

Seasonal Influenza and H1N1 Immunization

Parkland Forum
on Pandemic H1N1 Preparedness
October 15, 2009

Sherri Buhler B.N. R.N.
Director, Public Health Services

Presentation Outline

- Overview of seasonal influenza vaccine program
- Mass Immunization Programs in general
- H1N1 vaccine overview
- H1N1 mass clinic strategy

Immunization: a Public Health Responsibility

- Immunization is the safest and most effective way to protect against infectious disease
- Is the cornerstone of the public health response to H1N1 flu virus pandemic in Canada

Mass Immunization Planning in PRHA

- Regional Mass Immunization Team
- Reports to Regional Incident Command System through Planning Section
- Guides planning for the Seasonal and H1N1 mass immunization strategies

Seasonal Influenza

- Every year, seasonal influenza and related complications such as pneumonia cause death in the vulnerable and increased absenteeism in the rest of the population

Seasonal Flu Vaccine

Not the same as H1N1 Flu Vaccine

- Causes the body to produce antibodies to fight flu viruses
- Helps protect against seasonal flu strains that are predicted to be circulating during flu season
- Is prepared from inactivated viruses therefore cannot cause influenza.

“The Study”

- Media has become a main source of information
- Reporting an unpublished, draft study that suggests a “potential” association between prior seasonal flu shots and the risk of acquiring pandemic H1N1

BUT...

- Preliminary analysis of Manitoba data has not shown a similar association.
- Studies done in several other countries that have not found the same association
- PHAC is unable to comment on why the studies are finding different results, but a review of the various methods is currently underway

Further, Canada's Chief Public Health Officer has stated that preliminary research undertaken by PHAC "suggests that there is no increased risk of severe H1N1 pandemic disease in those who have received seasonal vaccine".

So...

- Some jurisdictions are delaying seasonal programs
- Some are targeting those most at risk from complications from seasonal influenza

- This decision has been based on several factors, including:
 - The possibility of an early fall second wave of H1N1 flu
 - The timing of H1N1 vaccine availability (likely beginning of Nov)
 - The strains of influenza that are currently circulating (very little to no seasonal influenza strains circulating at this time)
 - Canadian studies that have suggested a potential association between prior seasonal influenza vaccination and the risk of acquiring pandemic H1N1 disease

Manitoba's Approach

- Allows those people who are most vulnerable to seasonal influenza to receive their shot in a compressed time period before we have to switch over to H1N1 immunization.

Manitoba's Approach

- Sequencing those eligible for seasonal vaccine
 - "Right Now" group most at risk for complications from seasonal influenza strains
 - "Later" group will receive vaccine after the H1N1 campaign

“Right Now” Seasonal Flu vaccine is for . . .

- Individuals 65 years of age and over,
- Individuals who live in personal care homes and other long term care facilities,

“Right Now” Seasonal Flu vaccine is for . . .

- Others at greater risk of complications from seasonal flu :
 - Children 6 months to 23 months of age,
 - Individuals from 24 months to 65 years of age with risk conditions (e.g. pregnant women, chronic health conditions)

Pneumococcal (pneumonia) vaccine is for . . .

- Seniors 65 years and older
- Anyone who lives in a PCH or chronic care facility
- People 2 years of age and older who have a health condition that places them at high-risk (e.g. heart disease, asthma, diabetes)

What is Mass Immunization?

- A large scale community activity that requires a large number of community members to receive one or more immunizations in a short period of time
- A time for community members and health professionals to come together for the health of the community

Why Mass Immunization?

- To ensure rapid delivery of a vaccine deemed to be effective in the fight against a defined illness
- To interrupt the spread of an infectious communicable disease
- To protect the health and well-being of non-infected community members
- To protect the health and well-being of "at-risk" community members

Mass Clinics: Seasonal Flu

- PRHA has been using a “mass” clinic approach since 2006, testing various methods of organizing mass clinics to prepare for potential mass campaigns
- Very well received by staff and clients

Mass Clinics: Seasonal Flu

- Compressed into only 9 working days this year
- Trialing elements of our H1N1 plan such as arranging transportation, security presence, and active support from other programs such as EMS and Mental Health
- Watch for ads in papers and on radio

PHAC Guidance on H1N1 Vaccine Sequencing

1. Those who will benefit most from immunization and those who care for them
 - People with chronic conditions under age 65 years
 - Pregnant women
 - Children 6 months to under 5 years
 - People living in remote and isolated settings or communities

PHAC Guidance on H1N1 Vaccine Sequencing

- Health care workers involved in pandemic response or who deliver essential services
- Household contacts and caregivers of infants less than 6 months and of people with weakened immune systems
- Populations otherwise identified as high risk

PHAC Guidance on H1N1 Vaccine Sequencing

2. Others who will benefit from immunization
 - Children 5 to 18 years
 - Adults 19 to 64 years
 - Adults 65 years and over
 - First responders (police, firefighters)
 - Poultry and swine workers

H1N1 Vaccine

- Canada has tight regulatory control over vaccines to ensure safety, effectiveness and quality
- Health Canada will review all available test results, including international data, to ensure the vaccine is safe and effective before it will be authorized for use in Canada
- PHAC and Health Canada monitor the safety of vaccines on an ongoing basis

H1N1 Vaccine cont'd

What's the difference between an adjuvanted and non-adjuvanted vaccine?

Adjuvanted: substance added to a vaccine in order to **boost** the individual's response. Less of the virus or "antigen" is needed to make a dose of the vaccine.

- **Non-adjuvanted:** has no "booster" element. More antigen needed to create this kind of vaccine.

H1N1 Vaccine cont'd

Why has Canada ordered a vaccine with an adjuvant for the general population, rather than one that does not have an adjuvant?

- WHO recommended countries use dose-sparing vaccines whenever possible.
- Adjuvanted vaccine uses less of the virus material (antigen), allowing to immunize more people in a timely manner.
- Use of an adjuvant may provide cross-protection against virus drift. Virus drift are changes in the antigen of flu viruses which are common.

H1N1 Vaccine cont'd

Does an adjuvanted vaccine pose a risk to pregnant women?

- All evidence suggests adjuvanted vaccines are just as safe as non-adjuvanted vaccines; however there's no safety data for use of adjuvanted vaccine in pregnant women.
- The WHO's Strategic Advisory Group of Experts (SAGE) recommended in July that pregnant women should receive non-adjuvanted vaccine where possible, but that an adjuvanted vaccine could be used if necessary.

H1N1 Vaccine cont'd

**Is Canada ordering non-adjuvanted vaccine?
Who will it be recommended for and why?**

- Small amount of non-adjuvanted vaccine is a precautionary measure for pregnant women as no clinical data of the safety of adjuvanted vaccine in this group is available.
- WHO indicated it has no special concerns about the safety of adjuvanted H1N1 vaccines.
- WHO strongly recommended pregnant women be immunized against H1N1 flu virus, even if no non-adjuvanted vaccine is available.

What we know so far...

- More is being announced every day about the vaccine:
 - 1 dose for many groups
 - 2 doses spaced 21 days apart for others (children under 10, possibly adults over 65)
 - Non-adjuvanted vaccine may be available slightly later than adjuvanted (approx 2 weeks)
 - Anticipate early November program but have to be prepared for earlier launch

What we know so far...

- Planning as if 75% of the population will receive H1N1 vaccine
- There will be enough vaccine for every Manitoban who wants to receive vaccine but it will not be available all at once
- Balancing efficiency with enhancing access for those most at risk when choosing "host" communities for clinics
- Availability of different vaccine formulations and 2 dose requirements means potential need to host clinics 3 times in communities

Parkland “Host” Communities

Principles:

- Maximize efficiency
- Prioritize for populations most at risk of serious H1N1 disease
- Focus on safety

Parkland “Host” Communities

- Dauphin
- Gilbert Plains
- Winnipegosis
- Ethelbert
- Ste Rose
- Waterhen
- McCreary
- Roblin
- Grandview
- Swan River
- Benito
- Mafeking
- Barrows
- Sapotaweyak FN
- Duck Bay
- Camperville
- Wuskwi Sipiik FN

Mass Immunization Requires:

- Transportation
- Parking monitors
- Greeters
- Clerical support
- Security
- Nurses
- Volunteer coordination
- Post-immunization observation area
- Supply monitoring & replenishing

As well as . . .

- Janitorial support, snow/ice removal
- Food prep for workers, serving, cleanup
- Dedicated rest area for workers
- Consider: there could be staff vacancies due to illness, eg. janitorial staff at the clinic site, snow removal, nursing and clerical staff, volunteers

How Can You Help?

- Community leaders – lead by example; encourage participation
- Assist the planning team as requested
- Promote the immunization clinics
- Educate others
- Work together for success!

How Can You Help?

- Assist with securing appropriate space
 - Will be VERY short notice
 - Certain specifications for physical space

Mass immunization is a
community exercise, not just a
health exercise

Everyone has something to
contribute to the success of the
campaign

**Manitoba's information
source:**

www.manitoba.ca/flu

Questions?