

MUSHROOM POISONING

What is mushroom poisoning?

Some mushrooms produce toxins, or poisons, which can make humans and animals sick. One mushroom can produce more than one type of toxin. Farm sprays can contaminate wild mushrooms that may also make you sick, even if the mushroom is safe to eat.

Anyone can get sick from eating mushrooms. However, mushroom poisoning occurs most often in young children who are left unattended outside while playing. Adult cases are usually more serious, since they typically eat mushrooms on purpose and in larger amounts. Pets may also become sick from eating wild mushrooms, though this is rare.

Wild mushrooms grow best in wet areas. In Florida, mushrooms usually grow in warm weather, after a rain. Therefore, most cases of mushroom poisoning happen from June through October. Florida has several thousand types of mushrooms. They grow all over the state, especially in wooded areas.

How do you tell if a mushroom is poisonous?

There are many myths and tales about what mushrooms are safe to eat. *However, there is **NO** easy, clear way to tell if a wild mushroom is safe or poisonous.* There are thousands of types of mushrooms and about 100 that are known to be poisonous. Many poisonous mushrooms look like mushrooms that are safe to eat. Poisonous mushrooms may grow beside good mushrooms. The best way to tell if a mushroom is safe to eat is to have it identified by an expert (mycologist) or to buy it from a store or restaurant.

Does cooking a wild mushroom make it safe to eat?

Poisonous mushrooms cannot be made safe to eat by cooking, freezing, washing, or canning. The only way to prevent mushroom poisoning is to avoid eating toxic mushrooms.

What are the symptoms of mushroom poisoning?

There are many different signs of mushroom poisoning. The toxins in some mushrooms can cause your stomach to be upset, damage your brain or nervous system, hurt your liver or kidneys, and cause death. Some toxins may have unknown, long-term effects that may cause cancer. Signs of mushroom poisoning can include: diarrhea, upset stomach, vomiting, stomach cramps, chills, fever, headache, weakness, drowsiness, dizziness, sweating, drooling, confusion, muscle spasm, and hallucination. These signs may vary depending on the amount of toxin in the mushroom and the amount of mushroom that you eat. Some people may get sick immediately and some may take several hours to show signs of poisoning.

In many cases, people eat more than one type of mushroom, which may cause many different symptoms. A variety of symptoms will make it harder for a doctor to diagnose the problem correctly, putting the patient at a greater risk for serious illness.

How is mushroom poisoning treated?

Treatment for mushroom poisoning is complex. You need to talk to a Poison Center or a doctor to determine what you should do. Sometimes it may be safe to stay at home. Other times

you need to go to a hospital immediately. Your doctor can only treat your symptoms. Always consult a professional such as a Poison Center or a physician for appropriate treatment.

What should you do if you have eaten a wild mushroom?

Collect samples of the wild mushroom(s) that you ate so that an expert can identify the type. Put the samples in a paper bag or waxed paper and place in the refrigerator. If there are several types of mushrooms around, collect a sample of each. Contact your doctor or a local poison control center. If symptoms are severe, go to the nearest hospital emergency room or dial 911.

Can poisonous mushrooms kill you?

Eating mushrooms can be deadly if you eat the wrong kind. The most commonly known of these varieties is the 'Death Angel' or 'Death Caps.' This type of mushroom is from the genus *Amanita* and produces amatoxins. Amatoxins block the production of DNA and cause cell death. In 6 to 24 hours, you will experience sudden vomiting and diarrhea. You may start to feel better for a few days, but then get worse. The poisons in these mushrooms attack your kidney and liver. There is no known antidote. Death occurs in 30% of cases within 4 to 8 days. These types of mushrooms are often confused with a mushroom that causes hallucinations.



How to protect yourself if you eat wild mushrooms?

Important: You can **never** be 100% certain that a mushroom is safe to eat without appropriate lab testing.

The following is based on advice that mushroom hunting clubs give to members. If you want to eat wild mushrooms, you should:

- Collect mushrooms and practice identifying them for several years before eating them.
- Join a mycological society or a mushroom hunting group and learn from experienced people.
- Use at least two mushroom field guides to identify mushrooms. Experts often disagree on which mushrooms are safe to eat.
- Study and practice identifying both safe and poisonous mushrooms.
- Eat only very small amounts at first. This will reduce the amount of toxin you eat if the mushroom is poisonous. Even with safe mushrooms, you can have different reactions or allergies, as with any food.

Mushroom Poisoning in Florida

The Florida Poison Information Center Network receives hundreds of calls each year related to suspected mushroom poisoning. Most people experience symptoms such as nausea, vomiting, stomach cramps, and diarrhea. However, in a few cases, symptoms are much worse and include rapid heart beat, agitation, and hallucinations. Over half of these calls involve children less than six years of age.

Florida Poison Information Center Network (FPICN) – <http://www.fpfcn.org/>

FPICN has a 24-hour hotline for information and emergency services. This hotline is voice and TTY accessible (1-800-222-1222).



References

Mushroom Poisoning and Toxicity

United States Food and Drug Administration Center for Food Safety and Applied Nutrition, Bad Bug Book, Mushroom Toxins: <http://www.cfsan.fda.gov/~mow/chap40.html>.

Mushroom Poisoning: www.healthatoz.com.

Kuo, M. (2006, November). Mushroom toxins. Retrieved from the *MushroomExpert.Com* Web site: <http://www.mushroomexpert.com/toxicity.html>.

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Reporting Mushroom Poisoning, North American Mycological Association: <http://www.sph.umich.edu/~kwcee/mpcr/index.htm>

Fisher DW and Bessette AE. Chapter 12. Mushroom Poisoning. Edible Wild Mushrooms of North America. Austin: University of Texas Press, 1992. 143-146.

McKenny M and Stuntz DE. Mushroom Poisons. The New Savory Wild Mushroom. Seattle: University of Washington Press, 1994. 216-228.

Mycological Associations

North American Mycological Association: <http://www.namyco.org/index.html>

Mycological Society of America: <http://www.msafungi.org/>

International Mycological Association: <http://www.ima-mycology.org/>