Vibrio in Mississippi; June 19, 2015

Noncholera Vibrio

- Several noncholera species cause infections in humans
- Gastroenteritis, wound infections, sepsis
- Warm coastal or brackish waters
- Common contaminant of molluscan shellfish, especially oysters

Reservoirs and Transmission





- Raw or undercooked shellfish (especially oysters)
- Any food contaminated with raw seafood or sea water
- Wounds (accidental or occupational) exposed to raw seafood or sea water

Clinical Features

- Range from mild to severe gastroenteritis to wound infections and primary septicemia
- Depend on organism
- Depend on site of infection (transmission)
- Health status and risk factors
- V. parahaemolyticus and V. vulnificus

Vibrio parahaemolyticus







- Onset of symptoms usually 24 hours after exposure
- Watery diarrhea
- Cramping, nausea, vomiting
- Fever

Vibrio parahaemolyticus

- Typically self limited infection; 1-3 days
- Dysentery-like illness in up to ¼ of symptomatic infections
- Less commonly causes wound infections
- Sepsis rarely occurs

Vibrio vulnificus

- Septicemia
- Immunocompromised persons-particularly chronic liver disease
- Invades bloodstream from wound or GI tract
- Fever, chills, septic shock and death

Vibrio vulnificus

- Blistering skin lesions in 70% of the cases
- Can develop rapidly-spreading necrosis resembling necrotizing fasciitis
- 50% mortality rate when sepsis occurs
- Causes 95% of all seafood related deaths

Vibrio vulnificus

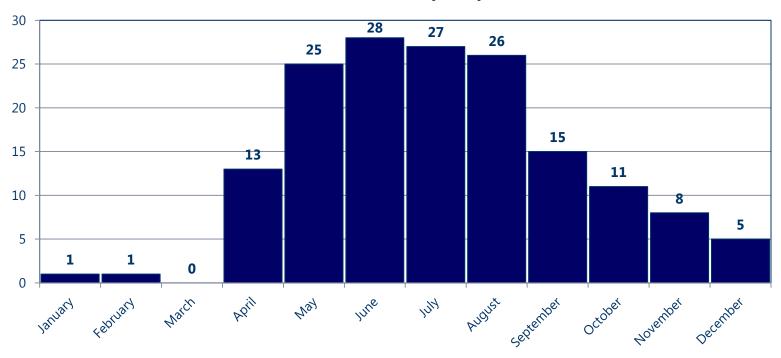
- At risk groups:
 - Liver disease
 - Hemochromatosis
 - Diabetes
 - Kidney disease
 - Immune disorders (including HIV)
 - Long term steroid use

Mississippi Cases

- Number of cases variable year to year
- Reported year round
- Increase summer months

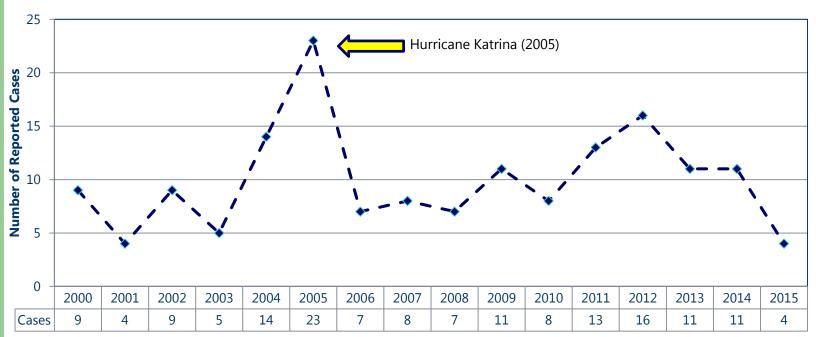
By Month, 2000-2015*

Reported Non-Cholera Vibrio Cases by Month, Mississippi, 2000 - 2015 (YTD)



By Year 2000-2015*

Reported Non-Cholera Vibrio Cases by Year, Mississippi, 2000 - 2015 (YTD)



Information

- CDC
 - http://www.cdc.gov/vibrio/vibriov.html
- Interstate Shellfish Sanitation Conference
 - http://issc.org/Education/VibrioVulnificus.aspx