



Reducing Vaccine-Preventable Disease in Texas: Strategies to Increase Vaccine Coverage Levels

**As Required By
Texas Health and Safety Code, Chapter 161:
Sections 161.0041, 161.0074, and 161.00706**



**Department of State Health Services
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Executive Summary

In accordance with the Texas Health and Safety Code, Chapter 161: Sections 161.0041, 161.0074, and 161.00706, the *Report on Reducing Vaccine-Preventable Disease in Texas: Strategies to Increase Vaccine Coverage Levels* is presented to the Governor, the Lieutenant Governor, the Speaker of the House of Representatives, the Legislative Budget Board, and the appropriate committees of the Texas Legislature.

The Department of State Health Services is charged by Texas Health and Safety Code, Chapter 81, to prevent and control disease in the state through communicable disease programs. This charge includes setting immunization requirements, providing health education about preventing disease, and keeping record of reportable diseases to track trends and identify outbreaks. Immunization is the surest way to avoid preventable diseases like measles, mumps, pertussis, and rubella. Texas has made progress over the last year in increasing vaccine coverage for these preventable diseases; however, room for improvement is evident. In 2013, Texas experienced the highest number of pertussis cases since 1959 with over 3,900 cases; this is an incidence rate of 14.8 cases per 100,000 population. A measles outbreak also occurred in North Texas in 2013. Each of these diseases is preventable through vaccination.

In the 2013 National Immunization Survey – Child, the vaccination coverage level for the 4:3:1:3:3:1:4¹ combination series was 72.5 percent for children 19-35 months of age, an increase of 7.7 percent from 2012. Texas is above the national vaccination coverage level of 70.4 percent. In comparison to other states, Texas ranked 18th in the nation for the 4:3:1:3:3:1:4 combination series.

The National Immunization Survey – Teen, estimates vaccination coverage levels for adolescents, 13 – 17 years old, for Tdap, meningococcal vaccine, and HPV vaccine. Texas increased in coverage for all three types of vaccine between 2012 and 2013, but is below the U.S. average for both female and male adolescents.

Despite these increases, the percentage and number of students with a conscientious exemption has increased every year in Texas since 2003. In the 2013-14 school year, the percent of students enrolled in Texas schools with a conscientious exemption on file was 0.76 percent.

In an effort to increase vaccination coverage levels, the Texas Department of State Health Services (DSHS) is promoting the medical home; promoting the use of ImmTrac, the statewide immunization registry and disaster preparedness tracking and reporting system; advancing the use of reminder and recall systems; providing more immunization-related education to providers and the general public; and encouraging stakeholder partnerships. These strategies have been proven to increase vaccination coverage levels and are the foundation for immunization programs nationwide.

¹ The 4:3:1:3:3:1:4 vaccination combination series includes four doses of diphtheria/tetanus/pertussis vaccine, three doses of polio vaccine, one dose of measles/mumps/rubella vaccine, three or four doses of Hib vaccine, three doses of hepatitis B vaccine, one dose of varicella vaccine, and four doses of pneumococcal conjugate vaccine.

DSHS contracts with local health departments (LHDs) throughout Texas to provide immunization services in their jurisdictions. In 2012, DSHS awarded \$15.5 million in federal and state General Revenue funding to 50 LHDs, including four LHDs in counties along the Texas-Mexico border. These 50 LHDs are required to implement immunization programs for children and adolescents under 19 years of age as well as for adults, with an emphasis on children under three years of age. LHD immunization programs provide education to the public; investigate reported vaccine-preventable diseases; promote the state immunization registry; and ensure access to immunizations, preferably through a medical home.

While progress is being made in Texas, the number of vaccine-preventable disease outbreaks in 2013 stresses the importance of the work undertaken by DSHS and its partners to ensure that individuals and communities are protected from vaccine-preventable diseases.

Introduction

The 78th Legislature adopted legislation, codified as Section 161.0074, Texas Health and Safety Code, which requires DSHS to submit a report by September 30th of each even-numbered year to the Governor, the Lieutenant Governor, the Speaker of the House of Representatives, the Legislative Budget Board, and the appropriate committees of the Texas Legislature.

DSHS, as required by the statute, must develop and report on ways to increase immunization rates using state and federal resources. Pursuant to Section 161.0074 of the Texas Health and Safety Code, the report must:

1. Include the current immunization rates by geographic region of the state, where available;
2. Focus on the geographic regions of the state with immunization rates below the state average for preschool children;
3. Describe the approaches identified to increase immunization rates in underserved areas and the estimated cost for each;
4. Identify changes to department procedures needed to increase immunization rates;
5. Identify the services provided under, and provisions of, contracts entered into by the department to increase immunization rates in underserved areas;
6. Identify performance measures used in contracts to increase immunization rates in underserved areas;
7. Include the number and type of exemptions used in the past year;
8. Include the number of complaints received by the department related to the department's failure to comply with requests for exclusion of individuals from the registry;
9. Identify all reported incidents of discrimination for requesting exclusion from the registry or for using an exemption for a required immunization;
10. Include department recommendations about the best way to use, and communicate with, local registries in the state; and
11. Include ways to increase provider participation in the registry.

Under the provisions of Section 161.00705(h) of the Texas Health and Safety Code, the report must include the number of complaints received by DSHS for failure to remove records for which consent to retain has not been received at the expiration of a disaster or emergency, pursuant to Section 161.0705(f). Under the provisions of Section 161.00706(f), the report must also include complaints received by DSHS for failure to comply with a written or electronic request under Section 161.00706(e), which governs requests submitted by a first responder for the removal of records from the immunization registry.

Background

Vaccines are widely recognized as one of the top ten public health successes of the 20th century, as reported by the Centers for Disease Control and Prevention (CDC). Diseases like measles, mumps, rubella, diphtheria, and polio were once widespread. Today, vaccine-preventable diseases are relatively rare in the United States due to concerted efforts to vaccinate the public. Yet, every year people in Texas die from vaccine-preventable diseases or suffer from their complications.

A highly vaccinated population reduces the incidence of disease and safeguards Texans' health. DSHS has worked with stakeholders in the statewide immunization system² to implement strategies that improve vaccine coverage levels in children.

In 2013, Texas experienced the highest number of pertussis cases since 1959 with over 3,900 cases; this is an incidence rate of 14.8 cases per 100,000 population. The number of cases is reflective of an ongoing national pertussis resurgence, with the United States reporting the highest number of pertussis cases in over 50 years. Additionally, a measles outbreak occurred in the North Texas area. Out of the 27 cases of measles reported by Texas in 2013, 21 cases reported were part of the outbreak.

The number of vaccine-preventable disease outbreaks stresses the continued importance of the work undertaken by the Immunization Branch and its partners to ensure that individuals and communities are protected from vaccine-preventable diseases.

Immunization Coverage Rates

National Immunization Survey – Child

The National Immunization Survey (NIS) is a large, ongoing, random-digit-dialed cellular and landline telephone survey conducted by the CDC to assess vaccine coverage levels among children 19 months through 35 months of age. Phone surveys are followed by a mailed survey to the child's vaccination provider to collect provider-confirmed vaccination information. The NIS provides national and state estimates of vaccination coverage and tracks progress toward Healthy People 2020 goals.

The NIS consists of a nationwide sample size of approximately 13,600 children. The target sample size for Texas in 2013 was approximately 1,045. Estimates of vaccine coverage levels are calculated for the United States as a whole, for each state, and for selected urban areas. In 2012 the selected urban areas in Texas included Bexar and El Paso counties, as well as the City of Houston. In late summer or early fall, the previous year's results are released. The most recent NIS report reflects the results of the 2013 survey and was released in September 2014.

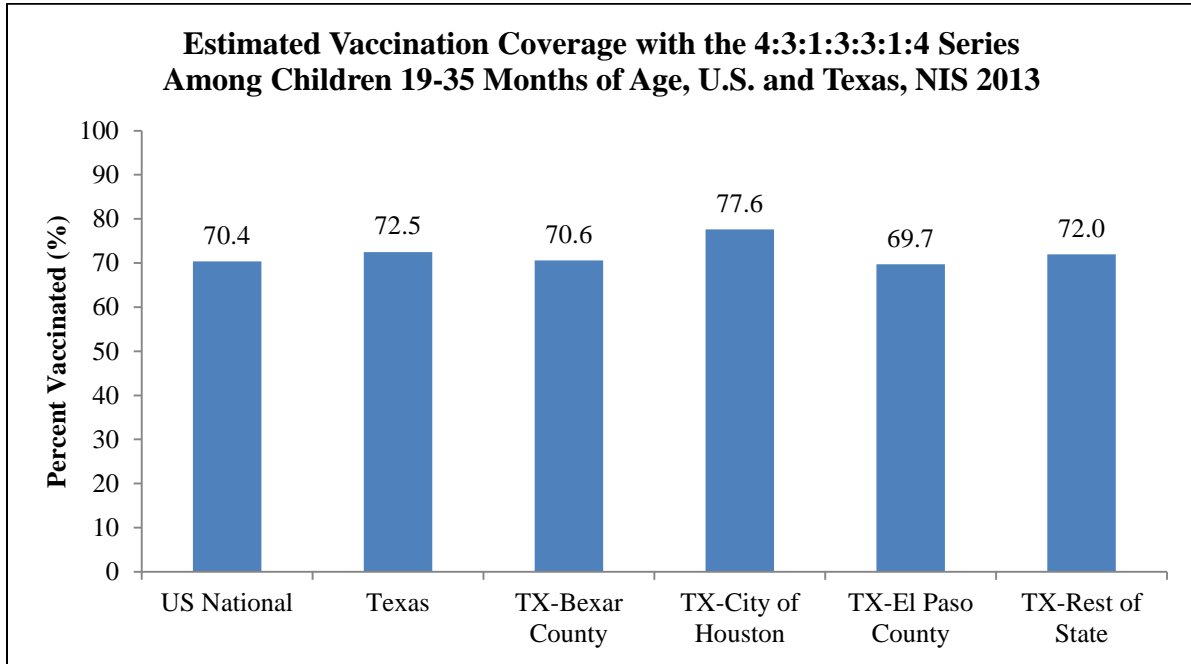
Children measured in the 2013 NIS were born between January 2010 and May 2012 and reflect a measurement of the effectiveness of strategies and activities that were in place up to three years ago.

Graph 1 shows 2013 national, Texas, and local vaccination coverage rates for children receiving the 4:3:1:3:3:1:4 combination series, which includes four doses of diphtheria/tetanus/pertussis vaccine, three doses of polio vaccine, one dose of measles/mumps/rubella vaccine, three or four doses of Hib vaccine, three doses of hepatitis B vaccine, one dose of varicella vaccine, and four doses of pneumococcal conjugate vaccine. The Texas coverage rate was 72.5 percent, 2.1

² The Texas immunization system is a complex partnership that integrates federal agencies and programs, state and local governments, schools, health-care providers, employers, insurers and health plans, vaccine manufacturers, and others in the private sector.

percentage points above the national average of 70.4 percent. Graph 2 provides a historical perspective of coverage in Texas for the combination series.

Graph 1. Texas Vaccine Coverage Levels among Children 19-35 Months of Age, National Immunization Survey, 2013.



Graph 2. Estimated Vaccination Coverage among Children 19-35 Months of Age, U.S. and Texas, National Immunization Survey, 2013.

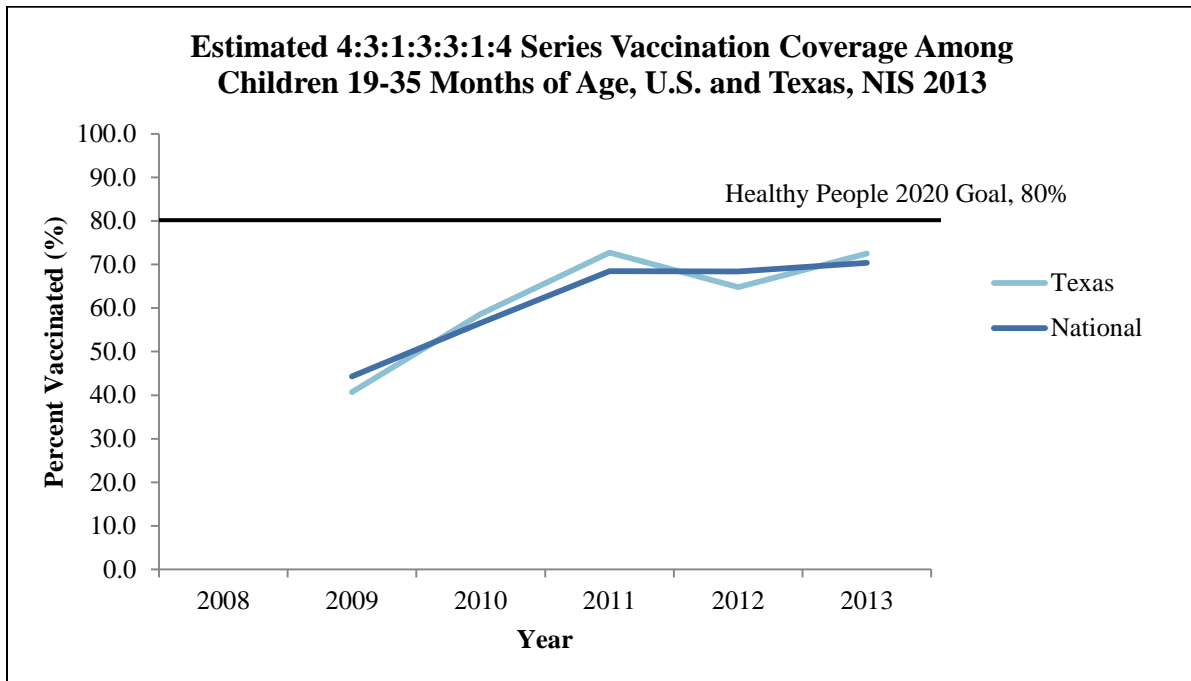


Table 1 provides the vaccine coverage levels among Texas children 19-35 months of age by selected vaccines for the United States, Texas, Bexar County, City of Houston, El Paso County, and the rest of the state.

Table 1. Vaccine Coverage Levels among Texas Children 19-35 Months of Age by Selected Vaccines, National Immunization Survey, 2013.

Vaccine	U.S.	TX	Bexar County	City of Houston	El Paso County	Rest of State
Hepatitis A	83.1%	90.1%	87.8%	91.5%	93.3%	90.0%
Hepatitis B	90.8%	89.5%	90.8%	93.9%	87.3%	88.8%
Hepatitis B Birth Dose	74.2%	81.8%	73.0%	83.2%	74.5%	82.7%
Haemophilus influenzae type B	82.0%	82.1%	79.3%	84.5%	79.6%	82.1%
Diphtheria, Tetanus, and Pertussis	83.1%	81.5%	79.4%	85.0%	76.7%	81.4%
Pneumococcal Conjugate (PCV)	82.0%	82.8%	81.5%	85.4%	82.3%	82.6%
Varicella	91.2%	93.6%	92.3%	92.7%	94.0%	93.9%
3+ Polio	92.7%	91.3%	92.6%	94.7%	88.6%	90.7%
1+ Measles, Mumps, Rubella	91.9%	92.7%	93.0%	92.4%	93.7%	92.7%
4:3:1:3:3:1:4	70.4%	72.5%	70.6%	77.6%	69.7%	72.0%

National Immunization Survey – Teen

The NIS-Teen is a national survey conducted annually by the CDC to assess immunization levels for adolescents 13-17 years of age. This study collects data by interviewing households in all 50 States, the District of Columbia, and selected areas for oversampling. The interviews are conducted by telephone, with households selected at random. To assure the accuracy and precision of the vaccination coverage estimates, immunization data for surveyed adolescents are also collected through a mail survey of their pediatricians, family physicians, and other health care providers. The parents and guardians of eligible adolescents are asked during the telephone interview for consent to contact the adolescents' vaccination providers. Types of immunizations, dates of administration, and additional data about facility characteristics are requested from immunization providers that are identified during the telephone survey of households. The NIS-Teen's estimates of adolescent vaccination coverage reflect a comparison of information provided by both surveyed households and immunization providers.

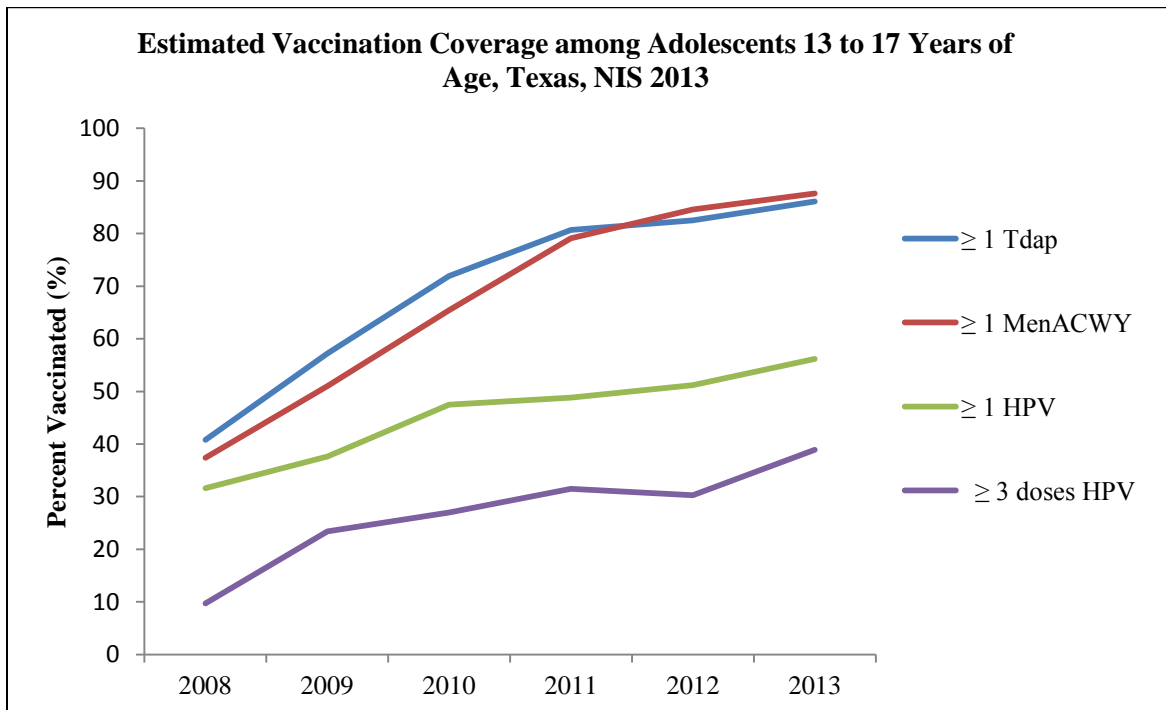
The survey assessed the immunization histories of 18,264 adolescents (9,554 males and 8,710 females) aged 13-17 years in the U.S. These adolescents were born between January 1995 and February 2001. In Texas, 1,112 adolescents were surveyed for the 2013 NIS-Teen. In 2013, the selected urban areas in Texas included Bexar County, City of Houston, and the rest of the state.

Table 2 shows 2013 national and Texas coverage rates for adolescents receiving the HPV, Tdap, and meningococcal vaccines, and compares 2012 NIS-Teen results to 2013 NIS-Teen results.

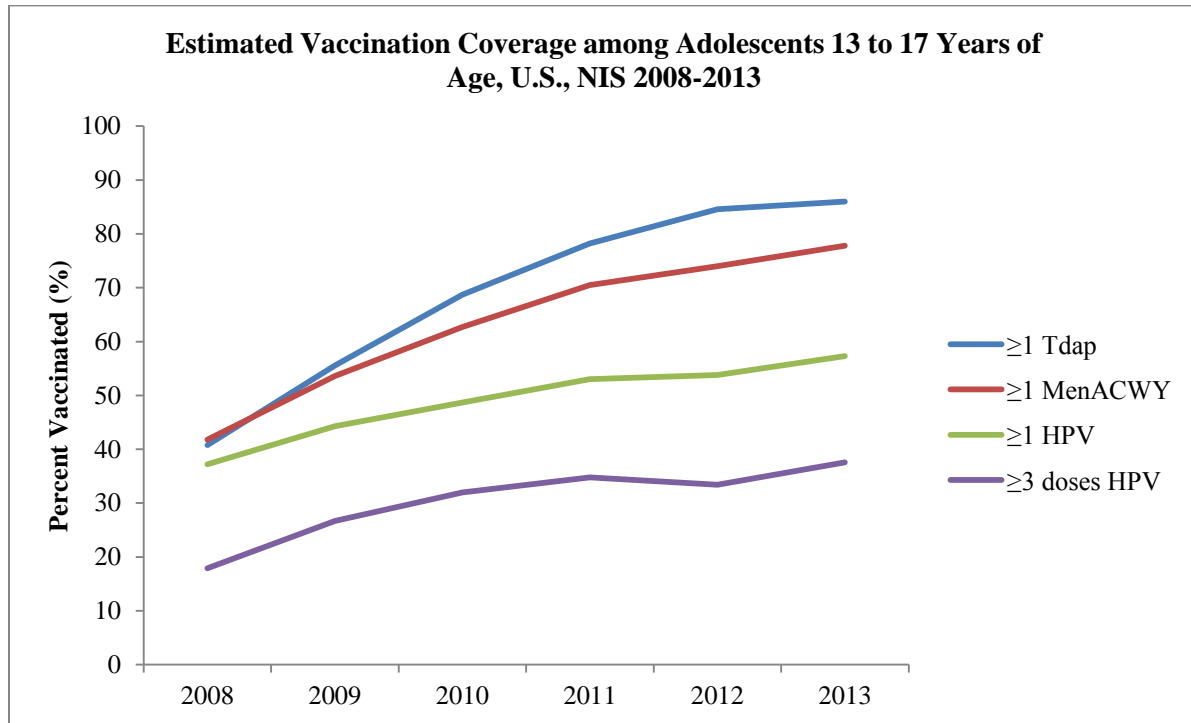
Table 2. Vaccine Coverage Levels among Texas Adolescents 13-17 Years of age by Selected Vaccines, National Immunization Survey-Teen, 2013.

Vaccine	Texas 2012	Texas 2013	U.S. National Average 2013
1+ dose Tdap	82.5%	86.1%	86.0%
1+ dose MenACWY	84.6%	87.6%	77.8%
1+ dose HPV vaccine, Females	51.2%	56.2%	57.3%
1+ dose HPV vaccine, Males	24.0%	34.1%	34.6%
3+ doses HPV vaccine, Females	30.3%	38.9%	37.6%

Graph 3. Estimated Vaccination Coverage among Adolescents 13 to 17 Years of Age, Texas, National Immunization Survey, 2013.



Graph 4. Estimated Vaccination Coverage among Adolescents 13 to 17 Years of Age, U.S., National Immunization Survey, 2013.



Approaches to Increase Immunization Rates

Texas continuously attempts to identify gaps in the statewide immunization system and proactively implements changes to mitigate those gaps. The Texas Immunization Stakeholder Working Group (TISWG) brings all facets of the immunization system together to dialogue about needs and successes throughout the state. Input from TISWG and collaboration with other partners enables DSHS to overcome barriers and gaps.

DSHS identified and continues to work to achieve the following strategic goals:

- Raise and sustain vaccine coverage levels for infants and children;
- Improve adolescent vaccine coverage levels;
- Improve adult vaccine coverage levels;
- Prevent and reduce cases of vaccine-preventable diseases;
- Maintain and improve public health preparedness;
- Promote and practice the safe handling and administration of vaccines and ensure the accountability and integrity of all program components.

Additionally, DSHS has adopted and promotes proven strategies according to the CDC, the Advisory Committee on Immunization Practices (ACIP)³, and Texas state leadership:

- Promote the medical home;
- Promote the use of the Statewide Immunization Registry and Disaster Preparedness Tracking and Reporting System, known as ImmTrac;
- Advance the use of Reminder and Recall Systems;
- Educate providers;
- Expand public/parent education; and
- Encourage public/private partnerships among stakeholders.

Addressing Needs of Underserved Areas

Children who are uninsured, underinsured, lack a medical home, or live in rural areas of Texas or along the Texas-Mexico border are traditionally underserved medically and in terms of providers. While DSHS programs emphasize the importance of a medical home, underserved areas often require additional services.

DSHS actively seeks to enroll federally qualified health centers and rural health clinics as healthcare providers in the Texas Vaccines for Children (TVFC)⁴ and Adult Safety Net (ASN)⁵ programs. Federally Qualified Health Centers and Rural Health Clinics mitigate barriers to medical care by offering immunization services outside usual clinic hours and by using reminder/recall systems to notify families of due or past due immunizations.

Additionally, DSHS actively recruits providers in the counties along the Texas-Mexico border. More than 456 private provider clinic sites in border counties are enrolled in the TVFC program. TVFC providers in the counties along the Texas-Mexico border administer approximately 1.8 million doses of vaccine each year.

DSHS also has long-standing relationships with public health agencies in counties along the Texas-Mexico border. Contracts provide funding to LHDs along the border to: promote TVFC and ImmTrac; administer vaccines; promote immunizations; conduct vaccine-preventable disease surveillance; assess vaccine coverage levels at the clinic level; and apply principles of epidemiology and outbreak control measures. In 2013, DSHS provided over \$2 million in state and federal funds to four contracted LHDs in border counties:

- City of El Paso Department of Public Health
- City of Laredo Health Department
- Hidalgo County Health Department

³ The Advisory Committee on Immunization Practices (ACIP) is a federally-appointed group of medical and public health experts that develops recommendations on how to use vaccines to control diseases in the United States. Additional information can be found at <http://www.cdc.gov/vaccines/acip/about.html>.

⁴ The TVFC program provides vaccines at no cost to physicians to vaccinate eligible children. Further information on the TVFC program can be found at http://www.dshs.state.tx.us/immunize/tvfc/tvfc_about.shtm.

⁵ The ASN program provides vaccines at no cost to physicians to vaccinate uninsured adults. Further information on the ASN program can be found at <http://www.dshs.state.tx.us/asn/>.

- Cameron County Department of Health and Human Services

These LHDs implement immunization programs for children and adolescents under 19 years of age and adults, with a special emphasis on children under three years of age, to eliminate barriers to immunizing children on schedule, expand vaccine delivery, and establish uniform immunization policies.

The Immunization Branch also works with CHIP to ensure that CHIP providers have access to low-cost vaccines for their participants. Through an Interagency Cooperative Contract between the Texas Health and Human Services Commission (HHSC) and DSHS, children receive vaccines at a lower cost to taxpayers by taking advantage of federal vaccine contract prices.

Contracts with Local Health Departments

The statewide effort to increase vaccine coverage levels and implement strategies to increase immunization coverage rates is reflected by state and federal funds allocated to LHDs across Texas. In 2013, DSHS provided \$15.5 million in state general revenue and federal funds to 50 LHDs to provide essential immunization services.

LHDs are required to implement the following activities to help increase immunization coverage levels:

- Incorporate systematic approaches designed to eliminate barriers and expand immunization delivery, including: partnerships, registry, reminder/recall, provider and public education, and the use of the medical home.
- Establish and maintain partnerships with community-based organizations and local human service agencies to promote best practices and activities that will increase vaccination coverage levels.
- Implement an immunization program for children, adolescents, and adults, with special emphasis on accelerating interventions to improve vaccine coverage levels of children less than 36 months of age.
- Use practices that encourage parents to use the medical home for vaccinations.
- Inform and educate the public about vaccines and vaccine-preventable diseases.
- Recruit and enroll providers into TVFC and perform follow-up visits when deficiencies are identified by the quality assurance contractor.
- Conduct immunization assessments or surveys in child-care facilities and registered family homes.
- Complete annual assessments in sub-contracted entities and clinics.

- Ensure a healthcare workforce that is knowledgeable about vaccines, vaccine-preventable diseases, and delivery of vaccination services.
- Promote ImmTrac use in public clinics and private provider offices to increase the number of children, adolescents, and adults participating in the registry and registered provider sites.
- Make use of reminder/recall systems to notify parents or guardians of children less than 36 months of age when immunizations are due or past due.
- Refer children to Medicaid and/or CHIP and assist families to identify medical homes by providing necessary resources.
- Report all vaccine adverse event occurrences in accordance with the National Childhood Vaccine Injury Act of 1986.
- Investigate all reported vaccine-preventable diseases.
- Provide immunization services and ACIP-recommended vaccines in LHD clinics to children, adolescents, and adults to maximize vaccine-coverage levels within each LHD's jurisdiction.

To ensure that contracted LHDs use proven national strategies, a standardized work plan⁶ is in place and is updated annually. In addition, the LHDs are provided with a current Contractor's Guide⁷, which explains the requirements and offers best practices to incorporate the nationally proven strategies. DSHS Health Service Region (HSR) immunization program managers provide training to LHD staff on each of these contractual pieces. In areas of the state where no LHD exists, HSRs provide the functions of an LHD.

As a way to improve immunization contracts, a comprehensive contract monitoring system was implemented in Fiscal Year 2009. Each LHD is on a monitoring schedule requiring an on-site evaluation by DSHS HSRs and contract management staff every two years. Findings from the on-site review prompt the creation of corrective action plans, which are closely monitored for implementation progress. The monitoring system has helped DSHS ensure contract compliance, oversee vaccine inventory, and identify opportunities to improve contracting processes by learning and sharing best practices among LHDs. DSHS shares these current best practices to improve immunization coverage rates within the jurisdictions of all contracted LHDs.

Conscientious Exemptions

A conscientious exemption is a type of exemption from vaccine requirements for entry to a school or child-care facility due to reasons of conscience, including religious beliefs. Texas began allowing exemptions from immunizations based on reasons of conscience, including

⁶ The FY 2015 ILA Immunization Contract work plan can be found at:http://www.dshs.state.tx.us/immunize/docs/contractor/E11-13986_FY2015_ILAWorkPlan.pdf.

⁷ The FY 2015 DSHS Immunization Contractors Guide For Local Health Departments can be found at: http://www.dshs.state.tx.us/immunize/docs/contractor/EF11-14094_FY2015_StatementofWork.pdf.

religious beliefs, on September 1, 2003, in accordance with Texas Health and Safety Code, Section 161.0041.

- Parents or guardians may request a conscientious exemption affidavit form in writing or via the DSHS website.
- Parents or guardians can request up to five conscientious exemption affidavit forms per child.
- Requests for conscientious exemption affidavit forms are submitted to DSHS. Once the request has been processed, DSHS then returns the original request and the conscientious exemption affidavit forms to parents or guardians via United States Postal Service, first class mail.
- After the original conscientious exemption affidavit form is signed and notarized, it must be submitted to the child's school or child-care facility.
- Each individual conscientious exemption affidavit is valid for two years from the date notarized.

DSHS is required, per Texas Health and Safety Code, Section 161.0041, to make an annual report to the Legislature on the number of requests for conscientious exemptions received. DSHS tracks information about conscientious exemptions using two methods: tracking the number of affidavit forms for conscientious exemption and tracking the number of conscientious exemptions reported by schools via the *Texas Annual Report of Immunization Status*. The Texas Health and Safety Code, Section 161.0041, prohibits DSHS from maintaining a list of individuals who request affidavits.

DSHS monitors compliance with immunization requirements via the *Texas Annual Report of Immunization Status*, as mandated by the Texas Education Code, Section 38.002. All accredited elementary and secondary schools in Texas, public and private, submit an annual report of immunization status to DSHS. Data from these reports are used to calculate an approximate number of conscientious exemption affidavit forms submitted to these schools.

Data are self-reported and provide an aggregate number of conscientious exemptions on file. No reports of incidences of discrimination for using an exemption have been reported since 2004.

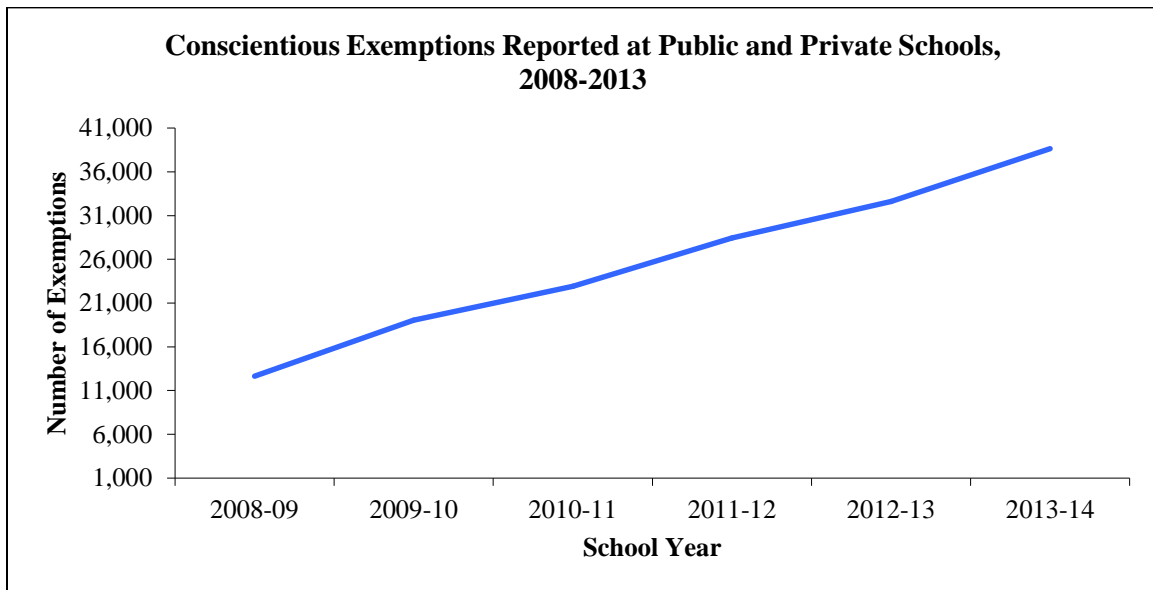
Table 3 describes the numbers of affidavits mailed, number of requests received, and number of individuals for whom forms were requested. Graph 5 shows the number of conscientious exemptions that are filed at public and private schools for grades kindergarten through 12th grade.

Table 3. Data on Requests Received for Conscientious Exemptions, FY 2012 – FY 2013.

Data Collected	FY 2012 (09/01/11- 08/31/12)	FY 2013 (09/01/12 – 08/31/13)	FY 2013 (09/01/13 – 08/31/14)
Number of Affidavits Mailed (The number of <i>forms</i> requested each year. Up to five affidavit forms per individual are allowed if requested.)	60,034	105,015	113,959
Number of Request Letters Received (The individual request letters received by the department each year. A request letter may list more than one child for whom an affidavit form is needed.)	20,675	29,037	29,888
Number of Individuals (The actual number of individuals for whom 1-5 affidavit forms have been mailed each year. This number differs from the number of affidavits mailed, since up to five forms per individual may be requested and mailed.)	27,682	44,291	46,795
Number meningococcal exemptions processed through the web portal supporting the Internet-based process for public junior and community college students	N/A	N/A	46,906 ⁸

⁸ The number of exemptions reported differs from that reported in the Report on Internet-based Meningococcal Exemption Request for Public Junior and Community Colleges – School Year 2013-2014 as it includes exemptions processed during the entire 2014 Fiscal Year.

Graph 5. Number of Conscientious Exemptions filed at Public and Private Schools, 2008-2013



Based on information in the *Texas Annual Report of Immunization Status*, the number and percentage of children that have a conscientious exemption has increased every year since conscientious exemptions were allowed in 2003. In the 2013-14 school year, the percent of students enrolled in Texas schools with a conscientious exemption on file was 0.76 percent.

ImmTrac, the Texas Statewide Immunization Registry

Texas Health and Safety Code, Section 161.007, requires DSHS to maintain an immunization registry as a single repository of accurate, complete, and current immunization records. The state registry, called ImmTrac, aids in the Department's charge in preventing and controlling the spread of disease within the state. ImmTrac simplifies the process of keeping Texans up to date on their vaccines, improves information available to providers and to parents, and helps ensure children receive critical vaccines on schedule and avoid over-vaccination.

ImmTrac consolidates and stores a client's immunization information electronically in a secure, central system. It is a critical component to state health information for both immunizations and disaster preparedness and planning. Over 9,000 medical providers in Texas actively use ImmTrac to assess vaccination coverage and needs within their client populations. ImmTrac currently stores over 110 million immunization records of nearly 8 million adults and children.

The rules governing ImmTrac, Texas Administrative Code, Title 25, Part 1, Chapter 100, Rule 100.10, provide a formal complaint process for failure by DSHS to comply with requests for exclusion from the registry and require DSHS to report incidents of discrimination resulting from exclusion requests. In 2012 and 2013, DSHS did not receive any complaints for failure to remove an individual's information from the registry or any reports of incidents of discrimination from an individual requesting exclusion from the registry.

DSHS has identified the following methods to increase provider participation in the immunization registry:

- Improve registry value and benefits to providers and payors.
- Increase registry marketing, promotion, and education efforts.
- Strengthen registry customer support.
- Continue with interoperability sustainability for Health Level 7 (HL7) immunization electronic data acceptance from registered providers.
- Collaborate with electronic health record (EHR) vendors to increase interoperability with ImmTrac.
- Employ a medical home model in order to improve clinical usability of the system.
- Implement recognition programs.
- Apply technical improvements.

In addition to the methods mentioned above, DSHS will continue to work to determine where technological efficiencies can be achieved through collaboration, platform integration, and interoperability. Additionally, work will continue with electronic reporters and EHR vendors toward achieving ImmTrac/EHR interoperability by continuing with HL7 exchange protocol and effort.

To increase the number of adults consenting to having their immunization records stored in ImmTrac, DSHS will continue working with the Texas Education Agency and high school nurses to secure consent from high school seniors to store their immunization records securely in ImmTrac as an adult. Work with higher education entities also focuses on increasing adult participation in ImmTrac. Additionally, DSHS will collaborate with the Texas Department of Public Safety to include educational information about ImmTrac to educate the general public when renewing their licenses.

Finally, DSHS is implementing an ImmTrac replacement project with federal funding, the purpose of which is to modernize ImmTrac and incorporate the vaccine inventory system for the Texas TVFC Program into one system. The expectation is that the new system will encourage more providers to participate in both TVFC and ImmTrac.

Other anticipated outcomes of the ImmTrac replacement project include:

- Savings on system costs and maintenance,
- Compliance with the Immunization Registry Functional Standard recommendations and guidelines of the American Immunization Registry Association (AIRA) and the Centers for Disease Control and Prevention (CDC),

- Compliance with the HL7 standards for data exchange adopted by the CDC to enable secure immunization data transfer with EHR systems,
- Alignment with Texas' Health Information Technology (HIT) plans for statewide health information exchange,
- Completeness and consolidation of data, allowing for more comprehensive preventive healthcare,
- Dose-level accountability, enhanced reminder/recall functionality, and client connection with a medical/school home,
- Vaccine accounting tools that allow providers to be more accountable for publicly-purchased vaccines and improve state oversight of these publicly-purchased vaccines and funds, and
- Provision of reliable immunization data during times of disaster, which is critical to compliance with Texas statute during disasters.

Completion of the ImmTrac Replacement project is anticipated in spring 2016.

Conclusion

Stakeholders and policy makers have made childhood immunizations a priority in Texas. DSHS has incorporated proven strategies in a comprehensive, collaborative approach with local and state partners to increase vaccine coverage levels. This systematic approach is designed to eliminate impediments to vaccination and maximize resources available to the immunization delivery system. Going forward, DSHS will continue to evaluate the effectiveness of existing public health strategies, and work to implement policies that increase coverage levels and thus decrease disease in Texas.