

Td Vaccine to Prevent Tetanus and Diphtheria

COMMUNICABLE DISEASE CONTROL

What are vaccines?

Vaccines are also called needles, baby shots, or immunizations. Vaccines help your immune system learn how to recognize the germs that cause diseases and fight them.

Vaccines not only protect the people who are immunized but may also protect those who cannot be immunized for medical reasons. This is because someone who is immunized is less likely to spread infection.

Before vaccines were available, little could be done to prevent serious diseases such as tetanus, diphtheria, pertussis (whooping cough), polio, measles and rubella. Now, very few Canadians get sick or die from these diseases because people are protected by immunization. However, in countries where these vaccines are not routinely used, experience shows that these diseases could again become common in Canada if we do not continue to immunize against them.

What are these diseases?

Diphtheria

Diphtheria used to be a common disease in Canada.

- About 12,000 people a year became sick with diphtheria.
- About 1,000 people died every year.

In Canada, cases of diphtheria have dropped because children and adults are protected through immunization. Today only a few cases of diphtheria occur each year. It usually infects people who are not protected through immunization.

Diphtheria bacteria, or germs, infect the throat, nose or skin. The germs are passed on to others by:

- coughing,
- sneezing, or
- close face-to-face contact with an infected person.

Diphtheria can affect people in several ways:

- breathing problems,
- weakness, or loss of muscle movement, also called paralysis,
- heart failure, or
- death.

Diphtheria kills one of every 10 people who get the disease.

Diphtheria is now very rare in Canada because we immunize our children. Recently, large outbreaks of diphtheria have occurred in other countries such as the former Soviet Union, because fewer people were getting immunized.

Tetanus

Tetanus is caused by tetanus bacteria, or germs, which get into cuts, puncture wounds or burns. Tetanus germs are common, especially in dirt, dust and manure.

- Tetanus germs in a wound form a poison, or toxin, that causes your muscles to tighten and go into spasms. A spasm is a painful, uncontrollable tightening of the muscles.
- Tetanus can be very serious if the breathing muscles are affected by these spasms.
- About two out of every 10 people who get tetanus die from the disease.

Will Td vaccine protect against tetanus and diphtheria?

When the Td vaccine is given in the recommended number of shots, it protects:

- more than 85 out of 100 people against diphtheria, and
- more than 95 out of 100 people against tetanus.

When should Td vaccine be given?

People are immunized against tetanus and diphtheria:

- in early childhood,
- at 14-16 years of age, and
- every 10 years for continued protection.

A booster dose of Td may be needed if a person has a wound or cut.

Manitoba's Childhood Immunization Schedule

Age	DaPTP*	Hib*	MMR	HBV	Tdap
2 months	X	X			
4 months	X	X			
6 months	X	X			
12 months			X		
18 months	X	X			
5 years	X		X		
Grade 4				XXX	
14-16 years					X
Every 10 years					X (Td only)

*DaPTP and Hib are given as "one needle"

D or d – diphtheria

ap – acellular pertussis (whooping cough)

T – tetanus

P – polio

Hib – Haemophilus influenzae type B

M – measles (red measles)

M – mumps

R – rubella (german measles)

HBV – hepatitis B

What are the side effects?

The Td vaccine is very safe. But as with any medicine, minor side effects sometimes occur.

Minor side effects include:

- soreness, redness and swelling where the needle is given;
- fever of less than 39° C (102.5° F);
- headache;
- not feeling well; and/or
- swelling of the lymph glands.

These usually disappear in two to three days.

In rare cases, more serious side effects can happen. These are:

- severe swelling and pain where the needle was given (this is unusual and happens only when doses of Td vaccine are given too often);
- serum sickness, an illness that affects certain organs in your body for a short time (this is rare);
- changes affecting the nerves in the arm and chest (tingling, numbness, weakness), which happens in less than one in 100,000 immunizations;
- temporary paralysis, called Guillain Barré Syndrome, which happens with about one in every 2.5 million immunizations; or
- a severe allergic reaction, also called anaphylactic shock. Symptoms of anaphylactic shock are:
 - hives,
 - wheezing,
 - shortness of breath or difficulty breathing,
 - swelling of the face, mouth, or throat, occurring in one of every 500,000 immunizations.

Always report any of these more serious reactions to your doctor or public health nurse.

Who should not get the Td vaccine?

Your doctor or public health nurse may decide not to give the injection in the following situations:

- If you have a high fever or serious infection worse than a cold. The immunization will be postponed and given another day.
- If you have had a severe allergic reaction to a previous dose of tetanus or diphtheria vaccines.
- If you have a severe allergy to thimerosal, formaldehyde or any other materials in the Td vaccine.
- Within the first three months of pregnancy.
- If you have had Guillain Barré Syndrome within six to eight weeks of receiving a previous dose of Td vaccine.

All severe allergies should be reported to the doctor or public health nurse before any vaccine is given.

Your record of protection

Make sure your doctor or public health nurse updates your Immunization Record card after you receive an immunization. Keep it in a safe place!

In Manitoba, vaccination is voluntary.

Recommended Resources:

Available at local bookstores:

- *Your Child's Best Shot: A Parents' Guide to Vaccination* (2002). Canadian Paediatric Society
- *What Every Parent Should Know About Vaccines* (2002). Dr. Paul Offitt & Dr. Louis M. Bell

Available on the Internet:

- Government of Manitoba – Public Health Branch
www.gov.mb.ca/health/publichealth/cdc/index.html
- Division of Immunization and Respiratory Diseases – Health Canada
www.hc-sc.gc.ca/pphb-dgspssp/dird-dimr/index.html

- Canadian Immunization Awareness Program – Canadian Public Health Association
www.immunize.cpha.ca/english/index.htm
- Canadian Paediatric Society
www.caringforkids.cps.ca/immunization/index.htm
- National Immunization Program – Centres for Disease Control and Prevention – USA
www.cdc.gov/nip/default.htm
- Immunization Action Coalition
www.immunize.org/index.htm

Information about the shots that you or your children receive may be recorded in the Manitoba Immunization Monitoring System (MIMS). This computerized database allows your doctor, your child's doctor or your public health nurse to find out what shots you or your child have had or need to have. Information collected in MIMS may be used to produce vaccination records, or notify you or your doctor if your child has missed a particular shot. Manitoba Health may use the information to monitor how well different vaccines work in preventing disease.

If you need information on the shots that you or your child has received, contact your local public health unit or nursing station.

For more information

Talk to your doctor, public health nurse or call Health Links in Winnipeg: 788-8200 or toll-free: 1-888-315-9257 or access our Web site at www.gov.mb.ca/health.

Local Public Health Unit Stamp

