandemic

Defining essential services -> business continuity

Assisting the health authority as necessary

Helping residents and local businesses cope

For the current nH1N1

- Mostly mild disease similar to seasonal influenza
- Expect higher employee absence rates this fall
- Opportunity to review policies and training
 - Healthy workplace
 - Alternate approaches to business operations (telephone, online, working from home)

Key messages

There will be enough vaccine for everyone who wants it

- We will supply vaccine to on-reserve health centres
- We will supply vaccine to employers who wish to run an occupational health campaign

There will be enough antivirals for those who need it

We do not anticipate closure of any public venues

Focus should be on staying well

What is different about pandemic H1N1 2009?

Large susceptible population

Age distribution

- Attack rate, hospitalisation and complications highest in those under 50

What do we expect this Fall

Early increase in cases now that school is back in

Some increase in people admitted to hospital

Earlier 'seasonal' flu vaccine programme

nH1N1 vaccine to arrive in November

- Enough for every Canadian who needs and wants it

Large nH1N1 vaccine campaign Nov. – Jan

- Details to come

Conclusions

Unless the virus changes its “spots”, we should not see anything like the worst scenario

Vancouver Coastal Health is committed to keeping you up to date as the flu season unfolds

Your key contacts

Vancouver Coastal Health

- Medical Health Officers
- Communicable disease program offices
- Community health centres
- Aboriginal health strategic initiatives

Don't forget the usual service providers,
including 811

