

# SAFETY & ENVIRONMENT OF CARE

## COMPREHENSIVE Training for KP Staff Who Work in Hospitals

### MEETS INITIAL TRAINING REQUIREMENTS IN THE FOLLOWING PROGRAM AREAS:

#### PERSONAL SAFETY

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

#### INFECTION PREVENTION & CONTROL

- Aerosol Transmissible Disease/Tuberculosis
- Bloodborne Pathogens

#### CHEMICAL SAFETY

- Hazard Communication
- Managing Hazardous Materials

#### WASTE MANAGEMENT

#### EMERGENCY RESPONSE

- Fire Safety & Fire Extinguishers
- Emergency Preparedness

#### ELECTRICAL & EQUIPMENT SAFETY

- Lockout/Tagout (for Affected & Other Employees)
- 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.

## INTRODUCTION

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.

Finally, there is a quiz on this material at the end of the course – you must pass the quiz to receive credit for the course.



**SECTION 1: PERSONAL SAFETY**

# **PERSONAL SAFETY**

Injury & Illness Prevention & Workplace Safety

Ergonomics

Security/Violence in the Workplace

Personal Protective Equipment

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 & ILLNESS PREVENTION PROGRAM (IIPP)

### 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.

## INJURY & ILLNESS PREVENTION PROGRAM (IIPP)

### 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!

## INJURY & ILLNESS PREVENTION PROGRAM (IIPP)

### 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 foot, 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.





## ERGONOMICS

### 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](#)



## ERGONOMICS

### 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!!!



## ERGONOMICS

### Computer Workstation Ergonomics and ergoINFO

#### *If you work at a computer most of the day -*

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.

[ProWorkstation Safety Plus \(WSP\) and Manual Handling Plus \(MHP\)](#) are online e-learning tools designed to help Kaiser Permanente employees effectively manage ergonomic risk

WPS has developed the interactive [ergoINFO](#) tool  
<http://insidekp.kp.org/ergoinfo/>



**INJURY & ILLNESS PREVENTION PROGRAM (IIPM)****Q&A: Injury Reporting**

If you are injured at work:

- A** Notify your supervisor right away (no later than the end of your shift)
- B** Be prepared to provide ideas for preventing similar injuries.
- C** Remind your supervisor to complete your injury report within 24 hours
- D** All of the above are correct

**INJURY & ILLNESS PREVENTION PROGRAM (IIPM)****Q&A: Injury Reporting**

If you are injured at work :

- A** Notify your supervisor right away (no later than the end of your shift)
- B** Be prepared to provide ideas for preventing similar injuries.
- C** Remind your supervisor to complete your injury report within 24 hours
- D** All of the above are correct

The correct answer is D.

## SECURITY/VIOLENCE IN THE WORKPLACE

### 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.

## SECURITY/VIOLENCE IN THE WORKPLACE

### 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 should be worn above the waist, on the outermost garment, and clearly visible.** This helps identify staff.
- 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.



## SECURITY/VIOLENCE IN THE WORKPLACE

### 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



**SECURITY/VIOLENCE IN THE WORKPLACE****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**

## SECURITY/VIOLENCE IN THE WORKPLACE

## Q&amp;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!**

## PERSONAL PROTECTIVE EQUIPMENT (PPE)

### Personal Protective Equipment - Introduction: Types of PPE

Different PPE is used to protect different parts of the body, including the eyes, face, head, feet, hands, arms and lungs.

**Examples of PPE** commonly used by health care workers include **Gloves** (Nitrile or Non-Latex/Latex Exam) and **Protective Clothing** (Moisture Resistant Gowns)

Other examples of uses for PPE and the type of equipment used are:

- Respiratory Protection:
  - N95 particulate respirators
  - PAPR (Powered Air Purifying Respirator)
  
- Eye Protection:
  - Safety Glasses w/Side Shields
  - Goggles
  - Faceshield
  - Shaded Laser Glasses

## PERSONAL PROTECTIVE EQUIPMENT (PPE)

### When is PPE Necessary?

PPE is necessary when hazards (like exposure to infectious materials or harmful chemicals) cannot be eliminated through engineering or administrative controls. You select PPE based on the type of exposure you expect to encounter.

Hazards in a health care setting that would require PPE are:

- Biohazards (potentially infectious body fluids)
- Penetration hazards (sharp objects, broken glass)
- Chemical hazards – through exposure to skin or vapors
- Non-ionizing radiation (lasers )
- Noise hazards (lawn mowers, generators)

Other factors to consider when selecting appropriate PPE include:

- Durability and appropriateness for the task: PPE is only effective if it stops infectious material, chemicals or other hazards from penetrating for the entire time it is used.
- Fit: PPE that fits poorly won't provide much protection. In some cases (like N95-type respirators) you must be fit tested prior to use in order to ensure protection

## PERSONAL PROTECTIVE EQUIPMENT (PPE)

### What PPE is necessary?

You can access a list of commonly performed procedures and the PPE required by clicking here:

**[REF DOC: PPE Matrix.](#)**



## PERSONAL PROTECTIVE EQUIPMENT (PPE)

### The limitations of the PPE

**All PPE has limitations** - for example, gloves may develop small holes. Even appropriate PPE does not provide a foolproof guarantee of safety.

Always use the right PPE for the job. OSHA requires that chemicals' Safety Data Sheets (SDS) list information about the appropriate PPE for the use with the product. Refer to the SDS if you have questions about the appropriate PPE for handling a chemical.

**Make sure you know where your PPE is!** (It can't help you if you can't find it when you need it, right?)

PPE has limitations...

- Make sure the size is right.
- N95-type respirators require fit testing and even when fit tested and appropriately used, N95 masks will only provide protection against particulates. They provide no protection from chemical vapors. In those situations a different kind of respirator is required.

## PERSONAL PROTECTIVE EQUIPMENT (PPE)

### Maintenance, useful life and disposal

#### **PPE should be disposed of when damaged or soiled.**

Employees must inspect all PPE prior to use for evidence of damage, missing or defective parts, correctness of size/fit, and any other condition which could affect its use. Any PPE with worn or defective parts must be repaired or replaced prior to use.

PPE which isn't discarded after single use should be cleaned and/or disinfected, depending on the condition, use and type of the PPE.

Clean PPE must be stored in a location and in a way which will keep it clean between uses.

Goggles, non-disposable gloves, hard-hats, and other PPE shouldn't be exchanged among employees for use unless they've been cleaned and sanitized.

## SECTION 2: INFECTION PREVENTION &amp; CONTROL

# INFECTION PREVENTION & CONTROL

## Aerosol Transmissible Disease Bloodborne Pathogens

**This section** is for **CALIFORNIA**.

This section is for Kaiser Permanente staff who work in **Northern California** or **Southern California**.

**Are you in the wrong state?**

Use the button below to jump to material for **Hawaii** region:

**HAWAII**

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.



## AEROSOL TRANSMISSIBLE DISEASES (ATD)

### 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](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.**

## AEROSOL TRANSMISSIBLE DISEASES (ATD)

### 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.](#)**

## AEROSOL TRANSMISSIBLE DISEASES (ATD)

### 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**

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## AEROSOL TRANSMISSIBLE DISEASES (ATD)

### 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.

**Examples:** Diphtheria, Mumps, Pertussis, Rubella, N. meningitidis

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

**Examples:** Chicken Pox, Measles, Tuberculosis, novel or unknown pathogens (treated as airborne until they are further characterized)

#### 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.

## AEROSOL TRANSMISSIBLE DISEASES

### 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.

## AEROSOL TRANSMISSIBLE DISEASES

### 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](#)**



# AEROSOL TRANSMISSIBLE DISEASES

## 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

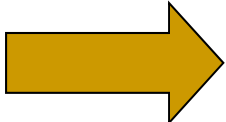
**Limitations:** Must be followed correctly and consistently

- 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

### PERSONAL PROTECTIVE EQUIPMENT

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

The next slides contain more information on PPE



## AEROSOL TRANSMISSIBLE DISEASES

### 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 patient room/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!**



## AEROSOL TRANSMISSIBLE DISEASES

### 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)** means an air-purifying respirator that uses a blower to force the ambient air through air-purifying filter to remove airborne contaminants and deliver filtered air to the user.

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.

## AEROSOL TRANSMISSIBLE DISEASES

### 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.



**AEROSOL TRANSMISSIBLE DISEASES****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 an N95 Particulate Respirator  
3M 1860****Example of Powered Air Purifying Respirator  
3M Air-Mate™ PAPR**

## AEROSOL TRANSMISSIBLE DISEASES

### Vaccines for ATDs

Employee Health Services is responsible for administering vaccinations:

- ❑ Vaccines are a safe and an effective means of preventing some ATD transmission
- ❑ Vaccinations are available at no cost to employees
- ❑ If you don't have your vaccination records, a simple blood test will determine if you have immunity

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](#)

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

## AEROSOL TRANSMISSIBLE DISEASES

### 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)

**AEROSOL TRANSMISSIBLE DISEASES****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**.

**AEROSOL TRANSMISSIBLE DISEASES (ATD)****Q&A: What is an ATD? What does the Exposure Control Plan do?**

An Aerosol Transmissible Disease (or ATD) is a disease or pathogen that requires droplet or airborne precautions to prevent exposure, and your facility's ATD Exposure Control Plan describes procedures to be followed in the event of an exposure.

**A****True****B****False**



**AEROSOL TRANSMISSIBLE DISEASES (ATD)**

**Q&A: What is an ATD? What does the Exposure Control Plan do?**

An Aerosol Transmissible Disease (or ATD) is a disease or pathogen that requires droplet or airborne precautions to prevent exposure, and your facility's ATD Exposure Control Plan describes procedures to be followed in the event of an exposure.

**A**

True

**B**

False

The correct answer is A.

## BLOODBORNE PATHOGENS

### Before getting started... Questions?

#### Questions?

The law requires that you have an opportunity for interactive questions and answers about this material. If you reach a point in this training when you do have a question, **STOP** and contact your local Infection Control or Employee Health department.

If you do not know how to contact them, you can find contact numbers by clicking [SafetyNet - 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, 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](http://kpnet.kp.org/ehs/training/ed_Bloodborne_Pathogens_Awareness_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 Control and/or Employee Health Department.**

## BLOODBORNE PATHOGENS

### OSHA's Bloodborne Pathogens Standard

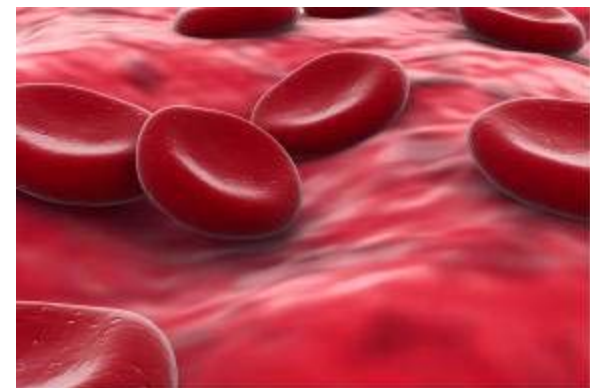
The Bloodborne Pathogen (BBP) Standard aims to minimize your exposure to bloodborne pathogens.

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.  
**Employees are required to use safe devices that are provided by the employer**

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

For your reference, a copy of the Federal (national) standard can be accessed by clicking [29 CFR 1910.1030](#)  
The California standard can be accessed here: [California Standard](#)



## BLOODBORNE PATHOGENS

### 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	Abdominal discomfort
Nausea and vomiting	Joint pain and rash
Jaundice (yellowing of the skin and eyes)	Flu-like symptoms

## BLOODBORNE PATHOGENS

### 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)



## BLOODBORNE PATHOGENS

### 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](#)).

## BLOODBORNE PATHOGENS

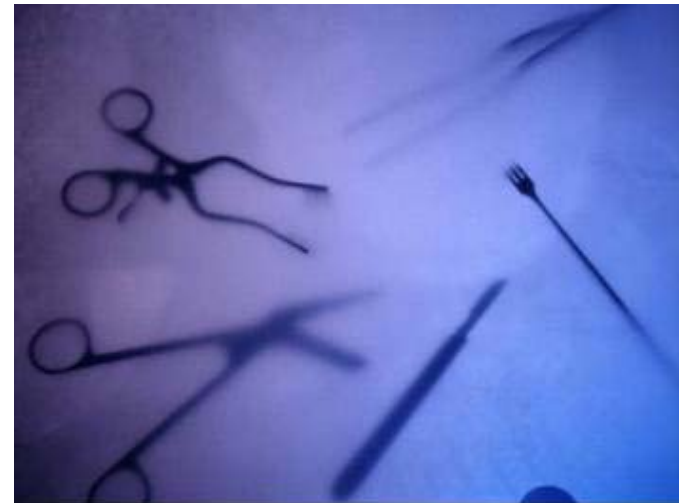
### Activities That May Involve BBP Exposure

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.



**BLOODBORNE PATHOGENS****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.  
*Employees are required to use safe devices that are provided by the employer!*
- 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.



## BLOODBORNE PATHOGENS

### 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.**

Or [http://kpnet.kp.org/ehs/training/deeplinks/redirects/kpl\\_bbp\\_ppe\\_matrix.htm](http://kpnet.kp.org/ehs/training/deeplinks/redirects/kpl_bbp_ppe_matrix.htm)

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.

## BLOODBORNE PATHOGENS

### 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.



## BLOODBORNE PATHOGENS

### 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](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.

**BLOODBORNE PATHOGENS****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.
  
- ❑ In **CALIFORNIA** Regions: Notify your department manager and go to Employee Health or the Emergency Department **IMMEDIATELY** (within the first **2 hours** of exposure).
  
- ❑ In **HAWAII** Region: notify your department manager (or person in charge) **IMMEDIATELY**, then go to **Workplace Incident Reporting** on the Kaiser Home Page and follow the instructions.
  
- ❑ 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.

## BLOODBORNE PATHOGENS

### 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 within the first 2 hours of exposure** 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.

**BLOODBORNE PATHOGENS****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.



**BLOODBORNE PATHOGENS****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.





**BLOODBORNE PATHOGENS****Q&A: Exposure to Blood or OPIM**

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

**A**

**Handle blood/body fluids of all patients as potentially infectious**

**B**

**Decontaminate hands between all patient contact, after specimen contact and after removal of gloves**

**C**

**Place used sharps in sharps container immediately after use. Do not recap or manipulate needles**

**D**

**All of the above are correct**



**BLOODBORNE PATHOGENS****Q&A: Exposure to Blood or OPIM**

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

**A**

Handle blood/body fluids of all patients as potentially infectious

**B**

Decontaminate hands between all patient contact, after specimen contact and after removal of gloves

**C**

Place used sharps in sharps container immediately after use. Do not recap or manipulate needles

**D**

All of the above are correct

The correct answer is D.

**SECTION 3: CHEMICAL SAFETY**

# CHEMICAL SAFETY

Hazard Communication

Managing Hazardous Materials

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.

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

### Information

The Federal Hazard Communication Standard requires a hazard communication program for the workplace, and this program should cover:

- ❑ **Identification** of chemicals in the work area (chemical inventory)
- ❑ **Labeling** of hazardous chemicals to provide hazard warnings
- ❑ **Safety Data Sheets** (SDS) for all hazardous chemicals to be readily accessible
- ❑ **Training** to be provided to all staff coming in contact with hazardous chemicals.

### You will need to know.....

- ✓ **All of the operations in your work where hazardous chemicals are present**
- ✓ **How to access facility chemical inventories**
- ✓ **How to access the Safety Data Sheets (SDS) for these chemicals**
- ✓ **How to access a copy of your facility's Hazard Communication Program.**

If you do not currently know the above information, 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 Safety Data Sheets.**

## HAZARD COMMUNICATION

### Chemical Hazards In the Work Area

**The types of hazardous chemicals you will work with depends on the operations in your work area.**

Click on the link below and select your department, you will find examples of chemicals typically found in different departments and the associated hazards, such as physical, health, simple asphyxiation, and combustible dust hazards, as well as hazards not otherwise classified.

**[CLICK HERE!](#)**

*You will require orientation on the specific processes and procedures for safe handling and use of chemicals at your worksite (Department Specific Training by **your supervisor** and/or EH&S Department 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.*

## HAZARD COMMUNICATION

### Labeling Systems: Primary and Secondary Labels

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

- ❑ Product identifier;
- ❑ Signal word, either "danger" or "warning";
- ❑ Hazard statement(s);
- ❑ **Pictogram(s), presented on the next slide;**
- ❑ Precautionary statement(s); and,
- ❑ Name, address, and telephone number of the chemical manufacturer, importer, or other responsible party.

You may find in your workplace some primary labels with an older format, which do not have the pictograms or signal words. These older primary labels provide very similar hazard information. If there are currently such labels, they will be replaced by the newer primary labels before mid year 2016

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

- ❑ Product identifier
- ❑ General hazard information by words, pictures and/or symbols










The original manufacturer's label and SDS are used as sources of information.



Examples of secondary labels

# HAZARD COMMUNICATION

## Pictograms and Hazards

<p><b>Health Hazard</b></p>  <ul style="list-style-type: none"> <li>▪ Carcinogen</li> <li>▪ Mutagenicity</li> <li>▪ Reproductive Toxicity</li> <li>▪ Respiratory Sensitizer</li> <li>▪ Target Organ Toxicity</li> <li>▪ Aspiration Toxicity</li> </ul>	<p><b>Flame</b></p>  <ul style="list-style-type: none"> <li>▪ Flammables</li> <li>▪ Pyrophorics</li> <li>▪ Self-Heating</li> <li>▪ Emits Flammable Gas</li> <li>▪ Self-Reactives</li> <li>▪ Organic Peroxides</li> </ul>	<p><b>Exclamation Mark</b></p>  <ul style="list-style-type: none"> <li>▪ Irritant (skin and eye)</li> <li>▪ Skin Sensitizer</li> <li>▪ Acute Toxicity</li> <li>▪ Narcotic Effects</li> <li>▪ Respiratory Tract Irritant</li> <li>▪ Hazardous to Ozone Layer (Non-Mandatory)</li> </ul>
<p><b>Gas Cylinder</b></p>  <ul style="list-style-type: none"> <li>▪ Gases Under Pressure</li> </ul>	<p><b>Corrosion</b></p>  <ul style="list-style-type: none"> <li>▪ Skin Corrosion/Burns</li> <li>▪ Eye Damage</li> <li>▪ Corrosive to Metals</li> </ul>	<p><b>Exploding Bomb</b></p>  <ul style="list-style-type: none"> <li>▪ Explosives</li> <li>▪ Self-Reactives</li> <li>▪ Organic Peroxides</li> </ul>
<p><b>Flame Over Circle</b></p>  <ul style="list-style-type: none"> <li>▪ Oxidizers</li> </ul>	<p><b>Environment (Non-Mandatory)</b></p>  <ul style="list-style-type: none"> <li>▪ Aquatic Toxicity</li> </ul>	<p><b>Skull and Crossbones</b></p>  <ul style="list-style-type: none"> <li>▪ Acute Toxicity (fatal or toxic)</li> </ul>

1910.1200(f); (h)(3)(iv)


## HAZARD COMMUNICATION

## Safety Data Sheets (SDS)

**Safety Data Sheets**, or **SDSs**, are important components of a hazard communication program.

**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

MATERIAL SAFETY DATA SHEET					Page: 1
Metal Cleaner					
		Revision: 11/27/99		Printed: 12/01/2003	
		Data Created: 12/01/99			
<b>1. Product and Company Identification</b>					
Product Code: DK579					
Product Name: Metal Cleaner					
Manufacturer Name and Address					
Company Name: PPG Industries, Inc.					
4325 Proanna 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					
<b>2. Composition/Information on Ingredients</b>					
Hazardous Components (Chemical Name)	CAS #	Percentage	OSHA TWA	ACGIH TWA	Other Limits
1. Ethanol-2-butyl-	111-762	10.0 - 20.0 %	(5)25 ppm	(5)25 ppm	No data
2. Diethylene glycol monocethyl ether	112-343	10.0 - 20.0 %	Not listed	Not listed	No data
3. Phosphoric acid	7664-382	30.0 - 40.0 %	1 mg/m3	1 mg/m3	No data
<b>3. Hazards Identification</b>					
<b>Emergency Overview</b>					
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 may be 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 may be 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 monoethyl ether (DEG/E), 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.: MIF5 MSDS, (S) A-V Systems, Inc. <span style="float: right;">MSD Form 1</span>					

SDSs can be available electronically or as hard copies. If you are not sure how to access an SDS, **contact your supervisor or your facility [EH&S Department](#)**.

You may find an older format of an SDS, called an MSDS, in your workplace. These MSDSs provide similar information. If there is an MSDS, it will be replaced by the SDS before mid year 2016.

## HAZARD COMMUNICATION

### Methods of Detecting a Chemical Presence or Release

You may learn about the presence of a hazardous chemical by

- ❑ Air sampling reports, for example, Kaiser Permanente's National Environmental, Health & Safety department will conduct periodic monitoring for formaldehyde.
- ❑ Continuous monitoring devices, such as those installed for EtO when needed

It is important that you stay alert to the signs of a chemical spill or release, by such signs:

- ❑ Is there an unusual or unusually strong smell?
- ❑ Is there a pool of an unidentifiable substance in an area where chemicals are being used?
- ❑ Are there leaks in the chemical containers?

You will need orientation and training on how to detect a spill or accidental chemical release - which is specific to those chemicals in use in your work area.

**Additional training may be required. Your facility's EH&S Department will identify those employees who require additional training.**



**HAZARD COMMUNICATION****Work practice controls and Personal Protective Equipment (PPE)**

Work practice controls are an effective way to prevent exposure to chemical hazards.

Examples of safe work practices include:

- Follow the precautionary statements printed in the SDS and labels
- Do not eat, drink, or chew gums near chemicals
- Use well-ventilated work area
- Proper use of Personal Protective Equipment (PPE)
- Washing your hands after handling chemicals



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

- 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

## HAZARD COMMUNICATION

### Spill Response

In general, you should know:

- ❑ What to do in case of an accidental spill—refer to the Rainbow Chart or other quick reference guide on emergency procedures. You can also refer to the SDS for accidental release measures.
- ❑ 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/region
- ❑ 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).

## HAZARD COMMUNICATION

### 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.

## HAZARD COMMUNICATION

### 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 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.)

8 CCR 5194 (G)

**HAZARD COMMUNICATION****Q&A: Hazard Communication Training**

So that I am compliant with the Hazard Communication regulation, 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 Safety Data Sheets

**A****True****B****False**

**HAZARD COMMUNICATION****Q&A: Hazard Communication Training**

So that I am compliant with the Hazard Communication regulation, 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 Safety Data Sheets

**A**

True

**B**

False

The correct answer is A.

## HAZARDOUS MATERIALS

### 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 safety data sheet (SDS).

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 EYEWASH AND SHOWER

### 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**.

## HAZARDOUS MATERIALS

### 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.**



## HAZARDOUS MATERIALS

## Medical Gas Safety

E-cylinder



H-cylinders

## 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](#)

**SECTION 4: WASTE MANAGEMENT**

## **WASTE MANAGEMENT**

Medical Waste

Hazardous and Universal Waste

Recyclable Waste and Regular Trash (non-hazardous)

This training meets the requirements of Medical Waste Management Act - California Health and Safety Code Sections 117600 – 118360, also Hazardous and Universal Waste Regulations - California Code of Regulations, Title 22, Division 4.5, Chapter 10 - 55.

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

## WASTE MANAGEMENT

### Overview

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 and Universal Waste**
- ❑ **Recyclable Waste and Regular Trash (non-hazardous)**

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.



**WASTE MANAGEMENT****Kaiser Permanente's medical waste streams**

**Kaiser Permanente generates a number of different waste streams that are “medical waste”**

Medical Waste consists of:

- ❑ Biohazardous Waste
- ❑ Pathology Waste
- ❑ Infectious Laboratory Waste
- ❑ Trace Chemotherapeutic Waste
- ❑ Sharps Waste
- ❑ Non-Hazardous Pharmaceutical Waste
- ❑ Commingled Sharps and Non-hazardous Pharmaceutical Waste

This presentation will explain what is required to manage each one of these waste streams.

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 MANAGEMENT

### Why properly manage medical waste? Who is responsible?

#### Prevent Disease Transmission

- ❑ It protects KP employees, waste handlers and communities we serve from being exposed to potentially infectious materials.

#### Regulatory Compliance

- ❑ Medical waste management must be properly collected for treatment and disposal. Improper management can result in regulatory citations and financial penalties.

#### Affordability and Environmental Stewardship

- ❑ The cost of treatment and disposal of each medical waste type varies; improperly treating medical waste can result in unnecessary costs AND unnecessary environmental impact as treatment and disposal processes use lots of water and energy.

The **person that generates the medical waste** (for example, nurse, physician, lab tech) **is responsible** for knowing how to properly dispose of each type of medical waste generated from their job duties.

The medical waste generator is responsible for disposing of the medical waste into its designated container at the point of generation.

**If you not sure how to dispose of waste, or have concerns regarding container requirements, report your concerns to your supervisor.**

## WASTE MANAGEMENT

### What is Biohazardous Waste?

#### DEFINITION: BIOHAZARDOUS WASTE

Fluid blood and otherwise potentially infectious body fluids

- ❑ Items that are soaked with blood and body fluids that “flow” (gauze, bandages, blood transfusion bags/tubing, etc.)
- ❑ Items that contain dry blood and body fluids that when wetted would “flow”
- ❑ Suction canisters with free flowing liquids, not solidified
- ❑ Any free-flowing body secretion containing blood components (e.g. urine, stools, pleural , peritoneal, amniotic fluids), and any other fluid visibly contaminated with blood

Any item labeled with a “Biohazard Symbol” (e.g. specimen bags) is considered medical waste.

#### WASTE CONTAINER:

**Collect in a container labeled with a biohazard symbol on the lid and sides AND lined with a red biohazard bag.**





## WASTE MANAGEMENT

### What is Pathology Waste?

#### DEFINITION: PATHOLOGY WASTE

Recognizable human anatomical parts

- ❑ Placentas
- ❑ Skin or tissue biopsies
- ❑ Human surgical specimens, tissue, organs, bone fragments, limbs, or body parts removed during surgery, autopsy, or other medical procedures
- ❑ Suction canisters with solidified fluids

#### WASTE CONTAINER:

Collect in a container labeled with the words “path” or “Pathology Waste” on the lid and sides AND lined with a red biohazard bag.



## WASTE MANAGEMENT

### What is Infectious Laboratory Waste?

#### DEFINITION: INFECTIOUS LABORATORY WASTE

Human specimen cultures from clinical laboratories

- ❑ Waste cultures and stocks from the production of bacteria, viruses, spores, discarded live and attenuated vaccines used in human healthcare or research, and culture dishes and devices used to transfer, inoculate and mix cultures

#### WASTE CONTAINER:

Collect in a container labeled with a biohazard symbol on the lid and sides AND lined with a red biohazard bag.



## WASTE MANAGEMENT

### What is Trace Chemotherapeutic Waste?

#### DEFINITION: TRACE CHEMOTHERAPEUTIC WASTE

Any device (including personal protective equipment) used in the production or delivery that is contaminated through contact with, or having previously contained, chemotherapeutic agents and is EMPTY.

- ❑ “Empty” is defined as a container, liner, tubing, or syringe that has no pourable, scrapable or drainable chemotherapy drug waste inside when tilted or inverted.
- ❑ Non-empty devices, containers, or grossly contaminated items are to be managed as RCRA hazardous waste or “bulk” chemo waste

#### WASTE CONTAINER:

Collect in a container usually yellow in color labeled with the words “chemo” or “Trace Chemotherapy” AND “Incinerate Only” on the lid and sides.



## WASTE MANAGEMENT

### What is Sharps Waste?

#### DEFINITION: SHARPS WASTE

Devices that are designed to puncture or capable of puncturing or cutting the skin that are contaminated with blood or potentially infectious body fluids.

Examples include:

- Needles; syringes with needles attached; trocars; pipettes; scalpel blades; guide wires; blood vials; broken or unbroken glassware that has been in contact with infectious agents, including serum bottles, and other rigid objects

#### WASTE CONTAINER:

Collect in a Red or Clear sharps container, labeled with the word “Sharps” AND the international biohazard symbol.



## WASTE MANAGEMENT

### What is Pharmaceutical Waste?

#### DEFINITION: PHARMACEUTICAL WASTE

All prescription or over the counter medications that do not require collection as trace chemotherapeutic or hazardous waste

- Departments that generate hazardous waste or trace chemotherapy waste will have a designated collection process approved by the EH&S manager

Contact your EH&S Manager for questions regarding identifying hazardous waste.

#### WASTE CONTAINER:

**CALIFORNIA:** Collect in a blue or blue lidded container labeled with the words “Pharm” or “Pharmaceutical Waste” AND “Incinerate Only”.

**HAWAII:** Return to the Pharmacy or dispose of per department policy



## WASTE MANAGEMENT

### What is Commingled Waste?

#### DEFINITION: COMMINGLED WASTE

The collection of sharps and pharmaceutical waste into the same container.

#### WASTE CONTAINER:

Collect in a blue or blue lidded container labeled with the words “Pharm” or “Pharmaceutical Waste” AND “Incinerate Only”

Note: hazardous or trace chemotherapy waste may not be placed into the commingled waste container!



**WASTE MANAGEMENT****What is NOT Medical Waste?**

**Below are some items that are sometimes misclassified as “medical waste”**

- Urine, feces, saliva, sputum, nasal secretions, sweat, tears, or vomitus, unless it contains fluid blood.
- Waste such as paper towels, paper products, articles containing non fluid blood, and other clinical solid waste products commonly found in the facility.

**These should all be disposed of as regular trash or into the sewer (as appropriate)!**



**WASTE MANAGEMENT**

Why does it matter what container medical waste goes into?

**NOT all medical waste is BURNED via incineration!**

Proper collection and segregation of medical waste ensures proper treatment prior to disposal in a landfill.

The following wastes are treated by  
**STEAM STERILIZATION:**

- ❑ Biohazardous Waste
- ❑ Sharps
- ❑ Infectious Laboratory Waste

The following wastes are treated by  
**INCINERATION:**

- ❑ Commingled Waste
- ❑ Pathology Waste
- ❑ Trace Chemotherapy Waste
- ❑ Pharmaceutical Waste



**WASTE MANAGEMENT**

What do you do if you identify improperly disposed medical waste?

As an example, if you find biohazardous waste in the regular trash bin, remember this:

- ❑ **ISOLATE** the waste container
  - Do not attempt to remove or touch the medical waste.
- ❑ **REPORT** the incident to your supervisor.
  
- ✓ Supervisors should contact the EH&S or EVS Manager for further guidance
- ✓ EVS will properly manage entire contents of the bin as medical waste.

**WASTE MANAGEMENT****Southern California Policy & Resources****IF YOU WORK IN SOUTHERN CALIFORNIA REGION:**

The Southern California Regional Medical Waste **POLICY** - and your site specific policy - detail **requirements** for **managing** medical waste. (add link to sharepoint)

The Southern California Regional Medical Waste **PLAN** - and your site specific plan - detail the **processes** and **procedures** that should be used to **manage medical waste**.

Contact your EH&S, Infection Prevention or EVS departments for questions regarding the policy or plan or any other needed guidance – [click here for contact information](#).

The Southern California Regional Medical Waste **Policy and Plan can be accessed here:**  
[https://sites.sp.kp.org/teams/ehs/scal/ layouts/15/start.aspx#/Shared%20Documents](https://sites.sp.kp.org/teams/ehs/scal/layouts/15/start.aspx#/Shared%20Documents)

Or

[http://kpnet.kp.org/ehs/training/deeplinks/redirects/scal med waste policy plan.htm](http://kpnet.kp.org/ehs/training/deeplinks/redirects/scal_med_waste_policy_plan.htm)

## WASTE MANAGEMENT

### Hazardous Waste and Universal Waste

In addition to Regulated Medical Waste, you may generate other types of waste, such as **Hazardous Waste** or **Universal Waste**.

Hazardous and Universal Waste have special collection, storage, and disposal requirements that differ from regulated medical waste requirements.

- ❑ **They must be segregated from other types of waste to enable proper disposal!**

Examples of **Hazardous Waste** are Formaldehyde, Warafin, Laboratory solvents and silver nitrate applicators.

- ❑ Be aware there are many other types of hazardous waste at KP
- ❑ If you package, label, ship or transport hazardous waste you are required to take additional training. The training is available via KP Learn, search for “DOT”.

**Universal Waste** consists of batteries, electronic equipment, mercury, light bulbs/tubes, and non-empty aerosol cans.

- ❑ If you have questions about whether a waste is hazardous or universal waste, or how **any waste** should be managed, contact your supervisor or your **EH&S Department**.

### **SafetyNet’s Hazardous and Universal Waste Resources**

## WASTE MANAGEMENT

### Recyclable and Regular Trash (non-hazardous)

At many Kaiser Permanente sites, items such as **non confidential paper, cardboard, bottles and cans, and organic food waste can be collected for recycling**. Know what items at your site can be collected for recycling, and place them in the proper recycling bin instead of the regular trash bin whenever appropriate.

The **benefits** of **recycling** include:

- ❑ Reducing the amount of waste sent to landfills and incinerators;
- ❑ Conserving natural resources such as timber, water, and minerals;
- ❑ Preventing pollution by reducing the need to collect new raw materials;
- ❑ Saving energy;
- ❑ Reducing greenhouse gas emissions that contribute to global climate change;
- ❑ Helping to sustain the environment for future generations;
- ❑ Helping to create new well-paying jobs in the recycling and manufacturing industries in the United States.

**WASTE MANAGEMENT****Q&A: Medical Waste**

Which of the following is **NOT** considered Medical Waste?

- A** Biohazardous Waste
- B** Trace Chemotherapeutic Waste
- C** Non-Hazardous Pharmaceutical Waste
- D** Paper towels and other paper products that don't contain fluid blood

## WASTE MANAGEMENT

## Q&amp;A: Medical Waste

Which of the following is **NOT** considered Medical Waste?

**A**

Biohazardous Waste

**B**

Trace Chemotherapeutic Waste

**C**

Non-Hazardous Pharmaceutical Waste

**D**

Paper towels and other paper products that don't contain fluid blood

The correct answer is D.

## SECTION 5: EMERGENCY RESPONSE

# 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 "RACE". See your facility specific supplement to learn if you use RACE of another acronym at YOUR location.**

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.

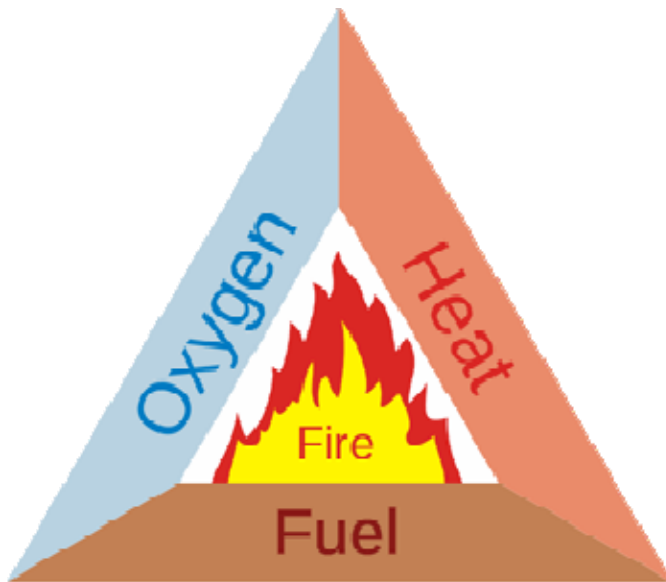
Completion of this section in conjunction with on-site orientation to facility and departmental procedures with regard to emergency, disaster response and evacuation complies with the training requirements of CFR 1910.38 with regard to staff training on Emergency Plans and provides information needed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

## FIRE SAFETY AND EXTINGUISHERS

### 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 AND EXTINGUISHERS****Fire Safety – R.A.C.E.**

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

**(Note that healthcare facilities in Los Angeles DO NOT use R.A.C.E. for fire response – see next slide)**

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

**FIRE SAFETY****Code Red Response – Los Angeles Medical Centers**

You must review the **FACILITY-SPECIFIC SUPPLEMENT** page at the end of this training for information on the acronym used at **YOUR** facility/region to respond to a fire.

For example: the city of Los Angeles has additional Fire/Life Safety training requirements for Hospital staff.

Affected hospitals include:

- Los Angeles/LAMC
- Panorama City
- South Bay
- West LA
- Woodland Hills

**Note that healthcare facilities in Los Angeles *DO NOT* use R.A.C.E. for fire response.**

In addition, every four years hospital staff in the city of Los Angeles must complete additional training on how to respond to a fire, including use of first aid fire equipment and employee evacuation procedures.

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

**PORTABLE FIRE EXTINGUISHERS****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)

**P**ull**A**im**S**queeze**S**weep

## 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!



**FIRE SAFETY****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!

**FIRE SAFETY****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 SAFETY****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

**FIRE SAFETY****Q&A: Fire Drills**

Which of the following can you do to protect yourself from fire?

**A**

**Keep all hallways and exits free and clear of clutter and debris.**

**B**

**Do not prop doors open because open doors will aid the spread of the fire.**

**C**

**Both A and B are correct.**



**FIRE SAFETY****Q&A: Fire Drills**

Which of the following can you do to protect yourself from fire?

**A**

Keep all hallways and exits free and clear of clutter and debris.

**B**

Do not prop doors open because open doors will aid the spread of the fire.

**C**

Both A and B are correct.

The correct answer is C.

## EMERGENCY PREPAREDNESS

### 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**

## EMERGENCY PREPAREDNESS

### Disaster Response Codes

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, tsunamis, hurricanes, wildfires, terrorist acts, hazardous materials spills near your facility or infectious pandemics.

Each facility/region has developed **Code Flipcharts** (sometimes called Rainbow Charts) which contain basic information on what you should do in response to an emergency.

These 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 PREPAREDNESS

### 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).



## EMERGENCY PREPAREDNESS

### Managing the Emergency Response

Depending on your location, your facility/region will have a

- A **H**ospital **C**ommand **C**enter (**HCC**), or
- An **E**mergency **O**perations **C**enter (**EOC**)

This will be 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.

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

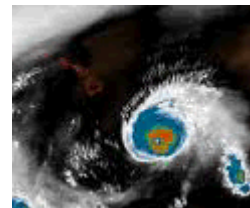
### Hazard Vulnerability Assessment and Drills

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 hospital 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).



## EMERGENCY PREPAREDNESS

### 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.



## EMERGENCY PREPAREDNESS

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

## EMERGENCY PREPAREDNESS

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.

**SECTION 6: MECHANICAL & ELECTRICAL SAFETY****ELECTRICAL & EQUIPMENT SAFETY**

Lockout/Tagout (for Affected & Other Employees)  
Medical Equipment  
Utilities Safety

Completion of this course complies with Federal requirements for training of affected and other employees with regard to control of hazardous energy under Federal Standard 29 CFR 1910.147 and California 8 CCR §3314.

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 to comply with Joint Commission standard EC.02.05.01.

## LOCKOUT/TAGOUT (AFFECTED AND OTHER EMPLOYEES)

### Lockout/Tagout for Affected and Other Employees

#### Purpose and Use of Energy Control

There are machines and equipment in our workplace which require periodic servicing and maintenance. The unexpected start-up of these machines/equipment or uncontrolled release of energy from them could cause injury to employees (e.g., electrocution). All Kaiser Permanente facilities have implemented a Hazardous Energy Control Program to prevent injury to employees. This program is known as Lockout/Tagout (LOTO).

#### What is “Lockout/Tagout”?

- ❑ Lockouts and Tagouts are the ways maintenance personnel **control hazardous energy** from being released when they are **working on a piece of equipment**.
- ❑ Sources of potentially hazardous energy include low to very high voltage electricity, compressed air, oxygen or other gases, open flames, steam, hydraulic line forces, radiation sources including x-ray laser light sources from laser surgical machines and spring tension.

**LOCKOUT/TAGOUT (AFFECTED AND OTHER EMPLOYEES)****Procedures and Prohibitions**

**TAGOUT** is a **paper or plastic tag** that is placed on a breaker/switch, or valve that warns other people not to operate it. Tagouts are used when a Lockout cannot be used.

**How this applies to YOU:**

Lockouts and Tagouts protect lives and ensure human safety. You may be working in or walking through an area where a Lockout or Tagout is being used.

**LOCKOUT** is a **physical lock** that holds a switch in the off position or holds shut a valve so hazardous energy cannot be released while the maintenance is occurring.

If you see one, **DO NOT TOUCH IT!** **Someone's life may be at risk!**

**LOCKOUT/TAGOUT (AFFECTED AND OTHER EMPLOYEES)****“Affected” Employees**

You are an **“affected”** employee if...

- ❑ your **job requires you to operate or use a machine** or equipment on which cleaning, repairing, servicing, maintenance, setting-up or adjusting operations are being performed under lockout or tagout, or
- ❑ your **job requires you to work in an area** in which such activities are being performed under Lockout or Tagout.

(An example is in Radiology, if you work around certain MRI or CT scan equipment.)

When equipment in your work area needs to be locked out or tagged out, the appropriate department (for example, Engineering or Kaiser Clinical Technologies) **will notify you about the upcoming work and any other information you will need to remain safe.**



## LOCKOUT/TAGOUT (AFFECTED AND OTHER EMPLOYEES)

### Limitations of Tags

Tagouts have limitations:

- ❑ You should be aware that tags are **essentially warning devices** affixed to energy isolating devices and do not provide the physical restraint on those devices that is provided by a lock.

The person who applied the lockout or tagout device is the **ONLY** person who may remove it!



**LOCKOUT/TAGOUT (AFFECTED AND OTHER EMPLOYEES)****Lockout/Tagout Questions?**

Questions or Problems:

If you see a problem with a tagout (e.g., torn or ripped, fallen off), **inform your supervisor/team leader** and the **maintenance person identified on the tag** immediately.

If you have any other questions or concerns about the Lockout/Tagout program, contact your local **EH&S Department** or visit the **NEH&S SafetyNet Lockout/Tagout Resources** page: **<http://kpnet.kp.org/ehs/loto/>**.



**LOCKOUT/TAGOUT (AFFECTED AND OTHER EMPLOYEES)****Q&A: Removing a Lockout or Tagout Device**

Who is authorized to remove a lockout or tagout device?

**A**

The manager or supervisor responsible for the given area

**B**

The Environmental, Health and Safety Officer

**C**

Any employee who needs to

**D**

Only the person who applied the given lockout or tagout device

**LOCKOUT/TAGOUT (AFFECTED AND OTHER EMPLOYEES)****Q&A: Removing a Lockout or Tagout Device**

Who is authorized to remove a lockout or tagout device?

**A**

The manager or supervisor responsible for the given area

**B**

The Environmental, Health and Safety Officer

**C**

Any employee who needs to

**D**

Only the person who applied the given lockout or tagout device

The correct answer is D.

## MEDICAL EQUIPMENT

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

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

## MEDICAL EQUIPMENT

### Preventive Maintenance (PM) Tags

Prior to use of medical equipment, staff **must inspect the PM Tag** to ensure that its **preventive maintenance is current** (not expired).

Equipment with outdated PM tags must be immediately reported to your supervisor and/or ClinTech. Remove from service and make it available for the performance of the PM.

Patient equipment should have inspection stickers. Individual pieces of Medical Equipment can be identified by the color-coded Equipment Identification Number (EIN) Sticker, which will look similar to one of the following:



## MEDICAL EQUIPMENT

### 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.

**MEDICAL EQUIPMENT****Q&A: ClinTech****You should:**

- Contact ClinTech to report the equipment malfunction.
- Put tags on equipment that describe the exact problem so that proper repair can be promptly arranged.
- Never “tag” equipment with a piece of paper marked “broken”.

**A****True****B****False**

**MEDICAL EQUIPMENT****Q&A: ClinTech****You should:**

- Contact ClinTech to report the equipment malfunction.
- Put tags on equipment that describe the exact problem so that proper repair can be promptly arranged.
- Never “tag” equipment with a piece of paper marked “broken”.

**A**

True

**B**

False

The correct answer is A.

## UTILITIES

### 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.





## UTILITIES

### 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.



## UTILITIES

### Electrical Safety

#### Electricity - General Safety Tips:

- ❑ Do not use “cheater” adapters or multiple adapters. **Extension cords should be no longer than 10 feet** and used 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!**

**SECTION 7: NOTIFICATIONS**



# 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.

## ACCESS TO EXPOSURE RECORDS

### 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](#)



**SAFETY & ENVIRONMENT OF CARE TRAINING (INITIAL)****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!