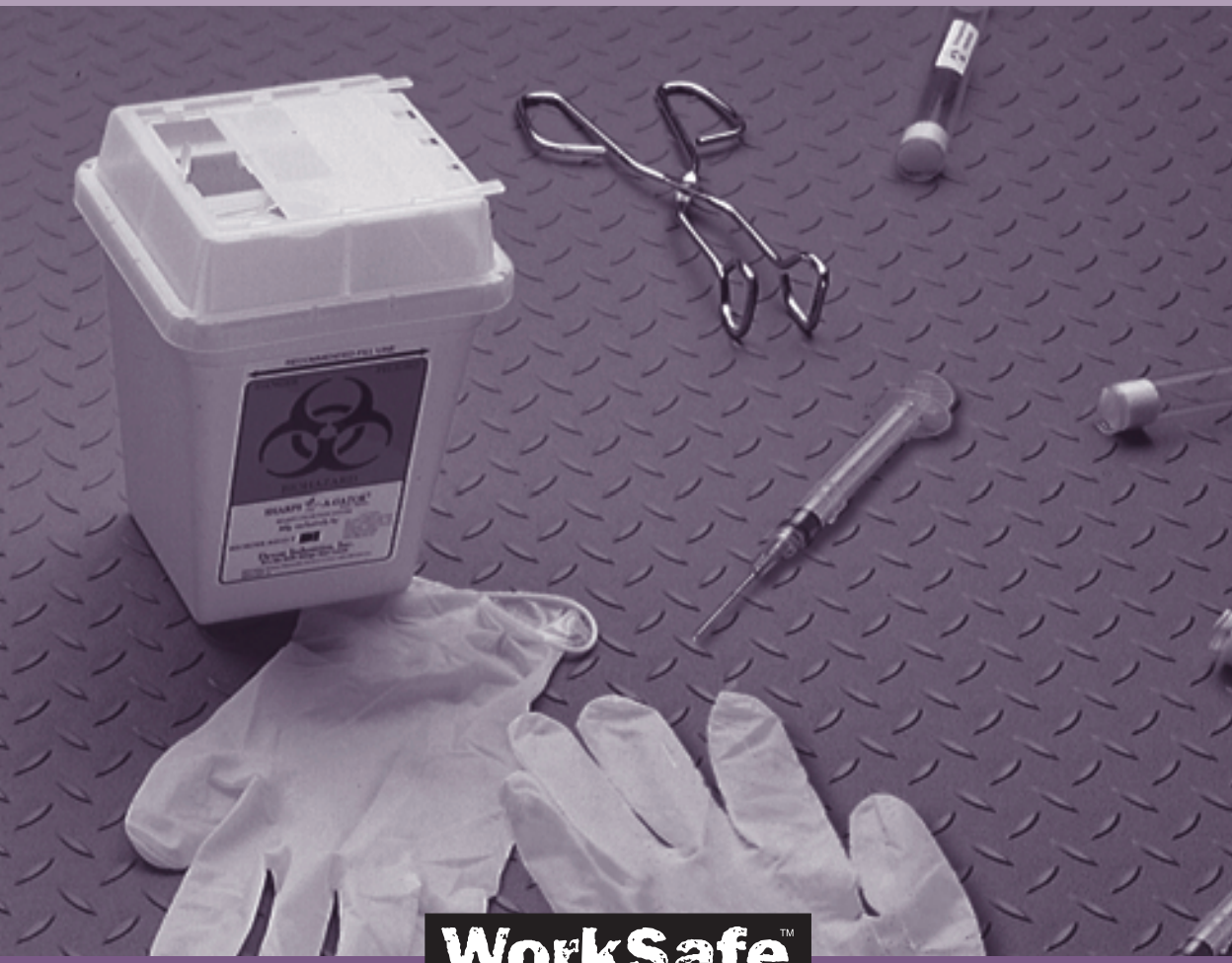
HIV/AIDS, and Hepatitis B and C

Preventing Exposure at Work



WorkSafe™

WORKERS' COMPENSATION BOARD OF BC

www.WorkSafebc.com

About the WCB

Preventing on-the-job injury and disease is the first priority of the Workers' Compensation Board (WCB) of British Columbia. WCB prevention officers inspect worksites in B.C. to make sure they comply with the Occupational Health and Safety Regulation, which sets out minimum workplace standards for health and safety. The WCB also investigates serious workplace accidents and consults with employers, supervisors, and workers to promote health and safety in the workplace.

Under the requirements of the *Workers Compensation Act,* a worker must report an injury or a disabling occupational disease as soon as possible to the employer. The employer must report work-related injuries, occupational diseases, and work-related deaths to the WCB within three days. A worker may not make an agreement with the employer to give up WCB benefits.

If a worker suffers a work-related injury or illness, the WCB provides fair compensation that may include medical costs, loss of earnings, physical rehabilitation, and pensions. The WCB also works with employers to help injured workers return to work. If a worker is killed on the job, counselling and financial help are made available to the victim's family. For more information on requirements or eligibility for WCB coverage, contact the WCB office nearest you.

WCB Prevention Information Line

The WCB Prevention Information Line can answer your questions about workplace health and safety, worker and employer responsibilities, and reporting a workplace accident or incident. The Prevention Information Line accepts anonymous calls.

Phone 604 276-3100 in the Lower Mainland, or call 1 888 621-7233 (621-SAFE) toll-free in British Columbia.

To report after-hours and weekend accidents and emergencies, call 604 273-7711 in the Lower Mainland, or call 1 866 922-4357 (WCB-HELP) toll-free in British Columbia.

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WCB publications

Many publications are available on the WCB web site. The Occupational Health and Safety Regulation and associated policies and guidelines, as well as excerpts and summaries of the *Workers Compensation Act,* are also available on the web site: <www.WorkSafebc.com>

Some publications are also available for purchase in print:

Phone:	604 232-9704
Toll-free phone:	1 866 319-9704
Fax:	604 232-9703
Toll-free fax:	1 888 232-9714
Online ordering:	<www.WorkSafebc.com> and click on Publications; follow the links for ordering

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Contents

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BC Centre for Disease Control

BC Centre for Excellence in HIV/AIDS

British Columbia Nurses' Union

CD Control Section, Vancouver/Richmond Health Board

Office of the Provincial Health Officer, Ministry of Health

Who should read this booklet

This booklet is for employers and workers who are *not* expected to come in contact with blood and body fluids at their workplaces – but who *could* have contact with these fluids in rare, isolated incidents that can't be foreseen.

Blood and certain body fluids can be infected with tiny organisms that can cause disease in humans. These micro-organisms are known as bloodborne pathogens. The bloodborne pathogens of most concern are the human immunodeficiency virus (HIV) and the hepatitis B and C viruses. HIV causes the disease AIDS (acquired immune deficiency syndrome), and the hepatitis B and hepatitis C viruses cause diseases with the same names. Since exposure to infected blood and certain body fluids may spread these viruses, these diseases are also called bloodborne diseases. See the box on page 8 for a list of the body fluids that may spread these viruses.

Employees who work outdoors in areas where public access can't be controlled and inside workers who work at places frequented by the public sometimes find used needles and condoms in their work areas. These items – which could carry HIV and the hepatitis B and C viruses – are often thrown away in parks, streets, alleys, empty lots, public washrooms, and on beaches. Workers, supervisors, and employers in work settings where this could occur should read this booklet.

Most workers won't ever contact, at work, blood and certain body fluids that can spread HIV and the hepatitis B and C viruses. But even employers and workers in settings where contact with blood and these body fluids is not expected should be aware of some basic precautions. This is because it is possible to become infected from a single exposure incident – that is, harmful contact with infected blood and body fluids. This booklet provides information on the basic precautions that should be taken in such work settings.

The first part of this booklet:

- Describes the health effects of the diseases caused by these viruses
- Explains how HIV and the hepatitis B and C viruses are – and are not – spread
- Answers other common questions about these viruses and diseases

The concerns many people have about HIV/AIDS, and hepatitis B and C usually lessen when they know how the viruses causing these diseases are spread.

The next two sections of the booklet:

- Explain how to prevent or reduce the risk of exposure to bloodborne pathogens in work settings where contact with blood and certain body fluids is not expected to occur
- Provide examples of safe work practices

This booklet is not intended to meet all the needs of workers who can reasonably expect to be exposed to blood and certain body fluids as part of their normal job duties. For example, it is not meant for workers directly involved in providing health care or for emergency response personnel such as firefighters and law enforcement officers. Employers in these and some other work settings (see the box on page 3) must comply with the sections on biohazardous materials in Part 6 of the Occupational Health and Safety Regulation. These sections typically require employers to develop and implement an exposure control plan to address the specific risks and hazards faced by workers in these work settings. Where exposure incidents involving blood and certain body fluids have occurred at a workplace in the past, employers may also have to implement an exposure control plan.

If you have any questions about the information in this booklet, call the Workers' Compensation Board (WCB) Prevention Information Line at 604 276-3100 in the Lower Mainland or toll-free at 1 888 621-SAFE (7233). To order extra copies of this booklet and other WCB publications, contact the WCB Publications and Videos Section (see page ii).

Who needs exposure control plans

Work settings where exposure control plans are likely needed:

- Doctors' and dentists' offices
- Hospitals and other health care facilities
- Ambulance and paramedic services
- Law enforcement, fire and rescue, and lifesaving services
- Correctional institutions
- Research labs
- Medical and dental labs, and medical and dental equipment repair premises
- Hemodialysis units
- Blood and tissue banks
- Nursing homes, residential care facilities, home health care, and hospices
- Drug treatment centres
- Outpatient facilities
- Funeral homes and crematoriums
- Schools
- Commercial laundries servicing health care and public safety institutions
- Regulated waste removal

Typically, employers must develop and implement an exposure control plan to address the specific risks and hazards in these settings. The requirements for exposure control plans are found in the Occupational Health and Safety Regulation, sections 5.54 and 6.34. Exposure control plans are beyond the scope of this booklet.

Overview of HIV/AIDS, and hepatitis B and C

What are the health effects of HIV/AIDS, and hepatitis B and C?

There can be serious health effects from HIV/AIDS, and hepatitis B and C.

HIV/AIDS

HIV causes AIDS. After the virus enters the body, it infects the cells that the body needs to fight infection and gradually destroys the body's immune system. As a result, the body can't resist illnesses and infections. Many of these illnesses (such as pneumonia) are serious and eventually cause death. There is no cure for HIV infection or AIDS, but there are drugs that can help people live longer. People can carry the virus for years and not have AIDS, but still be infectious.

Hepatitis B

The hepatitis B virus (HBV) can cause the following health problems:

- Short-term (acute) liver swelling (hepatitis) in most people infected
- Long-lasting (chronic) hepatitis in about 10 percent of people infected
- Permanent liver damage and scarring (cirrhosis) and liver cancer in some people who have chronic hepatitis

Some people infected with the virus do not develop any symptoms when they first get the disease. Others experience:

- Flu-like symptoms
- Fever
- Fatigue
- Nausea, vomiting
- Loss of appetite
- Stomach pains
- Dark urine and pale stools (feces)
- Jaundice (yellowing of the skin and whites of the eyes)

Most people completely recover with time. About one percent of people die from the initial infection. About 10 percent of people are chronically infected and may carry the virus for the rest of their lives. They are known as carriers and remain infectious to others. They may also develop chronic liver disease, which increases the risk of liver scarring and liver cancer. There is no cure for hepatitis B.

Hepatitis C

The hepatitis C virus (HCV) can cause symptoms similar to the symptoms of hepatitis B. The hepatitis C virus can also cause acute and chronic liver disease and liver cancer. It is more likely to cause chronic hepatitis, liver scarring, and cancer than hepatitis B.

Most people infected with the hepatitis C virus don't report any symptoms when they first get the disease. About 90 percent become chronically infected and remain infectious to others.

It is estimated that one to two percent of people in British Columbia are infected with hepatitis C. There is no cure for hepatitis C.

Are there vaccinations to prevent these diseases?

There is a vaccine for hepatitis B that works more than 95 percent of the time when properly given to healthy individuals. Workers who may be exposed to blood and certain body fluids as part of their normal job duties should be vaccinated as part of the requirements in Part 6 of the Occupational Health and Safety Regulation. Otherwise, there is no legal obligation to provide the vaccine to workers who are not reasonably expected to be exposed to blood and certain body fluids.

There is no vaccine for hepatitis C. There is medication that may be used for treating chronic hepatitis caused by the hepatitis C virus, but the medication only works in some cases.

There is also no vaccine for HIV. Special drugs – known as anti-retrovirals – attack HIV's ability to reproduce itself. These drugs may be given after a person has been exposed to blood and certain body fluids to lower the risk of HIV infection. AIDS experts believe that taking these drugs for a month after an exposure incident reduces the risk of becoming infected by about 80 percent.

Since there's no cure for these diseases, it is particularly important to prevent them.

How are HIV and the hepatitis B and C viruses spread?

HIV and the hepatitis B and C viruses can all be spread by infected blood. They can also be spread by certain other infected body fluids (see the box below). For infection to occur, viruses from infected blood and body fluids must enter the body. Whether an infection will occur depends on each individual's ability to fight infection. Human tissues and organs used for transplant can also transmit these viruses.

Certain body fluids that may spread HIV, or hepatitis B or C

The body fluids listed below are the ones referred to when this booklet says "**certain body fluids**" or "**infected blood and body fluids**":

- Semen
- Vaginal secretions
- Fluid that the fetus (unborn baby) lives in (amniotic fluid)
- Fluid around the heart (pericardial fluid)
- Fluid in the lining of the lungs (pleural fluid)
- Fluid in the abdomen (peritoneal fluid)
- Fluid in joints (synovial fluid)
- Fluid surrounding the brain and spinal cord (cerebrospinal fluid)
- Breast milk — has been shown to transmit only HIV
- Saliva — is known to transmit only hepatitis B
- Any body fluid with visible blood

Body fluids that DO NOT spread HIV, and hepatitis B and C — unless you can see blood in them

There is no evidence that the body fluids listed below spread HIV and the hepatitis B and C viruses unless you can see blood in them:

- Tears
- Nasal secretions
- Sputum (coughed up from the lungs)
- Vomit
- Urine
- Sweat
- Feces (stools)

These body fluids may spread other infections – for example, stools can spread hepatitis A and sputum can spread tuberculosis – but they are not of concern in the spread of HIV and the hepatitis B and C viruses.

How are people exposed to infected blood and body fluids?

The two most common ways people are exposed to infected blood and body fluids are by:

- Participating in sexual activities (vaginal, anal, and oral intercourse) without using a condom, particularly with people who are at high risk of being infected with HIV and the hepatitis B and C viruses (for example, people who inject street drugs)
- Sharing injection needles with an infected person

Exposure through needles usually occurs when street drug users share needles to inject drugs into their veins. Exposure is also possible through electrolysis (body hair removal), ear and body piercing, tattooing, acupuncture, and other procedures that involve puncturing the skin with previously used needles or other equipment. Handling and decontaminating needles and equipment properly, as well as following basic standards of hygiene, will protect consumers and personal service workers in these industries from exposure.

An infected mother can also transmit bloodborne pathogens to her baby during pregnancy, at birth, or, in some cases, through breast milk.

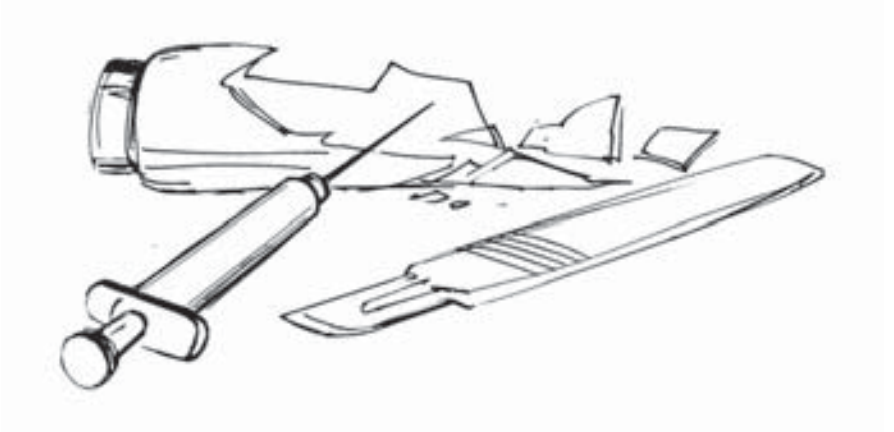
All blood donations are screened

Blood screening for hepatitis B began in January 1972, for HIV in November 1985, and for hepatitis C in June 1990. Some people who received blood before it had to be screened became infected through transfusions. **Since all donated blood is now tested for HIV, and hepatitis B and C, the risk of infection from a transfusion is extremely small.**

How could someone be exposed to infected blood and body fluids at work?

The virus must have the opportunity to **enter the body** for contact with infected blood and certain body fluids to pose a risk of infection. Whether an infection occurs depends on the individual's ability to fight infection. Workers can be exposed to infected blood and body fluids at work in the following ways:

- Puncturing the skin with sharp objects contaminated with infected blood and body fluids. (Sharp objects are commonly known as **sharps**. These include needles, scalpels, knives, razors, scissors, broken glass, or anything that can pierce, puncture, or cut skin.)
- Splashing infected blood and body fluids into the tissues lining the eyes, nose, or mouth. (These tissues are called mucous membranes.)
- Splashing infected blood and body fluids on non-intact skin (that is, fresh open cuts, nicks, wounds, skin abrasions, chapped and damaged skin, and skin with diseases such as eczema and dermatitis).



Sharps include needles, knives, scalpels, broken glass, or anything that pierces, punctures, or cuts skin.

Are HIV and the hepatitis B and C viruses spread by casual contact?

No. You **cannot** get HIV and the hepatitis B and C viruses from casual contact such as shaking hands or if someone sneezes or coughs near you. These viruses are not spread through the air – unlike flu viruses – and they are not spread by bites from mosquitoes or other insects. You also **cannot** get them by using the same facilities as someone with HIV/AIDS, such as:

- Sharing phones, work tools, equipment, or workstations
- Sharing washrooms or cafeteria facilities
- Swimming in a pool, showering in a locker room, or using a hot tub

Although casual contact doesn't transmit hepatitis B, living in close family settings with a person carrying the hepatitis B virus seems to increase the risk of infection. Transmission may occur if members of a household share personal items, such as razors and toothbrushes, which may be contaminated with small amounts of blood.

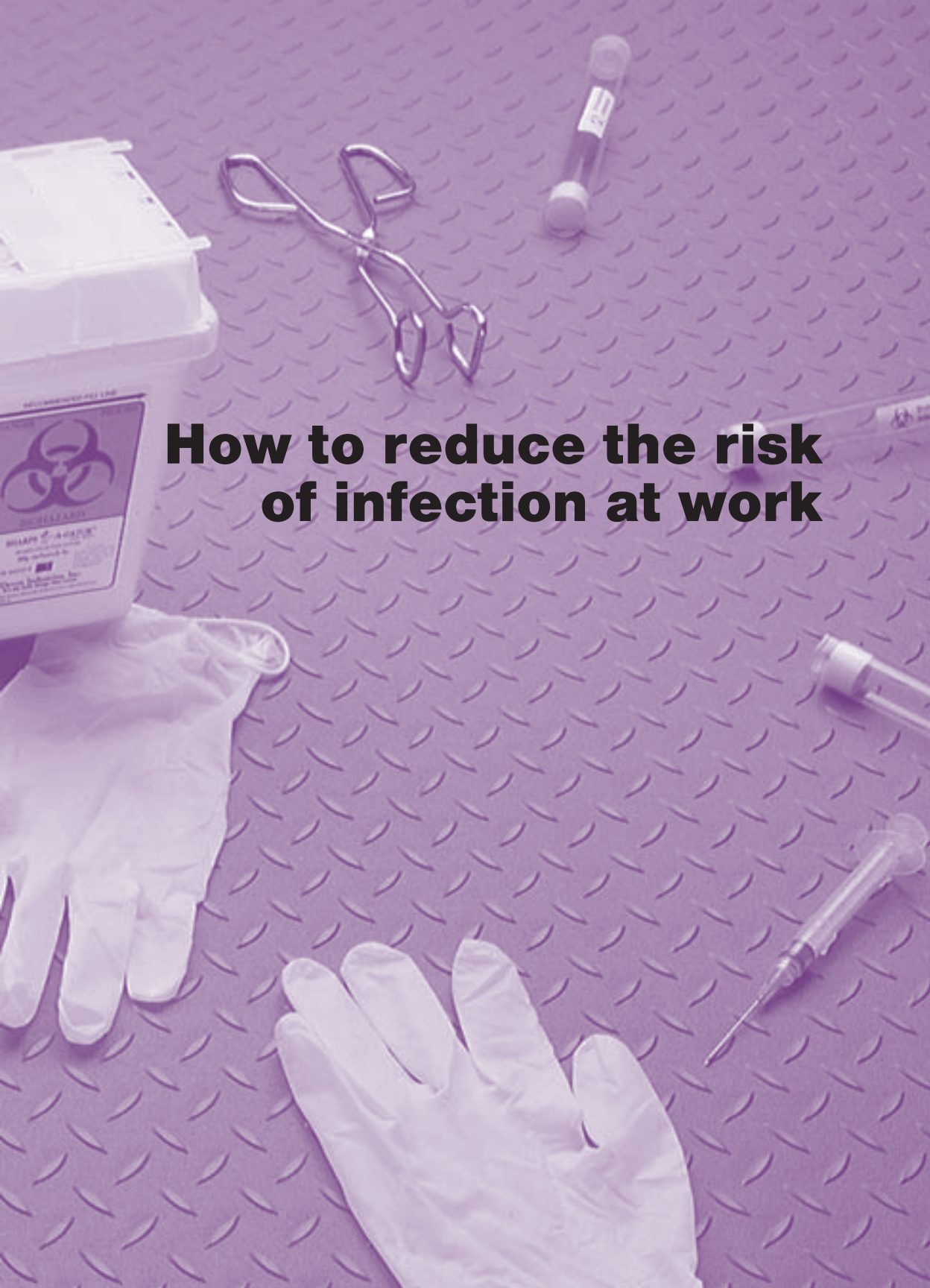
Putting risk into perspective

- Work exposure accounts for less than one percent of all reported cases of AIDS.
- The risk of infection after an exposure incident to infected blood and body fluids due to a needle puncturing skin is:
  - Up to 3 in 10 for hepatitis B (30 percent)
  - Up to 1 in 10 for hepatitis C (10 percent)
  - An average of 0.03 in 10 (or 3 in 1,000) for HIV (0.3 percent)
- The average risk of HIV infection is 1 in 1,000 (0.1 percent) after an exposure incident in which infected blood or body fluids come in contact with a mucous membrane (eyes, nose, and mouth) or non-intact skin (fresh open cuts, nicks, wounds, skin abrasions).

Can HIV and the hepatitis B and C viruses live outside the body?

HIV is considered fragile outside the human body. It becomes inactive with drying and when chemical germicides (substances that destroy germs) are applied. It is not known how long it can live on discarded needles and sharps.

Hepatitis B and C can pose a much greater risk to workers than HIV because these viruses are more easily transmitted, possibly because they can be found in much higher levels in body fluids. The hepatitis B virus is also much hardier. It can survive in a dried state on surfaces at room temperature for at least one week. There is no data on how long the hepatitis C virus can last in the environment, and this has not been established as a route of transmission.



How to reduce the risk of infection at work

Employer responsibilities

Where it is reasonable to expect that workers could be exposed to blood and certain body fluids as part of their **normal job duties**, employers must comply with the sections on biohazardous materials in Part 6 of the Occupational Health and Safety Regulation. Under these requirements, employers will typically have to develop and implement exposure control plans that eliminate or minimize the specific risks and hazards in their workplaces (see box on page 3).

Accident investigations are an important source of health and safety information. If a review of accident reports shows that exposure incidents involving blood and certain body fluids have occurred in the past, an exposure control plan may also be required.

There's a lot of concern in the workplace about HIV/AIDS, and hepatitis B and C. Even if contact is not likely to occur at a worksite, the employer can help allay such concern and can ensure that workers are prepared for unexpected events. Employers should do the following:

- Inform and instruct workers in how to eliminate or reduce the risk of contact with blood and certain body fluids.
- Ensure that work practices eliminate or minimize the risk of unforeseen contact.
- Develop ways to address chance encounters with blood and certain body fluids.
- Provide workers with the equipment, tools, and personal protective equipment (PPE) needed to deal with an unforeseen contact.
- Monitor the workplace to ensure that safeguards are used and safe work practices are followed.
- In case of an exposure incident, ensure that:
  - Prompt, easy-to-access first aid and medical attention is available
  - Employees are aware of procedures for obtaining immediate first aid and medical attention and for reporting incidents of exposure to blood and certain body fluids (see page 31)

If an exposure incident occurs at the workplace, the employer must investigate it and, based on the findings, must develop ways to prevent similar incidents from occurring.

How the joint health and safety committee can help

Where a joint health and safety committee or worker health and safety representative is required, the employer must work with the joint committee or worker representative to identify and resolve health and safety problems in the workplace. Here are some of the activities the joint committee or worker representative can undertake to help the employer ensure that workers are prepared for unexpected contact with blood and certain body fluids:

- Participate in developing hazard awareness campaigns
- Promote worker attendance at training sessions
- Review safe work practices
- Help select tools, equipment, and PPE
- Participate in workplace inspections to identify potential hazards
- Review accident and incident reports

Worker responsibilities

Workers also have responsibilities to help reduce the risk of contact with blood and certain body fluids. Workers must:

- Attend education and training sessions provided by the employer
- Use controls and follow safe work practices established by the employer for their protection
- Use the available tools and PPE that have been provided for use in chance encounters with blood and certain body fluids
- Know how to get immediate first aid and medical attention and how to report exposure incidents to blood and certain body fluids (see page 31)
- Know that they should not clean up spilled blood and body fluids unless they have the proper equipment and PPE, and have been trained to do so safely

Testing and the right to privacy

Can employers require job applicants to take tests for HIV/AIDS and other bloodborne diseases?

Under human rights law, employers can't require applicants to undergo testing for bloodborne diseases before being hired or placed in a job. The risk of an infected person spreading a bloodborne disease to another person at work is very small. Once employed, the employer may ask workers to be tested to determine eligibility for a disability plan if the employer provides this benefit.

Should workers be informed if a co-worker has HIV/AIDS?

Workers with HIV/AIDS (and other bloodborne diseases) have a right to privacy and aren't legally obliged to tell employers or co-workers of their medical conditions. If you know that an employee or co-worker has a bloodborne disease, you do not have the right to tell anyone else unless you have that person's permission to do so.

Some people have refused to work with or help people they thought had HIV/AIDS. This reaction is based on false beliefs about how HIV/AIDS is spread. There's no reason to stop individuals with HIV/AIDS from working. If they are well enough to perform the job, they must be permitted to work. If an individual's ability to work is affected by an HIV-related illness, employers should make reasonable alternative work arrangements, if possible.

Engineering controls

Engineering controls remove the hazard or isolate workers from the hazard. For example:

- Pocket masks used during artificial respiration should have one-way valves to prevent direct contact with the injured person's saliva, vomit, and blood.
- There are proper sharps containers that are puncture-resistant and leakproof, and can be closed. These should be made available for the safe disposal of sharps. (See the instructions on page 27.)
- Small leakproof and puncture-resistant containers have also been designed to hold one needle and fit easily in a jacket pocket. These can be made available to workers on the off-chance they might find a needle. Only a one-handed technique should be used to put a needle into such a container to avoid jabbing oneself. (See the instructions on page 28.)

Tools and equipment

An employer must provide workers with the tools and equipment – as well as PPE – needed to do the job safely. Even where workers aren't expected to contact contaminated needles, it is good practice to have proper sharps containers, gloves, tongs, and pliers available to pick up needles, in case workers do encounter them.

Have a proper sharps container, gloves, and tongs available to pick up sharps.

Safe work practices

Even if workers aren't expected to be in contact with blood and certain body fluids, all workplaces should have basic work practices to deal with the rare incidents that could occur. Safe work practices – such as those beginning on page 22 – explain how tasks are to be performed to reduce the likelihood of contact with blood and certain body fluids. These sample safe work practices should be tailored specifically to your workplace and should explain how to:

- Follow universal precautions (see box below)
- Get or administer first aid
- Report exposure incidents and seek medical attention
- Safely clean up blood and body fluids after spills
- Safely decontaminate or dispose of contaminated objects

Universal precautions

Universal precautions were first used in health care where medical personnel work frequently and directly with blood and certain body fluids. Other workers should also follow universal precautions to control their risk of contact with blood and body fluids that may be infected. Universal precautions **treat the blood and body fluids of *every* person as if they're infectious.** Universal precautions are steps you should take to protect yourself from coming into contact with the blood or body fluids of other people. An example of a universal precaution is wearing waterproof gloves when handling objects contaminated with blood.

Universal precautions are necessary because:

- People can carry HIV and the hepatitis B and C viruses without any signs and without knowing it — so you don't know who is infected
- It's possible to become infected with one exposure incident to infected blood or body fluids

Personal protective equipment

PPE acts as a barrier against skin and mucous membrane contact with blood and body fluids. PPE includes face shields, protective eye wear, waterproof gloves, aprons, gowns, lab coats, and shoe covers. Work instructions should state when and what type of PPE is needed. When PPE is required, the employer must:

- Provide the right kind of PPE for the hazard
- Ensure that it is readily available in sufficient quantities
- Make sure it fits the worker
- Train workers in its use and limitations
- Ensure that it is properly cleaned, maintained, stored, and replaced as needed

Check work instructions for the type of PPE needed to prevent contact with blood and body fluids.

Gloves

Gloves are one of the most common types of PPE. Gloves should be waterproof, disposable, of good quality, and suitable for the task – for example, medical gloves certified by the Canadian General Standards Board (CGSB). Don't use cloth gloves or gloves that aren't waterproof.

There is no single type or thickness of glove that works well in all situations. Waterproof gloves, such as natural rubber latex, vinyl, neoprene, and nitrile gloves, are not puncture-proof, so protection against sharps is limited. However, one study found that the volume of blood transferred during a needlestick injury may be reduced by about 50 percent when the needle passes through a natural rubber latex or vinyl glove. Gloves also vary in how well they resist physical hazards that can lead to tears, cuts, or abrasions. The thicker the gloves, the more protection they provide, but the harder it is to handle objects. Select the type and thickness of glove that gives you the best balance of protection and dexterity.

Special puncture-resistant and liquid-resistant gloves have been designed for use by firefighters in situations where they are likely to contact blood, broken glass, and sharp edges. These gloves may be useful for other workers who may also encounter these conditions (for example, outdoor workers who handle garbage).

Some workers who wear rubber or latex gloves develop health problems such as skin rashes and allergies. More information on these health problems can be found in the WCB publication, *Dealing with "Latex Allergies" at Work*. To order a copy, contact the WCB Publications and Videos Section (see page ii).

Keep broken skin covered

Breaks in your skin can be caused by cuts, scrapes, dermatitis, chapping, and other injuries. It is important to protect **fresh** breaks because they can provide an entry route for bloodborne pathogens. Cover injuries or non-intact skin with a **waterproof** dressing or bandage if there is a possibility that you may contact blood or certain body fluids – even though you wear gloves. The bandage will provide more protection to the broken skin in case the glove is punctured or in case blood or body fluids seep in around the top of the glove.

Sample safe work practices

Developing your own safe work practices

The sample safe work practices in this section can be used to guide you in developing similar ones tailored to your workplace. Specific information about your workplace should be added, where relevant, or where it is needed to clarify instructions. Examples of the types of information that should be added include:

- Specific instructions on how to summon first aid and seek medical attention
- The person to report exposure incidents to
- What PPE (such as waterproof gloves) is required, when to use it, and how to obtain it
- The location of equipment and tools such as sharps containers, tongs, and spill kits

How to wash hands

Hand washing is one of the best defences against spreading infections. It stops you from transferring infectious material from your hands to other areas of your body or other surfaces you may touch, and vice versa.

Wash your hands thoroughly, in a suitable facility such as a rest room or utility sink, using warm running water and non-abrasive soap.

Wash your hands thoroughly with warm running water and non-abrasive soap.

When should you wash your hands?

- Wash your hands when you tear a glove, or you think a glove is leaking. Remove the gloves and wash your hands immediately. If you have punctured your skin with a contaminated sharp, follow the procedure for exposure incidents. (See instructions on page 31.)
- Wash your hands after removing gloves at the end of a task – even if the gloves appear to be intact. Because you may contaminate your hands if you remove your gloves improperly, make sure you follow the correct procedure on page 24.
- Wash your hands immediately after accidental contact of unprotected but **intact** skin with blood or certain body fluids. If you have accidental contact with **non-intact** skin, follow the procedure on page 31.
- Wash your hands before leaving a work area.
- Wash your hands before eating, drinking, smoking, biting your nails, handling contact lenses, and applying personal care products (such as lip balm or make-up).

What do you do when hand-washing facilities aren't available?

- Use a waterless hand cleanser. Follow the manufacturer's directions on how to use the cleanser.
- Thoroughly wash your hands with soap and water in a proper facility as soon as possible after using the cleanser.

How to remove disposable gloves

Remove disposable gloves as soon as possible if they become damaged or contaminated. Remove them after you have completed the task that required gloves. Gloves should also be removed before leaving the work area. **Do not wash and reuse your gloves**. Use new gloves for each new task.

Follow these steps to make sure your hands do not contact any blood or body fluids left on used gloves:

1. With both hands gloved:
   - Grasp the **outside** of one glove at the top of the wrist. (See drawing below left.)
   - Peel off this glove from wrist to fingertips while turning it inside out, as you pull the glove off your hand and away from you.
   - Hold the glove you just removed in your gloved hand. (See drawing below right.)

Grasp the outside of one glove.

Hold the glove with your gloved hand.

Insert your fingers on the inside of the glove.

2. With the ungloved hand:
   - Peel off the second glove by inserting your fingers on the **inside** of the glove at the top of your wrist. (See drawing above.)
   - Turn the glove inside out while pulling it away from you, leaving the first glove inside the second. (See drawing on right.)
3. Dispose of the entire bundle promptly in a waterproof garbage bag.
4. Wash your hands thoroughly with soap and water as soon as possible after removing gloves and before touching non-contaminated objects and surfaces.

Turn the glove inside out over the first glove.

How to pick up sharps discarded in public places

Needles and other items (for example, condoms) that may carry HIV and the hepatitis B and C viruses are often thrown away in streets, public washrooms, regular garbage, parks, alleys, vacant lots, and on beaches. They have also been found under mattresses and pillows, in garbage cans, and behind toilets.

Don't pick up sharps and other items unless you have the proper equipment and PPE, and you have been instructed how to do so safely. Don't pick up anything with the intention of discarding it later. For example, don't put a used needle in your pocket that isn't in a proper pocket container. You could injure yourself before you discard it.

Do not place needles in regular garbage under any circumstances — you may create a hazard for others.

HAZARD ALERT

Don't reach for objects you can't see

A worker on a ski patrol was assisting an unconscious skier. The worker received a poke from a needle when emptying the skier's pack.

- Look before reaching. Don't use your hands to feel or reach into any area or container if you can't see the contents or if you don't know what's there. Use a long-handled stick or other object — not your hands — to explore hidden spots. A flashlight could be used to move objects and to shed light on hard-to-see objects.
- Empty the contents of purses, packs, and other containers by turning them upside down over a table or other flat surface.

How to pick up a sharp and place it in a sharps container

Follow these steps to pick up improperly discarded sharps and other items that could carry HIV and the hepatitis B and C viruses:

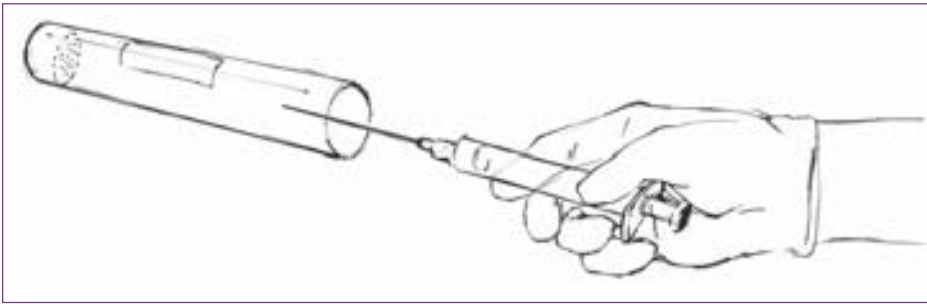
1. Have disposable waterproof gloves (such as natural rubber latex, neoprene, nitrile, and vinyl) and a proper sharps container ready. (You can obtain sharps containers from safety and medical supply stores and some municipal needle exchange programs. Drug stores may also carry suitable containers.)
2. Put the gloves on. Place the sharps container next to the needle or other item. Do not hold the container in your hand, or you might accidentally jab yourself.
3. If you are comfortable using tongs or pliers, use them to pick up the needle (or other item) and place it into the sharps container. This is the preferred method. If you are not comfortable using the tongs or pliers, pick up the needle by its shaft – with your gloved hand. In both cases, place the needle into the sharps container, pointed end first, away from you. Do not insert your fingers into the opening of the container, and keep your free hand out of the way.
4. Remove and discard the gloves (see page 24). Wash your hands with soap and water.
5. Don't fill the sharps container to the brim. When it is about three-quarters full, replace it with a new one and properly dispose of the old one. Contact your municipality for information on disposal.

Use tongs or pliers to pick up and place the sharp – pointed end first – into the container.

How to pick up a needle using a one-needle container

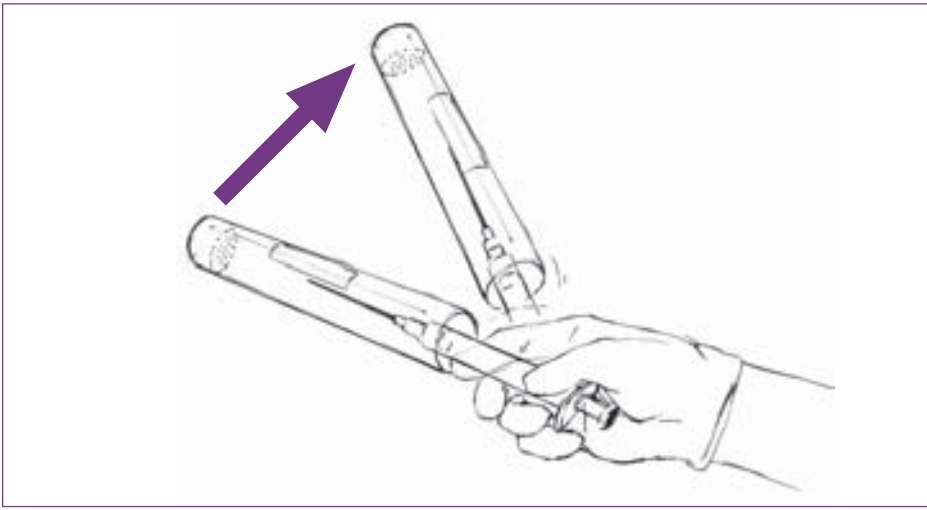
One-needle containers – that fit easily into pockets – have been designed for outdoor workers who may not be close to sharps disposal equipment. The following method is for a one-needle container. You must use only **one hand** with this technique to avoid jabbing yourself:

1. Wear disposable, waterproof gloves.
2. Use a proper puncture-resistant and leakproof one-needle container.
3. Hold the blunt end of the syringe in one hand. Then ease the sharp end of the needle into the opening of the container. **Do not** use your other hand to guide it.



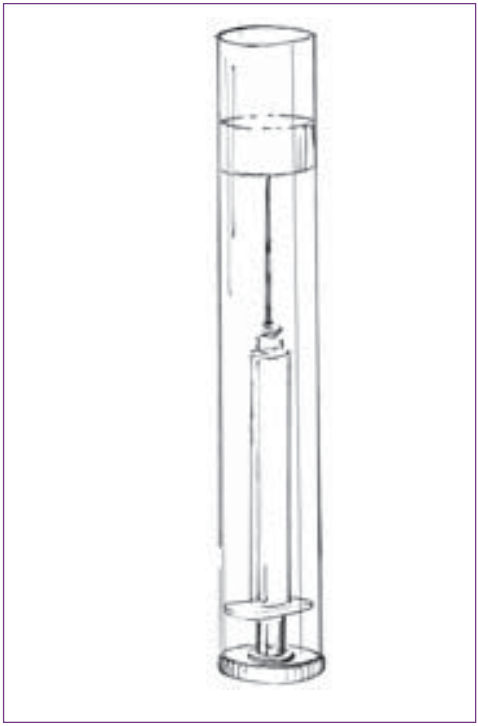
Using one hand only, ease the sharp end of the needle into the container.

4. Lift and tip the needle and container up so that the container falls down over the needle and covers the sharp end of the needle.



Lift and tip the needle and container.

5. Once the sharp end of the needle is enclosed in the container, you can safely grasp the container and syringe with your other hand to place the cap on the container. Make sure the cap is on securely. When you turn the container over (cap up), the needle will embed itself in the Styrofoam plug. Place the container in your pocket and discard in a suitable disposal container at your first opportunity.
6. Remove and discard the gloves (see page 24). Wash your hands with soap and water at your first opportunity.



Make sure the cap is on securely.

Picking up condoms

If you find a used condom, do not use your bare hands to pick it up. Use waterproof gloves, tongs, or something else to pick it up and throw it in the garbage.

How to handle garbage safely

Follow these steps to prevent contact with sharps and other items improperly discarded in garbage:

1. Handle garbage as little as possible.
2. Use waterproof garbage bags.
3. Be alert. If possible, look for sharps sticking out of the bags. Listen for broken glass when you move the bag.
4. Don't compress garbage or reach into garbage containers with your bare hands.
5. Don't use your bare hands to pick up garbage that has spilled out of an overflowing container. Wear puncture-resistant and liquid-resistant gloves (the type worn by firefighters), or use other tools designed for picking up garbage.
6. Don't let garbage bags get too full, if possible. Leave enough free space at the top of the bag, so that when you grab it, you grab the top of the bag only – not any of the contents. You may have to change bags more often to prevent them from getting too full. This will also make them lighter – and thus easier to hold away from your body.
7. Hold garbage bags by the top of the bag, away from your body. Don't hold garbage bags against your body.
8. Don't place one hand under the bag to support it.
9. Dispose of wastes according to federal, provincial, and local regulations.

HAZARD ALERT

Handle garbage carefully

- A worker grabbed a garbage bag and was stuck by a needle.
- A restaurant worker was cleaning the washroom. When emptying the garbage can, she reached into it and was poked with a discarded needle.
- A worker picked up a bag of garbage and held it close to his body. His thigh was stuck with a needle.

To avoid a skin puncture from needles or other sharps follow the directions above.

What to do when an exposure incident occurs

The following exposure incidents are potentially harmful:

- Skin is **punctured with a contaminated sharp.**
- A **mucous membrane** (the eyes, nose, or mouth) is splashed with blood or certain body fluids.
- **Non-intact skin** is splashed with blood or certain body fluids.

If any of the above exposure incidents occurs, follow these steps:

1. **Get first aid immediately.**
   - If the mucous membranes of the eyes, nose, or mouth are affected, flush with lots of clean water at a sink or eyewash station.
   - If there is a sharps injury, allow the wound to bleed freely. Then wash the area thoroughly with non-abrasive soap and water.
   - If an area of non-intact skin is affected, wash the area thoroughly with non-abrasive soap and water.

2. **Report the incident.**

   Report the incident as soon as possible to your supervisor and first aid attendant, or occupational health staff. This should **not** cause significant delay in seeking medical attention.

3. **Seek medical attention immediately.**

   Seek medical attention immediately – **preferably within two hours** – at the closest hospital emergency room, or at a health care facility if there's no hospital emergency room in the vicinity. Immunizations or medications may be necessary. These may prevent infection or favourably alter the course of the disease if you do become infected. Blood tests should also be done at that time. You may need to see your family doctor within the next five days for follow-up, such as counselling and medications.

4. **Complete WCB claim forms.**

   If the exposure incident occurred at work, the employer and worker must complete and submit the appropriate WCB claim forms. For any questions about claims, contact the WCB Occupational Disease Service at 604 276-3007 or 1 888 967-5377, local 3007.

   Blood and body fluid contact with **intact skin is not considered to be a risk** for the spread of bloodborne pathogens. You should, however, thoroughly wash your hands and other affected areas immediately. If you have any further concerns, contact your family physician or nearest health unit office (see the blue pages of the telephone directory).

How to clean up spills of blood and certain body fluids

Once any exposure incident has been attended to, clean up spills as soon as possible. **Don't clean up blood and certain body fluids unless you have been trained to do so and have the equipment and PPE needed to do so safely.**

Kits that contain the supplies needed to clean up spills are available from safety supply companies.

Procedures for cleaning up spilled blood and certain body fluids should include the following steps:

1. Restrict access to the area.
2. Make sure plastic bags are available for removal of contaminated items from the spill site. Have fresh, dilute bleach or a germicide ready.
3. Dispose of any sharps first according to the procedure on page 27.
4. Wear disposable, waterproof gloves (such as natural rubber latex, neoprene, nitrile, and vinyl). If necessary, wear other PPE, such as a face shield and a gown, to act as a barrier against contact with blood and certain body fluids and the dilute household bleach. If using a germicide, check the material safety data sheet (MSDS) to find out what type of glove to use.
5. Cover your shoes or boots with disposable, waterproof covers if they could become contaminated during clean-up.
6. Wipe up visible material first with disposable towels (or in another way that prevents direct contact with blood and certain body fluids). Dispose of the material and paper towels in waterproof garbage bags.
7. After you have carefully removed all the obvious material, it may be necessary to change gloves. Then decontaminate the area by carefully pouring over the spill site a germicide approved for use as a hospital disinfectant, or a fresh solution of household bleach and water (see the box on page 33). Leave the solution on for 10 minutes, then wipe it up with disposable towels. Discard the towels in the waterproof garbage bags.
8. Clean and decontaminate all soiled, reusable equipment and supplies. Properly discard any disposable items.
9. Wear the gloves to remove other protective equipment such as face shields and footwear covers. Dispose of or clean PPE (for example, face shields, aprons, boot covers) according to the manufacturer's directions.
10. Properly remove and dispose of your gloves. Wash your hands.

What to use to clean and disinfect contaminated areas

- Put on the proper PPE.
- Use disposable towels to clean up all visible material. Discard the towels in a waterproof garbage bag.
- Disinfect the area with a fresh bleach solution. A solution of 1 part of common household bleach to 100 parts of water (1:100 ratio) will kill HIV and the hepatitis B and C viruses except with spills involving a large amount of blood. With spills involving a large amount of blood, apply a solution of 1 part common household bleach to 10 parts of water (1:10 ratio). In both cases, leave the solution on for about 10 minutes. You can also use a germicide that is approved for use as a health care disinfectant.

Caution: Do not mix cleaning chemicals such as bleach and ammonia.

Need more information?

For more information on the **spread and treatment** of bloodborne diseases, talk to your family doctor, or contact your local public health unit (see the blue pages of the telephone directory). For information on AIDS, contact the BC Centre for Excellence in HIV/AIDS at St. Paul's Hospital (telephone 604 806-8477).

For information on **preventing workplace exposures**, contact the WCB Prevention Information Line at 604 276-3100 or 1 888 621-SAFE (7233).

For questions on **claims after exposure**, contact the WCB Occupational Disease Service at 604 276-3007 or 1 888 967-5377, local 3007.

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After Hours
Health & Safety Emergency
604 273-7711
1 866 922-4357 (WCB-HELP)

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