The Virtual Immunization Communication (VIC) Network is a project of the National Public Health Information Coalition (NPHIC) and the California Immunization Coalition, funded through a cooperative agreement with the Centers for Disease Control and Prevention.
A nationwide ‘virtual’ immunization community of health educators, public health communicators and others who promote immunizations.
Communication Strategies and Recommendations for the Upcoming 2017-18 Flu Season

Objectives

- Review 2016-17 influenza season overview and conclusions
- Evaluate estimates for reductions of burden of disease due to vaccination; 2012-13 (last H3N2 season with similar VE)
- Discuss ACIP Influenza Vaccine Recommendations, 2017-2018
- Review Flu Vaccine Supply for the 2017-2018 Flu Season
- Discuss proper vaccine administration as a key part of ensuring vaccination is as safe as possible
- Review Communication Goals and Objectives
- Discuss Campaign Strategies and Campaign Elements
A nationwide ‘virtual’ immunization community of health educators, public health communicators and others who promote immunizations.
Questions for Presenters?

- Ask questions using the Q&A window
- This webinar is being recorded
- Replays will be available

Frequently Asked Questions

1. Will I be able to get a copy of the slides after the webinar?
   ✓ Yes – a copy will be posted on the VICNetwork.org site

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Communication Strategies and Recommendations for the Upcoming 2017-18 Flu Season
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NCIRD, CDC
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Epidemiology and Prevention Branch, Influenza Division
NCIRD, CDC
2016-17 Influenza Season Summary and 2017-18 Influenza Vaccine Recommendations Update

Alicia Budd and Brendan Flannery
Influenza Division, CDC

Virtual Immunization Communication Network Webinar
August 30, 2017
Summary of 2016-2017 Season

- Peak activity occurred nationally in mid-February but there were regional differences.
  - Western Regions peaked in late December through mid-January
  - Remainder of country peaked in mid to late February
- Influenza A(H3N2) viruses predominated overall
  - Influenza B viruses were reported more frequently than influenza A viruses from late March until early July.
- The majority of circulating viruses were similar to those contained in the 2016-17 vaccine.
- Activity was moderate with severity indicators within range of what has been observed during previous influenza A (H3N2) predominant seasons.
Percentage of Visits for Influenza-like Illness (ILI), 2016-2017 and Selected Previous Seasons

0 1 2 3 4 5 6 7
40 42 44 46 48 50 52 2 4 6 8 10 12 14 16 18 20 22 24 26 28 30 32 34 36 38
% of Visits for ILI
Week
2015-16 Season
2014-15 season
2013-14 season
2012-13 season
National Baseline
2016-17 season
Influenza Positive Tests Reported to CDC by U.S. Clinical and Public Health Laboratories, 2016-2017 Season
Laboratory-Confirmed Influenza-Associated Hospitalizations, Cumulative, 2016-2017 and Previous 4 Seasons
Morality Surveillance: 2016-2017 and Previous Seasons

- Pneumonia and Influenza Mortality, National Center for Health Statistics

- Deaths in Children with Laboratory Confirmed Influenza
<table>
<thead>
<tr>
<th>Influenza positive</th>
<th>Influenza negative</th>
<th>Vaccine Effectiveness</th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td></td>
<td><strong>Unadjusted</strong></td>
<td><strong>Adjusted</strong>*</td>
</tr>
<tr>
<td>N vaccinated/Total (%)</td>
<td>N vaccinated/Total (%)</td>
<td>VE %</td>
<td>95% CI</td>
</tr>
<tr>
<td><strong>Any influenza</strong></td>
<td>883/2052 (43)</td>
<td>2761/5153 (54)</td>
<td>35 (27 to 41)</td>
</tr>
<tr>
<td>A/H3N2</td>
<td>619/1349 (46)</td>
<td>2761/5153 (54)</td>
<td>27 (17 to 35)</td>
</tr>
<tr>
<td>A/H1pdm09</td>
<td>8/26 (31)</td>
<td>2761/5153 (54)</td>
<td>61 (11 to 83)</td>
</tr>
<tr>
<td>B</td>
<td>238/650 (37)</td>
<td>2761/5153 (54)</td>
<td>50 (41 to 58)</td>
</tr>
</tbody>
</table>

* Multivariate logistic regression models adjusted for site, age, sex, race/ethnicity, self-rated general health status, days from illness onset to enrollment, and calendar time of illness onset
## Estimated Number of Influenza Illness Averted with Vaccination

<table>
<thead>
<tr>
<th></th>
<th>Averted Illnesses</th>
<th>Averted Medical Visits</th>
<th>Averted Hospitalizations</th>
<th>Averted P&amp;I Deaths</th>
</tr>
</thead>
<tbody>
<tr>
<td>2010-11 to 2015-16</td>
<td>1.6 - 6.7 million</td>
<td>793,000 – 3 million</td>
<td>39,300 – 86,700</td>
<td>1,230 – 3,430</td>
</tr>
<tr>
<td>2012-13*</td>
<td>5.6 million</td>
<td>2.7 million</td>
<td>61,500</td>
<td>1,820</td>
</tr>
</tbody>
</table>

*An H3N2 predominant season with vaccine effectiveness similar to what was estimated for 2016-17.*
ACIP recommendations for 2017-18

Composition of U.S. influenza Vaccines for 2017-18
2017-18 ACIP Influenza Statement--Overview

- Published in MMWR August 25, 2017*
- New Format
  - MMWR document focuses on recommendations and selected references; contains figure and tables
  - Background Document with additional references and a Summary of recommendations available on ACIP web pages (https://www.cdc.gov/vaccines/hcp/acip-recs/vacc-specific/flu.html)

Groups Recommended for Vaccination

- Routine annual influenza vaccination is recommended for all persons ≥6 months of age who do not have contraindications.

- While vaccination is recommended for everyone in this age group, there are some for whom it is particularly important—
  - People aged ≥6 months who are at high risk of complications and severe illness
  - Contacts and caregivers of these people, and of infants under age 6 months (because there is no vaccine approved for children this age)
Groups at Increased Risk for Influenza Complications and Severe Illness

- Children aged <5 years and adults ≥50 years;
- Persons with chronic pulmonary (including asthma) and other conditions
  - Cardiovascular (except isolated hypertension), renal, hepatic, neurologic, hematologic, or metabolic disorders (including diabetes mellitus);
- Immunosuppressed persons;
- Women who are or will be pregnant during the influenza season;
- Children and adolescents (aged 6 months–18 years) receiving aspirin therapy
  - Children at risk for experiencing Reye syndrome after influenza virus infection;
- Residents of nursing homes and other long-term care facilities;
- American Indians/Alaska Natives; and
- Persons who are extremely obese (BMI ≥40).
2017-18 ACIP Influenza Statement--Overview

- **Principal changes and updates for 2017-18**
  - Influenza vaccine composition for 2017-18
  - Several new licensures and approvals
  - Change in age recommendations for Afluria (IIV3)
  - Extension of the recommendation that LAIV not be used
  - Updates recommendations for pregnant women
2017-18 Influenza Vaccine Composition

- **Trivalent vaccines:**
  - an A/Michigan/45/2015 (H1N1)pdm09-like virus (new);
  - an A/Hong Kong/4801/2014 (H3N2)-like virus; and
  - a B/Brisbane/60/2008-like virus.

- **Quadrivalent vaccines:**
  - The above three viruses, and
  - a B/Phuket/3073/2013-like virus.
There are Still Many Different Vaccines

- ACIP Statement, Table 1
- 13 distinct products
- More than one might be appropriate for any given recipient
  - ACIP/CDC express no preferences for any one type of influenza vaccine over another, where more than one is appropriate and available
  - Vaccination should not be delayed in order to obtain a specific product.
Inactivated Influenza Vaccine, Trivalent (IIV3) and Quadrivalent (IIV4)

- **Inactivated Influenza Vaccines:**
  - Contain inactivated virus, split or subunit
  - High Dose or Standard Dose or with adjuvant
  - Many brands, some approved for those as young as 6 months of age
  - Most are intramuscular; one intradermal (for 18 through 64 years)

- **Trivalent (IIV3):**
  - Contain an A(H1N1) virus, an A(H3N2) virus, and a B virus (from one lineage)

- **Quadrivalent (IIV4):**
  - Contain an A(H1N1) virus, an A(H3N2) virus, and 2 B viruses (one from each lineage)
  - Designed to provide broader protection by representing both B lineages
New for 2017-18: Afluria Quadrivalent IIV4 (Seqirus)

- Standard-dose IIV4
- Indicated for persons aged ≥18 years
- Intramuscular
  - Like Afluria, can be administered via jet injector (the Pharmajet Stratis), but only for those aged 18 through 64 years
- Trivalent formulation of Afluria also available this season
  - Potential for confusion: for 2017-18, Afluria trivalent recommended for ≥5 years (previously ≥9 years)
New for 2017-18: Flublok Quadrivalent Recombinant Influenza Vaccine, RIV4 (Protein Sciences)

- Indicated for persons aged ≥18 years
- Contains recombinant influenza hemagglutinin (HA) protein (produced in insect cell line using a viral vector)
- Egg-free
- Previous trivalent formulation of Flublok (RIV3) also expected to be available
Vaccines licensed for age ≥ 65 years: High-Dose and Adjuvanted Inactivated Influenza Vaccines

- **Trivalent, high-dose influenza vaccine (HD-IIV3):**
  - Contain 60μg of hemagglutinin (HA) per virus (4x HA content of standard dose IIV3)
  - Fluzone (Sanofi) HD-IIV3 licensed ≥65 years
  - Observed to provide stronger immune response and have greater efficacy in persons aged ≥65 years

- **Adjuvanted inactivated influenza vaccine (aIIV3)**
  - Fluad (Seqirus)--only currently licensed U.S. influenza vaccine containing adjuvant (new to U.S. in 2016-17)
  - Contains MF59, an oil-in-water adjuvant
  - Intended to provide better immune response
    - Non-inferior response compared with standard dose IIV3 in pre-licensure studies
Live Attenuated Influenza Vaccine (LAIV)

- Nasal spray
- Not recommended for use in 2017-18 (no change from 2016-17)
- Change in text of recommendation
  - “FluMist Quadrivalent (LAIV4; MedImmune, Gaithersburg, Maryland) should not be used during the 2017–18 season due to concerns about its effectiveness against influenza A(H1N1)pdm09 viruses in the United States during the 2013–14 and 2015–16 influenza seasons.”
Some Things That are the Same for 2017-18

Recommendations for Vaccination of Children aged 6 months through 8 years

Recommendations for Vaccination of Persons with Egg Allergy
Dosing Algorithm for Children aged 6 months through 8 years, 2017-18

- Similar to past two seasons
- If two cumulative doses received prior to July 1, 2017, only one dose needed for 2017-18

Has the child received ≥2 total doses of trivalent or quadrivalent influenza vaccine before July 1, 2017? (Doses need not have been received during the same season or consecutive seasons.)

- Yes
  - 1 dose of 2017–18 influenza vaccine

- No or don’t know
  - 2 doses of 2017–18 influenza vaccine (administered ≥4 weeks apart)
New for 2017-18: FluLaval IIV4 (ID Biomedical)

- Standard-dose IIV4
- Now licensed for ≥6 months (previously for ages ≥3 years)
- Dose volume is same for all ages (0.5mL)
  - Safety of FluLaval IIV4 (0.5mL) comparable to Fluzone IIV4 (0.25mL)
- Potential for confusion (Dose volume is distinct from number of doses needed)
  - Fluzone (0.25mL) is only other product licensed for 6 through 35 month olds—dose volumes are different for this age group.
  - For those children that need two doses of vaccine, the two doses do not need to be the same type/formulation/brand
Influenza Vaccination of Persons with Egg Allergy

- Unchanged from 2016-17
- Egg allergic persons can receive any licensed, recommended vaccine that is otherwise appropriate (IIV or RIV)
  - However, RIV not licensed for persons under 18 years of age
- One additional measure remains for persons with a history of severe allergic reaction to egg (i.e., any symptom other than hives)
  - “The selected vaccine should be administered in an inpatient or outpatient medical setting (including but not necessarily limited to hospitals, clinics, health departments, and physician offices). Vaccine administration should be supervised by a health care provider who is able to recognize and manage severe allergic conditions.”
- No specific post-vaccination observation period recommended
  - However, per the ACIP General Best Practices guidelines, providers should consider observing all recipients of any vaccine for 15 minutes to avoid injury due to syncope
Egg Allergy Algorithm

- No longer printed in the MMWR
Key Updates for 2017-18

Updated Recommendations for Influenza Vaccination of Pregnant Women
Recommendations for Influenza Vaccination of Pregnant Women

- Influenza vaccination recommended by ACIP for women who will be pregnant during influenza season since 2004
  - Increased risk for severe influenza illness in pregnant women, particularly during second and third trimesters;
- Previous language stated pregnant women should receive inactivated influenza vaccine (IIV)
- For 2017-18, pregnant women may receive any licensed, recommended, age-appropriate influenza vaccine
  - IIV or RIV
  - LAIV not recommended in any population for 2017-18, and should not be used in pregnancy in any case
Thank You!

Questions?

For more information, contact CDC
1-800-CDC-INFO (232-4636)

The findings and conclusions in this report are those of the authors and do not necessarily represent the official position of the Centers for Disease Control and Prevention.
Jeanne Santoli, MD, MPH
Vaccine Supply & Assurance Branch, Immunization Services Division
NCIRD, CDC
National Supply for the 2017-18 Season

- For the 2017-2018 season, manufacturers have projected they will provide as many as 151 million to 166 million doses* of injectable influenza vaccine (IIV).

- Of this total:
  - Approximately 119M doses are projected to be QIV
  - Approximately 130M doses are projected to be T-free/reduced

*Total vaccine projections were provided by manufacturers at the National Adult and Influenza Immunization Summit (May 2017) and confirmed following that meeting via email. These projections are subject to change based on the following factors: production yield, lot release, and demand for vaccine
Flu Vaccine Distribution Over the Past 10 Years
JoEllen Wolicki, RN, BSN
Nurse Educator,
Communication and Education Branch
NCIRD, CDC
Administering Influenza Vaccine

JoEllen Wolicki, BSN, RN
Nurse Educator
Immunization Services Division
National Center for Immunization and Respiratory Diseases
Recommendations for route, site, and dosage of vaccines are based on data from clinical trials, practical experience, preventive health care visits, immunization schedule, and theoretical considerations.
Shoulder Injuries Related to Vaccine Administration

- Shoulder injuries related to vaccine administration are injuries to the musculoskeletal structure of the shoulder, including the ligaments, bursa, and tendons
  - They are thought to occur as a result of the unintended injection of vaccine antigen and/or trauma from the needle going into and around the underlying bursa of the shoulder
  - Symptoms include shoulder pain and limited mobility after the injection
All staff who will store, handle, and administer vaccines should:

- Receive competency-based training
- Have knowledge and skills validated

Vaccine administration best practices should be integrated into competency-based training, such as:

- New staff orientation – including temporary staff
- Annual education requirements

Ongoing education:

- Whenever vaccine recommendations are updated
- When new vaccines are added to inventory
Vaccine Administration e-Learn

- Online continuing education module outlining vaccine administration best practices, including:
  - Demonstration videos
  - Knowledge checks to reinforce information
  - Job aids and other printable resources

- Target audiences are nurses and medical assistants

- Free 1 hour of continuing education!

NEW VACCINE ADMINISTRATION e-LEARN AVAILABLE!

The free, self-paced online educational program offers comprehensive training, including videos, job aids, and other resources to accommodate a variety of learning styles and offers a certificate of completion or continuing education.

Stay up-to-date on vaccine administration best practices at https://www.cdc.gov/vaccines/hcp/admin/resource-library.html
Know the Site: Get it Right!

- Updated vaccine administration educational materials for health care personnel will be available on CDC’s vaccine administration web page, including:
  - Vaccine administration e-Learn
  - Printable clinical job aids, including an infographic on how to correctly administer influenza vaccine by intramuscular injection
  - A short video on the correct technique for intramuscular injection

- In addition, materials will be available to help partners promote proper vaccine administration to health care personnel
Vaccine Administration Resources

- CDC vaccine administration materials for health care personnel include:
  - Vaccine administration e-Learn
  - Printable clinical job aids
  - Videos

- [www.cdc.gov/vaccines/hcp/admin/resource-library.html](http://www.cdc.gov/vaccines/hcp/admin/resource-library.html)
Questions??

JoEllen Wolicki, BSN, RN
jwolicki@cdc.gov

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Cate Shockey, JD
Seasonal Flu Vaccination Campaign Lead
NCIRD, CDC
Campaign Plans & Strategies
2017-2018 Flu Season

Cate Shockey
Seasonal Flu Campaign

August 2017
Objectives of CDC’s Flu Vaccination Campaign

Increase the number of health care providers making a strong flu vaccine recommendation

Increase awareness and dispel misconceptions about the flu vaccine among providers and the general public
Key Messages

Consumers

- Flu is a serious illness
- The flu vaccine is the best protection available against flu. Talk to your doctor about getting the flu vaccine for your family
- The flu vaccine is very safe (myth busting)

Health Care Providers

- Flu is a serious illness
- The flu vaccine is the first and most important step to give your patients the best protection this flu season.
- Every visit with your patient is an opportunity to recommend the flu vaccine.
Addressing Misconceptions

- A very safe vaccine – millions of doses given every year
- Emphasize that flu vaccine cannot cause the flu
- Recognize that people may experience “side effects” (e.g., slight fever) after influenza vaccination and explain why
- Put side effects of vaccination into context with the potential risks and outcomes of influenza
- Anyone can get the flu – even healthy people
- Flu vaccine can help protect those around you from getting the flu
- Highlight other potential “costs” of influenza
Mark Your Calendar

- NFID Influenza Vaccination Kick-Off
  - September 28, 2017
  - MMWR releases
  - Press conference
  - Thunderclap (9/28)
  - Flu vaccination campaign begins

- National Influenza Vaccination Week (NIVW)
  - December 3-9, 2017
  - MMWR releases
  - It’s Not Too Late digital events
Digital Events

- #FightFlu
- Social Media Blitz
  - Kickoff Thunderclap
  - AMA on Reddit’s Medicine page
  - Twitter stories (hashtag event)
  - Facebook Frame
  - Flu Fighter Stories
- Medscape Facebook Live (October)
- Blog Relay (November)
Digital Toolkit: “Campaign in a Box”

One-stop-shop for seasonal flu vaccination materials, including:

- Important Dates and Events
- Messages to Share (sample social media and newsletter content)
- Print Ready Materials (posters and fact sheets)
- Social Media Images and GIFs
- Web material (badges, widgets, microsite)
Campaign Element: Partnership Engagement

- Share CDC key points, weekly updates
- Toolkit available with sample social media, newsletter content, and digital assets
- Access to a suite of both print and digital offerings that partners can use
- Increase visibility of partners’ influenza vaccine promotion activities
- Provide CDC influenza subject matter experts
- Web page tailored for partners
- Build capacity and sustainability
Take 3 Messaging

Take 3 Actions to Fight the Flu

Take everyday preventive actions to help stop the spread of flu viruses!

Get yourself and your family vaccinated!

Take antiviral drugs if your doctor prescribes them!
Questions?
Cate Shockey – cshockey@cdc.gov
Questions and Answers
Resources

Centers for Disease Control and Prevention
www.cdc.gov/vaccines

National Public Health Information Coalition
www.nphic.org
Please Complete Evaluation
Connect with the VICNetwork…

e-mail: info@VICnetwork.org

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Thank you for your support and your participation!