

Scombroid Fish Poisoning Fact Sheet

What is scombroid fish poisoning?

Scombroid fish poisoning, also known as histamine fish poisoning, is an allergic-type reaction that occurs within a few hours of eating fish contaminated with high levels of histamine. When certain types of fish are not properly refrigerated, bacteria in the fish can multiply, break down the flesh of the fish, and produce high amounts of histamine. The most common sources of illness are finfish such as tuna, mackerel, amberjack and bonito. Other fish, such as mahi mahi, bluefish, marlin, and escolar, can also cause scombroid fish poisoning.

How common is scombroid fish poisoning?

Scombroid fish poisoning occurs worldwide. Between 10 and 35 scombroid fish poisoning cases are reported each year in California. There may be many more unreported cases from people who did not seek medical care.

How do people get scombroid fish poisoning?

People get scombroid fish poisoning when they eat fish contaminated with high levels of histamines. Histamine contaminated fish often have a metallic, sharp, or peppery taste, smell bad, or have a “honey-combed” appearance. However, some contaminated fish will look, smell, and taste normal.

What are the symptoms of scombroid fish poisoning?

Scombroid fish poisoning resembles an allergic reaction and occurs within minutes to hours of eating fish contaminated with histamine. The most common symptoms are rash, diarrhea, reddening or flushing of the face and sometimes the neck, arms, and upper part of the body, sweating, headache, and vomiting. Burning sensation or swelling of the mouth, difficulty swallowing, stomach pain, and heart palpitations may also occur.

How is scombroid fish poisoning diagnosed?

There are no specific diagnostic tests for scombroid fish poisoning. Diagnosis is generally made based on symptoms and a recent history of eating fish a short time before symptoms appeared. If scombroid fish poisoning is suspected, laboratory testing may be done on any uneaten fish.

How is scombroid fish poisoning treated?

Most people have mild symptoms that resolve within a few hours. Treatment is often unnecessary but antihistamines or epinephrine can help severe cases or patients with other medical conditions.

How can you prevent scombroid fish poisoning?

Histamine formation depends on the temperature at which the fish is kept from the time it is caught to the time it is eaten. The best prevention is to keep fish appropriately refrigerated, when it is being transported or stored, until it is cooked and eaten. Do not purchase or eat fish with a bad odor or a “honey-combed” appearance. Since histamines are heat-resistant, cooking spoiled fish will not make it safe to eat.

What is the California Department of Public Health doing about scombroid fish poisoning?

Scombroid fish poisoning is reportable in California, and local health departments (LHDs) are available for consultation on scombroid fish poisoning to health care providers. When cases are reported, the California Department of Public Health and LHDs will investigate to find the cause of illness, prevent further infections, and educate the public.

Where can I get more information on scombroid fish poisoning?

More information on scombroid fish poisoning is available at:

[The U.S. Centers for Disease Control and Prevention:](https://wwwnc.cdc.gov/travel/yellowbook/2018/the-pre-travel-consultation/food-poisoning-from-marine-toxins)

(<https://wwwnc.cdc.gov/travel/yellowbook/2018/the-pre-travel-consultation/food-poisoning-from-marine-toxins>)

[The U.S. Food and Drug Administration's \(FDA\) Bad Bug Book:](http://www.fda.gov/downloads/food/foodborneillnesscontaminants/ucm297627.pdf)

(<http://www.fda.gov/downloads/food/foodborneillnesscontaminants/ucm297627.pdf>)

[The FDA, Center for Food Safety and Applied Nutrition Fish and Fisheries Products Hazards and Controls Guidance, Fourth edition:](http://www.fda.gov/downloads/food/guidanceregulation/ucm251970.pdf)

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