

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

As Required By

Texas Health and Safety Code,

Sections 161.0074

and 161.00706



TEXAS
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Executive Summary

Texas Health and Safety Code, Sections [161.0074](#) and [161.00706](#) require the Department of State Health Services (DSHS) to develop ways to increase immunization rates using state and federal resources, and submit a report to the Legislative Budget Board, the Governor, the Lieutenant Governor, the Speaker of the House of Representatives, and appropriate committees of the Legislature by September 30 of each even-numbered year.

DSHS is charged with preventing and controlling disease in Texas. Vaccination is one of the surest ways to avoid many diseases. Over the past year, Texas has made progress in increasing vaccine coverage levels. However, there are areas where improvement is still needed.

According to the 2016 National Immunization Survey-Child (NIS), Texas' vaccine coverage rates remained stable for the 4:3:1:3:3:1:4¹ combination series in children 19-35 months old with a coverage rate of 69.5 percent, similar to the national average of 70.7 percent.

Rates among Texas' adolescents remained mostly stable in 2016 as well. For tetanus, diphtheria, and acellular pertussis (Tdap), the rate was 85 percent. For human papillomavirus (HPV) series initiation (i.e., having received one or more doses), the rate was 49.3 percent, but varied greatly across jurisdictions, ranging from 45.7 percent to 79.8 percent. Rates for the meningococcal conjugate vaccine saw a decrease for the first time since 2008. However, with coverage rates at 85.5 percent, Texas continued to exceed the national average of 82.2 percent.

In recent years, DSHS has employed several strategies to increase coverage levels, including promoting a medical home, working with providers to make strong vaccination recommendations, employing quality improvement efforts, engaging

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 depending on brand, three doses of hepatitis B vaccine, one dose of varicella vaccine, and four doses of pneumococcal conjugate vaccine.

and collaborating with partners and stakeholders, and promoting the use of ImmTrac2, the state's immunization registry. These strategies have proven effective in increasing coverage levels and are the foundation for a successful immunization program.

As a part of coordinating immunization services across Texas, DSHS has contracted with 50 local health departments (LHD) to provide vaccines. For fiscal year 2018, DSHS made awards totaling \$15.3 million in state and federal funds.

While recent progress is encouraging, ongoing efforts by DSHS and our many immunization partners are essential to ensure that children and adults in communities across Texas are protected from vaccine-preventable diseases.

1. Introduction

Texas Health and Safety Code, Sections [161.0074](#) and [161.00706](#) require the Department of State Health Services (DSHS) to develop ways to increase immunization rates using state and federal resources, and submit a report to the Legislative Budget Board, the Governor, the Lieutenant Governor, the Speaker of the House of Representatives, and appropriate committees of the Legislature by September 30 of each even-numbered year. The report must:

- Include the current immunization rates by geographic region of the state, where available
- Focus on the geographic regions of the state with immunization rates below the state average for preschool children
- Describe the approaches identified to increase immunization rates in underserved areas and the estimated cost for each
- Identify changes to department procedures needed to increase immunization rates
- Identify the services provided under and provisions of contracts entered into by DSHS to increase immunization rates in underserved areas
- Identify performance measures used in contracts entered into by DSHS to increase immunization rates in underserved areas
- Include the number and type of exemptions used in the past year
- Include the number of complaints received by DSHS related to its failure to comply with requests for exclusion of individuals from the registry
- Identify all reported incidents of discrimination for requesting exclusion from the registry or for using an exemption for a required immunization
- Include the number of complaints received by DSHS related to its failure to comply with requests for removal of information from the registry under Texas Health and Safety Code, [Section 161.00706](#), Subsection (e)
- Include DSHS's recommendations about the best way to use, and communicate with, local registries in the state
- Include ways to increase provider participation in the registry

2. Background

Vaccines are recognized as one of the top 10 public health successes of the 20th century. Diseases including measles, mumps, rubella, diphtheria, and polio were once widespread. Today, vaccine-preventable diseases (VPDs) are rare in the United States due to concerted efforts to vaccinate the public. Despite this, every year, VPD outbreaks occur in Texas, causing suffering, and in some cases, death.

A highly-vaccinated population reduces the incidence of disease and safeguards public health. To ensure that vaccine coverage levels in Texas are high, the Department of State Health Services (DSHS) engages in efforts to promote vaccinations for infants, children, teens, and adults through a network of partnerships that integrate federal agencies and programs, state and local governments, schools, healthcare providers, employers, insurers and health plans, vaccine manufacturers, and others in the private sector.

Immunization activities are coordinated by DSHS and contracted local health departments (LHDs), and reflect the following strategic goals set by DSHS:

- Improve vaccine coverage levels for infants, children, and adolescents
- Improve vaccine coverage levels for adults
- Invest in a capable vaccination community with sufficient resources to excellently manage and contribute to Texas' immunization program
- 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

To address Texas' complex immunization needs, DSHS operates the Texas Vaccines for Children (TVFC)² and Adult Safety Net (ASN)³ programs and manages the

² The TVFC program provides vaccines at no cost to physicians to vaccinate eligible children. Further information on the TVFC program can be found at:

www.dshs.texas.gov/immunize/tvfc/.

³ The ASN program provides vaccines at no cost to physicians to vaccinate uninsured adults. Further information on the ASN program can be found at:

www.dshs.texas.gov/immunize/ASN/.

statewide immunization information system, known as ImmTrac2⁴, which allows Texans to store their vaccination records in a secure, electronic registry. Additionally, DSHS conducts public information and education related to VPDs and performs assessment, compliance, and evaluation of vaccine coverage across the state.

⁴ Information about ImmTrac2 is available at:
<http://www.dshs.texas.gov/immunize/immtrac/default.shtm>.

3. Immunization Coverage Rates

The Department of State Health Services (DSHS) uses the National Immunization Survey (NIS), conducted annually by the Centers for Disease Control and Prevention (CDC), to assess immunization levels throughout Texas. NIS gathers data on children and teen coverage rates separately using random-digit-dialed cellular and landline telephone surveys of parents followed by mail surveys of vaccination providers to confirm data. The 2016 data reflect Texas as a whole as well as selected urban areas, as follows: City of Houston, Bexar County, El Paso County, and Dallas County.

National Immunization Survey-Child

The NIS-Child assesses vaccine coverage levels for children 19-35 months of age receiving the 4:3:1:3:3:1:4 vaccine combination series.⁵ The 4:3:1:3:3:1:4 series is a representation of overall compliance for vaccines recommended by the Advisory Committee on Immunization Practices (ACIP) for children in this age group.⁶

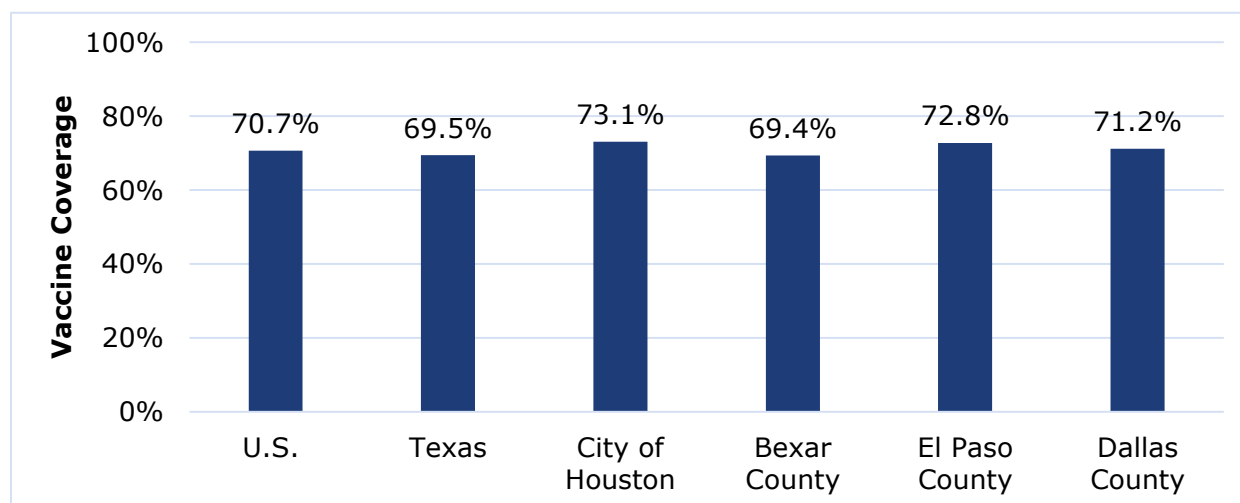
The 2016 report, which was released in September 2017, measures coverage for children born between January 2013 and May 2015. Measures reflect the effectiveness of strategies and activities in place from 2013 to 2016.

Overall, Texas' rate for children receiving the 4:3:1:3:3:1:4 combination series was 69.5 percent, similar to the national average of 70.7 percent. Across the sampled urban areas, coverage for the combined series ranged from 69.4 to 73.1 percent, as shown in Figure 1 below.

⁵ 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 depending on brand, three doses of hepatitis B vaccine, one dose of varicella vaccine, and four doses of pneumococcal conjugate vaccine.

⁶ More information about the immunization schedule for infants and children can be found at: www.cdc.gov/vaccines/schedules/easy-to-read/child.html

Figure 1. Texas 4:3:1:3:3:1:4 Vaccine Series Coverage Levels Among Children 19-35 Months of Age, National Immunization Survey, 2016.



In addition to the 4:3:1:3:3:1:4 vaccine combination series, NIS-Child also assesses vaccine coverage levels for diphtheria, tetanus, and pertussis (DTaP); *Haemophilus influenzae* type b (Hib); hepatitis A (Hep A); hepatitis B (Hep B); the hepatitis B birth dose; measles, mumps, and rubella (MMR); pneumococcal conjugate (PCV); polio; rotavirus; and varicella (chickenpox). The state as-a-whole saw coverage rates close to or exceeding 90 percent for the recommended number of doses of the poliovirus vaccine (90.1 percent), varicella vaccine (90.4 percent), and MMR vaccine (89.8 percent). In the selected urban areas, coverage was at or above 90 percent for the recommended doses of polio, varicella (chickenpox), and the MMR combination vaccine. Table 1 below provides vaccine coverage levels for each vaccine measured by NIS-Child.

Table 1. Vaccine Coverage Levels Among Texas Children 19-35 Months of Age by Selected Vaccines, National Immunization Survey, 2016.

Vaccine	U.S.	TX	City of Houston	Bexar County	El Paso County	Dallas County
4:3:1:3:3:1:4	70.7%	69.5%	73.1%	69.4%	72.8%	71.2%
≥4 Doses of DTaP	83.4%	81.3%	86.0%	78.1%	81.4%	82.0%

Vaccine	U.S.	TX	City of Houston	Bexar County	El Paso County	Dallas County
Hib ⁷	81.8%	80.0%	84.9%	78.0%	80.7%	81.1%
≥2 Doses of Hep A	60.6%	60.5%	68.1%	63.6%	66.8%	64.1%
≥3 Doses of Hep B	71.7%	75.2%	77.2%	75.3%	74.8%	89.1%
Hep B, Birth Dose ⁸	90.5%	88.3%	89.3%	91.4%	96.0%	85.7%
≥1 Doses of MMR	91.1%	89.8%	94.5%	91.5%	94.8%	91.2%
≥4 Doses of PCV	81.8%	82.4%	86.8%	82.5%	81.0%	84.0%
≥3 Doses of Polio	91.9%	90.1%	90.7%	91.2%	94.4%	91.0%
Rotavirus ⁹	74.1%	72.7%	79.6%	71.7%	78.5%	69.3%
≥1 Doses of Varicella	90.6%	90.4%	95.6%	92.5%	96.7%	92.5%

Texas coverage levels mirrored the national levels for 2016. The state continues to show progress toward meeting its goals for effective coverage for universally recommended vaccines among young children.

National Immunization Survey-Teen

The NIS-Teen assesses coverage rates among 13-17-year-olds for the following immunizations regularly recommended during adolescence: human papillomavirus (HPV), meningococcal conjugate (MenACWY), and tetanus, diphtheria, and acellular pertussis (Tdap). The 2016 survey measures coverage rates for adolescents born between January 1998 and February 2004. Table 2 below shows national and Texas coverage rates for adolescents receiving HPV, meningococcal, and Tdap vaccines.

⁷ Three or four doses of Hib vaccine, depending on vaccine type.

⁸ Coverage estimates by birth cohort. Estimates are for children born in 2012-2015.

⁹ Two or three doses, depending on vaccine type.

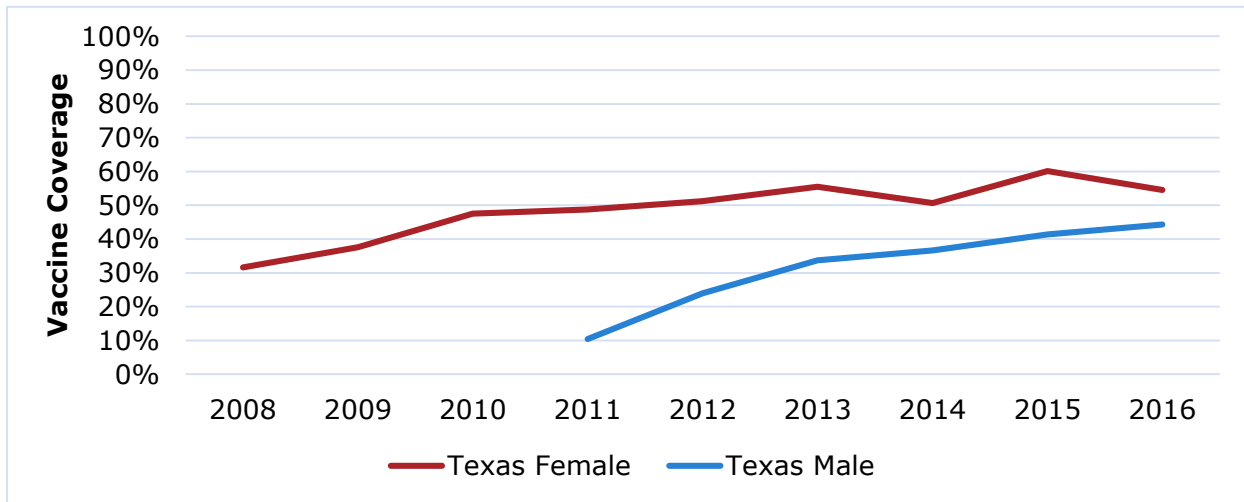
Table 2. Vaccine Coverage Levels Among Texas Adolescents 13-17 Years of Age by Selected Vaccines, National Immunization Survey-Teen, 2016.

Vaccine	U.S.	Texas	City of Houston	Bexar County	El Paso County	Dallas County
≥1 Dose of HPV	60.4%	49.3%	62.6%	53.4%	79.8%	45.7%
HPV Up-to-Date	43.4%	32.9%	46.4%	39.2%	66.0%	23.9%
≥1 Dose of HPV, Females	65.1%	54.5%	59.4%	58.3%	78.4%	48.8%
HPV Up-to-Date, Females	49.5%	39.7%	44.2%	45.2%	69.0%	24.3%
≥1 Dose of HPV, Males	56.0%	44.3%	65.9%	48.5%	81.1%	42.7%
HPV Up-to-Date, Males	37.5%	26.5%	48.6%	33.3%	63.2%	23.6%
≥1 Dose of MenACWY	82.2%	85.5%	82.9%	87.2%	91.6%	87.7%
≥1 Dose of Tdap	88.0%	85.0%	86.2%	85.4%	83.4%	83.0%

In 2016, coverage rates for HPV vaccine series completion (or up-to-date rates) for all adolescents in Texas were lower than the national rate and varied greatly among the selected urban areas. Texas' adolescent coverage rate for HPV series initiation (i.e., having received one or more doses) was 49.3 percent, similar to the rate recorded in 2015 (50.6 percent). HPV coverage rates among the selected urban areas showing series initiation varied from 45.7 percent to 79.8 percent. Figure 2 below shows male and female HPV vaccine coverage trends since 2008.¹⁰

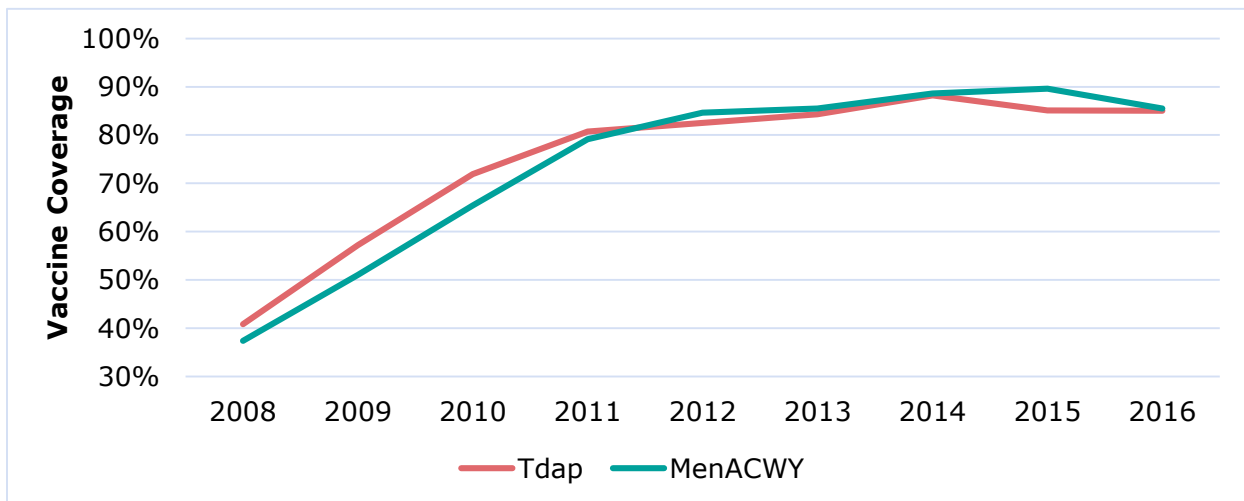
¹⁰ Rates for females and males are monitored separately because the HPV vaccine was initially recommended only for females. Data for males begins in 2011 because the vaccine was licensed for male use in 2010.

Figure 2. HPV Vaccine Series Initiation Coverage Among Adolescents 13-17 Years of Age, Texas, National Immunization Survey, 2008-2016.



In 2016, Texas’ coverage rates for the Tdap vaccine (85 percent) were similar to rates recorded in 2015 (85.1 percent). Rates for the meningococcal conjugate vaccine (85.5 percent) decreased for the first time since 2008, but continued to exceed the national average of 82.2 percent. Figure 3 below shows MenACWY and Tdap vaccine coverage trends since 2008.

Figure 3. Tdap and Meningococcal Vaccine Coverage Among Adolescents 13-17 Years of Age, Texas, National Immunization Survey, 2008-2016.



4. Approaches to Increase Immunization Rates

The Department of State Health Services (DSHS) takes a multifaceted approach to increase immunization rates in Texas that includes providing free vaccines to vulnerable populations, employing quality improvement efforts, performing educational outreach, and engaging and collaborating with partners and stakeholders.

Vaccine Safety Net

DSHS oversees two programs that provide vaccines to Texans, the Texas Vaccines for Children (TVFC) program and the Adult Safety Net (ASN) program, which provide free childhood and adult vaccines to eligible Texans who may not otherwise receive immunizations due to an inability to pay.

Quality Improvement

In addition to providing vaccines, DSHS employs quality improvement mechanisms to help participating providers effectively meet immunization goals. Among the quality improvement mechanisms recently employed are the following:

- **Assessment, Feedback, Incentives and eXchange (AFIX):** a quality improvement program conducted at facilities enrolled in the TVFC program with the goal of increasing vaccination of children and adolescents with all Advisory Committee on Immunization Practices (ACIP)-recommended vaccines by reducing missed opportunities and improving delivery practices.
- **Tdap and HPV Vaccine Improvement Efforts:** a data-driven, quality improvement effort that targets adolescent coverage rates. Each quarter, DSHS reports to each site enrolled in TVFC their number of doses ordered for Tdap and HPV vaccines (one dose of Tdap and three doses of HPV are recommended for an adolescent to be fully immunized against these diseases). By comparing the ordering ratio of these vaccines, each site can understand its vaccine ordering practices and identify missed opportunities for HPV immunization.
- **Improved Influenza Coverage:** For the 2018–19 influenza season, DSHS will implement a provider outreach project to improve seasonal influenza

immunization coverage. Throughout the season, DSHS will send monthly, personalized scorecards to TVFC providers with their number of influenza doses ordered and administered, and their influenza vaccine coverage rate. Providers can compare their performance to other providers in the county and across Texas.

Educational Outreach

DSHS has recently employed a variety of educational strategies to increase immunization rates, including:

- **Vaccine Education Online (VEO):** eLearning system that offers educational modules for physicians, nurses, and health education specialists to earn continuing education credit.
- **“Every Dose Matters”:** Public education campaign promoting the CDC’s ACIP vaccine recommendations for children. Digital and broadcast media targeting providers, parents, and the public started in spring 2018 and free printed resources were made available for order.
- **Influenza and Pneumococcal Education:** Mail-out of materials to more than 1,200 long-term care facilities in May 2018 encouraging immunization of residents. Educational materials can be found at <http://immunizetexasorderform.com>.
- **Adult and First Responder Education:** In-person trainings for more than 1,200 immunizing pharmacists are being conducted in 2018 to promote the adult standards for immunization practices, or CDC-recommended steps, that providers can implement to ensure that adult and first responder patients get the vaccines they need. The pharmacists are educated to assess patients at every clinical encounter for immunization status, recommend vaccines, answer questions regarding the vaccines and diseases they prevent, administer appropriate vaccines or refer patients to a provider, and document doses administered in ImmTrac2.
- **Emergency Responder Support:** Through the 2017 CDC Hurricane Recovery Crisis Cooperative Agreement, DSHS plans to collaborate with state, community, and local government partners to build immunization capacity at emergency responder facilities and build vaccine storage capacity within local health departments.

Stakeholder Engagement

DSHS's primary mechanism for engaging with immunization stakeholders is the Texas Immunization Stakeholder Working Group (TISWG)¹¹, which consists of more than a dozen members from across state health and human service agencies and professional healthcare associations. The DSHS-led working group brings all facets of the state's immunization system together to discuss and identify needs and successes, enabling DSHS to overcome barriers and gaps in the immunization system.

Collaboration with The Immunization Partnership (TIP)¹² is another critical component for stakeholder engagement that allows for coalition-building and outreach. TIP helps raise awareness about immunizations across the lifespan, encourages community resources that break down barriers to obtaining immunizations, promotes the use of ImmTrac2, engages immunization coalitions, and promotes immunization education to healthcare providers.

Additionally, the DSHS-hosted Texas Immunization Conference is another important opportunity for peer engagement and education. The biennial event brings together stakeholders from public health departments, private providers, vaccine manufacturers, hospital staff, non-profits, and university researchers to present, discuss, and learn about best practices for improving immunization rates. The most recent conference took place in November 2017 in San Antonio, drawing a crowd of more than 600 attendees, speakers, exhibitors, and staff. The next conference is slated for 2019.

¹¹ Information about TISWG can be found at: <http://dshs.texas.gov/immunize/partners/tiswg.shtm>.

¹² Information about TIP can be found at: <http://www.immunizeusa.org/>.

5. Contracts with Local Health Departments

The statewide effort to increase vaccine coverage rates is reflected by state and federal funds allocated to local health departments (LHDs) across Texas. For fiscal year 2018, the Department of State Health Services (DSHS) has awarded \$15.3 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, immunization information system (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
- 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 the Texas Vaccines for Children (TVFC) program and perform follow-up visits when deficiencies are identified by the quality assurance contractor
- Conduct immunization audits, assessments or surveys in child-care facilities, registered family homes, and schools
- 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 use of ImmTrac2, the Texas Immunization Registry, in public clinics and private provider offices to increase the number of children, adolescents, and adults participating in the registry
- Make use of reminder/recall systems to notify parents or guardians of children younger than 36 months when immunizations are due or past-due
- Refer children to Medicaid and Children’s Health Insurance Program (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 plan¹³ with performance measures is in place. In addition, the LHDs are provided with a current contractor’s guide¹⁴, which explains the requirements, and offers best practices to incorporate nationally proven strategies. DSHS provides training to LHD staff on each of these contractual pieces. In areas of the state where no LHD exists, DSHS performs similar functions.

Each LHD is on a monitoring schedule requiring an on-site evaluation by PHRs and contract management staff every two years. Findings from the on-site review prompt the creation of corrective action plans when necessary.

¹³ The fiscal year 2018 Work Plan for the interlocal agreement immunization contract can be found at: www.dshs.texas.gov/immunize/lhd.shtm.

¹⁴ The fiscal year 2018 Immunization Contractor’s Guide for Local Health Departments can be found at: www.dshs.texas.gov/immunize/lhd.shtm.

6. Addressing the Needs of Underserved Areas

Children who are uninsured, underinsured, lack a medical home, live in rural areas, or on the Texas-Mexico border are traditionally medically underserved. While the Department of State Health Services (DSHS) programs emphasize the importance of a medical home, underserved areas often require additional services.

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

Additionally, DSHS actively recruits providers in border counties. As of mid-2018, approximately 487 private and public border-area clinic sites are enrolled in TVFC, administering approximately 1.5 million doses of vaccine each year.

DSHS maintains long-standing relationships with public health agencies in border counties. Contracts provide funding to local health departments (LHDs) to promote TVFC and ImmTrac2, administer vaccines, promote immunizations, conduct vaccine-preventable disease surveillance, assess vaccine coverage levels, and apply epidemiological principles for controlling outbreaks. In 2018, DSHS provided more than \$2 million in state and federal funds to the following LHDs in medically underserved border regions:

- City of El Paso Department of Public Health
- City of Laredo Health Department
- Hidalgo County Health Department
- Cameron County Department of Health and Human Services

These LHDs implement immunization programs for children, adolescents, and adults, focusing special attention on children under age three, with the goals of eliminating barriers to immunizing children on schedule, expanding vaccine delivery, and establishing uniform immunization policies. DSHS also works with the Children's Health Insurance Program (CHIP) to ensure that CHIP providers have access to low-cost vaccines. 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.

7. Conscientious Exemptions

Since 2003, Texas Health and Safety Code [Section 161.0041](#) has allowed an exemption from vaccine requirements for entry to a school or child-care facility due to reasons of conscience, including religious beliefs. The conscientious exemption process is as follows:

- Parents or guardians may request a conscientious exemption affidavit form in writing or through the Department of State Health Services (DSHS) website.
- Parents or guardians can request up to five conscientious exemption affidavit forms per child.
- Once the request has been processed, DSHS returns the original request and the conscientious exemption affidavit forms to the parent or guardian by 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 to annually report to the Texas Legislature the number of requests for conscientious exemptions. DSHS gathers data by tracking the number of affidavit forms requested and the number of conscientious exemptions reported by schools, and monitors compliance with immunization requirements via the *Texas Annual Report of Immunization Status*, as required by Texas Education Code, [Section 38.002](#). All accredited elementary and secondary schools in Texas, public and private, must submit an annual report of immunization status to DSHS.

Data are self-reported and provide an aggregate number of conscientious exemptions. No reports of discrimination for using an exemption have been reported. Table 3 below shows the number of affidavits mailed, the number of requests received, the number of individuals for whom forms were requested, and the number of meningococcal exemptions processed through the web portal for public junior and community college students.

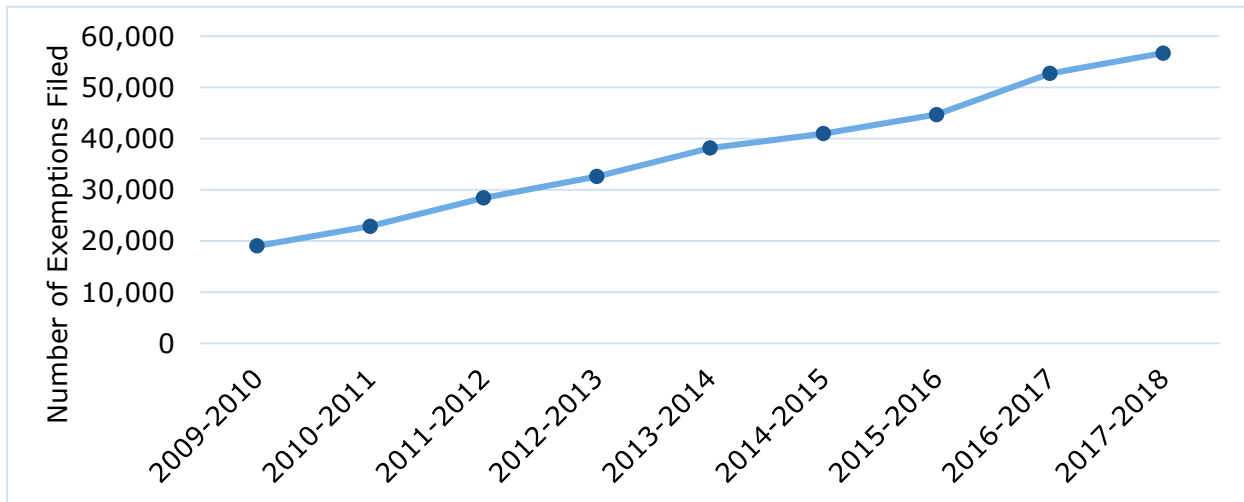
Table 3. Data on Requests Received for Conscientious Exemptions, Fiscal Year 2014 – Fiscal Year 2018.¹⁵

Data Collected	Fiscal Year 2014	Fiscal Year 2015	Fiscal Year 2016	Fiscal Year 2017	Fiscal Year 2018
Number of Requests Received (May List More Than One Child)	29,888	30,048	31,598	38,527	45,762
Number of Individuals for Whom Affidavits Were Requested	46,795	48,472	52,195	64,530	76,665
Number of Affidavits Mailed (May Request Up to Five Per Child)	113,959	119,505	130,248	160,976	188,883
Number of Meningococcal Exemptions Processed through the Web Portal for Public Junior and Community College Students	46,906	57,192	56,643	57,644	56,639

Figure 4 below shows the number of conscientious exemptions filed at public and private schools for kindergarten through 12th grade since 2008.

¹⁵ DSHS’s fiscal year starts September 1 and extends through August 31 of the following year. For example, fiscal year 2014 began September 1, 2013 and ended August 31, 2014.

Figure 4. Number of Conscientious Exemptions Filed at Public and Private Schools, 2009-2018



Based on information in the *Texas Annual Report of Immunization Status*, the number and percentage of children who have a conscientious exemption has increased every year since exemptions were allowed in 2003. In the 2017-18 school year, the percent of students with a conscientious exemption on file was 1.07 percent.

8. ImmTrac2, the Texas Immunization Registry

Texas Health and Safety Code [Section 161.007](#) requires the Department of State Health Services (DSHS) to maintain an immunization registry as a single repository of accurate, complete, and current immunization records. In 2017, the legacy version of the Texas Immunization Registry, called ImmTrac, was replaced and re-launched as ImmTrac2. This replacement system consolidates and stores immunization records in a secure, central immunization information system and offers providers numerous self-service features as well as the ability to assess current vaccine coverage levels and forecast future needs.

More than 30,000 medical provider sites, including Texas Vaccines for Children (TVFC) provider sites, are registered to use ImmTrac2. ImmTrac2 helps Texans stay up-to-date on their vaccinations, improves information available to providers and parents, and helps DSHS prevent and control the spread of disease. It is a critical component to state health information for both immunization and disaster preparedness and planning.

As of mid-2018, approximately 152 million immunization records for more than 8.25 million children and adults are stored in ImmTrac2, and more than 19,000 medical providers in Texas actively use ImmTrac2 to assess vaccination coverage among their client populations.

The rules governing ImmTrac2 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 2016 and 2017, DSHS did not receive any complaints for failure to remove an individual's information from the registry or for failure to comply with requests for exclusion of individuals from the registry. In addition, DSHS did not receive 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 ImmTrac2:

- Improve registry value and benefits to providers and payers
- Increase registry marketing, promotion, and education efforts
- Strengthen registry customer support

- Continue with interoperability sustainability for Health Level 7¹⁶ (HL7) immunization electronic data acceptance from registered providers
- Collaborate with electronic health record (EHR) vendors to increase interoperability
- Employ a medical home model in order to improve clinical usability of the system
- Implement recognition programs
- Apply technical improvements

Texas law requires written consent by individuals to participate in the immunization registry. To register a child 17 years old or younger, the parent or legal guardian must provide consent. This consent is required once and is valid until the participating child turns 18. Persons 18 years and older must complete an adult consent form one time to participate for a lifetime.

Texas Health and Safety Code [Section 161.007](#), requires childhood records of minors in ImmTrac2 to be purged once a participant reaches adulthood if adult consent is not received before a participant's 26th birthday. To maintain participation among graduating high school seniors, DSHS works with the Texas Education Agency and high school nurses to promote and obtain consent from 18-year-old students, and will work with higher education entities to increase young adult participation in the system. In addition, DSHS mails a notification to each ImmTrac2 participant who recently turned 18 outlining the benefits of providing opt-in consent as an adult to maintain vaccination histories for a lifetime.¹⁷

¹⁶ Health Level Seven International is a not-for-profit organization dedicated to providing a comprehensive framework and standards for the exchange, integration, sharing, and retrieval of electronic health information. The organization's website can be found at www.hl7.org.

¹⁷ [House Bill 2171, 84th Legislature, Regular Session](#) modified the age at which individuals' records are purged from ImmTrac2 if adult consent is not received, increasing it from 19 to 26 years old. The first cohort of individuals affected by this legislation will turn 25 in 2022, at which point DSHS will make a reasonable effort to provide notice that their information will be purged on their 26th birthday if they do not provide adult consent prior to that date.

9. Conclusion

Stakeholders and policy makers have made childhood immunizations a priority in Texas. The Department of State Health Services (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.

List of Acronyms

Acronym	Full Name
ACIP	Advisory Committee on Immunization Practices
AFIX	Assessment, Feedback, Incentives and eXchange
ASN	Adult Safety Net
CDC	Centers for Disease Control and Prevention
CHIP	Children's Health Insurance Program
DSHS	Department of State Health Services
DTaP	Diphtheria, Tetanus, and Acellular Pertussis
EHR	Electronic Health Record
FQHC	Federally Qualified Health Center
HHSC	Health and Human Services Commission
Hib	<i>Haemophilus influenzae</i> type B
HL7	Health Level 7
HPV	Human papillomavirus
LHD	Local Health Department
MenACWY	Meningococcal Serogroups A, C, W, and Y

NIS	National Immunization Survey
PCV	Pneumococcal Conjugate Vaccine
PHR	Public Health Region
RHC	Rural Health Clinic
Tdap	Tetanus, Diphtheria, and Acellular Pertussis
TIP	Texas Immunization Partnership
TISWG	Texas Immunization Stakeholder Working Group
TVFC	Texas Vaccines for Children
VEO	Vaccine Education Online
VPD	Vaccine-Preventable Disease
