SHIGELLOSIS
(Dysentery, Bacillary Dysentery)

1. **Agent:** A gram-negative bacillus divided into four groups: Group A, *S. dysenteriae* (12 serotypes); Group B, *S. flexneri* (10 serotypes); Group C, *S. boydii* (18 serotypes); Group D, *S. sonnei* (1 serotype). There are two provisional serotypes.

2. **Identification:**
   a. **Symptoms:** Acute gastroenteritis characterized by diarrhea, fever, nausea and sometimes vomiting, cramps, and tenesmus. In severe cases the stools contain blood, mucus, and pus. The disease is usually self-limited; complications are rare; mild and asymptomatic infections occur.
   b. **Differential Diagnosis:** Other enteric pathogens or toxins.
   c. **Diagnosis:** Isolation and serotyping of organism from feces or rectal swab.

3. **Incubation:** 1 to 7 days; usually 1 to 3 days.

4. **Reservoir:** The only significant reservoir is human.

5. **Source:** Feces of infected persons.

6. **Transmission:** Fecal-oral route with or without contamination of food or water. This may include fecally contaminated water or certain sexual behaviors.

7. **Communicability:** Variable as long as organisms are excreted, usually within 4 weeks after illness. Asymptomatic carriers may transmit infection; rarely the carrier-state may persist for months. Infective dose may be as low as 10-100 organisms.

8. **Specific Treatment:** Antibiotics such as trimethoprim/sulfamethoxazole (TMP/SMX), ampicillin and quinolones have been shown to shorten the duration of illness and bacterial shedding. Usage of antibiotics should be based on the clinical status of patient and sensitivity of organism. Currently circulating strains are resistant to ampicillin or TMP/SMX, or multiply resistant to ampicillin, TMP/SMX, and tetracycline. Cases considered to be a public health risk due to sensitive occupation or situation (SOS) should routinely receive antimicrobial therapy.

9. **Immunity:** There is some evidence of serotype-specific immunity of short duration.

**REPORTING PROCEDURES**

1. Report within 1 working day of identification of case or suspected case (Title 17, Section 2500, California Code of Regulations).

**Epidemiologic Data:**

a. Exposure to others with diarrhea in or outside of household.

b. Attendance at group gatherings where food was served, restaurants, or commercial food establishments within incubation period. Obtain detailed information on date, time, and types of foods or beverages ingested and ascertain whether dining companions had similar symptoms.

c. Travel history within incubation period.

d. If associated with a child care center, developmentally disabled facility, institution, or babysitting group, obtain detailed information on clientele, caretakers, and conditions at the facility or residence.

e. For infants 3 months of age and under, obtain detailed epidemiologic data on caretaker(s) including
babysitter (even if asymptomatic) to identify possible source.

f. Consumption of untreated water or recreational water exposure.

g. Colonic irrigation.

h. Sexual contacts within incubation period.

i. Sanitary conditions in the residence or other location(s) of possible exposure.

CONTROL OF CASE, CONTACTS & CARRIERS

Contact within 24 hours to determine if Sensitive Occupation or Situation (SOS) involved.

CASE:

Precautions: Enteric precautions until bacteriologically cleared as described below.

1. Sensitive Occupation or Situation: Remove from work until 2 successive negative feces specimens are obtained, at least 24 hours apart and taken at least 48 hours after cessation of antimicrobial therapy.

2. Non-sensitive Occupation or Situation: Must be cleared by obtaining 2 negative feces specimens or rectal swabs. May return to work when no longer symptomatic.

CONTACTS: Household members or persons who have close contact with the case.

1. Sensitive Occupation or Situation:

   a. Symptomatic: Remove from work until negative specimens as for case.

   b. Asymptomatic: May continue to work but must have 1 negative feces specimen.

2. Non-sensitive Occupation or Situation: Obtain specimens if symptomatic.

PREVENTION-EDUCATION

1. Emphasize hand washing after defecation and before handling food.

2. Wash raw fruits and vegetables thoroughly.

3. Protect from contamination by proper food handling techniques and sanitary storage.

4. Properly prepare infant formula.

5. Protect drinking water or boil drinking water for 20 minutes if it is suspected to be a source of infection.

6. Control flies by screening of doorways and windows, by eliminating fly breeding areas, and by the proper use of insecticides.

7. Dispose of feces properly.

8. Limit occupancy to meet housing codes and ensure adequate toilet facilities are available in group housing situations.


DIAGNOSTIC PROCEDURES

San Joaquin County Public Health Laboratory services are available. Refer to the Laboratory Services Manual in Section 2, Disease Reporting.