

# After the Shots...

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 healthcare provider.

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

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

- Does your child have a temperature that your healthcare provider has told you to be concerned about?
- Is your child pale or limp?
- Has your child been crying for more than 3 hours and just won't quit?
- Is your child's body shaking, twitching, or jerking?
- Is your child very noticeably less active or responsive?

► Please see page 2 for information on the proper amount of medicine to give your child to reduce pain or fever.

## What to do if your child has discomfort

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

Check your child's temperature to find out if there is a fever. An easy way to do this is by taking a temperature in the armpit using an electronic thermometer (or by using the method of temperature-taking your healthcare provider recommends). If your child has a temperature that your healthcare provider has told you to be concerned about or if you have questions, call your healthcare provider.

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

- Give your child plenty to drink.
- Dress your child lightly. Do not cover or wrap your child tightly.
- Give your child a fever- or pain-reducing medicine such as acetaminophen (e.g., Tylenol) or ibuprofen (e.g., Advil, Motrin). The dose you give your child should be based on your child's weight and your healthcare provider's instructions. See the dose chart on page 2. *Do not give aspirin.* Recheck your child's temperature after 1 hour. Call your healthcare provider if you have questions.

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

After vaccination, children may be fussy because of pain or fever. To reduce discomfort, you may want to give your child a medicine such as acetaminophen or ibuprofen. See the dose chart on page 2. *Do not give aspirin.* If your child is fussy for more than 24 hours, call your healthcare 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 medicine such as acetaminophen or ibuprofen. See the dose chart on page 2. *Do not give aspirin.*
- If the redness or tenderness increases after 24 hours, call your healthcare provider.

### My child seems really sick. Should I call my healthcare provider?

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

**HEALTHCARE PROVIDER:** PLEASE FILL IN THE INFORMATION BELOW.

If your child's temperature is \_\_\_\_\_°F or \_\_\_\_\_°C or higher, or if you have questions, call your healthcare provider.

Healthcare provider phone number: \_\_\_\_\_

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Technical content reviewed by the Centers for Disease Control and Prevention

# Medicines and Dosages to Reduce Pain and Fever

Choose the proper medicine, and measure the dose accurately.

1. Ask your healthcare provider or pharmacist which medicine is best for your child.
2. Give the dose based on your child’s weight. If you don’t know your child’s weight, give the dose based on your child’s age. Do not give more medicine than is recommended.
3. If you have questions about dosage amounts or any other concerns, call your healthcare provider.
4. Always use a proper measuring device. For example:
  - When giving acetaminophen liquid (e.g., Tylenol), use the device enclosed in the package. If you misplace the device, consult your healthcare provider or pharmacist for advice. Kitchen spoons are not accurate measures.
  - When giving ibuprofen liquid (e.g., Advil, Motrin), use the device enclosed in the package. Never use a kitchen spoon!

Take these two steps to avoid causing a serious medication overdose in your child.

1. Don’t give your child a larger amount of acetaminophen (e.g., Tylenol) or ibuprofen (e.g., Motrin, Advil) than is shown in the table below. Too much of any of these medicines can cause an overdose.
2. When you give your child acetaminophen or ibuprofen, don’t also give them over-the-counter (OTC) cough or cold medicines. This can also cause a medication overdose because cough and cold medicines often contain acetaminophen or ibuprofen. In fact, to be safe, don’t give OTC cough and cold medicines to your child unless you talk to your child’s healthcare provider first.



## Acetaminophen (Tylenol or another brand): How much to give?

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

CHILD’S WEIGHT	CHILD’S AGE	OLD FORMULATIONS INFANTS’ DROPS 80 mg in each 0.8 mL or in each 1.0 mL	INFANTS’ NEW FORMULATION OR CHILDREN’S LIQUID 160 mg in each 5 mL (1 tsp) Kitchen spoons are not accurate measures.	CHILDREN’S CHEWABLES 80 mg in each tab	JUNIOR STRENGTH 160 mg in each tab
6–11 lbs (2.7–5 kg)	0–3 mos	Advised dose* _____	Advised dose* _____		
12–17 lbs (5.5–7.7 kg)	4–11 mos	Advised dose* _____	½ teaspoon or 2.5 mL		
18–23 lbs (8.2–10.5 kg)	12–23 mos	Advised dose* _____	¾ teaspoon or 3.75 mL		
24–35 lbs (10.9–15.9 kg)	2–3 yrs	1.6 mL (0.8 mL+0.8 mL)	1 teaspoon or 5 mL	2 tablets	
36–47 lbs (16.4–21.4 kg)	4–5 yrs		1½ teaspoon or 7.5 mL	3 tablets	
48–59 lbs (21.8–26.8 kg)	6–8 yrs		2 teaspoons or 10 mL	4 tablets	2 tablets
60–71 lbs (27.3–32.3 kg)	9–10 yrs		2½ teaspoons or 12.5 mL	5 tablets	2½ tablets
72–95 lbs (32.7–43.2 kg)	11 yrs		3 teaspoons or 15 mL	6 tablets	3 tablets

## Ibuprofen (Advil, Motrin, or another brand): How much to give?

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

CHILD’S WEIGHT	CHILD’S AGE	INFANTS’ DROPS 50 mg in each 1.25 mL 	CHILDREN’S LIQUID  100 mg in each 5 mL (1 tsp) Kitchen spoons are not accurate measures.	OLD FORMULATION CHILDREN’S CHEWABLES 50 mg in each tab	CHILDREN’S CHEWABLES OR JUNIOR TABLETS 100 mg in each tab
less than 11 lbs (5 kg)	0–5 mos				
12–17 lbs (5.5–7.7 kg)	6–11 mos	1.25 mL	Advised dose* _____		
18–23 lbs (8.2–10.5 kg)	12–23 mos	1.875 mL	Advised dose* _____		
24–35 lbs (10.9–15.9 kg)	2–3 yrs		1 teaspoon or 5 mL	2 tablets	1 tablet
36–47 lbs (16.4–21.4 kg)	4–5 yrs		1½ teaspoon or 7.5 mL	3 tablets	1½ tablets
48–59 lbs (21.8–26.8 kg)	6–8 yrs		2 teaspoons or 10 mL	4 tablets	2 tablets
60–71 lbs (27.3–32.3 kg)	9–10 yrs		2½ teaspoons or 12.5 mL	5 tablets	2½ tablets
72–95 lbs (32.7–43.2 kg)	11 yrs		3 teaspoons or 15 mL	6 tablets	3 tablets

\* HEALTHCARE PROVIDER: PLEASE FILL IN THE ADVISED DOSE.

# Know Concentration before Giving Acetaminophen to Infants and Children

The Food and Drug Administration (FDA) is urging consumers to carefully read the labels of liquid acetaminophen marketed for infants to avoid giving the wrong dose to their children.

A less concentrated form of the popular medication is arriving on store shelves, and giving the wrong dose of acetaminophen can cause the medication to be ineffective if too little is given or cause serious side effects and, possibly, death if too much is given.

In an attempt to reduce the confusion over different strengths that have been blamed for past overdoses, some manufacturers are voluntarily offering only the less concentrated version for all children.

Until now, liquid acetaminophen marketed for infants has only been available in a stronger concentration that doesn't require giving the infants as much liquid with each dose.

But right now both concentrations of liquid acetaminophen are in circulation. Before giving the medication, parents and caregivers need to know whether they have the less concentrated version or the older, more concentrated medication. FDA is concerned that infants could be given too much or too little of the medicine if the different concentrations of acetaminophen are confused.

"Be very careful when you're giving your infant acetaminophen" says Carol Holquist, director of FDA's Division of Medical Error Prevention and Analysis.

Here's what the agency wants parents and caregivers to do:

## More concentrated, still available

<b>Drug Facts</b>	
<b>Active Ingredient (in each 0.8 mL)</b>	<b>Purpose</b>
Acetaminophen 80 mg.....	Pain reliever/fever reducer

<b>Drug Facts</b>	
<b>Active Ingredient (in each 1.0 mL)</b>	<b>Purpose</b>
Acetaminophen 80 mg.....	Pain reliever/Fever reducer

## Less concentrated, newly available

<b>Drug Facts</b>	
<b>Active Ingredient (in each 5 mL)</b>	<b>Purpose</b>
Acetaminophen 160 mg.....	Pain reliever/Fever reducer

- Read the Drug Facts label on the package very carefully to identify the concentration of the liquid acetaminophen, the correct dosage, and the directions for use.
- Do not depend on a banner proclaiming that the product is "new." Some medicines with the old concentration also have this headline on their packaging.
- Use only the dosing device provided with the purchased product in order to correctly measure the right amount of liquid acetaminophen.
- Consult your pediatrician before giving this medication and make sure you're both talking about the same concentration.

### Overdosing Has Been a Risk

An April 2011 report from FDA's Center for Drug Evaluation and Research (CDER) found that confusion caused by the different concentrations of liquid acetaminophen for infants and children was leading to overdoses that made infants seriously ill, with some dying from liver failure.

So to avoid dosing errors, some manufacturers voluntarily changed the liquid acetaminophen marketed for infants from 80 mg per 0.8mL or 80 mg per 1 mL to be the same concentration as the liquid acetaminophen marketed for children—160 mg per 5mL. This less concentrated liquid acetaminophen marketed for infants now has new dosing directions and

*“Be very careful when you’re giving your infant or child acetaminophen.”*

may have a new dosing device in the box, such as an oral syringe.

But this is a voluntary change and some of the older, stronger concentrations of acetaminophen marketed for infants are still available and may remain available.

“There is still some on store shelves; there is still some in homes; and there is still some in distribution,” says Holquist.

**Why does this pose a danger?**

If a pediatrician prescribes a 5 mL dose of the less concentrated liquid acetaminophen, but the parents administer a 5 mL dose of the more concentrated liquid acetaminophen, the child can receive a potentially fatal overdose during the course of therapy, Holquist explains.

Conversely, if a physician prescribes a dose based on the more concentrated liquid acetaminophen and the less concentrated medication is used, the child might not receive enough medication to fight a fever, she says.

FDA has issued a Drug Safety Communication ([www.fda.gov/Drugs/DrugSafety/ucm284741.htm](http://www.fda.gov/Drugs/DrugSafety/ucm284741.htm)) with more information for consumers about how to avoid confusion and potential dosing errors with the different concentrations of liquid acetaminophen.

**What Should You Do?**

Adding to the confusion is the fact that the box and the bottle may look much the same for both old and new versions of the medication, Holquist says.

Read the Drug Facts label to tell the difference between the two liquid acetaminophen products:

- Look for the “Active ingredient” section of the Drug Facts label usually printed on the back of an over-the-counter medication package.
- If the package says “160 mg per 5 mL” or “160 mg (in each 5 mL)”, then this is the less concentrated liquid acetaminophen. This medication should come with an oral syringe to help you measure the dose.
- If the package says “80 mg per 0.8 mL” or “80 mg per 1 mL,” then this is the more concentrated liquid acetaminophen. This product may come with a dropper.

If the dosing instructions provided by your healthcare provider differ from what is on the label, check with a healthcare professional before administering the medication. Do not rely on dosing information provided from other sources such as the Internet, old dosing charts, or family members.

It is important to understand that there is no dosing amount specified for children younger than 2 years of age. If you have an infant or child younger than 2 years old, always check with your healthcare provider for dosing instructions.

Acetaminophen is marketed for infants under brand names such as Little Fevers Infant Fever/Pain Reliever, Pedia Care Fever Reducer Pain Reliever and Triaminic Infants’ Syrup Fever Reducer Pain Reliever. There are also store brands on the shelves.

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