

## *Vibrio vulnificus* For Wider Audience of Immuno-Compromised Individuals

The term “forbidden fruit” is usually an abstract concept. But for those with liver disease, diabetes, or a compromised immune system, raw oysters can be a toxic temptation indeed.

The source of the danger is a bacterium called *Vibrio vulnificus*, a member of the same infamous family as cholera. If eaten by healthy individuals, these bacteria may cause mild symptoms such as diarrhea and abdominal pain. But if consumed by persons with these three underlying health concerns, the results can be deadly. If you have **liver disease, diabetes, or a weakened immune system**, raw oysters are absolutely off limits.

According to the appropriately named “Bad Bug Book,” produced by the U.S. Food and Drug Administration, those at risk can develop blood poisoning (septicemia), which claims the lives of a full 50 percent of its victims. Colleen Crowe, Surveillance Epidemiologist with the U.S. Centers for Disease Control and Prevention (CDC), explains that oysters feed by filtering the surrounding water, which may contain *Vibrio vulnificus*. When a vulnerable individual eats raw oysters containing these bacteria, his body becomes the perfect incubator for *Vibrio vulnificus* to do its damage.

Some oyster-lovers think there are shortcuts around the problem. How many of these wives’ tales have you heard?

**Myth:** It’s okay to eat raw oysters if you drown them in hot sauce.

**Fact:** The active ingredients in hot sauces don’t kill harmful bacteria any more than plain water does.

**Myth:** If you avoid oysters from polluted waters, you don’t need to worry.

**Fact:** *Vibrio vulnificus* has nothing to do with pollution; these bacteria thrive in warm coastal areas where oysters grow, such as the Gulf of Mexico.

**Myth:** Experienced oyster lovers can tell a good oyster from a bad oyster.

**Fact:** You can’t tell by looking! Vibrios cannot be tasted, seen, or smelled.

**Myth:** Alcohol kills harmful bacteria.

**Fact:** Just as with hot sauce, alcoholic beverages have more effect on you than they do on these bacteria.

**Myth:** Just a few oysters can't hurt you.

**Fact:** Roberta Hammond, Ph.D., Food and Waterborne Disease Coordinator for the State of Florida, cites a documented fatality where only three oysters were consumed. Hammond cautions that the seriousness of any case depends on many factors, including how many bacteria were ingested and the person's underlying health conditions, but she stresses that the fatal dose for anyone at risk is unknown.

**Myth:** Avoid raw oysters in months without the letter "R" and you're safe.

**Fact:** While *Vibrio vulnificus* bacteria are most abundant in warmer months, according to the CDC, a full 40 percent of cases occur in the cooler time of the year from September through April

So if you have diabetes, a liver condition, or a compromised immune system, you need to be your own advocate and steer clear of the dangers.

But there is good news. You don't have to give up eating oysters entirely. Following these simple guidelines will ensure your safety:

1. Cooking oyster thoroughly destroys *Vibrio vulnificus*. The FDA recommends:
  - √ If you boil oysters, cook them until the shells open and then continue cooking for 5 more minutes.
  - √ If you steam oysters, wait until the shells open and continue cooking for 9 more minutes.
  - √ Shucked oysters must be boiled at least 3 full minutes or fried in oil at least 10 minutes at 375° F.
2. Avoid mixing the cooked oysters with any raw oysters or with any juice from raw oysters.
3. Eat the cooked oysters soon after you've prepared them and refrigerate any leftovers.

While some oyster lovers shudder at the thought of cooking oysters, for those at risk, prevention isn't the best defense; it's the ONLY defense.