

HEALTHY PEOPLE 2020

CRITICAL INDICATORS FOR ADOLESCENTS AND YOUNG ADULTS



Proportion of adolescents who receive the tetanus, diphtheria and pertussis (Tdap) vaccine

Overview

Immunizations are an important part of annual adolescent well visits and help keep youth healthy. The Tdap vaccine protects against three bacterial infections that can be fatal — tetanus, diphtheria and pertussis.

Tetanus

A toxin made by bacteria commonly found in soil causes tetanus, also known as “lockjaw.” The bacteria enter the body through breaks in the skin — usually cuts or open wounds. Approximately three weeks after infection, a person can have symptoms such as headache, irritability and spasms in the jaw muscle. The toxin can spread through the body and cause strong muscle spasms, breathing problems and paralysis. Tetanus causes death in 13 percent of infected people in the United States.¹

Diphtheria

Diphtheria is spread through the coughs and sneezes of infected people. Diphtheria starts with a sore throat, mild fever and chills. The diphtheria toxin can attack the heart, causing abnormal heart rhythms and even heart failure. It may also lead to paralysis. Approximately 5 to 10 percent of people infected with diphtheria in the United States will die, with higher death rates (approximately 20 percent) among persons younger than 5 and older than 40.¹

Pertussis

Pertussis, also known as “whooping cough,” is very contagious and can cause prolonged and extreme coughing. It is easily spread through the air when an infected person coughs or sneezes. Young children are likely to have more severe symptoms of pertussis than preteens and teens. The symptoms of pertussis can persist for 10 weeks or longer.¹

Adolescent Tdap vaccination rates in Oregon

Figure 1 depicts Tdap vaccination rates for ages 13 to 17 between 2008 and 2011. Tdap rates increased every year in this time span, and Oregon’s rates closely followed the national average.^{2,3}

Adolescent immunization rates, Ages 13 to 17, 2008–2011

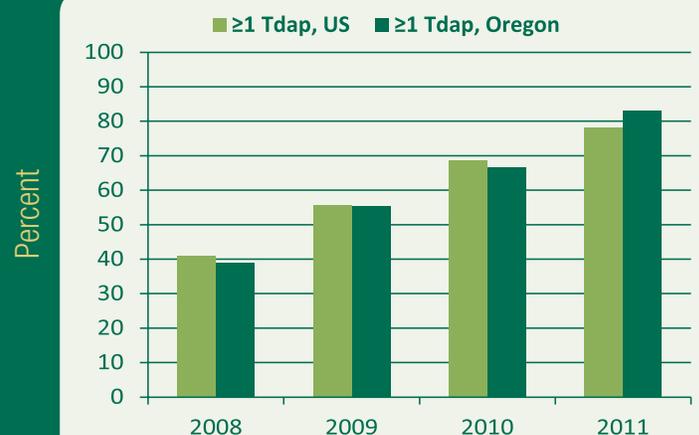


Figure 1

Source: National Immunization Survey, 2008–2011



Importance of Tdap vaccine

Tdap offers protection from tetanus and diphtheria; however, its most significant protection may be from pertussis. The number of reported pertussis cases has increased every year since 2006. In 2012, there were 890 cases of pertussis in Oregon, compared with 318 cases in 2011.³

Tdap vaccine recommendations

Infants have substantially higher rates of pertussis and pertussis-related deaths than older children and adults. The majority of hospitalizations and deaths from pertussis occurs among infants younger than two months, who are too young to receive the diphtheria, tetanus and pertussis (DTaP) vaccine; DTaP is given to kids under the age of 7.⁴ The Centers for Disease Control and Prevention (CDC) recommends the "cocooning" strategy, which advises everyone in close contact with an infant to get a Tdap vaccine.⁴

Youth aged 7 to 18

A dose of Tdap is recommended between age 11 and 12. This dose could be given as early as age 7 for children who missed one or more childhood doses of DTaP when they were younger. Older adolescents who did not receive a dose between 11 and 12 years of age should get a dose of Tdap as soon as possible.

Adults aged 18 and older

Adults who have never had Tdap should receive a dose at the earliest opportunity.

Pregnant women

Pregnant women should get a Tdap dose between 27 and 36 weeks of pregnancy or immediately postpartum. By getting Tdap during pregnancy, maternal pertussis antibodies transfer to the newborn, likely providing protection against pertussis until the child is old enough to receive the first DTaP vaccines at 2 months of age.⁵

Policies

Oregon Revised Statute 433.267 requires all children in public and private schools, preschools, Head Start and certified child care facilities to have up-to-date immunizations, unless they have a religious or medical exemption. For the 2012–2013 school year, Tdap is required for students in grades 7 through 11.⁶ In 2013–2014, Tdap will be required through 12th grade. If youth do not have the required vaccinations or exemptions by Exclusion Day (the third Wednesday in February), they will not be able to attend school.

To increase youth access to vaccinations, Oregon Revised Statute 689.645 allows pharmacists to vaccinate people aged 11 years and older. As part of this law, pharmacists are required to submit immunization data to Oregon's statewide immunization information system, ALERT IIS. The system allows medical providers to look at one consolidated immunization record for a patient; ALERT IIS also recommends immunizations for the patient.⁷



Parents and guardians

Parents and guardians are one of their children's primary sources of information about their own well-being. Parents and guardians should make sure their children have an annual well visit with their primary care provider. This visit includes vaccination recommendations based on the youth's past immunization schedule and age. Following are some of the resources available to parents and guardians about the immunizations their children need in Oregon:

- The Oregon Health Authority Public Health Division Oregon Immunization Program website provides recommended vaccination schedules for infants, children and adolescents as well as information on school vaccination laws (see www.healthoregon.org/imm).
- The Centers for Disease Control and Prevention provides a comprehensive view of vaccinations for youth in the United States as well as for youth travelling abroad. The site includes printable vaccination schedules and information on how to schedule make-up vaccinations in case some have been missed (see www.cdc.gov/vaccines/parents/index.html).

Primary care providers

To encourage youth vaccinations, primary care providers (PCPs) can talk to parents, guardians and youth patients about vaccinations' importance to protecting themselves, their family and their community. PCPs can also address potential concerns about the vaccine by referring to the Tdap Vaccine Information Statement, which they must give to patients before immunization. This document can be found at www.cdc.gov/vaccines/pubs/vis/downloads/vis-td-tdap.pdf. When Tdap is administered, PCPs should screen and offer other recommended adolescent vaccines including human papillomavirus vaccine (HPV) and meningococcal vaccine.

To encourage more PCPs to offer immunizations to youth, the Oregon Vaccines for Children (VFC) Program supplies no-cost federally purchased vaccines to immunize eligible children 18 years and younger. The VFC Program's goals are to increase vaccination rates in youth and vulnerable populations' access to vaccinations by offering free vaccines to private providers who then give them to eligible children. PCPs can enroll in this program by visiting www.healthoregon.org/vfc.

Additionally, PCPs can use the Oregon ALERT IIS in their practice, which makes it easy to enter data, create reports and access patients' prior immunization records.

Resources

Immunization Action Coalition

(www.immunize.org/) creates and distributes immunization educational materials to health care professionals and the public.

Oregon Immunization Program

(<http://public.health.oregon.gov/PreventionWellness/VaccinesImmunization/Pages/index.aspx>) provides Oregon immunization schedules, laws and surveillance data.

Centers for Disease Control and Prevention Preteen and Teen Vaccines

(www.cdc.gov/vaccines/who/teens/index.html) offers preteens and adolescents interactive tools such as the Vaccines Quiz and Adolescent Vaccines Scheduler.

The National Meningitis Association

(www.preteenvaccines.org) offers parents and preteens vaccination information such as a downloadable adolescent immunization poster and vaccine record keeper.

References

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6. Oregon Health Authority Public Health Division. (2013). School exclusion day is Feb. 20. Oregon Public Health news release: Retrieved Feb. 4, 2013, from www.oregon.gov/oha/news/2013/2013-0114-immunize-exd-day.pdf.
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 www.facebook.com/OregonImmunize |  [@OregonImmunize](https://twitter.com/OregonImmunize)

For additional information, please find the OHA Public Health Division Immunization Program on Facebook or follow the program on Twitter.

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