Bloodborne Pathogens

"Safety in Your Workplace"

COPYRIGHT NOTICE Copyright 2017 by Judy Adams. ALL RIGHTS RESERVED

No part of this publication may be copied or distributed, transmitted, transcribed, stored in a retrieval system, or translated into any human or computer language, in any form, or by any means, electronic, mechanical, magnetic, manual, or otherwise, or disclosed to third parties without the express written permission of Judy Adams, 213 Highway 17 South, Suite B, East Palatka, FL 32131

Bloodborne Pathogens

Safety in Your Workplace

In this course you will find answers and solutions to the following questions and you will learn the following objectives:

- What are bloodborne pathogens?
- Who is at risk?
- Standard precautions
- Personal protective equipment
- Hand hygiene
- Proper disposal of regulated waste
- Good housekeeping

Everyone in the health care industry should be concerned with the transmission of blood borne pathogens. As allied health professionals, Electrologists are at risk of exposure to human fluids that could transmit diseases. But the transmission of bloodborne pathogens can be easily prevented! In most instances you can prevent an infection before it gets started by exercising some general common sense along with good infection control practices.

What are bloodborne pathogens?

Bloodborne pathogens are disease-causing organisms, including viruses and bacteria, and they live in human blood and blood products. Some will make you ill and of course some can actually kill you! The most *common* bloodborne pathogens in the health care workplace are:

- 1. HIV human immunodeficiency virus. This is the virus that eventually causes AIDS.
- 2. HBV hepatitis B virus. Hepatitis B is a prevalent virus that can cause serious liver damage.
- 3. HCV hepatitis C virus. While not as common as hepatitis B, this virus can also cause liver damage.

There are many other bloodborne pathogens that you may be familiar with, but they have less of a probability of being contracted in the Electrologists workplace than the previously mentioned viruses. Those can include:

- 1. Hepatitis D
- 2. Diphtheria
- 3. Syphilis
- 4. Herpes

- 5. Malaria
- 6. West Nile Virus
- 7. Human papilloma virus (HPV)

<u>OPIM's</u>

OPIM's are 'other potentially infectious materials' that can be found in semen, vaginal secretions, saliva, and fluids around the heart, brain and spine. All human body fluids should be treated as if they are infectious! Remember; "If it is wet, sticky and not yours – don't touch it!"

Who is at risk and how are bloodborne pathogens transmitted?

Absolutely everyone is at risk for contracting a bloodborne pathogen, but health care workers are at greater risk since they are generally providing some type of treatment or examination to patients. Individuals who are already weak from illness or injury are at a greater risk. Special attention should be taken to protect weaker individuals from contracting disease. Keeping them healthy promotes good health for everyone that they come into contact with.

Bloodborne pathogens are easily transmitted. It is most likely to happen when contaminated blood or OPIM's come into contact with broken skin or mucous membranes. Broken skin can be as obvious as a needle stick, a cut, or even something as subtle as a burn, rash or even a hangnail. Transmission in the workplace through mucous membranes could be through the delicate tissues of the eyes, nose or mouth.

Something as simple as a menstrual accident or even a nose-bleed can become an infectious situation. I was attending a party once where one of the inebriated guests – who boasted about unprotected sex and frequently entertained 'paid' partners – cut his foot on broken glass on the floor. Other guests thought nothing of it and causally began to pick up paper towels to mop up the blood that he was tracking through the house. As someone who has been properly trained about bloodborne pathogens, I quickly took charge of the situation! I insisted that no one other than the injured person clean that up! He was drunk! They thought I was being harsh with him until I calmly looked up and said "Do you want his blood on you? Do you know without a shadow of a doubt that he does not have hepatitis or AIDS? *I'm* not willing to take that chance!". The room got quiet very quickly. Needless to say, we made him clean up his own mess and I spent some time that day educating the party-goers about disease transmission! What can seem very harmless could turn into a deadly situation.

Exposure to bloodborne pathogens in the Electrolysis workplace.

The most obvious areas of exposure in the Electrolysis facility would be an incident while working on a patient using the traditional 'needle-type' modality, and drawing a drop of blood from an improper insertion or an ingrown hair. The instruments that we use – forceps (tweezers) and probes – are also common areas of potential exposure. But don't forget the cotton ball or tissue that may be used to stop a small 'bleed' that may occur. That has to be dealt with in a safe manner as well.

You must also be prepared to address situations such as a menstrual accident or a fall that could produce a cut that bleeds. You could even have a pregnant person in your office whose water may break! You need to have a plan that will address the protocol that you would implement in the event of any of these types of situations.

Personal Protective Equipment (PPE)

For many health care facilities, special clothing and equipment is required for adequate protection. This can include gloves, masks, goggles and even special clothing that are designed to keep fluids from being readily absorbed. While the Electrolysis facility does not fall into the category of such specialized clothing, we do wear gloves and many times masks for protection. Florida law requires licensed Electrologists to wear gloves during needle electrolysis treatments. It is foolish for the Electrologist to ignore this safe practice since it is more for *your* protection than for the patient. If you are an employee, it is the responsibility of the employer to provide appropriate PPE's for your protection at no charge to you.

Gloves:

Protective gloves help keep infectious materials away from your hands during contact with patients' blood, mucous membranes, broken skin or body fluids. Always use a fresh pair of gloves for each patient or when you have to leave a patient to answer the phone or open the door, etc.

- Exam gloves used for any procedure where contact with blood or OPIMs could occur. These are the gloves that Electrologists use while delivering hair removal procedures. The gloves come in a variety of materials including latex, vinyl, and nitrile. Many people – including our patients – are allergic to latex, so you may want to consider using a non-latex glove so there will never be a mistake made in regard to an allergic condition of your patient.
- Reusable utility gloves used for cleaning and handling regulated wastes.
- Surgical or sterile gloves used for any procedure that requires contact with a patient's tissues or body cavities. These are not usually found in the Electrologist's workplace.

It is important to develop a routine or protocol each time you leave a work area. For example, an unsoiled lab coat should be hung up in a designated closet/area; items that need to be washed should be placed in appropriate receptacles; reusable equipment should be left in appropriate collection receptacles for proper cleaning and sterilization for its next use; and single use gloves should be disposed of in designated trash receptacles.

Hand Hygiene

Keeping your hands clean is one of the most important ways to prevent the transmission of bloodborne pathogens and OPIMs.

Wash your hands with soap and water:

- When they look or feel dirty
- After using the restroom
- Before and after preparing food
- Before and after eating
- After coughing or sneezing into your hands or blowing your nose

Decontaminate your hands with an alcohol-based hand rub (if your hands are not visibly soiled)

- Before and after patient contact
- Before putting on gloves and after taking them off
- After touching blood or OPIMs even if your wore gloves
- After touching any potentially contaminated object even if you wore gloves

Many people are concerned that such frequent hand hygiene can harm their skin. While it is true that some people have very sensitive skin that can become dry or cracked, or even get a rash from frequent decontamination, you can use hand creams or change the brand of soap or alcohol-based hand rub.

A good basic hand-washing technique is to use warm water and :

- Angle your hands downward in the sink
- Scrub vigorously to build up a good lather
- Rinse suds completely and pat hands dry with a paper towel.
- Clean under your fingernails, between your fingers, and along the sides of your fingers.

Licensed Florida Electrologists are required by law to have hot running water and single use disposable towels in the facility where they work.

It is also a good practice to have a good nail brush available at your hand-washing sink. Germs and bacteria are easily trapped under nails and along the sides of your fingers.

Contaminated "Sharps" in the Electrolysis Workplace:

What are sharps?

Anything that can cut or puncture the skin is considered a 'sharp'. The most obvious is a needle with a syringe. For the Electrologist, the sharps that are commonly found in our facilities are our needle/probes and possibly razors that could be used in a laser facility. Any sharp that has been contaminated with blood, dried or caked blood, or OPIMs can transfer bloodborne and other pathogens from one person to another – including the Electrologist! While Electrologists are not in a high risk field we *are* 'on the list' and proper precautions must be used.

Sharps Containers.

- Sharps should only be disposed of in approved containers.
- A sharps container must be puncture resistant, easily accessible and located in the same area where they are used.
- Never put your hand into a sharps container! If you must retrieve something from inside, use a pair of forceps or tongs.
- If you have a spill, you must use tongs, forceps or a broom and dustpan to clean it up.
- Never overfill a sharps container. When the container is approximately ³/₄ full, you should replace it with a new one.
- Be sure that the lid fits tight and is secured before you remove it for proper disposal.

This is what Florida law says about sharps and sharps containers.

64E-16.002 - Definitions

(24) Sharps Container – A rigid, leak & puncture resistant container, designed primarily for the containment of sharps, clearly labeled with the phrase & international biological hazard symbol as described in 64E-16.004(2)(a), F.A.C., and manufactured with dyes meeting the requirements for incidental metals as described in section 64E-16.004(2)(b), F.A.C.

64E-16.004 – Storage and Containment.

(2) Containment.

(b) All packages containing biomedical waste shall be visibly identifiable with the international biological hazard symbol and one of the following phrases: "BIOMEDICAL WASTE", "BIOHAZARDOUS WASTE", "BIOHAZARD", "INFECTIOUS WASTE", or "INFECTIOUS SUBSTANCE". The symbol shall be red, orange, or black and the background color shall contrast with that of the symbol or comply with the requirements cited in subpart Z of 29 C.F.R. subparagraph 1910.1030(g)(1)(C), Occupational Exposure to Bloodborne Pathogen Standard.

(d) Sharps containers.

1. Sharps shall be discarded at the point of origin into single use or reusable sharps containers. Needles and scalpel blades shall not be placed directly into double-walled corrugated containers. Sharps containers must be sealed when full. A sharps container is considered full when materials placed into it reach the designated fill line, or, if a fill line is not indicated, when additional materials cannot be placed into the container without cramming or when no additional materials are to be placed in the container.

4. The international biological hazard symbol shall be at least one inch in diameter on sharps containers.

(e) All outer containers shall be rigid, leak-resistant and puncture-resistant. Reusable outer containers shall be constructed of smooth, easily cleanable materials and shall be decontaminated after each use.

(f) The international biological hazard symbol shall be at least six inches in diameter on outer containers $19^{\prime\prime} \times 14^{\prime\prime}$ or larger, and at least one inch in diameter on outer containers less than $19^{\prime\prime} \times 14^{\prime\prime}$.





Isolyser

Various Sharps Containers

Electrologists are allowed to use any sharps container that complies with state standards above. They are generally inexpensive and readily available from Electrology suppliers and other medical supply stores.

Isolyser® is a self-disposal sharps product. Isolyser® has been used safely for over 20 years and combines storage, treatment and disposal in one container, for one price. No waste collection service is needed.

How does Isolyser® work?

Needles and other sharps are placed in the Isolyser® container. When full, the contents are solidified by adding two catalyst packets, trapping the sharps inside. Once solidified, the contents are destroyed, rendered unusable and safe for regular trash disposal in most states.

Work Practice Controls are the behaviors and actions that you should take to stay safe from bloodborne pathogens. It is up to you to maintain a safe workplace. It is your responsibility to safely perform all procedures that involve contact with blood or OPIMs or the chance for such contact.

Positive actions to ensure safety:

- Always place used sharps in an approved container.
- Always decontaminate your hands after removing gloves and other PPE.
- Before leaving a work area, always remove PPE and decontaminate your hands.

Actions to avoid:

- Never keep food or drinks in places where blood or OPIMs are stored.
- Do not wear PPE in dining or break areas.
- Never apply cosmetics or handle contact lenses in work areas where exposure to blood or OPIMs is possible.

Immunization Against Hepatitis B

There are no requirements for Electrologists to obtain the hepatitis B vaccine. If you choose to receive the vaccine, it is given in a series of 3 injections over a period of 4-6 months.

- The 1st injection is on a set date
- The 2nd injection is 1-2 months later
- The 3rd injection is 4-6 months after the 1st

You need all 3 does for effective prevention!

People who should NOT get the hepatitis B vaccine include people who:

- Are allergic to vaccine ingredients
- Are pregnant
- Have weakened immune systems

Exposure Incidents

Exposure incidents can and do occur, no matter how diligent you are to following protocol.

What is an exposure incident? It's any time that blood or OPIMs come into contact with your eyes, nose, mouth or skin through a needlestick, splash, or any other type of exposure.

What should you do if you are exposed? You must immediately consider how to reduce your risk of infection.

- Wash the affected area thoroughly with warm water and soap at once
- For mouth or eye exposure, thoroughly rinse out your mouth with water or mouthwash; flush your eyes with warm water or a saline solution

You should report an incident as soon as possible if you are working in a clinical situation. Contact your supervisor or the person who is in charge of your clinic. The person in charge should document the incident and write down the details of the exposure, inform you about counseling, workers' compensation and provide you with the steps that may help you avoid infection.

Incident reporting is required whenever an employee has been exposed to blood or OPIMs. When you report an exposure incident, your case will be kept confidential. You may be asked to:

Fill out an accident report. You should provide as many details as possible, including:

- Where and when the exposure occurred
- How the exposure occurred
- Whose blood or OPIMs you were exposed to (if you know)

Consider having your blood tested. You can refuse to have your blood tested. You can also have blood drawn and stored for at least 90 days, in case you decide to have a blood test done later. As allowed by law:

- The source person's blood will also be tested, if possible
- The test results will be available to you if you want them

Go in for a follow-up. Depending upon how severe the exposure was, if may be recommended that you receive treatment with drugs such as HBIG to reduce the risk of becoming infected with hepatitis B. Post-exposure treatments work best when started as soon as possible – preferably within hours!

All electrologists are at risk for exposure to bloodborne pathogens. While our risk is much lower than most other allied health professions, we are still 'on the list'. Preventing the transmission of bloodborne pathogens requires the proper education and a good plan to keep our risks low.

References:

Staying Safe from Bloodborne Pathogens; 2009 Edition

Centers for Disease Control

Florida Department of Health

INSTRUCTIONS FOR SUBMITTING EXAMINATION ANSWERS

- Please take the final exam on line!
- At the bottom of that page is a "start exam now" button for you to click for taking the exam on the 'Judy Adams Training Center of America' website on the internet.
- When prompted, be sure to spell your name *exactly* the way you want it to appear on your certificate of completion.
- As soon as you have completed the exam, you will be sent an email with a link to a PDF file so you can print your certificate. You can also save that PDF file for your reference. You also have an option of printing your certificate as soon as you pass the exam – before you even get your email with the link.
- The license number (if applicable) that you provide is the number that will be used to enter your hours/credit into CEBroker
- "Judy Adams Training Center of America" will be copied on your certificate and will then enter your hours into CEBroker for you!

Thank you!