Aerosol Transmissible Disease Safety Training

EPIC Management, L.P. / Beaver Medical Group, L.P.

Training Objectives:

- Introduction to Aerosol Transmissible Diseases (ATD)
- Examples of ATD / Signs / Symptoms
- Modes of Transmission
- Risk Identification
- Engineering and Work Practice Controls
- Decontamination and Disinfectants
- Personal Protective Equipment (PPE)
- TB Surveillance
- Respirator Protection
- Vaccines Available to Staff
- Exposure Incident and Medical Follow-up
- Surge Plan

Introduction to Aerosol Transmissible Diseases

Aerosol Transmissible Diseases (ATD) are diseases that are transmitted through dissemination of airborne droplet nuclei, such as small particle aerosols or dust particles containing the disease agent. Airborne Precautions or Droplet Precautions or both are required for Aerosol Transmissible Diseases. There are a wide variety of diseases that are considered ATD including, Influenza, Tuberculosis (TB), Pertussis (Whooping Cough), Meningitis, and Pneumonia.

California Code of Regulations, Title 8, Section 5199, Aerosol Transmissible Diseases can be found at the following website: http://www.dir.ca.gov/title8/5199.html

The Standard puts forth guidelines that employers must follow to protect employees from aerosol transmissible diseases. These guidelines include safe work practices, engineering controls, training requirements, record keeping requirements, an exposure control plan and etc.

EPIC / Beaver's Exposure Control Plan can be found on the EPIC Intranet page under the Policy and Procedures tab, Safety / Organized Plans of Operation, Aerosol Transmissible Diseases Exposure Control Plan.

The Exposure Control Plan provides guidelines for protecting all EPIC / Beaver employees from aerosol transmissible diseases. EPIC / Beaver recommends that employees become familiar with the Exposure Control Plan and participate in improving the plan, which will in turn help make EPIC / Beaver a safer work environment.

Examples of ATD

- Anthrax
- Influenza
- Chickenpox
- Measles
- SARS
- Smallpox
- Tuberculosis (TB)
- Diphtheria
- Meningitis
- Mumps
- Pertussis
- Pneumonia
- Rubella
- Strep

Signs and Symptoms

Potential TB can have the following symptoms:

- Cough lasting more than 3 weeks
- Unexplained weight loss
- Night sweats
- Fever
- Chronic fatigue / malaise
- Coughing up blood

Other ATD can have the following symptoms:

- Coughing spasms
- Fever, headache, tiredness, poor appetite
- Chills, runny nose, unexplained rash
- Stiff neck, swollen salivary glands
- Muscle aches

Patients must be screened by nursing staff and providers to determine if the patient requires an isolation room. Staff must become familiar with the signs and symptoms to ensure patients are isolated when it is required. Further evaluation will be setup with a provider to determine treatment for the patient following the screening process. Identifying these signs and symptoms will allow you and staff members to take the appropriate precautions while working with these patients. It will also help you to protect other patients and family members who may become exposed to this type of patient.

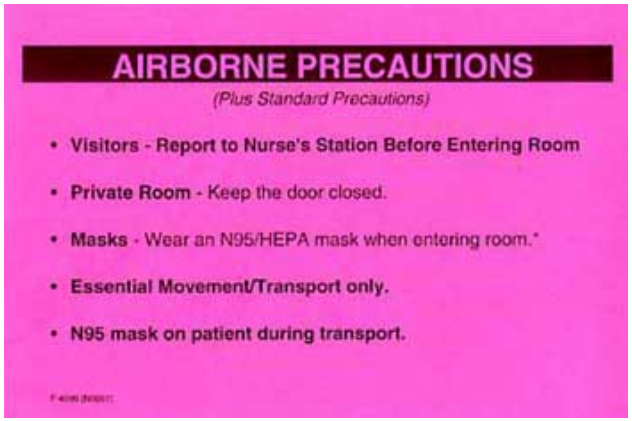
Modes of Transmission

Aerosol Transmissible Diseases can be transmitted in a variety of ways. Since the disease is transmitted through dissemination of airborne droplet nuclei, small particle aerosols, or on dust particles containing the disease, it makes the presence of the disease more likely. The following are common modes of transmission:

- An uncovered cough or sneeze that produces droplets (highest risk 3 – 6 feet).
- Close contact with an ill person (Example: drinking from the same beverage)
- Aerosols that are present in the air and inhaled by someone else
- Touching surfaces / objects that contain the disease (Example: door knobs, shopping carts)

In most situations it can be hard to identify how a person contracts these types of diseases. Probably the most difficult would be influenza because the disease can be very wide spread. In other situations it might be more clear. For example if a patient with TB coughs in your face and you contract TB, you can be reasonably certain that it came from that patient. Whereas it can be much more difficult to determine how you got the flu. Taking the appropriate precautions while working with a patient that has an ATD is important to your own health and safety.

Risk Identification



It is important for staff to recognize patients that have or could have an ATD. It is equally important that staff identify tasks and situations where there is a chance of exposure. By identifying tasks and situations that put you at risk, you will be able to take proper precautions that will protect you. The following are examples of tasks and situations that pose a risk:

- Conducting bronchoscopy or induced sputum procedures
- Completing chest x-rays on suspected or confirmed TB patients
- Entering a room with a patient that has or is suspected of having an ATD
- Examining or being in close proximity to an ill patient
- Cleaning or decontaminating a room or area
- Handling objects or items that are considered contaminated

Engineering and Work Practice Controls

Source, engineering, and work practice control measures can be taken to help in protecting yourself and others from potential exposures. The following measures can decrease the likelihood of exposure:

Source Control Measures:

- Provide disposable tissues
- Provide hand sanitizers
- Provide masks to patients
- Posting Respiratory Hygiene / Cough Etiquette Practices
- Patient education materials
- Well / Sick waiting rooms

Engineering / Work Practice Controls:

- Effective communication between facilities and staff
- Hand washing
- Personal Protective Equipment (PPE)
- Using isolation rooms
- Decontaminating rooms prior to use of another patient
- HEPA filters
- Infection control procedures
- TB Screening procedures
- Mark rooms as unavailable if contaminated
- Use of N95 respirators when needed

Decontamination / Disinfectants

Using proper disinfectants to decontaminate rooms and areas that are considered contaminated is essential to stopping the spread of diseases. When a room has been occupied by a patient who has or is suspected of having an ATD, you must not use the room again until it has been disinfected. If a room is considered contaminated it must be marked as such to ensure no one else uses the room until it is safe to do so. Effective communication within your department will help protect everyone.

While decontaminating a room or area make sure that you use proper personal protective equipment, which includes gloves and a N95 respirator. Also, make sure that you follow the proper procedures for disinfecting the room or area. This will allow you to disinfect the room or area for the specific disease the patient had or is suspected of having. If you would like more information on this topic please access our Infection Control Policy or contact your supervisor.

Personal Protective Equipment (PPE)

Personal Protective Equipment (PPE) is the vital barrier that employees must wear to protect themselves against a known hazard. A variety of PPE is provided to all employees that have a risk of exposure to various hazards. PPE must be inspected, maintained and decontaminated to protect you. Remember that PPE is required when you are working around hazards. **Some examples of situations include, but are not limited to:**

- During bronchoscopy or induced sputum procedures
- Completing chest x-rays on confirmed or suspected TB patients
- Entering an isolation room with a suspected or confirmed ATD patient
- While decontaminating a room or area
- Examining or working closely with a suspected or confirmed ATD patient

Examples of PPE Include:

- Gloves
- Gown
- N95 respirator
- Goggles / Face Shield
- Resuscitation devices

Respirator Protection

The use of a respirator is vital for your safety. N95 respirators are supplied in each department to help protect all employees from ATD. Employees must wear an N95 when entering a room with a suspected or known ATD patient or when assisting a provider in a procedure that produces aerosols or droplets (bronchoscopy or induced sputum procedures). If you have any questions on other situations that might require the use of an N95 please contact your supervisor.

Respirators must properly fit your face to be considered fully protective. Fit testing will be completed annually to ensure each employee is properly fit. Please keep in mind that you can only use a respirator with one patient before it is considered contaminated. For example, if you enter a room with a patient that has TB, once you are done with that patient you must dispose of the respirator. Respirators should not be used in another situation after it has been considered contaminated. Ensure that all respirators are stored in the proper areas for easy access. Follow proper donning and doffing procedures while using a respirator. Also, ensure that you complete a user seal check before using the respirator.

If your respirator is torn or damaged in anyway please make sure that you get a new one. Also, if you believe you need a different size please contact your supervisor for a fit test. Respirators can save you from an exposure incident, so make sure that you wear one when it is appropriate.

TB Surveillance

The TB surveillance program screens all employees to ensure that no one has contracted the disease. The screening takes place during the following time periods:

- Initially when each employee is hired
- Annually thereafter
- If an exposure to TB occurs

Employees who test positive are scheduled for a chest x-ray at our occupational clinic for clearance. The employees who are on the chest x-ray list because they have tested positive in the past, have an allergic reaction to PPD, had BCG vaccine, or other reasons for a positive skin test complete an annual TB questionnaire that screens them for symptoms. If the employee does not have any symptoms, no further action is required. If the employee has symptoms they are scheduled for a chest x-ray at our occupational clinic for clearance.

If an employee has been exposed to a patient with TB (an exposure event), that employee will be sent to the occupational clinic for follow-up. To protect your health and safety report all exposure incidents to a supervisor immediately. Early detection of the disease is vital for your health as well as the health of others.

Vaccines

Vaccines are an effective tool to prevent the spread of disease. It is important to protect yourself by receiving the proper vaccinations. All employees are offered the following vaccines as a precautionary measure due to the nature of employment:

- Tetanus, Diphtheria, and Acellular Pertussis (Tdap)
- Measles, Mumps, and Rubella (MMR)
- Chickenpox (Varivax)
- Influenza (Offered Annually)

Receiving these vaccinations can help protect you from contracting these diseases. The vaccines are not 100% effective, but research has shown that the vaccines dramatically reduce the number of cases in the United States in people that have developed the proper immunities.

All vaccines are completely voluntary, no one is required to receive a vaccine. Employees are offered the vaccines within 10 days of employment at no cost to them. If an employee chooses not to receive the vaccine, but decides at a later date that he/she would like to receive the vaccine they may still do so with no charge.

If you wish to receive any of the vaccines please feel free to contact your supervisor or the Safety Manager at extension 2183.

Exposure Incident / Follow-up

If you are involved in an exposure event to an ATD, please report the exposure immediately to a supervisor. It is vital for your health and safety as well as the health and safety of others to report the exposure immediately. EPIC / Beaver will conduct an analysis of the exposure scenario to determine which employees had significant exposures. These employees will be sent to the occupational clinic for further evaluation and follow-up. EPIC / Beaver will provide all applicable information to the treating physician to ensure proper care can be provided to the exposed employee. The treating physician will direct the care of the employee to ensure the employee is properly cared for and to determine if it is safe for the employee to return to work.

It is also important to identify the patient that the employee was exposed to. This will allow us to follow-up with the patient to determine exactly what he/she may have. Then this information can be passed along to the physician who is treating the employee. In some cases a disease may only be suspected, but it will be a tremendous help to determine if it is confirmed that the patient has the disease. For example if a patient presents to the facility coughing up blood and an employee is exposed to this patient, it could be a sign of TB. It is important to determine if the patient actually has TB because that will directly effect the care the employee might need to receive.

Questions ???

•That concludes your aerosol transmissible diseases safety training

• If you have any questions please contact your supervisor or the Director of Risk Management & Safety at (909) 799-1818 ext. 43518

• Please complete the Annual Safety Training Test

• All completed tests must be returned to your supervisor

THE END

Bloodborne Pathogens Safety Training

EPIC Management, L.P. / Beaver Medical Group, L.P.

Training Objectives:

- Introduction to Bloodborne Pathogens
- Bloodborne Diseases
- Modes of Transmission
- Risk Identification
- Safety Measures
- Decontamination and Disposal
- Personal Protective Equipment (PPE)
- Hepatitis B Vaccination
- Emergency Situations
- Exposure Incident
- Post-Exposure Evaluation
- Signs and Labels

Introduction to Bloodborne Pathogens

Bloodborne pathogens are pathogenic microorganisms that are present in human blood and other bodily fluids that can cause disease in humans. There are many different bloodborne pathogens, but the three that we are most concerned with are Hepatitis B (HBV), Hepatitis C (HCV) and the Human Immunodeficiency Virus (HIV).

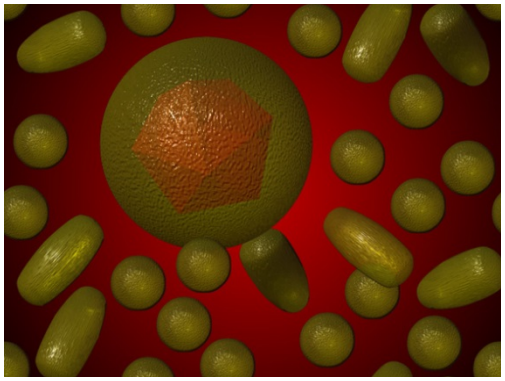
California Code of Regulations, Title 8, Section 5193, Bloodborne Pathogens can be found at the following website: http://www.dir.ca.gov/title8/5193.html

The Standard puts forth guidelines that employers must follow to protect employees from bloodborne pathogens. These guidelines include safe work practices, engineering controls, training requirements, record keeping requirements, an exposure control plan and etc.

EPIC / Beaver's Exposure Control Plan can be found on the EPIC Intranet page under the Policy and Procedures tab, Safety / Organized Plans of Operation, Bloodborne Pathogens and Exposure Control Plan.

The Exposure Control Plan provides guidelines for protecting all EPIC / Beaver employees from bloodborne pathogens. EPIC / Beaver recommends that employees become familiar with the Exposure Control Plan and participate in improving the plan, which will in turn help make EPIC / Beaver a safer work environment.

Hepatitis B (HBV)



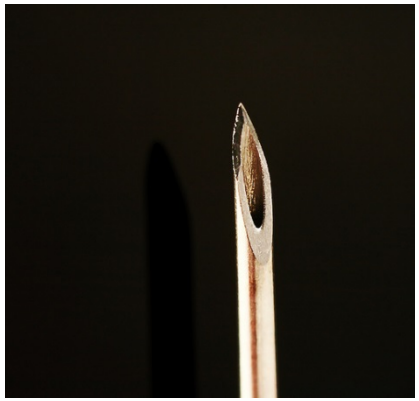
Hepatitis B is a virus that infects the liver. Initially it causes inflammation of the liver, but it can lead to more serious conditions such as cirrhosis and liver cancer. An estimated 1.25 million persons in the United States have chronic HBV infection. Rates are highest among adults, particularly males aged 25–44 years. In the United States, chronic HBV infection results in an estimated 5,000 deaths per year. The risk for chronic infection varies according to the age at infection, but approximately 90% of adults recover completely from HBV infection and do not become chronically infected.

HBV can survive outside the body at least 7 days and still be capable of causing infection, which makes it a very durable and more easily transmitted virus. There is no cure for Hepatitis B, but the Hepatitis B vaccine is available to all employees. No medication is available for acute conditions, but there are several antiviral medications available for chronic conditions.

Symptoms of Hepatitis B include: Fever, fatigue, loss of appetite, nausea, vomiting, abdominal pain, dark urine, clay-colored bowel movements, joint pain and jaundice. About 50% of people who are infected may not show any signs or symptoms of the disease for a long time.

Hepatitis C (HCV)

Hepatitis C is a viral infection of the liver. Usually HCV progresses slowly, but it can lead to cirrhosis and liver cancer. An estimated 3 million people in the United States have chronic HCV infection. Chronic infection results in an estimated 10,000 deaths per year. The risk for chronic infection varies according to the age at infection, but approximately 85% of adults will become chronically infected. Chronic HCV infection is the leading indication for liver transplants in the United States.



Hepatitis C is not transmitted as easily as Hepatitis B, but there is no vaccine available to vaccinate a person against HCV. There is also no cure for the disease, but there are antiviral medications available to help treat infected patients.

Symptoms of Hepatitis C include: Fever, fatigue, loss of appetite, nausea, vomiting, abdominal pain, dark urine, clay-colored bowel movements, joint pain and jaundice. About 75% of people who are infected do not show any symptoms. Some people may not show symptoms for 30 years, but the virus is slowly deteriorating the liver.

Human Immunodeficiency Virus (HIV)

The Human Immunodeficiency Virus (HIV) is the virus that causes Acquired Immune Deficiency Syndrome (AIDS). HIV attacks the body's immune system, which weakens it so it cannot fight other deadly diseases. It may be many years before AIDS actually develops. An estimated 900,000 people in the United States are infected with HIV. Over 18,000 people die of AIDS in the United States each year.

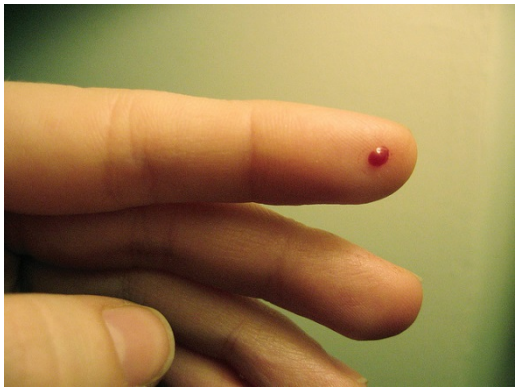
The HIV virus is very fragile, and it will not survive outside the human body for very long. There is no cure or vaccine available for HIV, but there are medications available to people who have become infected. HIV is a primary concern to employees providing first aid or medical care during situations involving fresh blood or bodily fluids.

Symptoms of HIV include: Fever, weakness, sore throat, nausea, headaches, diarrhea, white coating on the tongue, weight loss and swollen lymph glands. Many people who are infected with HIV do not have any symptoms at all for 10 years or more.

Modes of Transmission

Bloodborne pathogens can be transmitted through contact with infected human blood and other potentially infectious material (OPIM). The virus can enter your body in a variety of ways. The modes of transmission for HBV, HCV and HIV include:

- Sex with an infected partner
- Sharing needles, syringes and other equipment during injection drug use
- Birth to an infected mother
- Contact with blood or open sores of an infected person
- Needlesticks or sharp instrument exposures
- Sharing items such as razors or toothbrushes with an infected person



OPIM includes:

- Semen
- Vaginal secretions
- Cerebrospinal fluid
- Synovial fluid
- Pleural fluid
- Peritoneal fluid
- Amniotic fluid
- Saliva (dental)
- Other body fluids w/blood

Modes of Transmission (Cont.)

Occupational exposure can occur during a variety of tasks because infected blood or body fluids can enter your body through open sores, cuts, abrasions, acne and other damaged or broken skin. Bloodborne pathogens can also be transmitted through the mucous membranes of the eyes, nose and mouth.

Examples of occupational exposures include:

- Needlesticks from used needles
- Cuts from a contaminated scalpel or other blade
- Exposure to the eyes from not wearing appropriate Personal Protective Equipment (PPE)
- Exposure to other broken or damaged skin while working with patients
- Other punctures or cuts from equipment or devices that were used on a patient

Risk Identification

Identifying and recognizing tasks and other activities that may involve exposure to blood or OPIM is vital for your safety. The following tasks present an increased risk of exposure:

- Completing a blood draw for a patient
- Administering medications and other injections using needles
- Disposing of contaminated needles, scalpels, dressings and etc.
- Cleaning a room after a procedure
- Assisting providers with procedures
- Handling specimens containing blood or OPIM
- Suturing patients
- Handling biohazardous waste
- Cleaning spills involving blood or OPIM

There are many other situations where you may be at risk of exposure to bloodborne pathogens. It is best to always use Standard Precautions while working with patients. Always be aware of situations that may put you at risk in your department and do not be afraid to ask questions.

Safety Measures

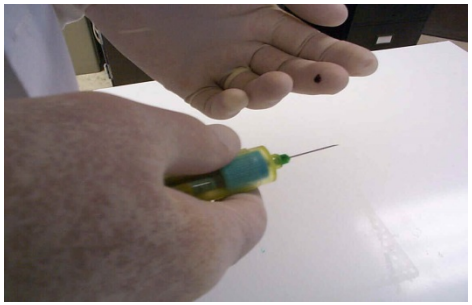
Safety measures including engineering, administrative or work practice controls can help to prevent or reduce exposures to blood or OPIM.

Standard Precautions must always be used while working at any EPIC / Beaver facility. Standard Precaution means treating all blood or OPIM as infected regardless of the perceived status of the source patient.

Hand washing is one of the most important and easiest practices to prevent transmission of bloodborne pathogens. Hands or other exposed skin must be washed thoroughly as soon as possible following an exposure incident. Hands must also be washed after glove or other PPE removal.

Never eat, drink, smoke, apply cosmetics or contact lenses in areas where there is a reasonable likelihood of exposure to blood or OPIM. Food and drinks must be stored in a separate area / refrigerator from other potentially infectious materials.

Engineering controls include needles and scalpels with safety mechanisms, the use of barriers and proper PPE. All EPIC staff must use needles with safety mechanisms, and remember to never recap a contaminated needle! To learn more please see EPIC / Beaver’s Exposure Control Plan.



Needlestick Prevention

Handling needles and other sharps properly is the key to preventing exposures to bloodborne pathogens. Please keep the following in mind while handling sharps:

- Never take your eye off the needle
- Always pay close attention to your surroundings while handling sharps
- Properly activate the safety mechanism on the needle immediately
- Dispose of contaminated sharps immediately in a properly labeled sharps container
- Never place a contaminated needle on a bed, desk, tray or in the regular trash
- Always replace full sharps containers and never overfill them (Black dotted line means full)
- Never attempt to recap a contaminated needle
- Do not use a needle unless it is equipped with a safety mechanism
- If you are not familiar with a needle or other sharp, ask questions before using it
- Use tongs or forceps to handle suture needles
- Never hand a contaminated sharp to another employee or accept a contaminated sharp

Decontamination and Disposal

Decontaminating equipment and areas ensures the safety of patients and employees. Please follow all policies and procedures related to decontaminating equipment and areas. Reusable equipment must be decontaminated after it is used on a patient and must never be used on another patient unless it has been properly decontaminated. Blood and OPIM that is present in rooms or nursing areas must be cleaned using appropriate disinfectants. Spill kits are available in each area for cleaning spills involving blood or OPIM. Ensure that you know how to use your spill kit and keep it maintained. Any questions regarding decontamination should be directed to your supervisor.

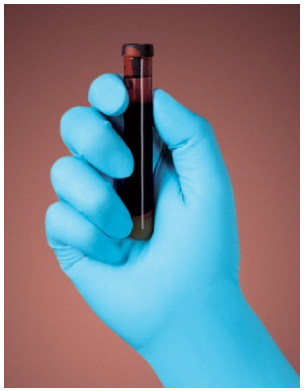
Biohazardous waste must be disposed of properly to protect employees and housekeeping. All sharps including needles and scalpels must be disposed of in an appropriately labeled sharps container. Never overfill a sharps container! Sharps containers are considered full when they reach the black dotted line on the outside of the container. Sharps containers that are full must be changed immediately, properly secured and taken to the appropriate biohazard storage room and placed in the red barrel for disposal. Sharps should never be disposed of in the regular trash. Biohazardous waste must be disposed of in properly labeled containers or red biohazard bags. Biohazardous waste must be disposed of in a rigid container with a red biohazard bag during the work shift. The red bags must be taken to the appropriate biohazard storage room when they become full or at the end of the work shift and placed in the red barrel for disposal. Any questions regarding disposal of biohazardous waste should be directed to your supervisor.

Personal Protective Equipment (PPE)

Personal Protective Equipment (PPE) is the vital barrier that employees must wear to protect themselves against a known hazard. A variety of PPE is provided to all employees that have a risk of exposure to various hazards. PPE must be inspected, maintained and decontaminated to protect you. Remember that PPE is required when you are working around hazards.

Some examples include, but are not limited to:

- Drawing blood
- Handling specimens
- Assisting in procedures
- Cleaning areas
- Handling blood or OPIM
- Handling biohazard trash



Examples of PPE include:

- Gloves
- Gowns
- Goggles / Face shield
- Resuscitation devices

Hepatitis B Vaccination

Hepatitis B vaccine is a three shot series that will help prevent you from contracting the disease. The Hepatitis B vaccine is offered to all employees at EPIC/Beaver at no charge to the employees, due to the nature of their employment. The vaccine has been shown in research to be approximately 90% successful in developing the proper immunities. There is no guarantee that the injections will completely prevent you from the potential of contracting Hepatitis B, but if the series is completed it does greatly reduce the risk of contracting the disease.

In 1985 about 12,000 health care workers were infected with Hepatitis B while at work, which was before the Hepatitis B vaccination was available. In 1995, after the vaccination was made available, about 800 health care workers were infected with Hepatitis B while at work. Completing the three shot series is very important in the prevention of this disease.

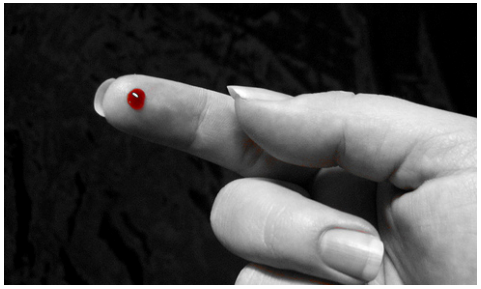
If you would like to start the series or you need to complete the series please contact your supervisor.

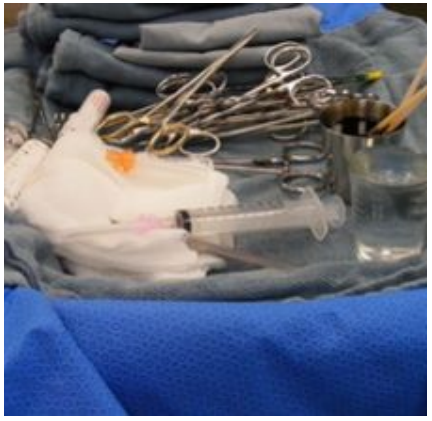
Exposure Incident

Exposure incidents are tough situations for employees. Some employees feel embarrassed, scared and confused after an incident occurs. It is important for you to remain calm if you have been exposed to a patient's blood or OPIM. Please keep the following steps in mind if you are ever exposed:

1. Wash the infected area immediately
2. If your eyes were exposed, flush with water at the eye wash station for 15 minutes
3. Report the incident to a supervisor
4. Identify the source patient
5. If possible, do not let the patient leave

It is vital for your safety to report the incident to a supervisor immediately. Identifying the source patient and testing the patient's blood is a critical step in this process. To ensure the patient can be tested immediately you must report the incident to a supervisor. A post exposure evaluation will be set up at our occupational clinic once the exposure incident has been reported. **Do not delay this process!!! Report all incidents immediately!!!**





Post-Exposure Evaluation

After an exposure incident has occurred it is important for the exposed employee to be evaluated at our occupational clinic. Examples of exposure incidents include; needlesticks, contact with blood or OPIM in your mucous membranes like your eyes, contact with blood or OPIM in broken skin and a cut or puncture with a contaminated instrument.

Employees receive a confidential evaluation by a physician at our occupational clinic to ensure that the employee receives proper medical attention. Some treatment needs to begin right away, so it is crucial for you to report the incident immediately. Once the source patient's results are received they will be shared with the treating physician to better direct the care of the employee.

An exposure incident does not mean that you will automatically become infected. A large enough amount of the live virus must enter your blood stream and overcome your bodies natural defenses for you to become infected. To give you a better idea of the chances of contracting one of the following diseases after an exposure incident please see the statistics below:

Hepatitis B: 6 – 30 % (If you have not been vaccinated)

Hepatitis C: 1.8% **HIV: 0.3% or 1 in 300**

Signs and Labels

The biohazard sign is an important identification label that helps employees and others distinguish biohazardous waste. You will see this sign in temporary storage areas inside or outside your facility. These areas are designated as biohazard storage areas and must be identified and locked.

Biohazard bags, sharps containers and storage barrels must be labeled with the appropriate biohazard symbol. Ensure that all biohazard waste is handled properly in the appropriate containers.

Refrigerators that contain biohazardous materials must be labeled appropriately. Remember that no food or drink is to be stored in a biohazard refrigerator. Refrigerators that are designated for food or drink storage must be labeled as such.

Learn to recognize the areas in your facility that are designated as biohazard storage areas and know how to properly dispose of biohazardous waste. If you have any questions please contact your supervisor to discuss the specifics of your facility.

Questions ???

- That concludes your bloodborne pathogens safety training
- If you have any questions please contact your supervisor or the Director of Risk Management & Safety at (909) 799-1818 ext. 43518
- Please complete the Annual Safety Training Test
- All completed tests must be returned to your supervisor

THE END

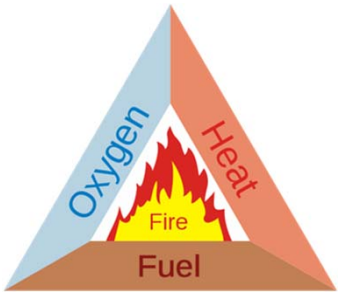
Fire / Earthquake Safety Training

EPIC Management, L.P. / Beaver Medical Group, L.P.

Fire Safety Objectives:

- Fire Prevention
- Fire Drills
- RACE
- Evacuation Plans
- Fire Alarms / Extinguishers
- Types of Fires / Extinguishers
- PASS

Fire Prevention



Fire develops from a mixture of three components: Fuel, Oxygen and Heat. Fire prevention means making sure that these three components do NOT get together. The best way to prevent fires is to ensure that items are stored and disposed of properly. It is vital for your safety and the safety of our patients to prevent fires.

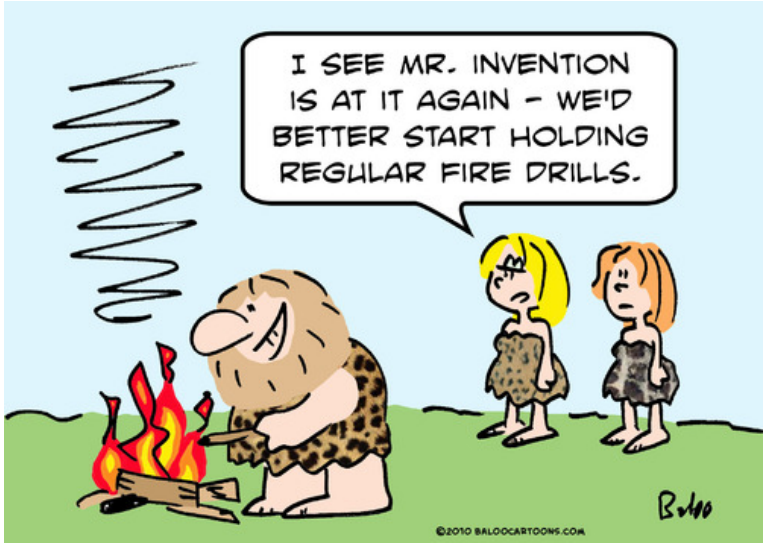
Please use the following tips to prevent fires at your location:

- Use proper housekeeping techniques to ensure your area is clean
- Store combustible materials away from heat and machines
- Use your MSDS when handling / storing substances to learn the precautions
- Keep oxygen cylinders away from flammable and combustible materials
- Ensure equipment is off when not in use or at the end of the day (example: Space heaters)
- Only smoke where you are permitted to smoke
- Do not overload outlets, circuits or motors
- Be sure that equipment does not spark or get hot enough to ignite
- Ensure that outlets, cords and equipment are in proper working order

Fire Drills

We all hope that we will never be involved in a fire, but everyone should be prepared. Fire drills are an excellent way to help locations prepare for an actual fire. Each facility is expected to hold quarterly fire drills, which will help everyone to prepare. Please participate in the drills and take them seriously. The drills give employees the opportunity to test their knowledge of responsibilities such as,

- Notifying the operator or calling out the fire code
- Locating the nearest fire alarm
- Locating the nearest fire extinguisher
- Directing others
- Blocking off the elevator
- Locating the nearest safe exit
- Evacuating through the safest exit
- Once evacuated, meeting at the staging area and
- Accounting for everyone



RACE

Rescue

Alarm

Contain

Extinguish / Evacuate

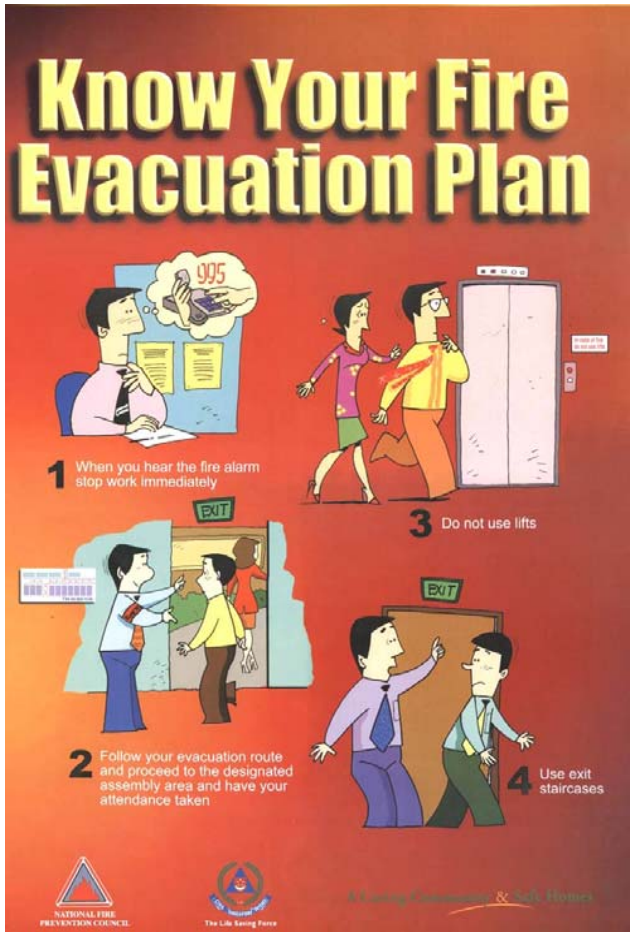
1. Rescue patients, staff and visitors from the area
2. Activate the fire alarm or call out the fire code
3. Contain the fire by closing windows and doors
4. Extinguish small fires, otherwise evacuate

It is very important to stay calm, but react quickly because staying calm will allow you to think and react properly. Start the evacuation process immediately and take advantage of the extra time before the fire spreads. By remembering this acronym you will always know how to react during a fire.

Evacuation Plans

It is important for you to become familiar with the locations that you work at. Evacuations can be difficult if people panic or are not familiar with the building. Keep the following tips in mind before and during evacuations:

- Keep evacuation routes clear and do not allow clutter
- Never prop open a fire door, fire doors are meant to stay closed to prevent fires from spreading
- Know multiple exits
- Know the location of fire extinguishers
- Know the location of fire alarms
- Be prepared and know how to react different situations
- Stay calm, do not panic and do not run
- Assist patients / visitors by directing them to safe exits
- Use the stairways, do not use elevators
- Once the area is evacuated, close doors to prevent the fire from spreading to other parts of the building



Fire Alarms / Extinguishers

You should know where the fire alarms and fire extinguishers are located in your facility. By knowing where these are located you will be able to react quickly. Time is a huge factor in a fire. If you activate the alarm quickly you will notify everyone else in the facility, which will allow them to react and evacuate. If you are able to use the fire extinguisher to extinguish a small fire you will prevent the fire from spreading, which can save lives and property damage.

If the facility does not have a fire alarm make sure that you notify everyone by calling out the fire code. The fire code is “CODE RED” and you would also want to let everyone know where the fire is located.

If you work in a facility that has other departments or businesses in the same facility make sure that you notify them as well. It is also a good idea to notify other facilities or houses that are in close proximity to the facility that is on fire. This will allow them to take action if needed.

Each facility has at least one fire extinguisher, so you should know where it is located and how to operate it.

Types of Fires / Extinguishers

There are 3 main types of fires that we are concerned with in the healthcare industry. (Please see the description to the right.)

There are also specific fire extinguishers that can be used on each type of fire. Fire extinguishers are identified by the type of fire they can extinguish:

- "A" extinguisher: can be used on Class A fires
- "B" extinguisher: can be used on Class B fires
- "C" extinguisher: can be used on Class C fires
- Combination extinguishers such as a "BC" extinguisher may be used on Class B and C fires.
- Combination extinguishers such as an "ABC" extinguisher may be used on all 3 types of fires

Class A: *Ordinary combustibles such as wood, cloth, paper, rubber, and many plastics.*

Class B: *Flammable liquids such as gasoline, oil, grease, tar, oil-based paint, lacquer, and flammable gas.*

Class C: *Energized electrical equipment including wiring, fuse boxes, circuit breakers, machinery, and appliances.*

The majority of fire extinguishers in our facilities are "ABC" extinguishers, but you should always make sure that you have the correct fire extinguisher for the type of fire you are attempting to extinguish. You should know which types of extinguishers you have in your facility.

PASS

Fire extinguishers are very simple to use. Simply remember the acronym PASS:

Pull

Aim

Squeeze

Sweep

1. Pull the pin near the handles of the extinguisher
2. Aim the nozzle towards the base of the fire
3. Squeeze the handles together to activate
4. Sweep back and forth to extinguish the fire completely

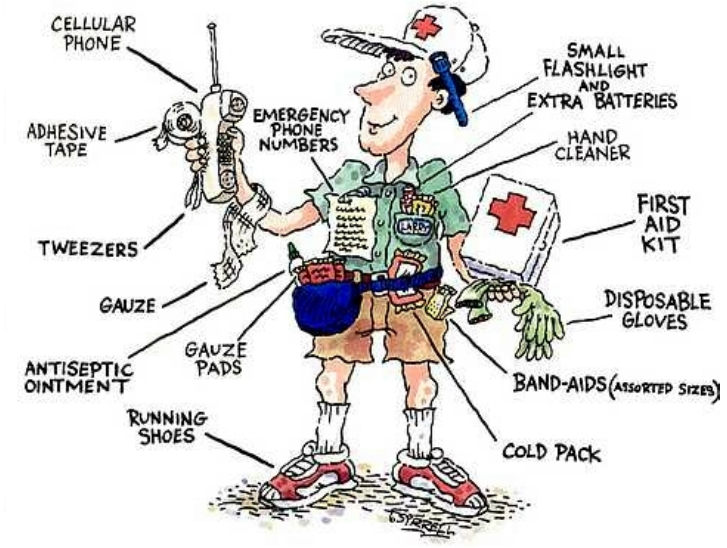
By reacting quickly to a small fire with a fire extinguisher you will be able to extinguish it before it turns into a large fire that could threaten patients, staff, visitors and property. Know where your fire extinguishers are located and remember the acronym PASS while using the extinguisher.

Earthquake Safety Objectives:

- Earthquake Preparedness
- Hazards
- During an Earthquake
- After an Earthquake

Earthquake Preparedness

Are you prepared for an earthquake? Being prepared is the most important part of Earthquake Safety. People who are prepared will have the items that they need and respond appropriately. Here are some tips that will help you be prepared:



1. Prepare a first aid / disaster kit
2. Keep a change of clothes in your vehicle
3. Keep a pair of running shoes in your vehicle (especially those who wear high heels)
4. Have an out-of-state contact person if possible
5. Keep extra food, water, supplies, medications and etc. at home and at work (recommended amount is at least 1 – 2 weeks worth)
6. Develop a personal disaster plan that you and your family can follow
7. For more preparedness information check out www.shakeout.org

Hazards

There are many hazards that you should be aware of during and after an earthquake. Hazards can be inside or outside the facility, but either way you should know what they are and be aware of them to help you remain safe during and after an earthquake. Here is a list of common hazards:

Inside the Facility

- Avoid windows / exterior walls
- Stay clear of items hanging on walls
- Avoid heavy cabinets, equipment and other items that could fall on you
- Watch out for sharps and broken glass
- Stay clear of hazardous materials and spills
- Be alert for fires, gas leaks, compressed gases and injuries

Outside the Facility

- Avoid the exterior walls of buildings
- Watch out for items that are attached to buildings like, signs, awnings, decks and etc.
- Stay clear of parking garages
- Avoid being on or under bridges and overpasses
- Stay clear of power lines, trees and vehicles
- Be alert for fires, gas leaks, down power lines and injuries

* One of the most dangerous places to be during an earthquake is near the outside of a building.

During an Earthquake

Indoors: Drop, cover and hold on. Drop to the floor, take cover under a sturdy desk or table, and hold on to it firmly. Be prepared to move with it until the shaking stops. If you are not near a desk or table, drop to the floor against the interior wall and protect your head and neck with your arms. Avoid exterior walls, windows, hanging objects, mirrors, tall furniture, large appliances and kitchen cabinets with heavy objects or glass. Do not use elevators and do not go outside!

Outdoors: Move to a clear area if you can safely do so; avoid power lines, trees, signs, buildings, vehicles and other hazards. Stay outside!

Driving: Pull over to the side of the road, stop and set the parking brake. Avoid overpasses, bridges, power lines, signs and other hazards. Stay inside the vehicle until the shaking is over. If a power line falls on the car, stay inside until a trained person removes the wire.

Near the shore: Drop, cover and hold on until the shaking stops. Estimate how long the shaking lasts. If severe shaking lasts 20 seconds or more, immediately evacuate to high ground as a tsunami might have been generated from the earthquake. Move inland 2 miles or to land that is at least 100 feet above sea level immediately. Do not wait for officials to issue a warning. Walk quickly, rather than drive, to avoid traffic, debris and other hazards.

After an Earthquake

Remain calm and beware of hazards in your area

- Check others for injuries and be ready to assist
- Check for damage at your facility
- Be alert for fires, gas leaks, broken glass, fallen items, spills, down power lines and etc.
- Alert others to hazards and direct responding personnel
- Follow your evacuation plans as needed
- Aftershocks may cause additional damage so be ready to drop, cover and hold on

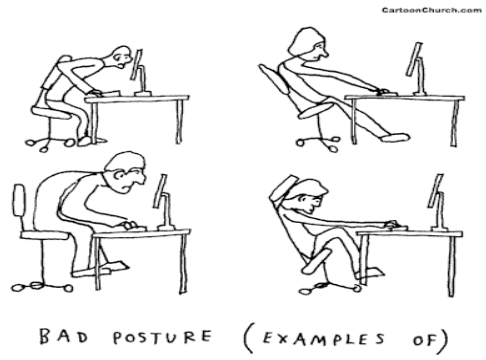
Strong earthquakes can cause many hazards, so you must stay calm and alert to your surroundings. The better prepared you are for a disaster like an earthquake, the better you will be able to help yourself and others during this difficult time. Ensure that you participate in the annual earthquake drill to help prepare your department / facility. Discuss proper procedures, hazards, potential issues, safe areas and how you would react and respond. By being prepared and remembering the tips from this training you will be ready for an earthquake.

Questions ???

That concludes your annual fire / earthquake safety training

- If you have any questions please contact your supervisor or the Director of Risk Management & Safety at (909) 799-1818 ext. 43518
- Please complete the Annual Safety Training Test
- All completed tests must be returned to your supervisor

THE END



General Clinic / Office Safety Training

EPIC Management, L.P. / Beaver Medical Group, L.P.

"It's the latest innovation in office safety.
When your computer crashes, an air bag is activated
so you won't bang your head in frustration."

Training Objectives

- Slips / Trips / Falls
- Ergonomics
- Ergonomic Evaluations
- Safe Lifting
- Hazardous Communications
- Electrical Safety
- Workplace Violence
- Reporting Hazards
- Reporting Work Related Injury / Illness

Slips / Trips / Falls

Slips, trips and falls are a common cause of work related injuries. Many times employees are in a hurry or not paying complete attention when accidents of this nature occur. It is important for everyone in the workplace to pay close attention and try to eliminate hazards around the clinic / office such as:

- Do not leave file drawers open.
- Clean up any spills that are on the floor.
- Do not set boxes or other materials in busy walkways.
- Clean up ice and water that falls on the break room floors.
- Pay close attention while carrying items.
- Do not walk through the landscaping or other areas with trip hazards.
- Texting and walking is a bad idea.
- Maintain a clean and organized working environment.
- Even though it is rare, watch out for ice on those cold mornings.
- Watch out for wet sidewalks and walkways from the sprinklers.

Ergonomics

It is important for employees to have a workstation that is properly setup for a number of reasons. Reason number one is very obvious, if you are setup properly you are less likely to experience a work injury. Also, employees who use proper ergonomics are more productive, comfortable, and in many cases in a better mood. Please use the information provided on this slide and the following slide to ensure that your workstation is ergonomically correct.

Chair

1. Sit up straight. Ears, shoulders, and hips in vertical alignment.
2. The arch of your back should be supported by a the chair or pillow.
3. Feet flat on the floor or a footrest should be used.
4. If the chair has armrests make sure that they are adjusted in a way that does not allow the shoulders to be raised.
5. Legs bent at the knee at 90 degrees. Where the waist and back meet also at 90 degrees.

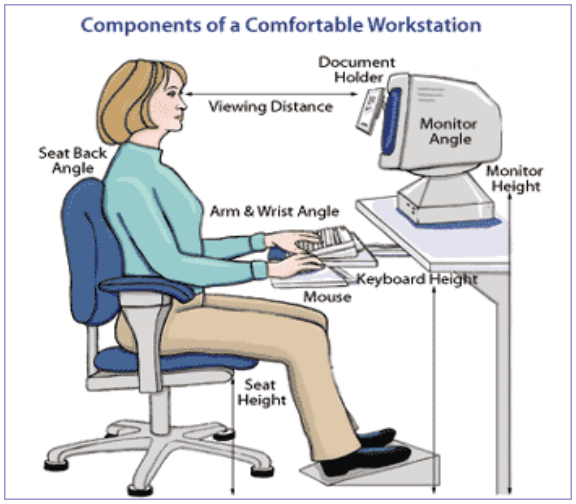
Keyboard

1. Shoulders in a neutral position (not raised).
2. Arms near the side of the body with the forearms parallel to the floor.
3. Elbows bent at 90 degrees.
4. Wrist in a neutral position (not bent).
5. Keep the keyboard flat on the desk and NOT on an angle.
6. Keep the mouse right next to the keyboard and on the same level.
7. Avoid reaching for the mouse and keyboard. Keep both close so the arms do not have to be extended.

Ergonomics (Cont.)

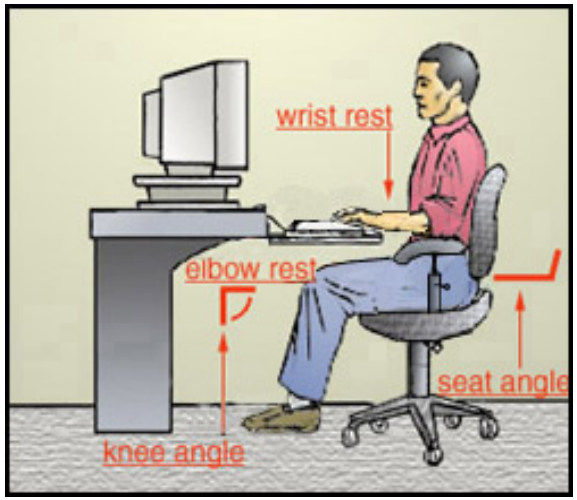
Monitor

1. Keep the keyboard and monitor directly in front of you.
2. Monitor screen approx. 20 – 26 inches away from you.
3. Top of the monitor slightly below eye level. (Neck in a neutral position)
4. If needed use a document holder at the same height and distance as the monitor.



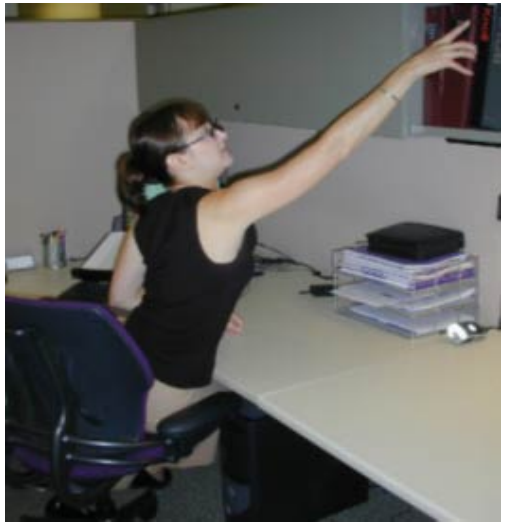
Other Items

1. Keep the phone, document, binders, and etc. within easy reaching distance.
2. Use a headset if you are required to use the phone frequently. (Do NOT hold the phone with your shoulder and neck.
3. Organize your workstation to fit your needs so you are comfortable.



Ergonomic Evaluations

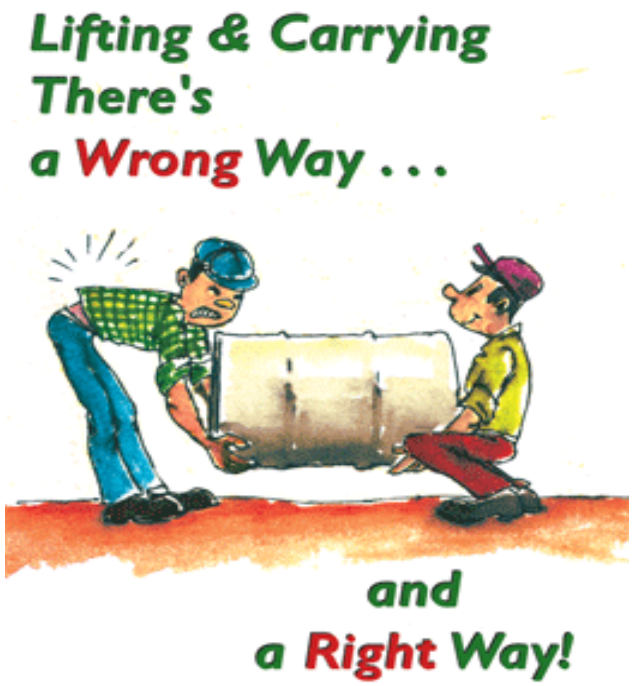
If you would like an ergonomic evaluation please contact your supervisor or the Safety Manager in Human Resources. A quick ergonomic assessment can help solve any ergonomic issues, which will provide further comfort. It is important that you request an evaluation whenever you are experiencing any discomfort, or need assistance adjusting your workstation. Make sure that this is NOT you:



Safe Lifting

Safe lifting practices must be used at all times to avoid injury. Most back injuries occur when employees are in a hurry and the employee lifts improperly. To avoid a back injury make sure that you use proper lifting techniques.

- Do NOT bend at the waist to lift.
- Bend at the knees and use your leg muscles.
- Do NOT attempt to lift or move an item that is too heavy for you.
- Ask for help. It is much easier for 2 people to lift an item.
- Do NOT twist, jerk, or move quickly while lifting an item.
- Take special care while lifting or transferring patients.



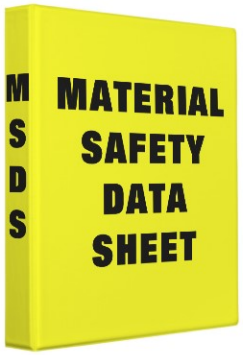
Hazard Communications

It is essential for you to know the safety and health risks of the substances and chemicals that you work with. Safety Data Sheets (SDSs) are supplied by manufacturers to inform you of the safety precautions that you must take while working with substances and chemicals. EPIC / Beaver supplies a SDS for all substances and chemicals that you work with. The SDS list can be found on the EPIC Intranet page **(http://intranet.epiclp.com/)** or in a hard copy binder labeled MSDS at all EPIC / Beaver facilities. Employees who work at the local hospitals or surgery centers must be aware of the hazardous substances that they may come into contact with as well. Please refer to the hospitals' or surgery centers' SDS for information on hazardous substances.

Make sure that you take the time to learn about the substances and chemicals that you work with. Whenever you are working with something new make sure that you ask questions and read the SDS prior to working with the substance or chemical. By taking these simple precautions you can protect yourself and help inform others of precautions that they must take to protect themselves. The SDS will provide the following information regarding the substance or chemical:

- Composition Information
- Potential Health Risks
- First Aid Measures
- Fire Fighting Measures
- Accidental Release Measures
- Handling and Storage
- Exposure Controls / Personal Protection
- Physical / Chemical Components
- Stability / Reactivity
- Ecological Information
- Disposal Information
- Transport Information
- Regulatory Information

Hazard Communications (Cont.)



The use of proper personal protective equipment (PPE) is vital to your health and safety. You must wear proper PPE when it is required, as it is the last line of defense between you and a known hazard. Make sure that you know when it is required, and if you are unsure do not be afraid to ask the question.

When working with substances and chemicals make sure that you know exactly what you are working with. If you are unsure what is in a container, do not use it. If you are transferring a substance or chemical from one container to another, make sure that you label the new container properly. Only use approved containers and NEVER use a beverage bottle to store a substance or chemical that you are working with.

By taking these simple precautions you can protect yourself against the safety and health risks that certain substances and chemicals present. It cannot be stressed enough, if you are unsure about anything regarding a substance or chemical you need to ask your supervisor immediately.

Hazard Communications (Cont.)

There are numerous substances that are used in the workplace every day that are considered hazardous to at least some degree. Normally the quantities of these items are very low at EPIC / Beaver. You are trained on specific hazards of the substances in your work area initially and whenever a new substance is brought into the facility. Remember that if you ever have questions on a chemical or substance and you feel that you need further training do not hesitate to contact your supervisor.

It is also important that you dispose of certain substances properly. For example most pharmaceuticals must be disposed of in a blue and white pharmaceutical waste container for incineration only. All supplies used to make and administer chemotherapy medications must be disposed of in chemotherapy waste containers. Other substances are considered hazardous and must be disposed of through a hazardous waste company. Please refer to the following hazardous substances list:

Batteries, Mercury Thermometers, Fluorescent lights, Inhalers (not empty), Other Aerosols (not empty), Coumadin/Warfarin, Formalin, Phenol, Insulin, Alcohol products containing over 24% alcohol, Cough Syrup, Hydrogen Peroxide w/concentration over 8%, Any item containing a hazardous preservative such as mercury, but NOT all of the following products contain hazardous preservatives, so you have to check: Antibiotics, Contact lens solution, Diuretics, Ear/eye drops, Eye ointment, Hemorrhoid ointment, Mercurochrome, Nasal spray, Skin cream.

Hazard Communications (Cont.)

Proposition 65 postings are present at each EPIC / Beaver facility that handles products that may contain a chemical known to the State of California to cause cancer or birth defects or other reproductive harm. The following is the Proposition 65 list of chemicals:

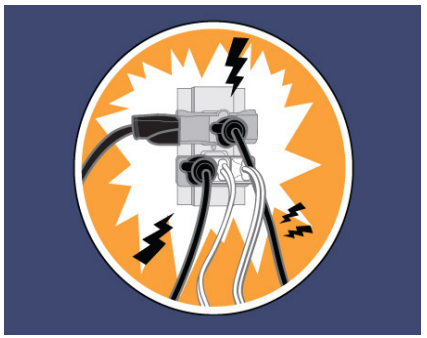
10% Buffered Formalin
ALIMTA FOR INJECTION
Amiodarone Hydrochloride Injection
BiCNU (Carmustine for Injection)
Boric Acid NF Powder
Carboplatin Injection
Cardizem LA
Neomycin Sulfate
Chloramphenicol
Cisplatin Injection
Cormatic / Ultima Aire Freshener Gels
Cytarabine Injection
Cytoxan For Injection
Dehydrated Alcohol Injection, USP
Dexferrum (Iron Dextran Injection, USP)
Digoxin Injection, USP
Diltiazem Hydrochloride for Injection
Diphenhydramine Hydrochloride Injection
Disinfectant Spray for Health Care Use
Doxorubicin Hydrochloride Injection, USP
Drysol
DTIC-Dome
Enlon Edrophonium Chloride Injection, USP
Etopophos for Injection
Etoposide Injection
Fluorouracil Injection, USP
GEBAUER'S ETHYL CHLORIDE
Gentamicin Sulfate in 0.9% Sodium Chloride Injection
Haloperidol Lactate
Ifex For Injection
Irinotecan Hydrochloride Injection

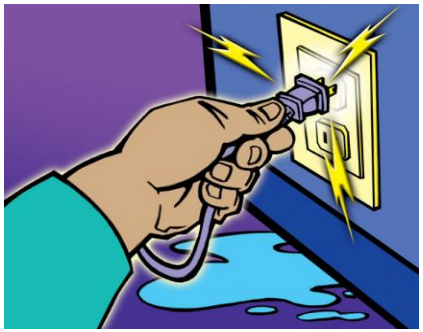
Proposition 65 (Cont.)

Ketorolac Tromethamine Injection, USP
LEMON FURNITURE POLISH
Lorazepam Injection
Mastisol Liquid Adhesive
Medroxyprogesterone Acetate Injectable Suspension, USP
MERCURY
Mercury Spill Clean-up Kit
Midazolam Hydrochloride Injection, Solution
Mithracin
Mitomycin for Injection, USP
Mutamycin
Neo-Synephrine mild (1/4%) Regular (1/2%) And Extra Strength (1%)
Neomycin and Polymyxin B Sulfates and Gramicidin Ophthalmic Solution USP
Neomycin and Polymyxin B Sulfates and Hydrocortisone Otic Suspension USP
Paclitaxel Injection
Phenobarbital Sodium Injection, USP
Promethazine Hydrochloride Injection, USP
Protocol 10% Neutral Buffered Formalin
PYROBOR, Dehydrated Borax
Sterile Acetazolamide Sodium, USP
Sulfacetamide Sodium & Prednisolone and Sodium Phosphate Ophthalmic Solution
Thiotepa for Injection
Triple Antibiotic Ointment
Vepesid for Injection
Vinblastine Sulfate
Vumor for Injection

Electrical Safety

The goal of electrical safety is to know what precautions are required to avoid electrical accidents. All employees must know the basics of electrical safety because electricity has the power to shock, burn, and cause fires. Use the following safety tips to keep your area clear of electrical hazards:





- Make sure that the equipment you are using is in working condition.
- Check to make sure the plug has a tight connection.
- Never bend a 3-prong plug to fit a 2-prong connection.
- Do not touch metal or other conductive materials to electricity.
- Make sure the area around electrical equipment is dry.
- Do not use damaged cords or outlets.
- Do not overload outlets.
- Extension cords should only be used temporarily.
- Unplug equipment that is sparking or heating up.
- Do not let dust or other material build-up on electrical equipment.
- Do not fasten cords with tacks, nails, or staples.
- Do not use metal tools or ladders around electricity.

Workplace Violence

Workplace violence is any act or threat of physical violence, harassment, intimidation, or other threatening disruptive behavior that occurs at the work site. It ranges from threats and verbal abuse to physical assaults and even homicide. While workplace violence is uncommon at EPIC / Beaver, it is still important to identify the risk factors that include:

• Disorderly conduct, such as shouting, pushing or throwing objects, punching walls, or slamming doors.

• Verbal threats to inflict bodily harm including vague or overt threats.

• Fascination with guns or other weapons, demonstrated by discussions or bringing weapons to the workplace.

• Obscene phone calls, intimidating presence, and harassment of any nature.

EPIC / Beaver strictly prohibits any threat or act of violence in the workplace. Threats or violence could come from a fellow employee, employee relative, patient, visitor, vendor, applicant, etc. Policy forbids employees or any unauthorized person from carrying or bringing a gun or any weapon on EPIC / Beaver premises. Any employee that is threatened or subjected to violence in the workplace should immediately contact a manager or the Human Resources Department. When a situation occurs employees should request assistance from the nearest available manager. Employees should also notify management of any security hazards.

Reporting Hazards

Reporting hazards is the best way to prevent a work related injury. All employees must take the time to report any hazards that may be present in their work area to a manager or supervisor. This will allow EPIC / Beaver to correct or eliminate the hazard, and by doing this we will be able to prevent injuries from occurring. Here are some examples of hazards that should be reported:

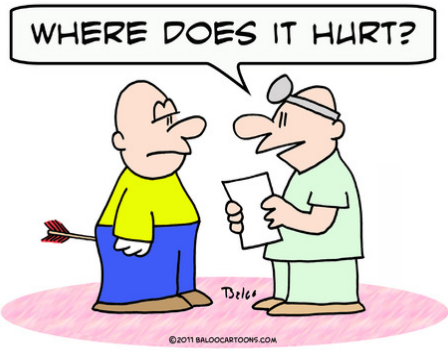
- A piece of equipment is damaged or not working properly.
- The flooring is damaged; carpet, tile, transition strip.
- A pipe or sink is leaking.
- An electrical cord or outlet is damaged or smoking.

- The sidewalk or parking lot surface is damaged.
- A chair, desk, or cabinet is loose or damaged.

Maintaining a safe and hazard free work area is everyone’s job. By working together and correcting problem areas we will be able to maintain a safe environment for employees, patients, vendors, and other visitors. Do your part by reporting hazards to your manager or supervisor.

Reporting Work Related Injury / Illness

While we would like to think that we will never have an accident or injury at any of our facilities, the reality is that we do have injuries occur. If you experience a work related injury or illness please report it to your manager or supervisor immediately. If your manager or supervisor is unavailable please report it to another manager or supervisor or the Human Resources Department.



EPIC / Beaver's goal is to treat every work related injury or illness promptly, and that starts with you reporting it to us immediately. Once reported you will be sent to an occupational clinic outside of EPIC / Beaver that will provide you with the care that you need. Promptly providing quality care will allow the injured or ill employee to take the steps to recovery more quickly, which will allow the employee to return back to full duties as soon as possible.

It is important not to delay this process, especially if it involves an exposure incident. Please do not hesitate to report your work related injury or illness. Your health is at risk when you do not report or delay reporting the incident. It cannot be stressed enough, if you experience a work related injury or illness report it immediately, so we can get you the appropriate treatment quickly.

Questions ???

•That concludes your annual general safety training

• If you have any questions please contact your supervisor or the Director of Risk Management & Safety at (909) 799-1818 ext. 43518

• Please complete the Annual Safety Training Test

• All completed tests must be returned to your supervisor

THE END

GHS Safety Training

EPIC Management, L.P. / Beaver Medical Group, L.P.

What is GHS?

GHS stands for the Globally Harmonized System of classification and labeling of chemicals. The reason GHS has been adopted by OSHA's Hazardous Communication Standard is that it provides a global system that will have consistent Safety Data Sheets (SDS's), more informative labels, and better protection for workers.

All chemical manufacturers must comply with the GHS system by June, 1, 2015. Training on the GHS system must be completed by December 1, 2013 because the chemical companies have already started to transition to the GHS. EPIC / Beaver is providing this training to ensure all employees are aware of the GHS system, which will provide a safer working environment.

Training Objectives

- New label elements
- How to use label information
- Safety Data Sheet (SDS) format
- Hazardous communication review
- Locating SDS's

GHS Label Elements

The Basic Parts of A GHS-Compliant Label

1. **Product Identifier** - Should match the product identifier on the Safety Data Sheet.
2. **Signal Word** - Either use "Danger" (severe) or "Warning" (less severe)
3. **Hazard Statements** - A phrase assigned to a hazard class that describes the nature of the product's hazards
4. **Precautionary Statements** - Describes recommended measures to minimize or prevent adverse effects resulting from exposure.
5. **Supplier Identification** - The name, address and telephone number of the manufacturer or supplier.
6. **Pictograms** - Graphical symbols intended to convey specific hazard information visually.

Sample label courtesy of Weber Packaging Solutions • www.weberpackaging.com

Chemical Hazard Labels

- Oxidizers

- Flammables
- Self Reactives
- Pyrophorics
- Self-Heating
- Emits Flammable Gas
- Organic Peroxides

- Explosives
- Self Reactives
- Organic Peroxides

Chemical Hazard Labels

- Acute toxicity (severe)

- Corrosives

- Gases Under Pressure

Chemical Hazard Labels

- Carcinogen
- Respiratory Sensitizer
- Reproductive Toxicity
- Target Organ Toxicity
- Mutagenicity
- Aspiration Toxicity

- Irritant
- Dermal Sensitizer
- Acute toxicity (harmful)
- Narcotic Effects
- Respiratory Tract
- Irritation

•Environmental Toxicity

Using Label Information

The information provided on the GHS label explains the basic safety information related to that chemical or substance. Further information can be found on the SDS, but the label serves as a quick reference for employees. By using the information provided on the label each chemical or substance can be handled properly and safely.

The Hazard Statement is a phrase assigned to a hazard class that describes the nature of the product's hazards. This statement also helps determine whether the chemical or substance is a physical, health, or environmental hazard.

The Precautionary Statement supplements the hazard information on the label by describing prevention, emergency response, storage, and disposal of the substance. This information will allow employees to use the appropriate safeguards that will prevent mishandling and accidents.

Physical Hazards

Explosives
Flammable Gases
Flammable Aerosols
Oxidizing Gases
Gases Under Pressure
Flammable Liquids
Flammable Solids
Self-Reactive Substances
Pyrophoric Liquids
Pyrophoric Solids
Self-Heating Substances
Substances which, in contact with water emit flammable gases
Oxidizing Liquids
Oxidizing Solids
Organic Peroxides
Corrosive to Metals

Health Hazards

Acute Toxicity
Skin Corrosion/Irritation
Serious Eye Damage/Eye Irritation
Respiratory or Skin Sensitization
Germ Cell Mutagenicity
Carcinogenicity
Reproductive Toxicology
Target Organ Systemic Toxicity - Single Exposure
Target Organ Systemic Toxicity - Repeated Exposure
Aspiration Toxicity

Environmental Hazards

Hazardous to the Aquatic Environment
Acute aquatic toxicity
Chronic aquatic toxicity
Bioaccumulation potential
Rapid degradability

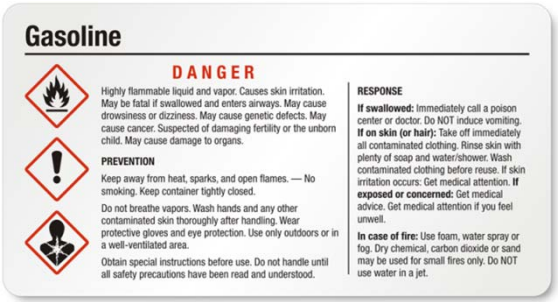
Hazard Statement Example

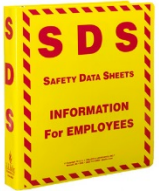
Example: Flammable Liquids

Category 1: Extremely flammable liquid and vapor
Category 2: Highly flammable liquid and vapor
Category 3: Flammable liquid and vapor
Category 4: Combustible liquid

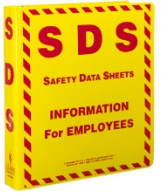
As you can see from the above example, the lower the category number the higher the risk or more dangerous the chemical or substance is.

This is a different way of thinking about the level of hazards because normally a person would consider the higher number more dangerous, but that is not the case with the GHS system. Please keep this key change in mind when examining the label.



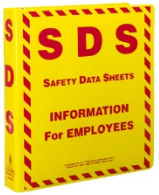


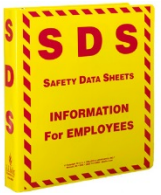
Safety Data Sheets (SDSs)



The GHS system requires that all SDSs have a 16 – section format that is standardized to ensure that key information is available for all chemicals and substances. Most will remember safety data sheets being referred to as Material Safety Data Sheets (MSDSs), but the new term is Safety Data Sheets (SDSs). The 16 – Sections are listed below:

Section 1: Identification
Section 2: Hazard Identification
Section 3: Composition
Section 4: First Aid
Section 5: Fire Fighting
Section 6: Accidental Release
Section 7: Handling / Storage
Section 8: Exposure Control / Personal Protection
Section 9: Physical / Chemical Properties
Section 10: Stability / Reactivity
Section 11: Toxicology Information
Section 12: Ecological Information
Section 13: Disposal Information
Section 14: Transport Information
Section 15: Regulatory Information
Section 16: Other Information





SDS Sections

Section 1: Identification

•GHS product identifier.
•Other means of identification.
•Recommended use of the chemical and restrictions on use.
•Supplier's details (including name, address, phone number, etc.).
•Emergency phone number.

Section 2: Hazard Identification

•GHS classification of the substance/mixture and any national or regional information.
•GHS label elements, including precautionary statements. (Hazard symbols may be provided as a graphical reproduction of the symbols in black and white or the name of the symbol, e.g., flame, skull and crossbones.)
•Other hazards which do not result in classification (e.g., dust explosion hazard) or are not covered by the GHS.

SDS Sections

Section 3: Composition

Substance

•Chemical identity.

•Common name, synonyms, etc.

•CAS number, EC number, etc.

•Impurities and stabilizing additives which are themselves classified and which contribute to the classification of the substance.

Mixture

The chemical identity and concentration or concentration ranges of all ingredients which are hazardous within the meaning of the GHS and are present above their cutoff levels.

Section 4: First Aid

•Description of necessary measures, subdivided according to the different routes of exposure, i.e., inhalation, skin and eye contact, and ingestion.

•Most important symptoms/effects, acute and delayed.

•Indication of immediate medical attention and special treatment needed, if necessary.

SDS Sections

Section 5: Fire Fighting

- Suitable (and unsuitable) extinguishing media.
- Specific hazards arising from the chemical (e.g., nature of any hazardous combustion products).
- Special protective equipment and precautions for firefighters.

Section 6: Accidental Release

- Personal precautions, protective equipment and emergency procedures.
- Environmental precautions.
- Methods and materials for containment and cleaning up.

Section 7: Handling / Storage

- Precautions for safe handling.
- Conditions for safe storage, including any incompatibilities.

Section 8: Exposure Control / Personal Protection

- Control parameters, e.g., occupational exposure limit values or biological limit values.
- Appropriate engineering controls.
- Individual protection measures, such as personal protective equipment.

SDS Sections

Section 9: Physical / Chemical Properties

- Appearance (physical state, color, etc.).
- Odor.
- Odor threshold.
- pH.
- melting point/freezing point.
- initial boiling point and boiling range.
- flash point.
- evaporation rate.
- flammability (solid, gas).
- upper/lower flammability or explosive limits.
- vapor pressure.
- vapor density.
- relative density.
- solubility(ies).
- partition coefficient: n-octanol/water.
- autoignition temperature.
- decomposition temperature.

Section 10: Stability / Reactivity

- Chemical stability.
- Possibility of hazardous reactions.
- Conditions to avoid (e.g., static discharge, shock or vibration).
- Incompatible materials.
- Hazardous decomposition products.

SDS Sections

Section 11: Toxicology Information

•Concise but complete and comprehensible description of the various toxicological (health) effects and the available data used to identify those effects, including: information on the likely routes of exposure (inhalation, ingestion, skin and eye contact);

•Symptoms related to the physical, chemical and toxicological characteristics;

•Delayed and immediate effects and also chronic effects from short- and long-term exposure;

•Numerical measures of toxicity (such as acute toxicity estimates).

Section 12: Ecological Information

•Ecotoxicity (aquatic and terrestrial, where available).

•Persistence and degradability.

•Bioaccumulative potential.

•Mobility in soil.

•Other adverse effects.

SDS Sections

Section 13: Disposal Information

Description of waste residues and information on their safe handling and methods of disposal, including the disposal of any contaminated packaging.

Section 14: Transport Information

- UN Number.
- UN Proper shipping name.
- Transport Hazard class(es).
- Packing group, if applicable.
- Marine pollutant (Yes/No).
- Special precautions which a user needs to be aware of or needs to comply with in connection with transport or conveyance either within or outside their premises.

Section 15: Regulatory Information

Safety, health and environmental regulations specific for the product in question.

Section 16: Other Information

Any other relevant information regarding the substance.

Hazardous Communications Review

It is essential for you to know the safety and health risks of the substances and chemicals that you work with. Safety Data Sheets (SDSs) are supplied by manufacturers to inform you of the safety precautions that you must take while working with substances and chemicals. EPIC / Beaver supplies a SDS for all substances and chemicals that you work with.

Make sure that you take the time to learn about the substances and chemicals that you work with. Whenever you are working with something new make sure that you ask questions and read the SDS prior to working with the substance or chemical. By taking these simple precautions you can protect yourself and help inform others of precautions that they must take to protect themselves. Also, please remember that whenever you are unsure about something that your supervisor is there for any questions that you have. It is always best to error on the side of caution and protect yourself from possible hazards.

Locating SDSs

All the SDSs are maintained on the EPIC / Beaver Intranet Site. Simply click on “Policies and Procedures” and then “MSDS”. The sheets are in alphabetical order and fairly easy to find by scrolling through the list. This list is updated whenever a SDS is revised, which will allow you to have the most current information regarding the chemical or substance.

As a backup there are hard copy versions maintained at each location usually found in Administration. The SDSs are contained in large yellow binders with “MSDS” on the outside of the binder. Please use the Intranet site as your first resource and the binders as a backup if the Intranet is down.

Employees who work at the local hospitals or surgery centers must be aware of the hazardous substances that they may come into contact with as well. Please refer to the hospitals’ or surgery centers’ MSDS for information on hazardous substances.

Questions???

More information on GHS can be found at the following website: https://www.osha.gov/dsg/hazcom/ghs.html

•If you have any questions please contact your supervisor or the Director of Risk Management & Safety at (909) 799-1818 ext. 43518

- Please complete the Annual Safety Test.
- All completed tests must be returned to your supervisor.