



AIDS and Bloodborne Diseases in the WORKPLACE: Fact vs. Fear

LADD

WHAT IS AIDS?

Much needless anxiety and misinformation about AIDS exists today. Many people are concerned that they can get AIDS in ways over which they have little control, such as in the workplace through casual contact with co-workers or clients. This fear is not based on fact.

AIDS (Acquired Immune Deficiency Syndrome)-is a disease that attacks the body's immune system, leaving it unable to defend itself against tumors and infection. Because the immune system is weakened by the disease, a person with AIDS may die from other infections that would have little effect on a healthy person. The AIDS virus (HIV) is very fragile. It is quickly destroyed by exposure to air, household bleach, or soap and water. To cause harm the virus

must actually enter the person's bloodstream. This occurs mainly through:

- Sexual contact with an infected person that result in the transfer of blood, semen, or vaginal fluids. This includes sexual intercourse, oral genital sex, and anal sex.
- Sharing dirty needles and syringes for drugs
- An infected mother transmitting it to her child during pregnancy or childbirth.

CLOSE, NON-SEXUAL CONTACT CAUSES NO RISK

Several studies have looked at whether people in close, non-sexual contact with people with AIDS will get AIDS. The individuals studied were primarily family members of people with

AIDS, who cared for them, shared unwashed dishes, glasses, linens, bathrooms, and kitchens, hugged and kissed them, and in general, acted the way family usually act. None of these people got AIDS through this close contact.

Fears that AIDS can be gotten through casual workplace contact have been proven false by research.

Even in workplaces such as hospital, where exposure to body fluids is more likely, basic precautions can reduce to nearly zero the chance of becoming HIV-infected.

In this pamphlet:

- *Close, non-sexual contact causes no risk*
- *How to avoid needles*
- *Handwashing*
- *Personal hygiene*
- *General rules on PPE*
- *Resuscitation devices*
- *Glove removal*
- *General housekeeping*

Inside this issue:

<i>What is AIDS</i>	1
<i>AIDS: Are you at risk?</i>	2
<i>What about HIV testing?</i>	2
<i>Bloodborne diseases</i>	3
<i>Workplace transmission</i>	4
<i>Universal Precautions</i>	4
<i>Reducing your risks</i>	5

You Cannot Get AIDS From:

- Giving Blood
- Mosquitoes or other insects
- Respiratory protective equipment
- The air
- Food or beverages
- Toilet seats
- Plates, cups or silverware
- Clothing, bed linen or furniture
- Sharing telephones
- Swimming pools, hot tubes
- Drinking fountains
- Household pets or other animals

AIDS: Are you at risk?

YOU CAN DEVELOP AIDS AS THE RESULT OF:

- Exposure to the HIV Virus through sexual contact through HIV-contaminated blood entering your bloodstream
- If you practice safe sex and take the necessary precautions to avoid blood-related transmission of the HIV virus, you can avoid contracting AIDS.

WHAT ABOUT HIV TESTING?

A number of employers have considered requiring that their workers be tested for HIV exposure or that antibody testing be used as a condition of employment. This test (the “HIV test”) only shows whether an individual has been exposed to the AIDS Virus. It cannot predict whether that individual will develop the disease.

HIV testing is only useful when you have good reason to believe you have been exposed to the virus. Your local health department can tell you where you can receive a free anonymous HIV test.

The following is a percentage breakdown of

the most common HIV transmission routes:

- 57% gay and bisexual men
- 22% present or past intravenous drug users
- 3% hemophiliacs and other recipients of contaminated blood transfusions.
- 6% heterosexual contacts
- 12% other and pediatric (because many people are reluctant to reveal their sexual orientation, use of intravenous drugs or don’t know the complete history of their sexual partner.

INTRODUCTION

Concerns about AIDS can make needlesticks, slips and spills alarming if you work in healthcare. Yet AIDS isn’t the only blood-borne threat you face. In fact, you’re more likely to be infected in the line of duty by the Hepatitis B virus (HBV). The Occupational Safety and Health Administration (OSHA) has issued a standard that, if followed, is designed to protect you. It details ways that you and your employer can work together to substantially reduce your risk of contracting a blood-borne disease on the job. You are covered by the standard if it is reasonably anticipated that you could be exposed to bloodborne patho-

gens as a result of performing your job duties.

“AIDS isn’t the only bloodborne threat you face, in fact, you’re more likely to be infected by the Hepatitis B virus, which is just as deadly”

BLOODBORNE DISEASES

Bloodborne diseases that you could be exposed to on the job include non-A Hepatitis, non-B Hepatitis, as well as syphilis, malaria and Human Immunodeficiency Virus. The two most significant are Hepatitis B (HBV) and Human Immunodeficiency Virus (HIV)

HBV

Hepatitis means “Inflammation of the liver.” Hepatitis B (HBV) is the major infectious bloodborne hazard you face on the job. It infects approximately 8,700 healthcare workers

a year, resulting in more than 200 deaths. If you become infected with HBV:

- You may suffer from flu-like symptoms becoming so severe that you may require hospitalization.
- You may feel no symptoms at all, feeling as if you were not infected.
- Your blood, saliva and other body fluids may be infectious.

- You may spread the virus to sexual partners, family members and even unborn infants.

HBV may severely damage your liver, leading to cirrhosis and almost certain death.

HIV (Human Immunodeficiency Virus)

The Human Immunodeficiency Virus (HIV) attacks the body's immune system, causing the disease known as AIDS or Acquired Immune Deficiency Syndrome. Currently, there is no vaccine to prevent infection. A person infected with HIV:

- May carry the virus without developing symptoms for several years.
- Will eventually develop AIDS.
- May suffer from flu-like symptoms, fever, diarrhea and fatigue.
- May develop AIDS-related illnesses including neurological problems, cancer and other opportunistic infections.

HIV is transmitted primarily through sexual contact, but may also be transmitted through contact with blood and some body fluids.

HIV is not transmitted by touching, feeding or working around patients who carry the disease.

EXPOSURE CONTROL PLAN

The risk of bloodborne diseases in the workplace are quite serious. Yet you can learn effective ways of minimizing them. A good place to start is with your employer's written Exposure Control Plan. A copy should be available for you to consult at your workplace during your work shift.

It will cover:

- Identification of employees covered by the standard
- Specific measures you and your facility must take to minimize your risk of exposure
- Procedures to follow if there is an exposure incident.

WORKPLACE TRANSMISSION

HBV, HIV and other pathogens may be present in the following body fluids:

- Saliva, semen, vaginal secretion, cerebrospinal, synovial, pleural, peritoneal, pericardial, amniotic and any other body fluids visibly contaminated with blood.
- Saliva and blood contacted during dental procedures.
- Unfixed tissue or organs other than intact skin from living or dead humans.
- Cell or tissue cultures that contain HIV or HBV.
- Organ cultures, culture media or similar solutions.

- Blood, organs and tissues from experimental animals infected with HIV or HBV.

Means Of Transmission

Bloodborne pathogens may enter your body and infect you through a variety of means including:

- An accidental injury by a sharp object contaminated with infectious material

Sharps Include:

- Needles, scalpels, broken glass, exposed ends of dental wires, anything that can pierce, puncture or cut your skin.
- Open cuts, nicks and skin abrasions, even

dermatitis and acne, as well as the mucous membranes of your mouth, eyes or nose

- Indirect transmission, such as touching a contaminated object or surface and transferring the infectious material to your mouth, eyes, nose or open skin

UNIVERSAL PRECAUTIONS

You may not be able to tell for sure which patients carry a bloodborne pathogen by taking a medical history or by examination. Both HIV and HBV infect people of all ages, socioeconomic classes, from every state and territory and from rural areas as well as cities.

- Many people carry bloodborne infections without visible symptoms
- Many people carry bloodborne infections without even knowing it.

*You can't identify every patient who may transmit infection. Yet, you can't afford not to since it takes just one exposure to become infected. **Universal Precautions** resolve this uncertainty by requiring you **TO TREAT ALL HUMAN BLOOD AND CERTAIN HUMAN FLUIDS AS IF THEY ARE INFECTIOUS** with HIV, HBV or other bloodborne pathogens.*

FYI: It is important to note that all blood, organs and tissue used during transfusions or surgeries have been tested for HIV. All con-

Contaminates Surfaces

Contaminated environmental surfaces are a major mode of HBV spread in certain settings, particularly hemodialysis units.

HBV can survive on environmental surfaces dried and at room temperature for at least one week. Surfaces and objects can be heavily contaminated by substances, such as serum or plasma, without visible signs.

taminated products are immediately and carefully disposed of by medical professionals

All medical and surgical instruments, including those used for tattooing and body piercing, must be completely sterilized or discarded properly after each use in order to prevent HIV transmission.

REDUCING YOUR RISK

Five major tactics reduce your risk of exposure to bloodborne pathogens on the job:

- Engineering controls
- Employee work practices
- Personal protective equipment
- Housekeeping
- Hepatitis B vaccine

Alone, none of these approaches is 100 percent effective. They must be used together, like five protective barriers against infection

ENGINEERING CONTROLS

These are physical or mechanical systems your employer provides to eliminate hazards at their source. Some examples are:

- Self-sheathing needles
- Biosafety cabinets
- Autoclaves

Engineering control effectiveness usually depends on you. Example: A sharp disposal container provides no protection if you recap needles by hand and toss them in a wastebasket.

You might not know if you get infected by HIV

Some people get a fever, headache, sore muscles and joints, stomach ache, swollen lymph glands or a skin rash for one or two weeks. Most people think it's the flu.

The virus will multiply in your body for few weeks or even months before your immune system responds. During this time, you won't test positive for HIV, but you can infect other people.

When your immune system responds, it starts to make anti bodies. Then your will test positive for HIV

WORK PRACTICE CONTROLS

These are specific procedures you must follow on the job to reduce your exposure to bloodborne pathogens or infectious materials.

NEEDLESTICKS

To avoid needle sticks:

- Do not bend, hand recap, shear or break contaminated needles and other sharps.
- Recap or remove contaminated needles from disposable syringes only when medically necessary. To recap needles, use a mechanical device or a one-handed technique.
- Place sharps in an appropriate puncture resistant, leak proof container immediately after use

- Report any sharps containers that are mounted too high or otherwise not easily accessible.

As a general rule: Do not recap needles by hand

HANDWASHING

If infectious material gets on your hands, the sooner you wash it off, the less chance you have of becoming infected.

- Hand washing keeps you from transferring contamination from your hands to other areas of your body or other surfaces you may contact later.
- Every time you remove gloves you must wash your hands with non-abrasive soap

and running water as soon as you possible can.

- If skin or mucus membranes come in direct contact with blood, wash or flush with water as soon as possible.
- Where hand washing facilities are not available, such as an emergency medical van, your employer will provide an antiseptic hand cleanser or antiseptic towelettes. Use these as a temporary measure only. You must still wash your hands with soap and running water as soon as you can.

PERSONAL HYGIENE

Additional self-protective controls should be followed to protect you:

- When performing procedures involving blood or other potentially infectious materials, minimize splashing, spraying, spattering and generation of droplets. Example: Before removing a rubber stopper from specimen tube, cover it with gauze to reduce the chance of splatter.
- Do not eat, drink, smoke, apply cosmetics or lip balms or handle contact lenses where you may be exposed to blood or other potentially infectious materials.
- Avoid petroleum-based lubricants that may eat through latex gloves. Applying hand cream is OK if you thoroughly wash your hands first.
- Never mouth pipette or suction blood or other potentially infectious materials.
- Don't keep food and drinks in refrigerators, freezers, cabinets or on shelves, countertops or bench tops where blood or other potentially infectious materials may be present.

PERSONAL PROTECTIVE EQUIPMENT

Equipment that protects your from contact with potentially infectious materials may include:

- Gloves, masks, gowns, aprons, lab coats, face shields, protective eyewear, mouth pieces, resuscitation bags or other ventilation devices.

Under normal work conditions, protective equipment must not allow potentially infectious materials to contact your work clothes, street clothes, undergarments, skin or mucous membranes. The type of protective equipment appropriate for a given task depends on the degree of exposure you anticipate.

- **HAZARD:** Generation of splashes,

spray, spatter or droplets of infectious material

PROTECTION: Mask, gloves, eye protection, gown and face shield.

- **HAZARD:** Potential clothing or skin exposure.

PROTECTION: Gown, gloves, apron and other protective body clothing

- **HAZARD:** Encountering large amounts of blood during autopsy or surgery.

PROTECTION: Gloves. Gown, surgical cap or hood and shoe covers or boots.

If your job requires you to be exposed to bloodborne pathogens, your employer will:

- Provide appropriate protective equipment at no cost to you.
- Clean, launder, repair, replace or dispose of protective equipment at not cost to you.

GENERAL RULES ON PERSONAL PROTECTIVE EQUIPMENT

You and your employer must follow these rules to insure that your protective equipment does it job.

- You must be trained to use equipment properly
- Protective equipment must be appropriate for the task.
- You must use appropriate protective equipment each time you perform a task.
- Your equipment must be free of physical flaws that could compromise safety.

- Your gloves must fit properly.
- If, when wearing equipment, it is penetrated by blood or other potentially infectious materials, remove it as soon as possible.
- Before leaving the work area, remove all protective equipment and place it in the designated area or container for washing, decontamination or disposal.

EXCEPTION TO THE RULE:

If you believe using protective equipment would prevent proper delivery of healthcare or jeopardize your safety or co-worker's, you may temporarily and briefly abandon its use in an emergency. After the incident, your employer must investigate the circumstances to determine if such a situation could be prevented in the future. In all other circumstances, wearing appropriate personal protective equipment is not only your best option— it is your only option. **WEAR IT!**

GLOVES

Gloves are the most widely used form of personal protective equipment. They act as a primary barrier between your hands and bloodborne pathogens. Latex or vinyl gloves procedures. Heavy duty utility gloves may be used for housekeeping duties.

HERE'S HOW TO USE THEM:

- You must wear gloves when you anticipate hand contact with blood, potentially infectious material, mucous membranes or non-intact skin.
- If you are allergic to latex or vinyl gloves, your employer will provide hypoallergenic gloves, glove liners, powder less gloves or another alternative.
- Since gloves can be torn or punctured by sharps, bandage any cuts before being gloved.
- Replace disposable single-use gloves, such as surgical or examination gloves, as

soon as possible if contaminated, torn, punctured or damaged in anyway. Never wash or decontaminate for reuse.

- Utility gloves may be contaminated and reused unless they are cracked, peeling, torn, punctured or no longer provide barrier protection.

GLOVE REMOVAL

You must follow a safe procedure for glove removal so that no substances from the soiled gloves come in contact with your skin.

- With both hands gloved, peel one glove off from top to bottom and hold the gloved hand.
- With the exposed hand, peel the second glove from the inside, tucking the first glove inside the second.
- Dispose of the entire bundle promptly.
- Remove gloves when they become contaminated, damaged or before leaving the work area.
- Wash your hands thoroughly.

GOOD HOUSEKEEPING

Good housekeeping protects every healthcare worker and it is every worker's responsibility. Example: A contaminated sharp carelessly discarded in a patient's bedding can jab housekeeping or laundry personnel who must handle the bedding.

GENERAL HOUSEKEEPING

Your facility's exposure control plan lists housekeeping specifics. Here are general rules for housekeeping staff:

- Clean and decontaminate at the end of each work shift. Clean all equipment and environmental working surfaces as soon as possible after contact with potentially infectious materials.
- Replace protective coverings such as aluminum foil or plastic wrap on equipment or surfaces at the end of the work shift or immediately after the surface is contaminated.

Do not pick up broken glass which may be contaminated directly with gloved or bare hands. Use tongs, forceps or a brush and a dust pan.

- Place contaminated sharps and infectious wastes in designated sharps containers. They should be labeled or color-coded, leak-proof containers that are closable and easily accessible to those who use them. Do not allow containers to overfill.
- Handle contaminated laundry as little as possible and with minimal agitation.

READ THE LABEL

These warning signs protect you from bloodborne hazards:

- Bags or containers bearing the biohazard sign tell you when the containers hold blood or other potentially infectious materials. Warning labels are also used to designate contaminated equipment.
- A fluorescent orange-red biohazard sign on a door indicates that HIV or HBV research or production takes place within. The sign lists special requirements for entering the facility.

HBV VACCINATION

PLAYING IT SAFE

Additional facts you should know:

- If you are exposed, report the incident immediately to your supervisor.
- If you consent, your employer will provide you with a confidential medical evaluation, including blood test, any available post-exposure preventive treatment and follow-up counseling.
- Your employer will provide you with a free training program during working

If you may be exposed to HBV on the job, your employer will make the Hepatitis B vaccination available to you at no cost. The vaccine is administered by three injections over a six-month period. Today's vaccines are safe and effective

- Those now used in the U.S. are made from yeast and cannot be infected with HIV or other bloodborne pathogens. Over 2 million U.S. healthcare workers have already been vaccinated.
- The complete series of HBV vaccinations is 85-97% effective at protecting you from getting the disease or becoming a

carrier for nine years or longer.

YOU SHOULD NOT BE VACCINATED IF:

- You have already received the complete Hepatitis B vaccination series.
- Antibody testing reveals you are immune
- You should not receive the vaccination for other specific medical reasons.

"There is no cure for AIDS. There are drugs that can slow down the HIV virus, and slow down the damage to your immune system. But there is now way to get all the HIV out of your body"

hours and annually thereafter.

- Training will tell you more about bloodborne disease, how to use personal protective and report and exposure incident. IT will also detail your rights and responsibilities as a worker.
- The Bloodborne Pathogens Standard contains special requirements for those who show work in HIV and HBV research labs and production facilities.

RISE TO THE CHALLENGE

It is possible to protect yourself from bloodborne pathogens on the job by knowing the facts and taking proper precautions. Working together with your employer, you BOTH can be confident in your ability to safely care for the well-being of others and yourself.