**Section 698.APPENDIX A Important Information About Pertussis (Whooping Cough) and the Pertussis Vaccine in DPT**

Introduction

This informational pamphlet is being made available to you to explain the benefits and possible side effects to the immunization for pertussis (the DTP shot). As a parent, you need to be aware of the importance of immunization, the possible risk associated with immunization and the risks faced by unprotected children.

Pertussis or whooping cough can be a serious disease. In some persons, especially very young children, it can cause permanent brain damage or even death. In order to protect persons from whooping cough, Illinois immunization rules "Immunizations" (77 Ill. Adm. Code 695) require children to get at least four DTP shots before they go to school. However, not all children should receive the DTP vaccine. In some cases, the "P" part (pertussis) of the DTP vaccine can cause serious reactions, including permanent brain damage or even death (See questions "Who Should Not Receive The DTP Vaccine?", "When Should a Child's DTP Shots Be Delayed?" and "Which Children Are More Likely Than Others To Have a Serious Reaction To DTP Vaccine?"). So some children should not get the "P" part of the DTP vaccine at all. These children should instead receive pediatric DT (diphtheria and tetanus) in order to have protection against these two diseases. Also, for some children the series of DTP vaccine should be delayed.

It is very important for you to read and to understand the information about whooping cough and the DTP vaccine contained in this pamphlet to protect your child's health. If there is something in this pamphlet you don't understand, ask the person who gave you the pamphlet to explain it.

What is DTP vaccine?

DTP is the abbreviation for the combined diptheria/tetanus/pertussis vaccine generally used to prevent these three serious diseases. This 3 in 1 vaccine is made from inactive toxins and killed germs and does not cause any of the diseases against which it protects. When injected, the vaccine causes the body to create disease-fighting substances called antibodies. Pediatricians advise that children receive five injections of the DTP vaccine prior to entrance into school.

What is Pertussis (whooping cough)?

Pertussis, also known as whooping cough, is a highly contagious disease caused by the bacterium, Bordetella pertussis, which is found in the mouth, nose, and throat of a infected person. It is spread to others by sneezing and coughing. The disease begins with cold-like symptoms and progresses to repeated, violent coughing spells, especially at night, which can interfere with eating, drinking, breathing, and sleeping. The coughing spells are commonly accompanied at the end by a "whooping" sound while the victim struggles to take a breath. This is why this disease is also known as whooping cough. A child may have as many as 30 or 40 or more coughing fits per day. The disease normally lasts for 4 - 6 weeks.

Why is it important to immunize children with DTP vaccine?

Whooping cough used to be an extremely common illness in the U.S. with as many as 250,000 cases reported per year during the 1930's. Widespread use of pertussis vaccine in this country since the late 1940's has contributed to a large reduction in the number of cases and deaths from the disease.

If infants and children were no longer immunized, the number of cases, the complications of illness, and the deaths due to pertussis could again become widespread, as has occurred in countries where usage of the DTP vaccine has decreased. When acceptance for the vaccine declined in Great Britain and Japan during the 1970's each country experienced serious outbreaks of pertussis; thousands of children were hospitalized and many died.

Because whooping cough is highly contagious, protection by vaccine is important for both the child who gets the shot and the community at large.

Must my child be immunized with DTP vaccine?

Illinois immunization rules "Immunizations" (77 Ill. Adm. Code 695) require most children to receive several different immunizations before they can enter school – DTP vaccine is one of them. In order to enter school, at least 4 doses of DTP, at the proper intervals, are required; 5 are recommended.

Not all children are required to get DTP shots. A child may be exempt from Illinois school entrance immunization requirements if he or she meets the appropriate conditions for such an exemption as indicated below:

• the child has any medical condition listed in the section "Who Should Not Receive the DTP Vaccine?";

• the parent or guardian requests an exemption on bonafide religious grounds (in which case the objection must be universal, and not for DTP vaccine alone).

What are the risks of getting whooping cough?

In recent years, according to the Centers for Disease Control (CDC), over 2,000 cases of whooping cough have been reported each year in the U.S. Since many cases go unrecognized or unreported, the actual number of cases could be much higher.

At the present time, approximately 30% of reported cases in the U.S. occur in infants less than 6 months old. One-half of the reported cases occur in children less than 1 year of age, and approximately 70% of the cases involve children less than 5 years of age. Whooping cough is 2½ times more common in children less than 1 year of age than in children who are between the ages of 1 - 4. Fatal cases are most likely to occur in children less than 1 year of age. This is why it is important that a child be given the vaccine as early in life as possible.

Older children and adults...even those who have been vaccinated...can also contract the disease and are believed in many cases to be the source of infection in the younger children.

What Are The Possible Dangers Of Whooping Cough?

A severe case of whooping cough can cause grave complications, among them convulsions, pneumonia, and brain damage. These effects are most likely to occur in the very young, and when they do, they can be fatal. An alarming number of whooping cough complications occur in infants younger than 1 year of age:

• more than half of the children are hospitalized (highest in infants less than 6 months of age).

• one out of five children develops pneumonia

• one child out of 40 has convulsions

• one child out of 240 develops diseases of the brain or permanent brain damage

• death occurs in one out of 100 infants less than six months of age.

In recent years, an average of 9 deaths due to whooping cough has been reported each year in the U.S. While fatality is low, almost all deaths are among children under 1 year of age, most in those under 6 months.

While there is no specific treatment for whooping cough, prompt medical attention and supportive care can be successful in reducing the severity and complications of the disease.

How Do The Possible Risks Of The DTP Vaccine Compare To The Benefits?

While the chance of your child being harmed from whooping cough is high, the chance of your child being harmed by the DTP vaccine is very low. The possible side effects of the vaccine should be balanced against the risks related to the disease. Both convulsions and permanent brain damage occur more frequently following whooping cough disease than after DTP vaccination.

Most U.S. doctors and public health officials believe that the benefits of pertussis vaccine outweigh the risk of reactions to the vaccine for most children.

What Are The Possible Side Effects Of The DTP Vaccine?

Vaccines are among our safest and most reliable medicines. However, vaccines, like all medicines, can cause side effects. With DTP vaccine, most children receive the full series of DTP shots without serious problems. The most common side-effects of DTP vaccine are soreness, redness and swelling at the site of the injection, a slight fever and fussiness. These reactions usually occur within the first 48 hours, are mild, and have a short duration. The frequency of these reactions is higher when more doses of DTP vaccine are given to the child. Less common, but more severe side-effects can occur.

The more serious reactions to the DTP vaccine may include convulsions; shock-collapse (turning blue or pale, limp, non-responsive); a fever of 103º F. or more; high-pitched screaming, persistent crying for three or more hours or unusually long sleeping with great difficulty in waking the child. Any of these signs should be reported to your doctor or health care provider at once.

Although rare, serious reactions that are possibly related to the vaccine include long-term seizure disorders, brain damage, and even death.

There is a great deal of disagreement over how often these serious reactions happen. The DTP vaccine, and particularly the "P" component, is known to cause serious reactions more often than other vaccines. It is not known how many children develop serious problems after the DTP shot, yet clearly children who receive DTP shots are at somewhat greater risk of serious reactions than those who receive DT shots, without the "P".

Because nervous system disorders such as seizures are typically first noticed in the first year of life, during the same period when three doses of DTP vaccine are given, it has been difficult to determine whether DTP vaccine causes these illnesses or whether their onset is coincidental. The DTP vaccine, therefore, may not necessarily be the cause of these rare problems.

When Should Your Child Receive The DTP Vaccine?

The DTP vaccine is given by injection starting early in infancy. The U.S. Public Health Service and the American Academy of Pediatrics recommend that children receive five injections of the DTP vaccine.

At least three shots are needed to provide initial protection. Young children should get 3 doses in the first year of life, normally at 2, 4, and 6 months of age, and a fourth dose at about 15 months of age. A booster dose is important for children who are about to enter school, and should be given between the ages of 4 and 6 years.

Because pertussis is not very common or severe in older children, those 7 years of age or older should receive a vaccine that does not contain the pertussis part. The vaccine which contains no pertussis part and a lower concentration of the diphtheria part is called Td vaccine.

Who Should Not Receive The DTP Vaccine?

Before you schedule your child to receive the DTP vaccine, plan to discuss his or her medical history with your doctor or health care provider. Some children should not receive the shot or should have the shot delayed until another time. If your child had a serious reaction following a previous dose of DTP vaccine, he or she should be fully evaluated to clarify his or her medical and neurologic status before a decision is made on continuing the DTP shots.

The use of DTP vaccine for your child needs to be closely evaluated by your doctor or health care provider if:

• he or she has a known problem of the brain or nervous system which is worsening or a seizure disorder which is uncontrolled; or

• he or she has already had an earlier DTP shot and any of the following reactions developed after the shot:

• a measured fever of 103º F. or greater (usually within 48 hours);

• an episode of limpness and paleness;

• a severe allergic reaction to any vaccine component;

• collapse or shock-like state within 48 hours;

• an unusual high-pitched screaming;

• convulsion(s) with or without fever occurring within 7 days; or

• other severe problems of the brain occurring within 7 days, including prolonged sleeping and inability to wake a child, unusual twitching of the body or unusual staring;

• persistent crying for 3 hours or more.

Children who have had a convulsion and children who have a brother, sister, or parent who has ever had a convulsion are more likely to have a convulsion after receiving DTP vaccine. The Centers for Disease Control (CDC) and the American Academy of Pediatrics recommend that because of the overall risk of pertussis disease and the fact that the risk of convulsions is still very low: (1) children with a personal history of a convulsion and whose nervous system is stable may receive DTP vaccine; and (2) children with a family history of convulsions should receive DTP vaccine. However, you should tell the person who is to give the immunization about such a history and discuss the possibility of using an anti-fever medicine.

Your child should not need further whooping cough vaccination if he or she has had laboratory confirmed whooping cough. This also should be considered with your doctor or health care provider.

If a child should not receive DTP vaccine, he or she should still be protected against diphtheria and tetanus by receiving pediatric DT vaccine rather than DTP.

When Should A Child's DTP Shots Be Delayed?

A child's DTP shots should be delayed if he or she:

• has a fever or ear or chest infection or is sick with an illness more serious than a cold at the proposed time for vaccination, or has not completely recovered from a past illness;

• has had a previous convulsion, seizure, or nervous system illness, until it can be determined that no more seizures are happening and the condition is stable and under control; or

• is taking a drug or undergoing a treatment that lowers the body's resistance to infection, such as cortisone, prednisone, certain anticancer drugs (chemotherapy), or radiation treatments.

A child's shots can be continued after he or she is well and has had a full medical evaluation.

Which Children Are More Likely Than Others To Have A Serious Reaction To DTP Vaccine?

The medical experts do not agree on the reasons why reactions occur following vaccination, nor can they predict in which children serious reactions will occur. But there are some factors which may make children more likely to have serious reactions.

A child may be at higher risk of a serious reaction to the "P" part of the DTP vaccine if he or she:

• has had a serious reaction to a previous DTP shot;

• has a neurologic illness, including a history of seizures or convulsions, the severity of which is changing or uncontrolled; or

• has a fever or infection or is sick when the shot is given.

How To Reduce The Risk Of A Serious Reaction To DTP Vaccine

It is important that a child's medical history be provided to the doctor or health care provider before he or she receives the DTP vaccine. Such a history should include, but not necessarily be limited to, the following information:

• major birth problems;

• your child's history of convulsions (seizures) or neurological illness;

• any allergy;

• recent or present illness;

• current medicines or treatment, and

• your child's history of previous vaccine reactions.

Besides providing your doctor or health care provider with your child's medical history, there are other things which can be done to reduce the risk of a serious vaccine reaction. Make sure your child has no obvious signs of infection at the time vaccine is given. Many physicians recommend giving acetaminophen (Tylenol, Tempra) at the time of vaccination and 4 and 8 hours later to reduce fever and reactions at the injection site.

What Signs To Look For In A Serious Reaction To Vaccine

It is important to observe your child carefully at periodic intervals during the 30 days after receiving the DTP vaccine, particularly during the first 72 hours. If your child has any of the following symptoms after receiving the DTP shot, write down the details on this form to help you report the correct information to your doctor or health care provider:

|  |  |  |  |  |
| --- | --- | --- | --- | --- |
| Symptom | Date | Time | Duration | Description |
| Measured fever nearing 103 degrees Fahrenheit  |  |  |  |  |
| High-pitched unusual screaming |  |  |  |  |
| Persistent, inconsolable crying (3 or more hours)  |  |  |  |  |
| Inability to wake child; unusually prolonged sleeping  |  |  |  |  |
| Shock or collapse; loss of muscle control; turning white, blue or gray; limpness  |  |  |  |  |
| Convulsion, seizure; unusual repeated twitching, jerking startling, or staring spells |  |  |  |  |
| Loss of sensory or muscle control; paralysis, limping, loss of speech, hearing or sight  |  |  |  |  |
| Difficulty or stoppage of breathing |  |  |  |  |
| Severe local reaction; large red, blue or purple coloring with extended swelling near where the shot was given |  |  |  |  |

If any of these events happen within 30 days after your child gets a DTP shot, call your doctor or health care provider at once. Tell them about the shot, when it was given, and about your child's reaction. Arrange for a prompt examination at the doctor's office, clinic, or emergency room. When things settle down, write down in detail exactly what happened.

Who Should I Report To If My Child Has A Reaction To The DTP Vaccine?

Parents should report any serious reaction occurring within 30 days of the DTP vaccine to their doctor or the health care provider who gave the vaccine. Your doctor or health care provider will report the serious reaction to the Illinois Department of Public Health, through local health authorities. The Illinois Department of Public Health upon receiving the report of the reaction will notify the manufacturer of the vaccine, through the Food & Drug Administration and the Centers for Disease Control (CDC).

Will A More Effective DTP Vaccine Be Available?

Currently, new more purified DTP vaccines are being developed and tested in the United States and in other countries. Adequate tests to ensure that these vaccines will cause fewer reactions and be at least as effective as currently available vaccines require large numbers of test subjects. Several years will be necessary to complete development and to prove the effectiveness and safety of a new vaccine.

Recordkeeping Following A DTP Shot

Each time your child is given a DTP shot, the following information is recorded in a permanent record and is available to you from your doctor or health care provider upon request:

• the date and time of day the vaccine was administered;

• the DTP dose number;

• the name, address, and title of the person who gave the shot;

• the vaccine manufacturer name;

• the vaccine lot number; and

• site of injection

You should keep information concerning the dates of all vaccines given to your child in a permanent immunization record plus the details of any reactions that may occur until your child enters school. A personal immunization card can be provided to you by your local health department, or in areas without a local health department, by contacting the Illinois Department of Public Health Regional Immunization Program Coordinator in your area. The names, addresses and telephone numbers of the above resources can be found in the Section: "What If I Have Additional Questions Regarding DTP Vaccine?"

Immunization Requirements For Entry Into School

Section 27-8.1 of the School Code (Ill. Rev. Stat. 1987, ch. 122, par. 8.1) requires that every child, prior to entering any public, private/independent or parochial school in Illinois must have received certain immunizations. Proof of having received the vaccine must be verified by the signature of a health provider such as a physician, school health professional, or health official. The written record must show the month, day and year of each immunization, if it cannot otherwise be determined that the vaccine was given after the minimum interval or age.

The following immunizations are currently required in Illinois:

DTP – at least 4 doses, at appropriate intervals, for students under 6 years of age.

DT/Td – at least 3 doses, at appropriate intervals, for students 6 years of age or over.

Polio – at least 3 doses of live oral polio vaccine, at appropriate intervals, for all students.

Measles – 1 dose of live virus vaccine at fifteen (15) months of age or older (those students who were enrolled in school prior to the 1981-1982 school year and were immunized on or after the first birthday, may be considered immune).

Rubella – 1 dose of live virus vaccine on or after the first birthday.

Mumps – 1 dose of live virus vaccine on or after the first birthday.

Exceptions To The Immunization Requirements

Illinois immunization rules "Immunizations" (77 Ill. Adm. Code 695) allow for a child to be exempt from school entrance requirements if:

• the parent or guardian objects to immunizations, in general, because of religious beliefs and practices (the objection must be universal and not just for DTP vaccination alone);

• a physician licensed to practice medicine in all its branches (M.D. or D.O.) indicates, in writing, the medical reason for the child not to get the vaccine;

• the doctor decides that because of your child's particular situation, the risks of the vaccine outweigh the benefits to the child and the public.

Under the Illinois immunization rules, a philosophical or moral reluctance exemption will not be acceptable.

What If I Have Additional Questions Regarding DTP Vaccine?

Your family doctor, health care provider, or local health department can supply you with more information about DTP vaccine as well as about the Illinois school entrance immunization law and the other vaccine-preventable diseases.

The names, addresses and telephone numbers of the local health departments and Illinois Department of Public Health Regional Immunization Program Coordinators are as follows:

Names, Addresses And Phone Numbers Of

Local Health Departments In Illinois

If the city or county in which you live has no local health department, you may contact the Illinois Department of Public Health's Regional Immunization Program Coordinator in your area who is listed below:

Names, Addresses And Phone Numbers Of

Illinois Department of Public Health

Regional Immunization Program Coordinators

Summary

You have the right to receive and understand the information contained in this booklet. If you don't understand any part of it, ask to discuss it before your child receives DTP vaccine. Discuss any questions you may have about the benefits or potential risks of the vaccine with your doctor or health provider.

Before your child receives the DTP vaccine, ask your doctor or health care provider about the treatment of local reactions and fever.

The success of immunizations makes it easy to forget the dangers posed to our children, but whooping cough has not "gone away."