TETANUS, DIPHTHERIA VACCINE PERTUSSIS (Tdap)

WHAT YOU NEED TO KNOW

1 Why get vaccinated?

Tdap (**T**etanus, **D**iphtheria, **P**ertussis) vaccine can protect adolescents and adults against three serious diseases.

Tetanus, diphtheria, and pertussis are all caused by bacteria. Diphtheria and pertussis are spread from person to person. Tetanus enters the body through cuts, scratches, or wounds.

TETANUS (Lockjaw) causes painful tightening of the muscles, usually all over the body.

• It can lead to "locking" of the jaw so the victim cannot open his mouth or swallow. Tetanus leads to death in up to 2 cases out of 10.

DIPHTHERIA causes a thick covering in the back of the throat.

• It can lead to breathing problems, paralysis, heart failure, and even death.

PERTUSSIS (Whooping Cough) causes severe coughing spells, vomiting, and disturbed sleep.

 It can lead to weight loss, incontinence, rib fractures and passing out from violent coughing, pneumonia, and hospitalization due to complications.

In 2004 there were more than 25,000 cases of pertussis in the U.S. More than 8,000 of these cases were among adolescents and more than 7,000 were among adults. Up to 2 in 100 adolescents and 5 in 100 adults with pertussis are hospitalized or have complications.

2 | Tdap and related vaccines

Vaccines for Adolescents and Adults

- **Tdap** was licensed in 2005. It is the first vaccine for adolescents and adults that protects against all three diseases.
- **Td** (tetanus and diphtheria) vaccine has been used for many years as booster doses for adolescents and adults. It does not contain pertussis vaccine.

Vaccines for Children Younger than 7 Years

- **DTaP** vaccine is given to children to protect them from these three diseases. Immunity can fade over time, and periodic "booster" doses are needed by adolescents and adults to keep immunity strong. (**DTP** is an older version of DTaP. It is no longer used in the United States.)
- DT contains diphtheria and tetanus vaccines. It is used for children younger than 7 who should not get pertussis vaccine.

Who should get Tdap vaccine and when?

Adolescents 11 through 18 years of age should get one booster dose of Tdap.

- A dose of Tdap is recommended for **adolescents who got DTaP or DTP as children** but have not yet gotten a dose of Td. The preferred age is 11-12.
- Adolescents who have already gotten a booster dose of Td are encouraged to get a dose of Tdap as well, for protection against pertussis. Waiting at least 5 years between Td and Tdap is encouraged, but not required.
- Adolescents who did not get all their scheduled doses of DTaP or DTP as children should complete the series using a combination of Td and Tdap.

Adults 19 through 64 years of age should substitute Tdap for one booster dose of Td. Td should be used for later booster doses.

- Adults who expect to have close contact with an infant younger than 12 months of age should get a dose of Tdap. Waiting at least 2 years since the last dose of Td is suggested, but not required.
- Healthcare workers who have direct patient contact in hospitals or clinics should get a dose of Tdap. A 2-year interval since the last Td is suggested, but not required.

An adolescent or adult who gets a severe cut or burn might need protection against tetanus infection. Tdap may be used if the person has not had a previous dose.

Td should be used rather than Tdap if

Tdap is not available, and for:

- Anybody who has already gotten Tdap,
- Adults 65 years of age and older,
- Children 7 through 9 years of age.

If vaccination is needed during **pregnancy**, Td usually is preferred over Tdap. Ask your doctor. **New mothers** who have never received a dose of Tdap should get a dose as soon as possible after delivery.

Tdap may be given at the same time as other vaccines.

4

Some people should not get Tdap vaccine or should wait.

- Anyone who has had a life-threatening allergic reaction after a dose of DTP, DTaP, DT, or Td vaccine should not get Tdap.
- Anyone who has a severe allergy to any component
 of the vaccine should not get Tdap. Tell your health
 care provider if the person getting the vaccine has any
 known severe allergies.

Talk with your doctor if the person getting the vaccine has a **severe allergy to latex**. Some Tdap vaccines should not be given to people with a severe latex allergy.

- Anyone who went into a **coma** or had a **long seizure** within 7 days after a dose of DTP or DTaP should not get Tdap, unless a cause other than the vaccine was found.
- Talk to your doctor if the person getting the vaccine:
 - has epilepsy or another nervous system problem,
 - had severe swelling or severe pain after a previous dose of any vaccine containing tetanus, diphtheria or pertussis,
 - has had Guillain Barré Syndrome (GBS).

Anyone who has a **moderate or severe illness** on the day the shot is scheduled should usually wait until they recover before getting the vaccine. Those with a mild illness or low fever can usually be vaccinated.

5

What are the risks from Tdap vaccine?

A vaccine, like any medicine, could possibly cause serious problems, such as severe allergic reactions. However, the risk of a vaccine causing serious harm, or death, is extremely small.

If rare reactions occur with any new product, they may not be identified until many thousands, or even millions, of people have used the product. Like all vaccines, Tdap is being closely monitored for unusual or severe problems.

Clinical trials (testing before the vaccine was licensed) involved about 4,200 adolescents and about 1,800 adults. The following problems were reported. These are similar to problems reported after Td vaccine.

Mild Problems

(Noticeable, but did not interfere with activities)

- Pain (about 3 in 4 adolescents and 2 in 3 adults)
- Redness or swelling (about 1 in 5)
- Mild fever of at least 100.4°F (up to about 1 in 25 adolescents and 1 in 100 adults)
- Headache (about 4 in 10 adolescents and 3 in 10 adults)
- Tiredness (about 1 in 3 adolescents and 1 in 4 adults)
- Nausea, vomiting, diarrhea, stomach ache (up to 1 in 4 adolescents and 1 in 10 adults)
- Other mild problems reported include chills, body aches, sore joints, rash, and swollen lymph glands.

Moderate Problems

(Interfered with activities, but did not require medical attention)

- Pain at the injection site (about 1 in 20 adolescents and 1 in 100 adults)
- Redness or swelling (up to about 1 in 16 adolescents and 1 in 25 adults)
- Fever over 102°F (about 1 in 100 adolescents and 1 in 250 adults)
- Nausea, vomiting, diarrhea, stomach ache (up to 3 in 100 adolescents and 1 in 100 adults)
- Headache (1 in 300)

Severe Problems

(Unable to perform usual activities; required medical attention)

- · None were seen among adolescents.
- In the adult clinical trial, two adults had nervous system problems after getting the vaccine. These may or may not have been caused by the vaccine. They went away on their own and did not cause any permanent harm.
- A severe allergic reaction could occur after any vaccine. They are estimated to occur less than once in a million doses.

A person who gets these diseases is much more likely to have severe complications than a person who gets Tdap vaccine.



What if there is a severe reaction?

What should I look for?

• Any unusual condition, such as a high fever or behavior changes. Signs of a serious allergic reaction can include difficulty breathing, hoarseness or wheezing, hives, paleness, weakness, a fast heart beat or dizziness.

What should I do?

- Call a doctor, or get the person to a doctor right away.
- **Tell** your doctor what happened, the date and time it happened, and when the vaccination was given.
- **Ask** your doctor, nurse, or health department to report the reaction by filing a Vaccine Adverse Event Reporting System (VAERS) form.

Or you can file this report through the VAERS web site at **www.vaers.hhs.gov**, or by calling **1-800-822-7967**.

VAERS does not provide medical advice.



The National Vaccine Injury Compensation Program

In the event that you or your child has a serious reaction to a vaccine, a federal program has been created to help pay for the care of those who have been harmed.

For details about the National Vaccine Injury Compensation Program, call **1-800-338-2382** or visit their website at **www.hrsa.gov/vaccinecompensation.**

8

How can I learn more?

- Ask your immunization provider. They can give you the vaccine package insert or suggest other sources of information.
- Call your local or state health department.
- Contact the Centers for Disease Control and Prevention (CDC):
 - Call 1-800-232-4636 (1-800-CDC-INFO)
 - Visit CDC's National Immunization Program website at www.cdc.gov/nip





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