A Few Reminders…

The VaxScene

Immunization Stakeholder Meeting
March 15, 2018 | 11:30 am – 1:30 pm | United Way
To register: http://www.immunizeusa.org/events/

SAVE THE DATE. MAKE YOUR VOICE HEARD!
The Immunization Partnership invites you to participate
Immunization Stakeholder Meeting
Immunization Policy and Impact on Patient Care
What Will We Discuss in This Presentation?

- What is Influenza
- Influenza Data 2017-2018
- Influenza Workshop Activity
What is Influenza?

• Contagious respiratory illness caused by different influenza viruses
• Can spread to people up to 6 feet away (respiratory droplets)
• Symptoms start 1 to 4 days after virus enters the body
• You can pass the virus to someone else before you even know you are sick (up to 1 day before symptoms start)
• Flu can be spread by people touching surfaces that has flu virus on it (less common)
• Flu activity peaks between December and February, but can go until May

NOT just the common cold...

People who have the flu often feel some or all of these signs and symptoms:
• Fever or feeling feverish/chills
• Cough
• Sore throat
• Runny or stuffy nose
• Muscle or body aches
• Headaches
• Fatigue (very tired)
• Some people may have vomiting and diarrhea, though this is more common in children than adults

*It’s important to note that not everyone with flu will have a fever

Start to feel better and then get a lot worse – could be Pneumonia
Who is at Risk?

High risk populations for serious complications, hospitalizations, and deaths include:

• People 65 years of age or older
• Children younger than age 5, especially those less than 2 years of age
• Pregnant women
• Residents of nursing homes and long term care facilities
• People who have chronic medical conditions such as
  Asthma
  Heart Disease
  Endocrine Disorders like Diabetes Mellitus
  Neurological Disorders such as seizures or impairments
  Morbid Obesity

Flu Vaccine Development

CDC Yearly Lab Work on Flu Viruses
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A Weekly Influenza Surveillance Report Prepared by the Influenza Division
Weekly Influenza Activity Estimates Reported by State and Territorial Epidemiologists*

*This map indicates geographic spread and does not measure the severity of influenza activity.

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Cumulative Number of Laboratory-Confirmed Influenza Hospitalizations, 2011-2017 Seasons

2015-2016

2017-2018
Emergency Center Visits due to ILI

Week Ending Feb. 10, 2018 – MMWR Week 6

In week 6, 8.9% of emergency center (EC) visits were due to influenza-like illness (ILI) complaints. Of the 2,184 patients presenting with ILI, the age group that recorded the most EC visits was the 05 to 24 year old (39%). Females accounted for 54% of patients presenting with ILI.

NOTE: Houston/Harris County ILI activity is assessed using information provided by surveillance participants in the Real-time Outbreak Disease Surveillance System (RODSS). For week 5, 36 surveillance participants reported ILI information to Houston Health Department. Influenza-like illness (ILI) is defined as the mention of fever AND cough, OR fever AND sore throat, OR flu in the patient’s Emergency Department (ED) chief complaint. These data do not represent laboratory confirmed cases of influenza nor do they represent all ED visits in Houston/Harris County. The algorithm for ILI-related ED visit has been updated to meet the national standard in December 2017. The changes were applied to all previous data points. The new algorithm is more inclusive and when applied to previously reported data it resulted in an increase in percentages of ED visits classified as ILI. As the result of the changes, the overall percentage has been changed, but the overall trend remained the same. As the criteria changes, the health department tends to be more inclusive for catching flu activity.
2017 – 2018 Activity

- 97 Pediatric deaths (Week Ending Feb. 17, 2018 – Week 7)
  - Only 26% of children eligible for vaccination received any flu vaccine this season before getting sick
- H3N2 has been the predominate virus
- First 3 weeks of 2018 - 49 states reported widespread flu activity—never seen before since data has been collected starting in 2010
- Flu season usually last 16 weeks, can range from 11-20 weeks (we are in week 14 now)
- More hospitalizations this year so far this year than in previous years
  - 21,279 laboratory-confirmed influenza-associated hospitalizations since 10/1/17
  - Translates to 74.5 hospitalizations per 100,000 people in the US
  - Highest rate is adults 65+, followed by adults 50 – 64 years, followed by children 0-4
- Flu is difficult to predict – unsure if we have reached the peak of the season yet
-ILI are as high as H1N1 pandemic – based on outpatient visits and emergency room visits
- 1 out of 10 deaths were due to Flu or Pneumonia during Week 6 (ending on Feb. 10)

Flu Myths and Truths

1. I cannot administer the flu vaccine with other vaccines
2. The flu vaccine can take up to 2 weeks before your body is protected
3. The flu hospitalizes 200,000+ people each year
4. You can catch the flu from going out in cold weather without a coat, with wet hair or by sitting near a drafty window
5. The flu kills 3,000 - 49,000+ people each year
6. You can go back to work/school with the flu after three days
7. Each year, 5% - 20% of the US population gets the flu
8. Healthy people don't need to be vaccinated
9. Flu can be treated with antibiotics
10. You can spread the flu to someone up to 6 feet away
PREVENTION IS KEY!

Prevention and Treatment

Prevention

*The best prevention is the influenza vaccine!*

- Hand washing
- Covering coughs and sneezes
- Avoiding touching eyes, nose, or mouth
- Avoiding contact with someone who is sick
- Staying home when sick
- Taking antiviral medications if prescribed help prevent the spread of influenza

Treatment

- Antiviral medications shorten duration and severity if given within the first 48 hours of illness
- Usually prescribed to persons who have a severe illness or those who are at higher risk for developing serious illness or complications
- Confirmation by diagnostic testing is not required for decisions to prescribe antiviral medication
Gigi's Flu Story

Questions?
What Will We Discuss in This Presentation?

- What is Influenza
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Influenza Questionnaire
Material Ordering

www.immunizetexasorderform.com

- Activity books
- Magnets
- Brochures
- Posters
- VIS’s

- For free shipping, select: Fed Exp Ground
- ‘Available Online Only’ – print only
- Click link of item under ‘Publication Title’ to view samples

Influenza Scenarios

Jacob
6 years old

Jessica
4 years old

Sam
6 months old

Brandon
7 years old
1. You administered seasonal flu vaccine (Flulaval; 0.5 mL) to Sam who is 6-months old, 6 weeks ago. He is back today. What do you do?
   a. Administer 0.5 mL of Flulaval
   b. Nothing—no vaccine is due

2. If there is no Flulaval in your facility’s inventory, can Fluzone be administered to Sam for the 2nd dose?
   a. 2nd dose is not needed
   b. No
   c. Yes

3. What dose (amount) should be administered?
   a. Fluzone cannot be administered
   b. 0.25 mL
   c. 0.5 mL

4. Brandon is 7 years old and comes into your clinic today for his flu shot. What should be administered?
   a. 0.25 mL of Fluzone
   b. 0.5 mL of Fluzone
   c. Flumist
   d. 0.5 mL of Flublok

5. Prior to coming to your clinic, Brandon has no history of the flu vaccine on file and his mom says he has never had the flu shot before but since this season has been so bad, she wanted him to get it. How many doses of flu does Brandon need?
   a. None— the flu vaccine is not effective
   b. 3
   c. 2
   d. 1

6. Brandon has returned to your clinic 3 weeks later because he sprained his ankle on the playground and his mother wants the doctor to look at it. Can his next dose of flu be administered today?
   a. No
   b. Yes
   c. He does not need another dose of flu this flu season

7. Jessica is 4 years old and is at your clinic for a flu shot. Her immunization history includes:
   IIV4 at 1 year of age and IIV4 at 3 years of age
   How many doses of the flu vaccine does Jessica need this season?
   a. 1
   b. 2
   c. None— the flu vaccine is not effective

8. Jessica sometimes experiences hives after eating eggs, but does not show any other symptoms. Should she still receive a flu vaccine?
   a. Yes
   b. No

9. Jacob, Jessica’s older brother, feels much worse after eating eggs than his sister does. He experiences angioedema, wheezing, and lightheadedness anytime he eats eggs. Should Jacob receive a flu vaccine?
   a. Yes
   b. No

10. You administered 0.25mL in a single-dose syringe of Fluzone to Jacob. Is the correct dosage?
    a. Yes
    b. No

11. If it is not, what should you do?
    a. Nothing – Jacob received the correct dose
    b. Administer an additional 0.5mL to Jacob on the same day
    c. Administer an additional 0.25mL of Fluzone to Jacob on the same day

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Sam is 6 months old so he is getting a flu shot for the first time. For any child who is 6 months to 8 years old, you should administer **2 doses, separated by at least 4 weeks.**
2. If there is no FluLaval in your facility’s inventory, can Fluzone be administered to Sam for the 2nd dose?
   a. 2nd dose is not needed
   b. No
   c. Yes

3. What dose (amount) should be administered?
   a. Fluzone cannot be administered
   b. 0.25 mL
   c. 0.5 mL

Children who require two doses of flu vaccine do not need to receive the same flu vaccine/brand both times. Live or inactivated vaccine can be used for either dose. (Within approved indications and recommendations, no preferential recommendation is made for any type or brand of licensed influenza vaccine over another.)

4. Brandon is 7 years old and comes into your clinic today for his flu shot. What should be administered?
   a. 0.25 mL of Fluzone
   b. 0.5 mL of Fluzone
   c. FluMist
   d. 0.5 mL of Flublok

0.5 mL of Fluzone is the appropriate dosage for anyone 3 years and older
5. Prior to coming to your clinic, Brandon has no history of the flu vaccine on file and his mom says he has never had the flu shot before but since this season has been so bad, she wanted him to get it. How many doses of flu does Brandon need?
   a. None - the flu vaccine is not effective
   b. 3
   c. 2
   d. 1

6. Brandon has returned to your clinic 3 weeks later because he sprained his ankle on the playground and his mother wants the doctor to look at it. Can his next dose of flu be administered today?
   a. No
   b. Yes
   c. He does not need another dose of flu this flu season

2 doses should be administered (4 weeks apart) to children who have never had the flu vaccine

7. Jessica is 4 years old and is at your clinic for a flu shot. Her immunization history includes:
   • IIV4 at 1 year of age
   • IIV4 at 3 years of age
How many doses of the flu vaccine does Jessica need this season?
   a. 1
   b. 2
   c. None – the flu vaccine is not effective

1 dose should be administered to children 6 months through 8 years of age who have previously received 2 doses
8. Jessica sometimes experiences hives after eating eggs, but does not show any other symptoms. Should she still receive a flu vaccine?
   a. Yes
   b. No

9. Jacob, Jessica’s older brother, feels much worse after eating eggs than his sister does. He experiences angioedema, wheezing, and lightheadedness anytime he eats eggs. Should Jacob receive a flu vaccine?
   a. Yes
   b. No

The recommendations for vaccination of people with egg allergies have not changed since last season (2016-2017). People with egg allergies can receive any licensed, recommended age-appropriate influenza vaccine and no longer have to be monitored for 30 minutes after receiving the vaccine. People who have severe egg allergies should be vaccinated in a medical setting and be supervised by a health care provider who is able to recognize and manage severe allergic conditions. Flucelvax is also an option (4 years and older).

10. You administered 0.25mL in a single-dose syringe of Fluzone to Jacob. Is the correct dosage?
    a. Yes
    b. No

11. If it is not, what should you do?
    a. Nothing – Jacob received the correct dose
    b. Administer an additional 0.25mL to Jacob on the same day
    c. Administer an additional 0.25mL of Fluzone to Jacob on the same day

If 0.25 mL of Fluzone Quadrivalent is inadvertently administered to someone 3 years of age or older, an additional 0.25 mL dose can be given on the same clinic day to provide a full 0.5 mL dose. If the patient cannot be revaccinated until the next day or later, a full dose of 0.5 mL of inactivated influenza vaccine should be administered as soon as the patient can return.
2017-2018 Pediatric Schedule for Children

Administer **2 doses, separated by at least 4 weeks**, to children 6 months through 8 years of age who:
- Are receiving influenza vaccine for the first time
- Vaccination history is unknown
- Did not receive a total of at least two doses of influenza vaccine before July 1, 2017

**Remember**
- Either product may be used for either dose
- Dose (amount) is based on the product

Administer **1 dose** to:
- Children 6 months through 8 years of age, who previously received 2 doses
- Both doses did not have to be administered during the same season or consecutive seasons
- Children 9 years of age and older, regardless of immunization history

Potential Vaccine Administration Errors

Administering the wrong dose (amount) including:
- 0.25 ml dose of FluLaval to a child 6-35 months
  - 0.5 mL should be administered
- 0.5 ml dose of Fluzone to a child 6-35 months
  - 0.25 mL should be administered
  - 0.5 mL is for 3 years and up
- 0.25 ml dose of Fluzone to a person 3 years and up
  - 0.5 mL should be administered
Thank You!

Resources
www.cdc.gov
www.dshs.texas.gov/immunize
www.immunize.org
www.immunizetexasorderform.com
http://www.shotbyshot.org/stories/gigis-story/

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Meningitis B

A Treating Physician’s Story
Meningococcal Serogroup B (MenB) Vaccine Recommendation

Presented by Essi M. Havor MSN, RN, APHN-BC
Houston Health Department, Immunization Bureau
March 1, 2018

Why Are We Talking About This?

High school senior Kimberly Coffey, 17, died one week before her graduation.

College sophomore Emily Stillman, 19, died just 36 hours after her first symptoms.
"I lost my 17-year-old daughter Kimberly to Meningitis B in 2012, two years before Meningitis B vaccines became available in the U.S. When the doctor in the Emergency Room told me she suspected my daughter had bacterial meningitis, I told the doctor it wasn’t possible because she had been vaccinated against meningitis. But what I didn’t know, and what so many parents still don’t realize, is that there is a separate strain of meningococcal disease – MenB – that is not covered by the traditional, more widely-known meningitis vaccine."

**OBJECTIVES**

At the end of the session, participants will learn about and have the opportunity to discuss….

- Meningococcal Disease
- MenB Vaccines Recommendations and administration
- Vaccine Safety
- Your roles as a TVFC provider
MENINGOCOCCAL DISEASE

➢ Meningococcal disease is a life-threatening bacterial infection that can affect the lining of the brain and spinal cord, or it can cause an infection in the bloodstream - or both.

➢ Most invasive disease is caused by 5 types of meningococcal bacteria – A, B, C, W& Y

➢ Can kill in a matter of hours.

➢ Case-fatality ratio is 10%–15%

➢ 20% of survivors have long-term sequelae such as neurologic disability, limb or digit loss, and hearing loss.

➢ About 50% of cases reported are usually serogroup B

RECOMMENDED VACCINES

2 separate vaccines are necessary to be fully immunized against the disease:

○ Most have received the MenACWY vaccine.

○ Few have received the MenB vaccine
Meningococcal Serogroup B (MenB) Vaccine

- Brands available:
  - Trumemba (Pfizer)
  - Bexsero (GSK)
- Age indication: 10-25 years
- ACIP recommendation: 16-23 years
- Preferred age of vaccination: 16-18 years
- Both given by intramuscular route
- The two brands of MenB vaccines are not interchangeable
- The series must be started and completed with the same brand of vaccine
- Doesn’t provide immunity against serogroups A,C,W,Y

MenB is routinely recommended for these groups:

- People age 10 years and older who have functional or anatomic asplenia
- People age 10 years and older who have persistent complement component deficiency, including people taking eculizumab (Soliris)
- People age 10 years and older who are at risk during an outbreak caused by a vaccine serogroup, such as on college campuses
- Microbiologists who work with meningococcus bacteria in a laboratory

MenB Vaccine Dose Schedule & Administration

Bexsero

Give 0.5mL of Bexsero as a 2-dose series with doses given at least 1 month apart

Trumemba

Give 0.5 mL of Trumemba either as:

- a 2-dose series with doses administered at least 6 months apart (healthy teens and young adults)
- a 3-dose series with the second and third doses administered 1-2 and 6 months after the first dose

** If the second dose is given at an interval of less than 6 months, a third dose should be given at least 4 months after the 2nd dose
In clinical trials, the most common adverse events within 7 days of receiving MenB were:

- injection site pain
- swelling or redness (80% – 90% of recipients)
- Up to 30% of recipients considered the pain to be severe
- Other reported symptoms included fatigue (35% – 40%), headache (33% – 35%), and myalgia (30% – 49%)
- In general, adverse events were more frequent with the first dose than with subsequent doses

What Is Your Role?

- Offer the MenB vaccine to all your patients between 16-18 years of age
- Also offer the booster dose of MCV4
- Screen your patients who are between ages 10-15 years, and are at high risk for Meningococcal B disease
- Document the brand of MenB vaccine administered:
  - In your medical record &
  - In ImmTrac2
- Educate parents and patients
- Document refusals & re-offer the vaccine at subsequent visit
- Conduct reminder/recall on patients who receive first dose
- MenB is NOT currently available on ASN program
College Outbreaks

**UMass Amherst**

The University of Massachusetts Amherst (UMass Amherst) is experiencing an outbreak of serogroup B meningococcal disease. UMass Amherst is recommending and offering vaccination to its students. [Learn more from UMass Amherst](#).

**Oregon State University**

Oregon State University (OSU) has an ongoing outbreak of serogroup B meningococcal disease. Students should check with OSU about requirements to get vaccinated with a serogroup B meningococcal vaccine. [Learn more from OSU](#).

"If I didn’t know, I’m sure other people don’t know. I said to her that day, I’m going to figure this out. By educating both parents and students on Meningitis B, its symptoms, and the vaccine to stop it, we have the ability to save other young people from this deadly but preventable disease."

- Alicia Stillman, mother of Emily Stillman and Co-Founder of the Meningitis B Action Project

**Vaccine Heroes**

Smallpox Eradication Program
1966-1980

**Voices for Vaccines**
Resources

➢ Recommendations for use of MenB among persons at increased risk were published in June 2015 and are available at www.cdc.gov/mmwr/pdf/wk/mm6422.pdf, pages 608–12.

➢ MenB recommendations for healthy adolescents and young adults were published in October 2015 and are available at www.cdc.gov/mmwr/pdf/wk/mm6441.pdf, pages 1171–6.

➢ Immunization Action Coalition (IAC) has prepared a document that provides a summary of the ACIP recommendations for use of MenB. The document is available at www.immunize.org/catg.d/p2035.pdf.

Thank You!

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