

# 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. As many as one out of five people who get tetanus dies.<sup>1</sup>

#### 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 one out of 10 people who get diphtheria will die from it.<sup>1</sup>

#### 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.<sup>1</sup>

#### Adolescent Tdap vaccination rates in Oregon

Figure 1 depicts Tdap vaccination rates for ages 13 to 17 between 2008 and 2013. Tdap rates increased every year in this time span, and Oregon’s rates closely followed the national average.<sup>2,3</sup>

#### Adolescent immunization rates, Ages 13 to 17, 2008–2013

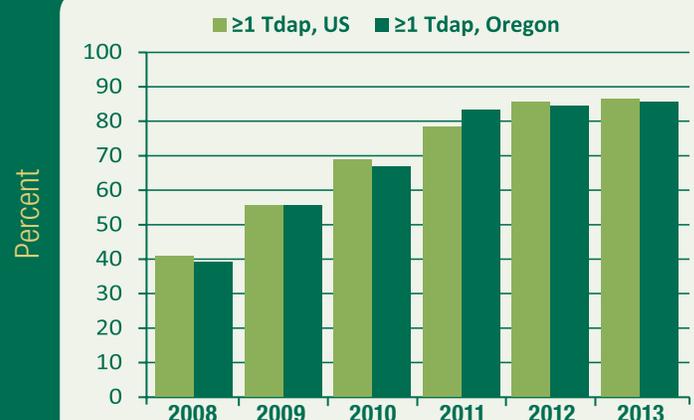


Figure 1

Source: National Immunization Survey, 2008–2013



## Importance of Tdap vaccine

Tdap offers protection from tetanus and diphtheria; however, its most significant protection may be from pertussis. In 2014, there were 413 cases of pertussis in Oregon, compared with 489 cases in 2013.<sup>3</sup>

## 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 2 months, who are too young to receive the diphtheria, tetanus and pertussis (DTaP) vaccine; DTaP is given to kids under the age of 7.<sup>4</sup> Three key strategies are recommended to protect infants from pertussis: administering Tdap vaccine to women during **every** pregnancy; encouraging close contacts of infants to be up-to-date with their pertussis vaccine (cocooning); and vaccinating infants with DTaP according to the childhood immunization schedule.<sup>4</sup>

### Pregnant women

Pregnant women should get a Tdap dose during **each** pregnancy, ideally between 27 and 36 weeks gestation. 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.<sup>5</sup>

### 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.

## 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 an exemption. For the 2015–2016 school year, Tdap is required for all seventh-grade through 12th-grade students.<sup>6</sup> 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.<sup>7</sup>



## 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](http://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](http://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](http://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), meningococcal vaccine and flu 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 providers who then give them to eligible children. PCPs can enroll in this program by visiting [www.healthoregon.org/vfc](http://www.healthoregon.org/vfc).

Additionally, PCPs can use Oregon ALERT IIS in their practice to access patients' prior immunization records, forecast immunizations due and send reminders/recalls.

## Resources

### Immunization Action Coalition

([www.immunize.org/](http://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](http://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](http://www.preteenvaccines.org)) offers parents and preteens vaccination information such as a downloadable adolescent immunization poster and vaccine record keeper.

### ALERT Immunization Information System

([www.alertiis.org](http://www.alertiis.org)) is a statewide registry that collects immunization data from public and private health care providers to create complete records for individuals.

## References

1. Centers for Disease Control and Prevention. (2014, July 24). Tdap vaccine for preteens and teens. Retrieved Feb. 26, 2015, from Centers for Disease Control and Prevention: [www.cdc.gov/vaccines/who/teens/vaccines/tdap.html](http://www.cdc.gov/vaccines/who/teens/vaccines/tdap.html).
2. Oregon Health Authority Public Health Division. (2014). Oregon adolescent immunization rates. Retrieved Feb. 26, 2015, from Public Health: <http://public.health.oregon.gov/PreventionWellness/VaccinesImmunization/Pages/researchteen.aspx>.
3. Oregon Health Authority Public Health Division. (2014). Oregon weekly/monthly CD surveillance report. Retrieved Feb. 26, 2015, from Public Health: <http://public.health.oregon.gov/DiseasesConditions/CommunicableDisease/DiseaseSurveillanceData/Weekly-MonthlyStatistics/Pages/index.aspx>.
4. Centers for Disease Control and Prevention. (2012). Updated recommendations for use of tetanus toxoid, reduced diphtheria toxoid, and acellular pertussis vaccine (Tdap) in pregnant women. *Morbidity and Mortality Weekly Report*, 62(07);131-135.
5. Centers for Disease Control and Prevention. (2015, Feb. 17). CDC features. Retrieved Feb. 26, 2015, from Help protect babies from whooping cough: [www.cdc.gov/features/pertussis/](http://www.cdc.gov/features/pertussis/).
6. Oregon Health Authority Public Health Division. (2015). Parents, don't let your child get left behind! Retrieved Feb. 26, 2015, from <http://public.health.oregon.gov/PreventionWellness/VaccinesImmunization/GettingImmunized/Documents/SchBusEng15.pdf>.
7. Oregon Revised Statute (ORS) 689.645. (2013). Power to administer and prescribe vaccines. Oregon Laws: Retrieved Feb. 26, 2015, from [www.oregonlaws.org/ors/689.645](http://www.oregonlaws.org/ors/689.645).

 [www.facebook.com/OregonImmunize](http://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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PUBLIC HEALTH DIVISION  
Adolescent Health Program

This document can be provided upon request in alternate formats for individuals with disabilities or in a language other than English for people with limited English skills. To request this form in another format or language, contact the Adolescent Health Program at 971-673-0249 or 971-673-0372 for TTY.

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