

## Handling Sewage and Fecal Matter Safely

University employees in many areas occasionally face exposure to human or animal fecal matter or sewage. Plumbers, custodians, groundskeepers, even the casual pedestrian can come in contact with fecal matter unexpectedly. Sewage spills, plumbing malfunctions, people relieving themselves in inappropriate places, and inconsiderate pet owners are some of the causes of this problem.

### Dangers of exposure

The greatest danger of exposure to fecal matter is the possibility of it entering your mouth and then getting into your digestive system. While most people would never knowingly ingest this matter, not using proper hygiene after contact with fecal matter or sewage can create a path for microorganisms to enter.

Hand-to-mouth exposure to fecal matter can cause illnesses such as salmonellosis and hepatitis A. Salmonellosis is a bacterial disease whose symptoms include abdominal pain, diarrhea, nausea, and sometimes vomiting. Hepatitis A symptoms include fever, malaise, anorexia, nausea, and abdominal discomfort, followed within a few days by jaundice. It can be a mild illness lasting one to two weeks or a disabling disease lasting several months.

The possibility of contracting life-threatening diseases such as hepatitis B or AIDS is extremely remote as neither hepatitis B nor HIV can be transmitted by the fecal-oral route.

### How to protect yourself

The two main ways of protecting yourself from fecal matter are following good hygiene practices and using personal protective equipment.

#### Good Hygiene

- Do not touch fecal matter with bare hands. If you need to remove it, wear waterproof gloves and use an instrument such as tongs or a spade for picking it up.
- Do not smoke, eat, drink, apply lip treatments, or chew gum while cleaning up fecal matter.
- Reduce exposure by keeping those who are not properly protected from coming in contact with the material. Close the area to any use pending clearance.
- Clean everything, including clothes, tools, and footwear, that came in contact with the fecal matter. Use a mild bleach solution made of two tablespoons of household bleach per gallon of cool water. (Chlorine is more effective in cool water.) Contaminated building floors should be scrubbed with the same solution. Be sure there is good ventilation for the chlorine fumes.
- Wash your hands thoroughly, even if you were wearing gloves the whole time. Use plenty of soap, scrub for at least 30 seconds, and rinse thoroughly with warm water. The California Department of Health Services states that "frequent, routine hand washing is the **most important safeguard** in preventing infection by agents present in sewage."



**Clearance**

Clean the site using the cleaning methods described above until all visible sewage has been removed and no sewage odor is present. The area can then be reopened for use.

**Personal Protective Equipment**

If your work duties are such that encountering fecal matter is a possibility, always be prepared by carrying waterproof gloves and washable footwear. Coveralls can also come in handy. Such work clothes should not be worn home or outside the immediate work environment.

Another way to protect yourself against illness is by keeping your tetanus-diphtheria (Td) immunization current. "Current" means a booster shot within the last ten years (for those who have completed the basic series of three immunizations, usually given in childhood).

If you have questions about how to handle fecal matter safely or about other sanitation issues, contact the Office of Environment, Health & Safety at 642-3073.

