**INDUSTRY BULLETIN**  
for Florida’s Foodservice Industry

**SUBJECT:** RAW OYSTERS HEALTH RISK  

**Vibrio vulnificus** (V. vulnificus) is a bacterium that occurs naturally in warm coastal seawater and is considered the most lethal of the Vibrios that inhabit brackish and salt water like the Gulf of Mexico. *V. vulnificus* is found in higher concentrations from April through October when the coastal waters are warmer.

Filter-feeding shellfish such as oysters, mussels and clams concentrate *V. vulnificus* in their tissues. When these shellfish are eaten raw or undercooked, the bacteria enter the digestive tract and multiply rapidly. Most healthy individuals are not at risk of *V. vulnificus* infection. However, individuals with certain conditions are at high risk of infection. Persons at high risk include those with liver disorders like hepatitis, cirrhosis or liver cancer; diabetes; those with immunocompromised conditions such as HIV/AIDS, cancer, or undergoing treatment for these illnesses; hemochromatosis (an iron disorder), or long-term steroid use (as for asthma and arthritis). Individuals who take prescribed medication to decrease stomach acid levels or who have had gastric surgery are also at risk. Older adults may also be at greater risk than younger people.

Vibrio infection symptoms include fever, chills, nausea, vomiting, diarrhea, abdominal cramps, and skin lesions. If septicemia develops due to the bacteria invading the bloodstream, shock and death can occur.

Those in high-risk categories are 200 times more likely to die from eating *Vibrio*. The average time from hospitalization to death is approximately 48 hours or less. This underscores the limited effectiveness of treatment and the importance of prevention. **People in high-risk categories should not consume raw shellfish.**

Currently there is no method to ensure that oysters are safe since even legally harvested oysters can be contaminated with viruses and naturally occurring bacteria. *Vibrio vulnificus* does not alter the appearance, taste or odor of oysters. To eliminate the risk of infection from *Vibrio vulnificus*: Do not eat raw oysters or other raw shellfish. Cook shellfish (oysters, clams, mussels) thoroughly by: a) boiling whole shellfish until the shells open and continue boiling for five more minutes; b) boiling shucked shellfish for at least three minutes; c) steaming whole shellfish until the shells open and then continue steaming for nine more minutes; or d) frying shucked shellfish in oil at 375°F for at least ten minutes. Do not eat shellfish that do not open during cooking.

To inform those persons who are most likely to be affected, food service establishments that serve raw oysters must warn their customers of the risk associated with eating raw oysters. This warning may be on menus, table placards, or other effective means and must be worded as follows [61C-4.010(8), Florida Administrative Code]:

**CONSUMER INFORMATION**

There is risk associated with consuming raw oysters. If you have chronic illness of the liver, stomach or blood, or have immune disorders, you are at greater risk of serious illness from raw oysters, and should eat oysters fully cooked. If unsure of your risk, consult a physician.

Several food processing technologies are being adapted by the U.S. Gulf coast shellfish industry to provide safer and better quality raw oysters. Three technologies currently used after harvesting are freezing, heat-cool pasteurization, and high pressure. However, because these processes may not kill all the bacteria and viruses present, it is not recommended that persons at high risk eat raw, processed oysters.

**THOROUGHLY COOKED OYSTERS ARE SAFE FOR EVERYONE.**


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