**Vibrio parahaemolyticus**

Prepared by Carina Blackmore M.S. Vet. Med, Ph.D.
DOH, Bureau of Epidemiology

*Vibrio parahaemolyticus* is a gram-negative bacillus found in marine environments worldwide. It colonizes filter feeding animals such as oysters, crabs, mussels and fish but can also be found free-living in seawater. Despite its broad distribution, most *V parahaemolyticus* infections in the United States occur in the states bordering the Gulf of Mexico as the bacilli multiply better in warm water where water temperatures in the summer generally exceed 70° F.

People become infected with *V. parahaemolyticus* primarily through eating raw or undercooked seafood. The bacteria grows very quickly at room temperature so contaminated cooked seafood may also be a source. In Japan, *V. parahaemolyticus* is one of the leading causes of foodborne illness.\(^1\) Sporadic cases are common along the coasts of the United States but outbreaks have also been reported.\(^2\) The most recent outbreak occurred during the summer of 1998 when 416 people (including 62 Florida residents and visitors) became infected by consuming raw oysters from Galveston Bay, Texas.\(^3\)

*Vibrio parahaemolyticus* is less virulent than *V. vulnificus* and the disease is normally limited to a relatively mild gastroenteritis with diarrhea, abdominal cramps, vomiting, headache and fever in people good health. In people with underlying health problems, particularly liver disease, the bacteria may spread into the blood and cause septicemia. It can also cause wound infections. Some *V. parahaemolyticus* infections may require hospitalization, however the disease is rarely fatal.\(^4,5\)

*Vibrio* infections are reportable in Alabama, Florida, Mississippi, Louisiana and Texas and *V. parahaemolyticus* is responsible for the majority of these cases in Florida. On average 24 cases have been reported to date in the state each year from 1981 when the disease became reportable. Most cases occur between April and October. Records from 1981-1993 (n=206) showed gastrointestinal illness (58%) and wound infections (27%) as the two most common forms of the disease in the state.\(^5\) Males were 4 times or more likely to get infected than females and 43% of all patients required hospitalization. In Florida, most people become infected by eating raw oysters. To prevent *Vibrio* infections in high-risk groups, the state requires warning notices everywhere raw oysters are sold. These urge people with chronic health problems to eat only fully cooked oysters.

**References**

2. MMWR 1998 47(22) 457-462.
3. Roberta Hammond, Environmental epidemiology, Florida DOH, personal comment