#### What is OSHA?

The Occupational Safety and Health Act (OSH Act) of 1970 was passed to prevent workers from being killed or seriously harmed at work. The law requires employers to provide their employees with working conditions that are free of known dangers. The Occupational Safety and Health Administration (OSHA) was created, as a result, to set and enforce protective workplace safety and health standards. OSHA provides information, training and assistance to workers and their employers. Workers may file a complaint to have OSHA inspect their workplace if they believe that their employer is not following OSHA standards or that there are serious hazards (1-800-321-6742).

Workers are entitled to working conditions that do not pose a risk of serious harm. To help assure a safe and healthful workplace, OSHA also provides workers with the right to:

- Ask OSHA to inspect their workplace'
- Use their rights under the law without retaliation and discrimination'
- Receive information and training about hazards, methods to prevent harm and OSHA standards that apply to their workplace.
- Get copies of test results done to find hazards in the workplace.
- Review records of work-related injuries and illnesses.
- Get copies of their medical records.

The Agency is responsible for implementing a formal, comprehensive, and active safety program with written records of program activities.

- 1. Every safety program shall include as a minimum the following elements: (Reference the Safety Manual for appropriate management techniques and examples)
  - a. New employee hiring practices, which include:
    - i. Completion of an employment application.
    - ii. A check of listed references.
    - iii. Completion of a voluntary medical questionnaire.
  - b. The assignment of responsibility and accountability for employee safety to appropriate supervisors who are responsible for:
    - Operating procedures and job safety rules for tasks that are written within each department and will include guarding procedures and rules regarding the use of required personal protective equipment.
    - ii. Training of all new and transferred employees with respect to safe job procedures and rules.
    - iii. Safety training will be continually refreshed for all employees as needed.
    - iv. A self-inspection program by responsible supervisors to detect and correct unsafe conditions or acts.
- 2. Safety management is the responsibility of each employee at all times in the workplace, and when in the patient's home. All appropriate employees and patients/caregivers shall receive instruction in safety management including but not limited to:
  - a. Electrical safety
  - b. Environmental
  - c. Bathroom safety
  - d. Hand washing
  - e. Infection control

- Refrigeration f.
- g. Use of glovesh. Trans-filling of medical gases
- i. Transfers and ambulation safety
- Use of medical equipment
- k. Disposal of needles in a non-penetrable non-glass container
- Double boxing and bagging
- m. Hazardous waste handling and disposal
- n. Storage, handling, delivery and access to supplies, medical gases and drugs, especially chemotherapeutic agents, controlled substances, parenteral and enteral nutrition solutions, and needles.
- 3. Patients/caregivers shall acknowledge in writing the receipt of verbal and written instructions regarding safety management. Patient care employees shall monitor the patient/caregiver's understanding and compliance with safety management on an ongoing basis. Appropriate instructions will be provided. All patient care employees will attend in service education on safety management upon employment, annually and as the need for further instruction is identified by their supervisor.
- 4. Patient related safety hazards will be documented in the clinical record and brought to the attention of the supervising nurse. All accidents or injuries will be reported to the supervising nurse and documented on an incident report. If the accident involves the patient, appropriate actions will be initiated, and the physician will be notified to obtain specific follow-up orders. A report of safety related incidents will be presented to the Advisory Committee and governing body including the causal factors and actions to prevent a similar incident.
- 5. If an accident or incident involves equipment malfunction and serious injury, illness or death, the incident will be reported to the Food and Drug Administration (FDA) within 10 days of notification of the incident.
- 6. An annual report summarizing incidents occurring in the previous 12 months must be filed with the FDA. The form 3419 is located on your USB.

Employers have the responsibility to provide a safe workplace that does not have serious hazards and to follow all relevant OSHA safety and health standards. Employers must find and correct safety and health problems. OSHA further requires employers to try to eliminate or reduce hazards first by making changes in working conditions rather than relying on masks, gloves, or other types of personal protective equipment (PPE).

Employers MUST also:

- Inform employees about hazards through training, labels, alarms, color-coded systems, chemical information sheets and other methods.
- Keep accurate records of work-related injuries and illnesses.
- Perform tests in the workplace, such as air sampling required by some OSHA standards.
- Provide hearing exams or other medical tests required by OSHA standards.
- Post OSHA citations, injury and illness data, and the OSHA poster in the workplace where workers will see them.
- Notify OSHA within 8 hours of a workplace incident in which there is a death or when three or more workers go to a hospital.
- Not discriminate or retaliate against a worker for using their rights under the law.

Recordkeeping Requirements for the Survey of Occupational Injuries and Illnesses
As in the past, OSHA requires that all recordable work-related injuries and illnesses information be
reported, utilizing Bureau of Labor Statistics Survey of Occupational Injuries and Illnesses (SOII)
recordkeeping requirements annually. These forms (OSHA 300, Log of Work-Related Injuries,
and Illnesses) have changed to include an additional column on (M5) on Hearing Loss.

As of January 1, 2015, all employers must report:

- a. All work-related fatalities within 8 hours.
- All work-related inpatient hospitalizations, all amputations, and all losses of an eye within 24 hours.

#### **OSHA Hazardous Communication Standard**

OSHA has revised its Hazard Communication Standard, March 2012, 77 FR 17574, (HCS) concerning classification and labeling of chemicals. This is recognized by health care providers as Material Safety Data Sheets (MSDS) and will now be called Safety Data Sheets (SDSs). Two significant changes contained in the revised standard require the use of new labeling elements and a standardized format for Safety Data Sheets (SDS). Effective December 1, 2013, employers must have trained their workers on the new label elements and SDS format. It is important that employees understand the new label and SDS formats. The specific requirements of the revised standard will be phased in over several years (December 1, 2013, to June 1, 2016)

The Hazard Communication Standard (HCS) is intended to inform employees of the proper recognition, use, and handling of hazardous chemicals and products in the workplace. This standard applies to all employers regardless of size if any employee has a potential exposure risk.

The Hazard Communication Standard also protects employees from dangerous chemicals by:

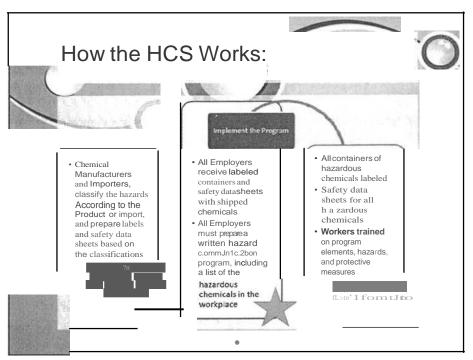
- 1. Eliminating hazardous chemicals if possible
- 2. Substitute a toxic substance with a less toxic substance
- 3. Redesign processes that use toxic chemicals to eliminate or reduce exposure to the chemical hazard.
- 4. Change work procedures to reduce the duration, frequency, and severity of exposure to the chemical hazard.
- 5. Ensure employees have appropriate personal protective equipment (PPE) appropriate to the chemical hazard.

The Agency is responsible to have a written communication program, have safety data sheets on each chemical, ensure all hazardous chemical containers are appropriately labeled, and train employees about the hazards of the chemicals they use.

The employee is responsible for:

- 1. Being familiar with the location and availability of safety data sheets (SDS's) and the written hazard communication program.
- Use chemical products in a manner that is consistent with the information set forth on the label and SDS, including but not limited to directions for use, hazard warnings, and precautionary measures.

- 3. Follow appropriate work practices when working with hazardous chemical products, such as the use of PPE and ventilation.
- 4. Report hazardous conditions to your supervisor.



#### **Hazard Classification**

All chemicals must be classified by the manufacturer based on OSHA criteria. Hazards are either physical or health classifications. A "hazard class" may be subdivided into "hazard categories" based on the degree of severity of the hazard. Classifications indicate not only the hazard, but also the severity of the effect.

**Physical Hazards**: combustible liquids, compressed gases, explosives, flammables, organic peroxides, oxidizers

**Health Hazards**: carcinogens, toxic or highly toxic, reproductive toxins, irritants, corrosives, sensitizers, hepatotoxins, nephrotoxins, neurotoxins, hematopoietic system impact, or target organ damage.

#### Labels

Labels must include specific components to protect workers when working with chemicals. Companies that produce hazardous chemicals must include specific elements on the labels. There is no exemption for small packages. There are no size requirements for labels. Labels must include:

## **Product Identifier:**

This can be the chemical name, code number or batch number. The manufacturer decides the identifier and must print the identifier on both the label and in Section 1 of SDS (Identification).

#### Signal Word:

This will be used to indicate the relative level of severity of hazard and alert the reader to a potential hazard on the label. There are only 2 signal words, "Danger" and "Warning". Only one will appear on the label.

Danger - used for the more severe hazards Warning - less severe hazards

## Pictogram:

A symbol intended to convey specific information about the hazards of a chemical. Pictograms are intended to alert users of the chemical hazards to which they may be exposed. Each pictogram consists of a symbol on a white background framed with a red border. The pictogram on the label is determined by the chemical hazard classification. OSHA has designated 8 pictograms which can be used under this standard.

## **Hazard Statements(s):**

This will describe the nature, and where appropriate, the degree of the hazard(s). i.e. "Causes damage to kidneys through prolonged or repeated exposure when absorbed through the skin". The hazard statements are specific to the hazard classification categories, and chemical users should always see the same statement for the same hazards, no matter what the chemical s or who produces it.

## **Precautionary Statement(s):**

A phrase that describes recommended measures to be taken to minimize or prevent adverse effects resulting from exposure to or improper handling/storage of a hazardous chemical. Precautionary statements address prevention, response, storage, and disposal. (Examples: do not eat, drink, or smoke when using this product or keep container tightly closed)

# Name, address and phone number of the chemical manufacturer, distributor, or importer:

How the employee might use the labels in the workplace, for example,

- How information on the label can be used to ensure proper storage
- How the information might be used to quickly locate information on first aid when needed by employees or emergency personnel.

General understanding of how the elements work together. For example,

- That where a chemical has multiple hazards, different pictograms are used to identify various hazards.
- When precautionary statements are similar, the one providing the most protective information will be included on the label.

The Hazard Communication Standard (HCS) requires chemical manufacturers, distributors, or importers to provide Safety Data Sheets (SDSs, formerly known as MSDSs) to communicate the hazards of hazardous chemical products. Employers must ensure that SDSs are readily accessible to employees. By June 1, 2015, the HCS will require new SDSs to be in a uniform format and include the section numbers, the headings, and associated information under the headings below:

## **Hazard Communication Safety Data Sheets**

Safety Data Sheets are formally known as Material Safety Data Sheets. They provide a detailed source of information about the chemical to ensure the chemical is handled safely. Required information appears in the same sections of an SDS regardless of the supplier. The most important

information will be listed in the first section of the SDS. SDS's must be readily available to workers when they are in their work areas, during each shift. SDS's may be maintained electronically as long as backup hard copy is available in the event of a computer or electrical failure. SDS's must be in English and other languages may be optionally provided by the agency. A red border is not required for pictograms on SDS's.

#### **SDS Sections**

**Section 1**, Identification, includes product identifier; manufacturer or distributor name, address, phone number; emergency phone number; recommended use; restrictions on use.

**Section 2**, Hazard(s) identification includes all hazards regarding the chemical; required label elements.

**Section3,** Composition/information on ingredients includes information on chemical ingredients, trade secret claims.

**Section 4,** First-aid measures includes important symptoms/effects, acute, delayed; required treatment.

**Section 5,** Fire-fighting measures lists suitable extinguishing techniques, equipment, chemical hazards from fire.

**Section 6,** Accidental release measures lists emergency procedures; protective equipment; proper methods of containment and cleanup.

**Section 7,** Handling and storage lists precautions for safe handling and storage, including incompatibilities.

**Section 8,** Exposure controls/personal protection lists OSHA's Permissible Exposure Limits (PELs); Threshold Limit Values (TLVs); appropriate engineering controls; personal protective equipment (PPE).

Section 9, Physical and chemical properties lists the chemical's characteristics.

Section 10, stability, and reactivity lists chemical stability and possibility of hazardous reactions.

**Section 11,** Toxicological Information includes routes of exposure; related symptoms, acute and chronic effects; numerical measures of toxicity.

\*OSHA will not be enforcing sections 12 -15 as other agencies are responsible

**Section 16,** other information includes the date of preparation or last revision

#### HAZARD COMMUNICATION PROGRAM

The purpose of the HCP is to ensure that hazardous chemicals in the workplace are evaluated and that information concerning physical and health hazards are communicated to potentially exposed employees. The HCP must be readily accessible by all employees at all times.

The goals of the HCP are:

- 1. Prevent chemical-related illnesses and injuries in the workplace
- 2. Enhance and support the organization's overall safety program
- 3. Establish open lines of communication between employees and the agency to support safe work practices
- 4. Substitute less hazardous chemicals when possible
- 5. Avoid OSHA violations and citations related to unsafe work practices

#### **Hazard Categories**

Chemicals may fall into more than one category and in order to protect yourself from hazardous chemicals it is important to read the label and identify the specific hazards associated with the chemical.

1. Corrosives- can cause visible destruction of, or irreversible damage to, living tissue by chemical action at the site of contact. They are often found in the form of concentrated acids

and bases. Examples include oven and grill cleaners, acid toilet bowl cleaners, alkaline drain cleaners. Corrosives often react violently if mixed with other products and can have immediate and damaging effects on the skin or mucous membranes. Examples include burns, blisters, scarring.

Irritants- are chemical products that cause a reversible inflammatory effect on living tissue by chemical action at the site of contact. Examples are industrial cleaners and degreasers, sanitizers, general purpose cleaners.

When using irritants or corrosives you should wear PPE, handle the product in a well-ventilated location and when mixing an acid with water, always add the acid to the water. First aid:

Skin exposure: remove contaminated clothing, rinse skin immediately with plenty of water for 15-20 minutes

Eye contact: hold eye open and rinse slowly and gently with running water for 15-20 minutes, remove contact lenses, if present, after the first 5 minutes, then continue rinsing. Seek emergency care or contact a poison control center. Check the product's SDS and label for specific first aid information.

- 3. Flammable and Combustibles- are substances that can catch fire and burn. Examples are flammable liquids such as acetone, gasoline, or solvent based products; Combustible example is mineral oil. Gases under pressure such as propane, liquid nitrogen, and aerosol products. The vapors can ignite easily and burn rapidly and may explode and produce toxic vapors. Exposure to the vapors may produce adverse health effects like headaches, dizziness, nausea, and chronic effects of damage to the lungs, liver, and kidneys. Precautions include not to use these products near open flames or other sources of ignition, keep the container closed when not in use, store in a cool, dry place and store separately from oxidizers (chlorine, ammonia, hydrogen peroxide).
- 4. Oxidizers- are substances that enhance the burning of other materials through the release of oxygen. They are generally very reactive chemicals and contact with flammable or combustible materials is likely to result in fire. Oxidizers may react with other products to form noxious odors/fumes such as bleach. The health hazards include inflammation/destruction of tissue,
  - severe irritation of the upper respiratory tract, irritation of eyes or nose, damage to the nervous
- system, and potential fertility disorders. Oxidizers should be stored separately from flammables and combustibles. Do not mix with other products and materials such as bleach and ammonia. Keep containers closed when not in use and check the SDS for product specific information.
- Toxins and Poisons- these are extremely poisonous and access to these should be restricted. Examples include sulfuric acid-based drain cleaners, ethylene glycol-based cleaners, hydrofluoric based aluminum cleaners/brighteners.

#### **Signs of Chemical Exposure**

There are 3 methods to detect a hazardous chemical release: sight, smell, and air monitoring (carbon dioxide monitor). If you smell a chemical, it has already entered your body. Report any odors that are different or stronger than normal.

## **Preventing or Reducing Exposure to Hazardous Chemicals**

Hazardous materials may enter the body through four different routes of exposure: inhalation, absorption, ingestion, or injection. When exposed to hazardous material, there may be 2 kinds of health effects to the body, acute and chronic. Acute is characterized by sudden and severe exposure

and rapid absorption of a material (e.g., chemical burn). Chronic is characterized by prolonged and repeated exposure over a longer period of time (e.g., exposure to lead pain may result in cancer). Wear PPE. OSHA requires that PPE provide adequate protection against the hazard, be reasonably comfortable, fit snugly without interfering with movement or vision, be durable, be capable of being disinfected (for reusable items), and be kept in good repair and clean. Assess the chemical's label for the appropriate PPE to use.

## **Managing an Unprotected Chemical Exposure**

The steps to take after an unprotected exposure depends on the toxicity of the material, dose, and route of exposure. Read the label for directions on post-exposure follow up. Identify the closest location of running water. If in doubt call 9-1-1.

## **Managing Spills and Leaks**

Consult the appropriate SDS for instructions on disposal. Clear the area. If spilled materials are flammable or combustible, remove sources of ignition or heat. Do not use tools or items that create sparks, heat, or flames. Stop the spill from spreading, especially into drainage or sewer systems. For liquid spill, use absorbent solid to soak and contain the spill (spill kit). Sweep up used absorbent and dispose of properly(biological waste should be disposed of in the a hazardous waste container/bag). Notify your supervisor as appropriate.

## **General Safety**

- 1. Only use chemicals that have appropriate labels and SDS's.
- 2. Always read the label on the chemical bottle.
- 3. Always follow the directions and precautions listed on the label and on the safety data sheet.
- 4. Never use a chemical if you are unsure what it is or how to protect yourself.
- 5. Always use appropriate PPE when working with chemicals.
- 6. Always dispose of a chemical properly.
- 7. Maintain adequate ventilation.
- 8. Practice hand hygiene.
- 9. Never bring chemicals into the workplace that have not been logged into the SDS manual.

#### NOTE:

Training on the format of the SDS must include:

- Standardized 16-section format, including the type of information found in the various sections (see previous example)
- For example, the employee should be instructed that with the new format, Section 8 will always contain information about exposure limits, engineering controls and ways to protect self, including personal protective equipment,
  - Section 8, Exposure controls/Personal Protection will always contain information about exposure limits, engineering controls and ways to protect self, including personal protective equipment,
  - Precautionary statements on label would be the same on the SDS.

OSHA requires employers to present information in a manner and language that their employees can understand. If the employee speaks/reads a language other than English, the employer will need to provide safety and health training in that language. OSHA's Hazard Communication website (http://www.oshagov/dsg/hazcom/index.html) has the following "quick cards" and OSHA briefs in English and Spanish to assist employers with training:

Label QuickCard

- o Pictogram QuickCard
- Safety Data Sheet QuickCard
- Safety Data Sheet OSHA Brief
- o Label/;Pictogram OSHA Brief

## **Safety Committee**

- 1. An Ad Hoc Safety committee will be organized within the agency to establish a network for communication of safety information pertaining to the work environment.
- The Committee will be organized to distribute safety information, observe, and monitor compliance with OSHA standards, determine safety needs, review problems, and develop means to improve or resolve those problems.
- 3. The Committee will be composed of representatives appointed by the Professional Advisory Committee.
- 4. The Safety Committee will be responsible for distributing safety related information, monitoring compliance, maintaining, and updating OSHA compliance as per OSHA standards.
- The Safety Committee will be knowledgeable in safety subject matter and conduct training inservices.
- 3. Safety Committee meetings will be scheduled once yearly and as needed to address special issues or situations.
- 4. The Administrator sets the dates and times for the meetings of the Safety Committee and plans the agendas for the meetings.
- 5. The minutes of the Safety Committee meetings are reported to the Professional Advisory Committee and to the Governing Body. They are filed by the Administrator along with any and all safety reports, papers, and written recommendations. They are maintained for a minimum of five (5) years and made available upon request.
- 6. The Administrator is responsible for informing the employees of the decisions, actions, and recommendations of the Safety Committee.
- 7. Each employee of the Agency may submit suggestions, complaints, or questions to his/her supervisor to submit to the Safety Committee.
- 8. The Safety Committee discusses all such suggestions, complaints, and questions and takes actions when necessary.
- 9. The Safety Committee reviews as required, all reports of work-related injuries and loss reports in order to design, develop and implement corrections as needed, to eliminate and prevent injuries at work.
- 10. The Safety Committee reviews every work-related injury to determine what caused the injury, what could have been done to prevent it and what has been done to prevent a recurrence.

# **Hazard Communication Quiz**

1.	OSHA's	Hazard Communication Standard deals with chemicals and is also known as:	
	a.	The Right to Learn Law	
	b.	The Right to Know Law	
	c.	The Right to be Educated Law	
	d.	None of the above	
2.	All chemical containers must be labeled?		
	a.	True	
	b.	False	
3.	You are not allowed to access Safety Data Sheets (SDS) regarding chemicals in your area?		
	a.	True	
	b.	False	
4.	A chemical can enter the body by:		
	a.	Inhalation	
	b.	Absorption	
	c.	Ingestion	
	d.	All of the above	
5.	Chemical exposure that causes headaches, nausea, and burns to the skin are signs ofor shorterm exposure:		
	a.	Chronic	
	b.	Inhalation	
	c.	Acute	
	d.	Sickness	
6.	How many sections are required in Safety Data Sheets under the new Global Harmonized System (GHS)?		
	a.	12	
	b.	8	
	c.	15	

	d.	16
7. You must ask permission from your supervisor to access Safety Data Sheets?		ust ask permission from your supervisor to access Safety Data Sheets?
	a.	True
	b.	False
8.		, Asbestosis, and Neurological diseases from chemical exposure are signs of sure or long term adverse health effects.
	a.	Chronic
	b.	Inhalation
	C.	Acute
	d.	Sickness
9.	Which	one of the following is not an effective way to protect yourself from chemical exposure:
	a.	Personal Protective Equipment (PPE)
	b.	Cleaning up a chemical spill without reading the SDS
	C.	Read all warning labels on container
	d.	Substitute less toxic chemicals if possible
10. In the new labeling requirements, all pictogram diamond frames must be what color?		
	a.	Blue
	b.	Black
	c.	Red
	d.	Yellow