Influenza Prevention and Control Strategies in Early Education and Child Care Settings

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**HOUSEKEEPING**

- All audio lines are muted
- Use the Q&A window to submit questions
- Use the Chat window for help with technical difficulties
- Webinar recording and Slides will be made available
OBJECTIVES

- Review influenza as a critical issue for early education and child care providers this winter.


- Emphasize influenza immunizations in early education and child care programs.

- Learn ways to be prepared for seasonal flu during the COVID-19 pandemic.
OVERVIEW

• **Part I:** Remember influenza? – Reviewing key points

• **Part II:** Strategic vaccine recommendations

• **Part III:** Tailored strategies and preparedness

• **Part IV:** Question and Answer
PART I

Remember influenza?—Reviewing key points
Influenza in Children: A Rapid Review
WHAT IS INFLUENZA (THE FLU)?

- Viral infection of respiratory system (nose, throat, lungs) with systemic (whole body) symptoms
- More serious than a common cold – weakens body
- Signs or symptoms include:
  - Sudden **fever**
  - **Headache**
  - **Body aches**
  - **Chills**
  - **Sore throat**
  - **Stuffy, runny nose**
  - **Dry cough**
  - Less energy than usual
  - **Belly pain**
  - **Nausea/vomiting**
  - **Diarrhea**
  - **Pinkeye**
**Influenza Complications in Children**

- Pneumonia
- Invasive *bacterial infections*: MRSA (Staph)
- Myocarditis (heart inflammation)
- Encephalopathy, Guillain Barré syndrome
- Sepsis-like syndrome in neonates
- Makes asthma or heart disease worse
- Reye syndrome if combined with aspirin
- Death
Spread of Influenza

- Influenza spreads by droplets projected into the air from coughing and sneezing.
- Droplets travel 3-6 feet then fall to the ground.
- To a lesser extent, influenza also spread by droplets falling onto surfaces which are touched by others.
IMPACT OF INFLUENZA IN CHILDREN

During the influenza season, children:
• Experience elevated disease and complications
• Have increased risk of hospitalization (<5yr)
• Have higher chance of seeking influenza-related medical care
• High risk = child care age group

10-40% of healthy children can be infected with influenza yearly
### Why Should We Care About Flu?

**2019-2020 Flu Season: Burden and Burden Averted by Vaccination**

During the 2019-2020 season, CDC estimates flu caused:

- **38 million** flu illnesses
- **400,000** flu hospitalizations
- **22,000** flu deaths

It could have been even worse without flu vaccines.

Nearly 52% of the U.S. population 6 months and older got a flu vaccine during the 2019-2020 flu season, and this prevented an estimated:

- **7.5 million** flu illnesses
- **105,000** hospitalizations
- **6,300** deaths

**Imagine the impact if more Americans chose to get a flu vaccine.**

Many more flu illnesses, hospitalizations, and flu deaths could be prevented.

The estimates for the 2019-2020 influenza season are preliminary pending additional data from the season.

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Vaccine Prevented
Influenza-Associated Pediatric Deaths by Week of Death
2017-18 season to 2020-2021 season

Why so low?

https://gis.cdc.gov/grasp/fluview/pedfludeath.html
Influenza KEY POINTS
Children consistently have the highest attack rates of influenza in the community during seasonal influenza epidemics.
Children play a pivotal role in transmission of influenza virus to their households and close contacts (eg, grandparents).
Children < 5 years, (especially < 2 years) and children with certain underlying medical conditions are at increased risk of hospitalization and complications from flu.
Pediatric Deaths from Influenza: 80% were unvaccinated
Antiviral medications are important in the control of influenza but are NOT a substitute for influenza vaccination.
# Antivirals for Influenza

<table>
<thead>
<tr>
<th>Drug (Trade Name)</th>
<th>Virus</th>
<th>Route</th>
<th>Treatment</th>
<th>Chemoprophylaxis</th>
<th>Adverse Effects</th>
</tr>
</thead>
<tbody>
<tr>
<td>Oseltamivir (Tamiflu)</td>
<td>A and B</td>
<td>PO</td>
<td>Birth or older&lt;sup&gt;a,b&lt;/sup&gt;</td>
<td>≥ 3 mo</td>
<td>Nausea, vomiting, Skin reactions, Neuropsychiatric events</td>
</tr>
<tr>
<td>Zanamivir (Relenza)</td>
<td>A and B</td>
<td>Inhalation</td>
<td>≥ 7 y</td>
<td>≥ 5 y</td>
<td>Bronchospasm, Skin reactions, Neuropsychiatric events</td>
</tr>
<tr>
<td>Peramivir (Rapivab)</td>
<td>A and B</td>
<td>IV</td>
<td>≥ 2 y</td>
<td>NA</td>
<td>Diarrhea, Skin reactions, Neuropsychiatric events</td>
</tr>
<tr>
<td>Baloxavir (Zoflusa)</td>
<td>A and B</td>
<td>PO</td>
<td>≥ 12 yr</td>
<td>NA</td>
<td>Nausea, vomiting, Resistance</td>
</tr>
</tbody>
</table>

- <sup>a</sup> Treatment within 48 hr of onset of illness has greatest effect in reduction of symptoms and duration of illness
- <sup>b</sup> No antiviral is specifically approved for severe influenza, but observational studies support effect on reduction of complications, and most experts support use
- <sup>c</sup> FDA approved for children 2 wk of age and older but AAP supports use from birth in term and preterm infants
- <sup>d</sup> Chemoprophylaxis: High risk children who cannot get vaccinated or may not respond to vaccine, within 2 weeks after vaccination if circulation of influenza, contacts of HR patients, control of outbreaks
The presence of an egg allergy in an individual is NOT a contraindication to receive an influenza vaccine.
Egg Allergy and Flu Vaccines

- Egg allergy does not increase risk of anaphylactic reaction to vaccination with inactivated influenza vaccines.*

- Children with egg allergies can receive age-appropriate, licensed, recommended vaccine with no special precautions similar to other routine vaccines.

- Children with a history of allergic reaction to previous influenza vaccination:
  - Should be evaluated by an allergist.
  - Vaccine administration should be supervised by a health care provider who can recognize and manage allergic conditions.

*Based on 28 studies evaluating 4,315 egg-allergic subjects (656 with severe allergies)
Key Point: Children Are More Vulnerable
WHY DO CHILDREN GET SICK AT CHILD CARE?

• Unique age group vs. other older children
• Immature immune system
  – Every cold virus is “new” to them
• Developmental
  – Everything in mouth (washing hands, covering mouth, close play, no personal space)
What About Influenza During the COVID-19 Pandemic?
<table>
<thead>
<tr>
<th></th>
<th>Cold</th>
<th>Flu</th>
<th>COVID-19</th>
</tr>
</thead>
<tbody>
<tr>
<td>Respiratory virus?</td>
<td>Yes</td>
<td>Yes</td>
<td>Yes</td>
</tr>
<tr>
<td>Symptoms</td>
<td>Mild (runny nose congestion)</td>
<td>More intense (fever, body and head aches, more)</td>
<td>Similar to cold and flu; loss of taste and smell</td>
</tr>
<tr>
<td>Can lead to hospitalization or death?</td>
<td>No</td>
<td>Yes</td>
<td>Yes</td>
</tr>
<tr>
<td>Vaccine available?</td>
<td>No</td>
<td>Yes</td>
<td>Not Yet for Young Kids</td>
</tr>
<tr>
<td>Can identify with a test?</td>
<td>Sometimes</td>
<td>Yes</td>
<td>Yes</td>
</tr>
</tbody>
</table>
Percentage of Visits for Influenza-like Illness (ILI) Reported by the U.S. Outpatient Influenza-like Illness Surveillance Network (ILINet), Weekly National Summary, 2020-2021 and Selected Previous Seasons

2020-21 Flu Season (During Pandemic)

Influenza Season

Source: CDC.gov
Percentage of Visits for Influenza-Like Illness (ILI) by Age Group
Reported by the U.S. Outpatient Influenza-like Illness Surveillance Network (ILINet),
Weekly National Summary, 2019-2020 and 2020-2021 Seasons
What About This Winter?

• Southern Hemisphere (eg, Australia) wintertime can often give us a preview.
• However, difficult to tell from southern hemisphere data because of COVID lockdowns/masking.
• What can the past history about other viruses tell us?
Other Examples? RSV virus was low during H1N1 Influenza but...
PART II

Vaccine Recommendations and Types Available for 2021-2022
AAP Annual Influenza Vaccine Recommendations

- AAP recommends annual influenza vaccination for all children 6 months and older.
- Flu shot and nasal spray vaccines are recommended with no preference for either.
- Children should receive the flu vaccine as soon as it is available (NOW!).
- Some children 8 years of age and younger might need two doses of flu vaccine this year. Consider planning ahead for children who need two doses.
Influenza Vaccination Can Protect Children Against Severe Influenza and Death

- **PICU Hospitalization**
  - 44 cases vs. 172 PICU and 93 community controls (children 6 mo–17 yrs) in 21 PICUs, 2010-2012 (US PALISI)
  - Vaccinated children were **74% (95% CI 19-91%)** or **82% (95% CI 23-96%)** less likely to be admitted to PICU for influenza vs. PICU or community controls
  - 1 dose only (when 2 needed), was NOT protective

- **Death**
  - 359 influenza associated deaths among children 6 mo–17 years
  - 26% received flu vaccine vs. 48% in comparative survey cohort
  - **Overall VE against death: 65% (95% CI 54%-74%)**
  - **Children with high-risk conditions VE: 51% (95% CI 31%-67%)**
  - **Children without high-risk conditions VE: 65% (95% CI 47% to 78%)**

What is the Quadrivalent Flu Vaccine?

A quadrivalent influenza (flu) vaccine is designed to protect against four different flu viruses, including two influenza A viruses and two influenza B viruses.

Why was quadrivalent flu vaccine developed?

For many years, flu vaccines were designed to protect against three different flu viruses: an influenza A(H1N1) virus, an influenza A(H3N2) virus and one influenza B virus, even though there are two different lineages of B viruses that circulate during most seasons. Adding a B virus from the second lineage was done to give broader protection against circulating flu viruses.
When Should A Child Get the Flu Vaccine?

• Children needing only 1 dose of influenza vaccine, regardless of age, should receive vaccination ideally by the end of October.

• Data available to date on waning immunity do not support delaying vaccination in children.
WHEN DOES A CHILD NEED TWO SHOTS?

• Children
  – 6 months through 8 years of age who are receiving influenza vaccine for the **first time**,  
  – Or only **1 dose ever** before July 1, 2021,  
  – Or vaccination status is unknown  

• Offer vaccination as soon as available  

• Should receive **2 doses of vaccine 4 weeks apart**, ideally by the end of October
**Why Vaccinate in Early Education and Child Care Settings?**

- You care for the most vulnerable population
  - Younger children at higher risk of influenza complications – death, hospitalization, school absence, doctor visits, ear infections
  - Children < 6 months old are too young to be vaccinated

- Typical flu prevention methods difficult
  - Nonpharmaceutical interventions - Physical distancing, hand washing, masking, sneezing in arm and washing of hands after
  - Exclusion – Affects parents’ ability to work
  - Infection control – Influenza is spread by coughing, sneezing, and touching things

- Children bring influenza home to families and spread it into communities
Do Child Care Centers Require the Influenza Vaccine?

In a 2016 study of randomly selected US child care centers, directors reported the following about influenza vaccine:

• For children
  – Only 24% of directors required the flu vaccine
  – 60% of centers did not track flu vaccination

• For adult caregivers
  – Only 13% of directors required the flu vaccination
  – 51% of centers did not track flu vaccination

• Child care provider vaccination rates are low
  – 22%, 30% (Ohio) 2009-10
  – 58%, 47% (St Louis) 2013-15

Shope, J Pediatr Infect Dis Society, 2019
De Perio, J Community Health, 2012
Rebmann, Am J Infect Control, 2016
How Can We Fight the Flu in Early Education and Child Care Settings?
PART III

Tailored Strategies and Preparedness
**Benefit of Infection Control**

- Pretty good for school-age children (>50%)
- Not very good for 0–5-year olds
  - 17-35% reduction in respiratory or influenza-like illness, depending on the intervention
    - Hourly hand sanitizer use (Pandejpong, 2012)
    - Standard regimen only benefited children < 2yrs (Roberts, 2000)
  - Other studies show only ~10% decrease in absence (Uhari 1999; Lennell 2008)
INFECTION CONTROL TO PREVENT INFLUENZA?

• Not as effective as immunization.
• BUT . . . Don’t stop doing it!!
  – Helps to prevent other infections.
  – More effective at reducing diarrheal disease.
• Practice should not change for flu season.
  – Consider more frequent alcohol-based hand sanitizer or hand washing.
  – Droplet spread through the air limits effectiveness of infection control against influenza.

AT BEST -
Reduces respiratory illness by 25%.
Hand Washing

- Must be learned!
- Teaching children – make it a LESSON activity
- Focusing on just-in-time reminders and training for staff
Use Hand Sanitizer
Be an Advocate – Remind Parents about Vaccinations
Masks

- Masks are highly effective for flu and COVID-19
- Can be used in children 2 or older
Reminders To Parents

• Parents look to **YOU** for advice and expertise
• Send out reminders
  – Flyers in backpacks
  – Emails
  – Texts
INFECTION PREVENTION AND CONTROL METHODS

• Surface cleaning, sanitizing, and disinfecting
• Cough and sneeze etiquette
• Ventilation
I N F E C T I O N C O N T R O L M E A S U R E S

User-friendly content in Managing Infectious Diseases in Child Care and Schools, 5th edition released 2019

• Purchase from https://shop.aap.org/

• Nearly 3 out of 4 US licensed child care centers use this reference
EXCLUSION FOR INFLUENZA — WHO TO EXCLUDE?

• Can’t tell which children have influenza?
  – Overlap of symptoms of influenza versus other viruses (eg, COVID)
  – Most kids with fever and respiratory symptoms do not have influenza (even in a flu epidemic)
  – Given COVID-19 – likely many will require testing for COVID-19 and quarantine if fever
EXCLUSION FOR INFLUENZA – WHO TO EXCLUDE?

Which children with respiratory symptoms should be excluded?

- Must exclude if not participating in activities and requiring too much care.
- Exclude children with fever and respiratory symptoms because the amount of flu virus (if they have it) is greatest in these children.
- Meets other exclusion criteria described in *Managing Infectious Diseases, 5th ed.*
STRATEGY: IMPROVE ACCESS

• On-site immunizations (for children and staff)
  – Health Department or child care health consultant
  – Passport Heath, Inc.
    www.passporthealthusa.com/vaccinations/

• Make it convenient for staff to get it
  – Find information about local sites
  – Give scheduled time off

• Make annual flu vaccine part of the routine – a habit
Improving Preparedness During the COVID-19 Pandemic
Why is Planning for Pandemic Flu, COVID-19, and Other Infectious Diseases Needed?

- To protect your center in an emergency
- Saves lives and reduces adverse consequences
- Prepare ahead to make difficult decisions
- Keep your center and business open
What to Consider for Planning?

- Who oversees the plan?
- Where will you receive info/updates?
- In a pandemic, child care/schools might close or recommend longer exclusion times.
- Will your existing communication plan work?
- Do parents have alternate care arrangements?
  - Resources: Child Care Aware, Save the Children

https://www.savethechildren.org/content/dam/usa/reports/emergency-prep/caregiver-disaster-checklist.pdf
WHAT SHOULD A PANDEMIC FLU PLAN INCLUDE?

Planning/Coordination

• Definition of a pandemic influenza
• Identify key staff to develop, practice, review plan
• Monitor pandemic threat
• Who has legal authority to close program?
  – Varies by state (county health dept, state health dept, CDC, state child care bureau, etc.)
• Identify key community contacts
• Collaborate with other child care programs in the area

What Should a Pandemic Flu Plan Include?

Communications Plan
- Identify key contacts
- How to keep in touch with staff and families (email, social media, phone)
- Vendors (you will need supplies and services)

Infection Control (always – but not applicable if closed)
- Hand/cough hygiene
- Cleaning/sanitizing/disinfection
- Exclusion
- Education
**What Should a Pandemic Flu/COVID-19 Plan Include?**

**Operations**
- How to deal with program closings and staff absences
- Plans to continue basic functions
  - Payroll
  - Plans for continued learning if program is closed

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**PREPARING FOR PANDEMIC INFLUENZA AT OUR CENTER**

<table>
<thead>
<tr>
<th>KEY CONTACTS</th>
<th>Name of Organization</th>
<th>Name &amp; Title</th>
<th>Phone/Email</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
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<tr>
<td>Staff/Health Department</td>
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<tr>
<td>State/Local Professional Development Coordinators</td>
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<tr>
<td>Child Care Health Consultant</td>
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<tr>
<td>Immunization Clinics</td>
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<tr>
<td>Mental Health Consultant</td>
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<tr>
<td>Mental Health Clinics</td>
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<tr>
<td>Meal Services</td>
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<tr>
<td>Back-up Suppliers</td>
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<tr>
<td>Temporary Staffing Agencies</td>
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<tr>
<td>Substitute Teachers</td>
<td></td>
<td></td>
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<tr>
<td>Other Contacts</td>
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</tbody>
</table>

What about COVID?
ISSUES WITH COVID-19 IN EARLY EDUCATION AND CHILD CARE

• Difficult to enforce hand hygiene, respiratory etiquette (masking, coughing in arm), and physical distancing in young children.
• Masking recommended for children ≥ 2 years old – primary defense along with surface sanitizing and disinfecting.
• Vaccine won’t be available for young children until likely next year.
• Difficult to run the business: program closures, staff shortages, parents scared so enrollment down.
• Some programs have brought in older children.
WHAT IS THE ROLE OF GROUP CHILD CARE DURING COVID-19?

• Critical infrastructure
  – Woefully underprepared if high levels of influenza and COVID-19
  – Funding depends on parents
  – More funding support needed (government)
• Provides a means for parents to return to work
• Relatively safe environment for children and caregivers
• Won’t be possible if there is also influenza this winter – MUST promote influenza immunization!!!
**FIGURE 1. COVID-19–associated cumulative hospitalizations per 100,000 children and adolescents,* by age group — COVID-NET, 14 states,† March 1, 2020–August 14, 2021**

* Rates are subject to change as additional data are reported.
† Select counties in California, Colorado, Connecticut, Georgia, Iowa, Maryland, Michigan, Minnesota, New Mexico, New York, Ohio, Oregon, Tennessee, and Utah.
COVID-19 HOSPITALIZATION

- The proportions of hospitalized children and adolescents with severe disease were similar before and during the period of Delta predominance.
- Hospitalization rates were 10 times higher among unvaccinated than among fully vaccinated adolescents.
## COVID Deaths (CDC) – 1/20 Through 10/2

<table>
<thead>
<tr>
<th>Data as of</th>
<th>Age group</th>
<th>COVID-19 Deaths</th>
<th>Indicator</th>
<th>Sex</th>
<th>Race or Hispanicity</th>
<th>Start Week</th>
<th>End Week</th>
</tr>
</thead>
<tbody>
<tr>
<td>10/06/2021</td>
<td>0-4 years</td>
<td>181</td>
<td>Age</td>
<td>All</td>
<td>All</td>
<td>01/04/2020</td>
<td>10/02/2021</td>
</tr>
<tr>
<td>10/06/2021</td>
<td>5-18 years</td>
<td>406</td>
<td>Age</td>
<td>All</td>
<td>All</td>
<td>01/04/2020</td>
<td>10/02/2021</td>
</tr>
</tbody>
</table>
INFECTION PREVENTION & CONTROL RESOURCES

- Germ Prevention Strategies (https://www.healthychildren.org/English/health-issues/conditions/prevention/Pages/Germ-Prevention-Strategies.aspx)
- Make Hand Washing Fun (https://www.youtube.com/watch?v=tQntTnCbgf4)
AAP RESOURCES

• Interim guidance during the COVID-19 pandemic
  www.aap.org/covid-19
    – Child Care During COVID-19
    – Return to School Considerations
• AAP Immunizations Webpage
• AAP Influenza Webpage
PANDEMIC INFLUENZA RESOURCES

- Creating a Pandemic Influenza Preparedness Plan: A Guide for Child Care Centers and Family Child Care Homes
  (https://www.cdc.gov/flu/pandemic-resources/planning-preparedness/community-mitigation.html)
- Guidance for School Administrators to Help Reduce the Spread of Seasonal Influenza in K-12 Schools
  https://www.cdc.gov/flu/school/guidance.htm
- Supplemental Interim Guidance for School Administrators Associated with Possible Outbreaks of H3N2 Influenza Virus (‘H3N2v”)
  https://www.cdc.gov/flu/swineflu/variant/h3n2v-schools.htm
- Caring for our Children Standard 9.2.4.4 - Written Plan for Seasonal and Pandemic Influenza
  (http://nrckids.org/CFOC/Database/9.2.4.4)
- Preparing Child Care Programs for Pandemic Influenza
  (www.aap.org/en-us/advocacy-and-policy/aap-health-initiatives/Children-and-Disasters/Pages/Preparing-Child-Care-Programs-for-Pandemic-Influenza.aspx)
**TAKE HOME POINTS**

- Influenza is the most common cause of vaccine-preventable deaths in children.
- Children spread influenza to caregivers, families and community.
- Immunization is by far the best influenza prevention tactic.
- Infection control is also important but not as effective as immunization.
- Child care programs have an important role and opportunity to improve immunization rates.
- The seasonal flu/COVID-19 plan should be reviewed and updated regularly.
PART IV

Question and Answer
FAQ:

• Should ill children receive the influenza vaccine?
FAQ: COVID AND INFLUENZA VACCINES

• Can COVID and FLU vaccine be given at the same time?
FAQ: What are the Different Variations of Influenza?

• Main ones are A and B
• C = mild; D = cattle
**Human Seasonal Influenza Viruses**

**Types**
- Influenza A
- Influenza B

(Influenza virus types A&B cause most human illness and the flu season)

**Subtypes**
- A(H1N1)
- A(H3N2)

**Clades (Groups)**
- 6B.1
- 3C.2a, 3C.3a

**Sub-Clades (Sub-Groups)**
- 6B.1A
- 3C.2a1; 3C.2a2; 3C.2a3; 3C.2a4

**Lineages**
- B(Victoria)
- B(Yamagata)

- V1A
- Y1, Y2, Y3

- None

American Academy of Pediatrics
DEDICATED TO THE HEALTH OF ALL CHILDREN®
FAQ: MATERIALS IN SPANISH?

• Yes!
• CDC
¿Quieres bloquear la influencia en tus hijos? ¿Quieres protegerlos contra las enfermedades? Entonces debes vacunarte. En esta página encontrarás toda la información que necesitas para vacunarte correctamente.

¿Qué es la influencia?:

La influencia es un trastorno crónico que causa una serie de reacciones inesperadas y extremadamente graves. Pero no es solo eso, la influencia también puede causar problemas de salud. La vacuna contra la influencia es una opción efectiva para prevenir esta enfermedad. Sin embargo, es importante entender los riesgos y beneficios asociados con la vacuna. En esta guía, exploraremos los diferentes aspectos de la influencia, incluyendo sus causas, síntomas, tratamiento y prevención. ¡Acompaña a tu familia hacia una vida saludable con esta guía sobre la influencia!

¿Qué son los síntomas de la influencia?:

Los síntomas de la influencia pueden incluir fiebre, dolor de cabeza, dolor de garganta, tos, dolor abdominal, vómitos, diarrea, rash, dolor muscular, poliposis, dolor de oídos, inflamación del corazón y los pulmones, y una serie de reacciones inesperadas y extremadamente graves. En algunos casos, puede causar la muerte. Algunas personas pueden presentar síntomas de la influencia en niños, pero estas manifestaciones son menos comunes.

¿Cómo puedo proteger a mi hijo de la influencia?:

Para proteger a tu hijo de la influencia, es importante vacunarlo lo más pronto posible. Nunca demasiado pronto, ya que la vacuna es efectiva incluso antes de que el niño pueda producirlo. La vacuna contra la influencia es un procedimiento seguro y eficaz que puede prevenir enfermedades graves. Siempre consulta con tu médico antes de administrar cualquier vacuna a tu hijo. Mantén tu familia salva y protegida contra la influencia con la vacuna contra la influencia. ¡Vacúnate hoy mismo!
HEALTH DISPARITIES?

Overall age-adjusted rates of hospitalization by race/ethnicity, FluSurv-NET, 2009-10 through 2018-19

- Non-Hispanic Black: 68.8 rate per 100,000 population
- Non-Hispanic American Indian/Alaska Native: 48.7 rate per 100,000 population
- Hispanic or Latino Race and Ethnicity: 44.5 rate per 100,000 population
- Non-Hispanic White: 38.1 rate per 100,000 population
- Non-Hispanic Asian/Pacific Islander: 32.3 rate per 100,000 population
Certificate of Participation

Participants will receive a certificate of participation after completing an online evaluation form found here:

https://www.surveymonkey.com/r/NCECHWWebinarFeedback