VIBRIOSIS, NON-CHOLERA (See also CHOLERA)

 Agent: Vibrios are motile, gramnegative, curved rod-shaped bacteria that live freely in marine or brackish waters. 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 Vibrio Species Associated with Human Illness	
Gastrointestinal Illness	Sepsis, Ear or Wound Infection
cholerae non-01 parahaemolyticus fluvialis mimicus hollisae furnissii	vulnificus alginolyticus damsela parahaemolyticus (rarely) cholerae non-01 (rarely)

3. Identification:

- Symptoms: Illness can be classified into three categories: gastroenteritis (watery diarrhea is most common), septicemia, and wound infection.
 Mortality rate for *V. vulnificus* septicemia in persons with underlying liver disease is 50%.
- b. **Differential Diagnosis**: Other causes of foodborne illness or septicemia.
- Diagnosis: Detection of Vibrio species from clinical specimens such as stool, blood, or wound discharge by culture or polymerase chain reaction (PCR).
- 3. **Incubation**: Varies by presentation; foodborne illness generally presents within 12-24 hours after exposure.
- 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.
- 6. **Transmission**: Ingestion of any raw or inadequately cooked seafood, or any food

- cross-contaminated by handling raw seafood or rinsing with contaminated seawater.
- 7. **Communicability**: Generally, not communicable from person to person, but potentially communicable by fecal-oral route.
- 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.
- 9. Immunity: None.

REPORTING PROCEDURES

- 1. **Reportable**, *California Code of Regulations*, Section 2500.
- 2. Report Form: CHOLERA AND OTHER VIBRIO ILLNESS CASE REPORT (CDPH 8587)

COVIS Oyster Supplemental Questionnaire CDC CHOLERA AND OTHER VIBRIO ILLNESS SEAFOOD INVESTIGATION REPORT FORM [CDC 52.79 (E)]

3. Epidemiologic Data:

- a. Ingestion of raw or partially cooked seafood, especially oysters and crabs.
 Water or food contaminated with seawater.
- b. Recent travel to areas with inadequate sewer service.
- Exposure to water, such as swimming, surfing, fishing, and aquarium maintenance.
- d. 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.

- e. Pre-existing wound or receipt of a wound exposed to water or marine animals.
- f. 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.

CONTROL OF CASE, CONTACTS & CARRIERS

Initiate investigation within one day of report.

<u>Public Health Nursing Home Visit Protocol</u>: 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.

- Gastroenteritis: remove from sensitive occupation or situation until 48 hours after resolution of signs and symptoms.
- 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.
 - 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.
- 3. Take precautions with food and water during recreation. Avoid ingestion of seawater.
- 4. Protect water supply from seawater or fecal contamination.

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.