
 **MedImmune**

**FluMist® Update
(Influenza Virus Vaccine Live, Intranasal)**

National Influenza Vaccine Summit

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 **2009-10 Seasonal Vaccine Selection and Production**


19 Strains from CDC: 4 H1N1, 5 H3N2, 7 B Victoria, 3 B Yamagata

12 LAIV Candidates Made: 3 H1N1, 3 H3N2, 4 B Victoria, 2 B Yamagata

3 LAIV Strains Approved:

- A/South Dakota/6/2007 (H1N1)
- A/Uruguay/617/07 (H3N2)
- NEW** B/Brisbane/60/2008 (Victoria Lineage)


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FluMist⁴® for the 2009-10 Season

- Planned supply: 10 - 11 million doses
- Shipping expected to begin in August
- Customers have choice of distributor
 - ◆ McKesson Medical-Surgical
 - ◆ Besse
 - ◆ ASD
 - ◆ Moore Medical
- One new strain in vaccine
 - ◆ Production is going well
 - ◆ All strains produced using reverse genetics

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H1N1 LAIV

- An initial order of \$90M of vaccine has been placed, with the potential for additional orders.
 - ◆ H1N1 LAIV project has been funded in whole or in part with Federal Funds from the HHS/ASPR/BARDA, under Contract No. 1002009000021
- H1N1 LAIV is same as seasonal FluMist vaccine, except is monovalent
 - ◆ 0.2 mL/dose (0.1 mL in each nostril) delivered by nasal spray
 - ◆ Produced in eggs
 - ◆ Contains no preservatives or adjuvants
 - ◆ Dose is fixed at $10^{7\pm 0.5}$ FFU/strain
- Clinical studies planned
 - ◆ Two concurrent placebo-controlled studies in children aged 2 – 17 years and adults aged 18 – 49 years
 - ◆ 2-dose schedule delivered 4 weeks apart
 - ◆ Objectives
 - > Demonstrate attenuation (assess solicited symptoms and adverse events)
 - > Assess serum immune responses after each dose (no known correlate of protection)
- If yield is consistent with that for seasonal strains, can make ~ 35 M doses

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Activities to Support Awareness of Influenza Vaccination and New Pediatric Recommendations

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'Choose Your Administration' *Promoting Dialogue on Flu Immunization*

Goals:

- Urge eligible adults and families to choose or "elect" to get a flu vaccination
- Encourage early vaccination



Implementation:

- Connect immunization messages with high level of interest and enthusiasm in the U.S. election:
- Media/Blogger Relations
 - Web site promotion
 - Presence at Democratic and Republican National Conventions

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‘Choose Your Administration’ Impact

Discussion of flu vaccination earlier in the season

70+ Media Interviews, including two live national hits on political programs

More than 30,000 CHOOSE buttons distributed










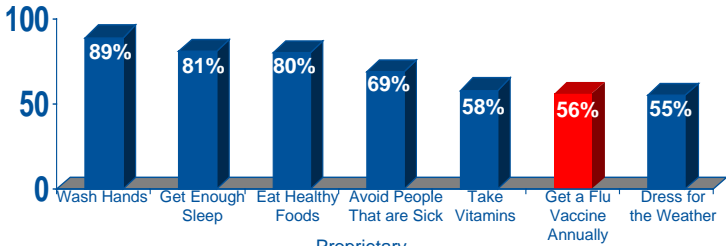


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‘Choose Your Administration’ Harris Survey

- **‘What can you do to help protect your child against influenza?’**
 - ◆ 85% agree that getting required immunizations is very important
 - ◆ 82% are aware that they can get their children vaccinated against influenza
 - ◆ 44% report ever having their child vaccinated against influenza
- **‘What can you do to protect your child against influenza?’**
 - ◆ Parents of children aged 8 – 17 years ranked vaccination 6th among 7 options



Option	Percentage
Wash Hands	89%
Get Enough Sleep	81%
Eat Healthy Foods	80%
Avoid People That are Sick	69%
Take Vitamins	58%
Get a Flu Vaccine Annually	56%
Dress for the Weather	55%

On-line survey of 952 parents and 875 children
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 **Raising Awareness Among Moms About Flu Vaccination**

Don't Play with the Flu
VACCINATE, DON'T WAIT!

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 **www.dontplaywiththeflu.com**

Enter your email address here to be notified when more information is available*:

*By entering an email address, you agree that from time to time, MedImmune may provide you with email updates. You can change this option at any time. Please review MedImmune's Privacy Policy regarding collection and use of your email address.

Thank you for visiting **DontPlayWithTheFlu.com**. This site is currently under construction. Please check back for more information about how to help protect your family* from seasonal flu and to learn about any "Don't Play with the Flu" family events near you.


Family activities, school, sports practice, piano lessons – who has time to play with the flu? Talk to your healthcare provider about getting eligible family members vaccinated early for this influenza season – maybe even at back-to-school check-ups. Help protect your home team against seasonal influenza. Don't wait to vaccinate!

 [FluList.com](#) | [Product Information](#) | [Privacy Policy](#) | [Terms & Conditions](#)

Sign-up today to receive an alert at time of campaign launch

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Consumer Education


- Sponsored AAP Public Service Announcement on the new pediatric influenza vaccine recommendations
- Distributed the CDC Public Service Announcement “Why Flu Vaccination Matters: Personal Stories from Families Affected by Influenza” to pediatricians and family physicians

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School Programs

- Expanded CDC/ACIP flu recommendations in 2009-2010 increase the number of children recommended for vaccination by approximately 30 million
- MedImmune has demonstrated a commitment to school flu vaccination over the past 7 years




*CDC/ACIP = Centers for Disease Control and Prevention's Advisory Committee on Immunization Practices


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School Programs 'Teach Flu A Lesson'

- *Teach Flu a Lesson* Objective
 - ◆ Encourage schools/school nurses/early childhood professionals to begin implementing school influenza vaccination programs





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School Programs 'Teach Flu A Lesson'

- Target audiences for the *Teach Flu a Lesson* initiative include:
 - ◆ Health Departments
 - ◆ Nurses
 - ◆ Parent Groups
 - ◆ Teachers
- The *Teach Flu a Lesson* initiative will provide guidelines, tips and customizable tools to help plan and implement flu vaccination programs in schools
 - ◆ Advertising and Direct Mail
 - ◆ www.teachflualesson.com
 - ◆ Vaccination Connections



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Understanding In-Office Influenza Vaccination by Pediatricians:

The Pediatric Influenza Coverage (PIC) Study

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PIC Study Objectives and Design

■ Objectives

- ◆ Describe vaccine coverage of children aged = 18 years in pediatricians' offices
- ◆ Examine correlations between in-office influenza vaccine uptake and the use of various methods to increase vaccine coverage

■ Study design

- ◆ Prospective, observational study conducted during two influenza seasons (2007-09)
- ◆ Geographically balanced sample of US outpatient pediatric offices
 - > Year 1: 44 offices (>280,000 children)
 - > Year 2: 89 offices (>498,000 children)

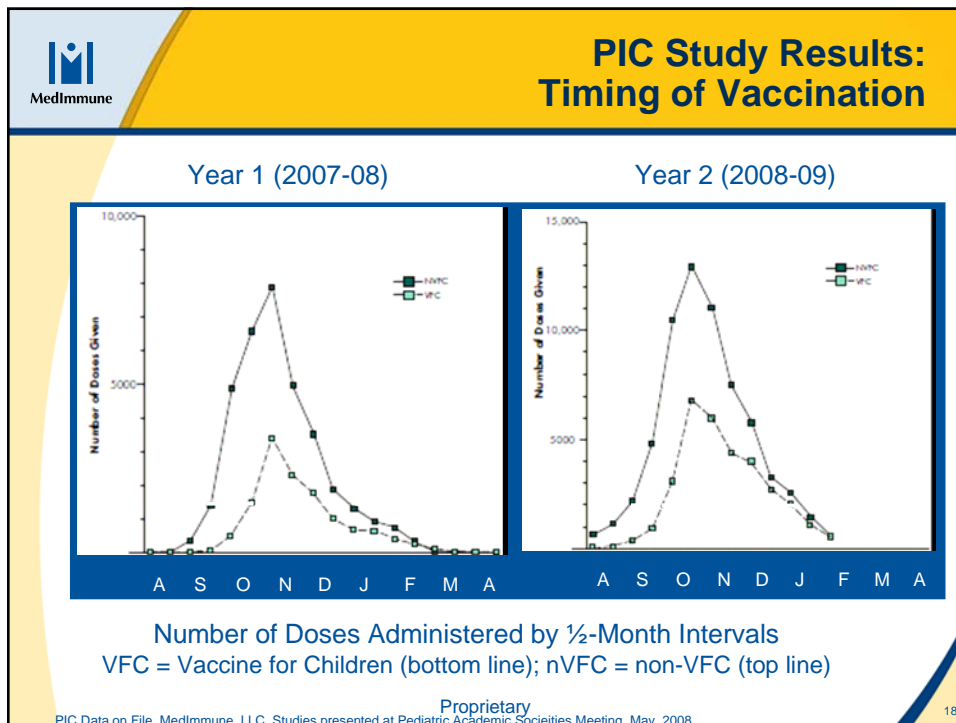
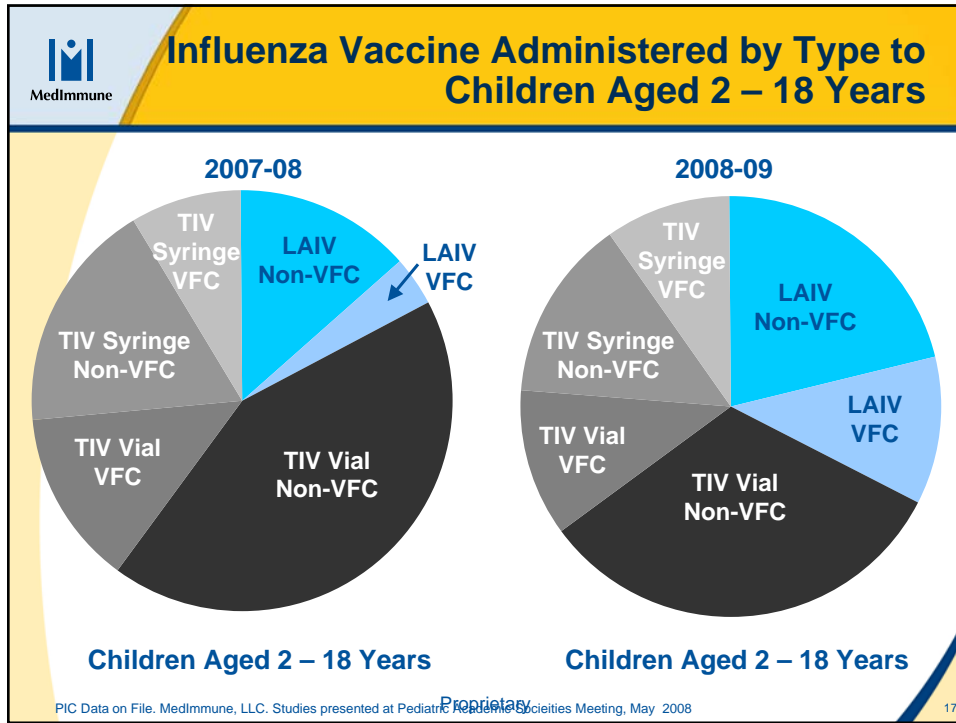
■ Study endpoints


- ◆ Description of office behaviors
- ◆ Influenza vaccination coverage in children aged = 18 years by age group
- ◆ Compliance with the recommended 2-dose regimen
- ◆ Correlation of office vaccination-related attitudes and activities with vaccine uptake

PIC Data on File. MedImmune, LLC. Studies presented at Pediatric Academic Societies Meeting, May 2008

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PIC Study Conclusions

- Coverage: Pediatric practices may be able to increase in-office vaccination by offering vaccines for a longer period of time
 - ◆ Should better utilize months before October and after December
 - ◆ Larger practices may be at a disadvantage in achieving high rates
- Compliance: VFC vaccine administration was delayed compared to privately purchased vaccine
 - ◆ May explain lower 2-dose compliance among children receiving VFC vaccine
 - ◆ Efforts should be taken to utilize VFC vaccine as soon as possible

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Important Safety Information

- FluMist® (Influenza Virus Vaccine Live, Intranasal) is indicated for active immunization of non-pregnant persons aged 2 - 49 years.
 - ◆ FluMist is not indicated for children aged <24 months, children aged <5 years with recurrent wheeze, persons with underlying medical conditions predisposing them to complications associated with influenza, immunocompromised persons, persons with history of GBS.
- FluMist contraindicated for:
 - ◆ Persons with history of hypersensitivity to eggs, gentamicin, gelatin or arginine or with life-threatening reactions to previous influenza vaccinations
 - ◆ Children and adolescents receiving aspirin or aspirin-containing therapy.
- Most common adverse reactions are runny nose or nasal congestion in recipients of all ages, fever >100°F in children 2-6 years of age, and sore throat in adults.
- Complete Prescribing Information is available upon request or at www.flumist.com

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