



Issue Brief

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The Facts About Medications for Colds and the Flu

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Medication doesn't cure common colds or the flu

No one wants to stay home feeling miserable with a cold or the flu. Many adults go to the doctor in search of a cure, or at least some medicine that will keep them, or their children, from missing work or school. However, there is no quick fix for a cold or the flu.

Most colds and respiratory infections are caused by viruses, as is the flu. Unfortunately, a virus must run its course, which usually lasts from 7 to 14 days. Antibiotics only work against bacteria, not viruses. Therefore, they do not work for colds or the flu.

Most doctors advise that the best way to treat a cold or the flu is by drinking plenty of fluids and getting some rest. But most patients take over-the-counter medications. Do they work?

Don't give cough and cold medications to infants or young children

Although over-the-counter (OTC) medication for colds and flu are popular, that doesn't mean they work, especially for children. In October 2007, the companies making OTC cough and cold medications for children announced that they would stop selling or promoting their use for infants and children under the age of **two** because of the potential risks. This announcement was the result of criticisms by influential doctors and medical

associations, protesting the marketing and widespread use of OTC pediatric cough and cold medications for young children under the age of **six**. And, when experts held a public meeting to advise the FDA, they concluded that there was no good evidence that these medications work for children under the age of **12**.

While the instructions for OTC pediatric cough and cold medications recommend that the products not be used by children under **two** years of age except under the guidance of a medical professional, companies have continued marketed these products to parents of infants and young children. Their packaging features images of young children as well as droppers to aid administration to infants. As a result, these medications are widely used for infants and young children even though there is **no evidence** that these products are safe or effective for children under the age of **six**. They seem to be safe but may not work for children ages 6-12.

The doctors and medical associations mentioned earlier asked that the influential FDA require studies of the effects and safety of these medications in young children; a public education campaign to inform parents of the lack of evidence for use of OTC cough and cold medications in young children; and labeling to make it clear to consumers that these products have not been found safe or effective in young children.

If the medications don't work, why sell them? Since many children under 6 are harmed by overdoses of these medications, and there is no evidence that they work for children that age, the FDA should put large, clear warnings on the label and on any advertisements.

The situation is different for children between 6 and 12, because the medications don't seem to do much harm, but we don't know if they have any benefit. Most likely, the FDA will ask for better studies to find out if these medications do more good than harm for children under the age of 12. Meanwhile, the FDA will have to decide if the medications can continue to be sold, and if so, should the labels say that these medications may not work for children under 12. Some doctors have expressed concern that parents want cold medications for their children, and that many parents will give adult versions of the medications to their children even if the label says not to. That seems to imply that parents are too stupid or stubborn to follow directions. But, that is not a good reason to allow the continued sale of medications that don't work.

Do these cough and cold medications work for adults? The studies are not very good for adults either, but some of these medications seem to work, while others don't. And, combination cold medications that treat many different symptoms are rarely a good choice—it makes more sense to treat only the symptoms that are bothering you.

Antibiotics don't work

Although they do not work, antibiotics are often prescribed for colds or the flu. According to the Centers for Disease Control and Prevention (CDC), about half of the 100 million antibiotic prescriptions written annually in the U.S. are unnecessary. The American College of Physicians reports that "using antibiotics too much, too often, or not finishing a prescription reduces their effectiveness and can cause a problem called antibiotic resistance." Antibiotic resistance is when bacteria are exposed to antibiotics and are able to survive by making genes that are resistant to the antibiotic. When harmful bacteria with resistant genes make us

sick, antibiotics are no longer an effective treatment.

To cope with the decreasing effectiveness of some antibiotics, new antibiotics have been developed that bacteria are not yet resistant to. However, these newer antibiotics, such as Levaquin and Cipro, are very expensive and have substantial risks and side effects compared to older antibiotics such as amoxicillin.

The bottom line: antibiotics should not be used for colds, flu, or other viruses. Generally, older antibiotics should be tried first, since they are safer, less expensive, and often just as effective.

The American College of Physicians released guidelines for prescribing antibiotics in conjunction with the CDC, the American Society of Internal Medicine, the American Academy of Family Physicians, and the Infectious Disease Society of America. These measures are directed at both doctors and consumers in order to lower rates of unnecessary prescriptions for antibiotics. Although it may seem unusual to target patients in addition to physicians, doctors claim that many patients feel entitled to a prescription when they visit the doctor. By educating the public that not receiving medication does not mean substandard care, the American College of Physicians hopes to reduce the pressure on physicians to write unneeded prescriptions.

The American College of Physicians' Consumer Guidelines for Antibiotics:

1. Don't insist on antibiotics for yourself or your children.
2. Ask your doctor, "Is this antibiotic really necessary?"
3. Take only with a doctor's instructions—don't take antibiotics left over from old prescriptions, given to you by friends or family, or purchased abroad without a prescription.
4. Prevent infections by washing hands thoroughly. Wash fruits and vegetables thoroughly. Avoid raw eggs and undercooked meats—especially ground meats.

5. Keep immunizations up-to-date—especially for influenza and pneumonia if you are a senior citizen or have a chronic illness.
6. Finish each antibiotic prescription—even if you feel better. If you don't finish the prescription, some resistant bacteria may stay with you and multiply, requiring a different—and most likely stronger—antibiotic when the infection returns weeks later.

The risks of medication can outweigh the benefits

The new concerns about OTC medication for children are just the latest warning that popular

over-the-counter medications can be dangerous. In 2001, the FDA ordered that all medications containing **phenylpropanolamine (PPA)** be removed from the shelves because of evidence that taking PPA increases the risk of stroke. FDA's decision was made after a study at Yale Medical School showed an association between PPA use and stroke in women using the medicine to lose weight. Men may also be at risk.

Although medicines containing PPA should no longer be available at the store, it is possible that you may have medicines containing PPA in your medicine cabinet. To be safe, those medicines should be discarded. They include:

- Acutrim Diet Gum Appetite Suppressant Plus Dietary Supplements
- Acutrim Maximum Strength Appetite Control
- BC Allergy Sinus Cold Powder
- BC Sinus Cold Powder
- Dexatrim Extended Duration
- Dexatrim Gelcaps
- Dexatrim Vitamin C/Caffeine Free
- Dimetapp Cold & Allergy Chewable Tablets
- Dimetapp Cold & Cough Liqui-Gels
- Dimetapp 4-Hour Liqui-Gels
- Dimetapp 4-Hour Tablets
- Dimetapp 12-Hour Extentabs Tablets
- Tavist-D 12 Hour Relief of Sinus & Nasal Congestion
- Triaminic DM Cough Relief
- Triaminic Expectorant Chest & Head Congestion
- Triaminic Syrup Cold & Allergy
- Triaminic Triaminicol Cold & Cough

Some of the medications that used to contain PPA are sold under the same name today, but no longer contain PPA. If you have old versions of any of the following medicines, check to see if they contain PPA. If they do, throw them out.

- Alka-Seltzer Plus Children's Cold Medicine Effervescent
- Alka-Seltzer Plus Cold Medicine (cherry or orange flavor)
- Alka-Seltzer Plus Cold Medicine Original
- Alka-Seltzer Plus Cold & Cough Medicine Effervescent
- Alka-Seltzer Plus Cold & Flu Medicine Effervescent
- Alka-Seltzer Plus Cold & Sinus Effervescent
- Alka-Seltzer Plus Night-Time Cold Medicine Effervescent
- Comtrex Deep Chest Cold & Congestion Relief
- Comtrex Flu Therapy & Fever Relief Day & Night

- Contac 12 Hour Cold Capsules
- Contac 12 Hour Cold Caplets
- Coricidin 'D' Cold, Flu & Sinus
- Dexatrim Caffeine Free
- Dimetapp DM Cold & Cough Elixir
- Dimetapp Elixir
- Naldecon DX Pediatric Drops
- Permathene Mega-16
- Robitussin CF

The bottom line

Medications that are safe for adults may harm children "Ask your doctor" doesn't help if there are no good studies for your doctor to read.

For more information on the Web:

The American College of Physicians, "Antibiotics: Do You Really Need Them?"
<http://www.doctorsforadults.com/antibio.pdf>

National Institute of Allergy and Infectious Diseases, "Fact Sheet: the Common Cold"
<http://www.niaid.nih.gov/factsheets/cold.htm>

U.S. Food and Drug Administration, "Colds and Flu: Time Only Sure Cure"
http://www.fda.gov/fdac/features/896_flu.html

FDA Consumer Update on OTC pediatric cold and cough medications
<http://www.fda.gov/consumer/updates/cold081607.html>

FDA Public Health Advisory on OTC pediatric cold and cough medications
http://www.fda.gov/cder/drug/advisory/cough_cold.htm

Citizen's Petition submitted to FDA in March 2007 concerning safety of OTC cough/cold remedies for children under 6:
<http://www.fda.gov/ohrms/dockets/dockets/07p0074/07p0074.htm>

For a full list of products containing PPA:
<http://www.phenylpropanolamine-ppa.com/>