

# A Hidden Danger Lurks Among the Reefs

## **Beware of Ciguatera (*pronounced sig-wa eerra*)**

Tiny algae can produce toxins that concentrate in the organs and flesh of large carnivorous reef fish (such as barracuda, hogfish, red snapper and groupers). Ciguatotoxic fish doesn't look or taste bad.

**Symptoms of ciguatera** appear within 6-24 hours, and include vomiting, diarrhea, abdominal pain and cramping, as well as unusual sensations (such as itching skin, aching teeth and painful urination). The classic symptom of ciguatera is the sensation that cold things feel hot to the touch. For some people, these symptoms come and go for months or even years, and can be triggered by eating seafood, caffeine or alcohol.

**Reduce your risk** of getting ciguatera by eating only small reef fish and by avoiding species most likely to carry ciguatera. Ask local fishermen or bait shops about which reefs or fish to avoid.

**Ciguatera can be treated** with a drug called mannitol if diagnosed within 72 hours. Report your symptoms and that you ate reef fish to your doctor or local emergency room. Call the toll free Aquatic Toxins Hotline at (888) 232-8635 to get treatment advice.

## **Florida's Marine Toxins**

Marine toxins are produced by microscopic, algae-like organisms that form the base of the ocean's food chain. Some marine toxins are extremely potent and can cause human illness or even death. While historically fish poisoning from marine toxins was common only in fishing communities, the growth of the global market for seafood has meant that almost every country now reports cases of these illnesses. Marine toxin poisonings are often under-reported to public health officials. Much remains, unknown about why marine algae produce toxins. It has been suggested that human impacts on coastal ecosystems (such as fertilizer runoff and pollution) help the growth of toxin-producing species.

## **Ciguatera Fish Poisoning**

Ciguatera is the most common marine toxin disease worldwide, particularly in Florida, the Caribbean and the Pacific Islands. Large reef fish can accumulate high concentrations of a natural toxin in their flesh and organs. Fish that are "ciguatotoxic" do not seem to be affected by the toxin. They do not behave unusually or appear sick. People who later get sick with ciguatera generally say the fish was delicious. After people eat toxic fish, they can experience a variety of symptoms, some of which may persist for months (or even years). Symptoms may come back suddenly after eating foods such as alcohol, caffeine, nuts, and fish.

Signs of ciguatera usually develop within 6 to 24 hours. Symptoms include vomiting, diarrhea, abdominal pain and cramping, and unusual sensations (such as itching skin; aching teeth, muscles or joints; and painful urination). The classic symptom of ciguatera is the sensation of hot and cold being reversed (i.e. cold things feel hot or "burn"). Some people also experience rapid or irregular heartbeats or unusual changes in blood pressure during the first few days of the illness.

**It is possible to reduce your risk of ciguatera.** Avoid eating large fish of types that have been reported to carry ciguatera, such as barracuda, hogfish, red snapper or groupers. Ask local fishermen for the reefs and types of fish to avoid. Unfortunately, there is no FDA-approved test kit for ciguatera at this time.

Ciguatera can be treated with a drug called Mannitol if diagnosed within 72 hours. At first sign of illness, contact your doctor or local emergency room and report your symptoms and what reef fish you ate. Call the toll free Aquatic Toxins Hotline (888) 232-8635 to get treatment advice. A ciguatera diagnosis should be reported to the local County health department so that other poisonings can be avoided.

For more information about how to safely enjoy Florida Fish, visit  
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[www.floridamarine.org](http://www.floridamarine.org)  
[www.myfloridaEH.com](http://www.myfloridaEH.com)  
or contact the Aquatic Toxins Hotline toll free at (888) 232-8635