

Bloodborne Pathogen Training



Employee Occupational Health and Safety
Infection Prevention

Click here to progress
to the next slide.



Target Audience

All staff who may have potential exposure to blood or other potentially infectious materials.

Agency/Committee Requiring this Learning

OSHA

Estimated Duration and Viewing Instructions

The expected time to complete this learning activity is **20 minutes**. If you are unable to complete during scheduled work time it may be completed outside of work with prior approval from your supervisor. Any overtime must be approved.



Once you complete this lesson, you should be able to:

1. Comply with OSHA 29 CFR 1910.1030.
2. Define Bloodborne Pathogens and Other potentially infectious materials (OPIM)
3. Identify where to obtain a written copy of Fairview's Bloodborne Exposure Control plan
4. Describe how to receive additional training when a task/procedure is new or modified that may affect an employees' occupational exposure
5. Identify tasks and activities that may involve exposure to blood and other potentially infectious materials (OPIM)
6. Explain how to minimize risks of a Bloodborne pathogen exposure.
7. Identify how to select the appropriate personal protective equipment (PPE)
8. Describe how to properly dispose of contaminated personal protective equipment (PPE)
9. Recognize the efficacy and benefits of the Hepatitis B vaccination
10. Explain how to report a Bloodborne pathogen exposure.





OSHA created standard **29 CFR 1910.1030** to minimize or eliminate the risk of occupational exposure to bloodborne pathogens.

[Click here](#) for a copy of the OSHA Bloodborne Pathogens standard.



Bloodborne Pathogens

=

Pathogenic microorganisms that are present in human blood or OPIM and that can infect people and cause disease.



Bloodborne Pathogens

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Pathogenic microorganisms that are present in human blood or OPIM and that can infect people and cause disease.



Include but are not limited to:

- Hepatitis B (HBV)
- Hepatitis C (HCV)
- Human Immunodeficiency virus (HIV) and Acquired immune deficiency syndrome (AIDS)



Bloodborne Pathogens

=

Pathogenic microorganisms that are present in human blood or OPIM and that can infect people and cause disease.



Include but are not limited to:

- Hepatitis B
- Hepatitis C
- HIV/AIDS

Other potentially infectious materials (OPIM)

=

Certain human body fluids, besides blood.



Bloodborne Pathogens

=

Pathogenic microorganisms that are present in human blood or OPIM and that can infect people and cause disease.

Other potentially infectious materials (OPIM)

=

Certain human body fluids and materials besides blood.

- Includes most human body fluids, such as
 - Semen and vaginal secretions
 - Internal body fluids such as synovial, pleural and amniotic fluids
 - Saliva in dental procedures
 - Any body fluid where it is difficult or impossible to differentiate between body fluids
- Unfixed human tissue or organs
- HIV containing cells, tissue cultures or organ cultures
- HBV containing culture medium or other solutions
- Blood, organs, or other tissue from experimental animals infected with HIV or HBV





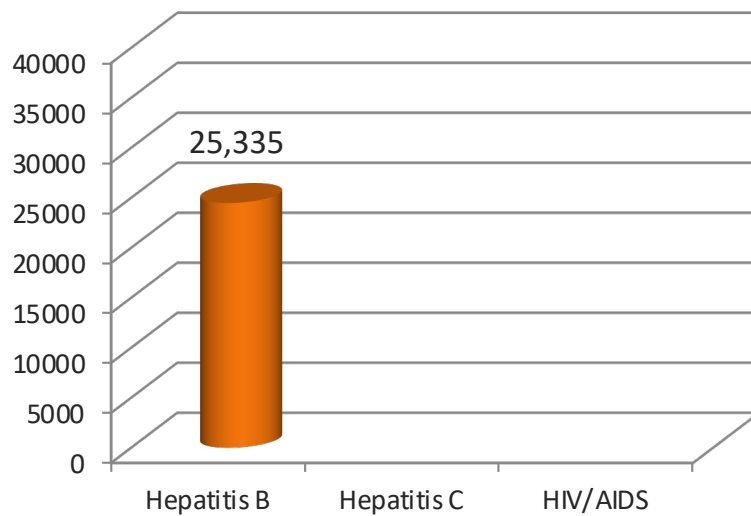
Modes of Transmission

- An accidental injury with a sharp object
- Non-intact skin, cuts, abrasions or acne
- Mucous membranes of mouth, eyes or nose
- Contaminated surfaces or objects
- High risk behaviors (e.g., failure to use Personal Protective Equipment and recapping needles)



Hepatitis & HIV/AIDS



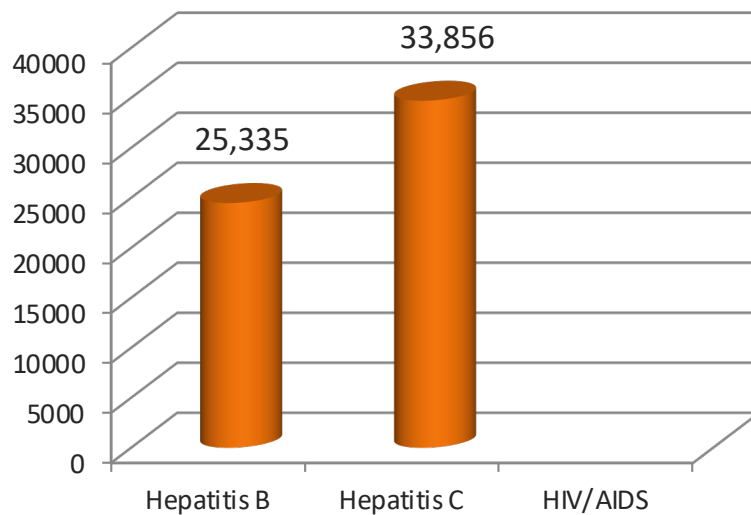


**Estimated persons in MN who are chronic carriers*

HEPATITIS B

- An estimated 25,335* persons in MN are chronic carriers (2018).
- Up to 10% of infected persons may develop chronic disease but for newborns the risk is 90%.
- Rates of acute Hepatitis B have decreased by 82% since 1991 due to vaccination.-



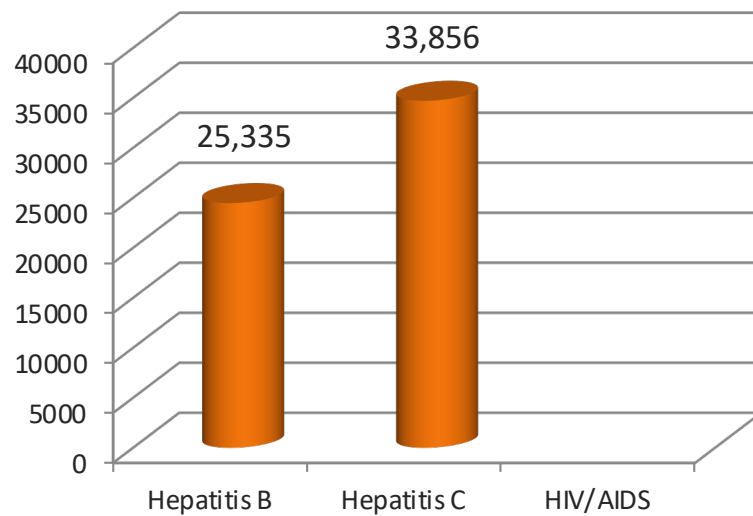


**Estimated persons in MN who are chronic carriers*

HEPATITIS C

- Hepatitis C is a common reason for liver transplants in US.
- There is a 0.2% chance of infection following a needlestick injury.
- An estimated 33,586* persons in MN have been infected with HCV(2018).
- Individuals born between 1945-1965 have a five time higher rate of Hepatitis C infection than other adults.



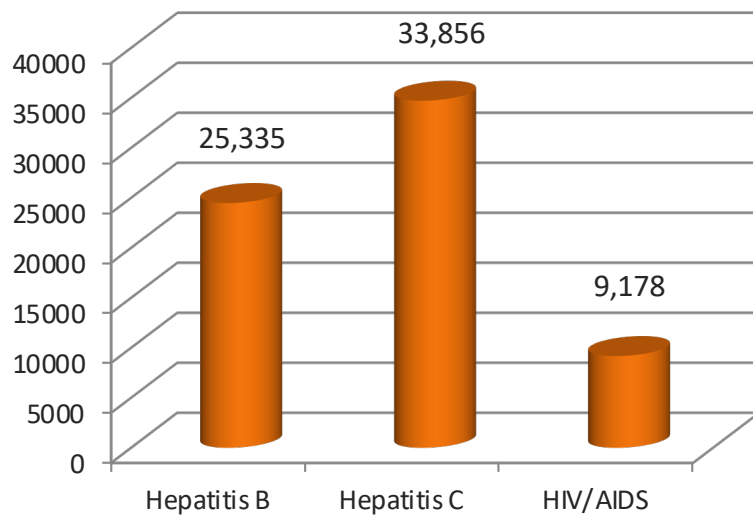


**Estimated persons in MN who are chronic carriers*

HEPATITIS C

- Up to 85% of infected persons may develop chronic disease.
- 1–5% of chronic carriers will die from liver cancer or cirrhosis.
- Median age of person with HCV is 56.





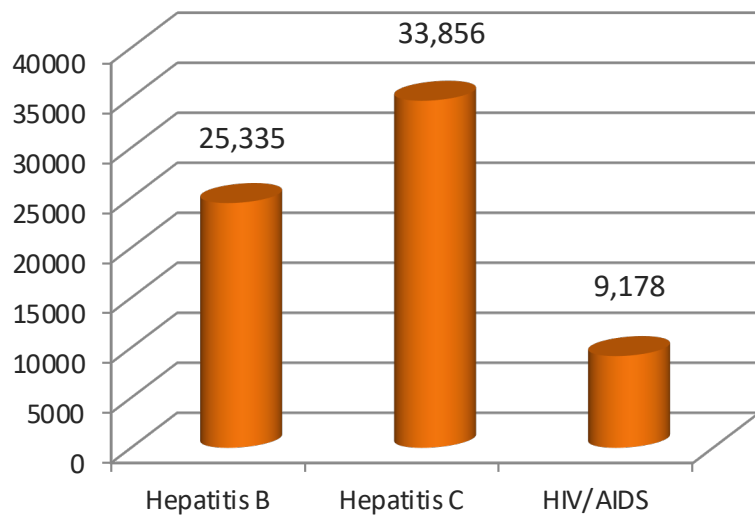
**Estimated persons in MN who are chronic carriers*

HIV/AIDS

- An estimated **9,178** persons in Minnesota are HIV/AIDS positive (2019), this includes **5,081** HIV and **4,097** AIDS.
- In Minnesota, although overall new cases fell slightly, more than one third of new cases were under 30 years old and a continuing pattern of increase among IV drug users.
- Males who have sex with other males remain the group at highest risk for acquiring HIV/AIDS in MN.



Signs & Symptoms of Infection



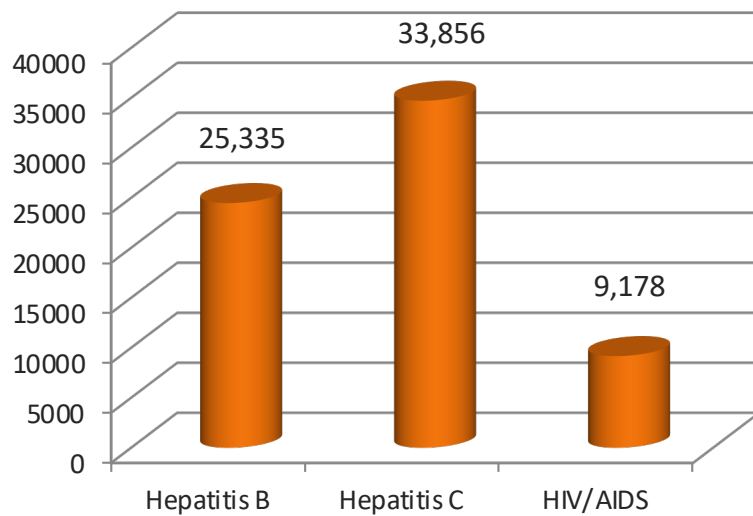
Hepatitis

- Jaundice
- Intermittent nausea and vomiting
- Abdominal pain
- "Flu" like symptoms

HIV/AIDS

- May be symptom free for years
- Weight loss, night sweats, recurrent infections
- Fatigue, mouth sores, swollen glands





Standard Precautions

Treat **ALL** blood & other potentially infectious materials as if infectious.

ANTICIPATE the potential for exposure and wear appropriate personal protective equipment to **PREVENT** exposure. Many people carry blood borne infections without visible symptoms or without knowing it.

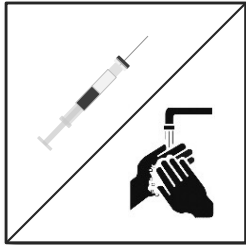


Reducing Your Risk

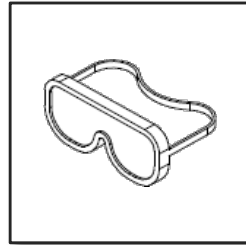




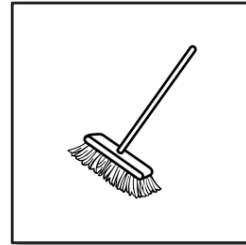
Engineering Controls



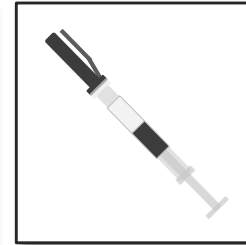
Work Practices Controls



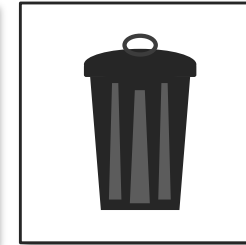
Personal Protective Equipment (PPE)



Housekeeping



Hepatitis B Vaccine



Clean-up Procedure



Communication of Hazards

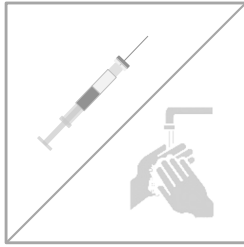
The [Bloodborne Exposure Control Plan](#) is a written program that outlines measures the company will take to minimize or eliminate your exposure. The plan also identifies employees at risk for exposure by job classifications.

The control plan/policy is located in Policy Tech.

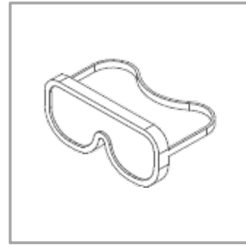




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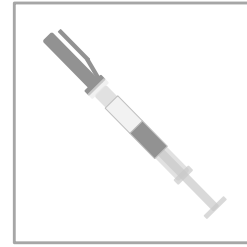
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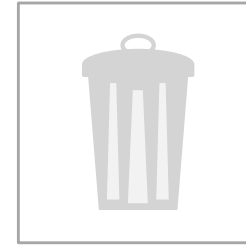
Personal Protective Equipment (PPE)



Housekeeping



Hepatitis B Vaccine



Clean-up Procedure



Communication of Hazards

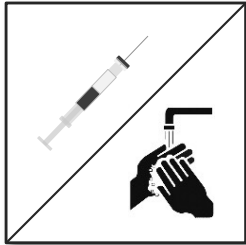
Engineering controls isolate or remove the hazard from the workplace

- Sharp containers
- Biohazard bags
- Safety devices on needles

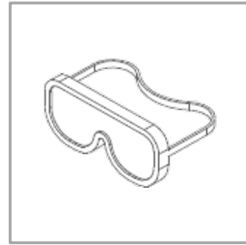




Engineering Controls



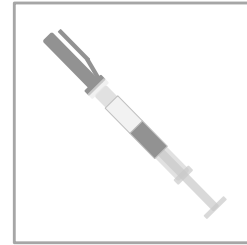
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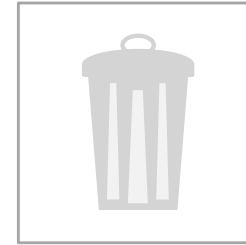
Personal Protective Equipment (PPE)



Housekeeping



Hepatitis B Vaccine



Clean-up Procedure



Communication of Hazards

Handling Contaminated Sharps

Best Practices on Patient Care Areas

Always

- Activate safety feature immediately after use
- Place contaminated sharps in puncture resistant, leak proof container
- Receive initial training and identify the necessary PPE when performing a procedure or operating a product to understand the risks associated with contact of blood and OPIM. Contact your supervisor for training options.
- Receive additional training when working with a new or modified procedure/product. Contact your supervisor for training options.

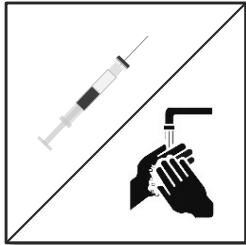
Never:

- Bend, recap, shear or break sharps
- Reach by hand into the sharps container
- Open, empty, or clean sharps containers manually
- Use a sharps container when its contents is above the maximum fill line

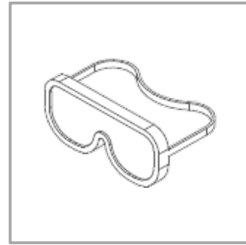




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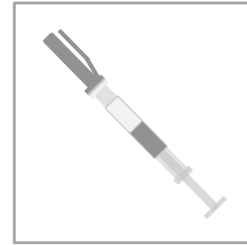
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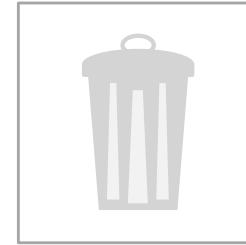
Personal Protective Equipment (PPE)



Housekeeping



Hepatitis B Vaccine



Clean-up Procedure



Communication of Hazards

Handling Contaminated Sharps

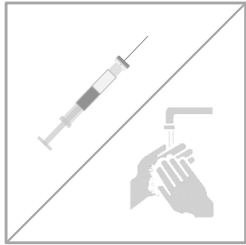
Best Practices on Patient Care Areas

- Minimize splashing, spraying, splattering, and generation of droplets
- Wear gloves and mask with face shield when pouring, emptying, or otherwise handling body fluids
- Empty Jackson Pratt drains carefully to minimize splashing
- To prevent needlesticks, slowly apply safety device and ensure it is fully locked prior to disposal
- Follow the manufacture's instruction for use when working with medical equipment, and only use the items for their intended purpose.

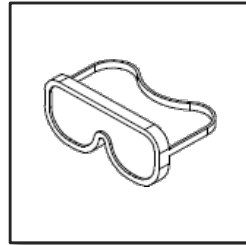




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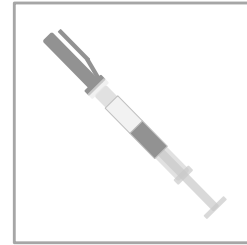
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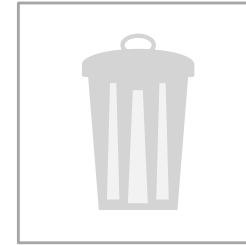
Personal Protective Equipment (PPE)



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Clean-up Procedure



Communication of Hazards

PPE provided per standard precautions at the facility you work at includes:

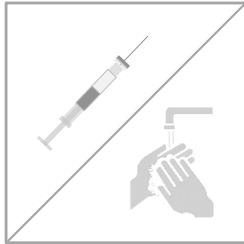
Gloves, Masks, Face shields, Protective Eyewear, and Gowns

- Gloves must be worn anytime you anticipate contact with blood, OPIM, mucous membranes or non-intact skin.
- Gowns, masks, face shields and eyewear must be worn according to the manufacturer's instructions for use and when the possibility of a splash or exposure may occur.
- Replace single-use disposable gloves, gowns, masks, or eye protection as soon as possible if contaminated, torn, punctured or damaged
- Dispose of PPE that is dripping or saturated with blood or OPIM in a biohazardous waste receptacle
- Dispose of PPE that is NOT dripping or saturated with blood or OPIM in a normal waste receptacle
- Do not reuse single-use disposable PPE
- Utility gloves may be reused if properly decontaminated

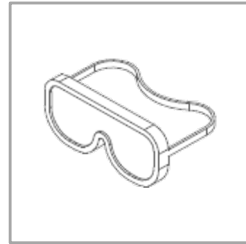




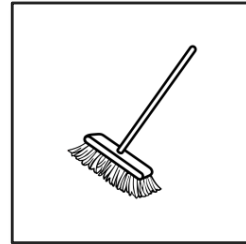
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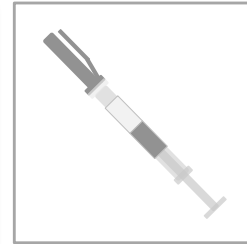
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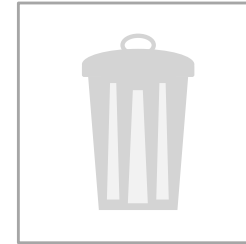
Personal Protective Equipment (PPE)



Housekeeping



Hepatitis B Vaccine



Clean-up Procedure



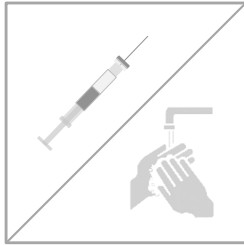
Communication of Hazards

- Contact Environmental Services for approved disinfectants
- Clean all equipment & surfaces after contact with potentially infectious materials
- Use tongs or brush and dustpan to pick up contaminated sharps
- Place contaminated sharps in sharps container and infectious wastes in biohazard bags

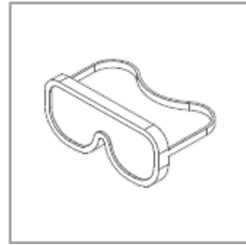




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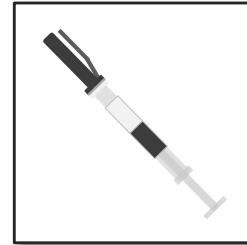
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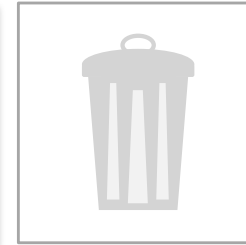
Personal Protective Equipment (PPE)



Housekeeping



Hepatitis B Vaccine



Clean-up Procedure



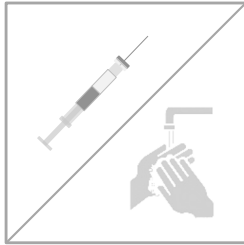
Communication of Hazards

- Hepatitis B vaccination series is available for free to all employees who may have occupational exposure
- The vaccine is 80%-100% effective in preventing infection or clinical hepatitis in those who receive the complete dose series.
- The Hepatitis B vaccine is given according to manufacturer instruction (3 dose or 2 dose vaccine)
- Employees must sign a declination form if they choose not to be vaccinated, but may request and obtain the vaccination at a later date
- There are no serious side effects

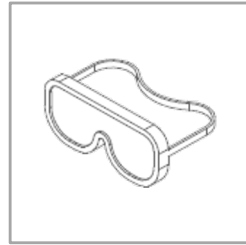




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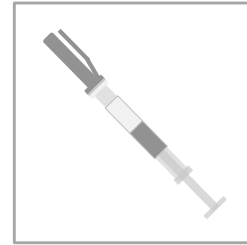
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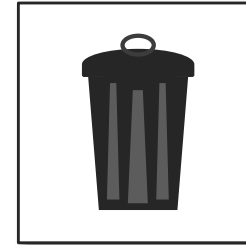
Personal Protective Equipment (PPE)



Housekeeping



Hepatitis B Vaccine



Clean-up Procedure



Communication of Hazards

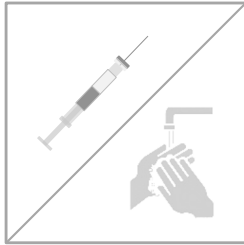


All departments that handle body fluids should have necessary supplies and/or a spill kit on their unit. **Spill kits are available through Supply Chain.**

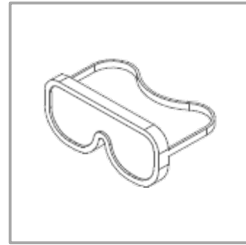
- ☑ Secure the area and avoid spreading the spill
- ☑ Put on PPE. Use absorbents on the perimeter of the spill, moving slowly to the center of the liquid. This prevents splashing
- ☑ Clean hard surfaces with disinfectant



Engineering Controls



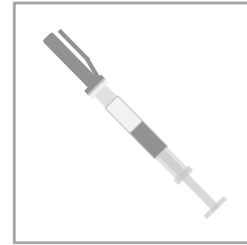
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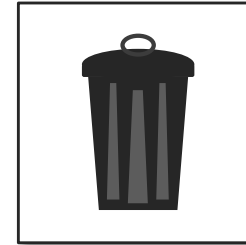
Personal Protective Equipment (PPE)



Housekeeping



Hepatitis B Vaccine



Clean-up Procedure



Communication of Hazards



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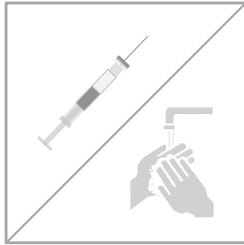
- Remove all linens and place in soiled holding area
- Dispose of contaminated cleaning supplies in biohazard bag
- Remove gloves and place into biohazard bag
- Wash hands

**See [Blood and Body Fluid Spill Clean-up](#) M Health Fairview policy for more information

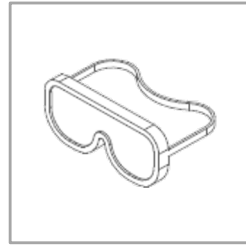




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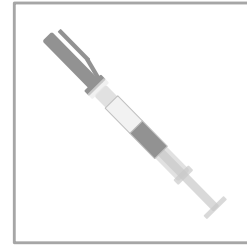
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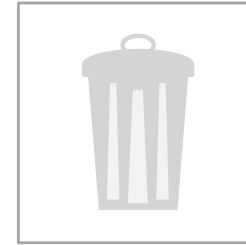
Personal Protective Equipment (PPE)



Housekeeping



Hepatitis B Vaccine



Clean-up Procedure



Communication of Hazards

Biohazard warning signs or labels are used to alert you to blood borne hazards.

Containers must be:

- Red or labeled with the biohazards symbol
- Leak proof
- Able to be sealed to prevent spilling



Exposure Incident





EXPOSURE INCIDENT

An exposure incident is a specific eye, mouth, other mucous membrane or non-intact skin contact with blood or OPIM that happens during the performance of an employee's duties.

Overall risks factors of an exposure incident include:

- Pathogen involved
- Wound depth
- Viral load of the source patient
- Amount of blood/body fluid involved
- Type of exposure (e.g. needlestick, cut, splash to the eyes/nose/mouth)

A confidential medical evaluation and follow-up must be made available to employees following an exposure incident.





EXPOSURE INCIDENT *Types of Exposure*

High Risk Exposure

- Source has a positive serology for a bloodborne pathogen (e.g. HIV, HBV, HCV) or is known to have high risk factors
- Exposure was a deep penetration with a hollow bore needle containing blood or body fluids
- Large volume of blood was injected (e.g. estimated 1cc or greater)

Low Risk Exposure

- Source has a negative serology for a bloodborne pathogen (e.g. HIV, HBV, HCV) or is known to have low risk factors
- Needlestick from an IV port, Heplock or suturing needle
- Exposure was to a mucous membrane (e.g. eyes, nose, mouth)
- Fluid exposure is to a superficial laceration > 24 hours old
- Superficial cut with a blade





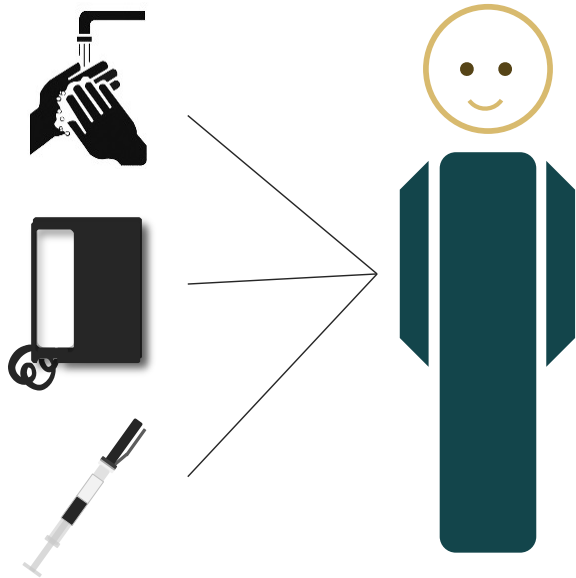
EXPOSURE INCIDENT *Types of Exposure*

Non-Exposure

- Fluid exposure to intact skin
- Body fluids containing no visible blood



EXPOSURE INCIDENT

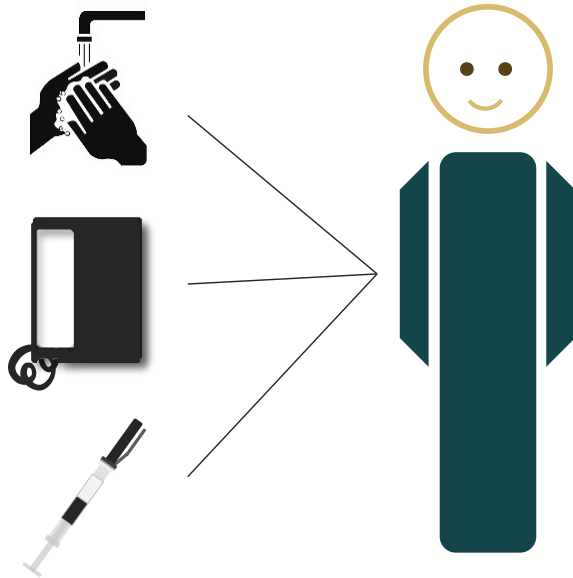


When you are exposed to blood or body fluids:

- Immediately wash exposed area thoroughly with soap and water
- Report to manager/supervisor/house lead immediately
- Notify immediately
 - During business hours - Employee Occupational Health & Safety (EOHS)
 - After business hours/weekends – Administrative Nursing Supervisor (ANS)
- Complete Blood and Body Fluid Exposure Packet
- Complete an Employee Safety Event in Compass
- Manager/supervisor will obtain the source's consent and have his/her blood drawn and sent to lab ASAP to be tested for HBV, HCV, and HIV



EXPOSURE INCIDENT



Follow up:

- ☑ Evaluation of exposure is to be completed in the shortest time possible after exposure, preferably within the hour
- ☑ Exposure evaluation will be done by an EOHS nurse, ANS, Manager (depending on site).
- ☑ In the absence of an EOHS nurse, the ED or Nursing Supervisor/House Lead will evaluate per EOHS protocol
- ☑ Employee will receive a confidential medical evaluation and follow up
- ☑ Counseling will be provided
- ☑ Prophylaxis will be administered, if necessary, with employee consent



Questions?

- Ask your supervisor
- Contact your site Safety Officer
- Contact Employee Occupational Health (EOHS)
- Contact Infection Prevention (IP)



You have finished this lesson!

There is a test connected with this lesson.

Once you are finished, click the “x” in the upper right corner to close this window, click on the lesson title again and the test button will be made available.

Completion of this program will be recorded in Fairview's Learning Management System (LMS). If you would like to print a statement of completion for your records, click [here](#).

