



Bloodborne Pathogens Training

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Objectives

- Identify bloodborne pathogens (BBPs)
- Locate the Exposure Control Plan
- Understand how diseases are transmitted
- Protect yourself from an exposure through prevention
- Respond appropriately to an exposure
- Understand your right to medical evaluation

**County of Inyo
Bloodborne Pathogen
Exposure Control Plan**

February 2020

**In the event of an exposure,
notify one of the following immediately:**

**Supervising Nurse Anita Richardson
(760) 873-4312
(760) 937-8567**

**Health Officer Dr. James Richardson
(760) 873-7868
(760) 920-0433**

**Risk Manager Aaron Holmberg
(760) 872-2908
(760) 937-7378**

What Are BBPs?

- Microorganisms present in human blood that can cause disease in humans
 - Viruses, bacteria, parasites, fungi
- Primary workplace pathogens
 - HIV, HBV, HCV
- Hepatitis A is transmitted by contact with contaminated feces, not blood.



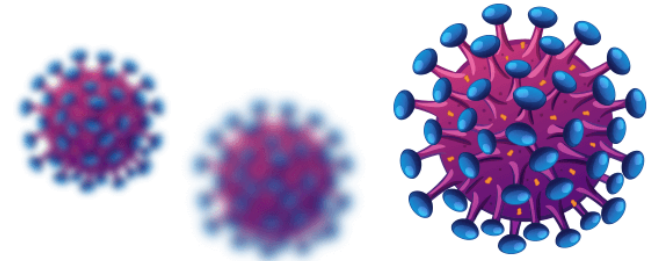
HIV and AIDS

- HIV leads to AIDS
- HIV attaches and depletes the human immune system
- Early HIV symptoms resemble common cold or flu virus
- HIV antibody test is only way to know for sure
- HIV does not survive outside the body (fragile virus)
- No cure (yet)
- Transmission: Sex & needles

WHAT IS HIV?

Human Immunodeficiency Virus (HIV)

is a virus that attacks cells that help the body fight infection.



There's no cure, but it is **treatable** with medicine.



Hepatitis B Virus (HBV)

- 1.25 million infected
- Symptoms
 - Jaundice, fatigue, abdominal pain, nausea, vomiting, dark urine
- 30% have no symptoms
- Vaccine available (3 shots, no side effects)
- Can survive outside body for at least 7 days
- Transmission: primarily through sex but contact with contaminated objects can also put you at risk



A serious liver infection caused by the hepatitis B virus that's easily preventable by a vaccine.

Hepatitis C Virus (HCV)

- Most common chronic bloodborne infection with 3M+ infected in USA
- Symptoms same as HBV, but can take years to manifest
- 80% have no symptoms
- Cure is 50-90% effective Can survive outside body 16 hours to 4 days
- Transmission: Direct contact with infected blood

Hepatitis C





Also called: Hep C

[ABOUT](#)[SYMPTOMS](#)[TREATMENTS](#)

An infection caused by a virus that attacks the liver and leads to inflammation.

Common

More than 200,000 US cases per year

-  Treatable by a medical professional
-  Spreads easily
-  Requires a medical diagnosis
-  Lab tests or imaging always required

The virus is spread by contact with contaminated blood, for example, from sharing needles or from unsterile tattoo equipment.

Most people have no symptoms. Those who do develop symptoms may have fatigue, nausea, loss of appetite, and yellowing of the eyes and skin.

Hepatitis C is treated with antiviral medications. In some people, newer medicines can eradicate the virus.

Hepatitis A Virus (HAV)

- Symptoms same as HBV and HCV
- No chronic long term infection
- Can survive outside body 16 hours to 4 days
- Treatable with medication
- Spread through contaminated water/food

Hepatitis A








Also called: Hep A

[ABOUT](#)[SYMPTOMS](#)[TREATMENTS](#)

A highly contagious liver infection caused by the hepatitis A virus.

Very rare

Fewer than 20,000 US cases per year

-  Preventable by vaccine
-  Treatable by a medical professional
-  Requires a medical diagnosis
-  Lab tests or imaging always required
-  Spreads through contaminated food or water
-  Short-term: resolves within days to weeks
-  Critical: needs emergency care

Hepatitis A is preventable by vaccine. It spreads from contaminated food or water, or contact with someone who is infected.

Symptoms include fatigue, nausea, abdominal pain, loss of appetite, and low-grade fever.

The condition clears up on its own in one or two months. Rest and adequate hydration can help.

Others

- MRSA:

Strain of staph infection that is resistant to a number of antibiotics, causes serious skin and soft tissue infections. Use good hygiene, disinfectants, clean your wounds, avoid sharing personal items.

- Norovirus:

Contagious virus that causes intestine and stomach to swell. Disinfect environment if someone vomits or has diarrhea. Use good hygiene, disinfectants, clean your wounds, avoid sharing personal items.

- TB, SARS, Corona Virus, Flu, Smallpox, etc.:

Droplet (airborne) transmission. Caution with coughing, talking, sneezing. Avoid touching eyes, nose, mouth. Avoid sick people. Wash hands frequently.

Human pathogen transmission

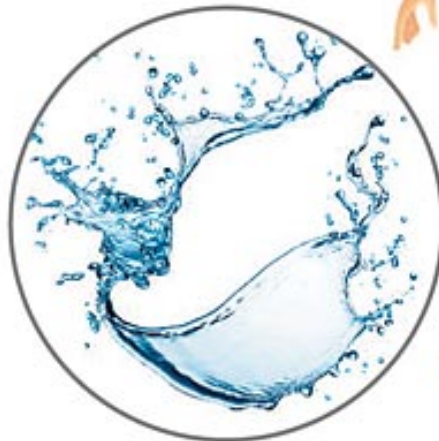
Infection caused by
airborne transmission



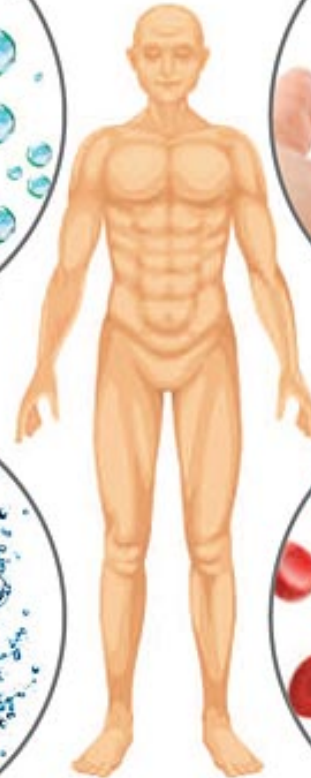
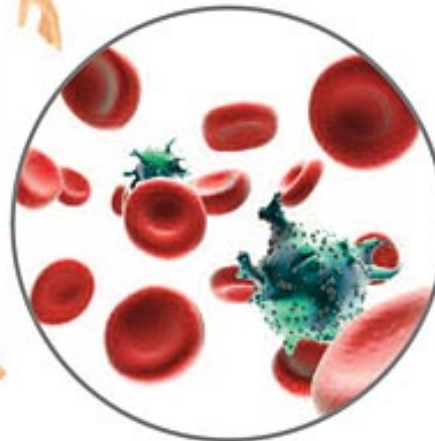
Infection caused by
contact and faeces



Infection caused by
contaminated water

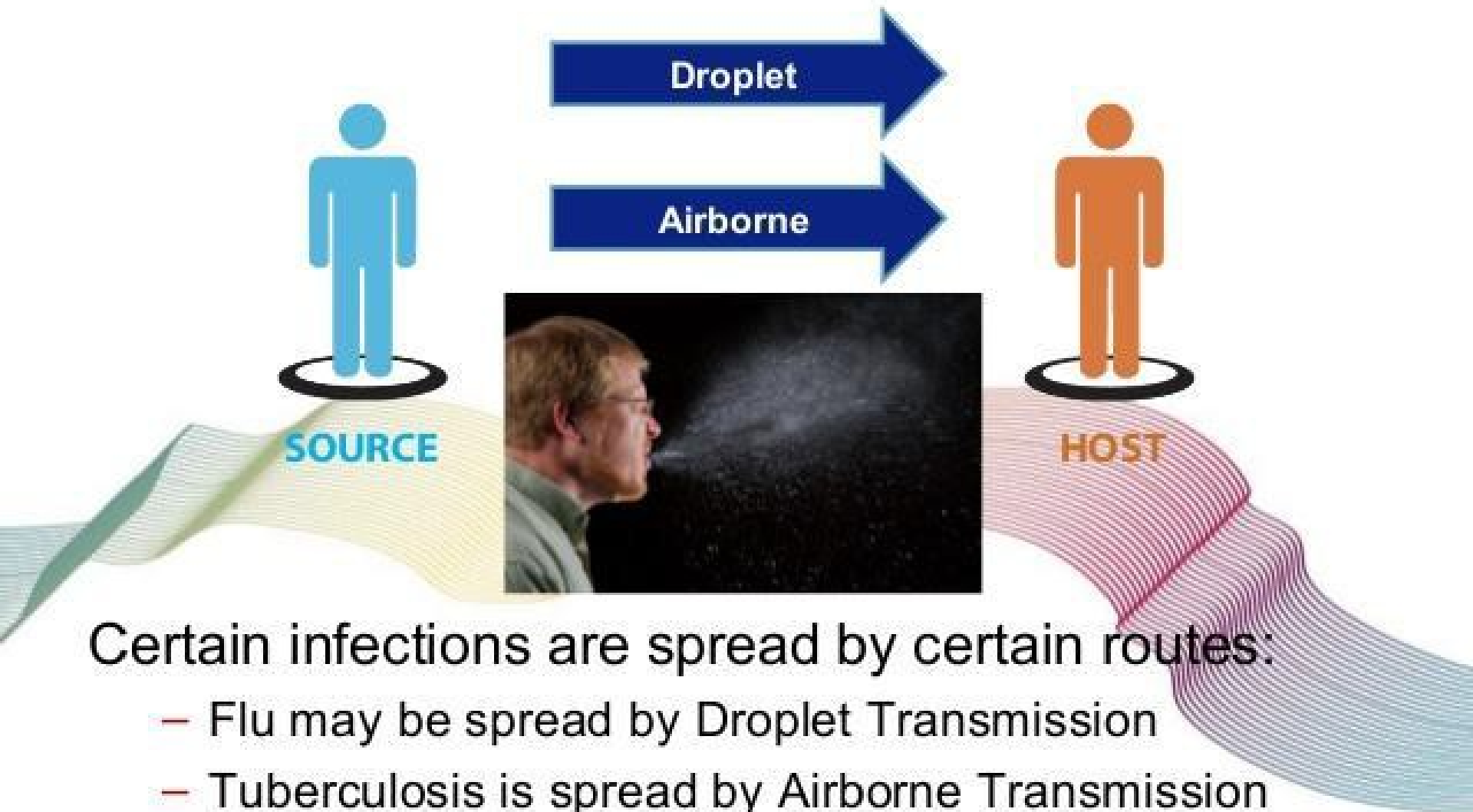


Infection caused by
pathogens in blood-
stream and tissues



- Contaminated sharp objects
- Contaminated needles
- Broken skin, including rashes
- Mucous membranes (eyes, nose, mouth, etc.)
- Contaminated feces

Spread of Respiratory Infections



Certain infections are spread by certain routes:

- Flu may be spread by Droplet Transmission
- Tuberculosis is spread by Airborne Transmission

Disease Transmissions

Contact Transmission:

- **Direct:** Close association between infected and susceptible host.
- **Indirect:** Spread by **fomites**.
- **Droplet:** Transmission via airborne droplets from saliva or mucus (coughing or sneezing)

Vehicle Transmission:

- ▶ **Airborne Transmission:** Pathogens carried on water droplets or dust for a distance > 1 meter
- ▶ **Water, food, air, blood, drugs**

Vector Transmission:

Arthropods carry pathogens from one host to another
(**mechanical vector** vs. **biological vector**)

Who is at Risk?

See written Inyo BBP plan, exhibits B/C/D

- Anyone who comes into contact with blood / bodily fluids or sick / injured persons
- ROLES: BBP Plan Exh B & C list certain roles in these departments as having particular potential for BBP exposure: HHS, Sheriff/Jail, ESAA, Probation, DA, Building & Maintenance
- TASKS: BBP Plan Exh D lists these tasks as having particular potential for BBP exposure: general cleaning, urine testing, contact with needles, searches, first aid/CPR, transporting inmates/suspects, contact with potentially infected persons or materials

* Employees in roles and/or performing tasks identified as having potential exposure to BBP are required to complete BBP training upon initial assignment and a review whenever the BBP plan is substantively updated.

Routes of Exposure

- Contact with someone with a bleeding injury
- Touching a contaminated surface or items & transferring
- Cleaning up blood or blood-soaked items
- Blood contact during first aid (good Samaritan vs. industrial)
- Using a tool covered with dried blood

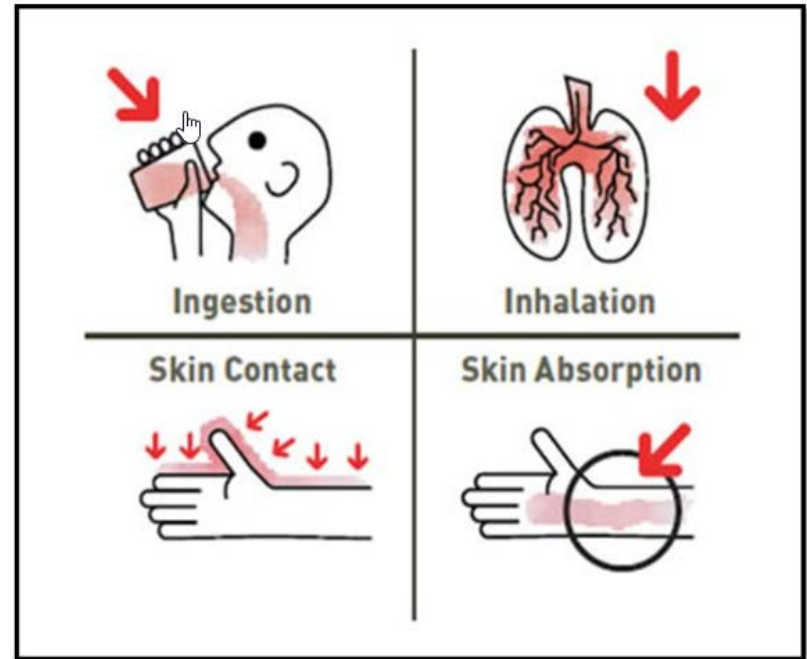
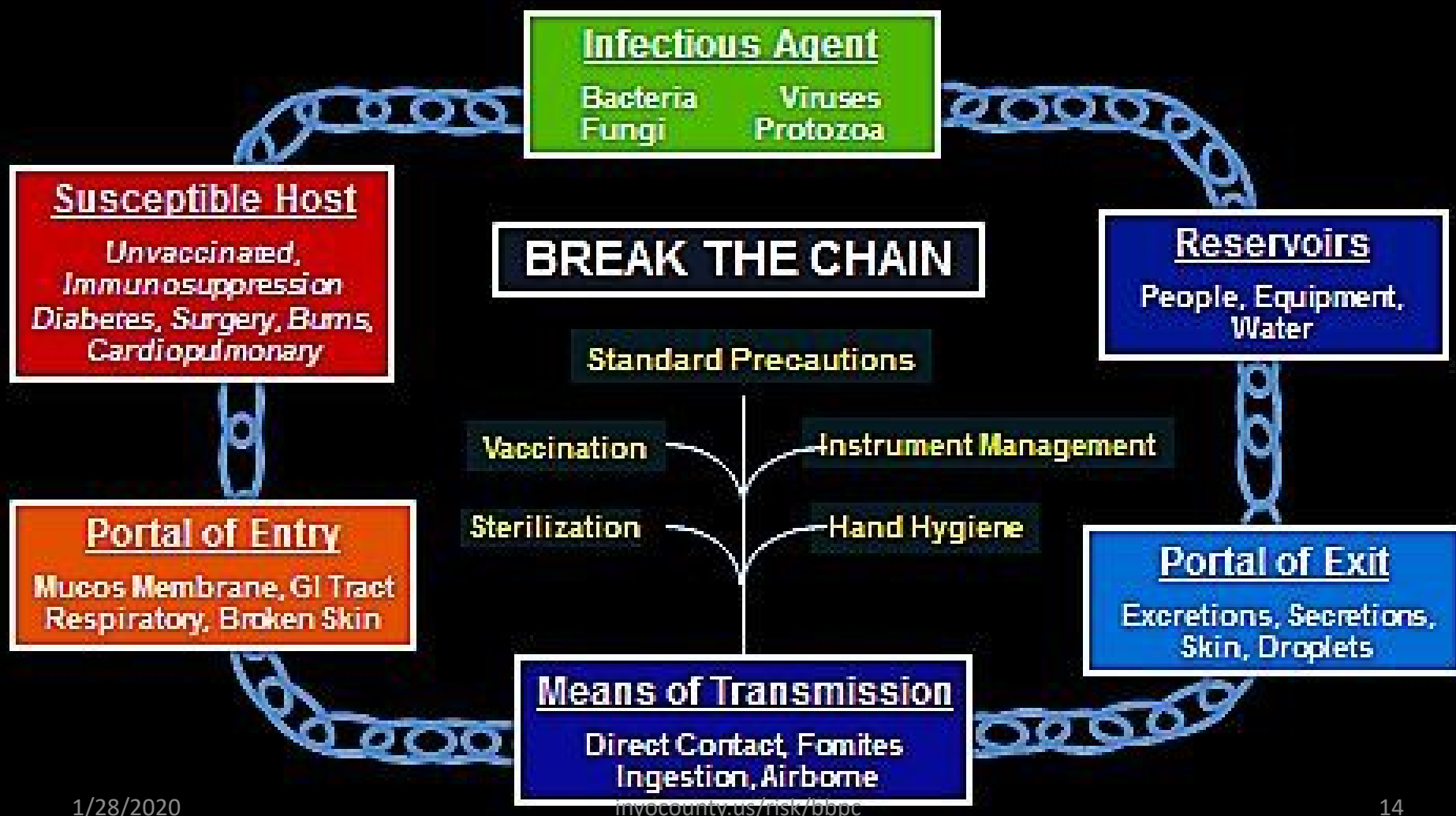


FIGURE 1: THE CHAIN OF INFECTION

—Break the chain at any point to prevent the transmission of infection—





Protecting Yourself

- Get HBV vaccine
- Universal Precautions
- Personal Protective Equipment (PPE)
- Follow safe work practices
- Follow decontamination and disposal procedures
- Fitness improves recovery (exercise)
- Report under-controlled exposures (Exh A or call)

BLOODBORNE PATHOGENS REPORT/RECOMMENDATION

EMPLOYEE: You are encouraged to bring any concerns about your exposure to bloodborne pathogens or the Exposure Control Plan to the Joint Labor/Management Safety Committee. Please complete this form and forward to the Risk Manager or your labor representative. The form will be submitted to the Joint Labor/Management Safety Committee for review and recommendation.

CONCERN: _____

RECOMMENDATION FOR CORRECTION: _____

DATE: _____

Signature _____

Department and Title _____

Exhibit A

HBV Vaccine

- Endorsed by medical communities and extremely effective
- Provided to employees at no cost (also Tetanus & HAV)
- Safe with no side affects
- If you must decline the vaccine, you must sign the form in the BBP Plan and return to Inyo County Health Department



VACCINATION DECLINATION FORM

Employee Name: _____

Title: _____

I understand that due to my occupational exposure to blood or other potential infectious materials I may be at risk of acquiring Hepatitis B virus (HBV) infection. I have been given the opportunity to be vaccinated with Hepatitis B vaccine, at no charge to myself. However, I decline the Hepatitis B vaccination at this time. I understand that by declining this vaccine, I continue to be at risk of acquiring Hepatitis B, a serious disease. If, in the future, I continue to have occupational exposure to blood or other potentially infectious materials and I want to be vaccinated with Hepatitis B vaccine, I can receive the vaccination series at no charge to me.

Employee Signature _____

Date _____

16

Universal Precautions

- Treat all blood and bodily fluids as if infected
- Use barrier protection (gloves, masks, aprons, eyewear) to avoid contact with infected bodily fluids
- Immediately clean up and decontaminate surfaces and equipment



Personal Protection Equipment (PPE)

- Barrier protection prevents exposure
- Use gloves when applying bandages or cleaning up
- Eyewear or masks protect against splashes
- Protective clothing or aprons protect against spurting blood
- Dust mask for nose and mouth protection
- Impromptu barriers as needed



Personal Protection Equipment (PPE)

Do you know where your BBP kits is?

Relevant Contents:

- Rubber gloves
- CPR mask / barrier
- Plastic bag or bucket for disposing bloody items
- Shovel / Scoop / Spatula
- Disinfectant



Plastic Pail - 5 Gallon, White



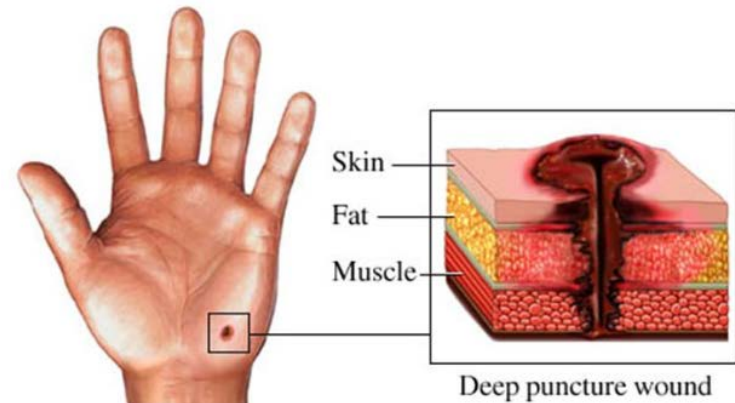
Safe Work Practices (1/5)

Avoid Puncture Wounds

- Use tongs, forceps, or other tools to pick up contaminated items
- Do not reach into a bucket that might have broken glass in it
- Wear your boots!!!



Puncture Wound



Safe Work Practices (2/5)

WASH YOUR HANDS

1. Wet Hands
2. Soap (20 seconds)
3. Scrub it all
4. Rise
5. Towel dry and
turn off tap with towel



WHEN: Before/after eating & restroom, after any potential exposure or contact

Safe Work Practices (3/5)

Do's

- Remove contaminated PPE and clothing before leaving the area
- Disinfect contaminated equipment
- Wash up immediately after exposure
- Seek immediate medical attention
Call hotline 877.215.7285 to report & speak with nurse
- Wash hands before and after glove removal
- Dispose of contaminated items properly



Safe Work Practices (4/5)

Don'ts

- No eating, drinking, smoking, cosmetics, or personal items in any work area where there is possibility of exposure to blood.
- Do not place or store food on bathroom shelves, cabinets, countertops, or work surfaces in work area where blood or bodily fluids may be present.
- Do not touch drug paraphernalia.



Safe Work Practices (5/5)

Needles - DO NOT PUT IN TRASH

- Do not touch needles directly.
- Wear gloves and use shovel/scoop/etc.
- Move to solid plastic container
- Seal container
- Ask supervisor where to take it.



Decontamination of an Area

- Wear appropriate gloves and glasses to protect eyes, nose, mouth, skin
- Dispose of bodily fluids properly
- After clean up, use 10% bleach or EPA-approved disinfectant for spills and let dry for 10 minutes
- Dispose of contaminated items immediately



Decontamination of Objects

- Do not use your hands
- Remove glass and other sharp materials using a brush and dust pan, or tongs.
- Use sharps container
- Use paper/absorbent towels to soak up residual liquids
- Disinfect all surfaces, and allow time to dry before using again





There's been a potential exposure!
What do I do next?



STEP 1: FLUSH

- Flush splashes to nose, mouth & skin with water for 3 minutes
- Irrigate eyes with clean water or saline for 20 minutes.

STEP 2: WASH

- Wash needle sticks and cuts thoroughly with soap and water.

STEP 3: REPORT

- Immediately report the incident to your supervisor **and** the Hotline (877.215.7285, code QS947) to make sure you get the care you may need and handle the required documentation.

Post Exposure Protocol

What the Supervisor Does Upon Notification of an Exposure

Call the following ASAP until you reach one of us:

- Supervising Nurse Anita Richardson @ 760.873.6533 or 760.937.8567
- Health Officer Dr. James Richardson @ 760.873.7868 or 760.920.0433
- Risk Manager Aaron Holmberg @ 760.872.2908 or 760.937.7378

You will be asked to assist with the exposure incident investigation.

EXPOSURE INCIDENT INVESTIGATION FORM

Date of Incident: _____ Time of Incident: _____

Location: _____

Potentially infectious materials involved: _____

Type: _____ Source: _____

Circumstances (work being performed, etc.): _____

How incident was caused (accident, equipment malfunction, etc.): _____

Personal protective equipment being used: _____

Actions taken (decontamination, clean-up, reporting, etc.): _____

Recommendations for avoiding repetition: _____

Signature _____ Date _____

EXPOSED EMPLOYEE MUST CONTACT ONE OF THE FOLLOWING PRIOR TO END OF WORK SHIFT: ANITA RICHARDSON, SUP. NURSE, (760) 873-3412 OR (760) 937-8567; DR. JAMES RICHARDSON, (760) 873-3331 OR (760) 920-0433; MARLENA BAKER, RISK MANAGER (760) 872-2908, (760) 937-7378.

Exhibit G

Always remember this

- BBPs can cause fatal disease
- Be aware of exposure at work
- Use universal precautions
- Use PPE
- Demonstrate safe work practices
- Follow exposure incident procedures
- Report all exposure incidents

**"ANY QUESTIONS BEFORE WE START
THE TEST?"**

"WHAT'S THE ANSWER TO NUMBER 1?"

"E"