

MANAGING YOUR ACETAMINOPHEN POISONING

What Is Acetaminophen Poisoning?

Acetaminophen or paracetamol (Tylenol) is the drug most often involved in planned and accidental overdoses in the United States. More than 100,000 cases occur yearly. Many products such as antihistamines, decongestants, and other pain relievers contain acetaminophen. Almost half of acetaminophen overdoses occur in children younger than 6. About 1 in 1000 cases leads to death, caused mainly by liver failure.

Acetaminophen usually comes in 80- to 600-mg dosages. Adults shouldn't take more than 4000 mg daily. Children younger than 12 shouldn't take more than 2600 mg daily. Toxic doses are usually more than 7500 mg in adults and more than 140 mg/kg of body weight in children.

What Causes Acetaminophen Poisoning?

The liver metabolizes about 90% of acetaminophen. A toxic intermediate from breakdown of acetaminophen can hurt liver and kidney cells. Age, liver disease, and simultaneous use of alcohol, and other drugs can give people higher risks of overdose. Medical conditions (such as malnutrition) and some herbal supplements may also lead to higher risk.

What Are the Symptoms of Acetaminophen Poisoning?

Poisoning can be divided into four phases on the basis of time after taking the drug. In phase 1 (0–24 hours), most people have no symptoms except for nausea, vomiting, and malaise. In phase 2 (24–48 hours), pain in the abdomen (belly), nausea, vomiting, and sweating may occur. Liver damage may start at this point. In phase 3 (72–96 hours), liver injury gets worse. Symptoms include jaundice (yellow skin), confusion, and lethargy. Other symptoms are irritability, appetite

loss, coma, and convulsions. In phase 4 (4 days to 2 weeks), depending on the amount of overdose, the person has either recovered or is in the final stages of liver failure.

How Is Acetaminophen Poisoning Diagnosed?

Emergency room and hospital health care provider make a diagnosis from the history, physical examination, and laboratory tests. These tests are of blood, kidney function, and liver function.

How Is Acetaminophen Poisoning Treated?

For certain blood levels, no treatment is needed. However, treatment, if needed, includes using an antidote named *N*-acetylcysteine (NAC) or Mucomyst. If people are seen within 4 hours of taking toxic amounts, emergency room health care provider may use activated charcoal to try to prevent absorption of acetaminophen by the gastrointestinal tract. Most people recover fully and don't have lasting liver injury.

Referral to a psychiatrist is recommended after an overdose or poisoning that was planned.

DOs and DON'Ts in Managing Acetaminophen Poisoning

- ✓ **DO** realize that most people have no symptoms in the early stages of acetaminophen poisoning. However, don't delay getting medical help. Call your health care provider, 911, the American Association of Poison Control Centers, or your local poison control center. Also, go to the hospital emergency department.
- ✓ **DO** remember to always close pill bottles. Use childproof bottle tops. Keep all drugs out of the reach of children and locked up.

✓ **DO** call your health care provider if you or a family member is depressed or suicidal.

Call if you think that you took too much acetaminophen. Call if you have symptoms of an overdose.

⊗ **DON'T** drink alcohol and use acetaminophen.

⊗ **DON'T** forget to read labels on many over-the-counter drugs. Many cold medicines, pain relievers, and allergy medicines include acetaminophen. Parents can easily give children too much acetaminophen by accident.

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FOR MORE INFORMATION

Contact the following sources:

- American Association of Poison Control Centers: Tel: (800) 222-1222; Website: <http://www.aapcc.org>
- American College of Emergency Physicians: Tel: (800) 798-1822 or (972) 550-0911; Fax: (972) 580-2816; Website: <http://www.acep.org>

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