Strategies for Increasing Childhood Vaccination Coverage Rates in Texas
Learning Objectives

• Review childhood and adolescent vaccination rates in Texas.
• Discuss the Standards for Pediatric Immunization Practices.
• Explain strategies to improve childhood vaccination coverage.
The Texas Department of State Health Services Immunization Unit is pleased to work with The Immunization Partnership to present these webinars to immunization coalitions and immunization partners throughout Texas. These webinars, along with resources available through www.ImmunizeTexas.com, work to ensure information and guidance are available to providers and the public.
Adolescent vaccination rates among 13 – 17 year olds

2015

- ≥ 1 dose of Tetanus/Diphtheria/Meningococcal
- ≥ 1 dose of HPV (female)
- ≥ 1 dose of HPV (male)
- Flu Vaccine

US National
Texas

Healthy People 2020 Objective Achieved

Sources: Centers for Disease Control and Prevention, National Immunization Survey, 2015
Centers for Disease Control and Prevention, FluVaxView, 2009-15 influenza seasons
Estimated deaths from pertussis, bacterial meningitis and selected HPV-associated cancers

Source: University of Texas MD Anderson Cancer Center, HPV Vaccine Uptake in Texas Pediatric Care Settings: 2014-2015 Environmental Scan Report
States with exemption for reasons of conscience from school vaccine requirements, 2016

Source: National Conference of State Legislatures^30
K-12th grade students with exemptions for reasons of conscience, Texas, 2003-2016

Source: Texas Department of State Health Services, Annual Report of Immunization Status, 2009-2016
POLL QUESTION

About how many K-12 students had an exemption for reason of conscience on file last school year?

a. 5,000
b. 10,000
c. 25,000
d. 45,000
POLL QUESTION

About how many K-12 students had an exemption for reason of conscience on file last school year?

a. 5,000
b. 10,000
c. 25,000
d. 45,000
Immunization status of Texas kindergartners, 2015-16

<table>
<thead>
<tr>
<th>Vaccine Category</th>
<th>Percent Completely Vaccinated</th>
<th>Reported Reasons for Lack of Completion by Vaccine Antigen</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td></td>
<td>Conscientious Exemptions</td>
</tr>
<tr>
<td>DTaP</td>
<td>97.4%</td>
<td>1.14%</td>
</tr>
<tr>
<td>Hepatitis A</td>
<td>97.2%</td>
<td>1.12%</td>
</tr>
<tr>
<td>Hepatitis B</td>
<td>98.1%</td>
<td>1.09%</td>
</tr>
<tr>
<td>MMR (2 doses)</td>
<td>97.6%</td>
<td>1.18%</td>
</tr>
<tr>
<td>Polio</td>
<td>97.6%</td>
<td>1.15%</td>
</tr>
<tr>
<td>Varicella (2 doses)</td>
<td>96.9%*</td>
<td>1.21%</td>
</tr>
</tbody>
</table>

*This percentage does not reflect 0.36% of Kindergarten students who met school entry requirements through proven history of varicella disease.

Source: Texas Department of State Health Services, 2015-2016 Annual Report of Immunization Status
# Immunization status of Texas 7th graders, 2015-16

<table>
<thead>
<tr>
<th>Vaccine Category</th>
<th>Percent Completely Vaccinated</th>
<th>Report Conscientious Exemptions</th>
<th>Report Medical Exemptions</th>
<th>Report Provisional Enrollment</th>
<th>Report Delinquent</th>
</tr>
</thead>
<tbody>
<tr>
<td>Hepatitis B</td>
<td>98.6%</td>
<td>0.55%</td>
<td>0.04%</td>
<td>0.31%</td>
<td>0.44%</td>
</tr>
<tr>
<td>Meningococcal</td>
<td>96.6%</td>
<td>0.80%</td>
<td>0.08%</td>
<td>0.32%</td>
<td>2.22%</td>
</tr>
<tr>
<td>MMR (2 doses)</td>
<td>98.7%</td>
<td>0.57%</td>
<td>0.06%</td>
<td>0.26%</td>
<td>0.39%</td>
</tr>
<tr>
<td>Polio</td>
<td>98.6%</td>
<td>0.58%</td>
<td>0.04%</td>
<td>0.32%</td>
<td>0.45%</td>
</tr>
<tr>
<td>Tdap/Td</td>
<td>96.9%</td>
<td>0.80%</td>
<td>0.10%</td>
<td>0.48%</td>
<td>1.75%</td>
</tr>
<tr>
<td>Varicella (2 doses)</td>
<td>96.1%*</td>
<td>0.67%</td>
<td>0.10%</td>
<td>0.38%</td>
<td>0.88%</td>
</tr>
</tbody>
</table>

*This percentage does not reflect 1.9% of 7th grade students who met school entry requirements through proven history of varicella disease.

Source: Texas Department of State Health Services, 2015-2016 Annual Report of Immunization Status
Percent of K-12 students with exemptions for reasons of conscience filed in Texas’ 25 most populous counties, 2015-2016

<table>
<thead>
<tr>
<th>County</th>
<th>2011-2012</th>
<th>2015-2016</th>
</tr>
</thead>
<tbody>
<tr>
<td>Travis County</td>
<td>1.53%</td>
<td>2.30%</td>
</tr>
<tr>
<td>Denton County</td>
<td>3.17%</td>
<td>2.05%</td>
</tr>
<tr>
<td>Hays County</td>
<td>0.83%</td>
<td>1.96%</td>
</tr>
<tr>
<td>Collin County</td>
<td>1.17%</td>
<td>1.92%</td>
</tr>
<tr>
<td>Williamson County</td>
<td>1.55%</td>
<td>1.83%</td>
</tr>
<tr>
<td>Montgomery County</td>
<td>1.06%</td>
<td>1.73%</td>
</tr>
<tr>
<td>Johnson County</td>
<td>0.70%</td>
<td>1.26%</td>
</tr>
<tr>
<td>Lubbock County</td>
<td>0.59%</td>
<td>1.11%</td>
</tr>
<tr>
<td>Tarrant County</td>
<td>0.79%</td>
<td>1.10%</td>
</tr>
<tr>
<td>El Paso County</td>
<td>0.57%</td>
<td>0.99%</td>
</tr>
</tbody>
</table>
Percent of K-12 students with exemptions for reasons of conscience filed in Texas’ 25 most populous counties, 2015-2016 (continued)

<table>
<thead>
<tr>
<th>County</th>
<th>2015</th>
<th>2016</th>
</tr>
</thead>
<tbody>
<tr>
<td>Galveston County</td>
<td>0.69%</td>
<td>0.99%</td>
</tr>
<tr>
<td>Smith County</td>
<td>0.61%</td>
<td>0.92%</td>
</tr>
<tr>
<td>Brazoria County</td>
<td>0.43%</td>
<td>0.80%</td>
</tr>
<tr>
<td>Brazos County</td>
<td>0.38%</td>
<td>0.76%</td>
</tr>
<tr>
<td>Bell County</td>
<td>0.37%</td>
<td>0.71%</td>
</tr>
<tr>
<td>Bexar County</td>
<td>0.32%</td>
<td>0.67%</td>
</tr>
<tr>
<td>Harris County</td>
<td>0.39%</td>
<td>0.62%</td>
</tr>
<tr>
<td>Dallas County</td>
<td>0.35%</td>
<td>0.60%</td>
</tr>
<tr>
<td>Jefferson County</td>
<td>0.19%</td>
<td>0.53%</td>
</tr>
<tr>
<td>Nueces County</td>
<td>0.25%</td>
<td>0.52%</td>
</tr>
<tr>
<td>Fort Bend County</td>
<td>0.39%</td>
<td>0.45%</td>
</tr>
<tr>
<td>McLennnan County</td>
<td>0.27%</td>
<td>0.42%</td>
</tr>
<tr>
<td>Cameron County</td>
<td>0.08%</td>
<td>0.12%</td>
</tr>
<tr>
<td>Hidalgo County</td>
<td>0.05%</td>
<td>0.10%</td>
</tr>
<tr>
<td>Webb County</td>
<td>0.04%</td>
<td>0.08%</td>
</tr>
</tbody>
</table>
Standards for Pediatric Immunization Practices

• Created by National Vaccine Advisory Committee (NVAC)
• 18 standards aimed at improving immunization practices in healthcare settings

A Time for Action, 2016 Report

- Biennial report by The Immunization Partnership
- Provides recommendations for education, interventions and policies to increase vaccination rates in Texas
- Based on statewide survey, stakeholder “town hall” meetings and literature review
Standard 1: Immunization services are readily available.

- Keep an adequate stock of vaccines on hand
- Times immunization services are provided should be in keeping with the schedules of today's parents
- Integrating immunization services into days and hours when other child health services, such as the Special Supplemental Food Program for Women, Infants, and Children (WIC) are offered
Standard 2: No barriers or unnecessary prerequisites to the receipt of vaccines exist.

- Immunization services should be available on a walk-in basis at all times for both routine and new patient visits.
- Waiting time should be minimized (not to exceed 30 min).
- Children coming only for vaccinations should be rapidly and efficiently screened without requiring other comprehensive health services.
- Standing orders should be developed and implemented.
Standing Orders

• Gives non-physician healthcare personnel (ex. physician assistants, nurses and medical assistants) directive to administer vaccines without a prescription to eligible patients
Standard 3: Immunization services are available free or for a minimal fee.

- No child should miss immunizations because the parents cannot afford the fee.
POLL QUESTION
Children can be vaccinated even if they have a mild illness, such as an ear infection or low-grade fever.

a. True
b. False
c. I’m not sure.
POLL QUESTION

Children can be vaccinated even if they have a mild illness, such as an ear infection or low-grade fever.

a. True
b. False
c. I’m not sure.
Standard 4: Providers utilize all clinical encounters to screen and, when indicated, immunize children.

- Each encounter with a healthcare provider, including ER and specialty visits, is an opportunity to screen vaccination status and, if indicated, administer needed vaccines.
- Children accompanying parents or siblings who are seeking any service should also be screened and, when indicated, should be administered needed vaccines.

*Make every visit a vaccination visit.*
Standard 5: Providers educate parents and guardians about immunization in general terms.

• Providers should educate parents in a culturally sensitive way about:
  – importance of immunizations
  – diseases they prevent
  – recommended vaccination schedules
  – need to receive vaccinations at recommended ages
  – importance of bringing their child's immunization record to each visit.
Standard 6: Providers question parents or guardians about contraindications and inform them in specific terms about the risks and benefits of the immunizations their child is to receive before immunizing a child.

- Providers should ...
  - ask questions to elicit a possible history of adverse events following prior immunizations
  - determine any existing precautions or contraindications
  - explain where and how to obtain medical care during both day and evening hours in case of an adverse event following vaccination
- Vaccine Information Statements (VIS sheets) should always be provided any time a vaccine is administered
Standard 7: Providers follow only true contraindications.

- Accepting conditions that are not true contraindications often results in the needless deferment of indicated immunizations.
  - Based on the recommendations of the ACIP and the Red Book Committee of the AAP
  - These recommendations may vary from those contained in the manufacturer's package inserts.
Standard 8: Providers administer simultaneously all vaccine doses for which a child is eligible at the time of each visit.

- Simultaneous administration of childhood vaccinations is safe and effective.
- Simultaneous administration of multiple needed vaccines can potentially raise immunization coverage by 9%-17%.
- If not all vaccines are administered, document why and flag the patient for recall.
Standard 9: Providers use accurate and complete recording procedures.

- Providers are required by statute to record what vaccine was administered, the date of administration (month, day, year), the name of the manufacturer of the vaccine, the lot number, the signature and title of the person who administered the vaccine, and the address where the vaccine was administered.

- Vaccine doses should be documented:
  - in the patient’s clinical record
  - in the patient’s personal copy of their shot record
  - in the Texas immunization registry
Immunization Information Systems

- Texas uses a statewide immunization registry
- More should be done to encourage full participation for both children and adolescents

![Graph showing percentage of children and adolescents with two or more immunizations recorded in the statewide immunization registry from 2012 to 2015. The graph includes bars for children 4 months – 5 years and adolescents 11 – 17 years.]

Source: Centers for Disease Control and Prevention, IIS Annual Report, 2012-2015
Standard 10: Providers co-schedule immunization appointments in conjunction with appointments for other child health services.

- Co-schedule immunization appointments with other needed health-care services such as WIC, dental examinations, or developmental screening, provided such scheduling does not create a barrier by delaying needed immunizations.
Standard 11: Providers report adverse events following vaccination promptly, accurately, and completely.

- Record the event fully in the medical record and promptly report any such events that are clinically significant to the national Vaccine Adverse Event Reporting System (VAERS), regardless of whether the event is believed to be related to the vaccine.
  - https://vaers.hhs.gov/index
Standard 12: Providers operate a tracking system.

- A tracking system should generate clinical reminders of upcoming immunizations as well as recalls for children who are overdue for their vaccinations.
Reminder/Recall

- Identify and contact patients who have upcoming vaccine doses (reminder) or have missed doses (recall)
Standard 13: Providers adhere to appropriate procedures for vaccine management.

- Handle and store vaccines as recommended in the manufacturer's package inserts.
- Record vaccine fridge and freezer temperatures.
- Note expiration dates.
Standard 14: Providers conduct semi-annual audits to assess immunization coverage levels and to review immunization records in the patient populations they serve.

• Include audits of immunization records or inspection of a random sample of records
  – determine the immunization coverage level (i.e., % of 2-year-old children who are up to date)
  – identify how frequently opportunities for simultaneous immunization are missed
  – assess the quality of documentation.
• Discuss results as part of ongoing quality assurance reviews and to develop solutions to the problems identified.
POLL QUESTION

Simply letting providers know what vaccination rates are in their clinic and recommendations for improving them can raise immunization coverage.

a. True  
b. False  
c. I’m not sure.
POLL QUESTION

Simply letting providers know what vaccination rates are in their clinic and recommendations for improving them can raise immunization coverage.

a. True
b. False
c. I’m not sure.
Provider Assessment and Feedback

- AFIX
  - Assessment
  - Feedback
  - Incentives
  - eXchange
- Alerts providers of how they are doing and what they can do better
- PROS: Identifies gaps so that they can be addressed
1. **Assessment** of the healthcare provider's vaccination coverage levels and immunization practices.
2. **Feedback** of results to the provider along with recommended quality improvement strategies to improve processes, immunization practices, and coverage levels.
3. **Incentives** to recognize and reward improved performance.
4. **eXchange** of information with providers to follow up on their progress towards quality improvement in immunization services and improvement in immunization coverage levels.

Source: Centers for Disease Control and Prevention, https://www.cdc.gov/vaccines/programs/afix/
Standard 15: Providers maintain up-to-date, easily retrievable medical protocols at all locations where vaccines are administered.

- Maintain a protocol which, at a minimum, discusses:
  - appropriate vaccine dosage, vaccine contraindications, and the recommended sites and techniques for vaccine administration, as well as possible adverse events and their emergency management.
- Outlined in standing orders

• Routinely seek the input of their patients on specific approaches to better serve their immunization needs and implement the changes necessary to provide more user-friendly services.
• Adopt a community-based approach to the provision of immunization services that recommends reaching high coverage levels in catchment area populations and not only in the active patient populations.
Standard 17: Vaccines are administered by properly trained persons.

- Only properly trained persons should administer vaccines.
  - Though not necessarily exclusively to physicians and nurses.
Standard 18: Providers receive ongoing education and training regarding current immunization recommendations.

- All persons involved in the administration of vaccines, management of immunization clinics, or the support of these functions should receive training on:
  - current guidelines and recommendations of the ACIP, AAP, and the AAFP
  - Standards for Pediatric Immunization Practices and other immunization information sources, such as the manufacturer's package inserts.
  - Healthy People 2020 Goals
Questions?

Please feel free to contact:

Katy Gore, MPH
Coalitions and Education Program Manager
kgore@immunizeUSA.org
(281) 769-3087
Thank you!