INTRODUCTION:

The Occupational Safety and Health Administration recognizes the need for a regulation that prescribes safeguards to protect workers against the health hazards from exposure to blood and certain body fluids containing bloodborne pathogens, and to reduce their risk to this exposure. There is a rapidly increasing participation and exposure of chiropractors in sports medicine as emergency responders. The chiropractic sports practitioner must have the knowledge and the plan in place prior to the risk of exposure. This document is intended to provide information and guidelines as they relate to sports chiropractic.

DEFINITIONS:

BLOOD:

Under the OSHA rule, blood means human blood, blood products, or blood components. Bloodborne pathogens are microorganisms that are present in blood, blood products, and other potentially infectious materials (OPIM).

OTHER POTENTIALLY INFECTIOUS MATERIALS (OPIM):

Other potentially infectious materials (OPIM), defined by the Centers for Disease Control as:

- semen
- vaginal secretions
- cerebrospinal fluid
- pleural fluid
- peritoneal fluid
- pericardial fluid
- amniotic fluid
- synovial fluid
- breast milk (not all authorities agree)
- saliva in dental procedures.

OCCUPATIONAL EXPOSURE:

Occupational exposure means a “reasonably anticipated skin, eye, mucous membrane, or parenteral contact with blood or other potentially infectious materials that may result from the performance of employees’ duties.”
UNIVERSAL PRECAUTIONS:

Universal precautions is a method of infection control in which all human blood and certain human body fluids are treated as if known to be infectious for HIV, HBV, and other bloodborne pathogens. Universal precautions are to be observed in all situations where there is a potential for contact with blood or other potentially infectious material. Under circumstances in which differentiation between body fluid types is difficult or impossible, all body fluids are to be considered potentially infectious.

PERSONAL PROTECTIVE EQUIPMENT (PPE):

Personal protective equipment refers to specialized clothing or equipment worn for protection from exposure to blood or other potentially infectious materials. Personal protective equipment will be considered “appropriate” only if it does not permit blood or other potentially infectious substances and contaminated materials to pass through to or reach a provider’s work clothes, street clothes, undergarments, skin, eyes, mouth, or other mucous membranes under normal conditions of use and for the duration of time the protective equipment is in use. Hypoallergenic alternatives (e.g., hypoallergenic or powderless gloves) must be available to people who have an allergic sensitivity to protective equipment. Personal protective equipment consists of, but is not limited to, gloves, face shields, masks, and eye protection, gowns, aprons, and similar items.

GUIDELINES AND PRECAUTIONARY MEASURES:

1. Identify in advance, as much as possible, the type and degree of anticipated exposure that you and other responders are likely to encounter.

2. In work areas where there is a reasonable likelihood of exposure to blood or other potentially infectious materials, one must not engage in activities that can transmit bloodborne pathogens. This includes activities such as, eating, drinking, applying cosmetics or lip balm, smoking, and handling contact lenses.

3. Gloves shall be worn where it is reasonably anticipated that one will have hand contact with blood, other potentially infectious materials, non-intact skin, and mucous membrane. Disposable gloves are not to be washed or decontaminated for re-use and are to be replaced when they become contaminated or as soon as feasible if they are torn, punctured, or when their ability to function as a barrier is compromised. Gloves should be made of latex, nitrile, rubber, or other water impervious materials. If glove material is thin or flimsy, double gloving can provide an additional layer of protection. Always inspect your gloves for tears or punctures before putting them on. If a glove is damaged, don’t use it!

4. Masks in combination with eye protection devices, such as goggles or glasses with solid side shield, or chin length face shields, are to be worn whenever splashes, spray, splatter, or droplets of blood or other potentially infectious materials may be generated. They are to be worn when eye, nose, or mouth contamination can reasonably be anticipated.

5. In instances when gross contamination can reasonably be anticipated, appropriate protective clothing shall be worn. This includes:
· lab coats
· gowns
· aprons
· clinic jackets
· caps
· shoe covers
· booties
· similar outer garments

6. All contaminated equipment and work surfaces will be decontaminated after completion of procedures and immediately or as soon as feasible after any spill of blood or other potentially infectious materials. Decontamination will be accomplished by utilizing bleach solutions or EPA registered germicides.

7. Make certain that anyone providing treatment to athletes must check oneself for any cuts, sores, and/or wounds. These must be covered with a bandage or dressings with no fluid seepage. If any open wounds are present, it is best to avoid providing first aid until the wound is healed.

8. Do not contaminate the first aid/trauma bag with blood, it is best that someone else hands you the materials from the bag. Anyone assisting the main provider must also take proper precautions.

9. Equipment that has been contaminated with blood or other potentially infectious materials shall be decontaminated prior to reuse.

10. Handwashing is one of the most important and easiest practices used to prevent transmission of bloodborne pathogens. If you are working on the field, or an area without access to handwashing facilities, you should use an antibacterial cleanser in conjunction with clean cloth/paper towels or antiseptic towelettes. If these alternative methods are used, hands should be washed with soap and running water as soon as feasible.

**PROPER CLEAN UP OF A BLOOD SPILL:**

1. Wear gloves.

2. If there is debris, remove glass and other sharp materials with brush and dust pan, plastic scoop, etc. Do not use your hands.

3. Be sure to discard all material into a puncture resistant container that is properly labeled for biohazardous waste disposal.

4. Use absorbent materials, such as a paper towel to soak up the spilled materials. Always wipe towards the center of the spill.

5. After removing visual remainders of the spill, clean the area with disinfectant/detergent active against bloodborne pathogens. A solution of 5.25% of sodium hypochlorite (household bleach/Clorox) diluted
between 1:10 and 1:100 with water. The standard recommendation is to use at least a quarter cup of bleach per one gallon of water. Allow it to stay in contact with the contaminated area for 20 minutes. If other bacterial/virucidal agent is used, check the label to make sure that it meets the requirement and follow manufacturer’s instructions on its proper use.

6. Wipe the area of the disinfectant.

7. Apply disinfectant/detergent a final time, allowing agent to set for 10 minutes to air dry.

8. Place all contaminated items in a properly labeled biohazard bag. All towels or materials used to clean up the spill must be properly disposed of, according to state and federal regulations.

9. Wash your hands.

ASEPTIC TECHNIQUE FOR GLOVE REMOVAL:

1. Grasp the palm of the glove with your opposite hand.

2. Slowly pull of the glove, inside out, being careful not to touch the contaminated areas of your glove with your ungloved hand.

3. Scrunch the glove into a ball with your gloved hand.

4. Carefully slide your index finger inside your remaining glove.

5. Pull off your remaining glove, inside out, over your scrunched glove.

6. Dispose of the gloves in the biohazard trash receptacle and wash your hands immediately.

MEDICAL SUPPLY LIST:

Note: This is a basic list. There are certain sports that may require specific equipment and materials. Suit your medical bag to the specific needs of your sports event, in addition to this list.

Latex or nitrile gloves
Antibacterial hand cleanser
Scissors/trauma shears
Bandages (various sizes and shapes)
Sterile gauze pads (4 x 4)
Abdominal pads
Mass trauma dressing
Adhesive tape
Ziploc bags
Splints, variety of sizes
Pocket mask with oxygen inlet (several)
Household bleach or bacterial/virucidal agent
Bag Valve Mask
Wound cleanser
Antibacterial cream
Portable suction unit
Alcohol swabs
Betadine swabs
BP cuff
Stethoscope
Kling
Normal saline/sterile water
Note pad and pen
Scrub brushes
Pocket mask
Eye protection
Face protection
Liquid proof gowns
Biohazard disposal bags with labels

REFERENCES


14. Nitrile gloves. GIWU LLC.


17. Occupational Exposure to Bloodborne Pathogens. OSHA 3127 (1996 (revised)).


