

DEPARTMENT OF ENVIRONMENTAL HEALTH County of Riverside

INFORMATIONAL BULLETIN NO. 36-06-DES

DISTRICT ENVIRONMENTAL SERVICES DIVISION

RAW OYSTERS

If You Eat Raw Oysters, You Need To Know....

About 20 million Americans eat raw oysters. However, for some people, eating raw oysters can cause serious illness or even death.

The Cause: Vibrio vulnificus

Vibrio vulnificus is a bacterium that occurs naturally in marine waters and is commonly found in Gulf of Mexico oysters. While not a threat to most healthy people, Vibrio vulnificus can cause sudden chills, fever, nausea, vomiting, blood poisoning, and death within two days in people with certain medical conditions. *Forty percent of Vibrio vulnificus infections from raw oyster consumption are fatal*. The bacteria are not a result of pollution, so, although oysters should always be obtained from reputable sources, eating oysters from "clean" waters or in reputable restaurants with high turnover does not provide protection. Eating raw oysters with hot sauce or while drinking alcohol does not kill the bacteria, either.

The Risk Factors

Certain health conditions put you at risk for serious illness or death from Vibrio vulnificus infection. Some of these conditions have no signs or symptoms so you may not know you are at risk. Check with your doctor if you are unsure of your risk. These conditions include:

- Liver Disease, either from excessive alcohol intake, viral hepatitis or other causes. The risk of death is almost 200 times greater in those with liver disease than those without liver disease.
- Hemochromatosis, an iron disorder
- Diabetes
- Stomach problems, including previous stomach surgery and low stomach acid
- Cancer
- Immune disorders, including HIV infection
- Steroid use, long-term (as for asthma and arthritis).

If you are or think you may be in any of these risk categories, you should not eat raw oysters.

As with any bacterial or viral infection, older adults and young children are more at risk because of weaker immune systems. However, because fully cooking oysters completely kills the bacteria, you can continue to enjoy oysters in many cooked preparations.

Oyster Safety: What You Can Do

At Restaurants

Order oysters fully cooked. Some states display notices for those at risk. Use them as reminders of how to avoid illness.

Cooking at Home

In the Shell:

Boil live oysters in water for 3 to 5 minutes after shells open. Use small pots to boil or steam oysters. Do not cook too many oysters in the same pot because the ones in the middle may not get fully cooked. Discard any oysters that do not open during cooking. Introduce live oysters to a steamer when "it is up to steam". Continue steaming for 4 to 9 minutes.

Shucked:

Boil or simmer for at least 3 minutes or until edges curl.

Fry in oil for at least 3 minutes at 375° F.

Broil 3 inches from heat for 3 minutes.

Bake (as in Oysters Rockefeller) for 10 minutes at 450° F.

California Shellfish Regulations

During the months between April 1st and October 31st the California Department of Health Services requires that all Gulf of Mexico oysters sold in California must be treated so that Vibrio vulnificus is reduced to undetectable levels. So oysters purchased from legal shippers should be treated and safe during that time frame and the oysters themselves will typically be marked to show that they have been treated. You must still be aware that oysters may not be treated if they are brought in illegally from Mexico or if you are out of California.

^{*}Document available in an alternate format upon request