**PATHOGEN SAFETY DATA SHEET**

**Enteropathogenic Escherichia coli**

### CHARACTERISTICS

<table>
<thead>
<tr>
<th>Characteristic</th>
<th>Description</th>
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</thead>
<tbody>
<tr>
<td><strong>Morphology</strong></td>
<td>Gram negative rod non-spore forming bacteria</td>
</tr>
<tr>
<td><strong>Host Range</strong></td>
<td>Humans and animals.</td>
</tr>
<tr>
<td><strong>Modes of Transmission</strong></td>
<td>Ingestion of contaminated food, fecal-oral transmission, and person-to-person transmission</td>
</tr>
<tr>
<td><strong>Signs and Symptoms</strong></td>
<td>Lower grade fever with nausea, diarrhea, and vomiting may be present. Stools are typically not bloody, mucoid, or dysenteric</td>
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<tr>
<td><strong>Infectious Dose</strong></td>
<td>Estimated to be around 1 million organisms.</td>
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<tr>
<td><strong>Incubation Period</strong></td>
<td>6 to 48 hours</td>
</tr>
</tbody>
</table>

### HEALTH HAZARDS

- **Risk Group & Containment Requirements**
  - **Risk Group 2**
    - Agents that are associated with human disease which is rarely serious and for which preventive or therapeutic interventions are often available.
  - **BSL2**
    - For all procedures involving suspected or known infectious specimen or cultures.
  - **ABSL2**
    - For all procedures utilizing infected animals.

### SPILL PROCEDURES

- **Small**
  - Notify others working in the lab. Remove PPE and don new PPE. Cover area of the spill with absorbent material and add fresh 1:10 bleach:water. Allow 20 minutes (or as directed) of contact time. After 20 minutes, cleanup and dispose of materials.

### EXPOSURE PROCEDURES

- **Mucous membrane**
  - Flush eyes, mouth, or nose for 5 minutes at eyewash station.
- **Other Exposures**
  - Wash area with soap and water for 5 minutes.
- **Report**
  - Immediately report incident to supervisor, complete first Report of Injury form, and submit to Safety and Risk Management.
- **During business hours**
  - Bridger Occupational Health 3406 Laramie Drive Weekdays 8am-6pm. Weekends 9am-5pm
- **After business hours**
  - Bozeman Deaconess Hospital Emergency Room 915 Highland Blvd

### VIABILITY

- **Disinfection**
  - Susceptible to 1:10 bleach:water, 70 % ethanol, and glutaraldehyde, accelerated hydrogen peroxide
- **Inactivation**
  - Inactivated moist heat (121°C for 30 min) and dry heat (1 hour at 160-170°C)
- **Survival Outside Host**
  - Can survive for 1.5 hours to 16 months on dry inanimate surfaces.

### PERSONAL PROTECTIVE EQUIPMENT (PPE)

- **Minimum PPE Requirements**
  - Lab coat, disposable gloves, safety glasses, closed toed shoes, long pants
- **Additional Precautions**
  - Additional PPE may be required depending on lab specific SOPs and IBC Protocol.

**SUPPLEMENTAL REFERENCES**

- **BMBL:** [https://www.cdc.gov/labs/BMBL.html](https://www.cdc.gov/labs/BMBL.html)
- **CDC:** [https://www.cdc.gov/ecoli/](https://www.cdc.gov/ecoli/)