



Tailgate Topic Review

[PP 05/12/2019 - 05/25/2019]

Raw Sewage (Personal Hygiene)/Blood Borne Pathogens

Are you at risk?

Workers whose activities bring them into contact with sewage and sewage products are at risk of contracting a work-related illness.

The majority of illnesses are relatively mild cases of gastroenteritis, but potentially fatal diseases, such as leptospirosis (Weil's disease) and hepatitis, are also reported to HSE.

However, not all cases are reported because people often fail to recognise the link between illness and work.

How to protect yourself

- Make sure that you understand the risks to health and the ways in which you can pick up infections.

- Use safe systems of work and wear the protective equipment that is provided.
- Report damaged equipment and get it replaced.
- Avoid becoming contaminated with sewage.
- Avoid breathing in sewage dust or spray.
- Do not touch your face or smoke, eat or drink, unless you have washed your hands and face thoroughly with soap and water.
- Cleanse all exposed wounds, however small, and cover with a sterile waterproof dressing.
- Change out of contaminated clothing before eating, drinking or smoking.
- If you suffer from a skin problem, seek medical advice before working with sewage.

- Clean contaminated equipment on site. Do not take contaminated clothing home for washing. Your employer should deal with this.

If you become ill

- Consult your doctor in the event of flu-like illness or fever, particularly where associated with severe headache and skin infections. Show your pocket card to the doctor.
- Seek medical advice if there are persistent chest symptoms, particularly if consistent with asthma or alveolitis (inflammation of the lung).
- Report any of the above illnesses to your employer, who should investigate any work-related link.

Exposure to BCA Inspectors

Public Works inspection is generally not considered a high risk occupation for exposure to raw sewage. Inspection staff is encouraged to be aware when they are entering any excavation that may be subject to a sewer spill. Appropriate PPE should be available to ensure that the BCA inspector's chance of contacting raw sewage is eliminated. Raw sewage is commonly found on workers' clothing, tools and materials located in the vicinity of the excavation.

Personal Protective Equipment (PPE)

Workers handling human waste or sewage should be provided proper PPE, training on how to use it, and hand washing facilities. Workers should wash hands with soap and water *immediately after* removing PPE. The following PPE is recommended for workers handling human waste or sewage:

- Goggles: to protect eyes from splashes of human waste or sewage.
- Protective face mask or splash-proof face shield: to protect nose and mouth from splashes of human waste or sewage.
- Liquid-repellent coveralls: to keep human waste or sewage off clothing.
- Waterproof gloves: to prevent exposure to human waste or sewage.
- Rubber boots: to prevent exposure to human waste or sewage.



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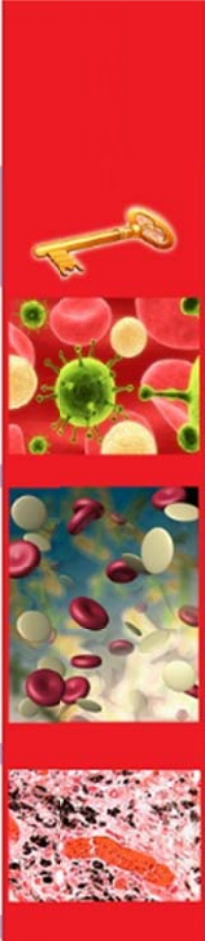
Negative Effects of Raw Sewage

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Key Notes

- On average, 7 million people suffer from illnesses caused by exposure to raw sewage per year.
- 7% of those 7 million become severely or fatally ill.



Viruses

Norwalk virus, rotavirus, Hepatitis A, Poliomyelitis Virus, Adenovirus

Gastroenteritis

Diarrhea, Vomiting, Abdominal Pain, Nausea, Cramping

Hepatitis A

Jaundice, Fever, Diarrhea, Fatigue, Cramping, Loss of Appetite, Nausea

Poliomyelitis

Sore Throat, Fever, Vomiting, Nausea, Cramping, Constipation, Diarrhea

Bacteria

Campylobacter, E. coli, Leptosria Salmonella, Shigella

Campylobacteriosis

Bloody Diarrhea, Fever, Cramping, Nausea, Vomiting

Escherichia coli (E. coli)

Bloody Diarrhea, Fever, Cramping, Nausea, Vomiting

Leptospirosis

Fever, Headaches, Body Aches, Chills, Diarrhea, Vomiting, Jaundice, Rash

Salmonellosis

Diarrhea, Fever, Cramping

Shigellosis (Bacillary Dysentery)

Bloody Diarrhea, Fever, Cramping

Parasites

Cryptosporidium parvum Giardia intestinalis

Cryptosporidiosis

Diarrhea, Loose Stool, Cramping, Slight Fever

Giardiasis

Diarrhea, Loose Stool, Cramping, Slight Fever

Vaccination Recommendations for Workers

Vaccination recommendations for workers exposed to sewage or human waste should be developed in consultation with local health authorities. Tetanus vaccinations should be up to date, with consideration also given to the need for polio, typhoid fever, Hepatitis A and Hepatitis B vaccinations.

The recommendations made in this document are based on best practices and procedures. Worker health and safety risks are likely to vary among specific locations and a trained health and safety professional should be consulted to create site specific worker health and safety plans.

Reporting Contact with Raw Sewage

1. Immediately wash hands with soap and water after coming in contact with raw sewage.
2. Clean contaminated work clothing daily with 0.05% chlorine solution (1 part household bleach to 100 parts water)

If any BCA employee has had skin or open wound contact with raw sewage for an extended period of time or they have ingested raw sewage they should contact Department's Occupational Safety and Health Division at (213) 473-7097.



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BLOODBORNE PATHOGENS

INTRODUCTION

This chapter contains information of importance for Bureau employees concerning the nature of blood-borne pathogens and the means to prevent exposure. Also, CAL/OSHA has issued blood-borne pathogens regulation (General Industry Safety Orders Section 5193) for the purpose of protecting employees covered by the regulation from exposure. To comply with this regulation, the Bureau has developed this *Blood-borne Pathogens Safety Review & Exposure Control Plan* for those employees with a potential risk to exposure in the course of their duties. All employees covered by the Exposure Control Plan will be provided with training by the Bureau.

Blood-borne pathogens, such as bacteria and viruses, are present in blood and body fluids and can cause disease in humans. The blood-borne pathogens of primary concern are hepatitis B, hepatitis C and HIV. These and other blood-borne pathogens are spread primarily through:

- **Direct contact.** Infected blood or body fluid from one person enters another person's body at a correct entry site, such as infected blood splashing in the eye.
- Indirect contact. A person's skin touches an object that contains the blood or body fluid of an infected person, such as picking up soiled dressings contaminated with an infected person's blood or body fluid.
- Respiratory droplet transmission. A person inhales droplets from an infected person, such as through a cough or sneeze.
- Vector-borne transmission. A person's skin is penetrated by an infectious source, such as an insect bite.

PREVENTING EXPOSURE

City Personnel department has determined that Public Works inspectors do not have an occupational exposure risk for exposure unless they are performing as an emergency first aid responder.

The most important protective measure to prevent a potential exposure incident to blood-borne disease is to use barrier precautions. By establishing a barrier between the injured person and the employee rendering first aid the likelihood of transmission is dramatically decreased. Gloves and CPR devices with one-way valves are effective barrier devices, and these items are contained in all City first-aid kits. In most workplace first aid incidents there is sufficient time to obtain these items from the kit before rendering first aid. For situations where this is not possible, employees should use their best judgment and improvise a protective barrier to prevent direct contact with blood or other body fluids by using any available material such as clothing or plastic. It is critical that employees use these precautions with ALL persons, at ALL times. All body fluids should be treated **AS IF** they could be infectious for blood borne disease. As a final safeguard should an exposure occur resulting in contact with the injured person's



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(source person) blood even if barrier precautions were used, all exposed City employees must contact the City's Medical Services at 213-473-6970.

DEFINITIONS

- 1) EXPOSURE INCIDENT - Requires two (2) elements; BOTH must be present to qualify the event as an "Exposure Incident":
 - a) Requires the presence of a body fluid that can transmit a blood-borne disease.
 - b) There must also be a portal of entry (an opening), such as a fresh cut, puncture wound, or a splash on mucous membrane (the lining of the eyes, mouth, nose) through which blood-borne diseases can enter the body.
 - o **Example: blood splashed on the arm with no open cuts is not an "Exposure Incident"**
2. SOURCE PERSON - Any individual, living or dead, whose blood/body fluid is the source of an exposure to another person/employer.
3. BARRIER PRECAUTIONS - Safety measures that treat ALL blood and body fluids, from ALL sources, at ALL times as if they are infections. Examples of these measures include using barriers such as gloves and a CPR device with a one-way valve.

POST-EXPOSURE PROCEDURE

IF YOU THINK YOU MAY HAVE BEEN EXPOSED TO BLOOD OR OTHER BODY FLUIDS THAT CAN TRANSMIT BLOODBORNE DISEASE, YOU SHOULD:

1. Immediately clean the affected wound with soap and water or an antiseptic, if available. If the eyes, nose, or mouth are contaminated, rinse with large amounts of water.
2. Then, as is the case for any work-related injury or event, report the incident to your supervisor.
3. Then, without delay, call the City's Medical Services at 213-473-6970
4. Ask the source person to accompany you to the City medical clinic. If the source person is unable to go to the clinic, attempt to get the person's name, address, and telephone number. It is important to evaluate the health of the source person as part of the post-exposure procedure. Information provided will be used to determine what treatment, if any, is appropriate for the exposed employee.
5. Employees who sustain an exposure as determined by the City's medical personnel will be provided the following:
 - a. Counseling about the risk of infection for their particular circumstance
 - b. Blood tests and medical treatment as indicated
6. ALL INFORMATION FROM BOTH THE EXPOSED EMPLOYEE AND SOURCE PERSON WILL BE HANDLED IN A SPECIAL CONFIDENTIAL MANNER AS REQUIRED BY FEDERAL AND STATE LAWS, AND CITY LAWS AND POLICIES.