PA AAP / ECELS Webinar
Immunization: Strategies for Success in Early Care and Education Programs

January 16, 2020 1 – 2:30 p.m.
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Objectives

• Explain the purpose of currently recommended immunizations/vaccines
• Identify resources for accurate information about vaccines and current vaccine schedules
• Summarize the role of the Department of Health (PA and Philadelphia) during a disease outbreak
• Comply with DHS and PA Code Regulations related to children’s immunization records and reporting

Download Handouts from the ECELS website
www.ecels-healthychildcarepa.org
Select Professional Development / Training tab, then Webinars

Time for a Polling Question

What is your primary role?
Childhood Immunization Partnership Project

A Collaborative Effort between:
Department of Health (DOH) and Department of Human Services (DHS)

Beginning 2018
Division of Immunizations
Janine Strick, BSN, RN
OCDEL-Certification
Diane Michel

Child Care - Immunizations

Who is responsible for review of immunization records in a child care setting?

According to 28 Pa. Code Chapter 27.77 and 55 Pa. Code Chapters 3270.131, 3280.131 and 3290.131

CHILD CARE OPERATORS

Who is responsible for enforcing compliance of the regulations relating to immunization records in a child care setting?

The Bureau of Certification Staff

Who is responsible for review of immunization records in a child care setting?

According to 28 Pa. Code Chapter 27.77 and 55 Pa. Code Chapters 3270.131, 3280.131 and 3290.131

Child Care - Immunizations

Verifications:

• 55 Pa. Code Chapters 3270.131(a), 3280.131(a) and 3290.131(a) states, the operator shall require the parent of an enrolled child, including a child, a foster child and a relative of an operator or a facility person, to provide an initial health report no later than 60 days following the first day of attendance at the facility.

• 55 Pa. Code Chapter 3270.131(d)(5), 3280.131(d)(5), and 3290.131(d)(5) states, the health report must include a review of the child’s immunized status according to recommendations of the Advisory Committee for Immunization Practices (ACIP).

• If verification of immunizations is not received as directed in 28 Pa. Code Chapter 27.77 and 55 Pa. Code Chapter 3270.131, the facility may not accept or retain an infant 2 months or age or older, a toddler or a preschooler for more than 60 days following the first day of attendance until the verification or exemption is received.

55 Pa. Code Chapter 3270.131(e)(1), 3280.131(e)(1) and 3290.131(e)(1) states, the facility shall require the parent to provide updated written verification from a physician, physician’s assistant, CRNP, the Department of Health or a local health department of ongoing vaccines administered to an infant, toddler or preschool child in accordance with the schedule recommended by the ACIP.

Q: Who is responsible for review of immunization records in a child care group setting?

A: The child care group setting.

(This is according to Title 28 Pa. Code 27.77)
Title 28 Pa. Code 27.77(a) (4)

“The caregiver shall ensure that a certificate of immunization is completed and signed for each child enrolled in the child care group setting. The certificates shall be updated by the caregiver to include the information provided to the caregiver under subsection (a) when that additional information is received. . . .

Exemptions:
55 Pa. Code Chapters 3270.131(e)(2), 3280.131(e)(2) and 3280.131(e)(2) state:
Exemption from immunization must be documented as follows:
(i) Exemption from immunization for religious belief or strong personal objection equated to a religious belief must be documented by a written, signed and dated statement from the child’s parent or guardian. The statement shall be kept in the child’s record.
(ii) Exemption from immunization for reasons of medical need shall be documented by a written, signed and dated statement from the child’s physician, physician’s assistant or CRNP. The statement shall be kept in the child’s record.
Child Care - Immunizations

- 55 Pa. Code Chapters 3270.131(e)(3), 3280.131(e)(3) and 3290.131(e)(3) states, the facility shall implement dismissal policies in accordance with the Department of Health regulation in 28 Pa. Code Chapter 27.77 (relating to immunization requirements for children in child care group settings).
- 55 Pa. Code Chapters 3270.131(e)(4), 3280.131(e)(3) and 3290.131(e)(3) states, The facility shall comply with the annual immunization reporting requirements in accordance with the Department of Health regulation in 28 Pa. Code § 27.77.

Child Care - Immunizations

• Verification of immunizations is not received as directed in 28 Pa. Code § 27.77, the caregiver may not accept or retain a child two months of age or older for more than 60 days following the first day of attendance until the verification of immunizations is received or one of the acceptable exemptions is received.

- Operator reviews the verification submitted by the parents according to the schedule recommended by the ACIP. Verification must be kept in the child’s health record on site at the facility.
- Operator and parent discuss any immunizations that are not up to date and establish a plan to come to compliance.
- During annual renewal inspections (and applicable unannounced) Certification Representatives (Cert Reps) will review a sampling of children’s records and assess for compliance with the regulations.
- If a child’s immunization record is not up to date as per the ACIP (including the make-up schedule) and there is no exemption in the file, the Cert Rep will discuss with the provider to see if documentation exists elsewhere in the child’s record (such as a medical reason or illness).
- If not up to date and/or no documentation exists, a citation will be issued for non-compliance and a Plan of Correction (POC) requested.

Incomplete Immunization Record Referrals

- Name and address of the facility (including ZIP code)
- Date of Site Visit
- Copy of Data Sheet showing dates of birth and immunization status

This referral will be sent to the certification staff in the county of the child care group setting. (A list of names of OCDEL staff to address referrals and fax numbers will be provided for each county district.)

Additional Information:
- There are many variables that could affect administering of immunizations for children in child care settings. Cert Reps and providers may need to discuss a child’s record and review extenuating circumstances before determining compliance or non-compliance and an appropriate plan of correction.
- By regulation, operators are required to have health policies in accordance with 55 Pa. Code Chapter 3270.121(a), 3280.121(a) and 3290.131(a) which states, the operator shall review with the parent, at the time of application, the facility’s general daily schedule, hours for which care is provided, fees, responsibilities for meals, clothing, health policies, supervision policies, night care policies, dismissal policies, transportation and pick-up arrangements.
Incomplete Immunization Record Referrals

OCDEL and Department of Health, Division of Immunization staff are collaborating for the health of one of our youngest populations of care.

WHAT IS IMMUNIZATION?

- **Immunization**: Process in which a person becomes protected against a disease through vaccination
- **Vaccination**: Injection of a killed or weakened disease, (antigen) that produces immunity or protection in the body against that disease
- **Vaccines**: Products that produce immunity or protection from a disease

GOALS OF VACCINATION

- Give immunity to individual people and the community in high enough proportion of the population to prevent transmission
- Provide protection when children (and adults) are at highest risk for serious illness from vaccine-preventable diseases

WHO DECIDES WHAT TO PUT INTO THE SCHEDULE?

- Group of experts in medicine, public health, ethics and vaccine research
  - U.S. - Advisory Committee on Immunization Practices (ACIP) 15 member committee includes member of the public to represent parents / patients; members CANNOT have any ties to vaccine manufacturers
  - World Health Organization (WHO) Strategic Advisory Group of Experts
- Review epidemiology (who is most at risk for getting the infection prevented by the vaccine), vaccine safety and effectiveness, perspectives from other experts
ARE VACCINES SAFE?
Safety
• Key part of vaccine development: Benefits need to clearly outweigh risks
• Reason why there are contraindications and precautions

WHY ARE IMMUNIZATIONS IMPORTANT?
Immunizations work with your immune system to protect you from serious diseases
Immunizations protect your family and community by preventing outbreaks of diseases
Protect people who are not able to get immunizations

IMPACT OF VACCINES

DO WE REALLY NEED THESE VACCINES?

MEASLES

• Virus- causes fever, rash and eye redness
• Can be very serious
  • Complications: pneumonia, ear infection, brain swelling and death
  • Children <5 years old at highest risk for complications
• No treatment
• Spread by contact with infected droplets
  • VERY contagious
  • Measles virus can also survive up to 2 hours in fine particles
  • Start spreading virus 4 days before rash starts

MEASLES, MUMPS, RUBELLA

Penn State’s mumps outbreak grows to 36 probable cases

Photos courtesy of the Public Health Image Library: www.cdc.gov
MEASLES IN THE U.S.

Reported cases from 31 states
Outbreaks: New York City, Rockland County (NY), Los Angeles, Washington, El Paso TX

https://www.cdc.gov/measles/cases-outbreaks.html

WHY IS MEASLES RE-EMERGING?

- Globalization
  - Measles common in many countries → cases may be imported from returning travelers
- VERY contagious
  - Almost all unvaccinated, susceptible individuals exposed to measles will be infected
- Pockets of low MMR immunization rates
  - Majority of affected people in current outbreaks unvaccinated

MUMPS

- Virus - causes respiratory symptoms and swelling of the salivary glands
- Complications: hearing loss, meningitis, inflammation of one or both testes, heart muscle inflammation
- Spreads by contact with infected droplets but NOT as contagious as measles

MUMPS IN 2019

- 99% decrease in mumps incidence since vaccine introduction but outbreaks still occur
- 50% of outbreaks occur on college campuses
- Lower complication rate in vaccinated cases

MMR VACCINE

- Live attenuated (weakened) vaccine
  - Combination MMR licensed in 1971
  - 1st dose: age 12-15 months
  - 2nd dose: age 4-6 years
- Very effective
  - 1 dose: 93% effective for measles / 78% effective for mumps
  - 2 doses: 97% effective for measles / 88% effective for mumps
  - Long term and probable lifelong immunity against measles and rubella

IS MMR SAFE?

- Excellent safety profile
  - Fever within 6-12 days 5-15%
  - Rash <5%
  - Febrile seizures in children 12-23 months old 1/3,000 doses
- Does NOT cause autism → Evaluated in several studies
  - Original study suggesting link to autism found to be false and author lost license
- Should NOT receive the vaccine if pregnant or have a compromised immune system
Which disease is known to be more commonly spread from adults to children?

Time for a Polling Question

DIPHTHERIA, TETANUS AND PERTUSSIS (WHOOPING COUGH) (DTAP)

Photos courtesy of the Public Health Image Library: www.cdc.gov

PERTUSSIS (WHOOPING COUGH)

- Bacterial lower respiratory tract infection causes violent attacks of cough that end in a characteristic ‘whoop’
- HIGH RISK: Infants too young to be fully vaccinated
  - Most severe disease: 3 of 4 have complications / 1 in 100 die
  - Source: Adolescent and adult contacts with unrecognized disease
    - ~ 30% of infants infected from mother
    - > 40% from other family members

PREVENTION IS KEY FOR PERTUSSIS

- Highly contagious
- Occurs in ALL age groups
- Those previously vaccinated are more likely to have mild symptoms that mimic other cough illnesses
- Vaccination can prevent transmission
  - But need VERY high vaccine coverage

WHY VACCINATE? PROTECT CHILDREN

- All children need to receive DTaP at 2, 4, 6 and 15-18 mo. of age with booster at age 4-6 years
- Immunity starts to fade so EVERY pre-teen (11-12 yr. old) needs a Tdap booster
- High vaccine coverage needed to prevent transmission
  - Children need high coverage rates
  - Adults need high coverage rates to protect infants
    - Prenatal immunization: Vaccinate pregnant women EACH pregnancy late 2nd or 3rd trimester or post-partum
    - Adults need a Tdap booster if they did not get one as a pre-teen

SEASONAL INFLUENZA

- Virus infects nose and throat
- Flu season in U.S. usually during winter months (October – April)
- Symptoms usually resolve in 3-7 days BUT Complications lead to hospitalization and death.

INFLUENZA PREVENTION IS IMPORTANT

• Causes 300,000 – 500,000 hospitalizations and ~36,000 deaths every year
• Certain groups are more at risk of getting really sick from influenza including:
  • Young children <5 years old
  • Pregnant women
  • People with conditions like asthma or heart disease
• Influenza vaccination is MOST IMPORTANT prevention tool → EVERYONE >6 months old should get a flu shot every year
• Flu vaccines DO NOT cause the flu

ROTAVIRUS: WHO IS AT RISK?

• Rotavirus illness

<table>
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<tr>
<th></th>
<th>Worldwide</th>
<th>US</th>
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<tbody>
<tr>
<td>Hospitalization</td>
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<td>55-70,000</td>
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<tr>
<td>Deaths</td>
<td>450-600,000</td>
<td>20-60</td>
</tr>
</tbody>
</table>

• All children exposed by age 2-3 years

ROTAVIRUS VACCINES

<table>
<thead>
<tr>
<th>Vaccines</th>
<th>Formulation</th>
<th>Composition</th>
<th>Effectiveness*</th>
<th>Administration Schedule</th>
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</thead>
<tbody>
<tr>
<td>RotaTeq</td>
<td>Oral</td>
<td>Live, attenuated</td>
<td>88-98%</td>
<td>2, 4, 6 mo</td>
</tr>
<tr>
<td>Rotarix</td>
<td>Oral</td>
<td>Live, attenuated</td>
<td>85-95%</td>
<td>2, 4 mo</td>
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</table>

* For severe rotavirus disease

• Make antibodies along the lining of the intestines
• Must get last dose by age 8 months
• Safe and Well-tolerated

Who can’t get the vaccine?
• Babies with really severe immune system problems
• Babies with diarrheal illness should wait until they are better

HEPATITIS B

• Virus that attacks liver
• Broad spectrum of liver disease
  • Asymptomatic, acute and chronic infection
  • Chronic infection can lead to liver cancer
  • If infected as a child more likely to get chronic infection
  • Infected pregnant moms can pass the virus to their infant
  • Person-to-person transmission important for early childhood infection → Contact with contaminated surface, sharing toothbrushes

HEPATITIS B VACCINE

• 3 doses: Birth, 1-2 and 6-18 months
• May receive as part of a combination vaccine
• If unvaccinated and traveling should receive vaccine
• Pregnant mothers should be tested for HepB
**HEPATITIS A BASICS**

- Virus that causes acute liver infection
- Wide range of symptoms
- Symptoms more likely in adults (70-95% with symptoms) than children (50-90% no symptoms)
  - Young children can be superspreaders
- Primarily spread person to person via fecal-oral route
- Infected persons spread Hepatitis A in their stool 2 weeks before and 1 week after onset of jaundice

**RISK FACTORS FOR HEPATITIS A INFECTION**

- International travel to high prevalence regions
- Contacts of international adoptees
- Homelessness
- Drug use
- Men who have sex with men (MSM)
- Food or water exposure
  - Food-associated outbreaks

**CORNERSTONE OF PREVENTION: HEPATITIS A VACCINES**

- All children at age 12-23 months of age
- Catch-up all unvaccinated children <19 years old
- Infants 6-11 months of age travelling internationally
- All individuals at increased risk of infection
  - Homelessness now included as a risk factor
- All individuals at increased risk for severe disease
- Any individual interested in obtaining immunity

**Time for a Polling Question**

What disease did parents want their children to share before the vaccine was available?

**VARICELLA = CHICKEN POX**

Photos courtesy of the Public Health Image Library: www.cdc.gov
VARICELLA

- Virus that causes rash with itchy, fluid-filled blisters
- Fever, headache common
- Complications: Skin infections, pneumonia, brain swelling, bleeding problems, death
- Risk of complications highest: Infants, teens, pregnant women, adults, immunocompromised people
- VERY contagious - Spread by contact with infected respiratory droplets or fluid from blisters

VARICELLA IN 2019

- Before vaccine introduction: 4 million cases, ~11,000 hospitalizations and 100 deaths every year
- Since vaccine introduction:
  - Hospitalizations decline 84%
  - Cases decline 92%

VARICELLA VACCINE

- Live-weakened virus vaccine licensed in 1995
- 2 dose schedule introduced in 2006 → 12-15 months and 4-6 years
- Effectiveness
  
<table>
<thead>
<tr>
<th></th>
<th>1 dose</th>
<th>2 doses</th>
</tr>
</thead>
<tbody>
<tr>
<td>All disease</td>
<td>85%</td>
<td>98%</td>
</tr>
<tr>
<td>Severe disease</td>
<td>100%</td>
<td>100%</td>
</tr>
</tbody>
</table>
- Safety
  - Non-serious adverse events: rash, fever, injection site reactions

PNEUMOCOCCUS

- Bacteria that lives in nose and throat, especially in children (and contacts of children)
- Spread person-to-person through coughing and sneezing
- Can cause ear infections, pneumonia, bloodstream infections and meningitis

- All infants should receive 4 doses of pneumococcal vaccine at 2, 4, 6 months and 12-15 months
- Vaccinating infants also helps protect older adults ('herd' or community immunity)

HAEMOPHILUS INFLUENZA (HIB)

- Bacteria that colonizes nose and throat, especially in children (and contacts of children)
- Can cause ear infections, skin and joint infections, pneumonia, bloodstream infections and meningitis
- Infection now uncommon due to widespread vaccination
- All infants should receive 3 or 4 doses of Hib vaccine at 2, 4, 6 and 12-15 months old

POLIO AND POLIO VACCINES

- Photos courtesy of the Public Health Image Library: www.cdc.gov
**POLIOVIRUS**

- Virus: causes flu-like illness
- Some infections affect the brain and spinal cord resulting in meningitis or paralysis
- Lives in intestines and throat
- Generally spread through contact with infected stool
- People without symptoms can spread virus
- Continuing vaccination crucial to achieve eradication
- All infants need 3 doses inactivated polio vaccine (IPV): 2, 4 and 6-18 months with a booster at age 4 yrs.

**COMMON CONCERNS ABOUT VACCINES**

**AREN’T ALL THESE VACCINES TOO MUCH FOR AN INFANT’S IMMUNE SYSTEM?**

- Fewer antigens (part that stimulates the immune system) in vaccines today
- Infants’ immune system able to handle bacteria in the environment every day
- Study showing two shots are no more stressful for infants than one shot

**ARE VACCINE INGREDIENTS SAFE?**

- Vaccines have ingredients like preservatives and other additives needed to keep vaccines safe and effective
  - Example: Aluminum helps make vaccines work better
- Aluminum: heavy metal that is common in the environment and is common ingredient in many foods
- We all have small quantities of heavy metals in body → vaccines do not increase levels
- Use of all additives strictly regulated by FDA

**HOW CAN YOU BE SURE ALL OF THESE VACCINES ARE SAFE FOR CHILDREN?**

- Safety is a key part of vaccine development: Benefits need to clearly outweigh risks
- As with any medicine, there are potential side effects but are most commonly mild and go away on their own
- Vaccine schedule has not been associated with any long term side effects
- Every vaccine has precautions and contraindications for administration to make sure they can be given safely

**IF CHILDREN DON’T GET VACCINATED - ARE THESE DISEASES REALLY THAT BAD? ISN’T NATURAL EXPOSURE BETTER?**

- Choosing not to vaccinate always takes a risk
  - Some illnesses, risk is small, but not zero
  - Other illnesses, either common or highly contagious
  - Serious complications: cancer, hospitalization, death
- Immune response after natural infection is generally stronger than immunization BUT natural infection has a high price
- When a parent chooses not to get their child vaccinated, other children not able to be vaccinated are at risk
WHEN SHOULD CHILDREN NOT RECEIVE A VACCINE?

• ALL children who attend child care facilities are required to receive ALL routinely recommended vaccines
• Medical exemptions are allowed in all states for children who cannot safely receive required vaccines
  • Severe allergy to a previous vaccine dose or a vaccine ingredient
  • Weakened immune system (cancer)

IMMUNIZATION REQUIREMENTS AND COMMUNICABLE DISEASE OUTBREAKS IN CHILD CARE FACILITIES

Role of the Health Department

CHILD CARE REQUIREMENTS AND RECOMMENDATIONS

• Child care requirements are an important tool to ensure a safe and healthy community
• Emphasizes importance of all recommended vaccines
• Opportunity to review records to make sure children are up to date for all recommended vaccines
• Your guidance and support of requirements matter

SURVEILLANCE AND RESPONSE

Public health actions and services:
• Consultation
• Control measures for child care facilities
• Exclusion for children who are unvaccinated
• Coordinate prophylaxis (medicine, vaccine) as needed for children / staff who are exposed
• Audit immunization records
• Provide recommendations for communication with families

WHAT HAPPENS WHEN THERE IS A CASE OF...??
OUTBREAKS – WHO TO CALL?

For emergency health questions or reports of an outbreak in the Commonwealth of PA

Call

Department of Health
877-PA-HEALTH (877-724-3258)

Stay on the line – your call will be answered by an available agent.

ECELS Resources

Section 10: Health Plan

• Child and Staff Health Services
  1. Child Health Assessment
  2. Tracking and Updating Immunizations and Checkup Records

Section 11: Care of Children and Staff Members Who Are Acutely Ill or Injured

• Reporting Requirements
• Outbreaks of Disease

National Standards and Recommendations

Standard 7.2.0.1: Immunization Documentation

Caring for Our Children, 4th Ed. (CFOC)  Caring for Our Children Basics

https://nrckids.org/CFOC

ECELS Resources

Immunization Self-Learning Module (SLM)

http://ecels-healthychildcarepa.org/
Select Professional Development/Training > Self-Learning Modules

Learn about current nationally recommended immunizations, tools to manage immunization records and steps to take during outbreaks. 2 hours of PA Key professional development credit

Health Capsules

http://ecels-healthychildcarepa.org/
Select Publications > Health Capsules

• Brief, low – literacy articles
• Immunization topics

Time for a Polling Question

Does your program use child care management software to document health information?

WellCareTracker™

www.wellcaretracker.org

• Secure, online tool to check completeness of routine preventive health services
• WellCareTracker™ checks immunizations according to ACIP recommendations and health records
• Staff enter dates of immunizations and preventive health services. Reports can be generated – Useful for certification visits.
• Subscription fee is $1.50 per enrolled child per year and one-time set-up fee of $25.00 for two passwords
Questions and Comments

Wrap Up

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