



University of California  
Cooperative Extension  
**Tulare County**  
Agriculture and Natural Resources



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## Mushrooms

Every year across the United States, more than 9,000 cases of mushroom poisoning are reported. Many hundreds of cases of mushroom poisoning occur each year in California. Children under the age of 6 years old account for a majority of these cases. The consequences of mushroom poisoning can be severe.

Medically speaking, "poisonous mushroom" means any mushroom or toadstool that causes an adverse or negative reaction when eaten. Symptoms can range from 6 hours of vomiting to liver or kidney failure.

In the United States, there are about 5,000 types of mushrooms. Of these, about 100 are responsible for most of the cases of mushroom poisoning. Less than a dozen species are considered deadly. However, death from other species, even so-called "safe" mushrooms, has occurred in very young children or in very ill adults. Some of the mushrooms that can cause death in healthy adults are the Death Cap, the Destroying Angel, the False Morel and the mushrooms in the Galerina species.

Because there is so much misinformation about toadstools and mushrooms, the terms need defining. Some people mistakenly believe the word "mushroom" means an edible or safe variety and the word "toadstool" means a poisonous or bad mushroom. This is incorrect. Many mushrooms are poisonous and some toadstools are edible or safe.

There are no non-scientific tests or rules that can accurately determine the safety or toxicity of a mushroom. To make matters worse, some of the "rules" people use to determine whether or not a mushroom is poisonous do not hold. Following are some facts about mushrooms:

- Some people can eat mushrooms with no problems, while other people eating the same mushroom will experience severe vomiting and diarrhea.

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- Some people can have allergic reactions to eating "safe" mushrooms.
- Some mushrooms are only poisonous if eaten in large quantities.
- Some mushrooms are poisonous when raw but become harmless when parboiled and thoroughly cooked.
- Some mushrooms are poisonous regardless of how they are cooked or prepared.
- Some mushrooms are poisonous only if eaten with alcoholic beverages.
- Some mushrooms are classified as poisonous because they are hallucinogenic.
- Some mushrooms that are edible when fresh and young become poisonous when they are old, hit by frost or if they decay.
- Some mushrooms, for unknown reasons, are poisonous in one part of the country and are not poisonous in another.
- Some mushrooms that are poisonous to animals do not cause major problems in humans.
- Most mushrooms are more dangerous to young children, the aged and the very ill.

Ideally, people and animals should never eat mushrooms that have not been identified by an expert or bought at the store. Unfortunately, many mushrooms are difficult to identify even for a trained mycologist, a biologist trained in the study of mushrooms.

Autumn season with its cool, damp evenings encourage mushroom growth. Check your yard for mushrooms before letting young children and pets out to play. Teach children not to taste or even touch ANY outdoor mushrooms. All mushrooms not bought at the grocery store are considered to be potentially dangerous.

If you even suspect a mushroom ingestion, call the poison control center as soon as you can. Just because a person does not have any symptoms right away does not mean that everything is OK. Symptoms may not develop until several days later. Not all mushrooms are poisonous. But several people have developed complete liver failure after eating the wrong mushrooms. **There is NO antidote for mushroom poisoning.**

Unfortunately, our office does not have a mycologist (mushroom specialist), whom it trained in the identification of mushrooms. Therefore, we cannot do any identification for you. Your best bet is don't eat wild mushrooms!

Source: California Poison Control Center, Linda Harris, Ed Perry

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