

Vaccinations may hurt a little . . .
but disease can hurt a lot!

Call your clinic right away if you answer "yes" to any of the following questions:

- Does your child have a temperature about which your health care provider has told you to be concerned?
- Is your child pale or limp?
- Has your child been crying for more than 3 hours and just won't quit?
- Does your child have a strange cry that isn't normal (a high-pitched cry)?
- Is your child's body shaking, twitching, or jerking?
- Does your child have marked decrease in activity or decrease in responsiveness?

Check the back of this page for information on the proper dosage of medication you can give your child to reduce pain or fever.

After the Shots . . .

What to do if your child has discomfort

Your child may need extra love and care after getting vaccinated. Some vaccinations that protect children from serious diseases also can cause discomfort for a while. Here are answers to questions many parents have after their children have been vaccinated. If this sheet doesn't answer your questions, call your clinic or health care provider.

Clinic or health care provider phone number: _____

I think my child has a fever. What should I do?

Check your child's temperature to find out if there is a fever. Do not use a mercury thermometer. If your child is younger than 3 years of age, taking a temperature with a rectal digital thermometer provides the best reading. Once your child is 4 or 5 years of age, you may prefer taking a temperature by mouth with an oral digital thermometer. Tympanic thermometers, which measure temperature inside the ear, are another option for older babies and children. If your child is older than 3 months of age, you can also take an underarm (axillary) temperature, although it is not as accurate.

Here are some things you can do to help reduce fever:

- Give your child plenty to drink.
- Clothe your child lightly. Do not cover or wrap your child tightly.
- Give your child a fever-reducing medication such as acetaminophen (e.g., Tylenol®) or ibuprofen (e.g., Advil®, Motrin®). **Do not give aspirin.** Recheck your child's temperature after 1 hour.
- Sponge your child in 1–2 inches of lukewarm water.
- If your child's temperature is _____°F (_____°C) or higher or, if you have questions, call your clinic or health care provider.

My child has been fussy since getting vaccinated. What should I do?

After vaccination, children may be fussy due to pain or fever. You may want to give your child a medication such as acetaminophen (e.g., Tylenol®) or ibuprofen (e.g., Advil®, Motrin®) to reduce pain and fever. **Do not give aspirin.** If your child is fussy for more than 24 hours, call your clinic or health care provider.

My child's leg or arm is swollen, hot, and red. What should I do?

- Apply a clean, cool, wet washcloth over the sore area for comfort.
- For pain, give a medication such as acetaminophen (e.g., Tylenol®) or ibuprofen (e.g., Advil®, Motrin®). **Do not give aspirin.**
- If the redness or tenderness increases after 24 hours, call your clinic or health care provider.

My child seems really sick. Should I call my health care provider?

If you are worried **at all** about how your child looks or feels, call your clinic or health care provider!

Medications and Dosages to Reduce Pain and Fever

Important notes:

1. Ask your health care provider or pharmacist which formulation is best for your child.
2. Give dose based on your child's weight. If you don't know the weight, give dose based on your child's age. Do not give more medication than recommended.
3. If you have questions about dosing or any other concern, call your clinic or health care provider.
4. Always use a proper measuring device. For example:



- When giving infant drops, use only the dosing device (dropper or syringe) enclosed in the package.





- When giving children's suspension or liquid, use the dosage cup enclosed in the package. If you misplace the dosage cup, consult your health care provider or pharmacist for advice. (Kitchen spoons are not accurate measures.)

5. **WARNING:** If you're also giving your child over-the-counter (OTC) medications such as cold preparations, be aware that these may contain pain or fever reducers such as acetaminophen or ibuprofen. Be sure to read all OTC medication labels carefully to ensure your child is not receiving more acetaminophen or ibuprofen than recommended.

Acetaminophen Dosing Information (Tylenol® or another brand)



Give every 4–6 hours, as needed, no more than 5 times in 24 hours (unless directed to do otherwise by your health care provider).

Weight of child	Age of child	Infant drops  0.8 mL = 80 mg	Children's liquid or suspension  1 tsp (5 mL) = 160 mg	Children's tablets 1 tablet = 80 mg	Junior strength 1 tablet = 160 mg
6–11 lbs (2.7–5 kg)	0–3 mos	Advised dose*: _____			
12–17 lbs (5.5–7.7 kg)	4–11 mos	Advised dose*: _____	Advised dose*: _____		
18–23 lbs (8.2–10.5 kg)	12–23 mos	Advised dose*: _____	Advised dose*: _____		
24–35 lbs (10.9–15.9 kg)	2–3 yrs	1.6 mL	1 teaspoon (160 mg)	2 tablets	
36–47 lbs (16.4–21.4 kg)	4–5 yrs		1½ teaspoons (240 mg)	3 tablets	
48–59 lbs (21.8–26.8 kg)	6–8 yrs		2 teaspoons (320 mg)	4 tablets	2 tablets
60–71 lbs (27.3–32.3 kg)	9–10 yrs		2½ teaspoons (400 mg)	5 tablets	2½ tablets
72–95 lbs (32.7–43.2 kg)	11 yrs		3 teaspoons (480 mg)	6 tablets	3 tablets

*Ask your health care provider

Ibuprofen Dosing Information (Advil®, Motrin® or another brand)

Give every 6–8 hours, as needed, no more than 4 times in 24 hours (unless directed to do otherwise by your health care provider).

Weight of child	Age of child	Infant drops  1.25 mL = 50 mg	Children's liquid or suspension  1 tsp (5 mL) = 100 mg	Children's tablets 1 tablet = 50 mg	Junior strength 1 tablet = 100 mg
under 11 lbs (5 kg)	under 6 mos	Advised dose*: _____			
12–17 lbs (5.5–7.7 kg)	6–11 mos	1.25 mL			
18–23 lbs (8.2–10.5 kg)	12–23 mos	1.875 mL			
24–35 lbs (10.9–15.9 kg)	2–3 yrs		1 teaspoon (100 mg)	2 tablets	
36–47 lbs (16.4–21.4 kg)	4–5 yrs		1½ teaspoons (150 mg)	3 tablets	
48–59 lbs (21.8–26.8 kg)	6–8 yrs		2 teaspoons (200 mg)	4 tablets	2 tablets
60–71 lbs (27.3–32.3 kg)	9–10 yrs		2½ teaspoons (250 mg)	5 tablets	2½ tablets
72–95 lbs (32.7–43.2 kg)	11 yrs		3 teaspoons (300 mg)	6 tablets	3 tablets

*Ask your health care provider

Recommended Immunization Schedule for Persons Aged 0–6 Years—UNITED STATES • 2007

Vaccine ▼	Age ►	Birth	1 month	2 months	4 months	6 months	12 months	15 months	18 months	19–23 months	2–3 years	4–6 years
Hepatitis B ¹		HepB	HepB	HepB	<i>see footnote 1</i>	HepB			HepB Series			
Rotavirus ²				Rota	Rota	Rota						
Diphtheria, Tetanus, Pertussis ³			DTaP	DTaP	DTaP		DTaP					DTaP
<i>Haemophilus influenzae</i> type b ⁴			Hib	Hib	Hib ⁴	Hib		Hib				
Pneumococcal ⁵			PCV	PCV	PCV	PCV				PCV ppv		
Inactivated Poliovirus			IPV	IPV	IPV							IPV
Influenza ⁶					Influenza (Yearly)							
Measles, Mumps, Rubella ⁷							MMR					MMR
Varicella ⁸							Varicella					Varicella
Hepatitis A ⁹							HepA (2 doses)			HepA Series		
Meningococcal ¹⁰											MPSV4	

 Range of recommended ages

 Catch-up immunization

 Certain high-risk groups

This schedule indicates the recommended ages for routine administration of currently licensed childhood vaccines, as of December 1, 2006, for children aged 0–6 years. Additional information is available at <http://www.cdc.gov/nip/recs/child-schedule.htm>. Any dose not administered at the recommended age should be administered at any subsequent visit, when indicated and feasible. Additional vaccines may be licensed and recommended during the year. Licensed combination vaccines may be used whenever any components of the combination are indicated and other components of the vaccine are not contraindicated and if approved by the Food and Drug Administration for that dose of the series. Providers should consult the respective Advisory Committee on Immunization Practices statement for detailed recommendations. Clinically significant adverse events that follow immunization should be reported to the Vaccine Adverse Event Reporting System (VAERS). Guidance about how to obtain and complete a VAERS form is available at <http://www.vaers.hhs.gov> or by telephone, 800-822-7967. **FOOTNOTES ON REVERSE SIDE**

DEPARTMENT OF HEALTH AND HUMAN SERVICES
CENTERS FOR DISEASE CONTROL AND PREVENTION
SAFER • HEALTHIER • PEOPLE™

The Recommended Immunization Schedules for Persons Aged 0–18 Years are approved by:

Advisory Committee on Immunization Practices (<http://www.cdc.gov/nip/acip>)
American Academy of Pediatrics (<http://www.aap.org>)
American Academy of Family Physicians (<http://www.aafp.org>)

More information regarding vaccine administration can be obtained from the websites above or the CDC-INFO contact center.

800-CDC-INFO
ENGLISH & ESPAÑOL - 24/7
[800-232-4636]

Keep track of your child's immunizations
with the

CDC Childhood Immunization Scheduler

www.cdc.gov/nip/kidstuff/scheduler.htm

FOOTNOTES**1. Hepatitis B vaccine (HepB).** (*Minimum age: birth*)**At birth:**

- Administer monovalent HepB to all newborns before hospital discharge.
- If mother is hepatitis surface antigen (HBsAg)-positive, administer HepB and 0.5 mL of hepatitis B immune globulin (HBIG) within 12 hours of birth.
- If mother's HBsAg status is unknown, administer HepB within 12 hours of birth. Determine the HBsAg status as soon as possible and if HBsAg-positive, administer HBIG (no later than age 1 week).
- If mother is HBsAg-negative, the birth dose can only be delayed with physician's order and mother's negative HBsAg laboratory report documented in the infant's medical record.

After the birth dose:

- The HepB series should be completed with either monovalent HepB or a combination vaccine containing HepB. The second dose should be administered at age 1–2 months. The final dose should be administered at age ≥ 24 weeks. Infants born to HBsAg-positive mothers should be tested for HBsAg and antibody to HBsAg after completion of ≥ 3 doses of a licensed HepB series, at age 9–18 months (generally at the next well-child visit).

4-month dose:

- It is permissible to administer 4 doses of HepB when combination vaccines are administered after the birth dose. If monovalent HepB is used for doses after the birth dose, a dose at age 4 months is not needed.

2. Rotavirus vaccine (Rota). (*Minimum age: 6 weeks*)

- Administer the first dose at age 6–12 weeks. Do not start the series later than age 12 weeks.
- Administer the final dose in the series by age 32 weeks. Do not administer a dose later than age 32 weeks.
- Data on safety and efficacy outside of these age ranges are insufficient.

3. Diphtheria and tetanus toxoids and acellular pertussis vaccine (DTaP). (*Minimum age: 6 weeks*)

- The fourth dose of DTaP may be administered as early as age 12 months, provided 6 months have elapsed since the third dose.
- Administer the final dose in the series at age 4–6 years.

4. Haemophilus influenzae type b conjugate vaccine (Hib).(*Minimum age: 6 weeks*)

- If PRP-OMP (PedvaxHIB® or ComVax® [Merck]) is administered at ages 2 and 4 months, a dose at age 6 months is not required.
- TriHibit® (DTaP/Hib) combination products should not be used for primary immunization but can be used as boosters following any Hib vaccine in children aged ≥ 12 months.

5. Pneumococcal vaccine. (*Minimum age: 6 weeks for pneumococcal conjugate vaccine [PCV]; 2 years for pneumococcal polysaccharide vaccine [PPV]*)

- Administer PCV at ages 24–59 months in certain high-risk groups. Administer PPV to children aged ≥ 2 years in certain high-risk groups. See *MMWR* 2000;49(No. RR-9):1–35.

6. Influenza vaccine. (*Minimum age: 6 months for trivalent inactivated influenza vaccine [TIV]; 5 years for live, attenuated influenza vaccine [LAIV]*)

- All children aged 6–59 months and close contacts of all children aged 0–59 months are recommended to receive influenza vaccine.
- Influenza vaccine is recommended annually for children aged ≥ 59 months with certain risk factors, health-care workers, and other persons (including household members) in close contact with persons in groups at high risk. See *MMWR* 2006;55(No. RR-10):1–41.
- For healthy persons aged 5–49 years, LAIV may be used as an alternative to TIV.
- Children receiving TIV should receive 0.25 mL if aged 6–35 months or 0.5 mL if aged ≥ 3 years.
- Children aged <9 years who are receiving influenza vaccine for the first time should receive 2 doses (separated by ≥ 4 weeks for TIV and ≥ 6 weeks for LAIV).

7. Measles, mumps, and rubella vaccine (MMR). (*Minimum age: 12 months*)

- Administer the second dose of MMR at age 4–6 years. MMR may be administered before age 4–6 years, provided ≥ 4 weeks have elapsed since the first dose and both doses are administered at age ≥ 12 months.

8. Varicella vaccine. (*Minimum age: 12 months*)

- Administer the second dose of varicella vaccine at age 4–6 years. Varicella vaccine may be administered before age 4–6 years, provided that ≥ 3 months have elapsed since the first dose and both doses are administered at age ≥ 12 months. If second dose was administered ≥ 28 days following the first dose, the second dose does not need to be repeated.

9. Hepatitis A vaccine (HepA). (*Minimum age: 12 months*)

- HepA is recommended for all children aged 1 year (i.e., aged 12–23 months). The 2 doses in the series should be administered at least 6 months apart.
- Children not fully vaccinated by age 2 years can be vaccinated at subsequent visits.
- HepA is recommended for certain other groups of children, including in areas where vaccination programs target older children. See *MMWR* 2006;55(No. RR-7):1–23.

10. Meningococcal polysaccharide vaccine (MPSV4). (*Minimum age: 2 years*)

- Administer MPSV4 to children aged 2–10 years with terminal complement deficiencies or anatomic or functional asplenia and certain other high-risk groups. See *MMWR* 2005;54(No. RR-7):1–21.

Ouch!

A Lesson on Immunizations

Playgroup #8

Materials Needed

- Paper and pens
- *The Berenstain Bears Go To the Doctor*, or
- *Lions aren't Scared of Shots*
- Stuffed animals
- Band-Aids

Handouts

- After the Shots
- Childhood Immunization Schedule (birth to 6 years old)

Introduction

Give each mom a blank sheet of paper and tell them that they are going to have a “pop quiz.” Ask them to answer the following questions:

1. When should your child have their first immunization?
2. What should you do if you can't afford the immunization?
3. What is one common reason parents delay having their child immunized?
4. What is the most common childhood disease in Utah County that could be easily prevented with immunizations?

Answers: 1. At birth before leaving the hospital (Hepatitis B), 2. Contact the Utah County Health Department, they have most childhood vaccines for \$5 through a special program, 3. Because it is stressful to deal with the child's crying or anxiety, 4. Pertussis (whooping cough) is the most common with 162 cases in Utah County in 2006.

Go over the answers with the mothers in your playgroup. Explain to them that timely administration of childhood immunizations is important to protect their child from vaccine-preventable diseases.

Lesson Plan

Lesson Objectives

- Understand how to reduce your child's fear of immunizations
- Know how to prepare yourself and child for immunization day
- Understand options for the uninsured

Reducing your Child's Fear of Immunizations

An immunization shot does not need to be stressful for children. Many parents provide their children with the information and support needed in order to make the immunizations as easy as possible. However, for some parents and children, needles become scary and immunizations can

quickly become a stressful event. Keep in mind that children can easily tell if their parents are afraid of needles and injections. When parents are anxious, children are likely to become anxious. If the parent acts extremely worried about the child's behavior during the immunization, then the child is also more likely to become upset. To decrease anxiety about immunizations, parents can do the following:

Start Early

With preparation and support, children won't be as anxious or afraid of the place where they receive immunizations. To help relieve your child's anxiety, you can do the following:

- Remain calm and confident. If needed, try anxiety-relieving techniques such as breathing and muscle relaxation.
- Bring along a stuffed toy or blanket for your child to hold on to during the immunization.
- Plan on holding your child during the procedure. Prepare yourself to talk calmly during the procedure.
- Plan to assess your child's coping after the shot. If they are still upset after the shot, don't immediately leave the office as the child will learn that this is a bad place that can be escaped by crying. It is important to let the child calm down before leaving.
- Reinforce ahead of time that the health care provider's office is a nice place and that the doctors and nurses are there to help.

To Reduce the Child's Anxiety

The majority of immunizations are given to children under 15 months old. This can sometimes be a difficult age since they do not have the ability to anticipate what will take place in certain situations like older children. To help reduce your child's anxiety, consider the following: Tell your child why immunizations or "shots" are necessary. Explain that shots keep us from getting sick.

Be honest about what the child may feel when getting an immunization. Never tell them that it won't hurt at all. Instead, explain that the slight pain only lasts for a short while.

Explain that you (or another person they trust) will be with them during the immunization.

Preparing for Immunization Day

When the immunization appointment draws near, reevaluate how you and your child reacted to the last immunization. Were you calm? Were you anxious? Was it a stressful event? You are the best judge of how much preparation your child needs to deal with immunization day. For children under the age of 7, tell them about the immunization appointment about one hour

beforehand. A longer “countdown” may cause extra anxiety. You can choose any of the activities from the following list to help the appointment go smoother:

- Use distraction while in the waiting room. This can include singing, humor, music, TV, reading, blowing bubbles, or talking about any subject not related to immunizations.
- Tell your child to “blow away the pain” by blowing out really hard just before the injection. Children can even be given a party blower to add to the distraction.
- Get down to the child’s eye level and be honest in telling them that the shot will hurt a little, but the pain won’t last long. If the child desires, you can sit next to them or hold them gently during the procedure.
- Using whichever arm is not being injected, have the child squeeze your hand as hard as what the pain is.
- Remain calm and in control while in the examination room. Don’t give children the control to postpone or avoid the inevitable by saying that they need to go to the bathroom – have them go beforehand.
- Let the child watch the needle piercing the skin if they want to. However, you can also act as the focal point if the child decides to look away. You can also become the “eyes” to report on the progress of the procedure and when it will be over.
- Set reasonable and firm limits. Children of any age should be allowed to cry and not feel embarrassed; however, they should also be aware that kicking and screaming are not acceptable.
- Reward your child afterward! Praise them and go somewhere special afterward to celebrate such as getting an ice cream cone.

Options for the Uninsured

Vaccine for Children Program – Offers childhood immunizations at little cost for children enrolled in Medicaid, CHIP, or who have no health insurance or are underinsured. To find out if you are eligible, call the Utah Immunization Program at 801-538-9450.

Activity

For this activity you will need one of the books listed in the suggested reading section as well as a few stuffed animals, a ballpoint pen, and Band-Aids.

Read *The Berenstain Bears Go to the Doctor* or *Lions Aren’t Scared of Shots* with the children. Afterwards, use the stuffed animals or puppets to role play a visit to the doctor’s office. The child can play the role of the doctor or nurse and pretend to give the stuffed animal or puppet a

shot. A straw or ballpoint pen can be used as the pretend needle. Prompt the child to tell the stuffed animal or puppet that the shot will hurt, but only for a moment. After giving the pretend shot, the child can then apply a Band-Aid to the pretend injection site.

Suggested Reading

The Berenstain Bears Go to the Doctor

By Stan and Jan Berenstain.

Lions Aren't Scared of Shots: A Story for Children about Visiting the Doctor

By Howard J. Bennett.

References

Training Children to Cope and Parents to Coach them During Routine Immunizations: Effects on Child, Parent, and Staff Behaviors. (1992). *Behavior Therapy*, Vol. 23, pp. 689-705.

Preparation of Children for Painful Procedures. (1990). *Pediatric Nursing*, 16 (6), pp. 537-541.

The Needle is Like an Animal: How Children View Injections. (1978). *Child Today*, Jan/Feb, pp. 18-21.

Coping Skills for Children Undergoing Painful Medical Procedures. (1988). *Issues in Comprehensive pediatric Nursing*, Vol. 11, pp. 113-143.

Thought Stopping: A Strategy for Impending Feared Events. (1984). *Issues in Comprehensive Pediatric Nursing*, Vol. 7, pp. 83-89.

7 Ways to Soothe Kids Getting Vaccines. (2007). WebMD. Retrieved December 19, 2007 from <http://children.webmd.com/news/20070509/7-ways-to-soothe-kids-getting-vaccines>.

Additional immunization information can be found by visiting www.immun-wize.org