



The presentation will begin shortly.

## 2012-2013 INFLUENZA VACCINE RECOMMENDATIONS

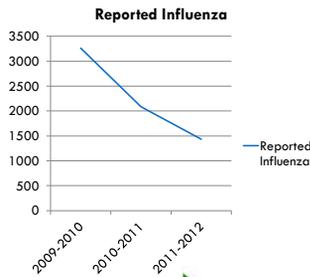


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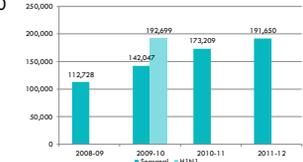
### Re-Cap of North Dakota Influenza Season

- Peaked Late March
- Number of cases
  - 2011-12, **1433**
  - 2010-11, 2089
  - 2009-10, 3259



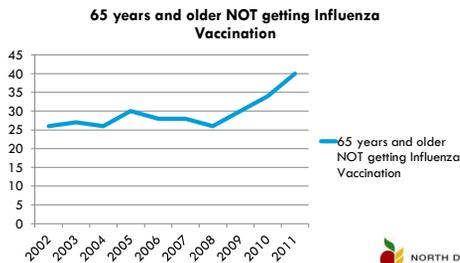
### 2011-2012 Influenza Season

- Doses of Vaccine given
  - 191,650 doses
  - High-dose: 14,650
  - Flu Mist: 28,867
- Doses of Vaccine by year.



### Item of concern

- Vaccination rate in North Dakotan's 65 years and older



### High Risk (for complications)



- Persons with asthma, diabetes, and chronic lung disease. (Also those that care for these individuals)
- Pregnant women
- People 65 years and older

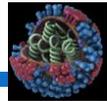


## 2012-2013 INFLUENZA VACCINE MAKE-UP

- A/California/7/2009 (H1N1)-like virus
- A/Victoria/361/2011 (H3N2)-like virus
  - B/Wisconsin/1/2010-like virus



## Determining the Make-up



### Antigenic Drift & Antigenic Shift

- Mutations
- Drift is a subtle change
  - Can cause epidemics
    - H3N2, but the strain changes
      - A/Perth/16/2009 (H3N2)-like virus
      - A/Victoria/361/2011 (H3N2)-like virus
- Shift is a major change
  - Can cause pandemics
    - H2N2
    - H3N2
      - Changed how it attaches to cells (H)
      - (N) is how the virus enters the cell

### Yearlong World Wide Observation

- Recommendations by WHO
  - 5 locations
    - Atlanta, Georgia, USA
    - London, United Kingdom
    - Melbourne, Australia
    - Tokyo, Japan
    - Beijing, China
  - Each country as final say of what their seasonal influenza vaccine will contain



## Costs associated Childhood Influenza

- Medical bills
  - \$300-\$4000
- Salary loss, due to missing work
  - \$222-\$1445
- Other flu related expenses
  - \$52-\$178



**\$0-\$40  
THE PRICE OF  
VACCINATION**

**\$574-\$5623**



## Antiviral Recommendations (stay the same)



Antiviral Agent	Activity Against	Use	FDA Approved For	Not Recommended For use in
Osetamivir (Tamiflu)	Influenza A & B	Treatment	1 yr and older	none
		Chemo-prophylaxis	1 yr and older	none
Zanamivir (Relenza)	Influenza A & B	Treatment	7 yrs and older	People with underlying respiratory diseases (e.g. asthma, COPD)
		Chemo-prophylaxis	5 yrs and older	

## FLU CLINIC LOCATOR

www.ndflu.com

Search for a Flu Vaccine Clinic entered on this site. Please note: This site contains information provided to the NDDoH by flu vaccine providers. This list may not be complete. You may also check with your local health unit or health-care provider to see if flu vaccine is available.

Please Select a County  or enter a city

[Flu Vaccine Clinic Editor](#) (log-in needed)

**Providers: Request to have your clinic added to the database**

Clinic Name:   
 Clinic Contact:   
 Address:   
 City:   
 Phone:   
 Days of Operation:   
 Hours of Operation:   
 Appointment:

Vaccine Comments:

County: Please Select a County



## Types of Influenza Vaccine



### LAIV

- Healthy individuals 2-49 years of age, not pregnant
- Store in refrigerator
  - 35°-46°F (2°-8°C)



The Nose

### TIV

- All individuals 6months and older
- Use for persons with mild egg allergies i.e. Hives
- Store in refrigerator
  - 35°-46°F (2°-8°C)



2012-2013 Childhood Influenza Vaccine Dosage Chart

Vaccine	Presentation	Preservative	Age	Dosage
<b>Fluzone®</b> (sanofi pasteur)	0.25 mL syringe	No	6 – 35 months	0.25 mL
	Multi-dose vial	Yes	6 – 35 months	0.25 mL
	Multi-dose vial	Yes	3 – 18 years	0.5 mL
	0.5 mL vial	No	3 – 18 years	0.5 mL
<b>Fluarix</b> (GlaxoSmithKline)	0.5 mL syringe	No	3 – 18 years	0.5 mL
	0.5 mL syringe	No	3 – 18 years	0.5 mL
<b>Fluvirin®</b> (Novartis)	0.5 mL vial	No	4 – 18 years	0.5 mL
	Multi-dose vial	Yes	4 – 18 years	0.5 mL
<b>Afluria®</b> (CSL)	0.5 mL syringe	No	9 – 18 years*	0.5 mL
	Multi-dose vial	Yes	9 – 18 years*	0.5 mL
<b>FluMist®</b> (MedImmune)	0.2 mL Sprayer	No	2 – 18 years	0.2 mL (0.1 mL per nostril)



Pre-booking

We have pre-booked 30,680 doses for the 2012-2013 season. 24,790 are for VFC eligible children, the remaining dose are for health units that participate in the universal program.



Recommendation for HCW?

TIV (flu shot) is recommended to be used for vaccinating household members, HCW, and others who have close contact with severely immunosuppressed person during those periods in which the immunosuppressed person requires care in a protective environment. Specialized patient-care area with a positive airflow relative to the corridor, high-efficiency particulate air filtration and frequent air changes



HCW who receive LAIV should avoid providing care for severely immunosuppressed patients requiring a **protected environment** for 7 days after vaccination

HCW who have contact with lesser degrees of immunosuppression (e.g., persons with HIV, chemotherapeutic medication use, or who are cared for in other areas such as the NICU) can receive TIV or LAIV



FluZone High-Dose

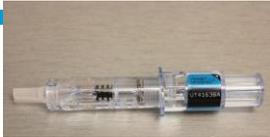


For ages 65 years and older

- Intramuscular shot with 4 times the antigen level
  - .5mL preservative free, single dose, prefilled syringes
- Clinical trials show a stronger immune response when FluZone high-dose is used
  - This is yet to translate into less influenza, this data will hopefully be available 2014-2015



Fluzone Intradermal (18-64yr old)



- Dose is 0.1 mL administered by a specially designed microneedle injector system in the deltoid (not the forearm)
  - Needle is 90% smaller
- Formulated to contain more Hemagglutinin (27 mcg) than a 0.1 mL dose of regular Fluzone formulation (9 mcg)



Updated VIS available

- **Inactivated**
  - <http://www.cdc.gov/vaccines/pubs/vis/downloads/vis-flu.pdf>
- **Live, intranasal**
  - <http://www.cdc.gov/vaccines/pubs/vis/downloads/vis-flulive.pdf>
- **Links also available on our website**  
<http://www.ndhealth.gov/immunize/>



## REMINDER

All vaccinations for everyone are required to be entered into the registry, including **SEASONAL INFLUENZA**.



## New Recommendation

(6mo-8yrs)

Have **NOT** received 2 vaccines during the time span of 2010-2012.  
 (2010-2011 & 2011-2012 seasons)  
 They will need two - vaccinations in the 2012-2013 season 4 weeks apart.



NDIS forecaster is programmed for this change.



## Caveat, awaiting further instructions



- If a child 6mo-8yrs of age is known to have received 2 seasonal influenza vaccines at some point. Then received at least 1 influenza vaccine containing H1N1 antigen. They would only need one vaccination this year.
- i.e. A 5yr old received 2 seasonal influenza vaccinations during the 2007-2008 season and the monovalent H1N1 in 2009. With no other vaccinations known this child would receive just 1 dose this year.



## Case Study 1

- 9 yr old Manda is visiting your flu clinic, how many shots of the 2012-2013 seasonal vaccine should she receive with the following history?
  - 2 seasonal vaccines 2008-2009
  - 1 seasonal vaccine 2009-2010
  - No other influenza vaccinations recorded

1

If she were 8 yrs old, how many should she receive?

2



## Case Study 2

- 2 year old Edison had a seasonal influenza vaccine September 2010 and November 2010. No vaccine was recorded during the 2011-2012 influenza season.
- What would be the number of vaccine amounts given?

1



DECEMBER 2<sup>ND</sup> – 8<sup>TH</sup>



NATIONAL INFLUENZA VACCINATION WEEK

Type your **QUESTIONS**  
in the chat window at  
the right ?

This presentation will be posted to our website:  
[www.ndhealth.gov/immunize](http://www.ndhealth.gov/immunize)

After the presentation, questions may be sent to:  
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## Post-test



- Post-test
  - ▣ Nurses interested in continuing education credit, visit [www.ndhealth.gov/immunize/posttest/](http://www.ndhealth.gov/immunize/posttest/)
  - ▣ Successfully complete the five-question post-test to receive your certificate
  
- Credit for this session available until **Wednesday, August 15<sup>th</sup> 5pm**

