

Influenza 2010-2011 Season: Vaccine Coverage, Safety, and More...

National Influenza Vaccine Summit
May 9, 2011

National Center for Immunization and Respiratory Diseases
Immunization Services Division



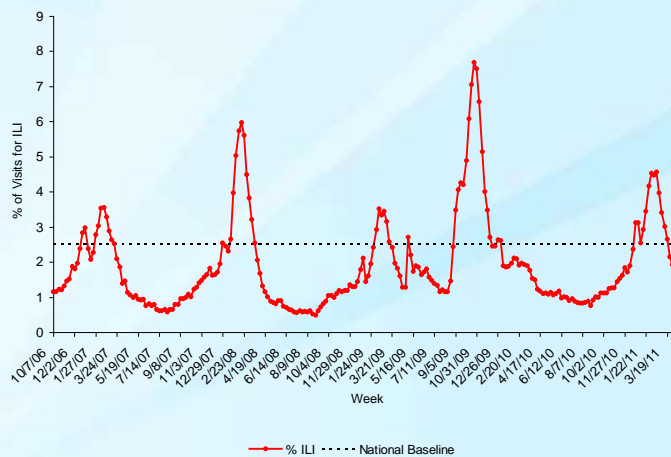
2010-2011 Influenza Season: Vaccination program challenges and accomplishments

- Challenges
- Overview of the flu season
- How to increase vaccination coverage?
 - Universal recommendation
 - Safe, well-matched vaccine
 - Increased vaccine supply
 - Diverse venues offering vaccination
 - Education and outreach
- Estimated vaccine coverage

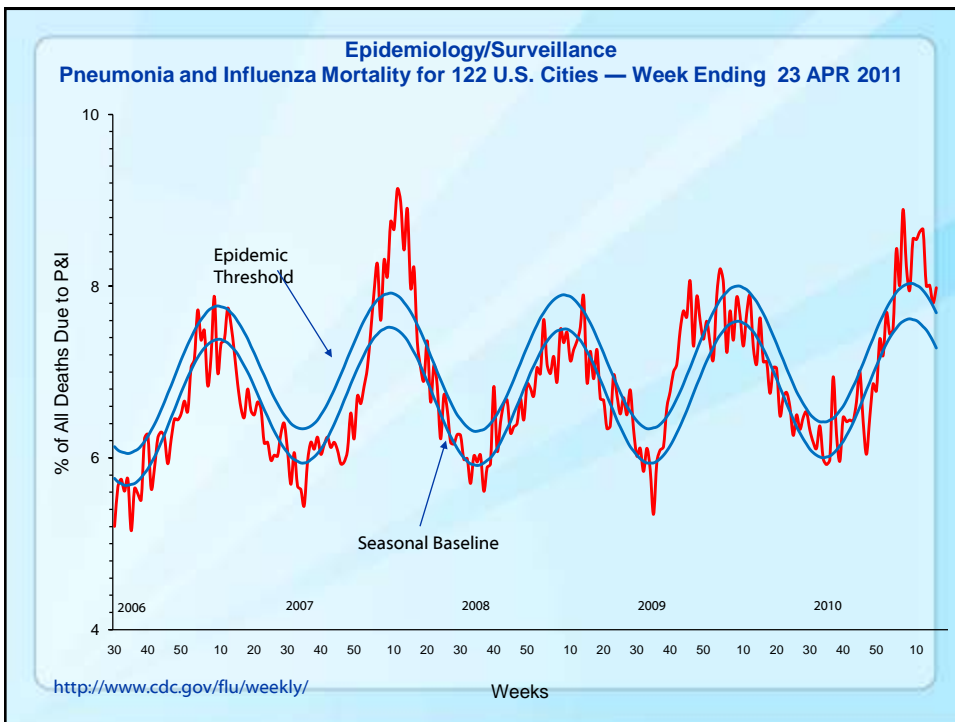
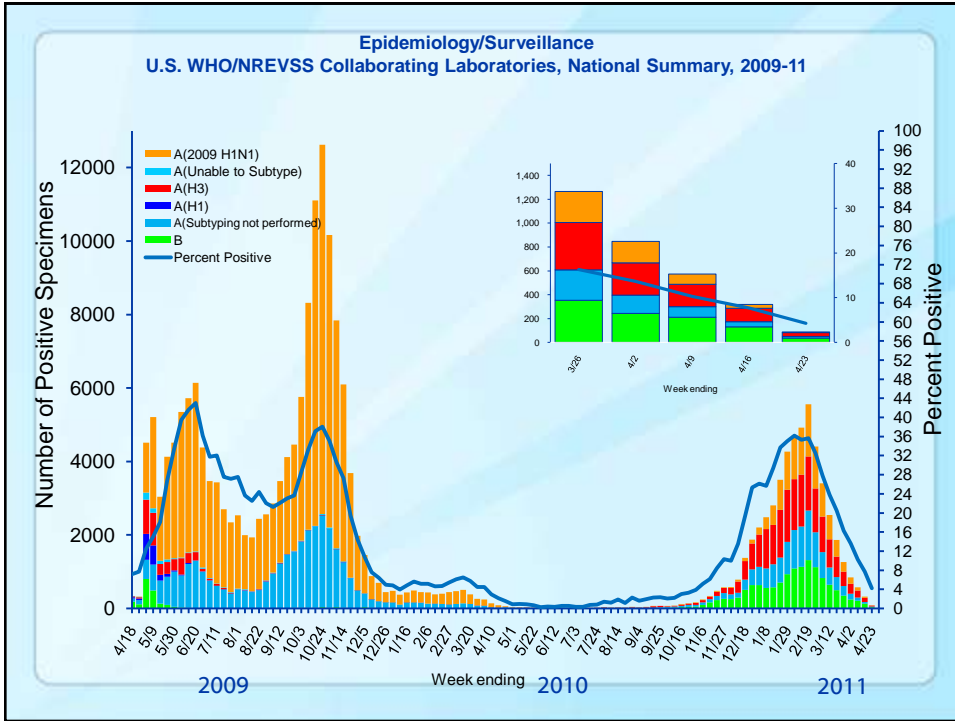
2010-2011 Influenza Season Challenges

- First “post-pandemic” season
 - High seasonal vaccine coverage in 2009-10 driven by pandemic
 - Public interest in vaccination?
- First season with universal flu vaccination recommendations
- Unprecedented vaccine supply
- New venues for vaccination

Epidemiology/Surveillance
Percentage of Visits for Influenza-like Illness (ILI) Reported by
the U.S. Outpatient Influenza-like Illness Surveillance Network (ILINet),
National Summary, October 1, 2006 – April 23, 2011

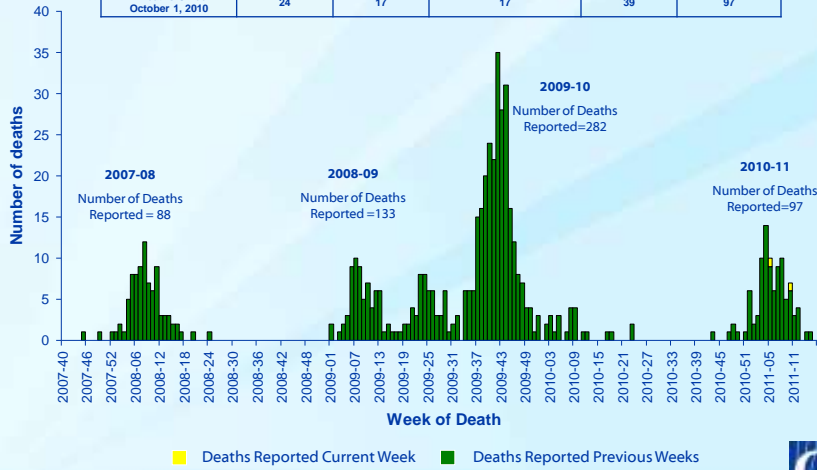


<http://www.cdc.gov/flu/weekly/>



Epidemiology/Surveillance Number of Influenza-Associated Pediatric Deaths by Week of Death: 2007-08 season to present

| Date | Influenza A (2009 H1N1) | Influenza A (H3N2) | Influenza A (Subtype Unknown) | Influenza B | Total |
|--------------------------------|-------------------------|--------------------|-------------------------------|-------------|-------|
| # Deaths Current Week - 16 | 0 | 0 | 0 | 2 | 2 |
| # Deaths Since October 1, 2010 | 24 | 17 | 17 | 39 | 97 |



<http://www.cdc.gov/flu/weekly/>



<http://gis.cdc.gov/grasp/fluview/main.html>



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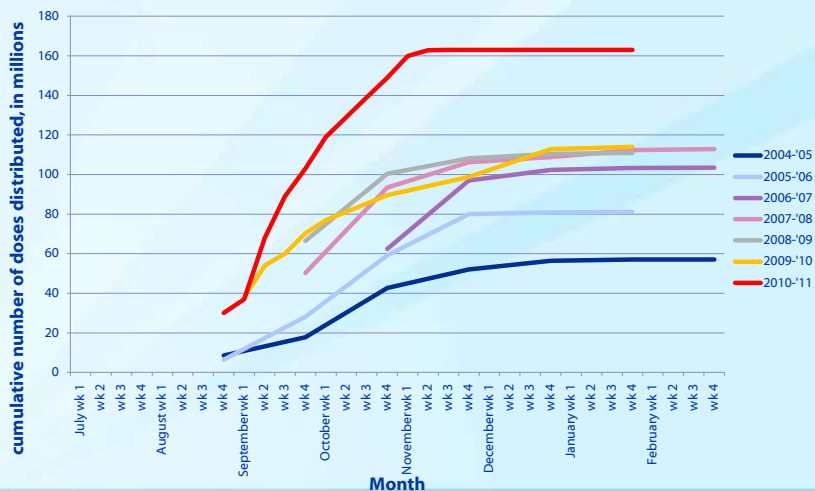
<http://gis.cdc.gov/grasp/fluview/main.html>

How safe was the 2010-2011 influenza vaccine?

- ❑ Background: association of CSL TIV with febrile seizures – Australia, Fall 2010
- ❑ VSD detects an increased rate of febrile seizures in 12 -23 month olds with concurrent use of TIV and PCV13*
- ❑ Attributable risk: 61 febrile seizures per 100,000 concurrent doses of TIV, PCV13 in 12 -23 month olds
- ❑ No elevated risk for TIV without PCV13
- ❑ Referred to ACIP General Recommendations Working Group
 - Possible missed opportunities if concomitant vaccination is discouraged
 - Risk/benefit of vaccination vs. infection

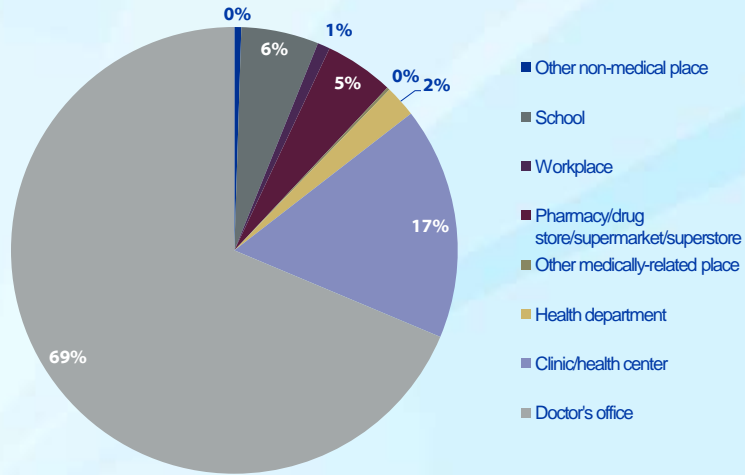
*<http://www.cdc.gov/vaccines/recs/acip/slides-feb11.htm#immunsafety>

Cumulative number of doses of influenza vaccines distributed by month by season, 2004-05 through 2010-'11



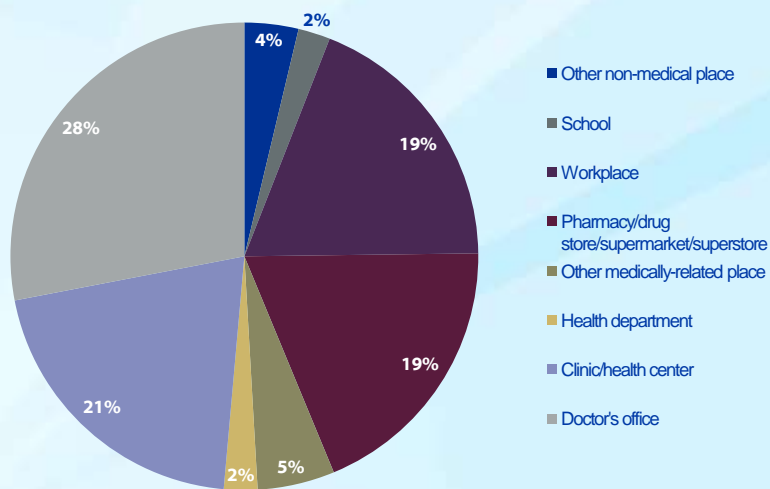
Source: Biologics data

Place of vaccination, persons aged 6m – 17y, National Flu Surveys, United States, March 2011



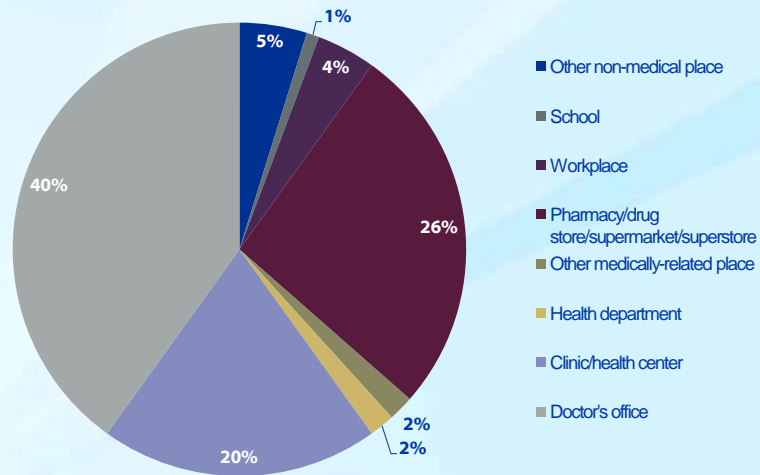
Source: <http://www.cdc.gov/flu/pdf/vaccination/fluvacsurvey.pdf>

Place of vaccination, persons aged 18-64 years, National Flu Surveys, United States, March 2011



Source: <http://www.cdc.gov/flu/pdf/vaccination/fluvacsurvey.pdf>

Place of vaccination, persons aged ≥ 65 years, National Flu Surveys, United States, March 2011



Source: <http://www.cdc.gov/flu/pdf/vaccination/fluvacsurvey.pdf>

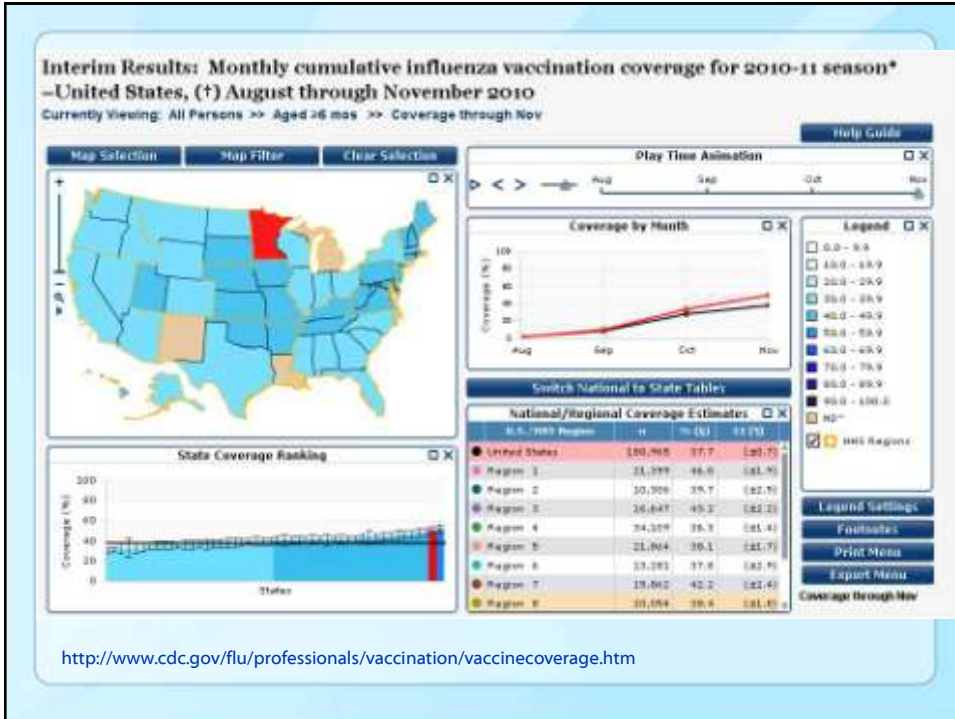
Place of Influenza Vaccination Among Pregnant Women and HealthCare Personnel, 2010-11 Influenza Season November 2010 Internet Panel Survey -- United States

- ❑ By mid-November 2010, 49% of *pregnant women* were or definitely intend to be vaccinated this influenza season
- ❑ Place of vaccination
 - Doctor's office (57%).
 - Pharmacy or drug store (12%)
 - Work place (8%)
 - Hospital (7%)
- ❑ By mid-November 2010, 62% of *HCP* were already or definitely intended to be vaccinated this influenza season
- ❑ The most common place of vaccination was at work (79%)

Source:

<http://www.cdc.gov/flu/pdf/vaccination/DingInternetPanelSurveyPregnantWomen.pdf>;

<http://www.cdc.gov/flu/pdf/vaccination/BlackNovemberHCPsurveyResults.pdf>



Seasonal Influenza Vaccination Coverage by Age: 2008-09 thru 2010-11 Seasons

| Group | 2008-09 (%) ¹ | 2009-10 (%) ² | 2010-11 (%) ³ |
|---------------------------------------|--------------------------|--------------------------|--------------------------|
| Overall (persons aged ≥ 6 mos) | 33 | 41 | 42 |
| Children, 6 mos-17 years | 29 | 44 | 46 - 50 |
| 6 mos-4 years | 44 | 62 | 54 - 61 |
| Persons ≥ 18 yrs | 34 - 36 | 40 | 41 |
| Persons 18-49 yrs, at high risk | 33 | 38 | 35 |
| Persons 19-49 yrs, not at high risk | 20 - 23 | 28 | 26 |
| Persons 50-64 yrs | 40 - 42 | 45 | 46 - 48 |
| Persons ≥ 65 yrs | 66 - 67 | 70 | 70 - 75 |

- NHIS estimates, online at: <http://www.cdc.gov/vaccines/stats-surv/nhis/2009-nhis.htm>; unpublished 2008-09 BRFSS
- BRFSS/NHFS, online at: http://www.cdc.gov/flu/professionals/vaccination/coverage_0910estimates.htm and unpublished
- March 2011 NFS, online at: <http://www.cdc.gov/flu/professionals/vaccination/vaccinecoverage.htm>; unpublished data, NIS, CDC; unpublished data, BRFSS, CDC

Seasonal Influenza Vaccination Coverage by Race/Ethnicity: 2008-09 thru 2010-11 Seasons

| Group | 2008-09 (%) ¹ | 2009-10 (%) ² | 2010-11 (%) ³ |
|----------------------------------|--------------------------|--------------------------|--------------------------|
| Race/ethnicity (adults) | | | |
| White, non-Hispanic | 37 – 39 | 44 | 45 |
| Black, non-Hispanic | 26 – 27 | 33 | 38 (±11) |
| Hispanic | 22 – 25 | 29 | 29 |
| Race/ethnicity (children) | | | |
| White, non-Hispanic | 30 | 43 | 47 - 48 |
| Black, non-Hispanic | 30 | 37 | 30 (±20) - 50 |
| Hispanic | 31 | 47 | 54(±15) - 58 |

1. NHIS estimates, online at: <http://www.cdc.gov/vaccines/stats-surv/nhis/2009-nhis.htm>; unpublished 2008-09 BRFSS
2. BRFSS/NHFS, online at: http://www.cdc.gov/flu/professionals/vaccination/coverage_0910estimates.htm; MMWR, January 14, 2011/60; and unpublished
3. March 2011 NFS, online at: <http://www.cdc.gov/flu/professionals/vaccination/vaccinecoverage.htm>; unpublished data, NIS, CDC; unpublished data, BRFSS, CDC

Seasonal Influenza Vaccination Coverage of HCP and Pregnant Women: 2008-09 thru 2010-11 Seasons

| Group | 2008-09 (%) | 2009-10 (%) | 2010-11 (%) |
|------------------------------|-------------------|--------------------|---------------------------|
| Pregnant women | 6-19 ¹ | 32-51 ³ | 44(±28)-49 ⁵ |
| Health care personnel | 53 ² | 62 ⁴ | 62 - 65(±10) ⁵ |
| Hospital staff | | 72 | 68 (±5.3) |
| Ambulatory/Outpatient/Dental | | 64 | 60 (±6.5) |
| Long Term Care | | 54 | 48 (±8.4) |
| Other | | 48 | 40 (±6.6) |

1. MMWR, August 6, 2010 / 59(rr08);1-62
2. NHIS estimates, online at: <http://www.cdc.gov/vaccines/stats-surv/nhis/2009-nhis.htm>; unpublished 2008-09 BRFSS
3. MMWR, December 3, 2010 / 59(47);1541-1545 and CDC unpublished NHFS data
4. MMWR, April 2, 2010/59(12);357-362
5. NFS (unstable estimates) and internet panel estimates, online at: <http://www.cdc.gov/flu/professionals/vaccination/vaccinecoverage.htm>

Vaccination in the 2010-2011 Influenza Season: What did the US achieve?

- Despite the expected challenge of “flu fatigue”, overall vaccine coverage maintained last season’s increases
 - Children
 - Pregnant women
 - Health care personnel in hospitals
- Multiple venues were accessed for vaccination
- Challenges for the coming season
 - Maintain the gains
 - Vaccination coverage among adults with risk conditions ~ 35%
 - Vaccination coverage among healthcare personnel in long term care and other settings

Thank You

For more information please contact Centers for Disease Control and Prevention

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