

FACTSHEET
FALSE MORELS vs. TRUE MORELS

When is Morel Hunting Season in Michigan?

May and June is morel hunting season in Michigan, and every spring there are individuals who become ill after eating mushrooms obtained from *amateur mushroom hunts*.

Why is mushroom hunting a concern?

The Children's Hospital of Michigan Poison Control Center (PCC) is reporting an unusually high number of patients with severe illness resulting in hospitalization after eating "false morels" that resemble true morel mushrooms. False morels include the *Beefsteak* and *Early Morel* mushrooms described below.

Why do false morel mushrooms make you sick?

These mushrooms contain the toxin gyromitrin which is toxic to the liver.

How quickly will you get sick from eating false morel mushrooms?

Onset of illness is usually 6 to 48 hours after eating.

What are the symptoms of illness from eating false morels?

Symptoms include nausea, vomiting, abdominal pain, diarrhea, dizziness, headache, muscle cramps, bloating, and fatigue. Untreated, people may go on to develop confusion, delirium, seizures and coma. The gyromitrin toxin can lead to right side abdominal pain, hepatitis and jaundice (yellow skin) within 48 hours, and in serious cases, increased bruising and bleeding due to loss of blood clotting factors.

What does a false morel look like?

Beefsteaks (*Gyromitra esculenta*) have wrinkled caps that are brain-like in appearance when mature. When immature, they may be smooth or saddle-shaped. They are never pitted or ridged. The stem may be narrow, pith-filled or one or two vertical chambers or hollow. The stem may also be thick with many chambers as if the flesh were folded vertically.



"Beefsteak" (*Gyromitra*) (1)



“Early Morel” (*Verpa*)(2a)

The early morel (*Verpa bohemica*) looks like the true morel, but unlike the true morel it has a cap that hangs around the stem (“thimble cap”), and is joined to the stem at the top of the cap. The entire fruiting body is a single hollow cavity. *Verpa bohemica* also contains the toxin gyromitrin.



“Early Morel” (*Verpa*)(2b)

Should you be concerned about eating true morels?

True morels are normally edible but if a large amount is eaten, or they are undercooked or eaten raw or eaten with alcoholic beverages, one may become ill. One can become sensitized to the mushroom over time; you might have eaten them without problems in the past, but now they make you ill. There is no warning that your body has changed its response to the morel.

How quick will you get sick from eating true morel mushrooms?

Illness from eating true morel mushrooms begins within a few hours and consists of nausea, vomiting, and abdominal pain lasting less than 24 hours.

What does a true morel look like?

True morels (*Morchella species*) are pitted and ridged; but they are not wrinkled or brain-like. The cap and stem is joined at the base of the stem or no more than halfway into the cap.



What should you do if you’ve eaten wild mushrooms?

If you have eaten wild mushrooms and develop any of the symptoms described, see a physician immediately. If you have any of the mushrooms left, take a picture of the mushroom with your camera or cell phone, or bring the mushroom with you to the doctor (place mushroom in a paper bag, they will fall apart in plastic).

“True Morel” (*Morchella*)(3)

Who should you contact with questions or concerns?

Contact the Poison Control Center (PCC) at 1-800-222-1222. The PCC can accept emailed pictures for mushroom identification and can provide advice for treatment.

Where can you find additional information about mushroom hunting?

Additional information can be found at the Michigan Mushroom Hunters website at <http://michiganmushroomhunters.org/default.htm>

Picture credits:

(1) Meißner, Severine. (Photographer). (2005). Frühjahrslorchel *Gyromitra esculenta* im Gras. [digital image]. Retrieved from <http://en.wikipedia.org/wiki/File:Frühjahrslorchel.JPG>

(2a) Hollinger, J. (Photographer). (2008). A cross-section of *Verpa bohemica* (*Krombh.*) [digital image]. Retrieved from http://en.wikipedia.org/wiki/File:Verpa_bohemica1.jpg

(2b) Hollinger, J. (Photographer). (2008). A cross-section of *Verpa bohemica* (*Krombh.*) [digital image]. Retrieved from <http://en.wikipedia.org/wiki/File:Verpa-bohemica-Xsection.jpg>

(3) Beentree. (Photographer). (2008). *Morchella conica*, Białowieża, Polska [digital image]. Retrieved from: <http://en.wikipedia.org/wiki/Morchella>