

How Toxic is That Pain Reliever in Your Medicine Cabinet?

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Acetaminophen containing products are some of the most common over the counter medications in the United States and over 25 billion doses of acetaminophen (Tylenol is the most common) are sold each year, according to the U.S. National Library of Medicine. In the U.S. acetaminophen is the number one over the counter drug.

We commonly take acetaminophen for minor aches and pain, as well as for fever due to colds and other illnesses. Most cough and cold remedies contain multiple ingredients (also known as “shotgun remedies”) since cold sufferers may have multiple symptoms, including fever, headache, sore throat, runny nose, cough and general aches and pains (also known as “malaise”). The predominant ingredient is always acetaminophen.

What people don't realize is that acetaminophen can be toxic if taken in doses exceeding 4,000 mg per day (3,000 mg/day for senior citizens). This is a hard, fast rule that should not be ignored. If you took two Extra Strength Tylenol (acetaminophen) Tablets (500 mg per tablet) every six hours (4 doses per day) you would have reached the 4,000 mg per day limit. If you took a cold remedy with this daily dose of acetaminophen you would be consuming a potentially toxic dose.

Back in 2009 the Food and Drug Administration required the labeling of acetaminophen containing products to contain statements including the following:

Liver warning: This product contains acetaminophen. Severe liver damage may occur if you (adult) take more than 4,000 mg of acetaminophen in 24 hours with other drugs containing acetaminophen and/or 3 or more alcoholic drinks every day when using this product. The warning further said “...If you are not sure whether a drug contains acetaminophen, ask your doctor or pharmacist.”

In my personal conversation with a hepatologist (liver disease physician), I was told that even a single dose of acetaminophen can cause measurable changes in liver enzymes. The liver is the predominant organ that metabolizes, or breaks down, acetaminophen in your body.

If the maximum dose is exceeded, or taken in combination accidentally, there is no immediate way of knowing. The result of overdose is damage to the liver which is difficult to reverse. There are no immediate symptoms until damage has taken place. This is why acetaminophen overdose is dangerous and of great concern.

Acetaminophen and children:

It's best not to give acetaminophen to a child under the age of 12 without consulting a physician. However, there are pediatric and infant formulation of acetaminophen with dosing guidelines. They are not intended for infants under the age of 2 years. These products have dosing recommendations that should be strictly adhered to and have clear warnings advising that they should not be taken with other acetaminophen containing products.

If you suspect an overdose:

If the person is unconscious or not breathing, call 911 immediately for emergency medical services.

If the person is awake and breathing without symptoms, call your local poison control center or the American Association of Poison Control Centers at (800) 222-1222.

REFERENCES

[U.S. Food and Drug Administration \(fda.gov\)](http://www.fda.gov) - Public Health Advisory: FDA recommends that over-the-counter (OTC) cough and cold products not be used for infants and children under 2 years of age.

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