



FOOD SAFETY, DEFENSE, AND OUTREACH

Constituent Update

July 18, 2005

Center for Food Safety and Applied Nutrition • Food and Drug Administration

FDA Releases a Risk Assessment on *Vibrio parahaemolyticus*

FDA today announces the availability of a risk assessment on the estimated public health risks associated with raw oysters containing pathogenic *Vibrio parahaemolyticus*. *Vibrio parahaemolyticus* is a bacterium that occurs naturally in coastal marine waters and estuaries (where rivers flow into the sea). It is recognized world-wide as a significant cause of bacterial seafood-borne illness. The United States Centers for Disease Control and Prevention (CDC) estimates that of the approximately 7,880 *Vibrio* illnesses each year in the United States, approximately 2,800 are estimated to be associated with *V. parahaemolyticus* and raw oyster consumption. *Vibrio parahaemolyticus* is normally present in many types of raw seafood, including fish, crustaceans, and molluscan shellfish. It colonizes and multiplies in filter-feeding shellfish such as oysters, clams, and mussels. Not all strains of *V. parahaemolyticus* cause illness; on the contrary, pathogenic strains represent a small percentage of the total *V. parahaemolyticus* present in the environment or seafood.

Most often, illness caused by *V. parahaemolyticus* occurs as sporadic cases of self-limiting gastroenteritis, with symptoms such as diarrhea, vomiting, and abdominal cramps. In recent years, however, several outbreaks have been caused by *V. parahaemolyticus*, involving dozens to hundreds of consumers. Also, though rare, the organism can produce a life-threatening septicemia, especially in people having underlying medical conditions such as liver disease or immune disorders.

FDA conducted this "product pathway" risk assessment to characterize the factors influencing the public health impact associated with the consumption of raw oysters containing pathogenic *V. parahaemolyticus*. This is referred to as a product pathway risk assessment because the factors that influence the risk associated with *V. parahaemolyticus* in oysters are examined from harvest through post-harvest handling to consumption.



FOOD SAFETY, DEFENSE, AND OUTREACH

Constituent Update

July 18, 2005

Center for Food Safety and Applied Nutrition • Food and Drug Administration

The risk assessment can be used to facilitate the formulation of effective guidance and requirements for industry and in the evaluation of potential risk mitigation strategies.

The risk assessment is available on FDA's website at

[US FDA/CFSAN - Quantitative Risk Assessment on the Public Health Impact of Pathogenic *Vibrio parahaemolyticus* in Raw Oysters](#)

Lastly, FDA recommends that people with weakened immune systems, due to the underlying illness, eat only cooked seafood, including oysters, to reduce the possibility of foodborne illness from *V. parahaemolyticus*, as well as other potential foodborne pathogens