

# Facts about Bloodborne Hazards in Our Schools

## GUIDELINES FOR LOCAL LEADERS

### A preventable occupational hazard

What are bloodborne hazards? Diseases such as hepatitis and HIV carried by human blood are known as “bloodborne diseases.” The viruses or bacteria that carry these diseases are known as “bloodborne pathogens.” Bloodborne diseases may be transmitted through contact not only with blood but also body fluids contaminated with blood, or “other potentially infectious materials” such as objects contaminated with blood.

#### How may association members be exposed?

Students or staff who have a bloodborne disease may potentially expose association members in various job classifications, particularly designated first aid providers. For example, school nurses are designated as first aiders and given first aid kits and training. General education teachers, special education teachers, physical education teachers, coaches, bus drivers, security guards, and others may or may not be so designated, depending on the district. In addition to providing first aid, other possible exposure scenarios in schools include cleaning up blood and being scratched or bitten.

Contact with a bloodborne pathogen may take place in several ways:

- ✓ Blood to blood exposure to a wound in the skin, including skin that is chapped, burned or has dermatitis;
- ✓ A splash to the eyes, nose, or mouth;
- ✓ Sexual contact;
- ✓ Puncturing of the skin by “sharps” – broken glass, needles, knives or other sharp objects;
- ✓ For Hepatitis B, exposure can also take place via a deep bite or contact with dried blood.

Casual contact with infected individuals –for example shaking hands, hugging, sharing a water fountain, telephone, or toilet – won’t pose any risk because the virus or bacteria must find its way into the bloodstream for infection to occur.

#### The major bloodborne diseases

##### Hepatitis B

Hepatitis B is a serious disease caused by a virus (HBV) that attacks the liver. The virus can cause lifelong infection, cirrhosis (scarring) of the liver, liver cancer, liver failure, and death. The symptoms of Hepatitis B can include nausea, fatigue, abdominal pain, light stools, dark urine, appetite loss, diarrhea, yellow skin or eyes. Only a blood test can tell if someone has HBV.

##### Hepatitis C

Hepatitis C is a liver disease caused by the Hepatitis C virus (HCV), which is found in the blood of persons who have the disease. Hepatitis C is serious for some persons but not for others. Most persons who get Hepatitis C carry the virus for the rest of their lives. Most have some liver damage but many do not feel sick. Some will develop cirrhosis (scarring) of the liver and liver failure after some years. Only a blood test can tell if someone has HCV.

##### HIV/AIDS

HIV (Human Immunodeficiency Virus) is a virus that damages the body’s immune system and cripples its ability to fight off other diseases. Usually after about 10 years of incubation the immune system weakens, eventually leading to AIDS (Acquired Immunodeficiency Syndrome) in which the immune system is weakened to the point that it has difficulty fighting off certain infections. These “opportunistic” infections overwhelm a weakened immune system to cause illness.

### HEALTH & SAFETY RESOURCES

Your NJEA UniServ Office

Region 1 Vineland 856 696 2670	Cape May/ Cumberland
Region 2 Woodbury 856 628 8650	Gloucester/Salem
Region 3 Voorhees 856 782 1225	Camden
Region 5 Moorestown 856 234 2485	Burlington
Region 6 Galloway Twp. 609 652 9200	Atlantic
Region 7 Toms River 732 349 0280	Ocean
Region 8 Lawrenceville 609 896 3422	Mercer
Region 9 West Long Branch 732 403 8000	Monmouth
Region 11/12 Edison 732 287 4700	Middlesex
Region 13 Flemington 908 782 2168	Hunterdon/ Somerset
Region 15 Cranford 908 709 9440	Union
Region 17 Parsippany 973 515 0101	Morris
Region 19 West NY 201 861 1266	Hudson – North
Region 20 Jersey City 201 653 6634	Hudson – South
Region 21 South Orange 973 762 6866	Essex
Region 23 Emerson 201 265 6200	Bergen – East
Region 25 Hasbrouck Heights 201 292 8093	Bergen – West
Region 27 Wayne 973 694 0154	Passaic County
Region 28 Stanhope 973 347 5717	Sussex/Warren
Region 29 Hamilton Square 609 689 9580	Higher Education

Symptoms may include fatigue, night sweats, severe diarrhea, weight loss, and swollen lymph nodes. Today there are medical treatments that can slow down the rate at which HIV weakens the immune system. There are other treatments that can prevent or cure some of the illnesses associated with AIDS. As with other diseases, early detection offers more options for treatment and preventative care. A positive HIV test result does not mean that a person has AIDS. A physician using certain clinical criteria such as AIDS indicator illnesses makes a diagnosis of AIDS.

### Other bloodborne diseases

Other bloodborne diseases include syphilis, malaria, babesiosis, brucellosis, leptospirosis, arboviral infections, relapsing fever, Creutzfeldt-Jakob disease, human T-lymphotrophic virus Type-1, and viral hemorrhagic fever.

### Transmission of bloodborne diseases

Hepatitis B and C and HIV/AIDS require different preventive measures than diseases spread through air, water, or touch such as tuberculosis, influenza, and the common cold. Of greatest concern are Hepatitis B and C, which can emerge in schools for several reasons, including more tattooing, body piercing and sexual and drug activity among young people, and an increase in immigrant children from countries where there are high rates of those diseases. Since 2001, children entering school in New Jersey have been required by the NJ Department of Education to be immunized or be in the process of being immunized against Hepatitis B. Every sixth grader must also have the series until the lower grades catch up. There are currently no vaccines for Hepatitis C or HIV/AIDS.

Children may be born HIV positive, although this is becoming less common due to new drug treatments for pregnant women with HIV/AIDS. Three-quarters of these children convert to HIV negative within a year. Blood transfusions, while becoming safer all the time, still pose some risk of transmitting Hepatitis C (1 chance in 3,300), Hepatitis B (1 chance in 250,000) and HIV (1 chance in 450,000).

### Hepatitis and HIV/AIDS: What are the relative risks?

Many people are worried about “catching” HIV/AIDS, but Hepatitis B and C are more concentrated in the bloodstream and body fluids of infected individuals and can survive out of the body in dried blood and other potentially infectious materials for periods of one week or more – making them far easier to “catch” than HIV/AIDS. Of people exposed to a needlestick with blood contaminated with Hepatitis B, 37-62 percent will develop a positive blood test – evidence of disease. For Hepatitis

C, 0-7 percent will develop a positive blood test. For HIV/AIDS, only 0.2 to 0.5 percent will develop a positive blood test.

### Prevention versus treatment

Medical treatment after potential exposure to Hepatitis B or HIV/AIDS is possible but much less desirable than prevention. Standard measures to prevent exposure to blood and other potentially infectious materials include disposable gloves, hand-washing, and safer needle handling procedures have been recommended since the early 1980s. Routine pre-exposure immunization against Hepatitis B for potentially exposed school staff is also a key preventive action. Regulations issued in 1991 and updated in 2001 by the Occupational Safety and Health Administration (OSHA) have increased compliance with these recommendations. Since 1991, many new “safe” needles and sharp devices have become commercially available. The revised standard was adopted by the New Jersey Public Employees Occupational Safety and Health (PEOSH) Program effective September 4, 2001, and covers public sector workers in New Jersey, including school employees determined to be “potentially exposed” to bloodborne pathogens by their school district. In most districts, coverage is extremely limited to only designated first aid providers. For example, a teacher with a student with a bloodborne disease in his or her classroom will not be covered in most districts.

### Assume all blood is infected

It is not workable in a school setting to know everyone who is infected with a bloodborne disease or to take preventive measures only with infected individuals. Even if all students and school staff were tested for all bloodborne diseases, medical confidentiality would not permit this information to be shared widely. In addition, testing would need to be continuous since a person’s infection status can change. Therefore, in the school setting, all blood must assume to be infected.

### Body fluids

Body fluids common in a school setting include saliva, vomitus, sweat, tears, urine, and feces. These are not considered infectious under the bloodborne pathogens standard unless they are contaminated with blood. Less common in a school setting are semen and vaginal secretions; fluid from the brain, spine, lungs, and amniotic sac; and fluid around joints, the heart, and the abdominal lining. These are considered infectious by the standard.

### Protection from discrimination for having a bloodborne disease

The Americans with Disabilities Act (ADA) of 1990 and other laws protect the rights of students and staff with a bloodborne disease to continue to

## For More Information

New Jersey Healthy School Facility Environments  
[www.state.nj.us/health/healthyschools](http://www.state.nj.us/health/healthyschools)  
EPA Healthy Schools, Healthy Kids  
[www.epa.gov/schools](http://www.epa.gov/schools)

New Jersey Education Association (NJEA)  
[njea.org](http://njea.org) click on Issues for Health and Safety

National Education Association (NEA)  
[www.nea.org](http://www.nea.org)  
<http://nea.healthyfutures.org>

PEOSH health issues – NJ Dept. of Health and Senior Services  
<http://nj.gov/health/peosh>

PEOSH safety issues – NJ Dept. of Labor and Workforce Development  
[http://lwd.dol.state.nj.us/lsse/employer/Public\\_Employees\\_OSH.html](http://lwd.dol.state.nj.us/lsse/employer/Public_Employees_OSH.html)

New Jersey Work Environment Council (WEC)  
[www.njwec.org](http://www.njwec.org)

attend school or work as long as they can perform the essential functions of their work. The ADA also provides for “reasonable accommodations” for such students and staff to enable them to continue to function successfully at school. **Note:** New Jersey laws strictly limit disclosure of health information, including information about whether or not a person has a bloodborne disease. This information can only be disclosed if the tested person voluntarily signs a release form.

### PEOSH bloodborne pathogens standard requirements

#### Employee exposure control plan

Employers must prepare a written plan that includes the job classifications, tasks, and procedures in which employees have potential exposure; the schedule and methods for implementing the requirements of the standard; and procedures for documenting the circumstances surrounding an employee’s exposure. The plan must document consideration and use of “safe” needles and other sharps, including input on selection from employees. The plan must be accessible to employees and updated annually or more often if work tasks or control measures change.

#### Methods to prevent exposure

- **Universal precautions:** Handle all human blood and other potentially infectious materials as if they were contaminated.
- **Engineering controls:** Whenever possible, use methods that contain or remove the hazard, such as puncture resistant containers for sharps, splashguards, and “safe” sharps with

injury protection mechanisms, such as retractable needles and retractable finger-stick lancets.

- **Work practice procedures:**

Immediate hand-washing following contact with potentially infectious materials; hand-washing after removing gloves (needed because gloves are not completely impermeable); no recapping, breaking, or bending of any contaminated needle, rather placing used needles into puncture resistant containers; no pipetting by mouth; leakproof containers for specimens; biohazard labels on containers and refrigerators.

- **Personal protective equipment:**

When exposure cannot be avoided by other means, appropriate personal protective equipment should be used. Depending on the situation, this may include gloves, face shields, goggles,

gowns, lab coats, mouthpieces, pocket masks, and/or resuscitation bags. Employers must provide the equipment in sizes to fit each employee and at no cost to employees.

- **Housekeeping:** Employers must establish written procedures for regular cleaning of the worksite and disinfecting contaminated surfaces and materials. (Suitable disinfection in the school setting would be cleaning with soap and water then with bleach diluted 1 part bleach to 10 parts water.) Tongs or a brush and dustpan must be used to pick up potentially contaminated sharps; vacuum cleaners are not suitable for this purpose.

### Hepatitis B vaccinations

Employers must follow the latest immunization recommendations of the U.S. Public Health Service. At this time this

means they must offer the three-dose Hepatitis B vaccination series free of charge within ten working days after employees begin jobs that have potential for exposure. In most districts, this will be limited to designated first aid providers who render assistance on a regular basis, including nurses, unless the local negotiates broader coverage. Designated first aid providers who render assistance only as a collateral duty can be offered either pre-exposure vaccination or vaccination after providing the first aid assistance. Local associations should negotiate the pre-exposure option. For newly immunized nurses only, an antibody blood test must be offered two or three months later to confirm that the vaccine was effective. Employees may decline the vaccination by signing a written statement.

## What members can do

### Medical evaluation and follow-up for exposed employees

Employers are required to offer free, confidential medical evaluation and follow-up as soon as possible to any covered employee who receives an occupational exposure to blood or other potentially infectious materials. Evaluation must include a written report of how the exposure occurred, testing the source person (if they agree), testing the exposed employee's blood (if they agree), and post-exposure treatment and counseling. For Hepatitis B, the recommended post-exposure management includes initiation of the Hepatitis vaccine series (if unvaccinated) and possibly Hepatitis B immune globulin (HBIG). For HIV, post-exposure prophylaxis includes a 4-week regimen of two or three drugs. The first doses should be taken within hours of the exposure incident. Unfortunately, there is currently no effective post-exposure treatment for Hepatitis C. For all three diseases, the exposed person should receive immediate baseline testing then periodic blood testing to see if infection develops. **It is essential that post-exposure treatment begin as soon as possible, preferably within hours, of the incident.** It is also essential that the treating physician is given a copy of and be familiar with the *U.S. Public Health Service Guidelines* listed under Internet Resources.

### Employee training

The school administration is required to provide effective training for employees who have anticipated occupational exposure. Again, this will usually be limited to designated first aid providers unless the local association negotiates broader coverage. This must be offered at the time of initial assignment and annually thereafter. Training must cover

hazards of bloodborne diseases, controls to avoid exposure and requirements of the PEOSHA standard. Employees must also have access to a copy of the standard and the employee exposure control plan.

### Recordkeeping

Records documenting employee training must be kept for three years. Records of employee exposures, medical evaluation, and follow-up must be kept for the length of employment plus 30 years. The employer must also keep a sharps injury log.

### Review or create an exposure control plan

School district administration and association members, including school nurses, should work together to develop and annually review a written employee exposure control plan for the school district. Two key resources for this task are the PEOSH Employer Guide and Model Exposure Control Plan and OSHA Instruction CPL 2-2.69, Enforcement Procedures for Occupational Exposure to Bloodborne Pathogens. A local health and safety committee is an excellent forum for developing and reviewing the exposure control plan. See NJEA Health and Safety Facts on Health and Safety Committees.

A key task for the local association will be to ensure inclusion of a complete list of job classifications, tasks, and procedures in which members have potential exposure to bloodborne diseases. The local association may wish to negotiate coverage above and beyond just those designated as first aid providers. Another key task is making sure the schedule for complying with the standard is reasonable. The local should insist the members receive **immediate treatment**

## What your association can do:

- Form a health and safety committee to monitor conditions in the workplace.
- Negotiate health and safety language.
- File grievances regarding unsafe conditions using existing contract language.
- See that training is provided through inservice days.
- Assure that the district complies with the N.J. Public Employee Occupational Safety and Health Act (PEOSH).
- Work with parent and community groups to eliminate and/or prevent hazardous conditions.

## For Assistance:

- Contact your association representative immediately. Your local or the NJEA UniServ office can help you with Workers' Compensation. You are entitled under state law (N.J.S.A.18A:30-2.1) "...to full salary without loss of sick days for up to one year..." and all medical treatment.

The New Jersey Work Environment Council (WEC) prepared this factsheet under the direction of the NJEA. Based in Trenton, WEC provides NJEA and other organizations with technical assistance and training about workplace and environmental hazards

after exposure and assure that the designated treatment facility has a copy of the PEOSH Standard and the *Updated U.S. Public Health Services Guidelines for the Management of Occupational Exposures to HBV, HCV, and HIV* and Recommendations for Postexposure Prophylaxis. The local may also want to negotiate with the district to offer post-exposure medical evaluation and follow-up to any “Good Samaritans” who voluntarily render first aid to injured co-workers, students, or visitors. Where hand-washing facilities are not readily available (such as on buses, field trips, and at sporting events) the local association should negotiate that the district provide disinfecting hand wipes to employees.

### **Ensure compliance with the PEOSH standard**

The local association should encourage the district to comply with all the provisions of the PEOSH Bloodborne Pathogens Standard as indicated in the employee exposure control plan. If needed, the district can be encouraged to request free onsite consultation from PEOSH. Where the district refuses to make enough effort to comply with the standard, the local can prepare a complaint and file it with PEOSH. Well-founded complaints should result in citations.

### **Latex glove allergies**

Disposable latex gloves play an essential role in protecting employees against bloodborne diseases, but some people are allergic to them. To reduce risks for members, the local should insist on the purchase of only low-protein, powder-free latex gloves. In addition, gloves made of alternative materials, such as polyethylene or vinyl, should be available to those with latex allergies.

### **Use NJEA resources**

Keep working to control the risk of bloodborne hazards to your members by using the full range of tools available from NJEA. Your UniServ field representative can help you strategize about useful tactics. NJEA can help organize health and safety committees, file for Workers’ Compensation, file grievances, negotiate contract language, take legal action to enforce school safety laws, enlist media coverage, educate members, and arrange onsite consultations and inspections with appropriate regulatory agencies. UniServ staff may also recommend enlisting parents as allies, since parents can bring extra pressure to bear on the district.

Remember to keep your members informed and regularly evaluate how your school’s bloodborne pathogens exposure control plan is working.

And don’t forget to celebrate and publicize your victories!

## **Internet Resources**

### **National Institute of Occupational Safety and Health (NIOSH)**

Links on Bloodborne Infectious Diseases, HIV/AIDS, Hepatitis B Virus, and Hepatitis C Virus  
[www.cdc.gov/niosh/topics/bbp/](http://www.cdc.gov/niosh/topics/bbp/)

### **Occupational Safety and Health Administration (OSHA)**

Links on Bloodborne Pathogens  
<https://www.osha.gov/SLTC/bloodbornepathogens/enforcement.html>

### **OSHA Instruction CPL 2-2.69 –**

Enforcement Procedures for Occupational Exposure to Bloodborne Pathogens, 94 pages, November 27, 2001  
[https://www.osha.gov/pls/oshaweb/owadisp.show\\_document?p\\_table=directives&p\\_id=2570](https://www.osha.gov/pls/oshaweb/owadisp.show_document?p_table=directives&p_id=2570) Or use the link from the previous OSHA page.

### **Updated U.S. Public Health Services Guidelines for the Management of Occupational Exposures to HBV, HCV, and HIV and Recommendations for Postexposure Prophylaxis,**

54 pages, June 2001  
[www.cdc.gov/mmwr/preview/mmwrhtml/rr5011a1.htm](http://www.cdc.gov/mmwr/preview/mmwrhtml/rr5011a1.htm)

### **PEOSH Educational Materials on Bloodborne Pathogens**

Request these free publications by calling 609-984-1863  
Also available online at  
<http://nj.gov/health/workplacehealthandsafety/documents/peosh/bbp.pdf>

### **PEOSH Revised Bloodborne Pathogen Standard,**

8 pages, updated October 2002  
Overview of the Bloodborne Pathogens Standard, 1910.1030. This standard protects workers in the public sector who come in contact with blood or other potentially infectious materials.

### **Model Exposure Control Plan**

90 pages, updated June 2002  
Serves as an employer compliance guide to the OSHA Bloodborne Pathogens Standard. Contains a fill-in-the-blanks exposure control plan and forms that may be used to comply with the recordkeeping requirements of the standard.

### **U.S. Public Health Services Guidelines for the Management of Occupational Exposures to HIV and Recommendations for Postexposure Prophylaxis,**

24 pages, September 25, 2013  
<https://stacks.cdc.gov/view/cdc/20711>