



VIBRIOSIS, NON-CHOLERA (See also CHOLERA)

- Agent:** *Vibrios* are actively motile, gram-negative, curved rod-shaped bacteria that live freely in marine or brackish waters. At least thirty *Vibrio* species have been identified as causing human illness. See table for most common species and their presentations.

Clinical Presentations of the Most Common <i>Vibrio</i> Species Associated with Human Illness	
Gastrointestinal Illness	Sepsis or Wound Infection
<i>cholerae</i> non-01 <i>parahaemolyticus</i> <i>fluvialis</i> <i>mimicus</i> <i>hollisae</i> <i>furnissii</i>	<i>vulnificus</i> <i>alginolyticus</i> <i>damsela</i> <i>parahaemolyticus</i> (rarely) <i>cholerae</i> non-01 (rarely)

- Identification:**

- Symptoms:** Illness can be classified into three categories: gastroenteritis, septicemia, and wound infection. Mortality rate for *V. vulnificus* septicemia in persons with underlying liver disease is 50%.
- Differential Diagnosis:** Other causes of foodborne illness or septicemia.
- Diagnosis:** Culture identification of specimens such as stool, blood, or wound discharge.

- Incubation:** Varies by presentation; foodborne illness generally presents within 12-24 hours.

- Reservoir:** Marine coastal regions are the natural habitat.

- Source:** Contact with brackish or salt water, or consumption of foods derived from or contaminated with seawater, especially shellfish.

- Transmission:** Ingestion of any raw or inadequately cooked seafood, or any food cross-contaminated by handling raw seafood or rinsing with contaminated seawater.

- Communicability:** Generally not communicable from person to person, but

potentially communicable by fecal-oral means.

- Specific Treatment:** For gastrointestinal illness, fluid replacement and supportive care; antibiotics in severe disease may shorten duration. For septicemia and wound infection, antibiotics are required. Tetracyclines are the drug of choice, while chloramphenicol and trimethoprim-sulfamethoxazole may be effective.

- Immunity:** None.

REPORTING PROCEDURES

- Reportable,** *California Code of Regulations*, Section 2500.

- Report Form:** **CHOLERA AND OTHER VIBRIO ILLNESS INVESTIGATION REPORT (CDC 52.79 (E), 08/07)**

- Epidemiologic Data:**

- Ingestion of raw or partially cooked seafood, especially oysters and crabs. Water or food contaminated with seawater.
- Recent travel to areas with inadequate sewer service.
- Exposure to water, such as swimming, surfing, fishing, and aquarium maintenance.
- Pre-existing medical conditions or medical treatments (antibiotics, antacids or H-2 blocker, peptic ulcer or gastric surgery, alcoholism or other liver disease, diabetes, HIV infection, corticosteroids, etc.) which might increase susceptibility.
- Pre-existing wound or receipt of a wound exposed to water or marine animals.
- Specific seafood consumption history for 7 days prior to illness, indicating if eaten raw or cooked; source of seafood if known and place of purchase.



- g. When seafood is suspected as the source of infection, additional questions must be answered concerning the method of preparation, specific location where seafood was obtained, shipping lot numbers, harvest site, environmental conditions of the harvest area, and conditions of storage and holding. The people conducting the Food and Milk investigation complete this information.

- 3. Take precautions with food and water during recreation. Avoid ingestion of seawater.
- 4. Protect water supply from seawater or fecal contamination.

CONTROL OF CASE, CONTACTS & CARRIERS

Public Health Nursing Home Visit Protocol:
Home visit as necessary – a face to face interview is conducted as necessary.

Refer to “Public Health Nursing Home Visit AS NECESSARY (HVAN) Algorithm” (B-73 Part IV Public Health Nursing Home Visit Protocol).

CASE:

Precautions: Enteric Precautions or Wound and Body Fluid Precautions, as appropriate.

- 1. Gastroenteritis: remove from sensitive occupation or situation until one negative stool.
- 2. If patient dies, refer to **Part III, MORTICIANS & CEMETERIES.**

CONTACTS: Household members or persons who share a common source.

1. Sensitive Occupation or Situation:

- a. **Symptomatic:** Treat as a case. Remove from work until asymptomatic and on therapy. Release specimens not mandatory.
- b. **Asymptomatic:** Do not remove from work.

- 2. **Non-Sensitive Occupation or Situation:** May obtain specimens on all household contacts and other suspect contacts to identify source of infection.

CARRIERS: Not applicable.

PREVENTION-EDUCATION

- 1. Stress hand washing and personal hygiene.
- 2. Dispose of feces in a safe, sanitary fashion.

DIAGNOSTIC PROCEDURES

Consult with the Bacteriology Section of the Public Health Laboratory.

Container: Feces-Parasite.

Laboratory Form: Test Requisition Form H-3021 (Rev. 9/07)

Examination Requested: Culture.

Material: Feces. Follow instructions provided with container.

Amount: Walnut size.

Storage: Do not refrigerate; protect from overheating.