2018-2019

Blood Borne Pathogen Training

QUEST R III

Prepared by

Patrick Paratore, Safety Specialist

Health and Safety Services

(518) 337-0211

patrick.paratore@questar.org

QUESTAR III

LOSING THIS MUCH BLOOD WON'T KILL YOU.

RECEIVING THIS MUCH COULD.

QUESTAR III

Definitions:

- **OSHA** – **O**ccupational **S**afety and **H**ealth **A**dministration**.**
  - A branch of the U. S. Department of Labor which enforces the Occupational Safety and Health Act of 1970
- **PESH -** New York State Department of Labor
  - Public Employee Safety and Health Division
- **OPIM** – **O**ther **P**otentially **I**nfectious **M**aterials.
  - Specific body fluids that can transmit blood borne pathogens

QUEST R III

Blood Borne Pathogens Standard

- Title 29 Code of Federal Regulations 1910.1030
  - OSHA

This Training Includes:

- Employee exposure determination
- Procedures for an exposure incident
- The schedule and method for complying with the OSHA standard including:
  - Hepatitis B vaccination and post-exposure follow-up
  - Training and communication of hazards to employees
  - Record keeping

QUEST R III

Training:

- All **employees** will receive Blood Borne Pathogen Compliance Training arranged by the Health and Safety Specialist.
- This training will be provided at the time of initial assignment and annually thereafter.
- Training records with the names and signatures of the employees who have completed this training will be maintained in the district and the Health & Safety Office at Q3 BOCES.

QUEST R III

Employee Exposure Determination

Listed are the designated job classifications where the employees will have a **reasonably** anticipated Occupational Exposure to Human Blood and **O**ther **P**otentially **I**nfectious **M**aterials.

1.) LPN/RN
2.) Custodians/Cleaners
3.) Maintenance
4.) Pre-K Staff
5.) Crisis Interv.Staff
6.) Career Tech. Instructors
7.) Social Workers
8.) Occupational Therapists
9.) Physical Therapists & Asst.'s
10.) Special Ed. Teachers
11.) Special Ed. Teachers Asst.'s
12.) Career Tech. Inst. Asst.'s
13.) Psychologists
14.) Phys. Ed. Staff
15.) Speech Personnel
16.) Transportation

QUEST R III

Blood Borne Pathogens

- Hepatitis A
- Hepatitis B
- Hepatitis C
- HIV

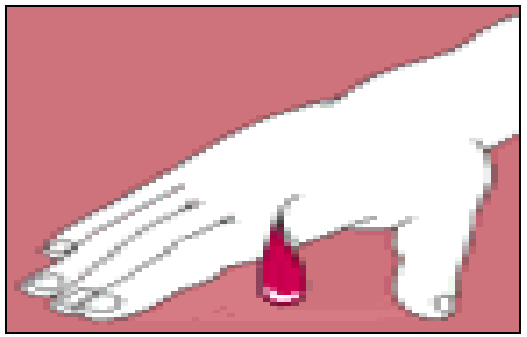
QUEST R III

Hepatitis A

- First of the hepatitis virus family to be identified
- Transmitted by the ‘fecal-oral’ route
- Sexually transmitted
- Can only be infected once
- Prophylactic treatment available
- Very few deaths

Hepatitis B (HBV)

- HBV is a virus that infects the liver
- HBV is transmitted *primarily* through "blood to blood" contact.
- Virus can survive outside the body ***at least 7 days*** and still be capable of causing infection.
- Can cause lifelong infection, cirrhosis (scarring) of the liver, liver cancer, liver failure, and death.
- In the US, almost 100,000 new people are infected each year.



QUEST R III

HBV

- **Acute Hepatitis B virus infection**
  - short-term illness that occurs within the first 6 months after someone is exposed to the Hepatitis B virus. Acute infection can — but does not always — lead to chronic infection.
- **Chronic Hepatitis B virus infection**
  - long-term illness that occurs when the Hepatitis B virus remains in a person's body.

In the United States, the CDC estimates 3.5 – 5.3 million people have chronic HBV infection.

HBV

- Hepatitis B virus is much more infectious than HIV
- If you had a needle stick accident and were exposed to infected blood, your chance of acquiring an infection would be:

HIV ~ 0.3% or 3 in 1000

HBV ~ 30.0% or 300 in 1000

According to CDC…..

- Your risk for acquiring an HBV infection is ***100 times*** greater than for HIV
- ***One out of 20*** people in the United States will get infected with HBV some time during their lives.

QUEST R III

HBV Symptoms

Wide range

- no symptoms
- brief flu-like symptoms
- jaundice
- serious illness
- death is rare is most cases

- May not be evident until 2 to 6 months after the person is infected.
- An infected person may be infectious to others several weeks before the onset of symptoms

Approximately one-half of all people who become infected do not have any symptoms of infection.

QUEST R III

Hepatitis B Vaccination:

QUESTAR III

What is the Hepatitis B Vaccination Series?

- Series of 3 shots over 6 months
- In shoulder muscle
- Made from yeast, NOT from blood
- You cannot get a blood borne disease from the vaccine
- It's SAFE, and up to 95% effective

QUEST R III

Hepatitis B Vaccination:

The Hepatitis B Vaccination Series is available to all targeted employees within a reasonable time and place, and is free of charge.

- Employees receive the series from an appointed health care provider or your personal physician
- Must complete series to be effective

QUEST R III

Hepatitis B Vaccination:

- Acceptance/Declination forms

Employee's who decline may decide to take the series at a later date.

QUEST R III

Hepatitis C:

Transmitted most efficiently through parenteral exposure to blood from an infected individual.

- receiving a blood transfusion from an infected source.
- sharing intravenous drug needles with an infected individual.
- people who received body piercing or tattoos done with non-sterile instruments.

Symptoms range from no symptoms or flu-like symptoms to jaundice and death in rare instances.

QUEST R III

Hepatitis C:

- HCV may survive on environmental surfaces at room temperature for

at least 16 hours

- In 2007, there were an estimated 17,000 new Hepatitis C virus infections in the United States.

QUEST RIII

Hepatitis C:

- Unlike HBV, there is currently no vaccine for HCV available and immune globulin administered after exposure does not appear to be very effective in preventing HCV infection.

- Approximately 75%–85% of people who become infected with Hepatitis C virus develop chronic infection.

- An estimated 3.2 million persons in the United States have chronic Hepatitis C virus infection.

QUEST R III

Human Immunodeficiency Virus (HIV)

- Virus that can lead to acquired immune deficiency syndrome, **AIDS.**
- HIV attacks the body's immune system, weakening it so that it cannot fight other deadly diseases.
- Once a person has been infected with HIV, it may be many years before AIDS actually develops.

QUEST R III

HIV & HBV

If you believe you have been exposed to any of these blood borne pathogens OR if you have experienced any of the signs or symptoms of these diseases -

Notify your supervisor immediately!

QUEST R III

Transmission

Blood borne pathogens can be transmitted when infectious blood or OPIM is introduced into the bloodstream of a person.

Transmission of blood borne pathogens in the **workplace** can occur through the following routes of transmission:

QUEST R III

Transmission

- **Fecal – Oral Route**
  - Via contaminated food/water
  - As a result of poor hygiene practices
    - Food service workers
    - Pre-K, Daycare workers
    - Special needs workers

QUEST R III

Transmission

- **Parenteral exposure**
  - Infected blood or OPIM is introduced directly into your body through a break in the skin.
  - Examples include:
    - a needle-stick injury
    - cut with a piece of contaminated glass, metal or plastic

QUEST R III

Transmission

Mucous membrane exposure

- Infected blood or OPIM enters your body through contact with a mucous membrane found in your eye, nose or mouth.

QUEST R III

Transmission

Blood borne pathogens may also be transmitted through:

- Sexual contact
- Pregnancies

Universal Precautions:

- In an effort to reduce/minimize the risk of exposure, ***only staff who have been designated as having a potential occupational exposure as a result of their job duties, and have been properly trained, should handle situations requiring first aid or blood and body fluid clean up*** (i.e. Custodians, Nurses).

QUEST R III

Engineering Controls and Work Practice Controls:

- Engineering controls and work practice controls must be used to prevent or minimize exposure to blood borne pathogens

QUEST R III

Engineering Controls:

- **<u>Sharps Containers</u>** – Puncture resistant disposable container for contaminated sharps, including: syringes, epi-pens, broken glass, or any other contaminated object that may pierce the skin.

QUEST R III

Engineering Controls:

- **Biohazard Red Bags** – Waste bags must be **RED** and labeled with either the words "Biohazard Waste" or a biohazard symbol and the word "Biohazard". These bags must be disposable and impervious to moisture and have strength sufficient to preclude ripping, tearing, or bursting under normal conditions of usage and handling.

QUEST R III

Engineering Controls:

- **<u>Bio-Hazard Waste Containers</u>** – rigid and leak-proof with a tight fitting lid (no cardboard boxes). The containers may be any color, but they must be labeled with either the words "Biohazard Waste" or a biohazard symbol and the word "Biohazard". The labels must be placed on both the lid and the sides of the container. The labels must be visible from all sides of the container.

QUEST R III

Work Practice Controls:

Your District is responsible for providing :

- Readily accessible hand washing facilities
- Appropriate personal protective equipment
- *Appropriate materials for cleanup*

QUEST R III

Work Practice Controls:

Employees are responsible for:

- Washing body parts as soon as feasible after skin contact with blood or OPIM.
- Washing hands as soon as feasible after removing gloves.

QUEST R III

Work Practice Controls:

- Placing blood or OPIM in a designated container (i.e. labeled container, red bag), which prevents leakage during collection, handling, processing, storage and transport.

Work Practice Controls:

- Placing sharps in proper sharps containers
  - Needles, epi-pens, broken glass, metal or any other contaminated object that may pierce the skin in a puncture resistant container

Work Practice Controls:

If you are working in an area where there is likelihood of exposure,

<u>You should never</u>:

- Eat
- Drink
- Apply cosmetics or lip balm
- Handle contact lenses

QUEST R III

Personal Protective Equipment

- It is ***imperative*** that all employees wear appropriate **P**ersonal **P**rotective **E**quipment when occupational exposure is anticipated.
- The type of PPE will depend upon the task and degree of exposure.
- PPE must be made readily available for all employee's use.

QUEST R III

Personal Protective Equipment Includes:

- Gloves
  - Approved bio-hazard, medical
  - Nitrile, Latex Free
- Eye Protection (when necessary)
  - Goggles
  - Glasses
- Face Shields (when necessary)

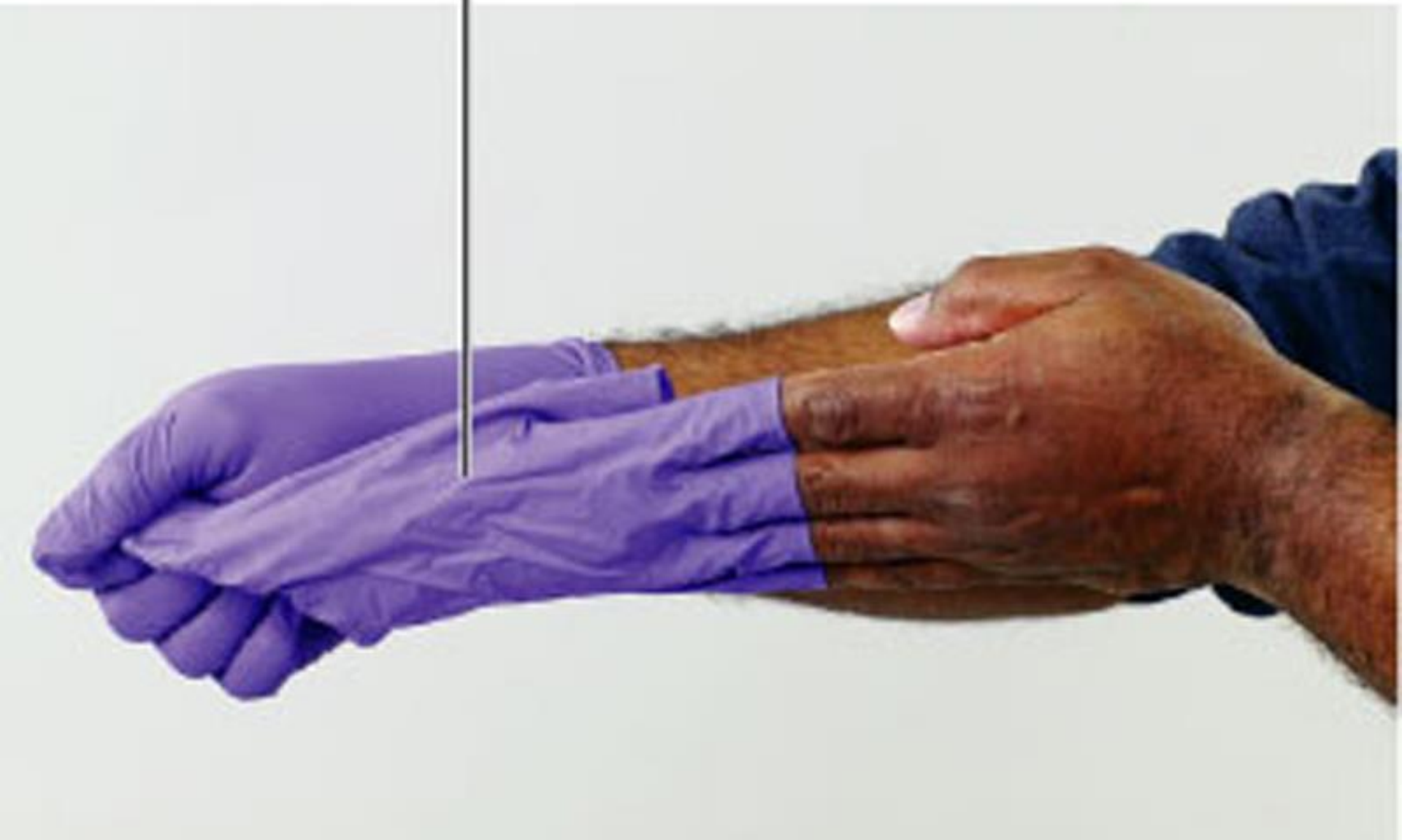
QUEST R III

Proper Glove Removal

- Proper de-gloving techniques shall be followed at all times.
- Hand washing with soap and water shall follow.

Hold hands away from body
and point fingers downward

Remove the glove
inside out




Do not touch the contaminated
outer surface of the glove

First glove is balled
up inside the second

If you have an Exposure

- Immediately wash the exposed area(s) with copious amounts of water.
- Clean any wound with soap and water or antiseptic wipes.
- For eye splashes, flush continuously with water for 15 minutes.
- Place sharps, needles, epi-pens, broken glass, or any other contaminated object in sharps container

QUEST R III

If you have an Exposure Incident:

- Report the incident to your supervisor!
- Complete the Exposure Incident Report in full detail and submit to the building nurse.

Incident Reporting:

- The employee must record and document all conditions surrounding the exposure incident.
- Documentation helps to decide appropriate medical treatment.

Post-Exposure Follow-up

- Based on the report, a confidential medical evaluation and follow-up will be made available to you as soon as possible
  - at a reasonable time and place
  - and at no cost to you
- Any treatment will be administered based on the incident

QUESTAR III

Record Keeping

- All medical records are kept safe and confidential within the personnel file of the employee.

- Additional copy will be kept by the doctor who administers the Post-Exposure Follow up.

QUEST R III

Decontamination

- When cleaning and decontaminating materials and surfaces:
  - Always wear appropriate PPE
  - Use an approved disinfectant
  - Use Red Bags or Bio-Hazardous Waste Containers for contaminated materials.

Decontamination

- If you are cleaning up a spill of blood, carefully cover the spill with paper towels or rags (to prevent splashing)
- Gently spray or pour your bleach solution or approved disinfectant over the towels or rags, and leave it for *at least 10 minutes*
- Red bags are needed for ‘soaked’ materials (dripping)

Universal Precautions Review

- If it's wet or dry and not yours, don't touch it
- If you want to touch it anyway, wear PPE
- If you get it splashed on you, wash it off
- Be sure of your personal protective equipment's function, don't reuse disposable items
- USE COMMON SENSE

QUEST R III

QUESTIONS

QUESTAR III