

**REGION I EMERGENCY MEDICAL SERVICES
STANDING MEDICAL ORDERS
BLS**

SMO: Food- And Water Borne Illnesses

Revised Date:

Overview: Although most agents considered likely to be used for bioterrorism would be disseminated by way of aerosol, it also is possible to use food-borne or water-borne agents. The use of these agents is less likely than air-borne agents for a large-scale attack because it is difficult to expose many people. Standard treatment of municipal water supplies would preclude survival of most biological agents. *Salmonella* species, *Shigella dysenteriae*, *Escherichia coli* 0157:H7 and *Vibrio cholerae* are all bacterial agents, which could be used to cause food-borne gastroenteritis. *Cryptosporidium parvum* (*C. parvum*) is a protozoal organism that also may be used as a biological agent. All suspected or confirmed cases of food- and water-borne illnesses must be reported to the local department of public health and the Illinois Department of Public Health. The incubation period is usually 1 to 3 days post exposure

INFORMATION NEEDED

- History of current illness
- Any patient family members or friends displaying signs and symptoms of the illness
- Watery or bloody stool
- Dehydration present

OBJECTIVE FINDINGS

- **GI:** These infections generally present as diarrhea and can be associated with nausea, vomiting, fever and abdominal cramps.
 - Gastroenteritis caused by *Shigella* often is associated with blood or mucus in the stool
 - Cholera is associated with severe watery diarrhea that can cause death from dehydration within hours
 - *E. coli* 0157:H7 is associated with bloody diarrhea
 - *Salmonella* or *Shigella* also can be associated with bloody diarrhea
 - *Salmonella typhi* and *S. paratyphi* can produce typhoidal syndrome with a gradual onset of fever, headache, malaise, muscle pain and constipation; diarrhea is uncommon
 - *C. parvum* typically causes watery diarrhea associated with crampy abdominal pain. The incubation period is usually approximately one week but can sometimes extend to several weeks. Illness sometimes can last for many weeks
- **Renal:** *E coli* 0157:H7 produces a shiga toxin associated with development of hemolytic uremic syndrome. This syndrome is characterized by hemolytic anemia, thrombocytopenia and renal insufficiency.

BLS

- Standard isolation techniques for all EMS personnel that would include gloves, gown, mask
- Minimize as much as possible the patient's diarrhea from contaminating other EMS equipment
- Vital signs
- Assess for any other medical or trauma issues
- Supplemental oxygenation as needed by nasal cannula at 2-6 LPM or by non-rebreather mask at 10-15 LPM
- Treat for shock if the patient is dehydrated

Documentation of adherence to protocol:

- History of current illness
- Oxygen give
- Treatment for shock

Medical Control Contact Criteria

- Contact Medical Control if there is any suspicion that the patient is suffering from any of these illnesses

COMMENTS

Except in the case of a dehydrated patient, the care is generally only supportive

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INFORMATION NEEDED

- ___ History of current illness
- ___ Any patient family members or friends displaying signs and symptoms of the illness
- ___ Watery or bloody stool
- ___ Dehydration present

OBJECTIVE FINDINGS

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ALS

- ___ Standard isolation techniques for all EMS personnel that would include gloves, gown, mask
- ___ Minimize as much as possible the patient's diarrhea from contaminating other EMS equipment
- ___ Vital signs
- ___ Assess for any other medical or trauma issues
- ___ Supplemental oxygenation as needed by nasal cannula at 2-6 LPM or by non-rebreather mask at 10-15 LPM
- ___ Treat for shock if the patient is dehydrated
- ___ IV of N.S.

Documentation of adherence to protocol:

Documentation of adherence to protocol:

- ___ History of current illness
- ___ Oxygen give
- ___ Treatment for shock

Medical Control Contact Criteria

- ___ • Contact Medical Control if there is any suspicion that the patient is suffering from any of these illnesses
- ___ • Contact Medical Control prior to initiating an IV if there is any suspicion that the patient may be experiencing signs and symptoms of this illness

COMMENTS

Except in the case of a dehydrated patient, the care is generally only supportive