OSHA’s Hazard Communication Standard

• OFC has developed a Hazard Communication Program to be in compliance with OSHA’s Hazard Communication Standard.

• The program teaches the hazardous nature of the substances with which we work, proper and safe handling procedures, and the steps employees must take to protect themselves from harm during normal working conditions or in an emergency situation in the workplace.
Hazard Communication Standard

Employee Training

• Employee training must include the details of the Hazard Communication Program developed by the employer, including:
  o An explanation of the labels received on shipped containers;
  o Workplace labeling system used by the employer;
  o Safety Data Sheet instruction, including the order of information and how employees can obtain and use the appropriate hazard information.
Hazard Communication Standard
Employee Training

• Employers are required to provide effective information and training on the hazardous chemicals in their work areas.

• Training must be done at the time of initial assignment to work with a chemical, and when a new chemical hazard is introduced into the work area.
How Hazard Communication Works

- Chemical Manufacturers and Importers classify the hazards of chemicals they produce or import, and prepare labels and safety data sheets based on the classifications.

- All Employers receive labeled containers and safety data sheets with shipped chemicals.

- All Employers must prepare a written hazard communication program, including a list of the hazardous chemicals in the workplace.

Employers must ensure:

- All containers of hazardous chemicals are labeled.
- Safety data sheets are maintained for all hazardous chemicals.
- Workers are trained on program elements, hazards, protective measures, etc.

- Keep Information Up-to-Date
Hazard Classification

Manufacturers

• The standard requires chemical manufacturers and importers to classify the hazards of the chemicals they produce or import, and to prepare appropriate labels and safety data sheets (SDSs) to convey the hazards, as well as recommended protective measures.
Hazard Classification Manufacturers

• Chemical manufacturers, importers, and distributors must ensure that the containers of these hazardous chemicals are labeled when shipped, and that SDSs are provided downstream with the first shipment and when the SDSs are updated.
Role of Labels

• Chemical manufacturers and importers must provide a label that includes a signal word, pictogram, hazard statement, and precautionary statement for each hazard class and category.

• Labels are the immediate source of information on a chemical.
Revised Labels

- Labels on shipped containers of hazardous chemicals were modified on June 1, 2015.
- The primary change is that information on labels has been standardized:
  - There are certain types of information required to appear on labels.
  - All suppliers have the same requirements, so labels should be more consistent in approach than past labels.
Label Requirements

• Labels on shipped containers must include:
  o Product Identifier
  o Signal Word
  o Pictogram
  o Hazard Statement(s)
  o Precautionary Statement(s)
  o Supplier Identification (Name, Address, Phone Number)
Signal Word

• “Signal word” means a word used to indicate the relative level of severity of hazard and alert the reader to a potential hazard on the label.

• The signal words used are “danger” and “warning.” “Danger” is used for the more severe hazards, while “warning” is used for the less severe
Pictogram

• “Pictogram” means a composition that may include a symbol plus other graphic elements, such as a border, background pattern, or color, that is intended to convey specific information about the hazards of a chemical.

• Eight pictograms are designated under this standard for application to a hazard category.
HCS Pictograms and Hazards

<table>
<thead>
<tr>
<th>Health Hazard</th>
<th>Flame</th>
<th>Exclamation Mark</th>
</tr>
</thead>
<tbody>
<tr>
<td>Carcinogen, Mutagenicity, Reproductive Toxicity, Respiratory Sensitizer, Target Organ Toxicity, Aspiration Toxicity</td>
<td>Flammables, Pyrophorics, Self-Heating, Emits Flammable Gas, Self-Reactives, Organic Peroxides</td>
<td>Irritant (skin and eye), Skin Sensitizer, Acute Toxicity (harmful), Narcotic Effects, Respiratory Tract Irritant, Hazardous to Ozone Layer (Non-Mandatory)</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Gas Cylinder</th>
<th>Corrosion</th>
<th>Exploding Bomb</th>
</tr>
</thead>
<tbody>
<tr>
<td>Gases Under Pressure</td>
<td>Skin Corrosion/Burns, Eye Damage, Corrosive to Metals</td>
<td>Explosives, Self-Reactives, Organic Peroxides</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Flame Over Circle</th>
<th>Environment</th>
<th>Skull and Crossbones</th>
</tr>
</thead>
<tbody>
<tr>
<td>Oxidizers</td>
<td>Aquatic Toxicity</td>
<td>Acute Toxicity (fatal or toxic)</td>
</tr>
</tbody>
</table>
Hazard Statement

• “Hazard statement” means a statement assigned to a hazard class and category that describes the nature of the hazard(s) of a chemical, including, where appropriate, the degree of hazard.
  ○ Example: Fatal if swallowed (Acute Oral Toxicity).
Precautionary Statement

• “Precautionary statement” means a phrase that describes recommended measures that should be taken to minimize or prevent adverse effects resulting from exposure to a hazardous chemical, or improper storage or handling.
  
  o Example: Do not eat, drink, or smoke when using this product.
  
  o Example: Keep container tightly closed.
Precautionary Statement

• The statements assigned to a chemical address the following four areas
  o Prevention
  o Response
  o Storage
  o Disposal
Example of Required HCS Label Elements

Product Identifier
Pictogram (Symbol in Red Frame)

Signal Word (Danger)
Hazard Statement(s) (Extremely flammable gas)

Precautionary Statement(s) (Keep away from heat and open flames. No smoking. Leaking gas fire: Do not extinguish, unless leak can be stopped safely. Eliminate all ignition sources if safe to do so. Store in well-ventilated place.)

Name, Address, and Telephone Number of Manufacturer, Importer, or Other Responsible Party
Role of the Safety Data Sheet (SDS)

• The Safety Data Sheet is the detailed source of information about the chemical.
  o The SDS is thus a reference to help ensure a chemical is handled safely.
Revise Safety Data Sheet Format

• Newly modified safety data sheets will be organized using a specified order of information.
• The required information will appear in the same sections of an SDS regardless of the supplier.
• The most important information will be listed in the first sections of the SDS.
SDS Sections

1. Identification
2. Hazard(s) identification
3. Composition/information on ingredients
4. First-aid measures
5. Fire-fighting measures
6. Accidental release measures
7. Handling and storage
8. Exposure control/personal protection
9. Physical and chemical properties
10. Stability and reactivity
11. Toxicological information
12. Ecological information
13. Disposal considerations
14. Transport information
15. Regulatory information
16. Other information
**Example of New Format SDS**

NFPA 704 Placard & Ratings Voluntarily Provided

GHS System and Labels Down in Section 2

### SECTION 1. PRODUCT AND COMPANY IDENTIFICATION

<table>
<thead>
<tr>
<th>Product name</th>
<th>: Product XYZ</th>
</tr>
</thead>
<tbody>
<tr>
<td>Synonyms</td>
<td>:</td>
</tr>
<tr>
<td>SDS Number</td>
<td>: 888100008809</td>
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<tr>
<td>Version</td>
<td>: 1.1</td>
</tr>
<tr>
<td>Product Use Description</td>
<td>: Fuel</td>
</tr>
<tr>
<td>Company</td>
<td>:</td>
</tr>
<tr>
<td>Chemtrec (Emergency Contact)</td>
<td>: (800) 424-9300</td>
</tr>
</tbody>
</table>

### SECTION 2. HAZARDS IDENTIFICATION

**Classifications**
- Flammable Liquid – Category 1 or 2 depending on formulation.
- Aspiration Hazard – Category 1
- Carcinogenicity – Category 2
- Specific Target Organ Toxicity (Repeated Exposure) – Category 2
- Specific Target Organ Toxicity (Single Exposure) – Category 3
- Skin Irritation – Category 2
- Eye Irritation – Category 2B
- Chronic Aquatic Toxicity – Category 2

**Pictograms**

1. Flammable
2. Explosive
3. Reactivity
4. Specific Hazard
5. Acute Toxicity

**Signal Word**
- Danger
SDS Requirements

• SDSs must be readily accessible to workers when they are in their work areas, during each work shift.
• Hazard communication works when employers also use SDSs to make sure that proper protective measures are being implemented.
The Orthopaedic & Fracture Clinic’s Hazard Communication Program

• The Safety Committee is charged with overall responsibility for OFC’s Hazard Communication Program.
• OFC will ensure that every hazardous chemical bares the appropriate labeling and warnings.
• OFC will maintain a list of all hazardous chemicals used in the clinic.
The Orthopaedic & Fracture Clinic’s Hazard Communication Program

• OFC will obtain SDS information for all hazardous chemicals and make them available to all employees.

• Mankato:
  o A comprehensive list of all hazardous chemicals along with SDS information is available in the Maintenance Department.
  o The individual departments listed below will have a list of hazardous chemicals used in that specific department and SDS information:
    o Physical Therapy, Back Care Center, Nursing/X-ray and MRI.

• Faribault:
  o To be determined.
Lesson Quiz / Pictogram Quiz

• You have now completed the Hazardous Communication Program slide presentation.

• Please take the Lesson Quiz on the Staff Portal to log your training.