

SAFETY & ENVIRONMENT OF CARE TRAINING

Hospital-based Staff, Annual Refresher

INCLUDES THE FOLLOWING MATERIAL:

PERSONAL SAFETY

- Injury & Illness Prevention
- Ergonomics
- Security/Violence in the Workplace

INFECTION PREVENTION & CONTROL

- Aerosol Transmissible Disease
- Bloodborne Pathogens

EMERGENCY RESPONSE

- Fire Safety & Fire Extinguishers
- Emergency Preparedness

CHEMICAL SAFETY

- Managing Hazardous Materials and Waste
- Changes to OSHA's Hazard Communication Standard

ELECTRICAL & EQUIPMENT SAFETY

- Medical Equipment
- Utilities Safety

NOTIFICATIONS

- Access to Medical Records

PLEASE NOTE:

MUCH OF THIS TRAINING REQUIRES ORIENTATION TO, AND ADDITIONAL TRAINING ON, DEPARTMENT-SPECIFIC AND FACILITY-SPECIFIC POLICIES AND PROCEDURES. SEE THE BEGINNING OF EACH SECTION FOR ADDITIONAL INFORMATION.

Welcome to Safety & Environment of Care Training!

Facility-Specific Information

There will be times when the information in this training must be supplemented with region-specific or facility-specific material.

There is a page **following the test for this course** with a link to this supplemental information.



- ! The last slide of this training contains a link to provide feedback on this module. Please help us to improve this training by providing us with your feedback.

PERSONAL SAFETY

Injury & Illness Prevention & Workplace Safety
Ergonomics
Security/Violence in the Workplace

This section provides information on how KP employees can maintain a safe work environment for staff and provides education and training on Illness and Injury Prevention needed to comply with Cal/OSHA Standard 8 CCR 3203 and Joint Commission Standards EC.02.01.01, EC.03.01.01 and HR.01.04.01.

This section provides information on how employees can prevent repetitive strain injuries and provides education and training needed to comply with Cal/OSHA Standard 8 CCR § 5110

INJURY & ILLNESS PREVENTION PROGRAM (IIPP)

IIPP – Workplace Safety, Hazard Reporting

Workplace Safety

The Workplace Safety program (WPS) is a Kaiser Permanente initiative to promote a safe work environment with the ultimate goal of eliminating workplace injuries.

WPS seeks to create a culture of safety that encourages every employee to take proactive responsibility for safety in their workplace.

Hazard Reporting

Employees at all levels should report any unsafe conditions or practices they observe. Hazards at your worksite can be reported without fear of reprisal.

Unsafe conditions or practices can be reported to:

- ❑ An immediate **supervisor** or to the **EH&S or WPS Office**
- ❑ A member of the **Integrated Safety Committee**
- ❑ The **hotline** established at your facility to report hazards anonymously/confidentially.

The **FACILITY-SPECIFIC SUPPLEMENT** page at the end of this training tells you how to report unsafe conditions at **YOUR** facility.

Injury Reporting

If you are injured on the job you must report the injury immediately!

Specific procedures will vary by facility. However, as general rules...

- ❑ Notify your supervisor right away - **no later than the end of your shift!** Call from home if you discover a problem after you leave work.
- ❑ Your supervisor will direct you to the appropriate department for treatment. For injuries that you and/or your supervisor believe are 'emergent', go to the Emergency Department.
- ❑ Complete an injury report with your supervisor within 24 hours of the injury.
- ❑ Assist your Manager with evaluation of the root cause of the injury. Why did it happen? What were the practices or environmental factors which may have caused or contributed to the injury?

If you are injured...

Be prepared to provide ideas for preventing similar injuries. What can other employees learn that might keep them safe? What can be done to reduce the injury risk?

The **FACILITY-SPECIFIC SUPPLEMENT** page at the end of this training provides additional information on injury reporting at **YOUR** facility.

Strain Injuries

Strain accounts for the greatest number of employee injuries in a health care setting.
All strain injuries are preventable!

Causes of Upper Extremity Strain Injuries include:

- ❑ **Improper materials handling**
- ❑ **Incorrect moving of cart by pulling it**
- ❑ **Overloaded carts making them too heavy or unstable**
- ❑ **Improper patient handling**

Common causes of general pain when lifting, and ways to prevent strain include:

Incorrect Reaching: To get objects from a high shelf, use a sturdy stool or ladder. Keep your shoulders, hips and feet facing the object avoid twisting to reach things to the side.

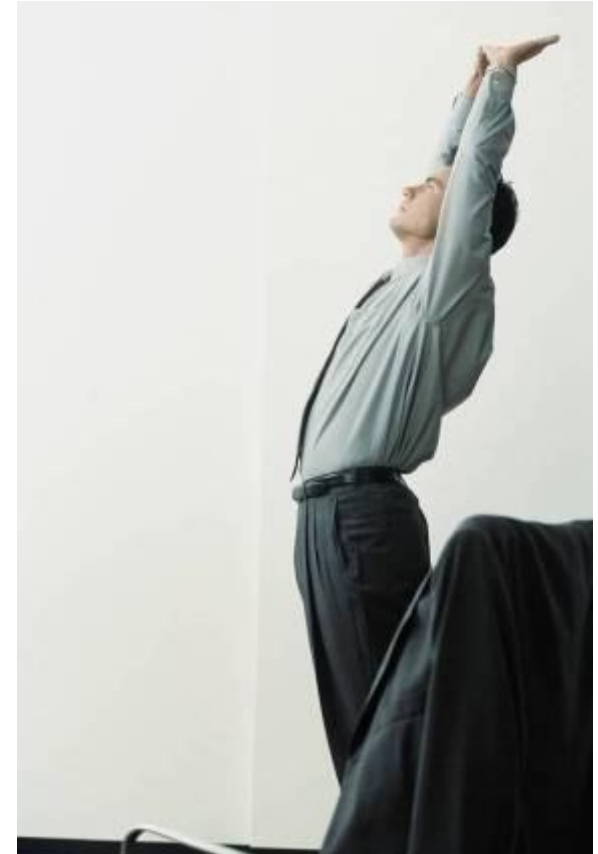
Incorrect Lifting: To properly lift an item such as a box, stand directly in front of the item and lift with your legs. Don't lift if you are bending or twisting at the waist.

Load Too Heavy: Before lifting, test the weight of the object by tipping one corner. If it's too heavy then get help or use a material handling device!

Workplace Safety - Back Care

Tips that will help you avoid back strain from lifting:

- ❑ Perform squat lifts bending your knees, not your back.
- ❑ If you can't move an object easily with your feet, it's probably too heavy to lift by yourself.
- ❑ Keep the object close to your body.
- ❑ Don't twist when lifting. Move your feet instead.
- ❑ Lift objects only chest high.
- ❑ Do not reach or stretch while attempting to lift an object.
- ❑ Whenever possible, use mechanical help such as a hand-truck or cart.
- ❑ Don't pull heavy loads - push instead.



INJURY & ILLNESS PREVENTION PROGRAM (IIPP)

Workplace Safety - Slips, Trips and Falls

Other common preventable injuries include those caused by slips, trips or falls.

Slips, Trips and Falls can be **prevented** by:

- **Taking personal responsibility for spills or tripping hazards.** Wipe up any non-hazardous liquid spilled on the floor—don't wait for EVS/housekeeping. Don't store something on the floor where it will create a trip hazard.
- **If you cannot eliminate the hazard** from things like spilled liquids, items on the floor and other objects, notify the appropriate parties right away.
- Many slips can be prevented by **wearing the proper shoes or shoe-covers.** Wear **enclosed** shoes or shoe covers with slip-resistant soles.



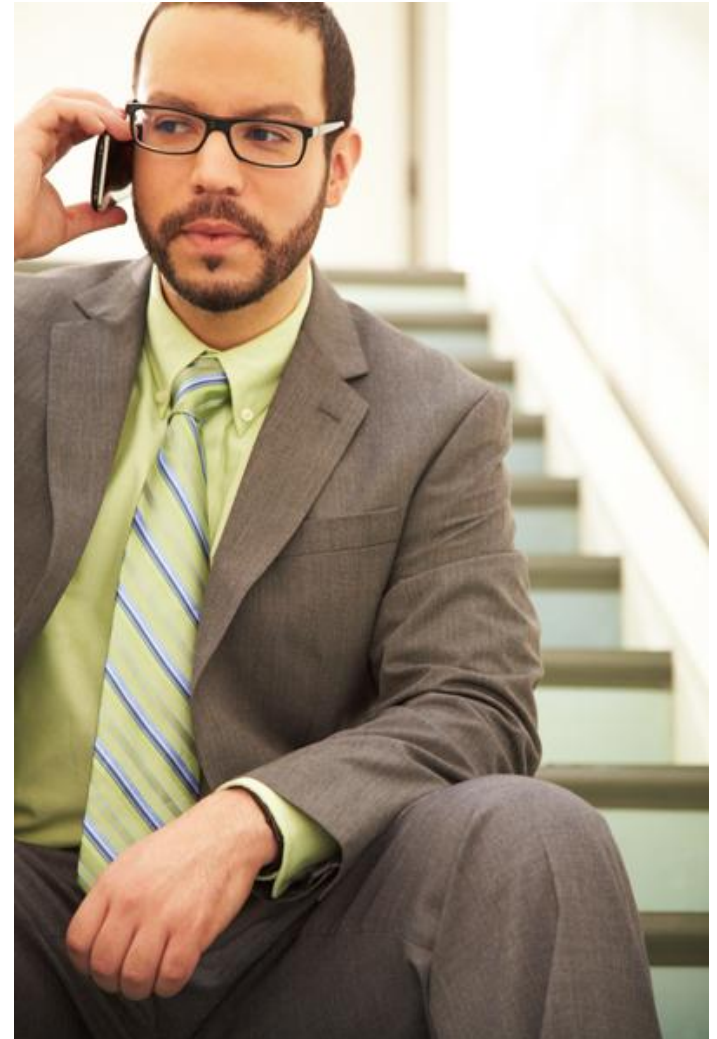
The KP Ergonomics Program

The goal of the Ergonomics Program is to reduce work-related Musculoskeletal Disorders (MSDs).

The following materials, tools, and training programs are available from your supervisor, EH&S or WPS, to help you set up your work area and address your own specific ergonomic issues :

- ❑ The pamphlet “Ergonomics for the Computer User”
- ❑ The KP Ergonomic Standard Guidance Document and Toolbox
- ❑ Self-assessment questionnaires and software tool
- ❑ Standard Equipment Lists
- ❑ Instructional Videos
- ❑ Stretch cards
- ❑ ErgoINFO Interactive Website

More information on the Ergonomics Program can be found on the [National WorkPlace Safety Ergonomics Page](#)



Risk Factors and Symptoms

ERGONOMICS is *the science of designing work environments and technology to fit the employee rather than requiring the employee to adapt to the environment and technology.*

Ergonomic Risk Factors include:

- ❑ Repetition
- ❑ Extended Duration
- ❑ Excessive Force
- ❑ Awkward Positions
- ❑ Over Reaching
- ❑ Poor Environment
- ❑ Individual Factors

What happens when you, your task and the environment don't fit?

Musculoskeletal Disorders (MSDs) can occur!

- ❑ Decreased range of motion in joints; decreased strength in extremity performance
- ❑ Swelling of joints, extremities, digits
- ❑ Numbness or tingling in extremities or digits
- ❑ Pain!!!



Workstation Ergonomics and ergoInfo

At most workstations, correcting ergonomic problems is simple and is something that you can do yourself. This link has instructions on how to make **[ergonomic adjustments to your workstation](#)**.

If you cannot adjust your workstation so that it is comfortable for you, or if you are experiencing pain which you believe is caused by incorrect ergonomics, it is important that you notify your supervisor and find out how to request an ergonomic evaluation at your facility.

WPS has developed the interactive ergoINFO tool <http://insidekp.kp.org/ergoinfo/>



Q&A: Injury Reporting

Following a workplace injury or illness, the employee's **supervisor/department manager** must complete a report of the injury :

- A** BEFORE seeking treatment
- B** Within 24 hours of injury
- C** Within 48 hours
- D** At least twice to make sure it goes through

Q&A: Injury Reporting

Following a workplace injury or illness, the employee's **supervisor/department manager** must complete a report of the injury :

A**BEFORE seeking treatment****B****Within 24 hours of injury****C****Within 48 hours****D****At least twice to make sure it goes through**

The correct answer is B.

Security

Introduction

As employees, there are many things we can do to help maintain a high level of security for ourselves and our patients and members.

Basic Security Tips for Personal Safety...

- ❑ Be alert at all times
- ❑ Use common sense
- ❑ Follow designated practices and procedures
- ❑ Report any suspicious behavior to authorities
- ❑ Call **Security*** or authorities according to your facility's policy, if you need assistance

The **FACILITY-SPECIFIC SUPPLEMENT** page at the end of this training has information on contacting Security at your facility.

Your Responsibilities

There are things you can do as a Kaiser Permanente employee to increase security:

- **Kaiser Employee Identification Badges must be worn at all times while at work. They must be worn above the waist*, on the outermost garment, and clearly visible.** This helps identify staff, and is a Kaiser Permanente policy as well as a Joint Commission requirement.
- Protect personal property. Don't keep personal items in public areas. Do not bring valuables to work or leave them at your workstation. Lock personal items in your vehicle's trunk, or alternatively, a desk, locker or file cabinet when you leave your immediate work area.
- Do not share your computer password, keys or access badges with another employee. This may lead to disciplinary action or termination.

***Remember - if your badge is hanging from your belt, that means it is below your waist - so it is non-compliant!**



Kaiser Permanente's Zero Tolerance Policy of Threatening Behavior

Kaiser Permanente has a policy of **zero tolerance** with regard to **violent or threatening behavior**.

This applies to all Kaiser Permanente employees, visitors and members!

Threats, harassment, intimidation, assault, battery and disturbances are all examples of behavior that is unacceptable.

All Kaiser Permanente **employees** have a **duty** to **report all incidents of violent behavior**.

Threatening behavior should be immediately reported to Security Services along with a request for assistance regardless of the threat source.

Watch for verbal signs to identify threats of violence:

- ❑ Angry or threatening tone of voice
- ❑ Shouting, screaming, cursing
- ❑ Making threats or sexual comments
- ❑ Challenging rules or authority
- ❑ Making unreasonable demands
- ❑ Expressing irrational thinking
- ❑ Talking about weapons

Q&A: Wearing Your ID Badge

An identification Badge can hang from an employee's belt so long as it is worn at all times while at work and clearly visible.

A True

B False

Q&A: Wearing Your ID Badge

An identification Badge can hang from an employee's belt so long as it is worn at all times while at work and clearly visible.

A True

The correct answer is B*.

B False

*Remember - if your badge is hanging from your belt, it is **below your waist!**

INFECTION PREVENTION & CONTROL

Aerosol Transmissible Disease Bloodborne Pathogens

When combined with orientation to facility-specific information on the ATD Exposure Control Plan, Respiratory Protection training, PAPR usage instruction and the Facility Surge Plan, completion of this section complies with the training requirements of California Aerosol Transmissible Diseases Standard 8 CCR §5199.

When completed in conjunction with orientation to job specific and site specific policies and procedures this section meets the training requirements with regard to bloodborne pathogens as described in Federal standard 29 CFR 1910.1030 and California 8 CCR §5193.

Before getting started... Questions?**Aerosol Transmissible Diseases**

The law requires that you have an opportunity for interactive questions and answers during this training.

- ❑ If you reach a point in this training when you do have a question, **STOP** and contact your local Infection Prevention-Control or Employee Health department.
- ❑ If you do not know how to contact them, click here:
[Environmental, Health & Safety, Infection Prevention-Control, Employee Health Contacts.](#)

If you close this course and return to it at a later time, you will have the option to start again where you left off.

In addition, Cal/OSHA's ATD Standard requires that our records include a summary of the training content and the names and qualifications of the trainers. KP's ATD training was created by National EH&S and content was developed by our national Subject Matter Expert (SME) for Aerosol Transmissible Diseases. Onsite support is provided by your local EH&S and Infection Control departments.

The Training Addendum at the link below provides a summary of elements included in this course and the qualifications of our national SME.

http://kpnet.kp.org/ehs/training/ed_Aerosol_Transmissible_Disease_Training_Addendum.pdf

By clicking the Forward button below, I understand that I have the right to get answers to questions about this material; and because this training is delivered online, that means contacting my Infection Prevention-Control and/or Employee Health Department.

Introduction – ATD Standard

The California Occupational Health and Safety Division (Cal/OSHA) adopted the Aerosol Transmissible Diseases Standard in August 2009.

Some of the things **the ATD Standard requires hospitals to do** is:

- ❑ Develop plans and procedures to **protect employees and visitors from ATDs**.
- ❑ Provide **employees** with appropriate **personal protective equipment** (including respirators).
- ❑ Provide any employee who does get an ATD with **medical care**.
- ❑ Make sure employees receive **initial and annual ATD training** - like this!
- ❑ And a lot more...

You can get **more detailed information** by reading through the ATD standard using the link below.

[Click here to access a copy of the Cal/OSHA ATD standard, 8 CCR 5199.](#)

What is an ATD?

An Aerosol Transmissible Disease (or ATD) is a disease or pathogen that requires **droplet** or **airborne precautions** to prevent exposure.

- ❑ **“Droplets”** are relatively large in size and can result from coughing, sneezing or talking.
- ❑ **“Airborne”** refers to relatively small particles, which can remain suspended in the air and can travel great distances.

The infectious organisms that cause ATDs can be spread by either of these!

Signs and Symptoms of ATDs that require **further medical evaluation** include:

- **Fever** with **rash**
- **Fever** with **cough**
- **Headache** or **neck stiffness** or **sensitivity to light**



Modes of transmission and source control procedures

Modes of transmission:

Droplet ATDs are spread by large respiratory droplets that generally do not travel very far.

Airborne ATDs are spread by very small infectious particles that can stay suspended in air and may travel long distances carried by air currents.

Source Control Procedures:

Educate visitors and patients to cover nose and mouth with a tissue when they cough or sneeze, using posters and/or direct communication.

Provide respiratory “etiquette stations” at facility entrances and public waiting areas, stocked with hand sanitizer and tissue and/or surgical masks.

ATD Exposure Control Plan

Your facility's **ATD Exposure Control Plan**:

- ❑ Describes specific methods the facility uses to control exposures
- ❑ Identifies job classifications at risk of exposure
- ❑ Describes procedures to be followed in the event of an exposure including medical follow up and incident investigation
- ❑ Describes procedures for training and recordkeeping

A link to your facility's ATD Exposure Control Plan can be found in your facility-specific training (link at the end of this module). Or you can contact the Department Manager or [Environmental, Health & Safety, Infection Prevention and/or Employee Health](#).

Employees are invited to provide input as to the Plan's effectiveness - use the link above to determine the appropriate contacts at your medical center.

Activities that may expose you to an ATD

Exposure to an **ATD** may occur when:

- ❑ You are in the same room or within 6 feet (in open space) of a suspected or confirmed ATD patient or handling patient materials that may be contaminated with infectious particles.
- ❑ You are performing or present during a task that may generate aerosolized ATD pathogens, including tasks performed on specimens in a lab or at autopsy.
- ❑ You enter the room of a patient on Airborne Isolation Precautions within an hour after the patient has left the room.

For more information, see the NEH&S matrix of tasks and procedures involving ATD exposure: [ATD Matrix](#)



Methods to prevent exposure – Hierarchy of Controls

ENGINEERING CONTROLS:

Ex: Airborne Infection Isolation (All) Room

Use: Isolates patients and their infectious particles from other patients and staff outside of the room

Limitations: Doesn't protect anyone inside the room with the patient; only effective when room is functioning properly

[Click here for more information on Engineering Controls](#)

ADMINISTRATIVE CONTROLS

Ex: Work Practice Controls

Use: Reduces potential for infection to spread

Limitations: Must be followed correctly and consistently

- Promptly identify patients with ATD (or suspected), and place surgical masks on them
- If airborne ATD is suspected, use All room
- If droplet ATD is suspected, use private room

[Click here for more information on Work Practice Controls](#)

PERSONAL PROTECTIVE EQUIPMENT

The next slides contain more information on PPE



*Use proper concentration of surface disinfectants as per manufacturer's guidelines.

Personal Protective Equipment (PPE)

Use: Protects wearer from exposure to ATD pathogens.

Limitations: PPE is **only effective** if **appropriately selected, correctly and consistently worn**, and **properly cleaned, stored or discarded**. Contaminated PPE may be a source of infection.

Basis for selection: PPE creates **physical barrier protection** from exposure to ATD pathogens, including facial protection for droplets and respiratory protection for airborne particles. **Examples** of types of PPE:

- ❑ Gloves
- ❑ Gown or apron (impermeable)
- ❑ Surgical mask for ATDs requiring Droplet Precautions
- ❑ Respirator (N95 or PAPR) for ATDs requiring Airborne Precautions

Your facility's **ATD Exposure Control Plan** includes a "**Matrix of Tasks and Procedures Involving Occupational Exposure and Exposure Controls**", which show the work practices and PPE required for each task that has potential for exposure to an ATD or bloodborne pathogen.

Your department manager is responsible for maintaining an adequate supply of respirators and other protective gear to prevent employee exposure and for informing you of the proper use, location, removal, handling, cleaning, decontamination and disposal of PPE used at your worksite.

AEROSOL TRANSMISSIBLE DISEASES

Decontamination and disposal of PPE

Remove any PPE before leaving the work area or when the PPE becomes contaminated or torn and place it in appropriate containers for storage, washing, decontamination or disposal.

The exception is your respirator, which must be **removed after** leaving the patient room.

Consider the front of the respirator and facemask contaminated after use. Dispose of your N95 in regular trash after use.

Decontaminate and store PAPRs according to your facility and/or departmental procedures.

Always wash your hands after the removal of PPE.



Methods to prevent exposure – Respiratory Protection

N95: Use an N95 or equivalent respirator with a known or suspected TB or other Airborne ATD patient when entering room of a patient on Airborne Isolation Precautions, or within an hour of when the room was occupied by patient.

Note: In order to correctly choose and wear an N-95 respirator, you must be fit tested for that type of respirator.

Powered Air Purifying Respirator (PAPR): employees who participate in high hazard procedures on patients suspected or confirmed to have an Airborne Infectious Disease must wear a PAPR or equivalent protection during the procedure, including when the procedure is performed in a negative pressure isolation room.

High hazard procedures are aerosol-generating procedures performed on an individual who has a suspected or confirmed ATD, including: sputum induction, bronchoscopy, intubation, aerosolized administration of Pentamidine or other medications, and autopsy, clinical, surgical and laboratory procedures that may generate aerosols.

TB surveillance

Employee Health Services is responsible for performing **TB surveillance**:

- ❑ All health care workers are **screened** initially **upon hire** and **annually** thereafter.
- ❑ Medical follow-up is provided for TB conversions.
- ❑ **Screenings are conducted every three months if two or more conversions** occur in one department or group.
- ❑ Note that immune-compromised individuals can have a false negative TB test result.



Respiratory Protection Training

If you are assigned to wear an N95 or PAPR respirator for protection from exposure to ATDs, you must complete initial and annual respiratory protection training.

For information regarding your facility's method for providing this training, talk to your Supervisor or contact [Environmental, Health & Safety, Infection Prevention or Employee Health](#).

Example of a 3M N95 Particulate Respirator



**3M Air-Mate™ PAPR
(Powered Air Purifying Respirator)**

Vaccines for ATDs

Employee Health Services is responsible for administering vaccinations:

- ❑ A simple blood test will determine if you have immunity
- ❑ Vaccinations are available at no cost to employees without immunity
- ❑ Vaccines are a safe and an effective means of preventing some ATD transmission

The following links will give you more information* on specific vaccines:

[Click for information about the Tetanus, Diphtheria \(Td\) with Pertussis \(Tdap\) vaccine](#)

[Click for information about the Varicella \(Var\) vaccine](#)

[Click for information about the Influenza, trivalent inactivated \(TIV\) vaccine](#)

[Click for information about the Influenza, live, attenuated \(LAIV\) vaccine](#)

[Click for information about the Measles, mumps, rubella \(MMR\) vaccine](#)

(**Note:** you may need to refresh the browser window if the documents above do not appear at first.)

* From the VIS (Vaccine Information Statements) web site: <http://www.immunize.org/vis/>

ATD Exposure Incident: Reporting and medical follow-up

Reporting an ATD Exposure Incident:

- ❑ **ALL** exposure incidents **must** be reported to your manager **immediately**.
- ❑ **Proceed to Employee Health** as soon as possible for appropriate evaluation and medical follow-up.

Post-Exposure Evaluation:

A **Post-Exposure Evaluation** is performed to determine the nature and extent of exposure, including circumstances of event, source patient information and other details. It may also involve testing of exposed employee or physician.

Medical follow-up may involve:

- ❑ Testing
- ❑ Preventive therapy: medications or vaccinations
- ❑ Other procedures if indicated (for example, a chest x-ray)

Facility Surge Plan

Epidemics or other events may create a **surge situation**. For this training to be compliant, you must know your facility's procedures under these circumstances, including the plan for:

1. **Surge receiving** and **treatment** of **patients**
2. Patient **isolation** procedures
3. Surge procedures for handling of **specimens**, including specimens from persons who may have been contaminated as a result of a **release of a biological agent**
4. How to **access supplies** needed for the response including PPE and respirators
5. **Decontamination** facilities and procedures
6. How to **coordinate** with emergency response personnel from other agencies

These procedures will be covered during your facility's disaster drills, which will include a surge scenario at least annually.

To access YOUR facility's Emergency Operations Plan and find specific information regarding the items listed above, talk to your Department Manager or contact **Environmental, Health & Safety, Infection Prevention and/or Employee Health**.

Q&A: Hospital requirements of the ATD Standard

The ATD Standard requires hospitals to do many things, including:

- A** Develop plans and procedures to protect employees and visitors from ATDs
- B** Provide employees with appropriate personal protective equipment
- C** Make sure employees receive initial and annual ATD training
- D** All of the above

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- B** Provide employees with appropriate personal protective equipment
- C** Make sure employees receive initial and annual ATD training
- D** All of the above

The correct answer is D.

Before getting started... Questions?

Questions?

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In addition, OSHA's BBP Standard requires that our records include a summary of the training content and the names and qualifications of the trainers. KP's BBP training was created by National EH&S and content was developed by our national Subject Matter Expert (SME) for Bloodborne Pathogens. Onsite support is provided by your local EH&S and Infection Control departments.

The Training Addendum at the link below provides a summary of elements included in this course and the qualifications of our national SME.

http://kpnet.kp.org/ehs/training/ed_Bloodborne_Pathogens_Awareness_Training_Addendum.pdf

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OSHA's Bloodborne Pathogens Standard

The Bloodborne Pathogen (BBP) Standard aims to minimize your exposure to bloodborne pathogens.

Employers must select and implement appropriate engineering controls to prevent employee exposure to BBPs. The standard requires that those at risk of BBP exposure be included in the process of evaluation and selection of these devices.

A hands-on demonstration in the use of the approved safety devices used in your work area is required.

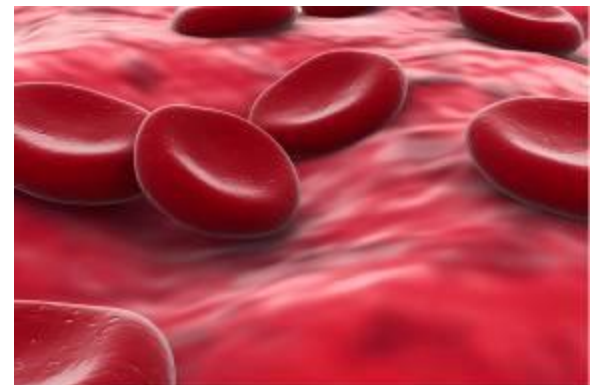
Talk to the Department Manager for more information on specific procedures performed or devices approved for use in your department.

For your reference, a copy of the standard can be accessed by clicking [29 CFR 1910.1030](#)

The California and Washington standards can be accessed here:

[California Standard](#)

[Washington Standard](#)



Epidemiology and Symptoms of BBPs

BBPs may include HIV, Hepatitis B (HBV), Hepatitis C (HCV) or other pathogens:

- ❑ Infection by **HIV** causes the progressive loss of immune system function. Acquired Immunodeficiency Syndrome (AIDS) can result from HIV infection and is characterized by opportunistic infections, cancers, neurologic disorders and other syndromes.
- ❑ **The time from infection by HIV to clinical diagnosis can be as long as 14 years.**

Hepatitis is an **inflammation of the liver** caused by a **virus**. Hepatitis B and C are the more serious viral forms and are **spread through contact with human blood** and perhaps through contact with other body fluids. They can result in chronic, debilitating and potentially fatal liver disease. You can have Hepatitis B or C for many years before you even know you have the virus. However, by then your liver may already be damaged. You can be infectious weeks before the onset of symptoms, and you will stay infectious while you are sick. Many people remain infectious indefinitely.

Symptoms of infection from Hepatitis B and C include, but are not limited to:

Loss of appetite

Nausea and vomiting

Jaundice (yellowing of the skin and eyes)

Abdominal discomfort

Joint pain and rash

Flu-like symptoms

BBP Modes of Transmission

The modes of BBP transmission to healthcare workers are:

1. **Needlesticks**/punctures
2. **Splashes** to the eyes or mucous membranes
3. **Cuts** or contact with non-intact skin (percutaneous)



The BBP Exposure Control Plan

Each Kaiser facility maintains a **Bloodborne Pathogen Exposure Control Plan**.

Your Facility's plan...

- Describes Kaiser's role in protecting employees and your obligation to use protective measures.
- Identifies the procedures that put employees at risk and the protective measures to be taken.
- Describes the procedure for reporting BBP Exposure and Post-Exposure Prophylaxis.

There will be a link to a copy of your facility's **BBP Exposure Control Plan** in your facility-specific training. Or a copy can be obtained from Environmental Health & Safety, Infection Prevention or Employee Health Services ([click here to locate](#)).



Activities That May Involve BBP Exposure

Examples of tasks that could involve exposure to **Bloodborne Pathogens** or **Other Potentially Infectious Materials (OPIM)** include any assigned duties during which skin, eye, mucous membrane, or parenteral contact with blood or OPIM can be reasonably anticipated.

Including:

- ❑ Blood drawing
- ❑ Suctioning
- ❑ Cleaning up blood or body fluid spill

Click here for a list of [commonly performed procedures](#) that may lead to exposure to BBPs.



Prevention of BBP Exposure

In order to prevent and reduce exposure to Bloodborne Pathogens, employees must:

- Handle Blood/Body fluids of all patients as potentially infectious.
- Decontaminate hands between all patient contact, after specimen contact and after removal of gloves.
- Use safe needle devices for injection, IV starts, blood draws, and use the needleless IV tubing systems. Use of safe needle devices is required by OSHA with only a few exceptions. **A limitation of safe needle devices** is that the majority of devices have safety features that must be actively engaged by the employee in order to be effective.
- Place used sharps in sharps container immediately after use. Do not recap or manipulate needles.

In addition...

- Handle all laboratory specimens as potentially infectious
- Hepatitis B vaccine must be offered to all employees at risk for blood or body fluid contact, and is strongly recommended for all employees. A declination form (available from Employee Health Services) must be signed if you choose to refuse the vaccine.
- Do not eat, drink, apply cosmetics or lip balm, or handle contact lenses in patient care areas or laboratory processing areas.
- Protect your non-intact skin (i.e. chapped or abraded skin) from contact with blood or body fluids.

Personal Protective Equipment (PPE)

PPE protects the skin, eyes, mouth or other mucous membranes during normal use and during the entire length of time the PPE is worn.

Examples of PPE are:

- ❑ Gloves
- ❑ Gowns and/or disposable plastic aprons
- ❑ Masks
- ❑ Face shields
- ❑ Protective eyewear

Click here for a list of [commonly performed procedures and the PPE required](#).

Also note:

- ❑ Disposable gloves cannot be washed or decontaminated for reuse.
- ❑ Employees must remove any PPE when it becomes torn or damaged, before leaving the work area, or when the PPE becomes contaminated, and place it in appropriate containers for decontamination or disposal. Disposable PPE, when dripping or caked with blood or other infectious material, should be discarded in a biohazard container (or in a chemo container if the PPE is contaminated by chemotherapeutic agents).

All PPE has limitations—gloves may develop small holes. Even appropriate PPE does not provide a foolproof guarantee of safety. **Your department manager is responsible for maintaining an adequate supply of protective gear to prevent employee exposure and for informing you of the proper use, location, removal, handling, cleaning, decontamination and disposal of PPE** used at your worksite.

Explanation for Selection of PPE

Your supervisor will need to review your job responsibilities for areas that may involve exposure to bloodborne pathogens.

Selection of Personal Protective Equipment (PPE) is based on the type and degree of risk associated with the task being performed. Your facility EH&S and/or Infection Prevention-Control Departments can help with selection and evaluation of PPE.

Any concerns about PPE (what type to use, proper training, etc.) should be discussed with your supervisor or contact your **[EH&S Department](#)** for more information.



Hepatitis B Vaccine

KP offers hepatitis B vaccine to all employees. The vaccine can be obtained **free of charge** from Employee Health Services. The benefit of being vaccinated against hepatitis B is that it will prevent infection and liver disease associated with exposure to the hepatitis B virus.

The vaccine:

- is highly effective and safe
- is recommended for all employees
- does not expose the recipient to bloodborne pathogen diseases
- is given in three injections in the arm at day 0, 1 month and 6 months

Adverse reactions to the hepatitis B vaccine are rare but include:

- injection site reactions, including redness, soreness, swelling
- fatigue/weakness
- headache
- malaise
- irritability



This link will give you more information on the vaccine: http://www.immunize.org/vis/hepatitis_b.pdf

If you decide not to receive the immunization, you must sign a declination form. You may decide later to be immunized.

Actions to take in an Emergency



- ❑ Skin - intact or non-intact - should be **washed immediately** with soap and water.
- ❑ Exposed mucous membranes should be flushed with water only.
- ❑ **Notify your department manager** and go to Employee Health or the Emergency Department.
- ❑ Employees who have had an exposure are offered a medical evaluation immediately with appropriate follow-up. The most obvious exposure incident is a needlestick. However, when blood or other infectious material come in contact with your eyes, nose, mouth, other mucous membrane, or non-intact skin, this is also considered an exposure incident and should be reported to your department manager immediately.

Post-Exposure Procedure

In the event you are exposed to any blood or other infectious materials, **it is CRUCIAL that you report any exposure incident to your department manager** to facilitate immediate intervention that can deter the development of HBV, HIV other potential infections.

Information which will be needed to report BBP exposure includes...

- ❑ The name and medical record number of the source patient (if known)
- ❑ The type and level of exposure
- ❑ What protective equipment or clothing you were wearing at the time of exposure
- ❑ Information on the device involved (including: name, brand, manufacturer, volume, gauge and length)
- ❑ Whether or not a safety feature was utilized

Employees who have had an exposure are offered an immediate medical evaluation with appropriate follow-up. The most obvious exposure incident is a needlestick. However, when blood or OPIM come in contact with your eyes, nose, mouth, other mucous membrane, or non-intact skin, this is also considered an exposure incident and should be reported to your supervisor immediately.

Employee Health Services enters information provided by the employee regarding the exposure incident into the National BBP Exposure Incident database. The **Sharps Injury Log** for each facility is generated from this database.

Post-Exposure Medical Evaluation

During the post-exposure medical evaluation, you will be provided with...

- Counseling
- Appropriate lab work and treatment in line with current US Public Health Service recommendations and regional policies and procedures
- Evaluation of any reported illness in the future to determine if the symptoms may be related to HIV or HBV development
- Chemoprophylaxis (drug therapy) is recommended after a high risk exposure.
- The recommended post exposure testing interval for HIV is at the time of exposure (baseline), 6 weeks, 12 weeks and 6 months.



Biohazard Labeling



Biohazard warning labels must be affixed to containers of biohazardous materials. Labels must include the universal biohazard symbol and the legend "**BIOHAZARD**" or in the case of sharps containers and regulated waste "**BIOHAZARDOUS WASTE**" or "**SHARPS WASTE**."

Labels are fluorescent orange or orange-red, with lettering and symbols in a contrasting color.



Q&A: Exposure to Blood or OPIM

If you have been exposed to blood or OPIM through unprotected contact with blood or body fluids, you should:

A

Wash or rinse the exposed area immediately and thoroughly

B

Notify your supervisor/department manager and go to Employee Health or the Emergency Department

C

Call 911

D

A and B are both correct

Q&A: Exposure to Blood or OPIM

If you have been exposed to blood or OPIM through unprotected contact with blood or body fluids, you should:

A Wash or rinse the exposed area immediately and thoroughly

B Notify your supervisor/department manager and go to Employee Health or the Emergency Department

C Call 911

D A and B are both correct

The correct answer is D.

EMERGENCY RESPONSE

Fire Safety

Fire Extinguishers

Emergency Preparedness

Completion of this section, in conjunction with on-site orientation to facility and departmental procedures with regard to Fire Response Plans, complies with the training requirements of Joint Commission Standard EC.03.01.01 and the requirements of 29 CFR 1910.38 with regard to staff training on Emergency Plans and Fire Prevention. **This section uses both "RACE" and "SAFE".**

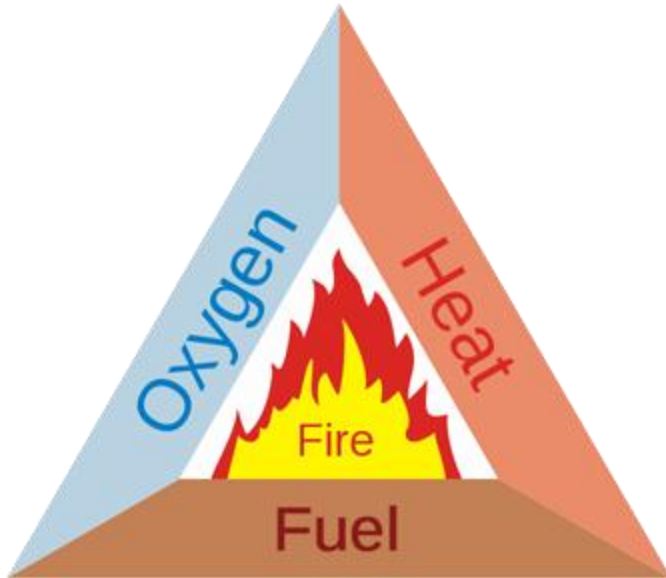
Completion of this section in conjunction with training on facility-specific and departmental procedures complies with the requirements of Federal Standard 29 CFR 1910.157 with regard to staff training on the use of portable Fire Extinguishers and provides education and training needed to comply with Joint Commission Standard EC.02.03.01.

Completion of this section in conjunction with on-site orientation to facility and departmental procedures with regard to emergency, disaster response and evacuation complies with the training requirements of CFR 1910.38 with regard to staff training on Emergency Plans and provides information needed to comply with Joint Commission standard EM.02.02.07.

Fire Safety

There are many things you can do to protect yourself from fire.

In general, you should...



- ❑ Use good housekeeping practices to **keep combustible material from piling up.**
- ❑ Keep items at least **18 inches below the bottom of the sprinkler head. Do not hang items** from the sprinkler heads.
- ❑ Keep all hallways and exits **free and clear of clutter and debris.**
- ❑ **Do not prop doors open.** Open doors will aid the spread of the fire.
- ❑ **Report all faulty wiring** and electrical equipment to Engineering.
- ❑ Give **electrical panels 36 inches** of clearance.
- ❑ Don't post **paper signs in egress corridors**

Fire Safety – R.A.C.E.

Use the term **R.A.C.E.** to remember basic fire procedures.

When fire or smoke is discovered remember...

- ❑ **R - Rescue/ Remove** patients and staff from area.
- ❑ **A - Alarm** - Pull closest fire alarm and follow your facility's procedures for notification.
- ❑ **C - Confine** fire by closing doors. Clear hallways of portable equipment and prepare for evacuation.
- ❑ **E - Extinguish** the fire if small and you have been trained to operate an extinguisher (or **Evacuate** if told to do so by the Incident Commander)

R - Rescue/Remove patients & staff

A - Alarm

C - Confine fire/**C**lear hallways

E - Extinguish or **E**vacuate

Code Red Response - S.A.F.E.

Alternatively, some facilities use the term **S.A.F.E.** to remember basic fire procedures:

When fire or smoke is discovered remember...

- ❑ **S - Safety of Life** - Remove occupants away from danger and close the doors
- ❑ **A - Activate** the closest fire alarm and follow your facility's procedures for notification.
- ❑ **F - Fight the fire** - only if it is safe to do so
- ❑ **E - Evacuate** if told to do so by the Incident Commander or Administrator-in-Charge

S - Safety of Life

A - Activate the Alarm

F - Fight the Fire

E - Evacuate

The **FACILITY-SPECIFIC SUPPLEMENT** page at the end of this training will tell you if you use S.A.F.E. at **YOUR** facility.

P.A.S.S.

To operate a fire extinguisher, remember: **P.A.S.S.**

- **P** - Pull The Pin
- **A** - Aim The Nozzle (at the **base** of the fire)
- **S** - Squeeze The Handle
- **S** - Sweep It Back & Forth (at the **base** of the fire)

Pull



Aim



Squeeze



Sweep



PORTABLE FIRE EXTINGUISHERS

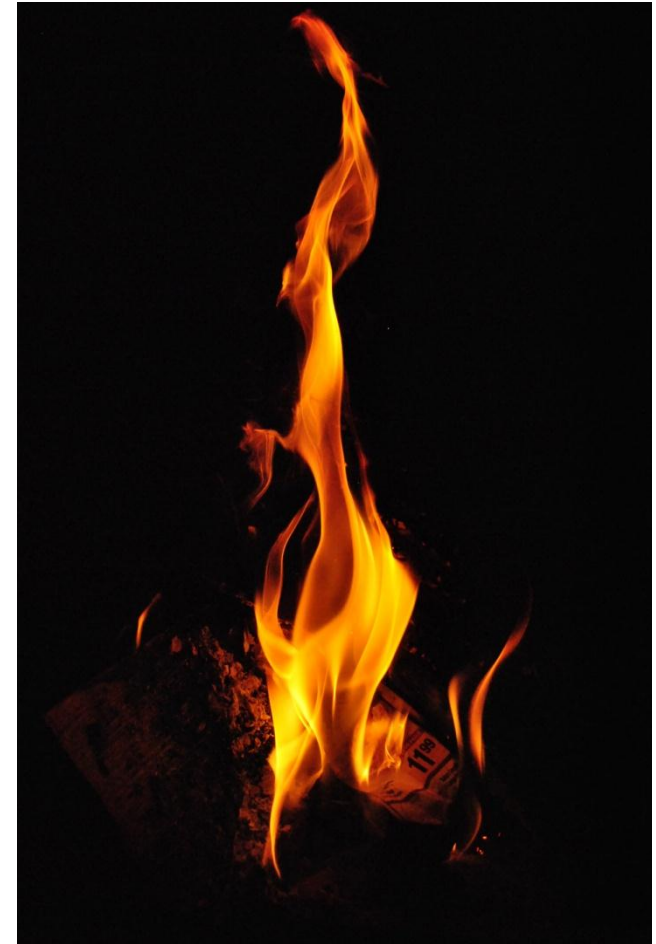
Fire Extinguishers - The Hazards of Early Stage Fire Fighting

There are things to consider when assessing the risk of trying to extinguish a fire:

- ❑ Is the fire too big to use an extinguisher? Portable extinguishers **last for only a short time when activated - less than a minute.**
- ❑ Is the air unsafe to breathe?
- ❑ Is the area too hot or too smoky?
- ❑ Is there a clear evacuation path behind you as you extinguish the fire?

Remember:

- ❑ Stand between the exit and the fire to escape if needed.
- ❑ Never place yourself or others in jeopardy by attempting to extinguish a fire.
- ❑ If it is not SAFE to extinguish a small fire, or if smoke becomes hazardous, leave the area!



Hospital Fire Response

Hospital Smoke Compartments:

Each floor of a hospital is divided into separate Smoke Compartments. Each smoke compartment is surrounded by walls and doors with added protection against smoke and fire, and will provide a barrier between you and the area which is burning.

You should know the boundaries of your smoke compartment and the smoke compartments adjacent to your unit.

If there is a fire on your unit, you would immediately evacuate yourself, coworkers, patients and visitors into the adjacent smoke compartment. This is known as Horizontal Evacuation.

Note: stairwells in protected buildings are both smoke and fire resistant!

Hospital Fire Response and Evacuation

In the event of fire, **Hospital Employees will not leave the building** unless instructed to do so.

If there is a fire on the unit, **Hospital Departments evacuate in the following order...**

1. **Horizontal** Evacuation (side to side to the next safe smoke compartment on the same floor)
2. **Vertical** Evacuation (going down the stairs to the next safe smoke compartment)
3. **Evacuate** the Building - only under the direction of the fire department or the incident commander.

Familiarize yourself with both the primary and secondary evacuation routes for your unit. Evacuation Maps are posted throughout each facility.

Fire Drills

For **COMPLIANCE** with both Joint Commission Standards and NFPA Fire Code, **ALL** employees are **REQUIRED** to participate in fire drills that are conducted regularly by EH&S or Engineering! **Treat a drill like a real Code Red: Stop work and participate in the drill – EVERY TIME!**

Fire Drills are conducted at every facility as follows:

- ❑ Hospitals - 1 drill per quarter per shift
- ❑ Medical Office Buildings which are Accredited – 1 drill per quarter per shift
- ❑ Medical Offices and other buildings – at least once per year

Q&A: Fire Drills

When your facility conducts a fire drill, you must:

- A** Recognize that it's only a drill and keep working – members are waiting!
- B** Use the time to read the Emergency Fire and Prevention Plan – you can never be prepared enough!
- C** Treat it like a real Code Red: Stop work and participate in the drill – EVERY TIME!
- D** Catch up on paperwork – there's finally some quiet time!

Q&A: Fire Drills

The correct answer is C.

When your facility conducts a fire drill, you must:

- A** Recognize that it's only a drill and keep working – members are waiting!
- B** Use the time to read the Emergency Fire and Prevention Plan – you can never be prepared enough!
- C** Treat it like a real Code Red: Stop work and participate in the drill – EVERY TIME!
- D** Catch up on paperwork – there's finally some quiet time!

Disasters

The Joint Commission defines a “**disaster**” as “**an unexpected or sudden event**” and also “a natural or human-made event that significantly disrupts the environment of care, or results in a sudden, significantly changed or increased demand for the organization’s services.”

Commonly within Kaiser Permanente we define a “disaster” as **any unplanned event, inside or outside our facility, that may affect our facilities, staff, patients, or our ability to provide care.**

We have a four-part program to manage disasters that includes:

- **Mitigation**
- **Preparedness**
- **Response**
- **Recovery**

Disaster Response Codes and Rainbow Charts

All facilities use **disaster codes**. The **FACILITY-SPECIFIC SUPPLEMENT** page at the end of this training contains information about the codes for **YOUR** facility.

Examples of internal disasters might be: IT computer system failures, public utility outages, hazardous materials spills, fires.

Examples of external disasters might be: earthquakes, wildfires, terrorist acts, hazardous materials spills near your facility or infectious pandemics.

Each Medical center has developed **Rainbow Charts** (also called Code Flipcharts) which contain basic information on what you should do in response to an emergency.

Rainbow Charts are posted throughout work areas as staff quick references.

You must familiarize yourself with the codes used at your facility for each type of emergency.

Emergency Operations Plans

Each medical center has an **Emergency Operations Plan** to manage disaster response.

The **FACILITY-SPECIFIC SUPPLEMENT** page at the end of this training contains specific information about **YOUR** facility's plans, where they are kept and how you can get a copy if you want to read it.

Some critical departments have created department-level Emergency Operations Plans also. Familiarize yourself with any department specific procedures for your work area.

EMERGENCY PREPAREDNESS

Roles & Responsibilities During a Disaster

Your role and responsibilities during an emergency will depend on where you work and what you do.

You may be reassigned to new or different duties during a disaster.

See your facility's specific information (link at the end of this section) for what you should do in a disaster:

- If you are at work when a disaster happens, or
- If you are at home when a disaster happens.

Keep your manager and Human Resources current on your contact information for any emergency call-back lists they might maintain.

Communications in a disaster are often difficult. Listen for public information broadcasts on radio and TV, check your facility's web page, and call your staff hotline (if your facility has one).



Managing the Emergency Response

Medical centers have a **Hospital Command Center (HCC)** (also known as a “**Emergency Operations Center**” or **EOC**) that is activated if the disaster code is called. It’s a place for leaders to gather, collect information, make decisions, and manage the response until the crisis is over and the Code is secured.

All Kaiser Permanente facilities use the **Incident Command System** (also known as the **Hospital Incident Command System**) to manage disaster response in the HCC/EOC.

The **person in charge** in the HCC/EOC during a disaster is called the “**Incident Commander.**” Other managers may be assigned to help in various pre-set roles as needed.

The **FACILITY-SPECIFIC SUPPLEMENT** page at the end of this training will tell you how to locate **YOUR** HCC/EOC and its phone number.

EMERGENCY PREPAREDNESS

Hazard Vulnerability Assessment and Drills

Medical centers conduct a **Hazard Vulnerability Assessment (HVA)** every year to determine the greatest threats, so they can focus preparations in the right areas. **HVAs are specific to each facility**, its locations, operations, and threats (internal or external).

The **FACILITY-SPECIFIC SUPPLEMENT** page at the end of this training contains the top risks to **YOUR** medical center based on recent vulnerability assessments.

Each medical center conducts **at least two disaster drills a year** (this is also a requirement of The Joint Commission).

Drills are designed to prepare the facility for the greatest risks identified on its **HVA** (Hazard Vulnerability Assessment).



OSHA Emergency Action Plan

Your Emergency Operations Plan also includes OSHA-required emergency evacuation procedures including how to evacuate and accounting for all staff after an evacuation. (The plan also covers how to evacuate patients as part of the process.)

Do not evacuate hospitalized patients until directed to do so

- ❑ **by overhead speaker, or**
- ❑ **by your manager!**

Posted in your facility are maps of exit paths through marked exit doors and stairs to designated areas outside the building. When you get to your work area find these maps, learn the fire escape routes, and ask your supervisor if you have any questions.

When you get to your work area ask your supervisor about evacuation plans and what your duties are if an evacuation is ordered.

Q&A: Which is an “internal disaster”?

An example of an **internal** disaster is:

- A** Earthquake
- B** Wildfire
- C** IT computer system failure
- D** Terrorist attack

Q&A: Which is an “internal disaster”?

An example of an **internal** disaster is:

- A** Earthquake
- B** Wildfire
- C** IT computer system failure
- D** Terrorist attack

The correct answer is C.

CHEMICAL SAFETY

Changes to OSHA's Hazard Communication Standard Hazardous Materials and Waste

When completed in conjunction with on-site departmental and job-specific orientation to the Hazardous Materials in use in the work area, this training meets the requirements of Federal Hazard Communication Standard 29 CFR 1910.1200 and California 8 CCR §5194 for training on Globally Harmonized Systems.

This section provides information on how employees can create a safe and secure working environment for staff and members and provides education and training needed to comply with Joint Commission Standard EC.02.02.01

HAZARD COMMUNICATION CHANGES

Changes to OSHA's Hazard Communication Standard

In March 2012, the Occupational Safety and Health Administration (OSHA) revised the Federal Hazard Communication Standard to be consistent with the provisions of the United Nations **Globally Harmonized System of Classification and Labeling of Chemicals (GHS)**.

*Note that although implementation of new primary container labeling requirements and use of SDS is not required until 2015, it is expected that new labels and SDSs will be phased in prior to then. Also, please note that there are no immediate changes required for labeling of secondary containers.



2012 Changes to OSHA's Hazard Communication Standard: Labels

The revised HazCom Standard **requires training** on:

- ❑ New primary container labeling requirements
- ❑ **Safety Data Sheets (SDSs)** – replacing MSDS

When new labeling requirements are implemented, hazardous waste labels will require:

- ❑ **Signal words** to denote the level of hazard (i.e. “Danger” or “Warning”)
- ❑ **Pictograms** to illustrate the specific hazards of a chemical
- ❑ **Hazard statements**
- ❑ **Precautionary statements**

In addition labels will require a:

- ❑ **Product identifier**
- ❑ **Name, address and telephone number**



Changes to OSHA's Hazard Communication Standard: Labels

Below are examples of new pictograms required for the hazard classes shown:



Flame

- Flammables
- Pyrophorics
- Self-reactives
- Self-heating
- Organic peroxides
- Emits flammable gas



Gas Cylinder

- Gases under pressure



Flame Over Circle

- Oxidizers

Changes to OSHA's Hazard Communication Standard: Labels



Exploding Bomb

Explosives
Self-reactives
Organic Peroxides



Acute Toxicity

Acute Toxicity (fatal or toxic)



Health Hazard

Carcinogen
Mutagen
Reproductive toxicity
Respiratory sensitizer
Target organ toxicity
Aspiration toxicity

Changes to OSHA's Hazard Communication Standard: Labels



Exclamation Mark

Irritant (skin and eye)
Skin Sensitizer
Acute toxicity (harmful)
Narcotic effects
Respiratory tract irritant



Corrosion

Skin corrosion/burns
Eye damage
Corrosive to metals

A non-mandatory pictogram associated with “environment” indicates Aquatic Toxicity



Changes to OSHA's Hazard Communication Standard: SDS

In addition to the changes to the labeling requirements, **OSHA's revised HazCom standard requires that manufacturers transition to use of standardized Safety Data Sheets (SDSs)** with a standard 16-section format **replacing MSDSs**.

Standardized SDS will include the following required sections:

- ❑ Section 1, Identification
- ❑ Section 2, Hazards(s) identification
- ❑ Section 3, Composition/information on ingredients
- ❑ Section 4, First-aid measures
- ❑ Section 5, Fire-fighting measures
- ❑ Section 6, Accidental release measures
- ❑ Section 7, Handling and storage
- ❑ Section 8, Exposure controls/personal protection
- ❑ Section 9, Physical and chemical properties
- ❑ Section 10, Stability and reactivity
- ❑ Section 11, Toxicological information
- ❑ Section 16, Other information

Worksite-Specific Chemical Hazards

Types of hazardous materials typically found in a hospital or clinic include:

- Glutaraldehyde and formaldehyde
- Cleaning agents and disinfectants such as Cavicide or Klenzyme
- Alcohol and hand degermer (which is flammable)
- Phenol
- Acetone
- Liquid nitrogen
- Hydrogen peroxide

You will require orientation on the specific processes and procedures for safe handling and use of chemicals at your worksite (Department Specific Training is required), as well as information on the location and the hazards associated with chemicals in the work area. If a new chemical hazard is introduced, you will need training on that chemical and its specific hazards.



Information Access

You will need to know where hazardous chemicals are located in your work area, **and** how they are stored, **as well as:**

- ✓ **How to access a copy of your facility's Hazard Communication Program.**
- ✓ **How to access the Material Safety Data Sheets (MSDS) for the chemicals in use in your work area.**
- ✓ **How to access facility chemical inventories**

If you do not currently know how to access these materials, you **MUST** get this information from your department manager/supervisor and/or your **EH&S department**.

Or, wait until the **FACILITY-SPECIFIC SUPPLEMENT** page at the end of this training for information on how to access hazardous chemical information for **YOUR** facility.

By clicking the Forward button below, I agree to learn where hazardous chemicals are present in my work area; how to access my Hazard Communication Plan; the chemical inventory for my work area; and how to access Material Safety Data Sheets.

HAZARDOUS MATERIALS AND WASTE

Protective Measures, Personal Protective Equipment (PPE)

Consistent and proper use of the correct PPE is another crucial part of safe handling of Hazardous Materials.

- ❑ **Wear protective apparel and equipment EVERY SINGLE TIME it is appropriate!**
- ❑ Make sure everyone, including visitors, wears appropriate eye protection where chemicals are handled.
- ❑ Wear appropriate gloves (such as Nitrile) to avoid potential contact with toxic materials; inspect the gloves before each use, wash them before removal, and replace them periodically or between procedures.
- ❑ Contact your manager/supervisor for PPE options



Spill Response

In general, you should know:

- ❑ What to do in case of an accidental spill—refer to the Rainbow Chart as a quick reference on emergency procedures.
- ❑ Incidental or small spills should be cleaned up immediately. With the proper training, incidental or small spills can generally be cleaned up by departmental staff. Know what the policy is at your facility.
- ❑ Large or Emergency Response Releases, require response from professionally trained HazMat teams.

For your reference, you may print this fact sheet with information on spill response: [Hazardous Spills Fact Sheet](#)

In addition, **remember that spill clean up material may need to be disposed as hazardous waste!** (contact your [EH&S Department](#) for consultation).



Spill Response

You should follow these procedures for response to incidental spills...

- ❑ **Isolate, Evacuate, Secure:** Isolate the spill area. Evacuate everyone from the area surrounding the spill, (the entire room if necessary), except those responsible for clean up of the spill. Secure the area.
- ❑ **Personal Protective Equipment (PPE):** If not already worn, put on personal protective equipment as needed, including: gloves, impervious foot covers and apron, chemical goggles with or without a face shield, if splash hazard present.
 - ❑ **Respiratory Protection:** response to an incidental spill will not normally require respiratory protective equipment.
 - Apply absorbents or neutralizers immediately to keep respiratory exposure within safe limits. Allow time for neutralizers to work before cleaning up.
 - Some chemicals present an inhalation hazard even from small spills and would require use of equipment such as a Powered Air-Purifying Respirator (PAPR). Those spills would be considered an Emergency Response Release, in which case you should evacuate and secure the room containing the spill. Contact your EH&S Department for a list of these chemicals.
 - Remember that N95-type respirators will not protect against chemical vapors or fumes!
 - N95 particulate respirators are recommended for spills of hazardous drugs (click on this link for more information on hazardous drug spills [Hazardous Drug Management](#)).
- ❑ **Contain:** Stop the source of the spill, if possible.
- ❑ **Confine:** Confine spill to initial spill area.
- ❑ **Neutralize:** See SDS for information on neutralization.

Large, or Emergency Response Releases, require response from Operations Level staff (employees in EH&S or Engineering may have this training), professionally trained HazMat teams or outside contractors.

Spill Response - Exposure

If an accidental spill or other event leads to an employee exposure, follow the steps below to aid any exposed workers.

Eyes: Go to the nearest eyewash station* and flush eyes for **15 minutes**.

Skin: Immediately flush skin with water for **15 minutes**. Use the quick drench emergency shower* if contact is over a large area.

Breathing: Move the exposed person to fresh air at once. If breathing has stopped, perform mouth-to-mouth resuscitation. Keep the affected person warm and at rest. Get medical attention as soon as possible.

Swallowing: See training on individual categories of chemicals for information on what to do if a hazardous material is swallowed.

If you are **not** trained to respond to incidental spills, remember **SIN** :

SIN S - Safety (of everyone in the area of the spill)

I - Isolate (the spill by closing a door, blocking pathway through the spill)

N - Notify (your emergency code line to alert responders to the situation)

*Eyewashes and showers are only required in areas that use specific chemicals.

Labeling Systems

Primary Labels are those which are affixed to the product's original container and provided by the manufacturer, which must include.

- ❑ Chemical name
- ❑ Appropriate hazard warnings, including physical and health hazards
- ❑ Manufacturer's name and address

When hazardous chemicals are transferred from a primary container into a secondary container, the **secondary container** must be **labeled** with the following:

- Chemical name
- Appropriate hazard warnings

The original manufacturer's label and/or SDS is used as a source of information.



Material Safety Data Sheets

Material Safety Data Sheets, or **MSDSs**, are information sheets on products which identify:

- ❑ MSDS date and vendor contact information
- ❑ What chemicals are in the product
- ❑ Physical hazards of working with the product
- ❑ Health hazards of working with the product Routes of Entry
- ❑ How to protect yourself from these hazards

MATERIAL SAFETY DATA SHEET						Page: 1
Metal Cleaner						
<div style="display: flex; justify-content: space-between;"> <div style="border: 1px solid black; padding: 2px;"> HEALTH 3 FLAMMABILITY 1 PHYSICAL HAZ. 1 PPE n </div> <div style="text-align: right;"> Revision: 11/27/1996 Printed: 12/01/2003 Date Created: 12/01/1996 </div> </div>						
1. Product and Company Identification						
Product Code:	DX579					
Product Name:	Metal Cleaner					
Manufacturer Name and Address						
Company Name:	PPG Industries, Inc. 4325 Rosanna Drive P.O. Box 9 Allison Park, PA 15101					
Emergency Contact 1	Emergency Medical/Spill Info:		(304)842-1300			
Information Contact	Technical Information		(614)363-9610			
Chemical Family:	ACID					
2. Composition/Information on Ingredients						
Hazardous Components (Chemical Name)	CAS #	Percentage	OSHA TWA	ACGIH TWA	Other Limits	
1. Ethanolol 2-Butoxy-	111-762	10.0 - 20.0 %	(S) 25 ppm	(S) 25 ppm	No data.	
2. Diethylene glycol monobutyl ether	112-345	10.0 - 20.0 %	Not Estab.	Not Estab.	No data.	
3. Phosphoric acid	7664-38-2	30.0 - 40.0 %	1 mg/m3	1 mg/m3	No data.	
3. Hazards Identification						
Emergency Overview						
Harmful or fatal if swallowed. May be corrosive. This product contains a material which causes skin burns. This product contains a material which causes irreversible eye damage. May be harmful if absorbed through the skin. Vapor and/or spray mist harmful if inhaled. Vapor irritates eyes, nose, and throat. Vapor generated at elevated temperatures irritates eyes, nose, and throat.						
Route(s) of Entry: Inhalation? No Skin? No Eyes? No Ingestion? No						
Potential Health Effects (Acute and Chronic)						
INGESTION: Harmful or fatal if swallowed.						
EYE CONTACT: This product contains a material which causes irreversible eye damage.						
SKIN CONTACT: May be corrosive. This product contains a material which causes skin burns. May be harmful if absorbed through the skin.						
INHALATION: Vapor and/or spray mist harmful if inhaled. Vapor irritates eyes, nose, and throat. Vapor generated at elevated temperatures irritates the eyes, nose, and throat. Repeated exposure to high vapor concentrations may cause irritation of the respiratory system and permanent brain and nervous system damage.						
CHRONIC OVEREXPOSURE: Avoid long-term and repeated contact. This product contains an ethylene series glycol ether and/or acetate which has been shown to cause adverse effects on the kidneys, liver, blood and/or blood-forming tissue. This product contains diethylene glycol monobutyl ether (DEGBE). DEGBE consumed in drinking water at low levels by rats for 30 days caused injury to either the liver, kidney, spleen, or testes.						
Licensed to A V Systems, Inc.: MIRS MSDS, (c) A V Systems, Inc.						

Safe Chemical Storage

It's important to **store chemicals safely**. Follow any and all recommendations of the manufacturer. These are usually found on the chemical container, label, or material safety data sheet (MSDS).

Other things to remember...

- ❑ **Don't** store hazardous chemicals **above eye level**.
- ❑ **Separate chemicals** that could **cause a hazardous reaction** if they are mixed. For instance, acids and bases can be very reactive together.
- ❑ Consider whether your chemicals need to be stored in a special cabinet, such as a **flammables** or a **caustics cabinet**.
- ❑ Do not store chemicals in containers normally used for other purposes—for instance a dish detergent or milk bottle.
- ❑ Chemical containers **should not be stored on top of each other or on the floor** where they could accidentally be knocked over.
- ❑ Chemicals should **never be stored with food**.



EMERGENCY EYEWASH AND SHOWER

Emergency Eyewash

Use of Emergency Eyewash Equipment

You need to know:

- Chemicals you use that can *cause damage to your eyes or skin*
- The **location** of the nearest eyewash *Can you get there with your eyes shut?*

In areas required to have an emergency eyewashes and/or shower, they must be in accessible locations that require **no more than 10 seconds for the injured person to reach (55 feet maximum)**.

To activate the eyewash, **push or pull the activation mechanism until the water starts**

- Hold your eyes open and rinse for **15 minutes!**

Emergency Showers

Emergency Deluge showers are needed in those areas where it is a possibility that either highly corrosive or highly toxic chemicals may splash over substantial areas of the body.

- To **activate** the emergency shower, **pull down** on the activation mechanism until the water starts.
- If your **clothing is contaminated with chemicals**, **remove them** before getting under the shower. (The chemicals will stay on the body longer if the clothing is not removed.)
- **Continue under the shower for 15 minutes** before seeking medical attention.

Also remember...there must always be a **clear pathway to the eyewash**: **ensure no carts or boxes are placed in the way**.

Medical Gas Safety

Cylinders containing compressed gases **are a serious hazard when not handled or stored correctly.**

A tank which is **not secured may be knocked over.** If the valve is knocked off or the tank ruptures, the cylinder would become **a projectile causing severe injury** or even death.

A leaking oxygen cylinder can be a fire and explosion hazard.

Leaks of compressed gases which displace oxygen, such as nitrogen or carbon dioxide, **can put people at risk for asphyxiation.**



Medical Gas Safety



Compressed Gas Cylinder Storage

- ❑ **All compressed gas cylinders must be upright and secured to a fixed object**, or held in a portable transport cart/holder. Cylinders should be secured at **both the top and the bottom**.
- ❑ In patient areas, only **12 small “E-Cylinders” of oxygen** or one H-cylinder (a maximum of 300 cubic feet) can be stored in a smoke compartment without special enclosures. In use e-cylinders of oxygen may be found on gurneys, wheelchairs or crash carts. These in use e-cylinders are not to be included in the smoke compartment storage count limitation.
- ❑ **Never store cylinders in an egress corridor!**

Click on this link for more information on safe handling and storage of [compressed medical gas cylinders](#)

CALIFORNIA ONLY: Employee Rights in California, Proposition 65

In California, Title 8 of the California Code of Regulations, Section 5194 (8 CCR 5194) contains additional notification requirements which are not in the federal standard.

California requires that employees are informed of their right:

- ❑ To receive information about hazardous substances in their work environment.
- ❑ For their physician or collective bargaining agent to receive that information
- ❑ Against discharge or other discrimination due to the employee's exercise of these rights
- ❑ To receive updated information on a timely basis when a new or revised material safety data sheet is received. This must be within 30 days if the new information indicates significantly increased risks.

California voters approved proposition 65 which requires the state to publish a list of chemicals that are known to cause cancer, birth defects or other reproductive harm. That list is available on the California EPA web site (<http://www.oehha.ca.gov/prop65.html>).

Examples of listed chemicals in health care include formaldehyde, ethylene oxide and some chemotherapy agents. Prop. 65 also requires that warnings appear on the label of listed products and that warning signs in the workplace be posted in conspicuous places where they're likely to be read and understood.

For questions regarding Prop. 65, contact your facility's **EH&S department**.

(This description of Prop. 65 requirements is provided for informational purposes only.)

WASTE SEGREGATION AND MINIMIZATION

Waste Segregation and Minimization

Health care organizations can be subject to severe penalties when waste is not segregated correctly by staff. Waste typically falls into some basic categories which are [subject to regulations written and enforced by different government agencies](#).

These categories include:

- ❑ **Medical Waste**
- ❑ **Hazardous Waste**
- ❑ **Universal Waste**
- ❑ **Drain Disposal/Waste Water**
- ❑ **Recyclable Waste**
- ❑ **Non-hazardous – Regular Trash**

In addition to this training, it is important that you [know the local regulatory requirements](#) and facility policies for waste segregation and disposal at your worksite.

You can contact your facility's [Environmental Health & Safety Department](#) if you have questions on waste.



Medical Waste

The most common form of regulated waste produced in a healthcare setting is **Medical Waste**.

Medical Waste includes:

- ❑ **Infectious/Biohazardous or "Red Bag" Waste**
- ❑ **Sharps waste**
- ❑ **Pharmaceutical Waste**
- ❑ **Trace Chemotherapy Waste**
- ❑ **Pathology Waste**

Note that, if you are involved in the packaging, shipping and transport of medical waste (for instance—you work in the EVS department), you will need to take additional DOT training on KP Learn: DOT Regulated Medical Waste Function Specific Training. Contact your facility's **Environmental Health & Safety Department** if you have questions on training requirements.

WASTE SEGREGATION AND MINIMIZATION

Biohazardous Waste

Any **recognizable fluid blood**, fluid blood products or containers or equipment containing fluid blood are considered to be **biohazardous**. This could include other body fluids contaminated by blood.

Biohazardous Waste must be disposed of in **designated Biohazard Bins**.

Some medical centers follow local requirements which are **more strict than the state regulations** and require disposal of items contaminated by any amount of blood or OPIM (Other Potentially Infectious Material) as Biohazardous/Red Bag Waste.

You must familiarize yourself with the **specific requirements of your facility** regarding disposal of biohazardous materials.

If you need more information on disposal of Biohazardous waste, discuss it with your supervisor or contact your facility **Environmental Health & Safety Department**.

BIOHAZARD RED BAG WASTE

Fluid blood
Blood-saturated items
Bags and IV tubing
containing blood products
Suction canisters
Hemovacs
Chest drainage units
Hemodialysis products

WASTE SEGREGATION AND MINIMIZATION

Sharps Waste and Path Waste



Sharps Waste would include anything capable of **puncturing or cutting the skin** and must be disposed of in a **sharps container**. Items which must be disposed of in a sharps container would include: needles, scalpels, blades, surgical staples, wires or broken glass.

Your facility may “co-mingle” sharps and pharmaceutical waste in pharmaceutical containers. Know what your facility’s policy is.



Pathology Waste is commonly disposed of in only a few departments, such as the **Operating Room** or **Pathology**.

Pathology Waste includes surgical specimens, anatomically identifiable human tissue or body parts, placentas, amniotic fluids or large blood clots.

Pathology Waste must be disposed of in a **container labeled “Pathology Waste”** or simply **“PATH”**.

WASTE SEGREGATION AND MINIMIZATION

Pharmaceutical Waste

Pharmaceutical Waste would include **any drugs**, such as partially full vials/amps of medication, tablets, capsules, partially filled syringes or IV solutions containing medication.

In California, pharmaceutical waste cannot be sent to landfill or dumped down the drain. Waste pharmaceuticals must be disposed in **pharmaceutical waste containers** and incinerated.

Note: you should familiarize yourself with your facility's policy on wasting controlled substances.

Some **drugs/pharmaceuticals** are **regulated by the EPA** through the Federal Resource Conservation and Recovery Act (RCRA). These pharmaceuticals must be disposed of as hazardous waste.

You should follow your facility's policy on Hazardous Waste for disposal of these medications.

Click this link for a complete list of [**RCRA Pharmaceutical Waste**](#).



WASTE SEGREGATION AND MINIMIZATION

Chemotherapy Waste

Trace amounts of **chemotherapeutic agents** and any materials contaminated by them must be disposed of as **Trace Chemo Waste**. Trace Chemo Waste is disposed of in **designated containers** which are usually **yellow** in color.



Many types of chemotherapy waste in quantities beyond trace amounts are regulated under RCRA.

This waste is considered **bulk chemo** and includes any chemotherapy waste which contains **pourable**, **drippable** liquid when held at any orientation.

It is KP policy to **dispose of all bulk chemo waste as hazardous waste**.



WASTE SEGREGATION AND MINIMIZATION

Hazardous Waste

Hazardous Waste is typically chemical waste or other waste which we are not able to manage as non-hazardous solid waste.

Hazardous Waste is either listed by the EPA, or it shows at least one of the following characteristics:

- ❑ Ignitable/Flammable
- ❑ Corrosive
- ❑ Reactive
- ❑ Toxic



Many but not all chemicals are considered hazardous waste.

Note that, if you are involved in the packaging, labeling, shipping and transport of hazardous waste, you will need to take additional DOT training on KP Learn: DOT Hazardous Waste Manifest and Shipper Function Specific Training. Contact your facility's **Environmental Health & Safety Department** if you have questions on training requirements.

Universal Wastes and Drain Disposal

Universal Waste is a sub-category of hazardous waste and cannot be sent to landfill.

In California, Universal Waste includes such items as:

- ❑ All **batteries**
- ❑ **Computer** equipment and **electronics** waste
- ❑ **Mercury**
- ❑ **Fluorescent light** tubes
- ❑ Non-empty **aerosol cans**

Drain Disposal is always prohibited for some materials, including:

- ❑ Hazardous Waste (chemicals that are ignitable/flammable, corrosive, reactive or toxic)
- ❑ Pharmaceutical Waste

You should know that **local water districts have their own rules** for drain disposal.

Know the requirements at the medical center where you work.

You can contact your [EH&S department](#) if you have questions on drain disposal restrictions.

ELECTRICAL & EQUIPMENT SAFETY

Medical Equipment
Utilities Safety

Completion of this course in conjunction with orientation and review of any facility or department-specific procedures with regard to Medical Equipment Management will provide employees with education and knowledge needed for compliance with Joint Commission Standard EC.02.04.01.

Completion of this training module in conjunction with orientation and review of any facility or department-specific procedures with regard to Utilities Management will provide employees with education and knowledge needed for compliance with Joint Commission standard EC.02.05.01.

Clinical Technologies

“ClinTech” is the department responsible for the management of the maintenance of all medical equipment at Kaiser Permanente facilities - regardless of ownership.

Some of the responsibilities of these departments include:

- Maintaining current, accurate inventories of all medical equipment
- Monitoring and acting on medical equipment hazard notices and recalls
- Conducting electrical safety testing on medical equipment
- Conducting scheduled preventive maintenance of all medical equipment

Note that **at most medical centers**, **ClinTech** does **not** maintain or repair:

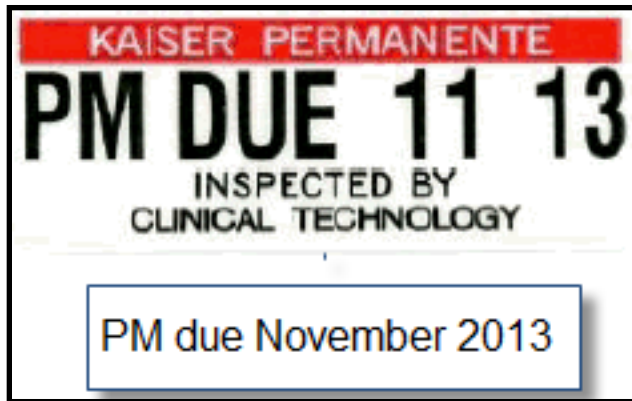
- | | |
|-----------------------------|---|
| ■ Wheel chairs | ■ Sphygmomanometers |
| ■ Call lights | ■ High Level Disinfection Units (GUS, Steris) |
| ■ Patient lifts | ■ TVs |
| ■ Beds | ■ OR Tables |
| ■ Patient Mechanical Scales | |

Typically these items will be maintained by the facility’s Engineering Department or an outside contractor.

Preventive Maintenance (PM) Tags

Prior to use of medical equipment, staff **must inspect the PM Tag** to ensure that its Preventive maintenance is current.

PM Tags are color-coded: **Red tags indicate that inspection is due in 2013. The first number indicates the month that the inspection is due. The second number indicates the year.**



Equipment with outdated PM tags must be immediately reported to ClinTech.

Remove from service and make it available for the performance of the PM.

Individual pieces of Medical Equipment can be identified by the Equipment Identification Number (EIN) Sticker.

Malfunctioning Equipment Tags & Safe Medical Devices Act

Medical Equipment which malfunctions must be tagged with a malfunctioning equipment tag and moved to a location where it will not be used.

Contact ClinTech to report the equipment malfunction. Tags on equipment should describe the exact problem so that proper repair can be promptly arranged.

Staff should never “tag” equipment with a piece of paper marked “broken”. Be aware that “broken” doesn’t really describe what is wrong with the equipment.

Remember that not using the tags or not following the proper procedures could jeopardize patient safety!

Safe Medical Devices Act (SMDA)

Medical Equipment failure or malfunction that causes or contributes to patient injury, illness or death must be reported, as required by the Federal Drug Administration (FDA).

In these instances a Responsible Reporting Form (RRF) should be completed.

All equipment involved in such an incident must be sequestered by ClinTech for investigation.

Q&A: ClinTech

In regards to Medical Equipment and the ClinTech department, which of the following is **NOT** true?

- A** Equipment with outdated PM tags must be immediately reported to ClinTech
- B** Staff should “tag” equipment with a piece of paper marked “broken” when it’s not working
- C** ClinTech maintains inventories of all medical equipment
- D** ClinTech is the department responsible for the management of the maintenance of all medical equipment (regardless of ownership)

Q&A: ClinTech

In regards to Medical Equipment and the ClinTech department, which of the following is **NOT** true?

The correct answer is B.

A

Equipment with outdated PM tags must be immediately reported to ClinTech

B

Staff should “tag” equipment with a piece of paper marked “broken” when it’s not working

C

ClinTech maintains inventories of all medical equipment

D

ClinTech is the department responsible for the management of the maintenance of all medical equipment (regardless of ownership)

Utilities Failures

There are a number of utilities in use at a hospital, and any of these may fail. Your facility may experience **electrical failure, flooding/sewer failure, medical gas failure, medical vacuum failure, hi-pressure steam failure, elevator failure or communications failure**. These systems are maintained by the Facility Services department at each medical center.

Review your facility's Rainbow Chart, or contact your supervisor or **EH&S Department** to learn what to do in any of these utility failure situations.



Medical Gases/Compressed Gas Cylinders

Staff in departments with piped medical gases should know what your department's responsibilities are with regard to emergency medical gas shut off.

Know the location of the shut-off valves and the rooms they control. If unsure of your responsibilities, discuss with your supervisor or contact your Engineering department.



Electrical Safety

Electricity - General Safety Tips:

- ❑ Do not use “cheater” adapters or multiple adapters. Use extension cords (under 10 ft) only in **temporary** emergency situations.
- ❑ Always disconnect plugs from wall by grasping the plug, not the cord.
- ❑ Equipment in patient care areas in a Hospital must have a 3-prong plug and be plugged into a 3-wire receptacle.
- ❑ At most facilities, electrical outlets which are connected to the back-up generators are colored RED. Red outlets are to be used primarily for life support equipment. At some hospitals, all outlets connect to back up generators. You should know which outlets in your area connect to back up power and your building’s emergency procedures in the event of power loss.
- ❑ Don’t plug microwaves or refrigerators into power strips.

Remove equipment from service if...

- ❑ There is evidence of overheating.
- ❑ Someone has received a shock from the equipment.
- ❑ Any wire is frayed, worn, burned, cut, or warm.
- ❑ It has been dropped or is physically damaged.
- ❑ Switches or knobs are loose or do not turn from one position to another, or do not consistently produce the expected result when operated.
- ❑ Liquid has been spilled on it.

If in question, do not use!

NOTIFICATIONS

Right to Access Exposure Records

Completion of this section complies with Federal requirements for Notification of Employee Access to Exposure Records under 29 CFR 1910.1020 and California requirements for 8 CCR 3204.

Employee Access to Exposure Records

Location and Availability of Records

Kaiser Permanente maintains records of any occupational exposure to harmful chemical or biological agents (or testing for them). An example is testing for staff exposure to TB. Certain records are maintained by the Employee Health Department, while records of any testing for occupational exposure to hazardous chemicals will be maintained by the facility's safety department.

Federal law requires that employers notify their employees of the existence of Employee Exposure Records at the start of employment and at least annually thereafter.

This section is your notification!

Responsible Persons

NOTE: Before finishing this training, you must know how to contact your Employee Health Department which is responsible for maintaining and providing access to Employee Exposure Records.

The **FACILITY-SPECIFIC SUPPLEMENT** page at the end of this training will tell you how to find **YOUR** facility's Employee Health Designee.

ACCESS TO EXPOSURE RECORDS

Right to Access Records and the Standard

Right to Access Records

You have the right to review your relevant exposure records.

Access to the Standard

Kaiser Permanente must make available a copy of the standard and its appendices to its employees.

Click here to access a copy of [OSHA Standard 29 CFR 1910.1020](#)

Click here to access a copy of the standard's [Appendix A](#)

Click here to access a copy of the standard's [Appendix B](#)



Quiz

The following Quiz consists of 10 questions.

To receive credit for the course, you must pass the Quiz with a score of 80% or better.

If you do not pass the quiz, you may take it again.

Good Luck!

Some of the typical ways an ATD exposure may occur are when:
(CHECK ALL THAT APPLY)

- You are performing a task that may send ATD pathogens into the air (aerosolize them).
- You are in the same room as a suspected or confirmed ATD patient.
- You enter the room of a patient on Airborne Isolation precautions **WITHIN AN HOUR** after the patient has left the room.

PROPERTIES

On passing, 'Finish' button:

On failing, 'Finish' button:

Allow user to leave quiz:

User may view slides after quiz:

User may attempt quiz:

[Goes to Next Slide](#)

[Goes to Next Slide](#)

[After user has completed quiz](#)

[At any time](#)

[Unlimited times](#)



Properties...



Edit in Quizmaker

Quiz Finished

You have finished the quiz.

IF YOU DID NOT PASS THE QUIZ:

Click here to [take the quiz again](#).

IF YOU PASSED THE QUIZ:

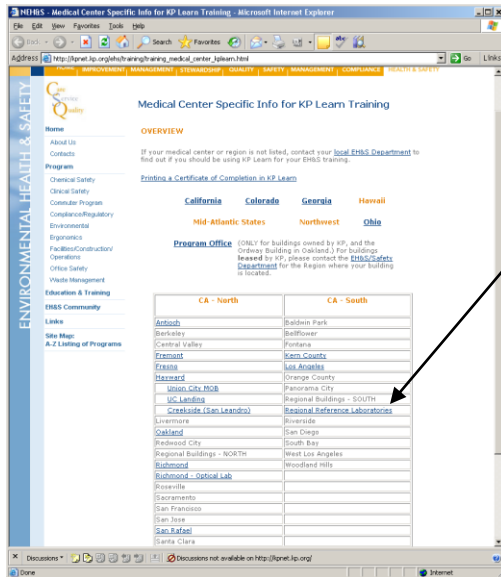
Please move to the next slide for the review of facility-specific information.

Facility/Region Specific Supplemental Information

There is information specific to your facility or region that must also be reviewed. Click on the link at the bottom to open a page that contains facility/region-specific information.

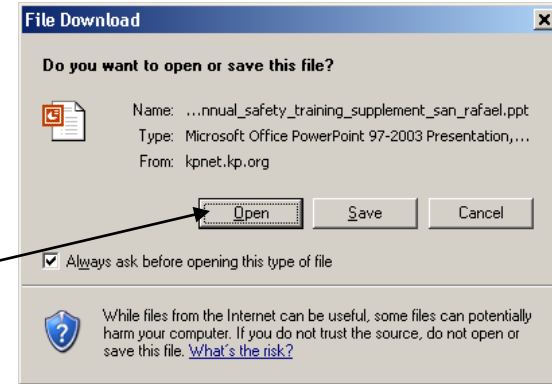
When you have opened the link to your facility/region specific supplemental information, click in the “x” in the upper right corner to close this course.

If you can, print and/or save this supplemental document for reference. You can also contact your [EH&S Department](#) to obtain a copy.



Click your facility/region link

then open your supplement



FACILITY SPECIFIC SUPPLEMENTAL INFORMATION

Training Survey

Thank you!

Help us improve our training by completing a survey at the link below.

[Training Survey](#)

