



Bloodborne Pathogens

By: Shanaz Sharifpour

Exposures to blood and other body fluids occur across a wide variety of occupations. Health care workers, emergency response, public safety personnel, and other workers can be exposed to blood through needlestick and other sharps injuries, mucous membrane, and skin exposures. There are many different bloodborne pathogens including malaria, syphilis, and brucellosis, but hepatitis B (HBV), the human immunodeficiency virus (HIV), and hepatitis C (HCV), are the three diseases specifically addressed by the OSHA Bloodborne Pathogen Standard, 29 CFR 1910.1030.

Hepatitis B (HBV)-Hepatitis B is the most common serious liver infection in the world. It is caused by the hepatitis B virus that attacks the liver. The virus is transmitted through blood and infected body fluids. This can occur through direct blood-to-blood contact, unprotected sex, use of unsterile needles, and from an infected woman to her newborn during the delivery process. The hepatitis B virus is very durable, and it can survive in dried blood up to seven days. For this reason, virus is the primary concern for employees such as law enforcement officers, and custodians who may come in contact with blood or potentially infectious materials.

Other possible routes of infection include: body piercing, tattooing, and acupuncture are possible routes of infection unless sterile needles are used, and also sharing sharp instruments such as razors. Hepatitis B is NOT transmitted casually. It cannot be spread through sneezing, coughing, and hugging. Everyone is at some risk for a hepatitis B infection, but some groups are at higher risk because of their occupation or life choices.

Symptoms of Hepatitis B-Sometimes a person with HBV infection has no symptoms at all. You might be infected with HBV (and be spreading the virus) and not know it. If you have symptoms, they might include:



yellow skin or yellowing of the whites of the eyes, tiredness and loss of appetite, nausea, abdominal discomfort, dark urine, and joint pain.

Risk factors for Hepatitis B-You are at increased risk of HBV infection if you:

- Have a job that involves contact with human blood.
- Live in the same house with someone who has chronic (long-term) HBV infection.
- Have sex with someone infected with HBV.
- Have sex with more than one partner.
- Are a man and have sex with a man.
- Have hemophilia.
- Travel to areas where hepatitis B is common.

Hepatitis C virus (HCV)-Hepatitis C is a liver disease caused by the hepatitis C virus (HCV), which is found in the blood of persons who

continued on page 2

IN THIS ISSUE...

Chemicals & Hazardous Materials	4
What You Can Do To Protect Kids From Secondhand Smoke	5
Neat, Clean, and Safe Rate your role in workplace housekeeping	6
Word Search Puzzle	7
Monthly Themes 2008	8
Customer Survey/Entry Form	9
April 2008 Calendar	10

have this disease. HCV is spread by contact with the blood of an infected person. There is no vaccine for the prevention of HCV infection. Transmission rarely occurs from mucous membrane exposures to blood. HCV is the most common chronic bloodborne infection in the United States.

Human Immunodeficiency Virus (HIV)/AIDS- AIDS, or acquired immune deficiency syndrome, is caused by a virus called the human immunodeficiency virus, or HIV. Once a person has been infected with HIV, it may be many years before AIDS actually develops. HIV attacks the body's immune system, weakening it so that it cannot fight other deadly diseases. AIDS is a fatal disease, and while treatment for it is improving, there is no known cure.

The HIV virus is very fragile and will not survive very long outside of the human body. It is primarily of concern to employees providing first aid or medical care in situations involving fresh blood or other potentially infectious materials. It is estimated that chances of contracting HIV in a workplace environment are only 0.4%. However, because it is such a devastating disease, all precautions must be taken to avoid exposure.

Symptoms of HIV-Infection can vary, but symptoms often include weakness, fever, sore throat, nausea, headaches, diarrhea, a white coating on the tongue, weight loss, and swollen lymph glands.

Transmission in the Workplace-HBV or HIV/AIDS is only transmitted in the workplace when there is contact between broken skin or mucous membranes and infected blood. Your skin acts as a protective barrier to keep viruses out unless broken by sores, dermatitis or acne. HBV and HIV/AIDS are not spread through the air like cold and flu germs, so you will not get either disease from:

- Working alongside someone who is infected touching, social kissing, coughing, or sneezing.
- Sharing things such as telephones or bathrooms with an infected person.

Prevention-Precautions you can take-To prevent exposure to these viruses, the following precautions should be taken in all settings – including the workplace:

Best Prevention-Hepatitis B Vaccination- To protect from the possibility of HB infection, vaccination is available, at no cost, to all FDOT Motor Carrier compliance Law Enforcement Officers and FDOT Drivers who may have occupational exposure to blood or other potentially infectious materials(Refer to Section 13.7 of FDOT Loss Prevention Manual).

Hand Washing-It is one of the most important and easiest safe work practices used to prevent transmission of bloodborne pathogens. Always wash your hands thoroughly and promptly after contact with blood or body fluids, even if gloves or other barriers were used, wash hands with soap and running water for at least 15 seconds.

Housekeeping-Surfaces soiled with blood and body fluids should be disinfected appropriately. Unlike HIV, the hepatitis B virus is very hardy and can survive on surfaces, dried and at room temperatures, for at least one week. Cleaning personnel may come in contact with potentially infectious materials while performing routine cleaning or maintenance tasks. Cleaning personnel should always be prepared by wearing gloves and apron on the job.

Any spill of blood, or other body fluids should be covered with absorbent sweep material to prevent the fluid from spreading. Spills should be cleaned up with a germicidal cleaning agent or a fresh solution of

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Infonet.dot.state.fl.us/safetyoffice/

continued from page 2

¼ cup bleach to one gallon of water. Be alert for contaminated sharp objects such as broken glassware or used syringes when emptying trash containers. Always use a brush and dust pan, tongs or forceps to pick up broken glassware, not your hands.

Proper Waste Disposal-Anything contaminated with potentially infectious materials should be discarded in a sturdy plastic bag. Tie the bag and label it as “Bio hazards” and place it into a leak proof container where it will not be disturbed until picked up for proper disposal.

Follow Safe work practices and Universal Precautions-When accidents happen on the job, it may seem natural to help your co-worker without thinking of your own safety. However, when looking out for others, you must protect yourself. So, avoid letting blood or body fluids contact your skin, eyes, nose, mouth or clothing. Consider Universal Precautions and use protective clothing such as gloves, apron, goggles and mask to protect yourself from exposure.

Universal Precautions are infection control approaches in which you should treat all blood and body fluids as potentially infected with HBV and HIV.

Biohazard Communications-These include labels and signs such as:

- Labels on any containers containing blood or regulated waste disposal, refrigerators, etc.
- Labels include a biohazard symbol, fluorescent orange/red.
- Red bags/containers can substitute for labels.
- Signs posted at entrance to specified work areas.

What you should do if you are exposed to blood or body fluids-The first thing to do in any situation where you may be exposed to bloodborne pathogens is to ensure you are wearing the appropriate personal protective equipment (PPE). If you need to perform CPR, remember to protect yourself. Unprotected mouth-to-mouth resuscitation can be hazardous to you. Give CPR only if you are trained to do so.

Be prepared by keeping a pocket mask on hand to protect you from the victim’s saliva and body fluids. Some safety measures are just using your common sense. Safe work practices are every worker’s responsibility. However, if an exposure occurs, don’t panic, follow these steps:

- If you do get blood or body fluids on your skin, wash your skin immediately.
- If you get blood or body fluids in your eyes, immediately flush your eyes with running water for at least 15 minutes at a sink or eye wash station.
- Report the incident immediately to your supervisor.

If you get blood or body fluids on your clothes or shoes, remove them as soon as possible, place them in a sealed plastic bag.

Next, wash your exposed skin with non-abrasive soap and water. Follow DOT’s Exposure Control Plan (this is located in Chapter 13, Section 13.7 of Loss Prevention Manual) to properly decontaminate or dispose of the contaminated items.

In summary, you can protect yourself from bloodborne diseases by using common sense:

- Frequent hand washing.
- Avoid direct contact with blood and body fluids and consider all blood and body fluids as potentially infectious diseases.
- Handle all contaminated sharps and needles carefully.
- Cover all cuts carefully.
- Know where protective equipment and emergency kits are kept.
- Update your training and information.

Also, check out these other sources for additional information:

Centers for Disease Control and Prevention (CDC) at: <http://www.cdc.gov/>, National Institute for Occupational Safety and Health (NIOSH) at: <http://www.cdc.gov/niosh/topics/bbp/>, and

Occupational Safety and Health (OSHA) at: <http://www.osha.gov/SLTC/bloodborne pathogens/index.html>.

Chemicals and Hazardous Materials

By: Shanaz Sharifpour



Today, thousands of chemicals are in commercial use with hundreds more being developed every year.

They purify drinking water, increase crop production, used in medicine and pharmaceutical products, cosmetics, and used by any household. But chemicals also can be hazardous to humans or the environment if used or released improperly.

Hazardous Materials—A material/substance/chemical can be hazardous if it can cause harm to people or the environment. Hazardous materials come in three basic forms:

- ➔ **Solids** such as powders, dusts, fumes.
- ➔ **Liquids**, including both fluids and mists.
- ➔ **Gases and vapors** that are given off by solid or liquid chemicals.

Whether they are solid, liquid, or gas, hazardous materials present two basic hazards—physical and health hazards. Materials with physical hazards include those that are:

- ➔ **Explosive**, meaning they can explode, such as materials in aerosol cans.
- ➔ **Reactive**, meaning they can react dangerously if they come into contact with another material. Sometimes, even contact with air or water can cause a violent reaction.

Materials with health hazards include those that are:

- ➔ **Corrosive**, meaning that they can eat away or otherwise damage other substances, including your skin if contacted.
- ➔ **Toxic**, poisonous, meaning exposure to these types of materials that can result in severe health problems and causes illness or possible death.

To protect yourself from hazardous materials, you need to be prepared in how to avoid problems when you are handling these materials. First, you need to know the hazardous materials you have in your workplace, and at home, then, how to use and handle them safely.

Label—The best place to start is right in front of us, the label on every container of hazardous materials, that tells us at a glance:

- ➔ What's in the container;
- ➔ What the hazard could be (health, fire, reactivity, etc.);
- ➔ How to protect ourselves; and
- ➔ Basic first aid.

Of course, a label doesn't have room for everything you should know about a chemical/substance. That's why the Material Safety Data Sheets (MSDS) have been created.

Material Safety Data Sheets (MSDS) — The next step in being prepared is to read MSDS. Each MSDS will tell us:

- ➔ What the chemical is, name of manufacturer, physical and chemical properties.
- ➔ Why it is hazardous, and information on physical risks such as fire, health, etc.
- ➔ How to work with it safely, and what type of personal protective equipment, proper handling, storage, and emergency procedures we need.

Safe work practices — The following safe work practices could minimize risk of exposure:

- ➔ Handle all chemicals with caution and care.
- ➔ Never deliberately smell any chemicals.
- ➔ Always wear the appropriate personal protective equipment (PPE). Depending on the chemical you are handling, appropriate PPE may include safety glasses, gloves, face shields, respirators, and protective clothing.
- ➔ Always wash your hands with soap and water before leaving the work area.

continued on page 5

Good Housekeeping - The following appropriate housekeeping measures are recommended:

- ➔ At the workplace, ensure that pathways and areas around emergency equipment such as showers, eyewash stations, and exits are kept clean so prompt action can be taken during an emergency.
- ➔ Keep all work areas, especially walkways and workbenches, clear of clutter and obstructions.
- ➔ Store chemicals in their proper locations immediately after use. Store and use incompatible substances separately.
- ➔ Promptly clean up spills and properly dispose of the spilled chemical along with the cleanup material according to the safe handling and disposal instruction found in the MSDS.



The more you know, the safer you will be. The Chapter 13, Section 13.9 of FDOT Loss Prevention Manual is a good source of information. Also, check out these sources for additional information:

1. Homeowners and Hazmats- A fact sheet can be found at <http://es.epa.gov/new/contacts/newsletters/shopping.html>
2. Department of Transportation Office of Hazardous Materials Safety (OHM)-at <http://www.hazmat.dot.gov>.
3. U.S. Occupational Safety and Health Administration's (OSHA) at <http://www.osha.gov> .

What You Can Do To Protect Kids From Secondhand Smoke

Submitted by: Shanaz Sharifpour



Sadly, children are powerless to protect themselves from the dangers of secondhand smoke. But we each can play an important role in protecting them from sec-

ondhand smoke exposure.

- ▶ Make your home and vehicle smoke-free at all times. If there are smokers in your family, they should always go outside to smoke. Opening a window is not enough.
- ▶ Make sure your children's day care centers and schools are 100% smoke and tobacco-free.
- ▶ Insist that no one smokes around your children.
- ▶ Choose smoke-free restaurants.

If you are smoking, the single best step you can take to protect your family's health and your own is to quit smoking. Quitting smoking will also reduce the chance that your children will grow up to become smokers themselves. While quitting smoking may be difficult, there are a number of proven resources available to help including free counseling and a range of FDA-approved medications.

To receive free counseling to help you quit smoking, please call **1-800-QUIT-NOW**.

For more information on cancer around the world and tobacco as a risk factor for cancer, visit the Global Cancer Atlas Online at <http://apps.nccd.cdc.gov/dpcglobalatlas/> .

This interactive Atlas provides colorful maps and charts on cancer around the world, as well as information on prevention strategies and cancer risk factors. It provides compelling cancer data from around the world by nation, with interactive maps and graphics on the global impact of cancer. For additional information visit these links:

Cancer Prevention and Control : <http://www.cdc.gov/cancer/>, also in Spanish: <http://www.cdc.gov/spanish/cancer/>

Secondhand Smoke: http://www.cdc.gov/tobacco/secondhand_smoke/ .

Reference: Center for Disease Control (CDC) at: <http://www.cdc.gov>



Neat, Clean, and Safe

Rate your role in workplace housekeeping.

Submitted by: Shanaz Sharifpour

Workplace housekeeping isn't just about neatness. It's also about:

Efficiency

A well-organized workplace is a more productive place.

Safety

A well-maintained workplace is a safer one with fewer hazards and fewer incidents.

Hygiene

A clean and sanitary workplace is a healthier place in which you're less likely to pick up germs, come into contact with chemicals on work surfaces, or inhale irritating or harmful dust.

To find out how much you're contributing to all these important goals, rate yourself by circling 1 for "Never", 2 for "Sometimes", 3 for "Usually", or 4 for "Always" for each statement below, then check your score.

Do you:

Keep your work area clean and neat on a daily basis?	1	2	3	4
Regularly inspect your work area for hazards?	1	2	3	4
Pick up objects from the floor and clean up spills?	1	2	3	4
Report hazards you can't remove or fix?	1	2	3	4
Dispose of trash and scrap properly to prevent fires?	1	2	3	4
Keep walkways and stairs clear of tripping hazards?	1	2	3	4
Clean up after yourself when you finish a job?	1	2	3	4
Store tools and materials in their assigned place?	1	2	3	4
Make sure tools and materials are properly maintained?	1	2	3	4
Use cleaning products safely?	1	2	3	4

Total Score _____

Check your score:

If your total score was 40, congratulations! You're taking responsibility for workplace housekeeping. Thanks for helping to make the workplace safer.

If you scored less than 40 but more than 30, you're contributing, but not as much as you could. Make housekeeping a higher priority.

If you scored less than 30, you're letting other people do your housekeeping chores for you or chores are not getting done. That's bad because it increases the risk that you or a co-worker could be injured by housekeeping-related hazards. Don't take chances with safety. Pitch in, do your share, and help keep the workplace safe for everybody.

Reference: 2008 Business & Legal Reports, Inc. (#583)

Word Search Puzzle

E W D F L M J G C D E L Z E C F L A M M A B L E F
Q C F K I S T Y S Y I Q E O J H A Z A R D S R V F
N N N J S J A B E T I S M C T E V K P X F U T I C
D S Z M Q I Z W E N N B P W A B W G V Z S D N T U
Y G Q C N X A B G E U E K O Q E J C A O I L L C J
E S U A G S G E A S X U D S S E M W P J Z D B A X
C M O U H N S F T F I P W I B E V X F A H F F E X
O E B T L T I I H H D X L B C R E E S A T C L R O
N H M I I T B L S U D G Q O T C L A C I M E H C I
T U B O U L S Q D D F V F N S U A B B U T E X W B
A X N N E Z Y X E N W P O W D I Y G V R D M M Y A
M Q R S Z B S Y O V A C Q A D E V H E L A Z Y Y C
I H A U R K M F D K W H I E V B N E O A N Z O F D
N W T K J Z Y H N G K Q U I S A R H S R G O J L Z
A M H X C V I Q N X H O S N E T L F P Q E S B L I
T E D X B U A K M G X O K W E F Y K Q X R B V G O
E R M D Q W D V U V R G T M Y M D U R J O G H S T
D V N O C P Y E Q R A E L F O K W W O S U C Y O H
S M B V H K N X O N O I T A L A H N I A S I J Z Q
E J U B P G E C I Y Y B C O P O Y P D F E F A F D
D I H Y R D X G V Y X J F M M F S T Q R S F S F F
S X D F S I A D H W W L D H E X S O O V C G A G I
U N N U F K V B U L N Y R K B L F I A L U A Y S W
C I X O T C M R S N R Y N Q W X D H S M Q O W H N
H Y L D Q N C L B J P Z H E T A Y H H Y Z X O D R

ACCIDENTS
CAUTION
CHEMICAL
COMBUSTIBLE
CONTAMINATED
CORROSIVE
DANGEROUS
DISPOSE
EMPLOYEES
EXPLOSIVE

EXPOSURE
EYEWASH
FLAMMABLE
HANDLING
HAZARDS
INGESTION
INHALATION
REACTIVE
SAFE
TOXIC

The Safety Advisor puzzle is generated from the <http://school.discoveryeducation.com/>, puzzle maker. Omissions or errors are possible. This is a free program and we cannot be responsible for any errors or omissions.

MONTHLY THEMES FOR 2008

January: Back Injury Prevention and Safety Meetings
February: Fall Protection and Traffic Safety
March: Laboratory and Office Safety
April: Hazardous Materials & Bloodborne Pathogens
May: Respiratory Protection and Tool Safety
June: Materials Handling and Managing Stress

July: Heat Stress and Outdoor Hazards
August: Work Zone Safety and Health Advise
September: Fitness/Nutrition and Bicycle/Pedestrian Safety
October: Fire Protection and Personal Protective Equipment
November: Vehicle Safety and Ergonomics
December: Holiday Safety and Electrical Hazards

Safety Slogan

Don't be a ding-bat,
know your hazmat!

Submitted by:

Sid Whichard
Lake City Construction
District 2

Get More from Safety Smart Online

[http://floridadot.safetysmart.com/
SSOL/enterprise/](http://floridadot.safetysmart.com/SSOL/enterprise/)



Safety Hot Line



Local (850) 245-1543

You can now report
hazards by telephone.

You can stay anonymous.

Everything is confidential.

Action will be taken and you will
be notified within 30 days.

Safety Advisor Customer Satisfaction Survey

We are interested in your opinion. In order to better serve your needs, please take a moment to fill out this brief questionnaire. Send to:

Local Fax: 850 245-1554

or

Via US Postal Service (or inter-office mail) to the address shown below.

Attention: Industrial Safety
Florida Department of Transportation
605 Suwannee Street, MS 53
Tallahassee, Florida 32399-0450

Survey Questions	Yes	No
Are the Safety Advisor topics relevant to your day to day job?		
Have you ever used the Safety Smart web site?		
What would you suggest to improve the suitability of the Safety Advisor to our needs or to improve the overall quality? (Please be specific)		
<hr/> <hr/> <hr/>		
Do you have any questions regarding Industrial Safety programs and/or operations? Please feel free to include your questions or comments.		
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Safety Slogan of the Month Entry Form

You are encouraged to submit safety slogans applicable to the month safety theme.

Slogans are judged on originality and relevance to the month's theme. (there are two themes each month)

You may also email your slogans to shanaz.sharifpour@dot.state.fl.us or nancy.lynn@dot.state.fl.us

In the subject line of your email please write ***"Safety Slogan Entry"***.

Please Print	
Safety Slogan for the month of _____	
<hr/> <hr/> <hr/>	
Name: _____	Location/Office: _____
District: _____	Phone: () _____

April 2008

Hazardous Materials Bloodborne Pathogens

*National Alcohol Awareness Month
National Child Abuse Prevention Month
National Public Health Week April 3-9
National Work Zone Awareness Week April 7-11
National Medication Safety Week April 1-7*

Sunday	Monday	Tuesday	Wednesday	Thursday	Friday	Saturday
		1 April Fool's Day	2 National Walk To Work Day	3	4	5 Check Smoke Alarms
6	7 World Health Day	8	9	10	11 Pay Day	12
13	14	15 Federal Income Tax Day	16	17	18	19 Passover Begins At Sundown
20 Passover	21	22 Earth Day	23 Administrative Professional's Day	24	25 Pay Day Arbor Day	26
27	28	29	30			

