

Priority Problem Seven:

PATHOGEN CONTAMINATION

The Barataria-Terrebonne estuary contains rich, productive waters ideal for growing shellfish. Unfortunately, these waters are also rich breeding grounds for pathogenic organisms. Pathogens are disease-producing organisms—such as bacteria and viruses—that can affect human health. Shellfish can become contaminated by human fecal pathogens (from sewage) and also by naturally occurring marine bacteria called *Vibrio*. Human fecal pathogens can cause illness in healthy people who eat contaminated oysters, while *Vibrio* can cause illness and death in individuals with a preexisting illness.

The current system of seasonally classifying oyster-growing waters has been extremely effective in preventing sewage-related contamination in the Barataria-Terrebonne estuary. The proper handling, labeling, and refrigeration of seafood have also reduced the risk of contamination.

Vibrio-related illnesses are not a major contaminant problem in the Barataria-Terrebonne estuary. However, educational efforts must be continued to inform recreational users of the potential risk of infection, and to warn high-risk consumers (individuals with diseases of the liver, blood, stomach, or immune systems) of the risk of fatal infection from eating raw oysters.



Sewage Pollution

Human illnesses can be caused by sewage contamination of shellfish. These illnesses are associated with the contamination of oyster beds and the subsequent eating of raw oysters. In the Barataria-Terrebonne area there have been no reported incidences of sewage-related illnesses since 1984. This is probably due to a new system of seasonally classifying shellfish-producing waters and to a new sewage system installed in Terrebonne Parish.

Natural Marine Pathogens

Between 1980 and 1994, there were 14 deaths caused by *Vibrio* (a natural marine pathogen) in the Barataria-Terrebonne estuary. These individuals had either come into contact with salt water or consumed raw seafood. In all cases, the individuals were at high risk because of existing illnesses, such as diseases of the liver, blood, stomach, or immune system.



**Barataria-Terrebonne
NATIONAL ESTUARY PROGRAM**

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