



UNDERSTANDING AND PREPARING FOR H1N1

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UNDERSTANDING AND PREPARING FOR H1N1

COMMUNICATIONS IS THE KEY;

WE HAVE A COMPREHENSIVE PLAN IN THAT REGARD



WHAT IS H1N1 (Swine Flu)?

- Origins - Mexico, April 2009 new recombinant Influenza A virus, hence “novel”
- WHO level: Pandemic Phase 6
- Symptoms are as per usual Influenza: mostly mild, but can be severe or deadly



H1N1

- What we know:

- Most illness has been mild, with low rates of hospitalizations and deaths (1.6/1,000,000 population)
- Severe disease causing hospitalization occurs most frequently in children and young adults
- Risk factors for severe outcomes also include pregnancy and chronic medical conditions

- What we DON'T know:

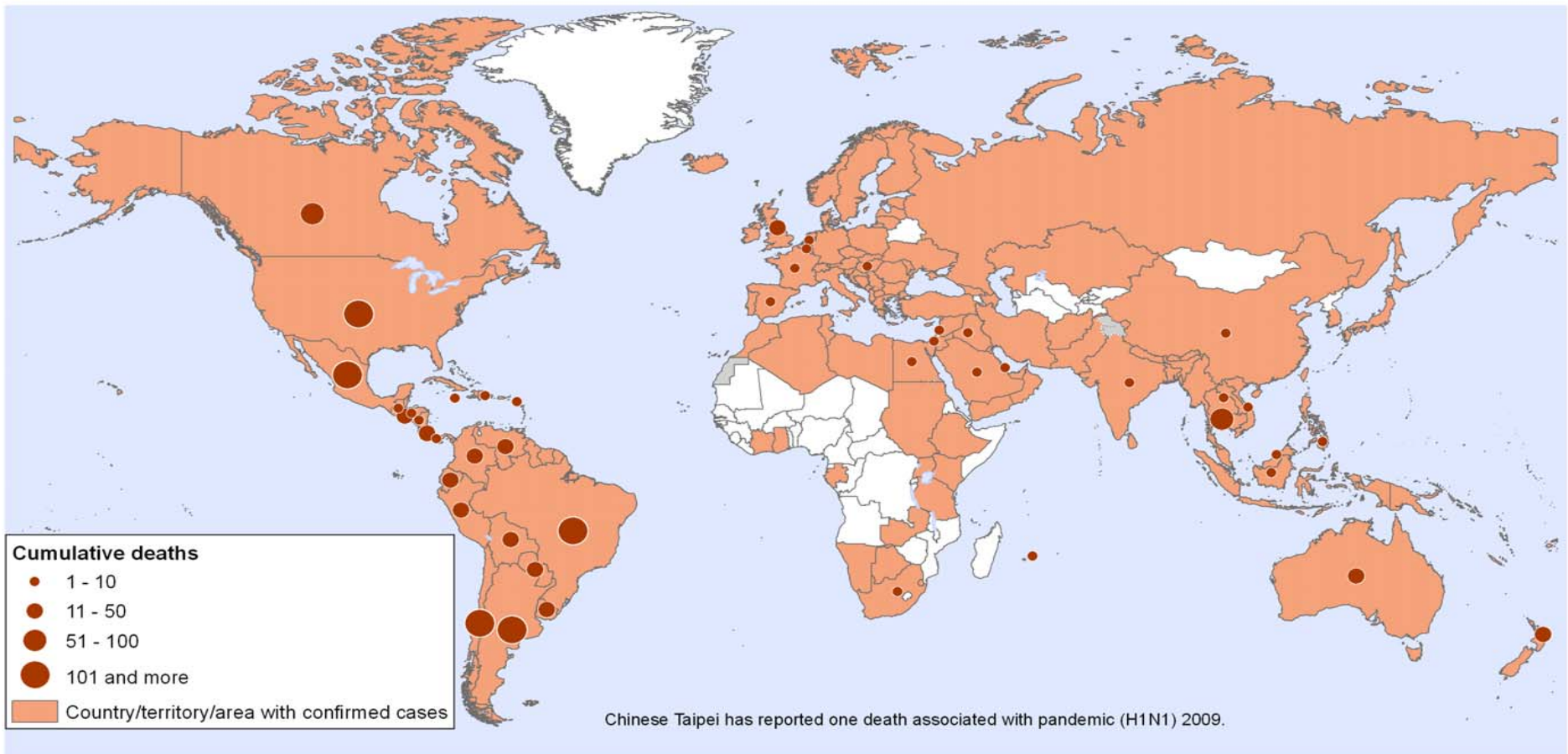
- Will disease severity of successive waves of illness be more, less, or the same as observed to date?
- What will be the impact of seasonal flu vaccine on the likelihood of H1N1 vulnerability?
- Level of increased demand on the health system (primary care, hospitals, home care, etc.)



Pandemic (H1N1) 2009

Status as of 13 August 2009

Countries, territories and areas with lab confirmed cases and number of deaths as reported to WHO



The boundaries and names shown and the designations used on this map do not imply the expression of any opinion whatsoever on the part of the World Health Organization concerning the legal status of any country, territory, city or area or of its authorities, or concerning the delimitation of its frontiers or boundaries. Dotted lines on maps represent approximate border lines for which there may not yet be full agreement.

Data Source: World Health Organization
Map Production: Public Health Information and Geographic Information Systems (GIS)
World Health Organization



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Map produced: 19 August 2009 13:38 GMT



H1N1 IN CANADA SINCE APRIL 2009

H1N1 CANADA	7,083 Overall cases reported	1,422 Hospitalized cases	275 Cases admitted to ICU	70 Deaths
Females, %	51.9	51.4	56.7	60
Median age	18	25	40	51
Aboriginal status, %	12.5	16.5	14.5	11.4
Underlying medical conditions ¹ , %	36.4 (641/1,761)	54.2 (486/897)	65.3 (128/196)	75.5 (37/49)
Pregnancy ² , %	4.1 (71/1,717)	22.4 (60/268)	15.7 (11/70)	33.3 (4/12)

¹ Among those for whom the information was provided excluding pregnancy.

² Among women between 15 and 44 years old. SOURCE PHAC AUG 15 2009



H1N1 IN ONTARIO (August 19)

Number of confirmed cases:	4,007
Number of hospitalizations:	315 cases hospitalized
Deaths:	22
Summer Camps:	Of the 19 respiratory outbreaks reported, 9 have been caused by H1N1



H1N1 IN EOHU AREA (August 15)

Number of confirmed cases: 23

Number of hospitalizations: 6

Deaths: 1



PREDICTIONS AND PREPARATIONS

Learning from the Past: 1957 H2N2 Pandemic (USA)

- Started in the spring/summer of 1957
- Returned with a 2nd wave peaking mid October 1957 and a 3rd wave in March 1958
- Infected 25% of US population (45 million)
- 60% of students, absenteeism up to 30%
- Death rate 2/3 of 1%
- 20,000 excess deaths due to H2N2/pneumonia during this time
- No significant effect on industry/business
- No vaccine in time



PREDICTIONS AND PREPARATIONS

HOPE FOR THE BEST BUT PREPARE FOR THE WORST

- Most experts predict a second wave in the fall
- When?
- How many? Up to 30% of the population?
- There will be the usual seasonal flu season. Will this impact H1N1? Which will come first?
- Influenza virus mix/virus changes - H1N1 and H3N2?
- Increased demand for antivirals, personal protective equipment and infection control supplies
- Potential for capacity constraints in acute care, long-term care, community care and public health sector

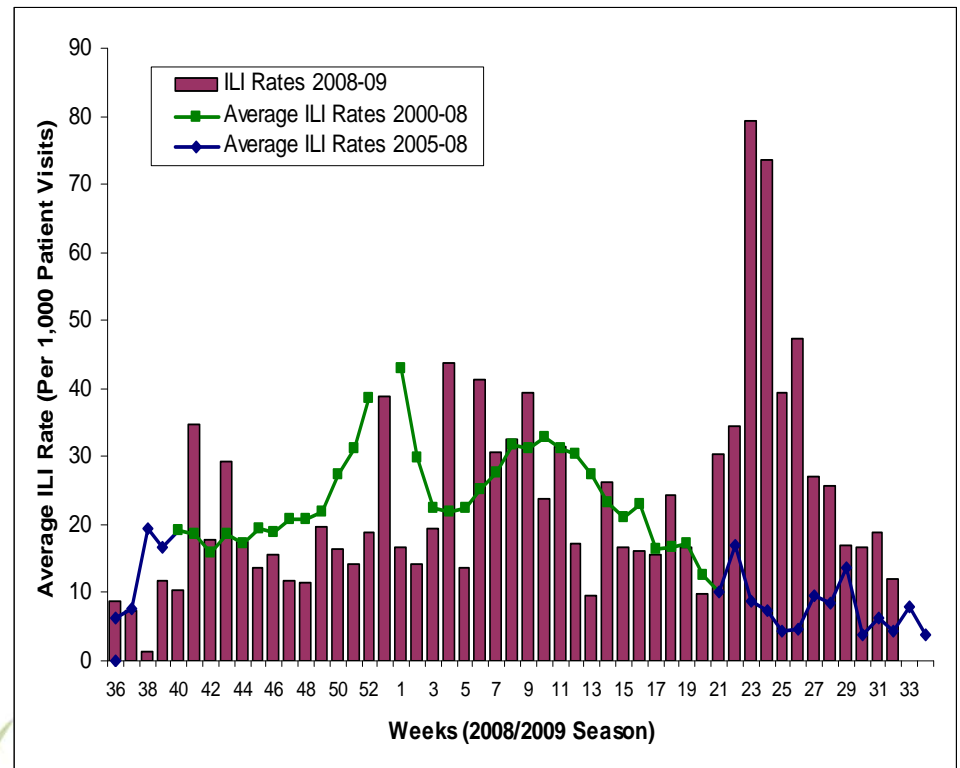


FIGHTING/PREVENTING H1N1

PUBLIC HEALTH MEASURES

SURVEILLANCE / MONITORING

- Syndromic Surveillance
- Reporting of outbreaks from institutions, schools, daycares and workplaces
- Provincial reporting - Fluwatch
- Physician reports



FIGHTING/PREVENTING H1N1

PUBLIC HEALTH MEASURES

INFECTION CONTROL / HYGIENE

Infection prevention and control practices are paramount in helping to prevent or reduce the spread of influenza.



FIGHTING/PREVENTING H1N1

PUBLIC HEALTH MEASURES

INFECTION CONTROL / HYGIENE

- Adapting physical environments can reduce the spread of influenza
- Achieved through ensuring:
 - Handwashing stations have running water and an adequate supply of soap and paper towels or hand dryers
 - Alcohol-based hand rub (ABHR) where handwashing facilities not available
 - Designated area where ill students/workers can be isolated from others
 - Students bring their own supplies to class; reduce the need to share

SOURCE: CHIEF MEDICAL OFFICER OF HEALTH



FIGHTING/PREVENTING H1N1:

PUBLIC HEALTH MEASURES

INFECTION CONTROL / HYGIENE

- Active screening of staff and students before they enter the school is not recommended at this time.
- Staff and students should be familiar with ILI symptoms and monitor themselves on a regular basis.
- Staff and students should report their ILI symptoms to school officials (or employers) as soon as possible.

SOURCE: CHIEF MEDICAL OFFICER OF HEALTH



FIGHTING/PREVENTING H1N1:

PUBLIC HEALTH MEASURES

INFECTION CONTROL / HYGIENE

- Staff and students should be encouraged to practice hand hygiene and cough/sneeze etiquette frequently:
 - *Posting of signage and use of educational materials*
 - *Reinforcement of hand hygiene during specific activities (e.g. before eating lunch/snacks, after sneezing/coughing, etc.)*
 - *Reinforcement of respiratory etiquette*

SOURCE: CHIEF MEDICAL OFFICER OF HEALTH



FIGHTING/PREVENTING H1N1

PUBLIC HEALTH MEASURES

INFECTION CONTROL / HYGIENE

- Exclusion of anyone ill with ILI symptoms
- Students who become ill while at school should be separated from other children until they can be picked up
- Students and staff should remain at home until they no longer have a fever and feeling better
- Considerations for pregnant women and individuals with pre-existing chronic disease:
*Likelihood of contracting virus is no different from general public.
However, may suffer complications from pH1N1 and should see their healthcare provider as soon as possible.*

SOURCE: CHIEF MEDICAL OFFICER OF HEALTH



FIGHTING/PREVENTING H1N1

PUBLIC HEALTH MEASURES

SOCIAL DISTANCING / SCHOOL CLOSURES

School closures are not recommended at present. Closures are extremely socially and economically disruptive.

- Decision to close schools (and other distancing measures) should be discussed in collaboration with the local public health unit

Closure should mitigate the impact of H1N1 on the entire population

Decision should be based on health and safety considerations (i.e., high staff absenteeism)

- Triggers to close may include:
 - Severity and extent of H1N1
 - Virulence of H1N1

SOURCE: CHIEF MEDICAL OFFICER OF HEALTH



FIGHTING/PREVENTING H1N1

PUBLIC HEALTH MEASURES

QUARANTINE/TRAVEL RESTRICTIONS/EMERGENCY DECLARATION

*Possible options, only in an
“extreme emergency situation”.*



FIGHTING/PREVENTING H1N1

ANTIVIRAL MEDICATION AND H1N1 VACCINE

TAMIFLU -

A specific antiviral medication that needs to be given within 24 hours of illness onset. Not recommended for routine preventative use.



FIGHTING/PREVENTING H1N1

ANTIVIRAL MEDICATION AND H1N1 VACCINE

H1N1 VACCINE

- An adjuvant vaccine likely ready for Nov-Dec 2009
- Who needs H1N1 vaccine? to be determined...as we understand the pattern of disease in the second wave
- Possibility of mass vaccination (not obligatory)
- Two doses, 21 days apart
- **People will still need the regular seasonal Flu vaccine which will be available late September, mid October, 2009**
- **Regular flu vaccine does not prevent H1N1**
- **H1N1 vaccine does not protect against seasonal flu strains**
- A logistic challenge to our Health Unit



POSSIBLE H1N1 SCENARIOS AND SOME THOUGHTS

- H1N1 Second wave, in Oct-Nov, before vaccine is available
- Possibility of mass immunization in anticipation
- Difficult to predict extent or severity. However we do know that H1N1 can cause severe illness just like the seasonal flu.
- All of our actions/reactions will depend on the specific scenario. We have many options at our disposal, and we are planning for the various scenarios, at the local and provincial level.



FIGHTING/PREVENTING H1N1

WORKING WITH THE EASTERN ONTARIO HEALTH UNIT:

To obtain the latest information on H1N1

Guidance on infection prevention and control best practices

Advice on how to manage students and/or staff with ILI

Outbreak declaration

→ School/workplace absenteeism rates that exceed 10%

Direction on timely outbreak response measures

Decisions on school and/or other closures

SOURCE: CHIEF MEDICAL OFFICER OF HEALTH



CONCLUSION

H1N1 IS A POTENTIAL THREAT TO THE PUBLIC.

IT IS OUR DUTY TO BE PREPARED,
AS PANDEMIC PLANNING IS IN OUR MANDATE.

BY PREPARING FOR THE WORST, WE CAN BE READY.
TODAY, WE HAVE THE TOOLS, KNOWLEDGE AND TECHNOLOGY
TO BE ABLE TO BETTER COPE WITH PANDEMICS
AS COMPARED TO PAST ONES!

LET'S PLAN AND PREPARE... BUT NOT PANIC.





UNDERSTANDING AND PREPARING FOR H1N1

THANK YOU

ANY QUESTIONS?

