Fluzone® (Influenza Vaccine) and Influenza Immunization Update

Dan DiVito
Senior Director, Fluzone US

Sanofi Pasteur's Vision

A world in which no one suffers or dies from a vaccine-preventable disease.
**Influenza** is the Disease From Which We Are Furthest From Our Goal

**In Children...**

US Pediatric* Deaths from Vaccine Preventable Diseases, 2004-2013

<table>
<thead>
<tr>
<th>Disease</th>
<th>Deaths</th>
</tr>
</thead>
<tbody>
<tr>
<td>Polio</td>
<td>0</td>
</tr>
<tr>
<td>Measles</td>
<td>1</td>
</tr>
<tr>
<td>Hepatitis</td>
<td>19</td>
</tr>
<tr>
<td>Pertussis</td>
<td>152</td>
</tr>
<tr>
<td>Meningitisb</td>
<td>251</td>
</tr>
<tr>
<td>Influenza</td>
<td>864</td>
</tr>
</tbody>
</table>

References

**And in Seniors**

Adults 65+ of age suffer disproportionately from influenza related morbidity and mortality1-3:

- **15%** of the population
- **60%** of hospitalizations
- **90%** of deaths

References
Fluzone High-Dose Vaccine: Developed to Help Better Protect Seniors Against Influenza

Primary Endpoint<sup>a</sup>

**24.2%**

MORE EFFICACIOUS compared with Fluzone vaccine against all flu strains<sup>1,2</sup>

Secondary Endpoint<sup>b</sup>

**51.1%**

MORE EFFICACIOUS compared with Fluzone vaccine against flu caused by similar strains<sup>1,2</sup>

<sup>a</sup> Laboratory-confirmed, protocol-defined, influenza-like illness caused by viral strains regardless of their antigenic similarity to vaccine strains.

<sup>b</sup> Culture-confirmed influenza caused by viral types/subtypes antigenically similar to the vaccine strains in association with a modified CDC-defined ILI

Fluzone High-Dose: Becoming Standard-of-Care for Influenza Immunization of Seniors

Expected 2016-17 Immunization Status for Americans ≥65 Years of Age

1/3

of US seniors won’t receive an influenza vaccine

60% of immunized seniors expected to receive Fluzone High-Dose vaccine in 2016

Sources: Census data, CDC published immunization rate, and company internal estimates
Sanofi Pasteur Continues to Invest in Protection from the Devastation of Influenza

- Continuing to advance the science of influenza prevention
  - Fluzone High-Dose vaccine: Developing quadrivalent formulation and exploring expanded indication
    - Supporting investigator-led studies of sub-populations
  - Developing a broadly protective vaccine

- Breaking ground on a 3rd US manufacturing facility

- Increased filling capacity for 2016-2017 season

Ahead: The 2016-2017 Influenza Season

- Producing 65 million doses of Fluzone vaccine to help protect Americans of all ages
  - Fluzone High-Dose vaccine
  - Fluzone Quadrivalent vaccine: Pediatric Dose
  - Fluzone Quadrivalent vaccine
  - Fluzone Intradermal Quadrivalent vaccine

- Manufacturing is progressing well; investments made to improve timing of delivery

- Focused on educating healthcare providers about the devastation of influenza, especially in seniors and children
A world in which no one suffers or dies from a vaccine-preventable disease.

IMPORTANT SAFETY INFORMATION

Indication
Fluzone and Fluzone High-Dose vaccines are indicated for active immunization for the prevention of influenza disease caused by influenza A subtype viruses and type B virus contained in each vaccine. Fluzone vaccine is indicated for persons 6 months of age and older. Fluzone High-Dose vaccine is approved for use in persons 65 years of age and older.

Safety Information
The most common local and systemic adverse reactions to Fluzone and Fluzone High-Dose vaccines include pain, erythema, and swelling at the injection site; myalgia, malaise, headache, and fever (irritability, abnormal crying, drowsiness, appetite loss, and vomiting in young children receiving Fluzone vaccine). Other adverse reactions may occur. Fluzone and Fluzone High-Dose vaccines should not be administered to anyone with a known hypersensitivity (eg, anaphylaxis) to any vaccine component, including egg protein or thimerosal (the multidose vial is the only presentation containing thimerosal), or to a previous dose of any influenza vaccine.

If Guillain-Barré syndrome has occurred within 6 weeks following previous influenza vaccination, the decision to give Fluzone or Fluzone High-Dose vaccine should be based on careful consideration of the potential benefits and risks. Vaccination with Fluzone or Fluzone High-Dose vaccine may not protect all individuals.

Before administering Fluzone or Fluzone High-Dose vaccine, please see full Prescribing Information.