IDENTIFYING DEFICIENCIES IN AN INFECTION CONTROL PROGRAM

EXECUTIVE DEVELOPMENT

By: Edward H. Kensler Jr.
Florence Township Fire Department
Florence, New Jersey

An applied research project submitted to the National Fire Academy as part of the Executive Fire Officer Program

August 1998

ABSTRACT

As a result of a response to a motor vehicle accident, the Florence Township Fire Department realized that their infection control measures were inadequate. Therefore, the purpose of this research project was to identify the deficiencies with their current infection control measures.

Both descriptive and evaluative research were conducted (1) to determine how the operational officers felt about infection control, (2) to identify what the department was currently doing about infection control, (3) to identify regulations and standards that need to be considered regarding infection control, and (4) to identify deficiencies with the department's current infection control measures when compared to the regulations and standards.

A survey was conducted, departmental documents were reviewed, and a literature review was conducted during this research project. Also, a comparison between the department's current infection control measures and the appropriate regulations and standards was completed.

The results of this project answered all of the research questions. They showed that the operational officers felt that infection control is important but that the department's current measures were not sufficient. Three documents concerning infection control were identified and the department's current infection control measures were compared with these documents.

The recommendations made as a result of this project include establishing a health and safety committee and appointing an infection control officer. In addition, once the health and safety committee is established and the infection control officer appointed they should be charged with the responsibility of developing a written exposure control plan and to correct any other deficiencies that were found.

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INTRODUCTION

In October 1997 the Florence Township Fire Department responded to a motor vehicle accident to assist the emergency medical squad. During the incident two of our members assisted with the extrication of the driver from the vehicle. Two days after the incident, we were informed that the victim of the car accident was infected with the Human Immunodeficiency Virus (HIV).

While attempting to react to this incident, we realized that our current infection control measures were inadequate.

The purpose of this research project is to identify where the problems are with our current infection control measures and to identify what actions we need to take in order to eliminate these problems.

To accomplish this project both descriptive research and evaluative research was used to answer the following questions:

1. How do the Operational Officers of the Florence Township Fire Department feel about infection control?
2. What is the Florence Township Fire Department currently doing in regards to infection control?
3. What are the current regulations and/or standards that we need to consider regarding infection control for emergency responders?
4. What actions need to be taken by the Florence Township Fire Department in order to meet the current standards and/or regulations identified?

BACKGROUND AND SIGNIFICANCE

Waites (1994) stated that "the last two decades have produced an onslaught of new diseases, many of which we can do nothing about" (p.22). In addition, Ullman (1996) notes that "Emergency medical workers have a higher likelihood of exposure to possibly infectious agents than most other health care professionals" (p.142).

Realizing that the Florence Township Fire Department is not immune from these trends and believing that "a fire department should do whatever is possible to promote the health of its firefighters" (Pedrotti, 1989, p.26), the fire department had implemented some infection control measures.

In October 1997 the Florence Township Fire Department's infection control measures were put to the test when firefighters responded to a motor vehicle accident. During the incident, two firefighters were assigned to assist the local medical squad with extrication. Two days later members of the fire department learned that the victim of the car accident was infected with the Human Immunodeficiency Virus (HIV).

Although the department did have some infection control measures established at the time of the incident, in addition to requiring annual bloodborne pathogen training for its members, it was determined that the members failed to utilize universal precautions against exposure during the incident. In addition, the reports that were filed as a result of the incident were found to be inadequate.

The actions taken by the Florence Township Fire Department during this incident supported the belief of Adams (1996) who feels that "we continue to put ourselves at risk on the street by failing to follow the basic universal precautions against bloodborne pathogens" (p.16).

As a result of this incident it was clear that the Florence Township Fire Department needed to review current infection control measures, identify current standards and/or regulations, and to identify corrective actions that should be taken to improve infection control measures within the department.

This research paper relates to the problem solving, quality service, and legal aspects of fire protection sections of the Executive Development Course, Executive Fire Officer Program, at the National Fire Academy.

LITERATURE REVIEW

Establishment of an infection control program is recommended in both the 1995 edition of the National Fire Protection Association Standard 1581, Standard on Infection Control (NFPA 1581) and the Occupational Safety and Health Administration Standard 1910.130, Infection Control (OSHA 1910.130). Although a fire department may not have to comply with either of these two standards, from a moral standpoint a fire department needs to take appropriate steps to ensure that its firefighters are protected by an effective Infection Control Program (Loflin, 1994). On the other hand, according to West (1992), "many departments have been cited and fined by OSHA for failing to begin an infection-control program" (p. 84).

As Pedrotti (1989) points out, “firefighter health and safety has become an important issue since the 1980’s” (p.28). Also, “in the 1990’s to have your vehicle covered with blood is not a good idea: it is not as has been previously described a red badge of courage” (West, 1994, p. 28).

The occupational risks posed from bloodborne pathogens has been documented as a worsening problem in healthcare environments (Corser, 1998). Corser (1998) further states that “health care employees demonstrated HBV (Hepatitis B Virus) exposure susceptibility rates up to 10 times higher than the general population” (p. 246). “Each year about 8,700 health care workers are infected with HBV, and 200 die from their infection” (Mangan, 1995, p. 34). Further estimates indicate that about 75-110 of every 1000 workers who are frequently exposed to blood or other potentially infectious materials will be infected with HBV over the course of their working lifetime (Rekus, 1991). Finally, to show the seriousness of the problem, Costello (1990) found that although an effective vaccine against HBV was made available in 1982, the incidence of the disease still continued to increase. This was the first time in American history, according to the Center for Disease Control that the incidence of a disease has increased after a vaccine became available. As a result of this risk fire departments need to establish effective infection control programs that will help protect the firefighters.

In today’s environment it is vital to have an effective infection control program that, “involves more than just buying a 15-cent pair of rubber gloves” (Pedrotti, 1989, p. 26). As West (1991) explains “an effective, on-going infection-control program serves to

demonstrate concern for department members and may even assist with recruitment and retention within a department" (p.51).

But what about fire departments that feel that infection control programs are not needed? As Loflin (1993) indicates "even if a fire department does not provide EMS, there are still means of exposure for personnel, for example via burn victims" (p.43). After all, it is possible to become infected through a single exposure; therefore, opportunities for exposure must be prevented to the greatest degree possible (Rekus, 1991).

Given the nature of infectious diseases, it is critical for all fire departments to establish procedures that will help personnel recover benefits as a result of a work related exposure (Haugh, 1995). "Bloodborne pathogens are real dangers and employees may suffer needless pain and life threatening exposures that could have been prevented through awareness, prevention, and training" (Johnson, 1996, p. 56). Therefore, we should be operating under the philosophy that the firefighter's, EMT's, and paramedic's health and safety is as important as the patient's (Loflin, 1994). "An infection control program protects you, your family and the patients you treat" (West, 1992, p. 48).

In summary, it has been determined that infectious diseases, such as bloodborne pathogens, are a legitimate threat to our firefighters. Furthermore, we found that the Florence Township Fire Department has both a moral and a legal responsibility to establish and maintain an infection control program. In addition, due to the nature of our business, our members have more of a chance of being exposed to infectious diseases than ever before. Therefore, it is imperative that our department not only have an

infection control plan the meets the requirements of NFPA 1581 and OSHA 1910.130, but also one that will indeed protect our firefighters. After all, as Loflin (1993) states, "the better we prepare ourselves the better the end results will be" (p.44). We feel we owe that to our members.

PROCEDURES

DEFINITION OF TERMS

Acquired Immune Deficiency Syndrome (AIDS) – a communicable disease caused by HIV. (CDC)

Bloodborne Pathogen – Pathologic microorganisms that are present in human blood and that can cause disease in humans. (OSHA) Note: the term "blood" includes blood, blood components, and products made from human blood.

Board of Fire Commissioners – A five-member panel comprised of elected officials who are responsible to oversee the operations of the fire department.

CDC – Center for Disease Control

Commissioner – An official, elected by the registered voters of the municipality to serve on the Board of Fire Commissioners

Communicable Disease – A disease that can be transmitted from one person to another.

Exposure Incident – A specific eye, mouth, other mucous membrane, non-intact skin, or parenteral contact with blood, body fluids, or other potentially infectious materials. Or inhalation of airborne pathogens (NFPA)

Hepatitis B (HBV) ("Serum Hepatitis") - A viral form of hepatitis spread through blood contact, and also as a sexually transmitted disease. Hepatitis B is a significant risk for emergency care workers. Infection may result in death, chronic hepatitis, liver cancer, or cirrhosis of the liver. A vaccine to prevent spread of hepatitis is available. (CDC)

Human Immunodeficiency Virus (HIV) – The causative agent of AIDS

Infection Control Officer – The person or persons within the Fire Department who are responsible for managing the department infection control program and for coordinating efforts surrounding the investigation of an exposure. (NFPA)

NFPA – National Fire Protection Association

Occupational Exposure - reasonable anticipated skin, eye, mucus membrane, or parenteral contact with blood, blood fluids, or other potentially infectious materials that might result from the performance of a member's duties. (NFPA)

Operational Officers – Includes all the chiefs and captains of the Florence Township Fire Department

OSHA – Occupational Safety and Health Administration.

Universal Precautions – A system of infectious disease control which assumes that every direct contact with body fluids is infectious and requires every employee exposed to direct contact with body fluids to be protected as though such body fluids were HBV or HIV infected. Therefore, Universal Precautions are intended to prevent health-care workers from parenternal, mucus membrane, and nonintact skin exposures to bloodborne pathogens and should be used by emergency response personnel. (OSHA)

In the first part of the project, we used descriptive research to try to get a complete picture of (1) what the operational officers thought about infection control and (2) what the Florence Township Fire Department currently has in place regarding infection control. First, a survey instrument was developed that was to be completed by the ten operational officers within the department. The operational officers consisted of the Operations Chief, the three Station Commands, the three Captains, and the three Lieutenants. The survey included both "open-ended" and "closed-ended" questions.

While reviewing the surveys there were some concerns that we had to deal with. They included, (1) we had to assume that the surveys were being filled out honestly by the respondents, and (2) we were slightly limited because only 7 of the 10 surveys had been returned. This survey instrument was developed to determine how the current operational officers feel about infection control and if the officers feel that they are properly trained to handle an infection control exposure. We felt that it was important to begin by trying to determine how our operational officers felt about infection control because they are the ones who are responsible for enforcement. A copy of this survey and comments is included in Appendix A.

In addition to conducting a survey of the operational officers, the departmental policies and procedures were reviewed to determine what the department currently requires. The department training programs were also examined to see what training is currently being conducted concerning infection control. During this part of our research, we had to assume that the departmental polices and procedures that were in place were being followed. In addition, we also had to assume that competent instructors were

conducting the training and that the training objectives that were identified were also being met.

Once the departmental records had been reviewed, an extensive literature review of infection control was completed. A primary source of information was the Learning Resource Center (LRC) at the National Emergency Training Center (NETC). Other sources of information used during this project are listed in Appendix B. Although we were able to gather a large amount of information during this review, we did face some limitations because some of the documents that we wanted to look at were not available.

The second part of this project required evaluative research. During this part, we wanted to compare the standards and regulations that we identified during the literature review. Once we identified the standards and regulations regarding infection control, then we could identify our deficiencies and determine what actions we would need to take in order to meet them. This did present some problems because at this time we were assuming that the problems were with our current control measures and not with the enforcement of these control measures.

The major limitation that we found during this part of the project was inefficient reports that had been filed by the operation officers. We determined that proper documentation is a problem within the department but is beyond the scope of this project.

RESULTS

RESULTS QUESTION 1

An Infection Control Survey was developed to determine how the current operational officers felt about infectious control. Of the ten surveys that were given out, seven were completed and returned.

In response to question number one ("Do you feel that our department needs an infection control program?"), six of the seven officers stated that we do need to establish an infectious control program. One person did not answer this question.

In response to question number two ("Do you feel training on infection control is important?"), all seven respondents indicated that they thought training on infection control was important.

In response to question number three ("Do you think our members receive adequate training on infection control?"), only four of the seven respondents stated that they thought the current training was adequate. The remaining three feel that training on infection control needs to be improved.

In response to question number four ("Do you think training should be mandatory?"), all seven respondents indicated that infection control training should be made mandatory. In addition when asked how much time should be spent on infection control the time indicated by the respondents varied from 2-4 hours for firefighters and varied from 2 ½-4 hours for officers.

In response to question number five ("Do you feel that you are adequately prepared to handle a situation where either you or one of your firefighters is exposed to an infectious disease?"), six of the seven respondents stated that they felt that they were prepared to handle an infection control exposure. One person indicated that they did not think that they were prepared.

In response to question six ("Do you ever think about what would happen if you were exposed to an infectious disease?"), all seven respondents indicated that they have thought about being exposed to possible infectious materials.

Based on this survey we found that the officers, who had responded to the survey, all agreed that infection control training was important. Also, although the adequacy of the current training is in question, all of the officers felt that infection control training should be mandatory. However, the total hours of training that should be required varied among the officers. Finally we learned that all the respondents stated that they have thought about possibly being exposed to an infectious material.

RESULTS FOR QUESTION 2

While researching the department documents concerning infection control, we did find a section in the department's policy and procedures manual for infection control. However, when we tried to look up the section it was missing.

Next, we spoke with C. Lester Smith (personal interview, April 7, 1998) who is the secretary of the Board of Fire Commissioners for the Florence Township Fire District regarding this policy. Mr. Smith informed us that the department did make an attempt to

draft a policy to meet the Occupational Safety and Health Administration's requirements on infection control (OSHA 1910.130). Unfortunately, due to changes within the Board of Fire Commissioners, the policy was never completed.

Although an official policy was not completed, we did find that the department had a program for Hepatitis B vaccinations. The department contracts with the Community Nursing Services group in Mt. Holly, New Jersey. Before any member can start responding to calls they must either start their Hepatitis B vaccine series or sign the department Hepatitis B declination form (Appendix C).

In addition to the Hepatitis B vaccination program, the department also requires an annual training program on Bloodborne Pathogens. This training program was started in 1996 and requires every member to attend a one-hour class annually. The outline of this program is included in Appendix D.

Next we looked at the equipment that is available in relation to infection control. We found that the department does supply and stock rubber gloves, antiseptic hand cleaners, and red infection control bags. The operational officers are responsible to keep the apparatus stocked with this equipment.

Finally, we found that the department contracts with National Safety Clean in Kennett Square, Pennsylvania for disinfecting and cleaning of turnout gear. The department turnout gear is sent out on an as needed basis for repairs and cleaning. Again, it is the responsibility of the operational officers to make the appropriate notifications whenever turnout gear needs to be cleaned or repaired.

RESULTS FOR QUESTION 3

While researching the literature it was determined that the Florence Township Fire Department is required under the New Jersey's Public Employees Occupational Safety and Health Administration (PEOSHA) to meet the regulations set in OSHA 1910.130. In addition, other guidelines and regulations that need to be considered include the Center for Disease Control (CDC) guidelines on patient exposure protection and the Ryan White Comprehensive Aids Resources Emergency (CARE) Act of 1990, also known as the Ryan White Law. Finally, we will also need to consider the 1995 edition of the National Fire Protection Association Standard on Infection Control (NFPA 1581).

During this research it was found that NFPA 1581 was designed to meet all the OSHA requirements (Foley, 194). In addition, NFPA 1581 addresses fire service and emergency medical service (EMS) infection control from a different perspective as it applies to not only Bloodborne pathogens, but also to airborne and foodborne pathogens to protect both patients and emergency responders (Foley, 194).

In summery, as a result of this review we found that the Florence Township Fire Department is legally required to meet OSHA 1910.130 and the Ryan White Law at a minimum. In addition, the current 1995 edition of NFPA 1581not only meets the minimum regulations but expands to include other infectious control issues.

RESULTS FOR QUESTION 4

The three major documents that we found that we needed to consider were the Ryan White Act, OSHA 1910.130, and NFPA 1581. Therefore we did a comparison of each of these documents separately.

First, we looked at the Ryan White Act for comparison. The purpose of the Ryan White Act is to provide a process by which personnel who may treat and /or transport patients and may have been exposed to an infectious disease can be notified of the exposure (Federal Register, 1994). To meet the requirements of this act, the department must have procedures so that their employees can submit a request for exposure determination. In addition, the department must designate an infection control officer who will be responsible for the duties outlined in the Act.

At the present time our department does not meet either of these two requirements.

Next, we looked at OSHA 1910.130 for comparisons. The five major components of this document that we need to consider include; exposure control, methods of compliance, hepatitis B vaccination, communication of hazards, and record keeping.

Exposure Control - In order to meet the section we must have a written exposure control plan. At the present time our department does not meet this section because they do not have a written plan.

Methods of compliance – This section can be broken down into four areas: universal precautions, engineering controls, personal protective equipment, and house keeping. We found that the department did meet the section on universal precautions, engineering control, and personal protective equipment, but was deficient in house keeping. This deficiency was largely due to the lack of a written schedule for cleaning and failure to have established guidelines for proper decontamination.

Hepatitis B vaccination – In reviewing this section we found no deficiencies with the current program.

Communication of Hazards – The department meets most of the requirements for labeling/signs and for training. The only major deficiency was found in the area of training. During training the department should be reviewing their exposure control plan. At the present time this is not possible because the department does not have a written exposure control plan in place.

Finally, we looked at NFPA 1581for comparisons. For this comparison we again broke down the document into its program components; policy, training/education, infection control officer, health maintenance, exposure incidents, and fire department facilities.

Policy – since the Florence Township Fire Department does not have a written policy concerning infection control they do not meet the requirements of this section.

Training and education – The department did meet most of the requirements outlined in this section, but we did note two areas of deficiencies. First, we are not able

to review the exposure control plan because we do not have one established. Second, the current training program was specific to Bloodborne pathogens. The training curriculum would need to also include other diseases such as meningitis, hepatitis C, lice, and scabies in order to meet the requirements of this section.

Infection Control Officer – Although the department does have a Safety Officer in place, several deficiencies were noted. The establishment of an infection control officer or the expansion of duties of the current safety officer needs to be accomplished to meet this section. Duties that would need to be assigned to this individual includes: (1) maintaining communications among the fire department and other health care agencies; (2) insure notification, verification, treatment, and follow-up of members who have been exposed to an infectious disease; and (3) ensure that compliance procedures and engineering controls are established for the department facilities.

Health Maintenance – while reviewing this section we found that the department does meet several requirements. The department currently offers Hepatitis B vaccinations and also has written documentation for declination. In addition, all new members are sent for a physical so that they are certified for duty. Although not examined at this time we are assuming that the current departmental physical meets the medical requirements of NFPA 1582 (Medical Requirements for Fire Fighters 1997 edition). Also, at this time, all health records are maintained in the firefighters personnel file.

The deficiencies to the health maintenance section include; (1) immunizations for other diseases, (2) annual tuberculosis screening of members, and (3) establishment of a health database.

Exposure Incidents – The department does not have any established procedures for exposure incidents and did not meet any of the requirements under this section.

Fire Department Facilities – Currently the Fire Department has no established policies and no controls in place concerning fire department facilities.

DISCUSSION

As Loflin (1993) suggested, the best approach to infection control is to be proactive rather than reactive. Although it did take a real incident to spark this project, the goal of this project was to identify what the Florence Township Fire Department needs to do in order to make our infection control program effective.

The results of our research revealed that the Florence Township Fire Department has both a legal and moral obligation to establish an infection control program. Also, as suggested by Loflin (1993), "personnel providing emergency care must realize that the hazards are real" (p.42). Although we never want to think that anything bad could happen to us, infectious diseases are a real threat. Once we understand the problems we face in regards to infection control, we can begin to take precautions to protect our patients and ourselves.

"It has been estimated that the use of universal cautions can lead to a 40% decline in exposure to infectious agents (Carnillo, 1996 p.921). Therefore, these precautions should be used on every response. We must think before we act. As Ullman (1996) suggests, all body fluids should be treated as if they were infectious. Although this concept is basic, the fire service appears apprehensive to take simple precautions. Even West (1994) noted, "it is unfortunate that those simple precautions had to be mandated by federal law to get proper attention" (p. 28).

A major area that needs to be addressed is the establishment of an infection control officer. This position is critical for a successful infection control program and therefore should be filled by a person who has the desire and interest in the position. West (1993) stated, "Interest is key because this role is a 24 hour a day, 7 day a week job" (p.34).

Also, proper documentation and reporting procedures need to be addressed. The documentation of the exposure is, as Loflin (1993) indicates, one of the most important aspects of the whole process. Unfortunately, Hibberd (1995) estimated that up to 90% of all exposures are never reported. This can present a big problem if an individual discovers that they had become infected from an unreported exposure. As Haugh (1995) explains, there is usually very little problem showing that an injury occurred on the job but clear and convincing evidence will be needed to show that an infectious disease resulted from the job. Failure to properly report the exposure may result in medical coverage being denied. In addition to not receiving compensation, "The process of establishing whether or not one has contracted the disease on the job may invite intense

scrutiny into the employees personal life to determine what other possible exposures to diseases the employee might have had outside the workplace" (Haugh, 1995, p. 63).

Finally, training is another critical element in a successful infection control program. This is because how the firefighter reacts to a potential exposure situation seems to depend upon his/her training. Therefore, "training must cover all diseases that pose an occupational health risk to personnel" (West, 1992, p.50). During training firefighters need to become knowledgeable about infectious diseases and cleaning and disinfecting procedures (Coonan, 1998).

A policy that meets the requirements of the current standards and regulations is the first step, but it is not enough. All those effected by the program must also be convinced that the threat is real and there is a need for the adopted policy. This, as stated in the USFA Guide to Developing and Managing an Emergency Service Infection Control Program (1992) "must begin by selling the program" (p. 39). In addition, we should always encourage and support good judgement, as Johnson (1996) indicates, because it works.

RECOMMENDATION

It is recommended that the Florence Township Fire Department establish a standard policy on infection control.

To start, we need to first establish a health and safety committee. This committee should have the responsibility to (1) establish an infection control program and (2) monitor the program's effectiveness.

The health and safety committee should establish necessary goals and objectives, along with having an appropriate timetable for completion, in order to remove any deficiencies with our current infection control measures. Their first priority should be to develop a policy to meet, at a minimum, the requirements of OSHA 1910.130 and the Ryan White Act. A sample policy that we had received from the NJ Department of Health has been included in Appendix E.

Next, in order to meet the requirements of the Ryan White Act, we will need to appoint an infection control officer. The infection control office should become the single point of contact with the hospitals, in order to maintain confidentiality. Also, this person should be responsible, in conjunction with the health and safety committee, to monitor the effectiveness of the department's infection control program.

Once we have a health and safety committee established and have appointed an infection control officer, then we will need to develop a plan to meet the infection control requirements that are required by OSHA 1910.130. This will mean creating a written exposure control plan that includes exposure determination of employees with occupational exposure and a method of implementation. In addition, the committee needs to consider the other deficiencies that we have found.

Finally, after we have satisfied our legal obligation by meeting the requirements of the Ryan White Act and OSHA 1910.130, we should start working to meet the requirements of NFPA 1581.

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APPENDIX A

INFECTION CONTROL SURVEY AND RESULTS

Survey Letter

Dear Officer:

I am currently enrolled in the National Fire Academy's Executive Fire Officer Program. As part of that program I am conducting a research project on Infection Control. Therefore, I would like to ask for your assistance by taking a few minutes to complete and return the attached survey. Please answer all the questions as completely and truthfully as possible and return to me in the enclosed envelope.

Thank you for your time.

Sincerely,

Edward H. Kensler Jr.
Fire Administrator

Infection Control Survey

1. Do you feel that our department needs an infection control program? Yes No

Why or Why Not?

2. Do you feel training on infection control is important? Yes No

Why or Why Not?

3. Do you think our members receive adequate training on infection control? Yes No

Why or Why Not?

4. Should infection control training be mandatory? Yes No

Why or Why Not?

If yes how many hours of training, on infection control, should each member be required to take each year?_____ , each officer?_____

5. Do you feel that you are adequately prepared to handle a situation where either you or one of you firefighters is exposed to an infectious disease? Yes No

Why or Why Not?

6. Do you ever think about what would happen if you were exposed to an infectious disease? Yes No

If yes, what infectious diseases are you concerned about being exposed too?

Thank you for your time!

Infection Control Survey Results
7 respondents

1. Do you feel that our department needs an infection control program?	Yes -6	No - 0
2. Do you feel training on infection control is important?	Yes - 7	No - 0
3. Do you think our members receive adequate training on infection control?	Yes - 4	No - 3
4. Should infection control training be mandatory?	Yes -7	No - 0

How many hours for members – between 2 – 4

How many hours for officers – between 2 ½- 4

5. Do you feel that you are adequately prepared to handle a situation where either you or one of you firefighters is exposed to an infectious disease?	Yes - 6	No - 1
6. Do you ever think about what would happen if you were exposed to an infectious disease?	Yes - 7	No - 0

Infection Control Survey Results
Comments Made

1. Do you feel that our department needs an infection control program?

    - "To control infection disease transmission and educate"
    - "To prevent needless infection exposure to potentially harmful diseases and for liability Purposes"
    - "We deal with all kinds of diseases on almost any call we go on"
    - "To inform people on what to do if they come in contact with infectious diseases and how to prevent becoming infected"

2. Do you feel training on infection control is important?

    - "To prevent the spread of diseases"
    - "To prepare the firefighter"
    - "So that firefighters are made aware of the potential hazards"
    - "Members need to know how to prevent and control disease transmission"
    - "Keep personnel updated and reminded of its importance"

3. Do you think our members receive adequate training on infection control?

    - "We get the basics"
    - "I feel that plenty of people get signed off when doing bloodborne pathogen training"
    - "Once a year we have mandatory training"
    - "It depends on who gives it and what is presented"
    - "Although we do attempt with our bloodborne pathogen program, we need to further educate our members about other diseases"

4. Should infection control training be mandatory?

    - "It is that important"
    - "So that no one has an excuse why they got exposed. Over time, people tend to forget and get complacent"
    - "To prepare a firefighter for a situation involving infection control"

Infection Control Survey Results
Comments Made

5. Do you feel that you are adequately prepared to handle a situation where either you or one of you firefighters is exposed to an infectious disease?

    - "The video we watch tells us what to do"
    - "I have squad experience for these situations"
    - "Once a year we have an infection control class"
    - "It depends on the scenario"
    - "Because I constantly think about it"
    - "I have a working knowledge from my education"

6. What infectious diseases are you concerned about being exposed too?

    - "HIV when treating a victim with an open wound"
    - "ALL"
    - "HIV and anything that will affect my style of living"
    - "HIV and Hepatitis B"
    - "Any blood diseases"
    - "AIDS and any other infectious diseases"

APPENDIX B

SOURCES FOR INFECTION CONTROL INFORMATION

American Red Cross
Mt. Holly Chapter
Madison Avenue
Mt. Holly, NJ 08060

Burlington County Department of Health
15 Pioneer Blvd.
Westampton, NJ 08060

National Fire Protection Association
Batterymarch Park
Quincy, Massachusetts 02269

New Jersey Division of Fire Safety
South Broad Street
Trenton, NJ 08625

New Jersey Department of Health
John Fitch Plaza
Trenton, NJ 08625

New Jersey Department of Labor
John Fitch Plaza
Trenton, NJ 08625

US Department of Heath and Human Services
Public Health Service, Center for Disease Control
Atlanta, Georgia 30333

US Department of Labor
Occupational Health and Safety Administration
Office of Public Affairs, Room N-3637
200 Constitution Avenue, N.W.
Washington, D.C. 20210

United States Fire Administration
National Fire Academy
16825 South Seaton Avenue
Emmitsburg, Maryland 21727

APPENDIX C

HEPATITIS B DECLINATION FORM

HEPATITIS B VACCINE DECLINATION

THIS FORM IS TO BE SIGNED BY ANY EMPLOYEE WHO DECLINES TO ACCEPT HEPATITIS B VACCINE OR WHO CHOOSES TO RISK BEING EXPOSED BY RESPONDING TO EMERGENCY CALLS BEFORE BEING VACCINATED.

I understand that due to my occupational exposure to blood or other potentially infectious materials, I may be at risk of acquiring Hepatitis B Virus (HBV) infection. I have been given the opportunity to be vaccinated with Hepatitis B vaccination at this time. I understand that by declining this vaccine, I continue to be at risk of acquiring Hepatitis B, a serious disease. If, in the future, I continue to have occupational exposure to blood or other potentially infectious materials and I want to be vaccinated with Hepatitis B vaccine, I can receive the vaccination series at no charge to me.

Reason for declining: _____

_____

_____

_____

(Signature of employee)

Witness: _____

Date: _____

APPENDIX D

INFECTION CONTROL TRAINING OUTLINE

Annual Bloodborne Pathogens Training

I. Introduction
Registration
Welcome

- Introduction Video -

II. PEOSH BLOODBORNE PATHOGENS STANDARD

OH 1

A. The standard 29 CFR Part 1910.1030 occupational exposure to bloodborne pathogens.

On July 6, 1993, the Federal OSHA standard was adopted by the New Jersey Public Employees Occupational Safety & Health (PEOSH) Program to protect public employees in New Jersey.

B. Many workers risk on-the-job contact with blood and other body fluids. These materials may contain pathogens -organisms that can cause serious diseases of major concern.

OH 2

1. Hepatitis B is an infection of the liver caused by the Hepatitis B Virus.

OH 3

2. Human Immunodeficiency Virus (HIV).

OH 4

3. Acquired Immunodeficiency Syndrome (AIDS).

OH 5

C. Who is Covered - The standard covers all public employees who may have contact with blood or other potentially infectious materials because of their work.

Employees most likely covered include but are not limited to:

1. Healthcare workers
2. Emergency Medical Services
3. Firefighters
4. Police Officers.

III. INFECTIOUS MATERIALS AND EXPOSURE

OH 6

A. Potentially Infectious Materials

1. The standard defines other potentially infectious materials as:
    a) Semen and vaginal secretions
    b) Fluid from the brain, spine, lungs, and amniotic sac
    c) Fluid around joints, the heart, and the abdominal lining
    d) All body fluids that are visibly Contaminated with blood
    e) Any human tissue or organs other than the skin

OH 7

B. How are employees exposed

1. Exposures occur when employees do tasks that can cause blood or other potentially infectious materials to enter their bodies;
    a) cuts, cracks, or abrasions to the skin
    b) splashes or spraying into the eyes, mouth, or nose
    c) puncture wounds from contaminated sharps (needles, broken glass).

IV. EXPOSURE CONTROL PLAN – (NOT APPLICIABLE)

OH 8

A. Employee must prepare a written plan that includes

1. The job classification tasks and procedures in which employees have occupational exposure.

2. The schedule and methods for implementing the requirements of the standard.

3. Procedures for documenting the circumstances surrounding an employee's exposure.

B. The plan must be accessible to employees. It also must be updated at least annually or more often if work tasks or control methods change.

V. METHODS TO PREVENT EXPOSURE

OH 9

A. Universal Precautions

1. Handle all human blood or other potentially infectious materials as if they were contaminated.

B. Engineering Controls

1. These are methods that contain or remove the hazard, such as puncture-resistant containers for sharps, splashguards, or self-sheathing needles.

C. Work Practice Procedures

1. Immediately wash hands (and other parts of the body as needed) following any contact with blood or other potentially infectious materials.

2. Do not recap, break or bend by hand any needles.

3. Decontaminate all equipment that may have come in contact with infectious materials

D. Personal Protective Equipment (PPE)

1. Wear PPE when subject to exposure
   a) gloves
   b) face shield/goggles
   c) pocket mask/resuscitation
   d) gown/apron

2. PPF should be put in designated containers for cleaning, repair, or disposal if it becomes contaminated or damaged.

3. Employers must provide PPB free of charge.

E. Housekeeping requirements

1. Establish written procedures and schedules for regular cleaning of the work site and for disinfecting contaminated surfaces and materials.

2. Handle contaminated laundry as little as possible and wear gloves (and other protective equipment if necessary).

3. Follow state laws for handling and disposing of regulated waste.

F. Hepatitis B Vaccinations

1. Employers must offer free hepatitis B vaccinations to all employees who have anticipated exposure to blood or other infectious materials.

2. Vaccinations must be given ten working days after employees begin jobs that have potential for exposure.

3. Employees may decline the vaccination, but must sign a "decline" statement if they do so.

VI. Exposure Incident Procedures

A. Exposed Employees

1. Employers are required to offer free, confidential medical follow-up to all employees who receive an occupational exposure to blood or other potentially infectious materials.

2. These services must include:
    a) A written report of how the exposure occurred
    b) Testing the source person if possible
    c) Testing the exposed employee's blood if he/she consents
    d) Post-exposure treatment and counseling

OH 10

B. Record keeping

1. Confidential records about employee exposures, medical evaluation, and follow-up must be kept for the length of employment plus thirty years.

2. Records showing that employee training has occurred must be kept for three years

VII. LABELING

A. Biohazard Labeling

OH 11

1. The warning label must be fluorescent orange or orange-red, contain the biohazard symbol and the word "BIOHAZARD" in contrasting color, and be attached to each object by string, wire, adhesive, or other method to prevent loss or unintentional removal of the label.

APPENDIX E

SAMPLE INFECTION CONTROL POLICY

(Name of Company)

(Address)

EXPOSURE CONTROL PLAN

PURPOSE

The purpose of this Exposure Control Plan is to protect the employees of _____ _____ from occupational exposure to bloodborne pathogens. The term "employees" will refer to all career and adult volunteer officers and firefighters, and Emergency Medical Technicians.

POLICY STATEMENT

1. The Bloodborne Pathogens Standard will be administered through _____

_____

2. All employees of will observe "Universal Precautions" in performing their job duties. This means that the blood and body fluids of all people must be considered potentially infectious. Human body fluids that are considered potentially infectious are: semen, vaginal secretions, cerebrospinal fluid, synovial fluid, pleural fluid, pericardial fluid, peritoneal fluid, amniotic fluid, saliva in dental procedures, and any body fluid that is visibly contaminated with blood. Other potentially infectious materials include any unfixed tissue or organ, other than intact skin, from a human. Appropriate precautions must be taken to reduce the risk of exposure to these potentially infectious agents to the employees while they are performing their duties.

3 All employees who perform duties that place them at risk of exposure to blood or body fluids are considered "occupationally exposed" and will be included in this Exposure Control Plan.

All occupationally exposed employees:

A Will be trained in the appropriate procedures that will minimize their risk of occupational exposure.

B. Will be offered the Hepatitis B vaccination at no cost to them.

C. Are to be provided with the necessary equipment and protective barriers to minimize their risk of exposure to blood and body fluids.

D. Are required to report all exposure incidents to their supervisor and Exposure Control Plan Coordinator.

E. Will receive medical follow-up and treatment as necessary following any exposure incident to blood and body fluids at no cost to them.

EXPOSURE DETERMINATION

The following employees have duties that routinely place them at occupational risk of exposure to blood and body fluids while performing their duties:

A. All paid Firefighters
B. All adult volunteer firefighters.
C. E.M.T.'s

Junior volunteers are not exposed to blood/body fluids as part of their routine duties. Therefore, all junior volunteers will be trained in this standard, but will not be covered by its provisions until becoming an adult volunteer at age 18.

Exposure to blood and body fluids may occur during, but is not limited to, the performance of the following procedures:

A. Administering first aid where contact with blood is expected.

B. Care of burn victims

C. Care of wounds, including dressing changes and application of medications.

D. Handling or disposal of items soiled with blood or body fluids

E. Cleaning surfaces or items soiled with blood or body fluids.

F. Disposal of medical waste.

SAFE WORK PRACTICES AND ENGINEERING CONTROLS

Safe work practices and engineering controls will be utilized to eliminate or minimize exposure to employees of. If there is still a risk of occupational exposure after these precautions are in place, employees are expected to utilize personal protective equipment which will be provided to them at no cost by the_____.

1. HANDWASHING

Hands should be washed with an approved antimicrobial soap and water and dried with a paper towel. Hands are to be washed:

A. After handling any item or surface that is contaminated with blood or body fluids.

B. After contact with mucous membranes or non-intact skin.

C. After removal of gloves.

D. After completion of tasks that may lead to occupational exposure, before leaving the work area.

If handwashing sinks are not readily available, antiseptic moist hand towelettes may be used. These will be available in all vehicles for use by employees at risk of occupational exposure while away from sanitary facilities. Hands are to be washed with soap and running water as soon as it is feasible.

In addition to handwashing, any other potentially contaminated skin area must be washed immediately, or as soon as feasible, with soap and water If employees sustain an exposure to their skin or mucous membranes, those areas shall be washed or flushed with water, as appropriate, as soon as possible after contact

2. WORK AREA RESTRICTIONS

Eating, drinking, smoking[1] applying cosmetics or handling of contact lenses is prohibited in work areas where there is a risk of exposure to blood and body fluids. Food and beverages are not to be stored or placed in refrigerators, freezers, shelves, cabinets, or on countertops where blood or other potentially infectious materials are present.

3. WORK PRACTICES

All procedures are to be performed in such a manner as to reduce the risk of splashing or spraying blood or body fluids.

4. MAINTENANCE OF EQUIPMENT

Equipment should be regularly inspected for contamination with blood and body fluids, and disinfected when it becomes contaminated. All equipment must be decontaminated prior to sending out for repair. If it is impossible to decontaminate before shipment, the equipment must be labeled as contaminated to alert those who will handle it.

PERSONAL PROTECTIVE EQUIPMENT

Employees at risk of occupational exposure to blood and body fluids are required to wear appropriate protective barriers during the performance of their duties. This Personal Protective Equipment will be provided by the_____ at no cost to the employee. This equipment will be considered protective only if it does not permit blood or other potentially infectious materials to pass through or reach the employee's clothing, skin, eyes, mouth or other mucous membranes under normal conditions of use and for the duration of time the equipment will be used

Personal protective equipment for specific tasks will be chosen based on the anticipated risk of exposure to potentially infectious material white completing that task. Employees are to be trained in the proper selection, indications, use and disposal of these protective barriers.

All personal protective equipment will be cleaned, laundered and disposed of by at no cost to the employee. All repairs and replacements will also be made by _____ at no cost to the employee.

1. AVAILABLE EOUIPMENT

The following personal protective equipment will be available to employees who are at risk of occupational exposure during the performance of their duties:

A. Disposable latex or vinyl gloves

B. Disposable face mask with eye shields

C. Disposable, impervious coveralls

D. Shoe covers

E. Resuscitation devices

F. Turnout gear

2. GLOVES

Disposable latex or vinyl gloves must be worn when there is a risk that there will be hand contact with blood or body fluids, when handling items soiled with blood or body fluids, or when touching mucous membranes or non-intact skin.

Disposable gloves must be changed when they become contaminated, torn or punctured and hands must be washed when the gloves are removed. Gloves must also be changed after each contact, even if they are not soiled.

Employees who are allergic to the gloves provided should report such allergies to the Exposure Control Plan Coordinator. Alternative gloves will be provided. Unsoiled disposable gloves are to be discarded after use. Under no circumstances should disposable gloves be washed and reused.

Examples of procedures where gloves must be worn may include but are not limited to:

A. Wound care

B. Cleaning and processing of soiled equipment

C. Cleaning of soiled environmental surfaces

D. Whenever there is a reasonable expectation that there will be risk of exposure to blood or body fluids.

3. PROTECTIVE CLOTHING

COVERALLS

A disposable coverall is to be worn during any procedure where there is a possibility that an employee[1]s uniform or clothing, or any exposed skin areas may become contaminated with blood or body fluids. A cover gown that becomes grossly soiled with blood or body fluids should be removed as soon as possible and discarded in plastic bags designated for medical waste.

Examples of procedures where coveralls/aprons must be worn may include but are not limited to:

A. Providing First Aid at an accident scene where there is a great deal of exposure to blood or body fluids.

B. When attending the birth of a baby

C. When dealing with a combative child or adult in the presence of blood or body fluids.

D When cleaning grossly contaminated environmental surfaces.

E. Whenever there is a reasonable expectation that there will be risk of exposure to a great deal of blood or body fluids.

4. TURNOUTGEAR

Turnout gear will be considered personal protective equipment since it is fluid resistant. Coveralls should be used whenever possible, but turnout gear may be substituted when appropriate.

All contaminated turnout gear will be laundered by the_____ according to manufacturer's instructions.

5. SHOE COVERS

Shoe covers are to be worn when there is a possibility that any part of an employee's shoes, including the soles, may become contaminated with blood or body fluids, Shoe covers that become grossly soiled with blood or body fluids should be removed as soon as possible and discarded in plastic bags designated for medical waste.

Examples of procedures where shoe covers must be worn may include but are not limited to:

A. Providing First Aid at an accident scene where there is a great deal of blood or body fluids.

B. When attending the birth of a baby.

C. Whenever there is a reasonable expectation that there will be risk of exposure to a great deal of blood or body fluids.

6. FACE MASKS/EYE SHIELDS

Face and eye protection is required when employees are in situations where there is a reasonable likelihood that there will be splashing or spraying of blood or body fluids.

Face protection must always be worn in conjunction with protective eye shields. For example, goggles must be worn with a facemask, or a full-face shield may be worn.

Examples of procedures where face and eye protection must be worn may include but are not limited to:

A. Providing First Aid at an accident scene where there are injuries to arterial vessels, causing spurting blood.

B. When attending the birth of a baby.

C. Whenever there is a reasonable expectation that there will be risk of exposure to splashing or spraying of blood or body fluids.

7. RESUSCITATION DEVICES

To eliminate the need for mouth-to-mouth resuscitation, ventilation devices will be make available to all employees trained in Cardiopulmonary Resuscitation.

8. UNIFORMS

Uniforms are **NOT** considered protective barriers. Therefore, appropriate coveralls will be provided and must be used if the employee reasonably anticipates that there is the need for such protection. If the employee inadvertently contaminates their uniform with blood or body fluids, they must be decontaminated before they may be taken home Contaminated uniforms should be placed in leakproof plastic bags labeled with a Biohazard label. They will be collected and laundered by the_____ services.

If equipment needs to be commercially cleaned, the _____will use the following services:

NAME:
ADDRESS:
PHONE:
CONTACT PERSON:

LOCATION OF PERSONAL PROTECTIVE EOUIPMENT

A. Personal Protective equipment will be kept in the following location:

_____

B. In addition to these locations, portable kits will be placed on all emergency vehicles/fire trucks. These kits will contain the following:

	Four (4) pairs of latex gloves
	Two (2) disposable coveralls
	Two (2) set of face/eye shields
May	Two (2) set of shoe covers
Vary	One (1) resuscitation device
	Two large and two small red plastic bags for medical waste
	Four (4) moist antiseptic hand towelettes
	Four (4) biohazard labels

C. It is the responsibility of the employee to verify the availability and usefulness of their kit before starting their work shift All kits will be kept readily accessible in the vehicle the employee is using during their work shift.

HOUSEKEEPING

A. All work areas are to be maintained in a clean and sanitary condition.

B. All equipment, environmental surfaces, such as floors and walls, and working surfaces shall be cleaned and decontaminated after any contact with blood or body fluids with an EPA-approved, hospital-grade disinfectant-detergent for environmental surfaces.

C. All environmental and work surfaces are to be cleaned:

1. As soon as possible after they are contaminated or following spills of blood or body fluids

2. At the end of the work shift if the surface has become contaminated since the
last cleaning

D. All environmental and work surfaces are to be routinely cleaned at the end of each day.

E. Gloves are to be worn during all cleaning and decontamination procedures,

F. Cleaning items such as disposable cloths are to be discarded when they become heavily soiled. If they become contaminated with blood or body fluids, they should be discarded in the plastic lined trashcans designated for medical waste.

G Broken glassware should never be picked up with bare hands. All broken glassware or sharps should be cleaned up with a mechanical means, such as brush and dustpan. The brush and dustpan should then be decontaminated.

MEDICAL WASTE

A. Certain items must always be considered medical waste and must be handled as potentially infectious. Medical waste may include, but is not limited to:

1. Items and equipment soiled with blood or body fluids, including soiled personal equipment.

B All medical waste is to be stored in closed and protected containers that can hold the contents without leakage during handling, storage and transport. These containers will be red in color or labeled with the Biohazard sign.

C. All medical waste will be sent off-site for proper treatment and disposal by an authorized medical waste transporter.

D. All medical waste that must be transported back to the main storage facility for pickup and disposal will be secured in red plastic bags designated for medical waste as soon as possible.

TRASH CANS

A. All trashcans located in areas where there is a chance of contamination will be lined with plastic.

B. Trash cans, which are to be used for the collection of medical waste, should be red in color or lined with a red plastic bag, and have a Biohazard sticker affixed to them.

C. Al trash cans, even those lined with plastic$_1$ shall be cleaned and decontaminated weekly and as soon as possible after visible contamination.

LABELS AND SIGNS

A Biohazard label or red color-coding will be used to identify all items and equipment contaminated with blood or body fluids. These may include, but are not limited to:

A. Medical waste containers

B. Containers where contaminated equipment is kept

GUIDELINES FOR REPROCESSING REUSABLE MEDICAL EQUIPMENT

A. Gloves are to be worn when handling contaminated medical equipment.

B. Sterilization

C. High level Disinfecting

No equipment needs sterilization since all items that enter sterile body tissue are disposable.

D. Intermediate Level Disinfecting:

Surfaces that come in contact with intact skin, such as blood pressure cuffs and stethoscopes, and may have been contaminated with blood or body fluids require intermediate level disinfecting

Intermediate disinfecting requires the use of a tuberculocidal hospital-grade germicidal agent or a 1:100 solution of household bleach.

E. Low Level Disinfecting:

Contaminated work surfaces, environmental surfaces and medical items that will only touch intact skin are to be disinfected with an EPA-approved disinfectant or disinfectant germicidal agent.

F. Routine Cleaning:

Routine cleaning of non-contaminated environmental surfaces at the end of the day may be done with detergent and water or a hospital-grade disinfectant and water.

G. Cleaning of Blood and Body Fluid Spills:

Blood and body fluid spills are to be cleaned with an EPA-approved disinfectant-germicide that is tuberculocidal or a 1:100 dilution of bleach. Gloves must be worn when cleaning all spills of potentially infectious materials. Protective coverings such as aprons or shoe coverings should be used if the area to be cleaned is grossly contaminated. Disposable cloths are to be used to clean blood or body fluid spills All sailed paraphernalia should be discarded in a container designated for medical waste.

HEPATITIS B VACCINE

A. All employees who have been identified as being at risk for occupational exposure to blood or body fluids are to be offered the Hepatitis B Vaccine, at no cost to them, within 10 working days of employment and after the employee has had appropriate training The vaccination will be provided during convenient hours at a reasonable time and place. All Hepatitis B vaccinations will be performed according to recommendations of the U.S. Center for Disease Control Immunization Practices Advisory Committee.

B. Employees who have previously received the complete series of Hepatitis B Vaccine will provide the dates of immunization to the Exposure Control Plan Coordinator, and will be considered fully immunized.

C. Employees who decline the Hepatitis B vaccine will sign a waiver that uses the wording stipulated in the OSHA standard.

D. Employees who initially decline the Hepatitis B vaccine but who later wish to be immunized may then have the vaccine provided at no cost to them.

E. A licensed physician will be available to evaluate all employees at risk for occupational exposure with questions about their eligibility to receive the Hepatitis B vaccine. _____ will provide this service for the employees.

F. Confidential medical records will be kept of this evaluation, indicating any medical contraindication for receiving the vaccine. A copy of this written opinion will be made available to the employee upon request. A copy will also be provided to the Exposure Control Plan Coordinator.

G. A record will be kept of all occupationally exposed employees who are eligible to receive the Hepatitis B vaccine. This record will include:
   1. Name of the employee
   2. Date offered the vaccine (training dates)
   3. Dates of administration of each vaccination in the series

H. A list of all occupationally exposed employees who decline vaccination will also be kept, along with a signed and dated waiver form indicating their declination.

POST-EXPOSURE EVALUATION AND MEDICAL FOLLOW-UP

An exposure incident is any situation in which blood or body fluids comes in contact with the eye, mouth, mucous membranes or non-intact skin, or where there is parenteral contamination through a needle stick or cut, while an occupationally exposed employee is performing job-related duties.

Following an exposure incident, specific procedures will be as follows:

A. The incident will immediately be reported by the employee to the Supervisor.

B. The incident will be reported as soon as possible to (Coordinator)

C. A written report of the incident will be prepared by the Exposure Control Plan Coordinator, who will maintain a permanent record of every exposure incident

D. The exposure incident record will include:
   1. Employee's name
   2. Employee's Social Security Number
   3. Circumstances of the exposure
   4. Route of exposure
   5. If source individual's HIV and HSV serologic testing was obtained.
   6. Hepatitis S vaccination status of the employee
   7. An evaluation of the exposure
   8. Corrective action taken to prevent recurrence

E. The source of the incident is to be identified if possible, but the name is to be kept confidential If permission is given, the source individual's blood is to be drawn for HIV and HBV serologic testing The results of these are to be provided to the employee.

F Following every exposure incident, a confidential medical evaluation and follow-up is to be provided at no cost to the employee by _____.

This evaluation will include:

1. An evaluation of the risk of the exposure incident
2. Baseline and follow-up testing of the employee for HIV and HBV

NOTE: THE EMPLOYEE HAS THE RIGHT TO REFUSE BASELINE TESTING FOR HIV. THE EMPLOYEE MAY CONSENT TO HAVING BLOOD DRAWN FOR HIV TESTING, BUT NOT GIVE CONSENT FOR THE ACTUAL TESTING. THIS BLOOD WILL BE RETAINED FOR 90 DAYS. DURING THAT TIME, THE EMPLOYEE MAY DECIDE TO HAVE THE BLOOD TESTED. THIS WILL BE DONE AS SOON AS POSSIBLE. IF THE BLOOD IS NOT TESTED WITHIN 90 DAYS, IT WILL BE DISCARDED.

3. Counseling
4. Post-exposure prophylaxis, when indicated
5. Hepatitis B vaccine will be offered.
6. Follow-up of any reported illness that results from the exposure incident

G. The employee will be provided with the following information:

1. Results of the medical evaluation
2. Results of the employee's serologic testing
3. Results of the source individual's serologic testing, if obtained
4. Illness that may result from the exposure incident
5. Need to report such illnesses for further evaluation and treatment

H. All medical findings and diagnoses following an exposure incident will be kept in the employee's tile and will be held strictly confidential. These files will be kept for the duration of employment plus 30 years.

I. The employee will be given appropriate counseling concerning precautions to take during the period after the exposure incident.

J. The employer will be provided with (PhysiciansName)_____ written opinion and evaluation within 15 days of the evaluation.

EMPLOYEE TRAINING

All current employees at risk for occupational exposure to blood or body fluids will be trained within 30 days of the implementation of this standard, All new employees will be trained within 10 days of their initial employment and before beginning their work assignments where occupational exposure may occur. Training will be repeated annually and more frequently when needed. Training is to be provided at reasonable times and locations, and at no cost to the employee Training will include the following:

1. A copy of the regulatory text of the standard.

2. A general overview of the epidemiology, modes of transmission[1] and symptoms of bloodborne diseases

3. An explanation of the employer's Exposure Control Plan and the location of the plan. A written copy will be provided to any employee requesting one.

4. An explanation of the appropriate methods for recognizing task and activities that may result in exposure to infectious materials.

5. An explanation of the use and limitations or methods that will reduce or prevent occupational exposure, including engineering controls, work practices and personal protective equipment.

6. Personal protective equipment available and its proper selection, use and handling

7. Information on the Hepatitis B Vaccination, including its efficacy, safety, method of administration, immunization schedules, possible side effects, contraindications and benefits. Employees will be informed that the vaccinations will be offered free of charge to them.
8. An explanation of the signs and color-coding that will be used to identify biohazards.

9. An opportunity for interactive questions and answers with the trainers. Training will be conducted by (Name of Health Worker or Organization)

_____

RECORDKEEPING

MEDICAL RECORDS

A. Confidential medical records will be kept for all employees at risk for occupational exposure. These records will include:

1. Employee's name
2. Employee's Social Security Number
3. Hepatitis B Vaccination status, including dates of vaccination or signed declination form
4. All relevant information on any exposure incidents

B. These medical records will be kept at the _____

C. Medical records will be kept for the duration of employment plus 30 years

TRAINING RECORDS

A. Training records will be kept on all employees at risk for occupational exposure. These records will include:

1. Dates of training session
2. Summary of content taught at training session
3. Names and qualifications of trainers
4. Names and job titles of all employees that attended

B. Training records are to be kept for 3 years from the date of the training session.

This Exposure Control Plan will be reviewed and updated annually or more frequently, if necessary.