OSHA Safety for Healthcare Workers

Protecting Yourself from Bloodborne Health Risks

Presented By:
Cathy Montgomery, RN
Excellentia Advisory Group

EXCELLENTIA
ADVISORY GROUP

OSHA Safety Programs

- Bloodborne pathogens – Exposure control plan

What they are, what is **YOUR** risk, how to protect yourself, what to do if you are injured

- Hazard Communications

How you will know the risk of the products you will be using for work

Bloodborne Pathogens

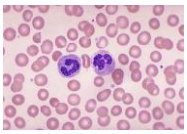
- They are pathogenic microorganisms that are present in human blood and body fluids that can cause disease in humans
- They are most commonly transmitted in the workplace by needlestick injuries involving a contaminated needle and injuries caused by other contaminated sharps
- They can also be transmitted via mucous membrane or non-intact skin contact with bodily fluids
- They pose a **serious** health risk to employees in the health care workplace

Bloodborne Pathogens

Some Definitions:

Blood: means human blood, human blood components, and products made from human blood.

Contaminated: means the presence or the **reasonably anticipated** presence of blood or other potentially infectious materials on an item or surface.



Why is this a BIG DEAL?????

Hepatitis C is the most frequent infection resulting from needlestick and sharps injuries

- Fever
- Fatigue
- Loss of appetite
- Nausea/vomiting
- Abdominal pain
- Dark urine
- Joint pain
- Jaundice

Hepatitis C can lead to liver failure, liver cancer, need for liver transplants

Transmission rate is 2.7% to 10%

Why is this a BIG DEAL?????

Hepatitis B is a threat to non vaccinated/non-immune health care workers

- Abdominal pain
- Dark urine
- Fever
- Joint pain
- Loss of appetite
- Nausea & vomiting
- Weakness & fatigue
- Jaundice

Hepatitis B can lead to cirrhosis and liver cancer

Transmission rate is 3% to 30%

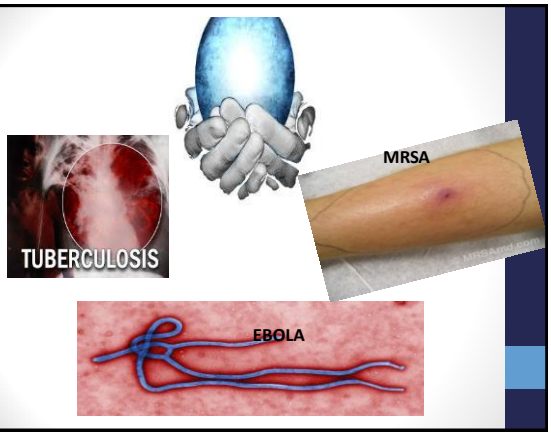
Why is this a BIG DEAL?????

HIV

Flu like symptoms
Effect 40-90%
Within 1-2 months

HIV leads to progressive failure of the immune system

Transmission rate approximately .3%



Risk Groups

All employees who could be "reasonably anticipated", as the result of performing their job duties, to face contact with blood and other potentially infectious materials

OCCUPATIONAL EXPOSURE

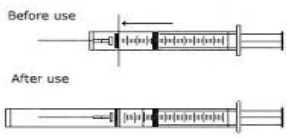
Physicians, dentists, medical examiners, nurses, ER personnel, law enforcement personnel, firefighters, technicians, housekeepers, laundry workers, medical waste treatment employees, home health workers……..

How to Protect Yourself?
1-2-3

1. "Universal precautions shall be observed to prevent contact with blood or other potentially infectious materials. Under circumstances in which differentiation between body fluid types is difficult or impossible, **all** body fluids shall be considered potentially infectious materials."
2. Standard precautions -Add body fluids (except sweat).

How to Protect Yourself?
1-**2**-3

2. Engineering Controls: means controls (e.g., sharps disposal containers, self-sheathing needles, safer medical devices, such as sharps with engineered sharps injury protections, and needleless systems) that isolate or remove the bloodborne pathogens hazard from the workplace.



How to Protect Yourself?
1-2-**3**

3. Work Practice Controls: means controls that reduce the likelihood of exposure by altering the manner in which a task is performed (e.g., prohibiting recapping of needles by a two-handed technique).

1. Place cap on hard flat surface.

2. Scoop cap with end of needle so that the cap is sitting on the needle.

3. Press the cap and needle on the hard flat surface until the cap snaps into place.

How to Protect Yourself?
1-2-3

DO NOT OVERFILL!!!

Statistics

- Suture Needles = 43.4%
- Scalpel blades = 17%
- Syringes = 12%

*75% of the injuries occurred during passing or use

Statistics

- 64.3% injury involves the primary user
- 33.49% injury to the secondary user
- 93% injury occurred to a hand

The problem is you can't always see them! Sometimes they are hidden in the linens, dropped on the floor, or into the regular trash.

Ways You Can Help

- If sharps containers are not placed where you need them to avoid long walks, talk to your supervisor.
- Never try to use a sharps container that is too full, alert your supervisor or change boxes.
- Use teamwork and communication at all times. Be a role model for the others you work with.

Ways You Can Help

- Point sharp ends away from users to decrease risk of injury.

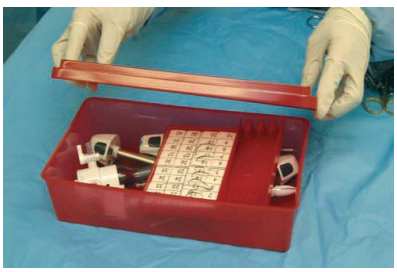
NOT!

- Minimize the distance or length of time one walks around with syringes and needles, whether filled for injection or empty.
- Avoid carrying syringes around in your hand or pocket. Place them in a secondary hard plastic container for transport.

Ways You Can Help

Don't use your fingers to point to items when you are counting!!!!!!!!!

Ways You Can Help



Enclosing your sharps in any type of container is always a good idea.

Ways You Can Help

Never stick your hand into the trash.

Additional Protections

- Mouth pipetting/suctioning of blood or other potentially infectious materials is prohibited.
- Specimens of blood or other potentially infectious materials shall be placed in a container which prevents leakage during collection, handling, processing, storage, transport, or shipping.

Additional Protections

PERSONAL PROTECTIVE EQUIPMENT
GLOVES

- Wear whenever there is a possibility of contact to your hands
- Inspect for holes before putting on
- Make sure they fit well
- Never clean disposable gloves and reuse
- Change gloves between tasks
- Hand hygiene after removing gloves

A Few More Words About Gloves…

Utility Gloves

- Utility gloves may be decontaminated for re-use if the integrity of the glove is not compromised. However, they must be discarded if they are cracked, peeling, torn, punctured, or exhibit other signs of deterioration or when their ability to function as a barrier is compromised.

Additional Protections

Masks, Eye Protection, and Face Shields: Masks, in combination with eye protection devices such as goggles or glasses with solid side shields or chin-length face shields, should be worn whenever splashes, spray, spatter, or droplets of blood or other potentially infectious materials may be generated and eye, nose, or mouth contamination can be reasonably anticipated.

Additional Protections

Gowns, Aprons, and Other Protective Body Clothing: Appropriate protective clothing such as, but not limited to gowns, aprons, lab coats, clinic jackets, or similar outer garments should be worn in occupational exposure situations. The type and characteristics will depend upon the task and degree of exposure anticipated.

Additional Protections

Caps, hoods, shoe covers: Surgical caps or hoods and/or shoe covers or boots shall be worn in instances when gross contamination can reasonably be anticipated .




Housekeeping Requirements

All equipment and environmental and working surfaces should be cleaned and decontaminated after contact with blood or other potentially infectious materials.



Housekeeping Requirements

Housekeeping Requirements

- Contaminated work surfaces should all be decontaminated with an appropriate disinfectant after completion of procedures, immediately or as soon as is feasible when surfaces are overtly contaminated, after any spill of blood or other potentially infectious materials, and at the end of the work shift if the surface may have become contaminated since the last cleaning.
- Protective coverings, such as plastic wrap, aluminum foil, or imperviously-backed absorbent paper used to cover equipment and environmental surfaces, should all be removed and replaced as soon as is feasible when they become overtly contaminated or at the end of the work shift if they may have become contaminated during the shift.

Housekeeping Requirements

- All bins, pails, cans, and similar receptacles intended for reuse which have a reasonable likelihood for becoming contaminated with blood or other potentially infectious materials should be inspected and decontaminated on a regularly scheduled basis and cleaned and decontaminated immediately or as soon as is feasible upon visible contamination.
- Broken glassware which may be contaminated should not be picked up directly with the hands. It shall be cleaned up using mechanical means, such as a brush and dust pan, tongs, or forceps.
- Reusable sharps that are contaminated with blood or other potentially infectious materials should not be stored or processed in a manner that requires employees to reach by hand into the containers where these sharps have been placed.

Regulated Waste

Regulated Waste

- Disposal of all regulated waste must be in accordance with applicable regulations.
- Regulated Waste: means liquid or semi-liquid blood or other potentially infectious materials, contaminated items that would release blood or other potentially infectious materials in a liquid or semi-liquid state if compressed, items that are caked with dried blood or other potentially infectious materials and are capable of releasing these materials during handling, contaminated sharps, and pathological and microbiological wastes containing blood or other potentially infectious material.

Regulated Waste Containment

Regulated waste must be placed in containers which are:

- Closable
- Constructed to contain all contents and prevent leakage of fluids during handling, storage, transport, or shipping
- Labeled or color-coded
- Closed prior to removal to prevent spillage or protrusion of contents during handling, storage, transport, or shipping

NOTE: If outside contamination of the regulated waste container occurs, placed it in a second container. The second container will meet the above listed criteria.

Laundry

Contaminated Laundry: means laundry which has been soiled with blood or other potentially infectious materials or may contain sharps.

- Contaminated laundry should be handled as little as possible with a minimum of agitation.
- Contaminated laundry should be bagged or containerized at the location where it was used and should not be sorted or rinsed in the location of use.
- Contaminated laundry should be placed and transported in bags or containers that are labeled or color-coded.

Laundry

- Whenever contaminated laundry is wet and presents a reasonable likelihood of soak-through or leakage from the bag or container, the laundry should be placed and transported in bags or containers which prevent soak-through and/or leakage of fluids to the exterior.
- Employees who have contact with contaminated laundry need to wear protective gloves and other appropriate personal protective equipment.

Lets Talk Hep B

Hepatitis B Vaccination

- The hepatitis B vaccine and vaccination series is available to all employees who have occupational exposure.
- This vaccination is FREE!!!!
- If you change your mind, just ask.

What Should You Do If You Have an Injury?

- **Do not apply pressure to the wound, allow it to bleed freely. You have no idea where that sharp has been, and now you have no idea what you have been exposed to!!!!!**
- **For your sake and your family's, follow these next steps VERY CAREFULLY……**

What Should You Do If You Have an Injury?

<u>What to do if you have an injury</u>:

- **Immediately flood the exposed area with water and clean any wound with soap and water or a skin disinfectant if available.**

- **Report the injury immediately to your supervisor.**
- **Seek immediate medical attention for post-exposure management.**

What Should You Do If You Have an Injury?

Accept Post-Exposure Evaluation & Follow-up

YOUR RESPONSIBILITIES

- **A gloved hand can be used to pick up syringes by the barrel, with the needle end pointing away. If the syringe is partly hidden, entangled, or in an awkward position, use tongs or some other instrument to move it before picking it up by hand.**
- **With some sharps (such as needles and lancets), it may be difficult to avoid the sharp end. Use tongs or other tools to pick up these items. Be sure any tools used give a good grip and aren't awkward to use.**

YOUR RESPONSIBILITIES

YOUR RESPONSIBILITIES

- **Once a syringe or other sharp is picked up, it should be placed directly into a sharps container. Don't hold the sharps container when disposing of a sharp. The container should be placed firmly on a level surface or securely attached to a cart or other location.**
- **Do not manually compress trash bags. Carry trash bags without close bodily contact if possible. If close contact with bags cannot be avoided, the use of puncture-resistant protective clothing may be appropriate.**

YOUR RESPONSIBILITIES

- Work carefully, always alert for sharps that may have been left behind.
- Try not to rush, that can cause mishaps!
- Learn about your policies and follow them.
- Remind your coworkers to follow the policies.
- Use personal protective equipment (gloves, eye protection, fluid-resistant gowns).
- Use sharps containers as needed.

Revised OSHA Hazard Communication Rule

Development of a Worldwide System for Hazard Communication

Revised OSHA Hazard Communication Rule

Original Hazard Communication Standard (1983) gave the workers the "right to know". The revised Standard gives workers the "right to understand".

Revised OSHA Hazard Communication Rule

SDS Format

1. Identification
2. Hazard(s) identification
3. Composition/information on ingredients
4. First-aid measures
5. Fire-fighting measures
6. Accidental release measures
7. Handling and storage
8. Exposure control/personal protection

SDS Format

9. Physical and chemical properties
10. Stability and reactivity
11. Toxicological information
12. Ecological information
13. Disposal considerations
14. Transport information
15. Regulatory information
16. Other information

SAFETY DATA SHEET
HYDROGEN PEROXIDE 12%

3. HAZARDS IDENTIFICATION:

Irritating to eyes and skin.

4. FIRST AID MEASURES:

GENERAL:	IN ALL CASES OF DOUBT OR WHEN SYMPTOMS PERSIST, ALWAYS SEEK MEDICAL ATTENTION
INHALATION:	Move the exposed person to fresh air at once. Keep the affected person warm and at rest. Get prompt medical attention.
INGESTION:	DO NOT INDUCE VOMITING. In case of spontaneous vomiting, be sure that vomit can freely drain because of danger of suffocation. Only when conscious, rinse mouth with plenty of water and give plenty of water to drink - (approx 500ml). Keep patient at rest and obtain medical attention.
SKIN:	Remove affected person from source of contamination. Wash the skin immediately with soap and water. Get medical attention promptly if symptoms occur after washing.
EYES:	Keeping eye open, immediately irrigate with water or eye-wash for 15 minutes. Obtain medical attention.

SAFETY DATA SHEET
HYDROGEN PEROXIDE 12%

8. EXPOSURE CONTROLS AND PERSONAL PROTECTION:

INGREDIENT NAME:	CAS No.:	STD	LT EXP 8 Hrs	ST EXP 15 Min
HYDROGEN PEROXIDE	7722-84-1	OES	1 ppm	2 ppm

PROTECTIVE GLOVES:	Use protective gloves.
EYE PROTECTION:	Use approved safety goggles or face shield.
OTHER PROTECTION:	Wear appropriate clothing to prevent any possibility of skin contact.
HYGIENIC WORK PRACTICES:	SKIN PROTECTION - apply barrier cream to hands and exposed skin. Promptly remove any clothing that becomes contaminated.

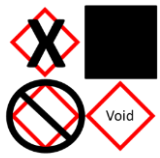
Label Elements

Product identifier
Supplier identifier
Chemical identity
Hazard pictograms*
Signal words*
Hazard statements*
Precautionary information

*Standardized

Pictogram Shape and Color

Pictograms will have a black symbol on a white background with a red diamond frame.



What to do?

Revised OSHA Hazard Communication Rule

- Carcinogen
- Mutagenicity
- Reproductive Toxicity
- Respiratory Sensitizer
- Target Organ Toxicity
- Aspiration Toxicity

Revised OSHA Hazard Communication Rule

- Flammables
- Pyrophorics
- Self-Heating
- Emits Flammable Gas
- Self-Reactives
- Organic Peroxides

Revised OSHA Hazard Communication Rule

- Irritant (skin and eye)
- Skin Sensitizer
- Acute Toxicity (harmful)
- Narcotic Effects
- Respiratory Tract Irritant
- Hazardous to Ozone Layer (Non Mandatory)

Revised OSHA Hazard Communication Rule

- Gases under Pressure

Revised OSHA Hazard Communication Rule

- Skin Corrosion/ Burns
- Eye Damage
- Corrosive to Metals

Revised OSHA Hazard Communication Rule

- Explosives
- Self-Reactives
- Organic Peroxides

Revised OSHA Hazard Communication Rule

- Oxidizers

Revised OSHA Hazard Communication Rule

- Aquatic Toxicity

Revised OSHA Hazard Communication Rule

- Acute Toxicity (fatal or toxic)

Signal Words

"Danger" or "Warning"

Used to emphasize hazard and discriminate between levels of hazard.

***No more "Caution"**

Hazard Statements

A single harmonized hazard statement for each level of hazard within each hazard class.

- **Example: Flammable liquids**
  - **Category 1: Extremely flammable liquid and vapour**
  - **Category 2: Highly flammable liquid and vapour**
  - **Category 3: Flammable liquid and vapour**
  - **Category 4: Combustible liquid**

Precautionary Statement

A phrase that describes recommended measures to be taken to minimize or prevent adverse effects resulting from exposure to a hazardous chemical, or improper storage, or handling of a hazardous chemical.

Precautionary Statement Examples

"Do not spray on open flame or other ignition source" (prevention)

"Wash contaminated clothing before reuse" (response)

"Protect from sunlight. Store in a well ventilated place" (storage)

OSHA Safety for Healthcare Workers

Protecting Yourself from Bloodborne Health Risks

QUESTIONS??

Cathy Montgomery, RN
cathy@excellentiagroup.com
Excellentia Advisory Group, LLC
1-636-875-5088