

VACCINE PREVENTABLE DISEASES



2017

ANNUAL REPORT



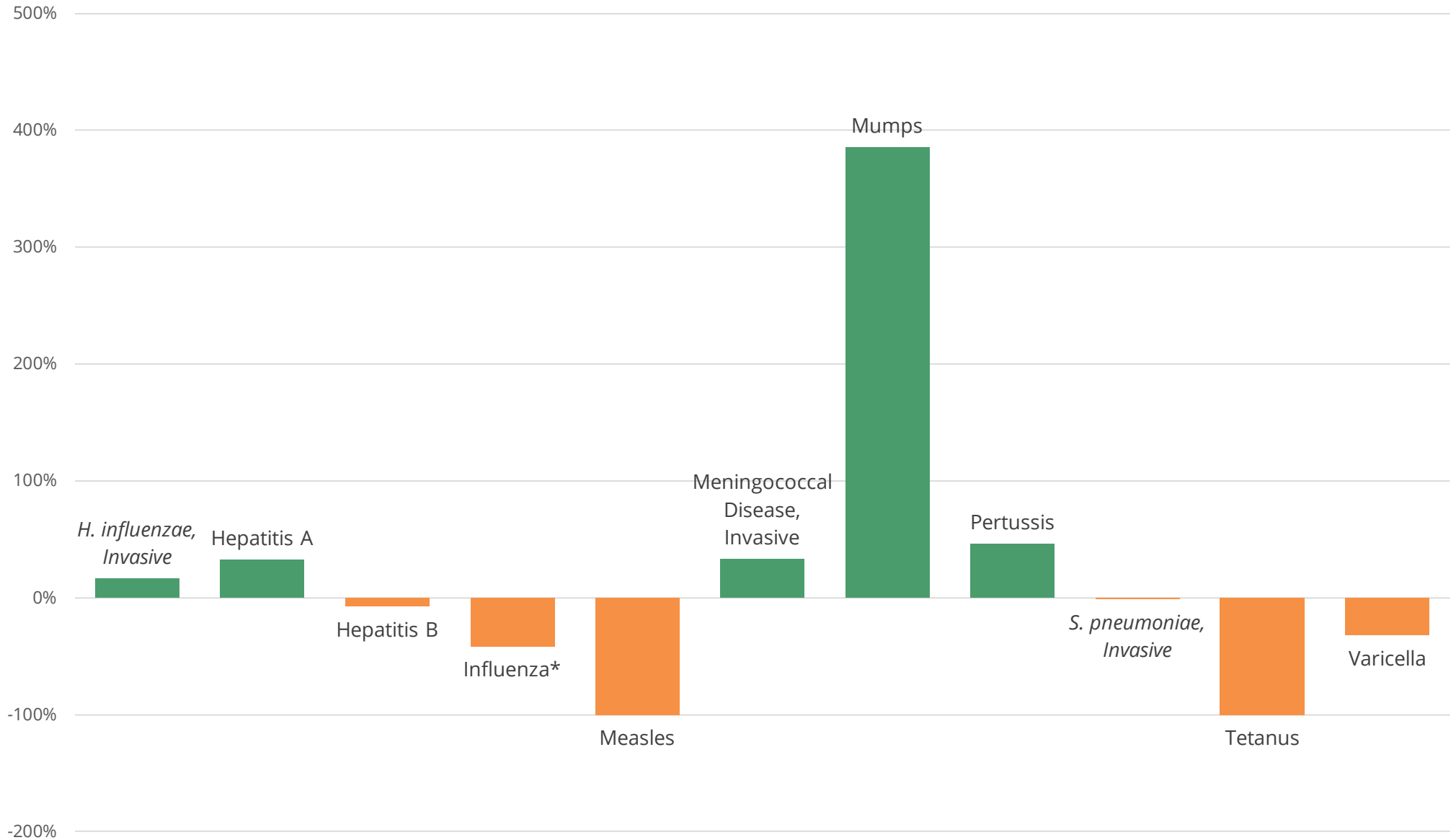
ARIZONA DEPARTMENT
OF HEALTH SERVICES

Vaccine-Preventable Diseases in Arizona

2017

Vaccine-preventable diseases are any infectious diseases where an **effective preventive** vaccine exists.

The number of vaccine-preventable diseases reported in Arizona varies year to year and in 2017 there was an **increase** in *H. influenzae*, hepatitis A, meningococcal disease, mumps and pertussis compared to 2016. There was a **decrease** in hepatitis B, influenza, measles, *S. pneumoniae*, tetanus, and varicella.

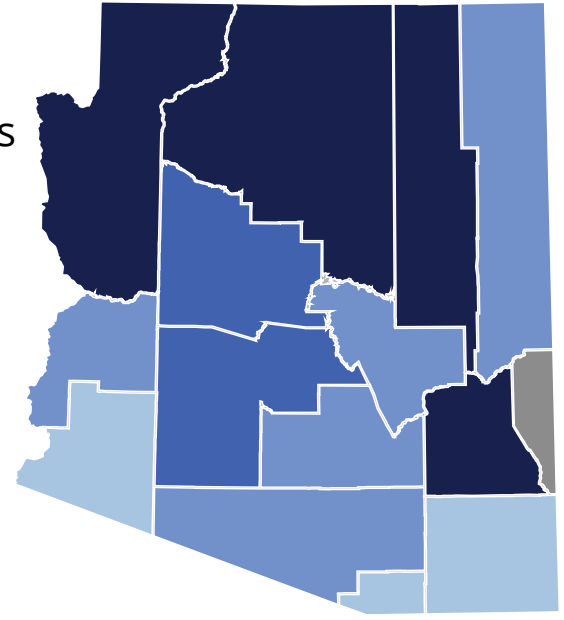
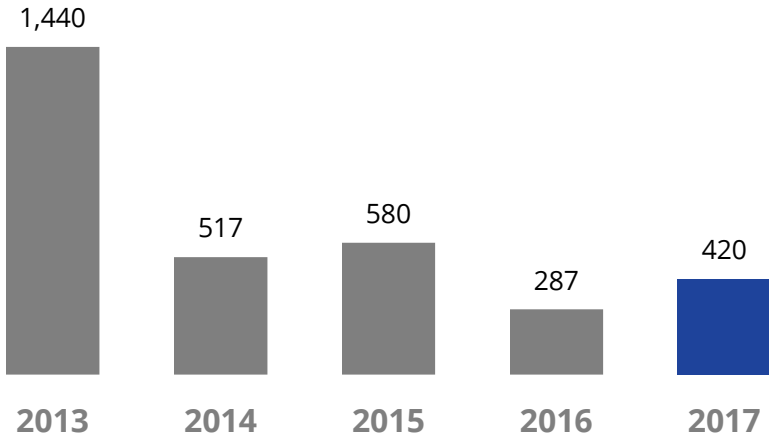


*Influenza is reported by season (2016–2017 season) not by calendar year.

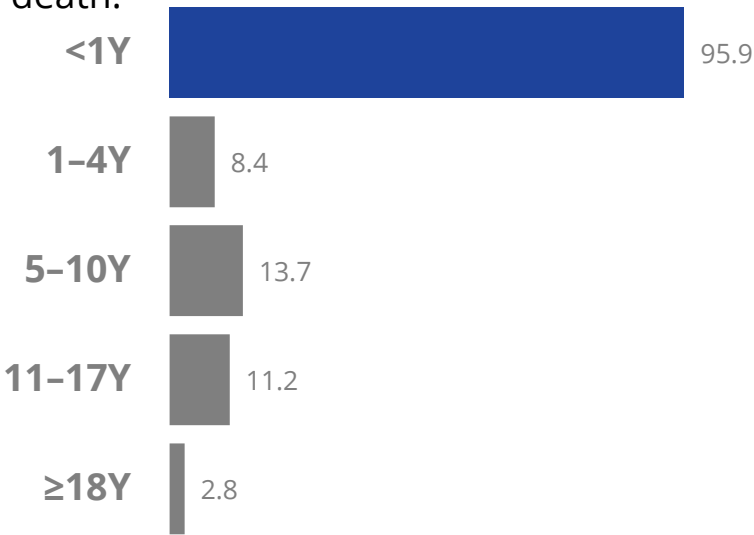
Pertussis in Arizona

2017

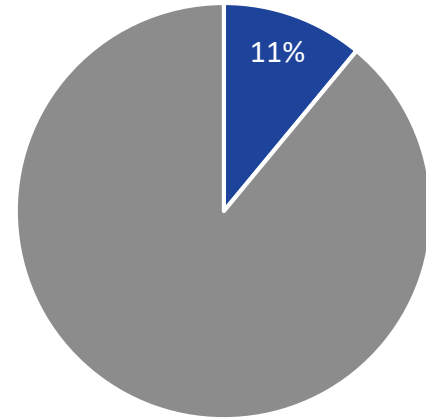
Pertussis cases typically peak every 3 to 5 years. In 2017, Arizona had **420** cases reported to public health which was an increase. The number of cases are expected to continue to increase over the next several years.



As there is an increase in case counts the rates of pertussis in children less than one continues to be elevated. This age group is at higher risk for severe complications and death.



A total of **11%** of pertussis cases were **hospitalized** in 2017.



78% of hospitalized cases were infants less than 1 year of age.

21% of pertussis cases were **unvaccinated** and **39%** had some but **not all recommended doses** of the pertussis vaccine.

Fully Vaccinated, 40%

Partially Vaccinated, 39%

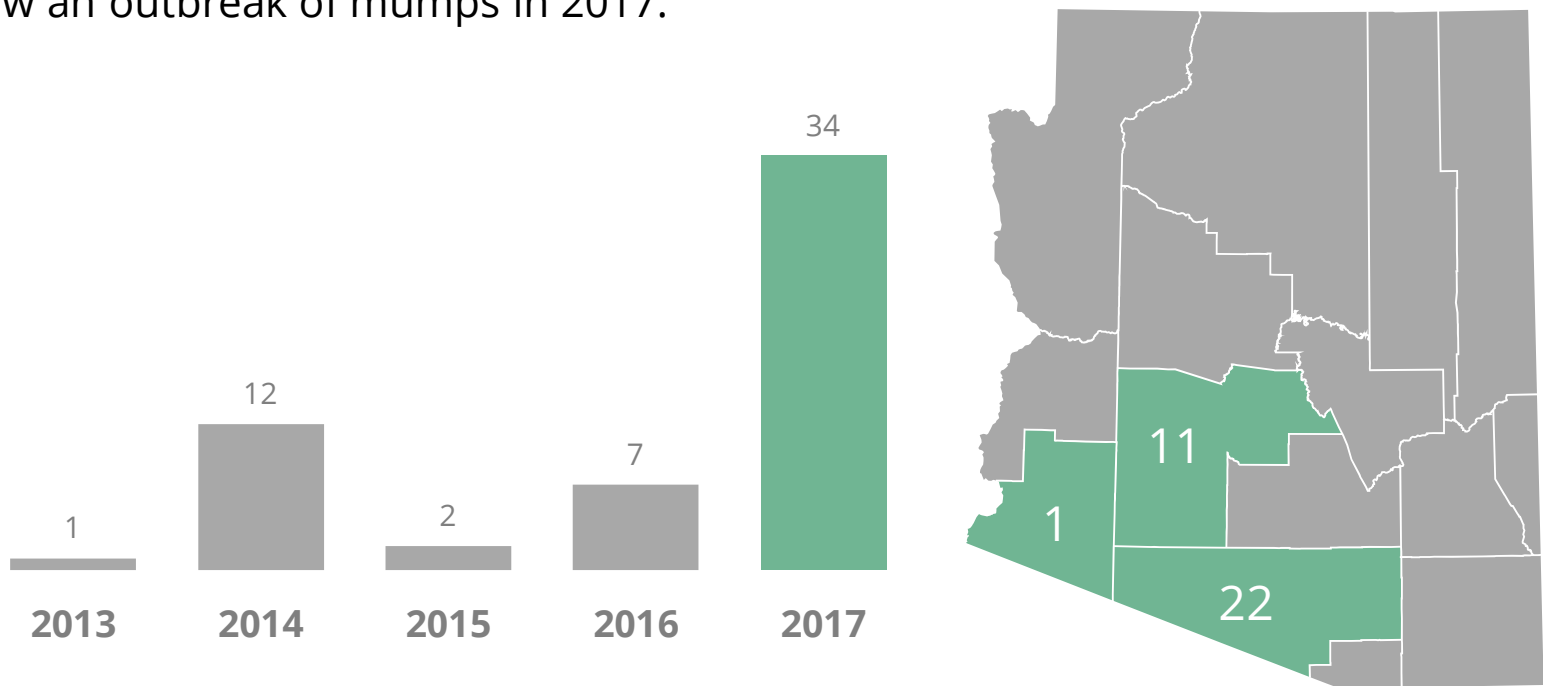
Not Vaccinated, 21%

11 children were less than 6 months and were excluded from the figure since they are considered too young to be fully vaccinated.

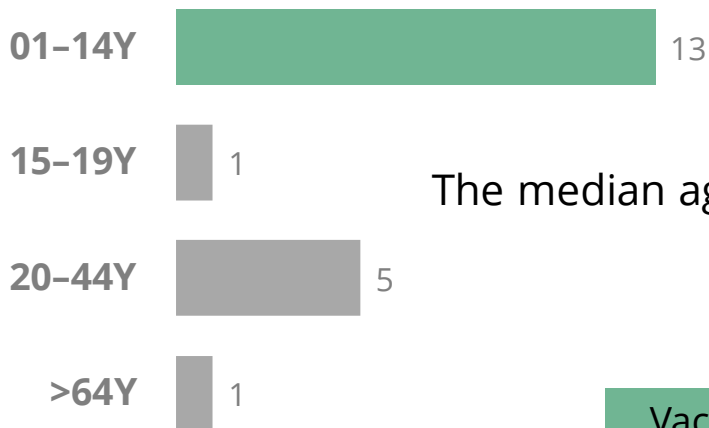
Mumps in Arizona

2017

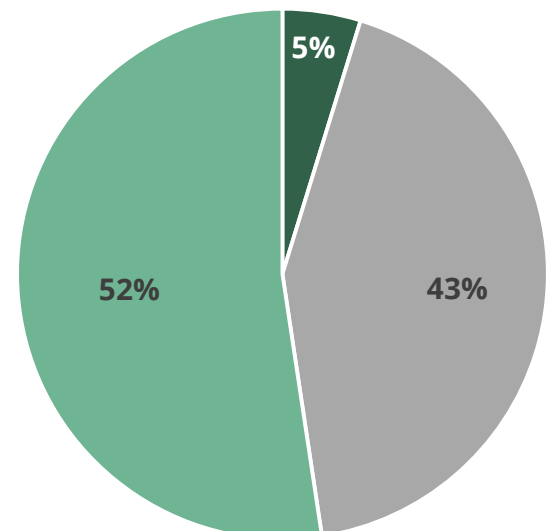
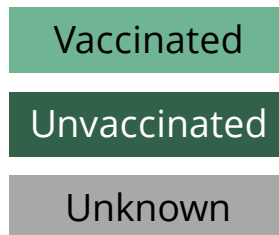
Mumps has been increasing nationally over the past several years and Arizona saw an outbreak of mumps in 2017.



21 of the **34** mumps cases in 2017 were related to an outbreak in Pima County among a close-knit community.



The median age for this outbreak was **11 years old**.



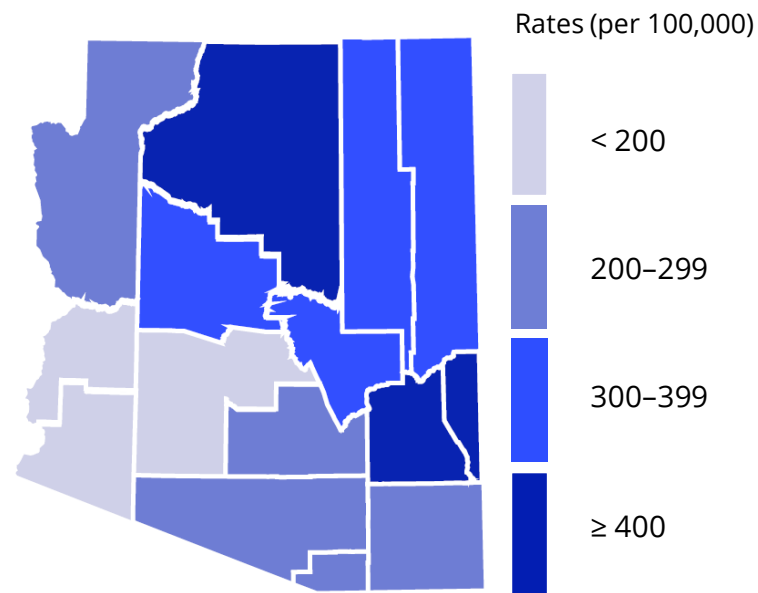
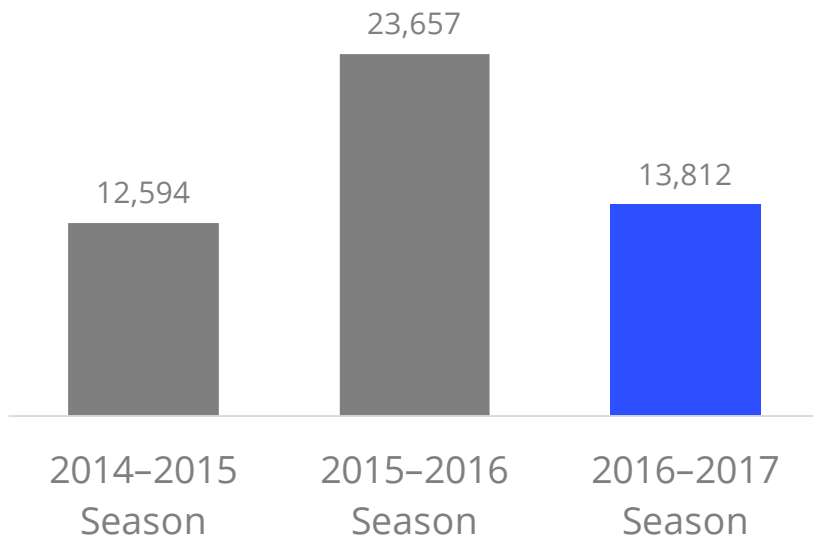
A large majority of cases were **fully vaccinated** or had an **unknown vaccination status**. Those with unknown statuses were generally older.

Influenza in Arizona

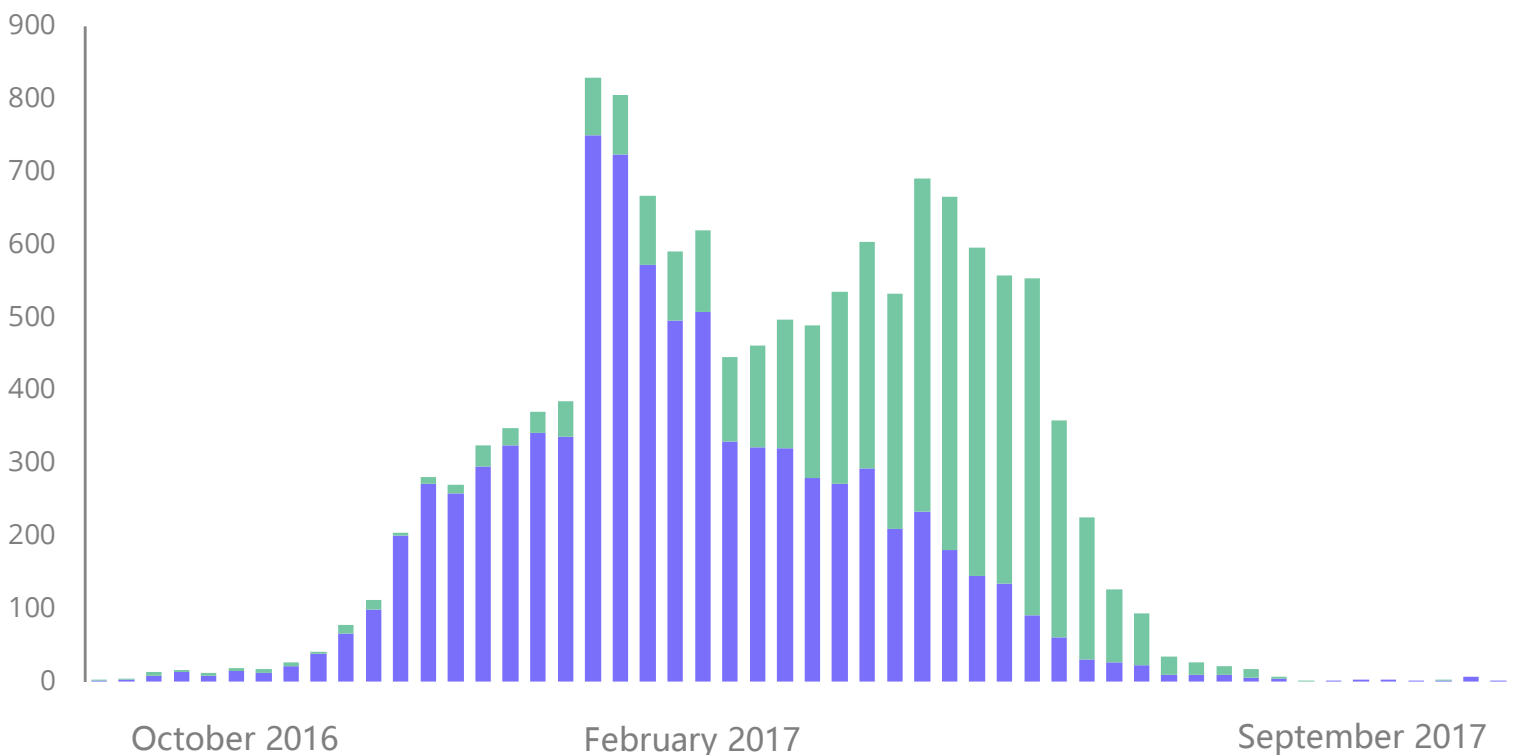
2016-2017

Every influenza season is unique with variation in the number of cases reported, timing of the season, and circulating strains.

The 2016-2017 influenza season had two peaks during the season. The first was in February and the second was in May.



Influenza A and **Influenza B** circulated simultaneously, at different levels, throughout the 2016-2017 season.

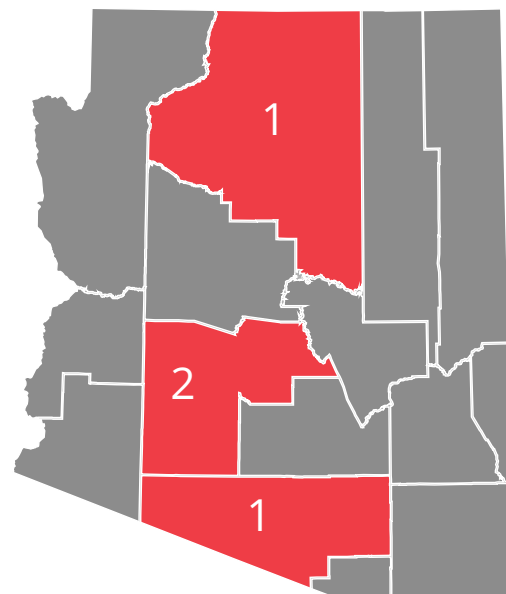
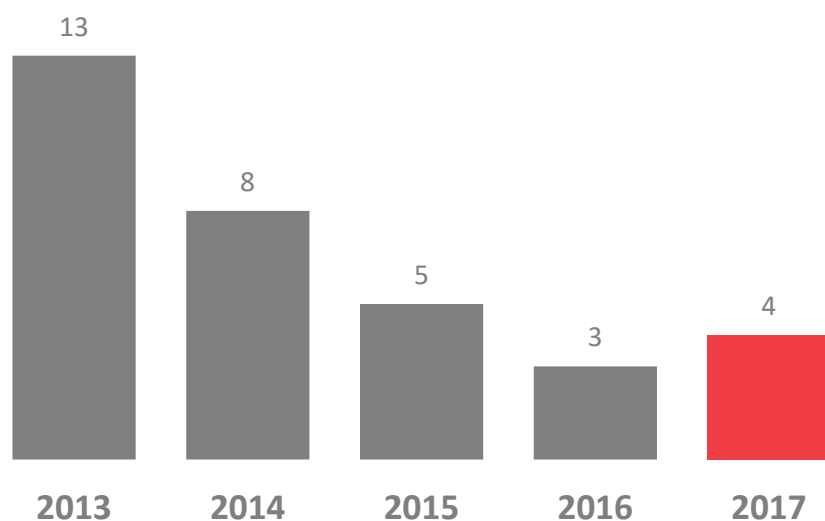


Because of the high number of influenza cases, there are not enough resources for individual investigations like some of the other VPDs. For more information, please see the [2016-2017 influenza season summary](#).

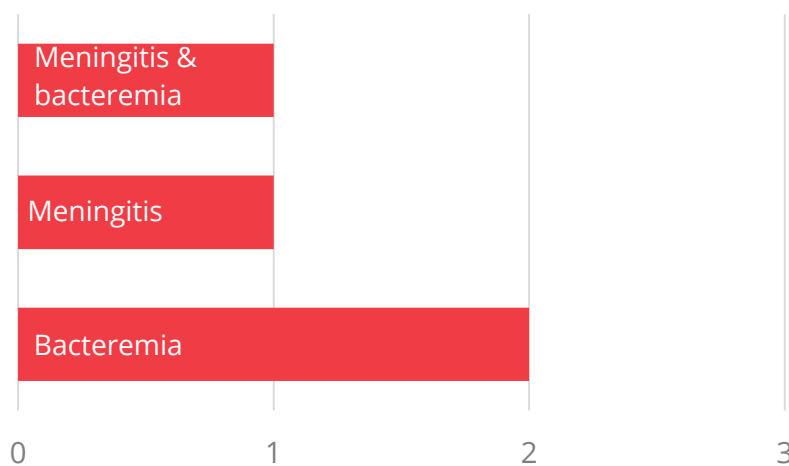
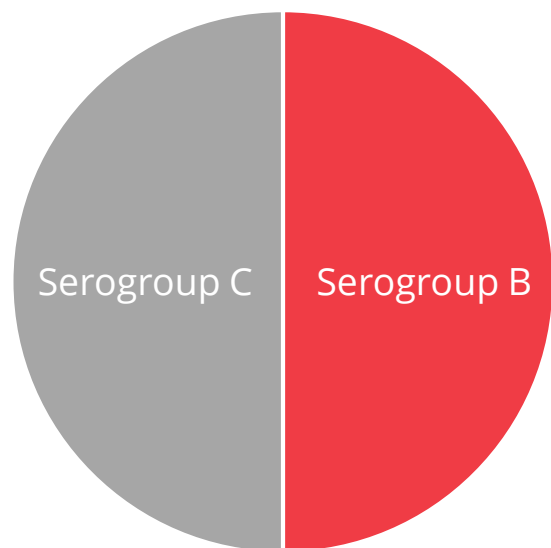
Meningococcal in Arizona

2017

Invasive meningococcal disease has been on the decline since the 1990s and in 2017 Arizona had a total of **4 cases** reported.



In 2017, two cases were **serogroup B** and two cases were **serogroup C**. In the United States, the most common serogroups that cause disease are B, C, and Y.

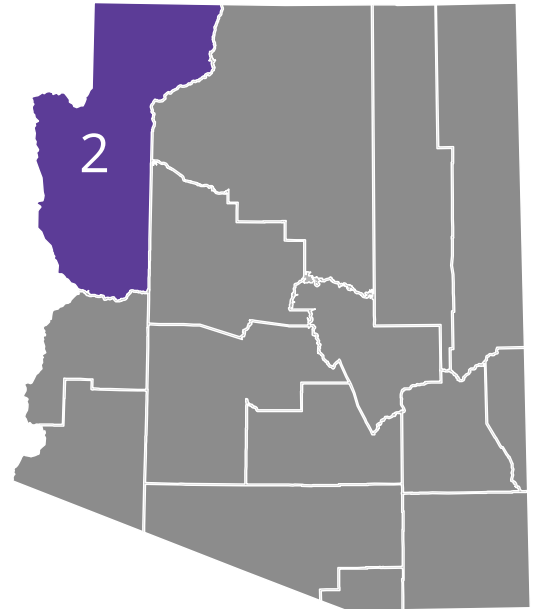
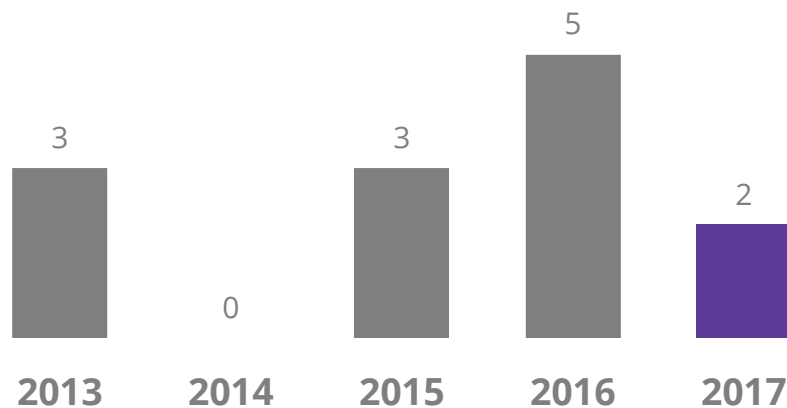


All four cases were **hospitalized** due to their infections.

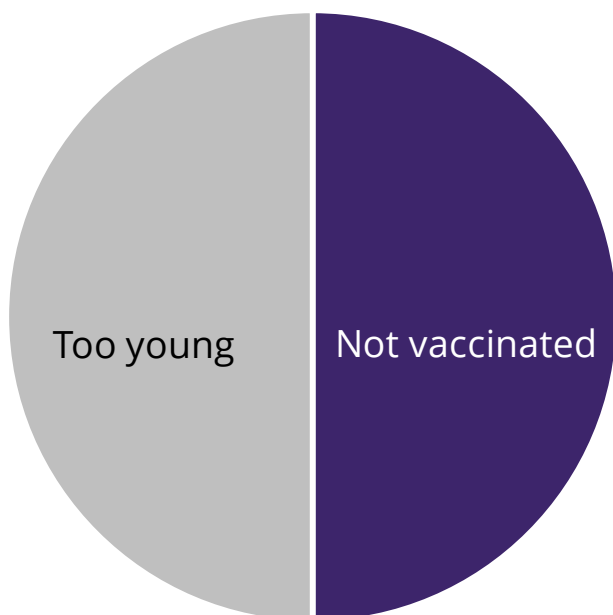
All four cases were either **unvaccinated** or had **unknown** vaccine status for both the meningococcal B vaccine and the meningococcal conjugate vaccine (A, C, W135, & Y).

Only **one** of the cases was within an age group that vaccination would have been recommended.

Haemophilus influenzae type b (Hib) infections are very rare since the introduction of the vaccine in the late 1980s. In Arizona, there are usually one or two cases reported each year. In 2017, there were **two cases**, both from Mohave County.



Both Hib cases had to be hospitalized due to their infections. The types of infections included **sepsis** (infection of the blood) and **meningitis** (swelling of the membrane covering the brain and spinal cord).



One of the Hib cases was **not vaccinated** and the second Hib case was **too young to be vaccinated**.

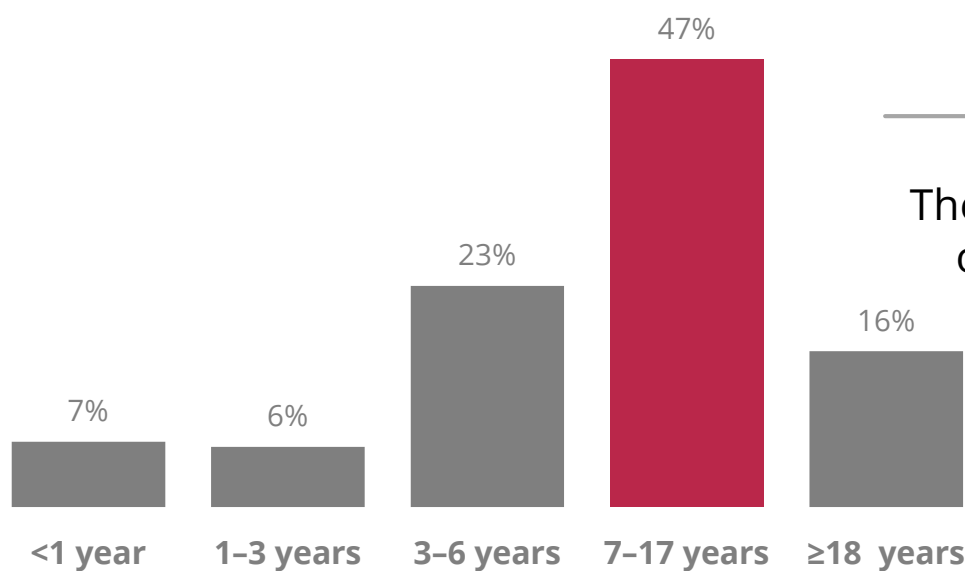
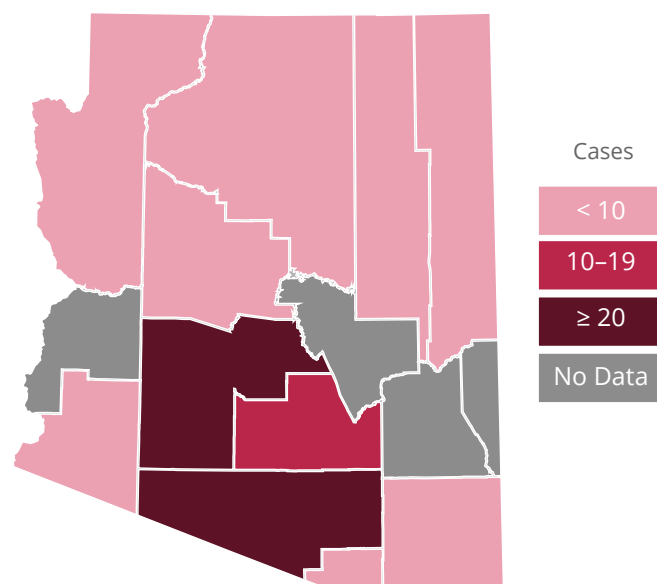
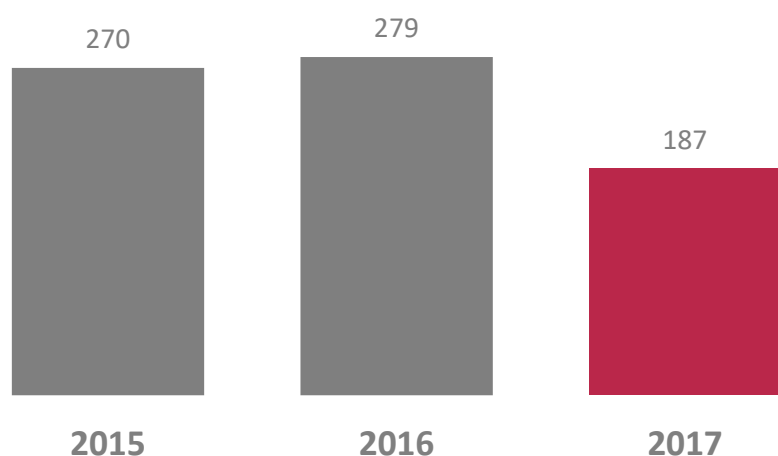
Protecting children who are too young to receive vaccines is just one of the reasons being up-to-date with immunizations is so important.

Varicella (Chickenpox) in Arizona

2017

The number of reported varicella cases decreased in 2017 by approximately 90 cases with **187 cases** reported to public health.

These reported numbers are lower than the actual numbers due to under-reporting of varicella cases.



The majority of varicella cases occur in our **school-aged group**.

There were a total of 6 outbreaks of varicella that occurred in 2017. The number of cases ranged from 3 to 14 with an average of 6 cases.

