

Hazard Communication

Safety Administration Unit
Oklahoma Department of Corrections
2016

Course Information:

| | |
|------------------------------------|---|
| Course Title: | Hazard Communication for Flammable, Toxic and Caustic Substances |
| Course Codes: | DOC 450 CLEET 16-1806 |
| Training Credit: | 2 Hours |
| Type of Training Credit: | Orientation / Annual In-service / Safety |
| Original Course Created By: | Jonathan Roberts, MS, CSHO, GSP Date: December 2013 |
| SME Annual Review By: | Jerry Motte, Safety Administrator, JULY 2016 |
| Curriculum Revision/Date: | Terri Vogt, APO II, EDU; 1JULY2016 |
| Course Approval/Date: | Phil Gilstrap, Training Manager, EDU; 25 July 2016 |
| Target Population: | All DOC Staff |
| Classroom Presentation: | |
| Approved Instructors: | Safety Officers/Certified Instructors |
| Delivery/Presentation: | Classroom |
| Evaluation procedures: | Instructor observation |
| Online Course: | |
| Approved Instructors: | N/A |
| Delivery/Presentation: | Self-paced online study |
| Evaluation Procedures: | N/A |

Information Sources:

- * OP-150310 Hazard Communication Program; Eff. Date: 12/02/14
- * <http://www.osca.com/courses/construction/health-hazards-in-construction.aspx>
- * “OSHA Brief—Hazard Communication Standard: Safety Data Sheets,” OSHA, U.S. Department of Labor website:
<https://www.osha.gov/Publications/OSHA3514.html>
- * “Transitioning to Safer Chemicals: A toolkit for Employers and Workers,” OSHA, U.S. Department of Labor website:
https://www.osha.gov/dsg/safer_chemicals/index.html
- * Advanced Chemical Safety website:
<http://chemical-safety.com/documents/pdf/GENERALRULES.pdf>
- * OSHWIKI Networking Knowledge website:
https://oshwiki.eu/wiki/Chemical_storage

Effective Dates

| Effective Completion Date | Requirements | Who |
|---|---|---|
| 1 JUNE 2016 | Update alternative workplace labeling and hazard communication program as necessary, and provide additional employee training for newly identified physical or health hazards | Employers |
| Transition period to the effective completion dates noted above | May comply with either 29 CFR 1910.1200 (the final standard), or the current standard, or both. | Chemical manufacturers, importers, distributors, and employers. |

Course Objectives

1. Identify the types of chemical hazards within your work area.
2. Explain the difference between acute and long term exposure to hazardous chemicals.
3. Describe the possible effects to humans from exposure to carcinogens, corrosives, irritants and mutagens.
4. Identify the substance represented by pictograms used on safety data sheets.
5. Identify the hazard represented by each of the four colors on a safety label.
6. Describe the required elements of a written HazCom program.
7. Explain safe handling procedures for hazardous substances.
8. Explain how to respond to a possible overexposure to a hazardous substance.

Hazard Communication Program OP-150310

This course presents the primary points of information regarding the ODOC hazard communication program. Employees are responsible for reading, understanding and following the procedures as outlined in OP-150310.

To access this policy go to:

<http://ok.gov/doc/documents/op150310.pdf>

“The Oklahoma Department of Corrections (DOC) recognizes that its employees, offenders, volunteers, visitors, and contractors have a right and need to know the properties and potential safety and health problems of associated chemicals to which they may be exposed. This procedure provides guidelines for the implementation and maintenance of hazard communication ensuring compliance with the applicable federal and state standards and to safeguarding the health of correctional employees, offenders, volunteers, visitors, and contractors. “

What Is a Health Hazard?

A health hazard is any chemical or substance that may produce acute (short term) or chronic (long term) health effects in exposed employees.

Examples include:

- * Carcinogens (chemicals that may cause cancer)**
- * Toxic or highly toxic agents**
- * Corrosive/caustic substances**
- * Reproductive or genetic toxins**

Chemical Health Hazards:

Acute Toxicity

- An adverse health effect following a single exposure to a chemical
- Skin contact with insecticides
- Accidental ingestion of a chemical

Carcinogen

- A chemical that causes or can potentially cause cancer
- Breathing in asbestos fibers
- Skin contact with motor oils

Chronic Toxicity

- An adverse health effect following repeated exposure to a chemical, which can occur following a relatively short exposure or long exposure
- Short term—hours, days, weeks
- Long term—years

CMR

- A chemical that is carcinogenic, mutagenic or toxic to reproduction

Corrosive

- A chemical that causes irreversible damage to skin, eyes or airways.
- Strong acids and strong bases such as concentrated hydrochloric acid or concentrated hydroxides.

Irritant

- A chemical that causes reversible damage to skin, eyes or airways
- Detergents or soaps

Mutagen

- A chemical that can cause permanent damage to genetic material in cells, which can possibly lead to heritable genetic damage or cancer
- UV rays from the sun
- Benzene

Benefits of understanding chemical hazards:

Prevent injuries, deaths from:

- * Violent chemical reactions, fires, explosions**
- * Burns, irritation, trouble breathing, nausea, diseases**



Benefits of understanding chemical hazards:

Manufacturers and importers:

- * Classify chemical hazards
- * Provide labels, safety data sheets (SDSs)



Detecting hazardous chemicals in work areas:

- * Air monitoring equipment
- * Appearance, odor
- * Physical, chemical characteristics
- * Unknown chemicals to be considered hazardous



A chemical can have both physical and health hazards

* **Chemical manufacturers or importers must classify chemicals according to the physical and health hazards**

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

Physical and health hazards

- * Hazard classifications have sub-categories
- * Warning statements, phrases, other label elements are specified after classification



Physical hazard:

A chemical classified as posing one of the following hazardous effects:

- 1. Explosive**
- 2. Flammable (gases, aerosols, liquids, or solids)**
- 3. Oxidizer (liquid, solid, or gas)**
- 4. Self-reactive**
- 5. Pyrophoric (liquid or solid)**
- 6. Self-heating**
- 7. Organic peroxides**
- 8. Corrosive to metal**
- 9. Gases under pressure**
- 10. In contact with water emit flammable gases**

Physical hazards:

11. **Pyrophoric gas** - spontaneously ignites at 130°F or below.
12. **Combustible dust** - build-up can ignite if suspended in air in confined area.
 - Grains, sugar
 - Charcoal, soot
 - Chemicals (sulfur)
 - Metals (magnesium, aluminum)
 - Plastics, resins



Health hazards:

A chemical which is classified as posing one of the following hazardous effects:

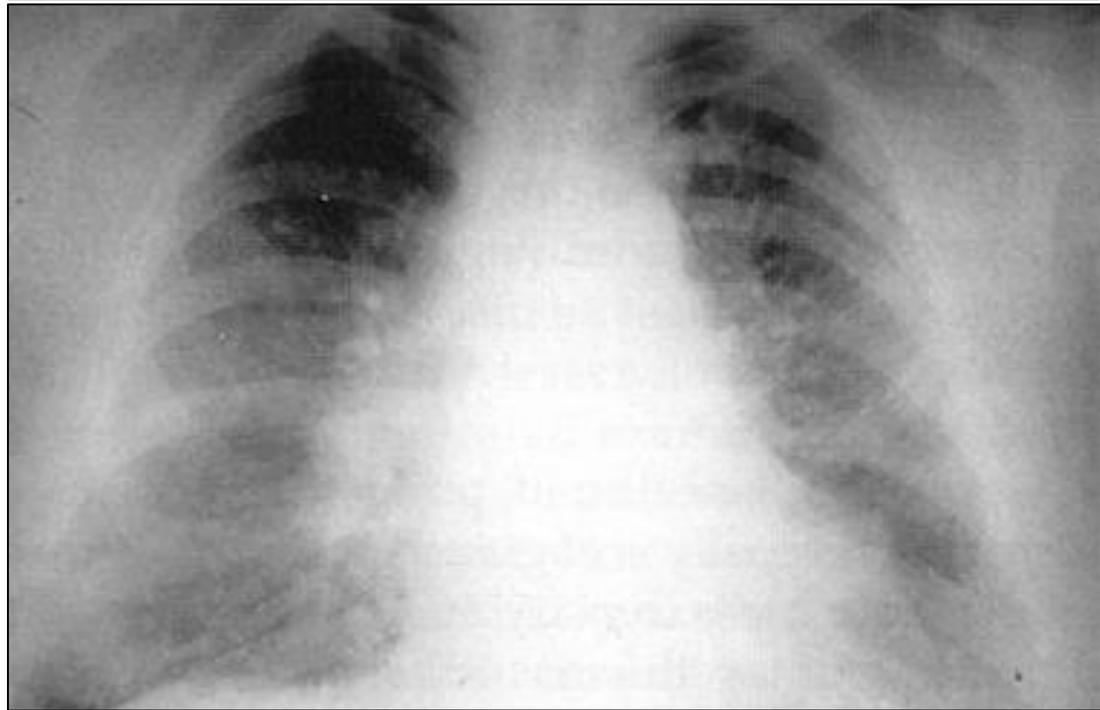
1. **Acute toxicity**
2. **Skin corrosion or irritation**
3. **Serious eye damage or irritation**
4. **Respiratory or skin sensitization**
5. **Germ cell mutagen**



Health hazards:

6. **Carcinogenicity**
7. **Reproductive toxin**
8. **Target organ systemic toxin**
 - Single exposure
 - Repeated exposure
9. **Aspiration hazard**

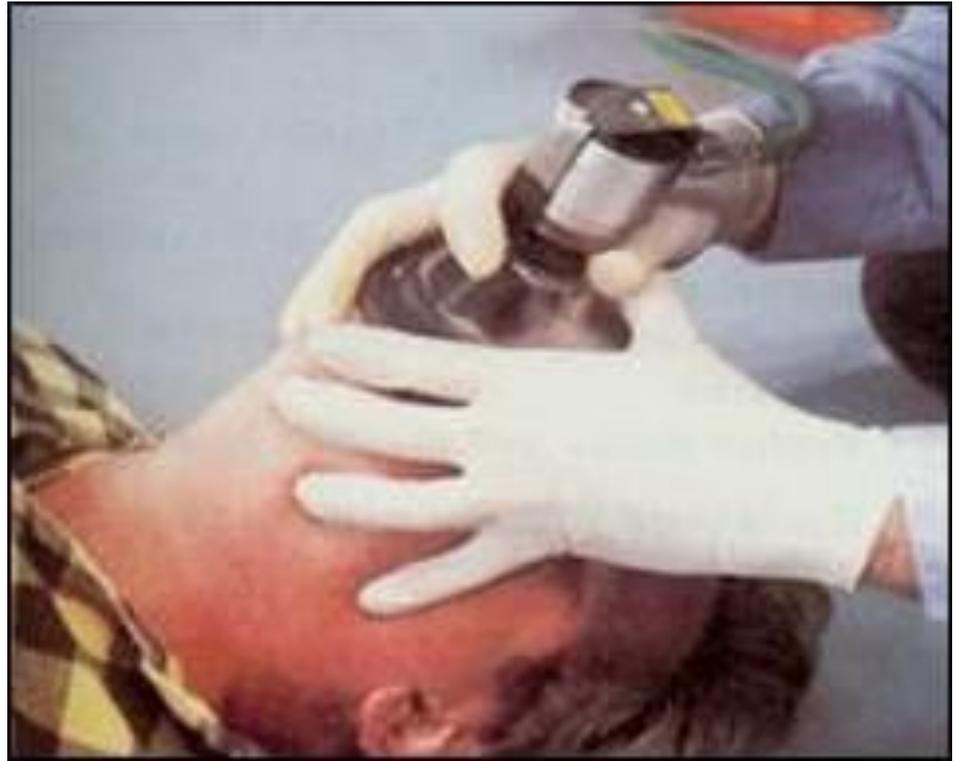
Chest radiograph of a 36-year-old chemical worker 2 hours post-exposure to chlorine inhalant. Exposure to low concentrations of chlorine for prolonged periods may have destructive effects, as might very short-term exposure to high concentrations.



<http://emedicine.medscape.com/article/832336-overview>

Health hazards:

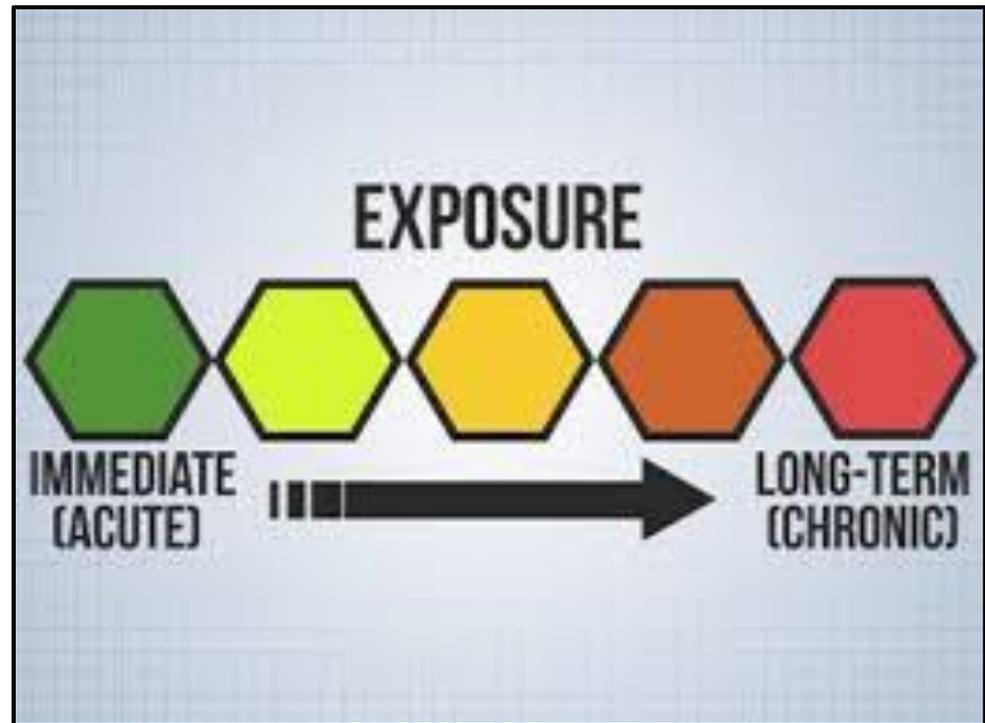
**Simple asphyxiant -
displaces oxygen in
the air to create an
oxygen-deficient
atmosphere that can
lead to
unconsciousness,
death**



Health hazards:

Health effects— Exposure:

- * Can occur rapidly after brief exposure (acute)
- * Long-term effects after prolonged, repeated exposure (chronic)



Exposure Time Frames

Acute Exposure

Short term exposure (e.g., minutes, hours, days) to (usually) relatively high levels of contaminant



Acute exposure may result in *acute effects* which can range from relatively mild (eye irritation), to extreme (an asthma attack)

Chronic Exposure

Long term (e.g., years to lifetime) exposure to (usually) relatively low levels of contaminant



Chronic exposure may result in *chronic effects* (cancer, chronic obstructive pulmonary disease, neurological problems, etc.)

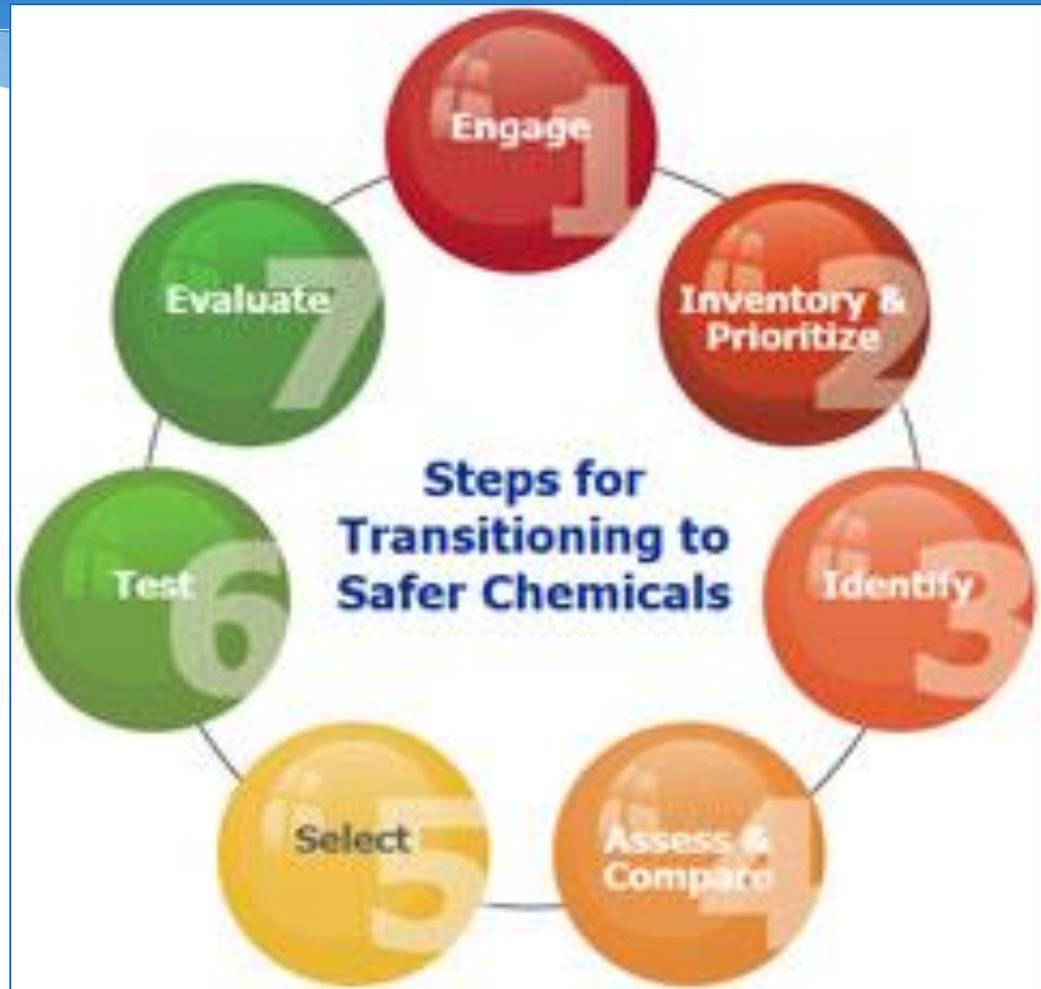
Protective control measures

- * **Engineering controls**
- * **Administrative, work practice controls**
- * **Enclosing operations**



Protective control measures

- * Ventilation equipment
- * Substituting less hazardous chemicals
- * Safer chemical handling procedures



Safe Handling Procedures

- * Use only chemicals required for a particular process. Do NOT substitute.
- * Identify the chemical(s) and review all hazards before using it (MSDS).
- * Wear proper eye protection.
- * Follow workplace procedures.
- * Maintain and use required safety equipment.



Safe Handling Procedures

- * Food, beverages and tobacco cannot be brought into or stored in areas of chemical use.
- * Maintain and use adequate personal decontamination equipment.
- * Keep workplace neat.
- * Develop an attitude of safety awareness.
- * Maintain safe storage of chemicals.



Personal protective equipment (PPE)

- * Used when hazards are not completely controlled or eliminated by other control measures
- * PPE selection based on hazard assessment and effectiveness of PPE



Personal protective equipment (PPE)

- * **Chemical-resistant:**
 - * **Goggles**
 - * **Face shields**
 - * **Gloves**
 - * **Boots**
 - * **Coveralls**
 - * **Aprons**
 - * **Respirators**
- * **Do not use damaged, malfunctioning PPE**



Emergency procedures

- * Chemical emergencies can involve fires, explosions, burns, asphyxiations
- * Unknown chemicals are considered to be hazardous
- * Emergency responders manage:
 - * Releases of unknown chemicals
 - * Any potentially dangerous release
- * Others go to safe area, report emergency



First Aid

Read SDSs for first aid information before using any chemical

Report overexposures to any chemical

Get prompt first aid, medical attention



First Aid

Contact with corrosive, irritating chemicals:

- * Know locations of emergency eyewash, showers
- * Learn how to use eyewash, showers
- * Flush eyes/skin with water



First Aid

Use the eyewash:

- * **Activate water stream**
- * **Hold both eyes open, lift eyelids**
- * **Often recommended to flush at least 15 minutes**
- * **Get professional medical assistance after flushing**



First Aid

Overexposure from breathing vapors, gases, aerosols, fumes, dust:

- * **Move victim to safe area with fresh air**
- * **Get emergency medical assistance**



First Aid

Ingesting chemicals:

- * Call poison control center, emergency medical responders
- * Have information from SDS available
- * Only induce vomiting or give water if advised by a medical provider

Oklahoma Poison Control Center

phones

Voice: 405-271-5062

TTY: 800-222-1222 Toll Free

Toll Free: 800-222-1222

Fax: 405-271-1816

web

Visit [Oklahoma Poison Control Center Website](#)

Email: oklahoma_poison@ouhsc.edu (non-emergency only)

Guide Location: 07:01;



Written HazCom Program

OSHA's HazCom standard includes requirements for:

1. Chemical classification
2. Safety Data Sheets (SDSs)
3. Labeling
4. Written HazCom program
5. Employee information, training
6. Provisions for trade secrets



Written HazCom Program

Written HazCom program:

1. Labels, chemical name, warnings
2. Safety data sheets (SDSs)
3. Inventory of hazardous chemicals (CIL)
4. Employee information, training
5. How employees learn hazards of non-routine tasks
6. Hazards of chemicals in unlabeled pipes



Written HazCom Program

7. Items not on the list if HazCom standard does not apply to them:

- * Hazardous waste
- * Tobacco
- * Many types of wood products
- * Manufactured articles
- * Food in store, restaurant
- * Certain drugs
- * Cosmetics
- * Certain consumer products
- * Nuisance particulates
- * Radiation
- * Biological hazards

Labeling overview

- * Labels warn of potential dangers
- * Labels are not intended to be the sole source of information
- * Labels serve as an immediate warning
- * Containers need labels
- * Pipes, fuel tanks, engines are not containers



Labeling overview

- * **Label provisions for hazardous solids:**
 - * **Solid metal**
 - * **Solid wood or plastic the could release hazardous chemicals during downstream use**
 - * **Whole grain**
- * **Labels for solids can be sent with first purchase only:**
 - * **Exception applies to the solids, not to accompanying hazardous chemicals that pose a risk to employees during transit**

Labeling overview

- * HazCom labels not required for hazardous chemicals labeled under other laws:
 - * Chemicals labeled under EPA rules
 - * Foods, flavors, fragrances, cosmetics, drugs, medical products
 - * Alcoholic beverages for non-industrial use
 - * Consumer products
 - * Seed treated with pesticides

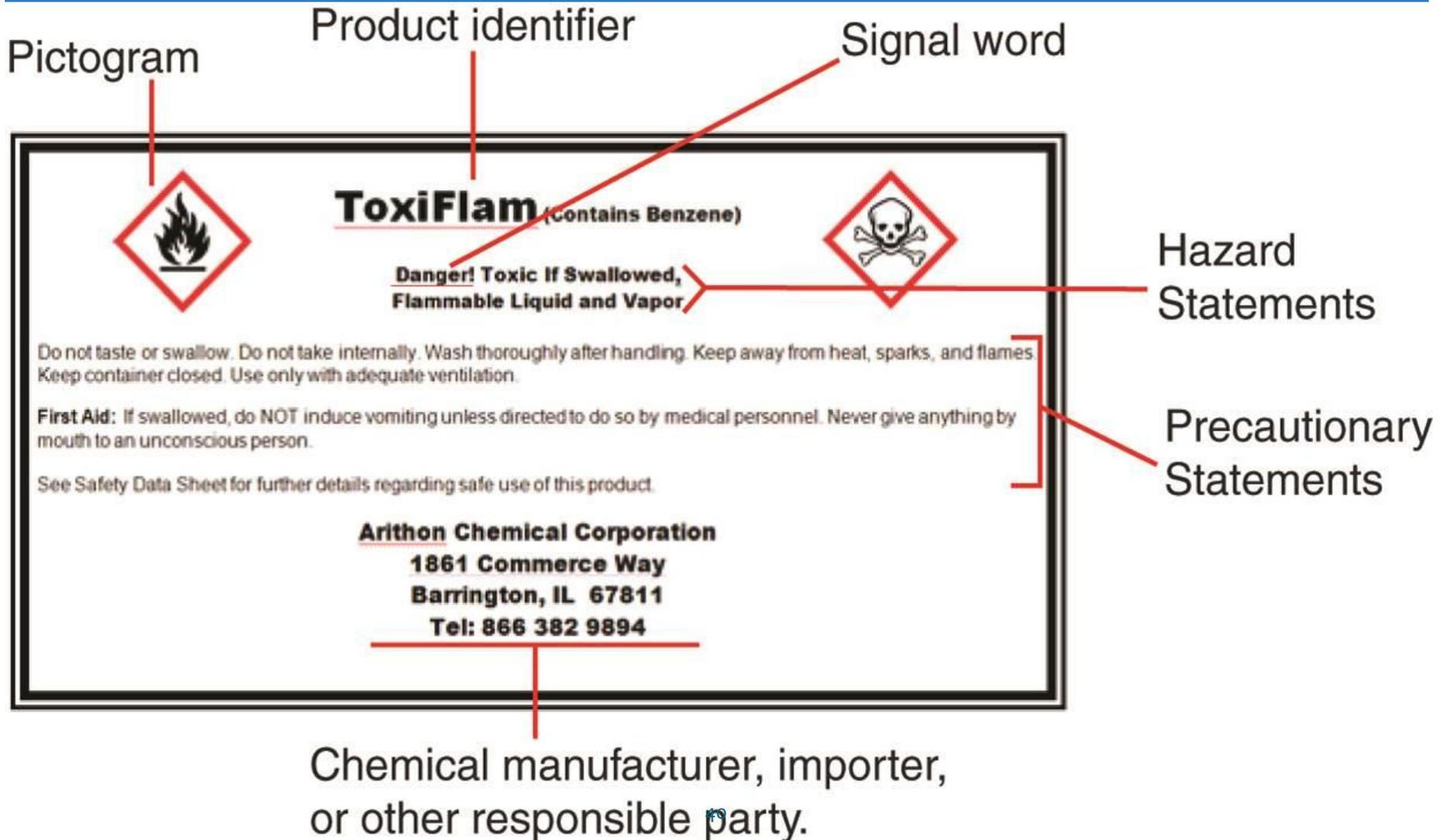
- * SDSs are still required for these hazardous chemicals



Labeling of shipped containers

1. **Product identifier**
(matches SDS and list)
2. **Signal word** (Danger = severe hazard; Warning = less severe)
3. **Hazard statement**
(based on hazard class and category)
4. **Pictogram** (symbol to show hazard class)
5. **Precautionary statement**
(safe use, storage)
6. **Name, address, phone number of manufacturer, importer, or responsible party to contact for emergency information**

Labeling of shipped containers



Labeling of shipped containers--Pictograms



Flame Over Circle

- Oxidizers



Flame

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



Exploding Bomb

- Explosives
- Self-reactives
- Organic peroxides

Labeling of shipped containers--Pictograms



Skull and Crossbones

- Acute toxicity (severe)



Corrosion

- Skin corrosion; burns
- Eye damage
- Corrosive to metals



Gas Cylinder

- Gases under pressure

Labeling of shipped containers—Pictograms



Health Hazard

- Carcinogen
- Respiratory Sensitizer
- Reproductive Toxicity
- Target organ toxicity
- Mutagenicity
- Aspiration toxicity



Exclamation Mark

- Irritant
- Dermal sensitizer
- Acute toxicity (harmful)
- Narcotic effects
- Respiratory tract irritation



Environmental

- Environmental toxicity

Labeling - shipped containers

OSHA Defined Hazards

Simple asphyxiant:

No pictogram

Signal word = “WARNING”

Hazard statement = “May displace oxygen and cause rapid suffocation”

Labeling - shipped containers

OSHA Defined Hazards

**Combustible
dust:** No pictogram

Signal word = “WARNING”

Hazard statement = “May form
combustible dust concentrations in
air”

Labeling - shipped containers

OSHA Defined Hazards

**Pyrophoric
gas:**

Flame pictogram



Signal word = “DANGER”

Hazard statement = “Catches fire spontaneously if exposed to air”

Facility/District HazCom Program— Chemical Inventory List

The master Chemical Inventory List (CIL) is a complete alphabetical listing of all hazardous chemicals maintained at the facility/district/unit.

- * Product identifier referenced on Safety Data Sheet (SDS)**
- * Entire workplace or separate areas**

Responsibilities of facility/district/unit department supervisors where chemicals are stored or issued:

1. Maintain an up-to-date CIL of the hazardous chemicals with an up-to-date list of emergency telephone numbers (i.e., 911 and local poison control center);
2. Maintain a SDS for each chemical listed on the CIL; and
3. Ensure that both the CIL and the SDS are accessible for review by employees, volunteers, offenders, visitors and contractors and for responding in the event of an emergency resulting from exposure.

Facility/District HazCom Program— Chemical Inventory List

A safety consultant/qualified designee will be assigned to each facility/district/unit. The safety consultant/qualified designee will maintain and ensure compliance with the following:

1. Maintain and update a master CIL and SDS's for each hazardous chemical
2. Make the CIL and the SDS available to employees, volunteers, offenders, visitors and contractors for their review and provide information in the event of an exposure;
3. Forward copies of the master CIL to the local fire department
4. Conduct and document an annual review of all CIL's and the SDS's on site
5. Maintain all SDS's and CIL's for 40 years in accordance with the General Records Disposition Schedule

Facility/District HazCom Program— Chemical Inventory List

Employees, inmates and offenders working in areas where exposure(s) to hazardous chemical(s) may exist will be required to perform their jobs in accordance with precautions communicated in the SDS.

1. A supervisor may take appropriate disciplinary action when an employee/offender does not comply with the precautionary measures mandated by this procedure.
2. An affected employee/offender (or designated representative) may make a written request to the safety officer/qualified designee for access to review copies of the CIL and the SDS.
3. ODOC may not discharge, discriminate against or initiate any adverse personnel action against any employee who has exercised his/her right under 40 O.S. § 403 B to file a complaint with the Department of Labor or any other regulatory agency.

Facility/District HazCom Program— In-House Containers

- All containers used by employees, offenders, volunteers, visitors or contractors will be properly labeled using the NFPA 704 label or the HMIS prior to use of the hazardous chemical in the workplace.
- The NFPA 704 and the HMIS outlines the typical "fire diamond" used by emergency personnel to quickly and easily identify the risks posed by hazardous materials.



HMIS--Hazardous
Material Identification
System:

NFPA--National Fire
Protection Association
704 Label



Labeling

In-house containers

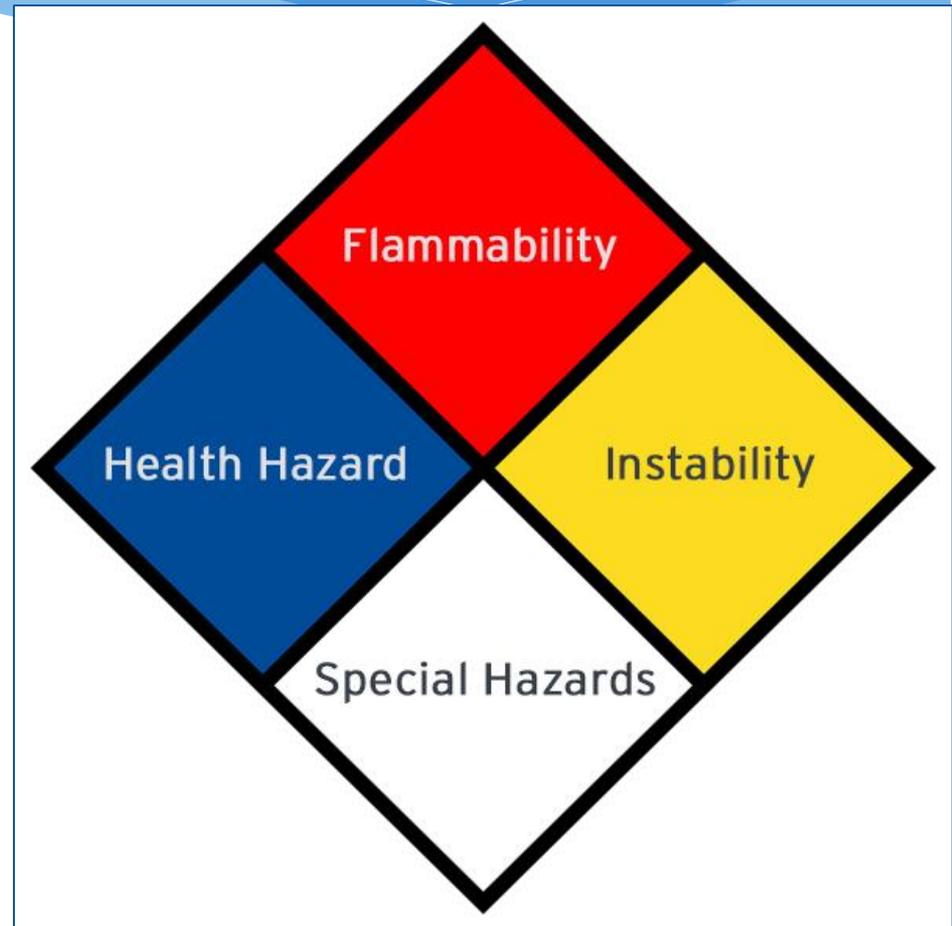
NFPA system identifies:

- * Health hazards - Blue
- * Flammability hazards - Red
- * Reactivity hazards - Yellow
- * Special hazards - White

Hazard severity (0 to 4):

0 = none

4 = severe



Labeling

In-house containers

HMIS system identifies:

- * Health hazards - Blue
- * Flammability hazards - Red
- * Physical hazards - Orange
- * Personal protection - White

Hazard severity (0 to 4):

- 0 = Minimal
- 1 = Slight
- 2 = Moderate
- 3 = Serious
- 4 = Severe



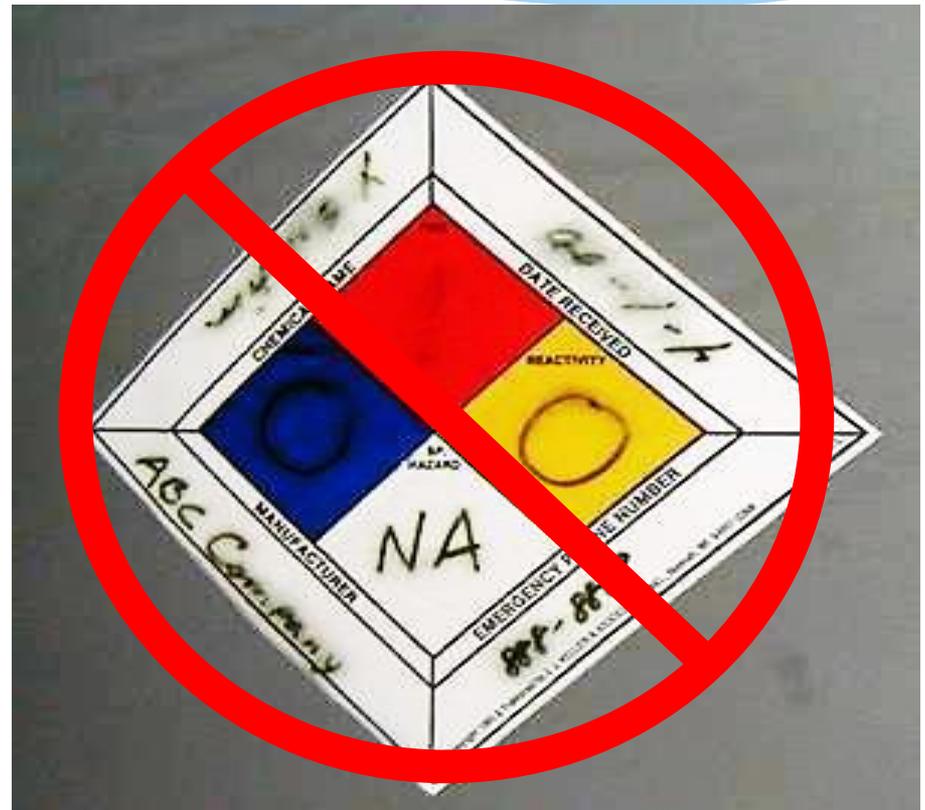
The image shows a yellow-bordered label template for HMIS (Hazardous Material Identification System) on in-house containers. The label is divided into four horizontal sections, each with a specific color and hazard category. The top section is white and contains the text 'HMIS'. The second section is blue and labeled 'HEALTH', with two white boxes for hazard severity ratings. The third section is red and labeled 'FLAMMABILITY', with one white box for hazard severity rating. The fourth section is orange and labeled 'PHYSICAL HAZARD', with one white box for hazard severity rating. The bottom section is white and labeled 'PERSONAL PROTECTION', with no boxes for hazard severity rating. The label is surrounded by a yellow border with a repeating pattern of the text 'HMIS'.

| HMIS | |
|---------------------|---|
| HEALTH | <input type="text"/> <input type="text"/> |
| FLAMMABILITY | <input type="text"/> |
| PHYSICAL HAZARD | <input type="text"/> |
| PERSONAL PROTECTION | |

Labeling

In-house containers

- * Rely on labels on shipped containers
- * Re-label if label falls off or cannot be read



Labeling In-house containers

Individual stationary containers (i.e., tanks) may use:

- * Signs
- * Placards
- * Batch tickets
- * Operating procedures

These alternatives must provide the same information as would a label.



Labeling

In-house containers

Different system for in-house labels:

- * **Product identifier**
- * **Words, pictures, symbols, or a combination of these, that provide at least general information on the hazards of the chemicals**



Hazards of non-routine tasks, unlabeled pipes

1. Identify the chemicals you work with
2. Know their individual hazards
3. Use the chemicals correctly
4. Know the contents of unlabeled pipes



Safety Data Sheet (SDS)

- * Chemical fact sheets
- * Provided by chemical suppliers
- * Employer keeps them up-to-date
- * Must be in English
- * **Employers must ensure that SDSs are readily accessible to employees.**
- * Report missing SDSs



Safety Data Sheet (SDS)

Use:

- * Verify label information
- * PPE recommendations
- * Symptoms, health effects
- * First aid
- * Emergency procedures



Material Safety Data Sheets (MSDS)

- * **Safety Data Sheets (SDS)** have replaced **Material Safety Data Sheets (MSDS)**.
- * The **MSDS** included much of the same information as the current **SDS**. However, the **SDS** now offers a 16 section standardized format.



Safety Data Sheet (SDS)— Form Sections

Section 1— Identification:

- Product ID
- Manufacturer name, address, phone number
- Emergency phone
- Recommended use
- Restrictions on use

Section 2—Hazard Identification:

- All hazards
- Required label elements

Safety Data Sheet (SDS)— Form Sections

Section 3—Composition

- Chemical name, synonyms
- CAS number
- Percentage of ingredients
- Trade secret claims

Section 4—First aid

- Required treatment for each route of exposure
- Acute (immediate) symptoms, effects
- Immediate, special treatments

Safety Data Sheet (SDS)— Form Sections

Section 5—Fire fighting:

- Extinguishing techniques
- Extinguishing equipment
- Hazardous combustion products
- Equipment, precautions for firefighters

Section 6—Accidental release:

- Personal precautions
- Protective equipment
- Emergency procedures
- Containment and cleanup methods

Safety Data Sheet (SDS)— Form Sections

Section 7—Handling and storage:



- Safe handling
- Safe storage
- Incompatible materials

Section 8—Exposure control, personal protection:



- Permissible exposure limits (PELs)
- Threshold limit values (TLVs), other exposure limits
- Engineering controls
- Personal protective equipment (PPE)

Safety Data Sheet (SDS)— Form Sections

Section 9—Physical, chemical properties:



- Chemical appearance
- Odor, odor threshold
- Physical properties (pH, flash point, flammability limits, vapor pressure and density, auto-ignition temp., decomposition temp., viscosity, etc.)

Section 10—Stability, reactivity:



- Conditions to avoid
- Incompatible materials
- Hazardous decomposition products

Safety Data Sheet (SDS)— Form Sections

Section —11 Toxicological information:

- Routes of exposure
- Immediate, chronic effects
- Toxicity data
- Carcinogenicity

Section 12—Ecological information (non-mandatory):

- Eco toxicity
- Biodegradability

Safety Data Sheet (SDS)— Form Sections

Section 13 - Disposal considerations (non-mandatory):

- Waste description
- Waste handling, disposal

Section 14—Transport information (non-mandatory):

- DOT shipping name, hazard class, packing group
- UN number

Safety Data Sheet (SDS)— Form Sections

Section 15 - Regulatory information (non-mandatory):



- Product-specific safety, health, environmental regulations

Section 16 - Other information:



- Date of SDS's preparation or last revision

***SDS indicates if no relevant information is available within a section.**

Proper Use and Dispensing Techniques:

- * Check label, SDS
- * Wear PPE
- * Operate ventilation
- * Take *only* the amount you need
- * Keep containers closed
- * Do not use near heat, sparks, or open flames



Proper Use and Dispensing Techniques:

- * **Mixing some chemicals can cause dangerous reactions**
- * **Do not mix chemicals without instructions**
- * **Do not re-use containers**



Proper Use and Dispensing Techniques:

Chemical transfer precautions:

- * Wear PPE
- * Work in well-ventilated area
- * Use the proper container

Extra precautions for flammable liquids:

- * Electrically ground and bond containers
- * Using non-sparking tools
- * Pump from vertical drum
- * Self-closing valve from horizontal drum



Procedures for Use and Dispensing Flammable, Toxic and Caustic Chemicals

Issuance

- All flammable, caustic, and toxic substances will be issued (i.e., drawn from supply points to canisters or dispensed) only under the supervision of authorized staff, and in approved containers. A log will be used to record distribution of these chemicals

Amounts

- All chemicals will be issued daily and only in the minimum amount necessary for the task. Institutions that use the Correct Pac or Portion Pac chemical system do not need to issue daily.

Supervision

- All persons using hazardous chemicals will be supervised by qualified staff who has received training on the hazards of caustics, toxics and flammables. The staff member must review the associated SDS; understand the safe use of the substance and first aid measures.

Accountability and Inspections

- All hazardous chemicals will be accounted for before, during, and after their use. Discrepancies will be reported to the safety officer/qualified designee.
- Weekly inspections will be conducted by the facility/district/unit department supervisor on hazardous chemical containers

Procedures for Storage, Use and Disposal of Flammable, Toxic and Caustic Chemicals

Always store, use or dispose of chemicals properly.

Consult the following sources for accurate information:

Labels and SDS

DOC Policy (OP-150310)

Facility/district safety officer

Chemical storage:

- * **Prevent:**
 - * Spills
 - * Chemical reactions
 - * Fires
- * **Review SDS**
- * **Separate storage room, cabinet**
- * **Segregate incompatible chemicals, compressed gas cylinders**



Chemical disposal:

- * Regulated as hazardous waste
- * Collect and dispose of waste properly
- * Do not mix waste material without instructions
- * Do not pour into a sewer or sink
- * Properly decontaminate all tools



HazCom Information Summary

Remember:

- * The methods, observations to detect chemicals.
- * Know what chemicals are in your work area.
- * Always follow SDS and label instructions as well as written procedures for handling and using chemicals.
- * Be aware of the physical and health hazards associated with any chemical before using it.
- * Use safe work practices, emergency procedures, and PPE as required.



HazCom Information Summary

Details of HazCom program:

- * Labels on shipped containers
- * Labeling used on in-house containers
- * Safety Data Sheets and the order of information



Always ask for HazCom help if you have any questions.

Safety Information Contacts:

Oklahoma Department of Corrections Safety Administration:

- * Jerry Motte, Safety Administrator
- * Phone:
- * Email: jerry.motte@doc.ok.gov



Occupational Safety & Health
Administration
200 Constitution Ave., NW,
Washington, DC 20210
Phone: 800-321-6742 (OSHA)
Website: www.OSHA.gov

Course Review:

Can you...?

1. Identify the types of chemical hazards within your work area.
2. Explain the difference between acute and long term exposure to hazardous chemicals.
3. Describe the possible effects to humans from exposure to carcinogens, corrosives, irritants and mutagens.
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