

**Texas Department of State Health Services**

# Immunization Coverage in Texas

## Child and Adolescent Vaccination Coverage

Immunization Branch



[www.ImmunizeTexas.com](http://www.ImmunizeTexas.com)



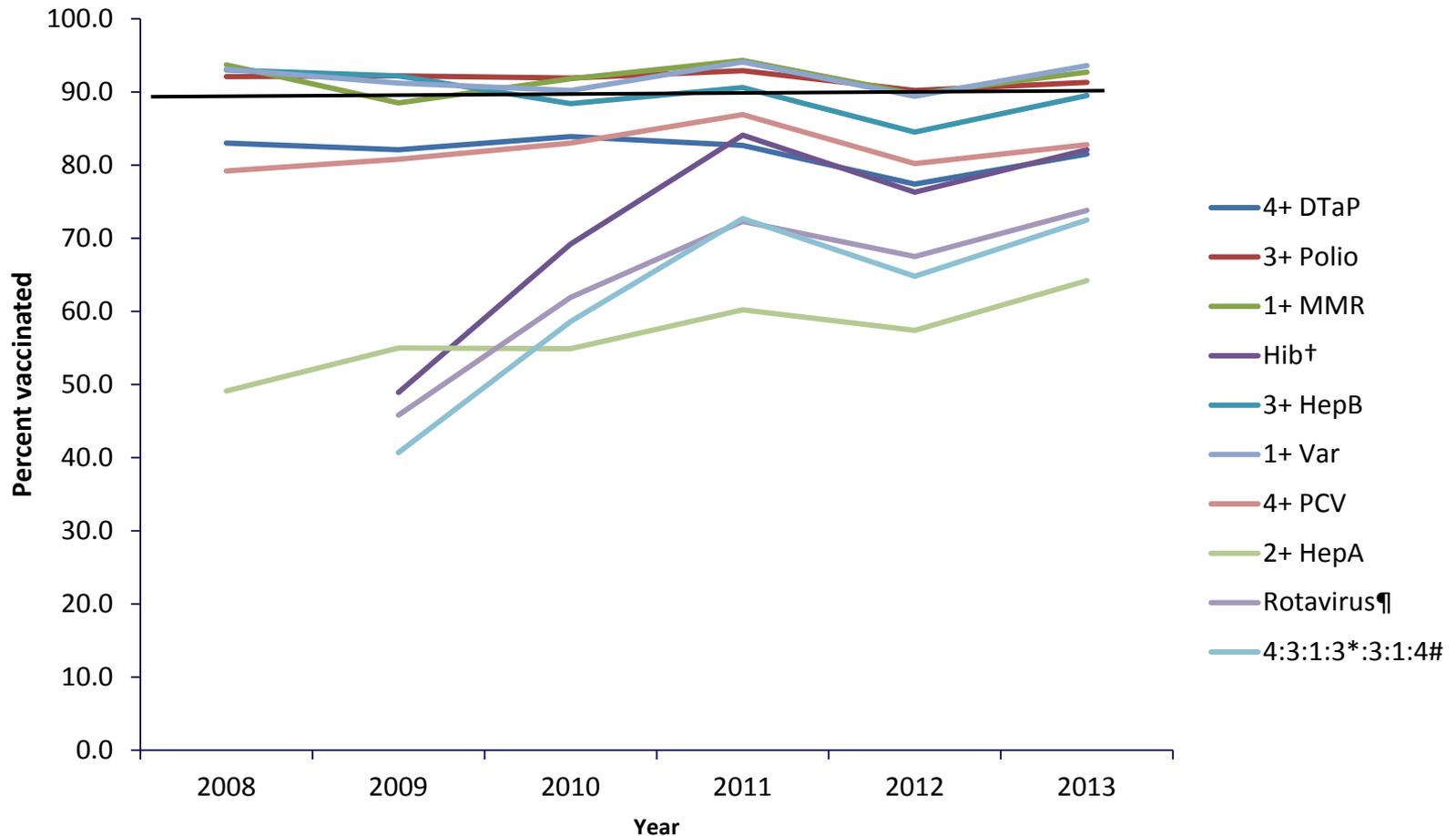
# Outline

- National Immunization Survey Coverage
- Adolescent Vaccination Coverage
- School Vaccination Coverage
- Conscientious Exemptions in Texas
- Exemptions and Pertussis Analysis

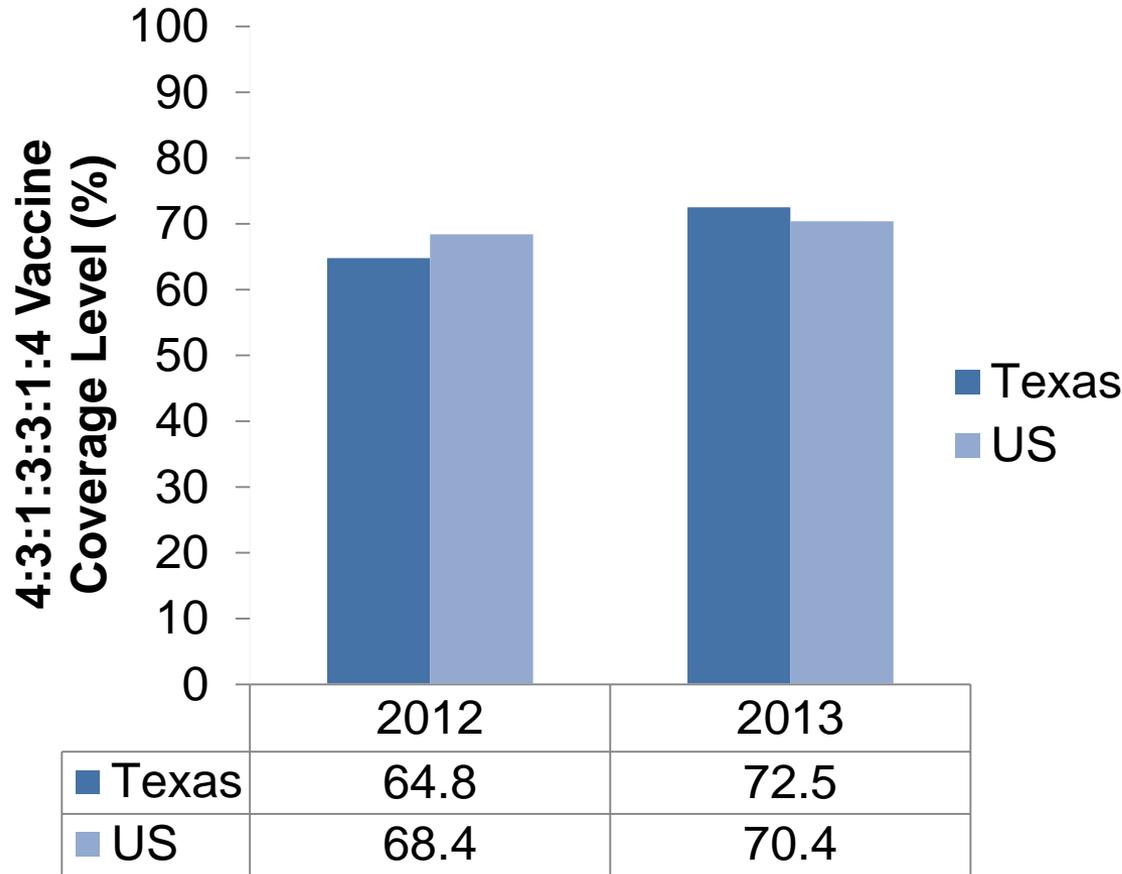
# 2013 Child and Teen NIS

- Assess immunization levels among
  - Pre-school children, 19-35 months old
  - Adolescents 13-17 years of age
- Conducted annually by CDC
- Population-based, random-digit–dial sample of phone numbers followed by reviewing the child’s vaccination record from the provider
- Provides a “Report Card” to let us know how well we are doing in protecting our nation’s children against vaccine-preventable diseases
- The NIS provides national and state estimates of vaccination coverage-including new vaccines as they are licensed and recommended for use

# Vaccination Coverage Among Children 19-35 months, Texas, 2008-2013 National Immunization Survey

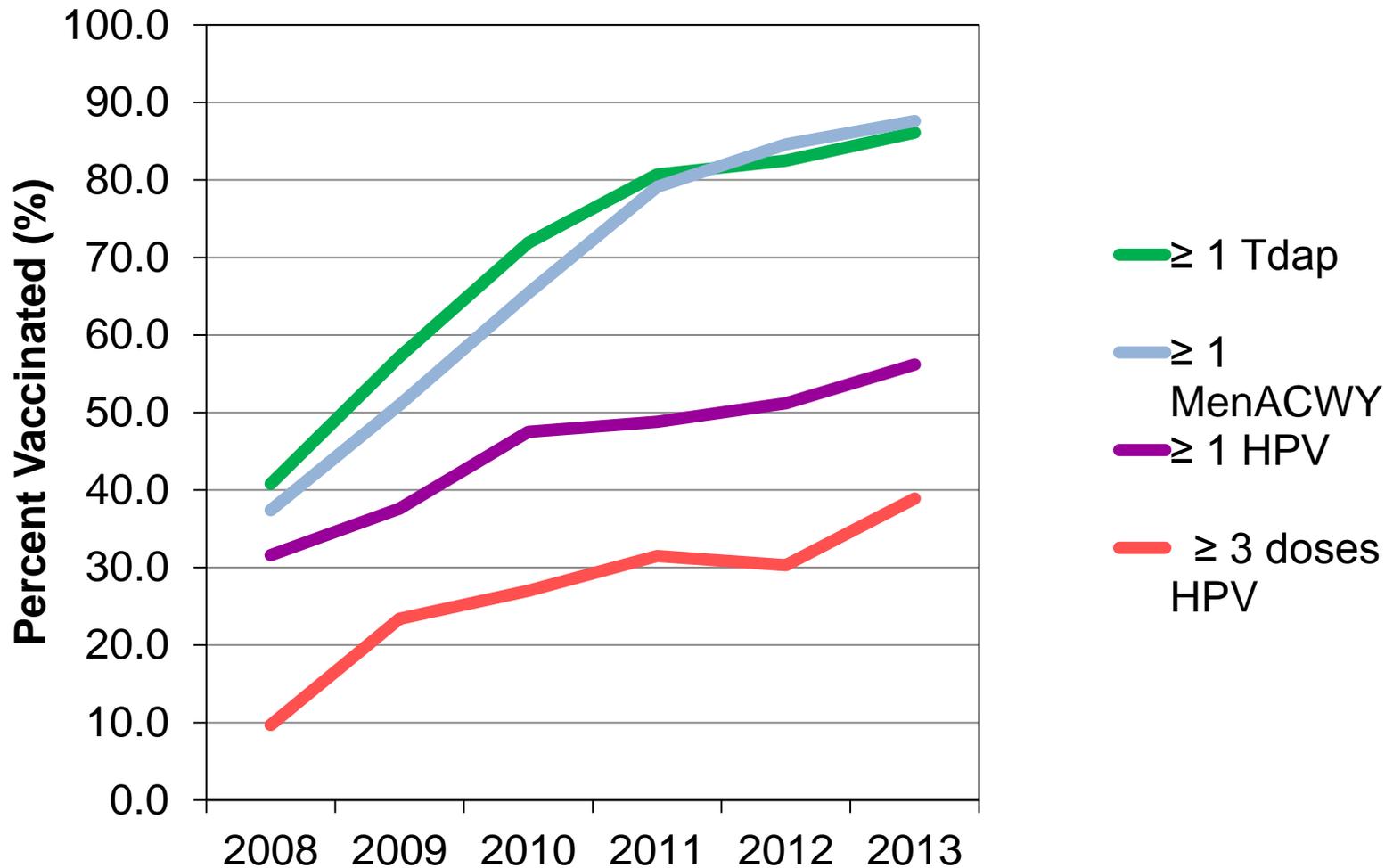


# National Immunization Survey 2012–2013, Texas vs. US with Pneumococcal Vaccine Added to National Requirement

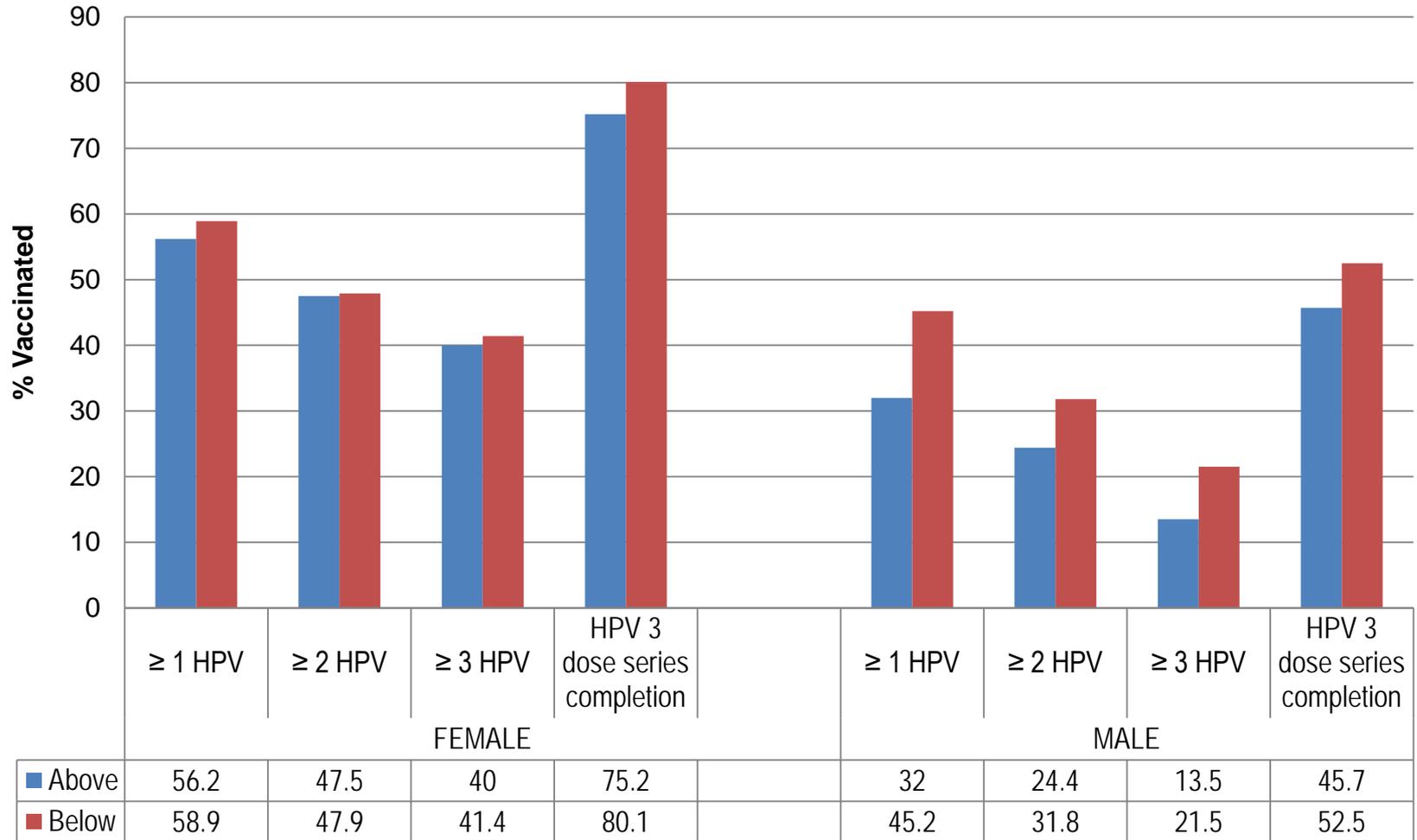


**Texas ranks 18th in the nation** with a 72.5% coverage level for the 4:3:1:3:3:1:4 series which includes the full series of Hib. This is a statistically significant increase of 7.7 percentage points from the 2012 coverage level.

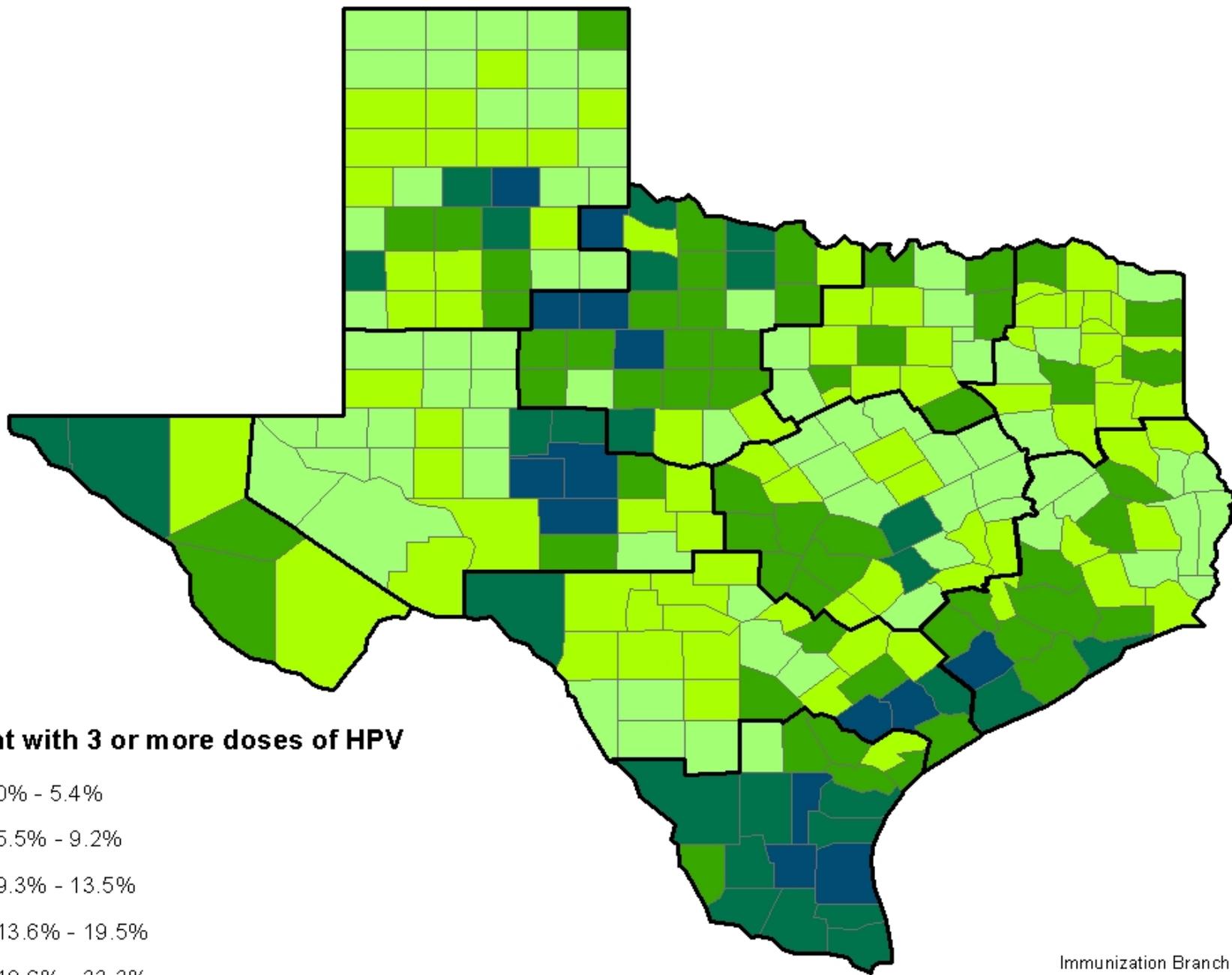
# Adolescent Vaccination Rates in Texas From 2008-2013, NIS-Teen



# Comparison of HPV Vaccination Coverage for Teens Above and Below Poverty, NIS Teen, Texas, 2013



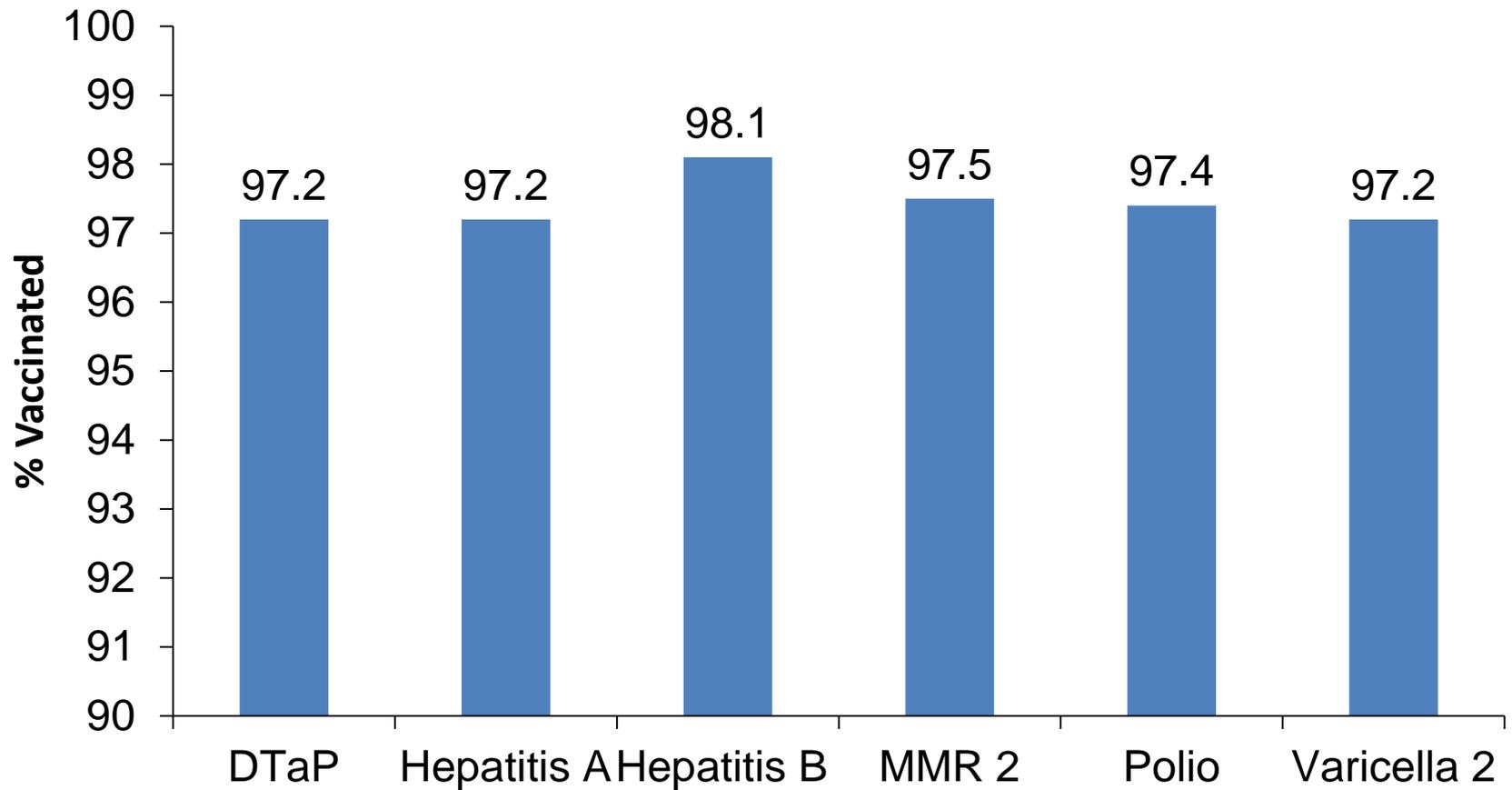
# Estimated Coverage with 3 or more doses of HPV Among 13-17 Year Olds, 2012



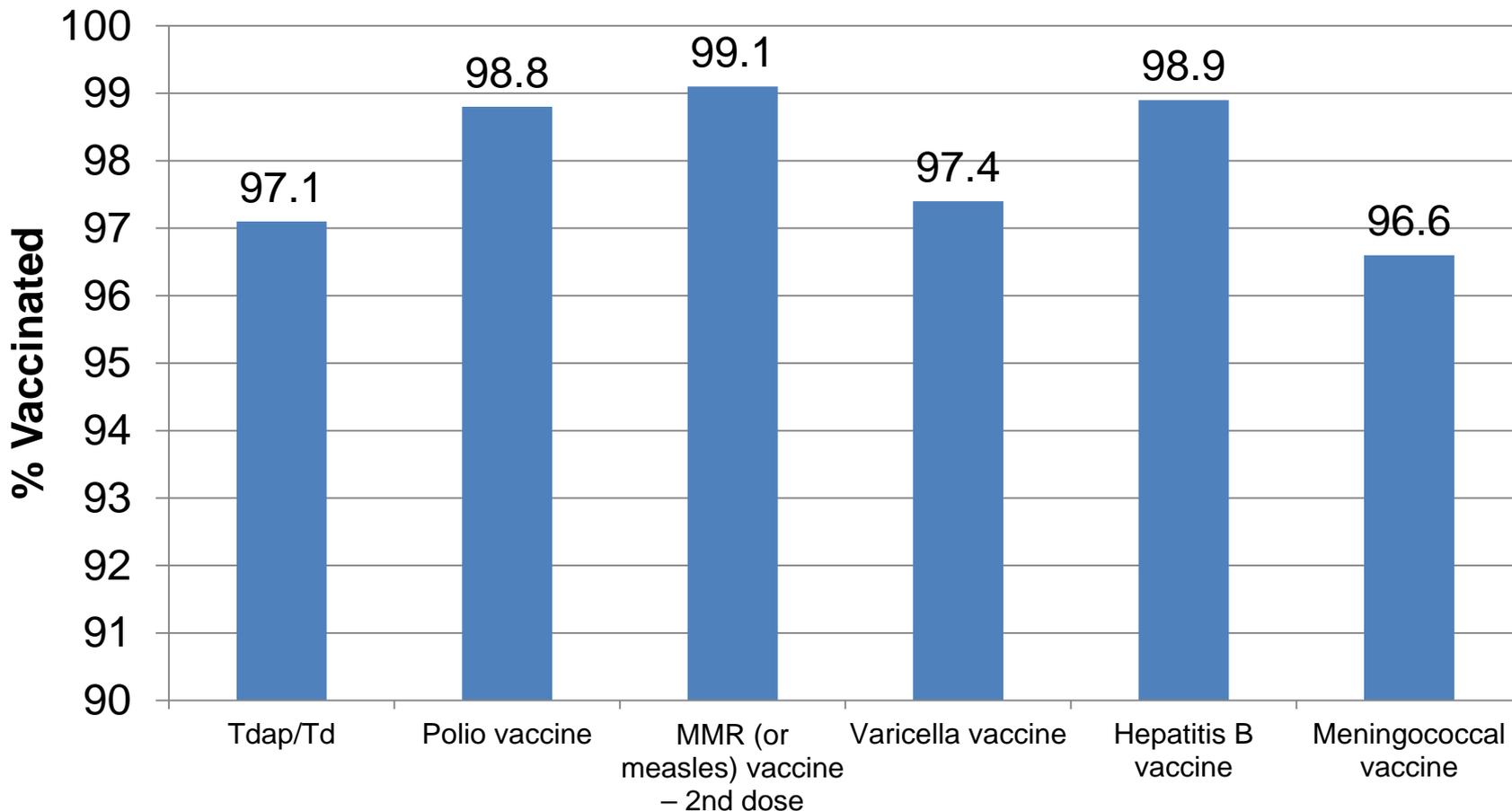
**Percent with 3 or more doses of HPV**

- 0% - 5.4%
- 5.5% - 9.2%
- 9.3% - 13.5%
- 13.6% - 19.5%
- 19.6% - 33.3%

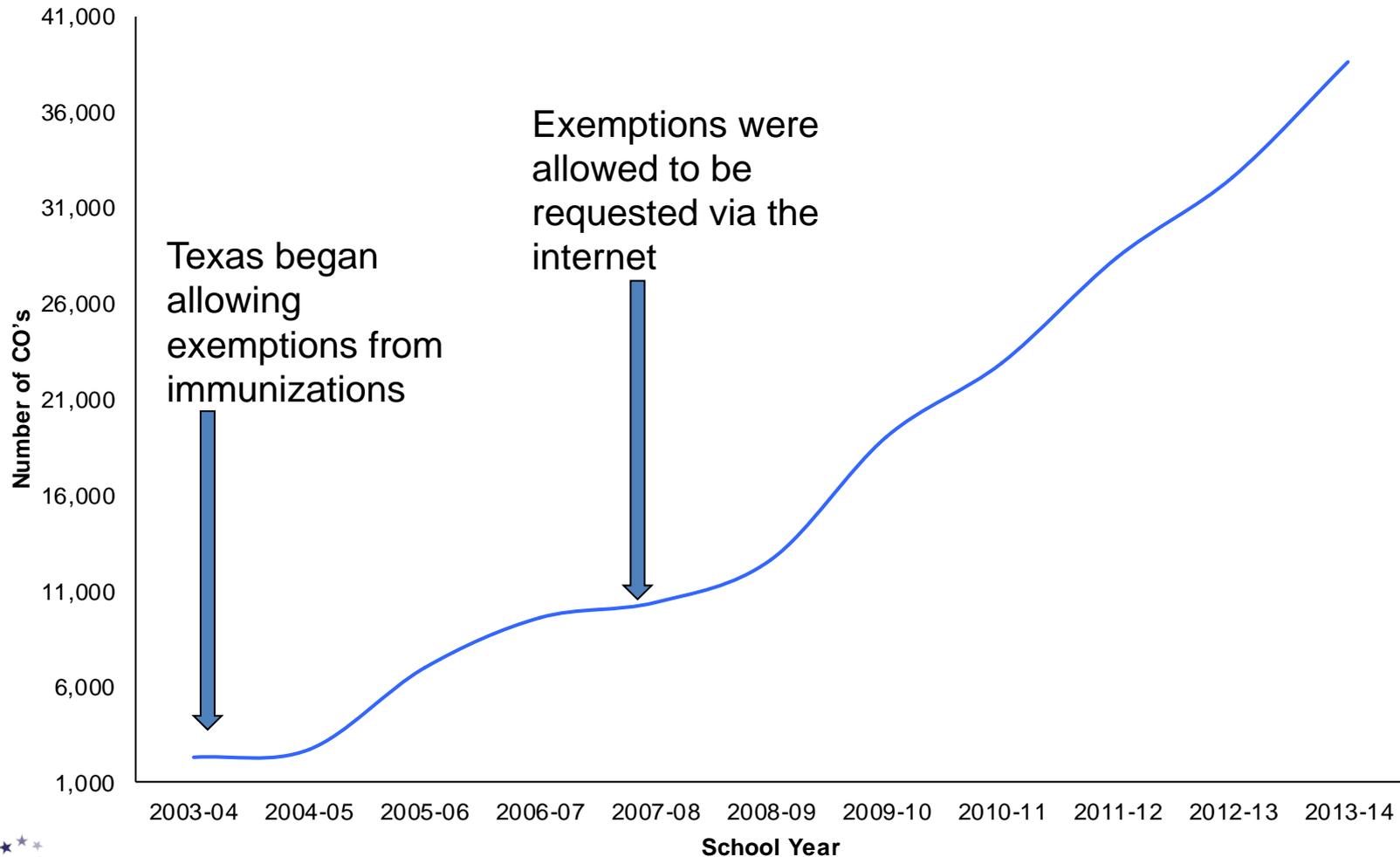
# Percent of Texas Kindergarten Students Completely Vaccinated (2013-14)



# Estimated Vaccine Coverage in Texas Public School for 7th Grade Students (2013-14)



# Conscientious Exemptions Reported at Schools 2003-2013



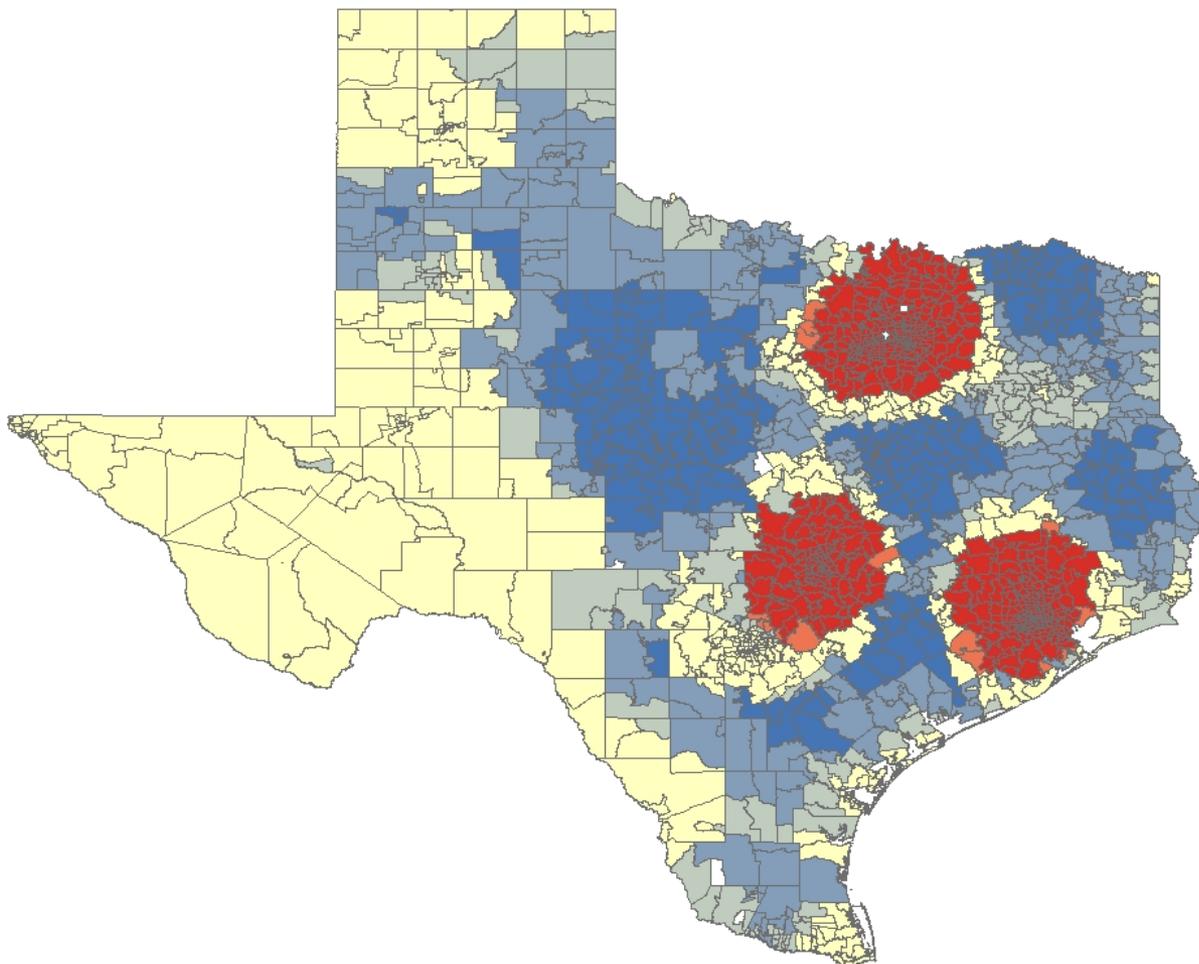
# Exemptions and Vaccine Preventable Diseases

- Children with exemptions are at increased risk of contracting and transmitting vaccine-preventable diseases such as pertussis
- Despite high immunization coverage levels in Texas, pockets with high rates of exemptions can occur that may potentially increase the risk of transmission of vaccine preventable diseases.
- Previous studies have shown the incidence of measles and pertussis among vaccinated children in a county was associated with the frequency of exemptions in that county

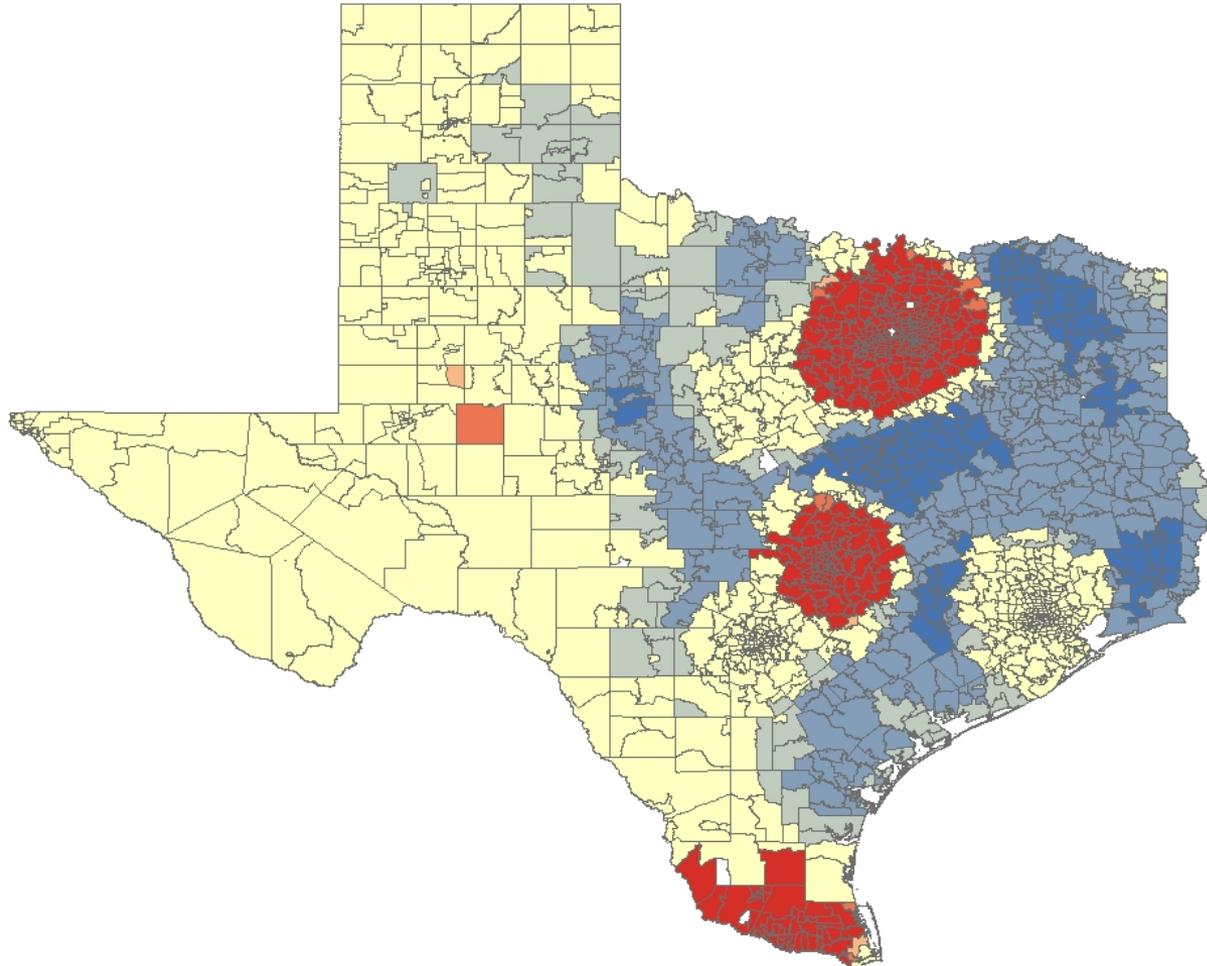
# Study Overview

- Objective
  - Determine whether there is an association between the number and concentration of reported cases of pertussis disease in a zip code and the number and concentration of individuals for whom COs were requested
- Methods
  - Pertussis incidence by zip code for children 0-18
  - Conscientious exemption request by zip code
  - Conducted analysis in SAS and ArcGIS
  - Hot Spot Analysis

# 2013 Conscientious Exemption Hot Spots



# 2013 Pertussis Disease Hot Spots



# Results

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Year	Individuals who Requested Conscientious Exemptions	Pertussis Cases in Persons 0-19 Years	Correlation (r)
2011	30,980	754	0.44
2012	46,406	1,761	0.56
2013	44,051	3,250	0.64

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# Study Conclusions

- The findings of the study suggest that there is an association between pertussis disease and individuals for whom conscientious exemptions were requested.
- The findings are consistent with previous study conducted in 2009.

# Questions