Strategies to Overcome Myths and Misperceptions

“I understand that the vaccine can be unsafe, especially for my baby”

2008 National Influenza Vaccine Summit

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What Strategies Can Reduce Myths and Misperceptions?

- Education, Education, Education
- Storytelling: Sharing real experiences with the dangers of influenza disease
- Modeling: Vaccinate Health care Professionals!
- “Balanced” media—is it even possible?
What is Safe?

- SAFE = No Harm from the vaccine? No vaccine is 100% safe
- SAFE = No Harm from the disease? Influenza vaccine is certainly not 100% effective

- Have we communicated realistic expectations?
- Communicate that the safety and effectiveness of receiving influenza vaccine is far less risky than being un-immunized
- To do nothing is to take a risk
Multi-dose vials of influenza vaccine contain thimerosal as a preservative.
This requires time for conversation in the clinics about thimerosal, even in mass vaccination settings.
Theoretical/unproven risk with thimerosal vs Real/Considerable risk with disease.
Education on the lack of scientific support for thimerosal as a causative agent of autism is as necessary as ever.
However, when statistics and double-blind studies don’t matter to people, how do we get through to them? Address myths.....
Flu Vaccine Unsafe for Pregnant Women?

- Women who will be pregnant during the flu season are in the high priority group for flu vaccine. It’s unsafe not to vaccinate.
- Vaccinate during any trimester if pregnant during flu season with inactivated vaccine.
- Pregnant women hospitalized at greater rates during influenza epidemics.
- Rate of hospitalization of pregnant women in the 3rd trimester compares to non-pregnant women with high risk medical conditions (Neuzil).
- Pregnant women do have some natural immune suppression during pregnancy making them more vulnerable to disease.
Flu Vaccine Unsafe for Newborns?

- There is no influenza vaccine licensed for infants under 6 months of age due to high incidence of febrile reactions in this age.
- Influenza disease in the very young causes some of the highest morbidity and mortality—the U shaped epi curve.
- It is critical people caring for young infants are immunized including:
  - Family members and relatives
  - Child care providers
  - Health care providers including all clinic staff
Flu Vaccine Unsafe for infants, toddlers and older children?

- ALL children 6 months of age to 18 years should get influenza vaccine
  - The risk of the disease far outweighs the risk of the vaccine
  - The goal is not only to prevent death, but also to reduce morbidity from significant interpandemic epidemics
  - Options are available for healthy children 2 and over for intranasal vs. injectable
  - Explain how the cold-adapted “live” vaccine works
  - Side effect to TIV generally includes local reactions which are actually more common in adults
  - Systemic reactions are uncommon (Nichol)
**Infant’s Immune System is Too Weak?**

- Even premature babies have the immune capacity to respond to inactivated vaccines
- When they are 60 days old, even in an NICU, babies are started on their series
What’s a Child’s Risk of Disease?

- **Who are the kids who get influenza?**
  - They must be sick already
  - They must have problems with their immune system
  - They must be too young to be immunized
  - They must go to big schools with lots of exposures
  - They must live in the city in crowded conditions
  - They must have only gotten 1 vaccine
Television news airs photos a family has shared of their 8 year old son “Lucio” who died of Influenza A.

Their hope is to alert parents in order to prevent other children from dying.

Telling the real stories makes a difference.
6 deaths in MN in 2007 from Influenza, 10% of the US peds cases
6 Children died between 1/23/07 & 2/21/07
Half lived in the metro, half in Greater MN
All males, 3 were 8yrs; a 2yr, 18mo, 17 mo
4 of the 6 were cared for at Children’s
Only 1 was vaccinated, none in the recommended age-group
Half (3 of 6) were otherwise healthy
2 of the 3 underlying conditions were MRSA
Children’s Hospitals and Clinics of MN
Laboratory Confirmed Hospitalized Influenza Cases
Oct 2007 – Apr 2008

- N = 65

- Length of Stay
  - Average = 3.2 days
  - Median = 2 days
  - Mode = 2 days
  - Range 1 – 27 days
Laboratory Confirmed Hospitalized Influenza Cases by Month
Children's Hospitals and Clinics of MN
Oct 2007 - Apr 2008

Data as of 7 May 2008
Laboratory Confirmed Hospitalized Influenza Cases
by Health Status
Children's Hospitals and Clinics of MN
Oct 2007 - Apr 2008

52%  48%

Data as of 7 May 2008
Laboratory Confirmed Hospitalized Influenza Cases by Vaccination Status
Children's Hospitals and Clinics of MN
Oct 2007 - Apr 2008

- Vaccinated (2 doses) 49%
- Not Vaccinated 26%
- Vaccination Status N/A (<6 months) 5%
- Vaccinated (1 dose) 18%
- Vaccination Status Unknown 2%

Note: Vaccination status determined using EMR visit notes and MIIC (MN Immunization Information Connection)

- Of the vaccination status unknowns, 15% (n=10) were previously hospitalized or seen at a Children’s clinic since September 2007 (Missed Opportunities?)

Data as of 7 May 2008
Laboratory Confirmed Hospitalized Influenza Cases by Age
Children's Hospitals and Clinics of MN
Oct 2007 - Apr 2008

- ≤ 6 months: 18%
- ≥ 6 years: 32%
- 7 months - 5 years: 50%

Data as of 7 May 2008
Laboratory Confirmed Hospitalized Influenza Cases by Type
Children’s Hospitals and Clinics of MN
Oct 2007 - Apr 2008

- Influenza A: 68%
- Influenza B: 32%

Data as of 7 May 2008
Laboratory Confirmed Hospitalized Influenza Cases by Location
Children's Hospitals and Clinics of MN
Oct 2007 - Apr 2008

Data as of 7 May 2008
Summary

- Clarify the source of myths and misperceptions for vaccinating pregnant women, infants and children
- Educate about safety of vaccine and real threat to children from disease
- Share stories
- Reduce missed opportunities to vaccinate
- Be a role model by vaccinating yourself