



# Hazard Communication

National Capital Area

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## **Purpose of Hazard Communication**

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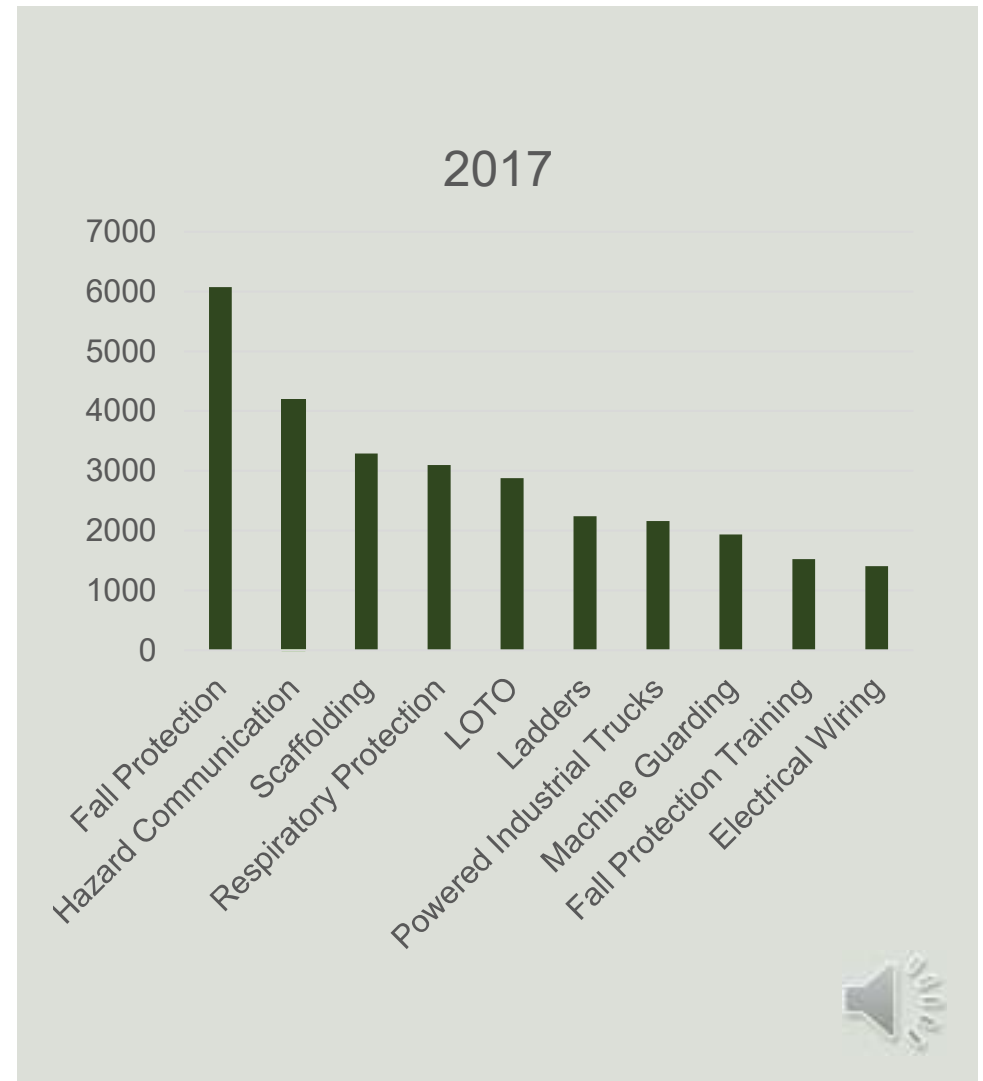
To ensure that the hazards of all chemicals produced or imported are classified, and that the information concerning their hazards is transmitted to employers and employees.



## Hazard Communication

▫ 2<sup>nd</sup> most cited OSHA violation

- Written program
- Labeled containers
- SDS
- Training
- Chemical inventory



## HazCom Standard

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- Also known as “Right to Know”, codified in 29 CFR 1910.1200
- Revised to adopt the Globally Harmonized System (GHS) in 2009.
- The standards for general industry and construction are identical



## Who does HazCom apply to?

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- The HazCom standard applies to any worker who may be exposed to hazardous chemicals under **normal operating conditions**, or in **foreseeable emergencies**.



## So What is a Hazardous Material?

- Physical Hazards
  - Gas under pressure
  - Explosive
  - Flammable
  - Oxidizer
  - Pyrophoric
  - Self-reactive or self-heating
  - Organic peroxide
  - Corrosive to metal
  - Emits flammable gas when contact w/H<sub>2</sub>O
- Health Hazards
  - Acute toxicity (all pathways)
  - Skin corrosion/irritation
  - Serious eye damage/irritation
  - Respiratory/skin sensitization
  - Mutagen
  - Carcinogen
  - Reproductive toxin
  - Specific organ toxicity
  - Aspiration toxicity



## Hazardous Materials

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- Simple Asphyxiant
- Combustible Dust
- Pyrophoric Gas
- Hazards not otherwise classified



<https://www.youtube.com/watch?v=fl-jlNqpCQ8>



## Communication Methods

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- Labels
- SDS
- Chemical Inventory
- Written Program
- Training





## Communication Methods

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- Pictogram
  - Symbol conveying specific information about chemical hazards
- Signal word
  - Indicates relative level of severity
    - Danger
    - Warning
- Hazard statement
  - Describes the nature of the hazard
- Precautionary statement
  - Recommended measures to minimize/prevent adverse effects



## Communication Methods: Labeling

- Every individual container must be labeled in English
- Manufacturer labels include:
  - A product identifier
  - Pictogram
  - Signal Word
  - Hazard Statement
  - Precautionary statement
  - Contact information for the manufacturer

**The Basic Parts of A GHS-Compliant Label**

**1** → **n-Propyl Alcohol**

UN No. 1274  
CAS No. 71-23-8

**2** → **DANGER**

**3** → Highly flammable liquid and vapor. Causes serious eye damage.  
May cause drowsiness and dizziness.

**4** → Keep away from heat/sparks/open flames/hot surfaces. No smoking. Avoid breathing fumes/mist/vapors/spray. Wear protective gloves/protective clothing/eye protection/face protection. IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses if present. Continue rinsing.

Fill Weight: 18.65 lbs. Lot Number: 956754434  
Gross Weight: 20 lbs. Fill Date: 6/21/2013  
Expiration Date: 6/21/2020 See SDS for further information.

**5** → Acme Chemical Company - 711 Roadrunner St. - Chicago, IL 60601 USA - [www.acmechem.com](http://www.acmechem.com) - 123-444-5567

**6** → [Pictograms: Flame, Hand being poured on, Exclamation mark]

1. **Product Identifier** - Should match the product identifier on the Safety Data Sheet.  
2. **Signal Word** - Either use "Danger" (severe) or "Warning" (less severe).  
3. **Hazard Statements** - A phrase assigned to a hazard class that describes the nature of the product's hazards.  
4. **Precautionary Statements** - Describes recommended measures to minimize or prevent adverse effects resulting from exposure.  
5. **Supplier Identification** - The name, address and telephone number of the manufacturer or supplier.  
6. **Pictograms** - Graphical symbols intended to convey specific hazard information visually.

Sample label courtesy of Weber Packaging Solutions - [www.weberpackaging.com](http://www.weberpackaging.com)

## Secondary Container Labeling

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- When do I have to apply a label?
  - Anytime chemicals are transferred from manufacturer's container
  
- Label options:
  - Use original label
  - Label with all GHS elements\*
  - Other label with SDS nearby
    - Product identifier
    - Hazard description

\*Online resources like [MySafetyLabels.com](http://MySafetyLabels.com) are helpful



# Example Labels

HS85  
Batch number: 85L6543



**Warning**  
Harmful if swallowed










Wash hands and face thoroughly after handling. Do not eat, drink or smoke when using this product. Dispose of contents/container in accordance with local, state and federal regulations.

**First aid:**  
If swallowed: Call a doctor if you feel unwell. Rinse mouth.

GHS Example Company, 123 Global Circle, Anyville, NY 130XX Telephone (888) 888-8888

Product ID: \_\_\_\_\_

Signal Word:  DANGER  WARNING  N/A

<b>HEALTH</b>	<b>FIRE</b>		
		<input type="checkbox"/>	<input type="checkbox"/>
<b>SPECIFIC HAZARD</b>			
	<b>INSTABILITY</b>	<input type="checkbox"/>	<input type="checkbox"/>
			
		<input type="checkbox"/>	<input type="checkbox"/>
			
		<input type="checkbox"/>	<input type="checkbox"/>
			<input type="checkbox"/>
		<input type="checkbox"/>	<input type="checkbox"/>

Hazard Statement: \_\_\_\_\_

Precautionary Statement: \_\_\_\_\_

Personal Protective Equipment: \_\_\_\_\_



## Communication Methods: Labeling

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There are a few exceptions to the HazCom labeling requirements:

### ▫ Portable Containers

- Must be used in one shift
- Must only be used by the person who filled the container
- Must not be left unattended at any time

### ▫ Storage Areas

- Forgoes individual labeling if all contents of all containers are the same
- Must be visible at all times
- Must contain the same information as an individual label

### ▫ Non-containers

- Pipes, engines, and fuel tanks



## Communication Methods: Labeling

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- Other labeling systems
  - NFPA
  - DOT



## Communication Methods: SDS

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- Standard format of 16 sections
  - Always in the same order
- Must be readily available to all employees on their first day of employment.
- Must be provided to employee within 24 hours of request



## Communication Methods: SDS

1. Product Identifier
2. Hazard Identification
3. Composition
4. First Aid Measures
5. Fire-fighting Measures
6. Accidental Release Measures
7. Storage and Handling
8. Exposure Controls (PPE)
9. Physical and Chemical Properties
10. Stability and Reactivity
11. Toxicological Information
12. Ecological Information
13. Disposal
14. Transportation
15. Regulatory Information
16. Other Information





## Exemptions

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- Non-hazardous materials
- Household Consumer Products
  - Based on exposure



## Communication Methods: Written Program

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- Must include
  - Labeling requirements
  - SDS program
  - Guidelines for employee training
  
- Also Recommended
  - Roles and responsibilities
  - Contractor/Concessionaire integration
  - Documentation and storage
  - Chemical Inventory



## Communication Methods: Written Program

- HazCom plans should be updated:
  - Each time regulations change
  - Each time staff or roles change
  - Each time the training program changes
  - Each time new chemicals are introduced
  
- The NCA Environmental Program Manager maintains a template that parks can use to create their written program

[Park name]  
Park address line 1  
Park address line 2  
Phone: (555-555-5555)  
Fax: (555-555-5555)

[Insert Park Name]

**Hazard Communication Program**

Plan created: [Insert date]  
Plan Revised: [Insert revision date if applicable]  
Superintendent signature of approval: \_\_\_\_\_ Date: \_\_\_\_\_

## Updating the Template

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- The template is mostly pre-written, but includes spaces for park staff to include information specific to their park.
  - Park Policy/Program Availability
  - Roles and Responsibilities
  - Secondary Container Labeling
  - Chemicals in pipes
  - Table 3: Employee Training
  - Chemical Inventory



## Communication Methods: Chemical Inventory

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- Often included as an appendix to the written program, but may also be the Table of Contents in a complete SDS binder
  
- Lists every chemical at the Park
  - Same product identifier as the SDS
  - Container size and type
  - Quantity
  - Location



## Communication Methods: Training

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- A HazCom Program is only as good as the training that goes with it
- Documentation is key!



## Communication Methods: Training

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- General and specific hazards
- Methods to protect employees:
  - Use of PPE
  - Storage/handling practices
  - Emergency procedures
- Details of the Program
  - Location
  - Labeling system
  - SDS



## Communication Methods: Training

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- Training should be held
  - At initial assignment
  - When roles change
  - When hazards change
  - When the program changes
  - Annually (recommended)





## Responsibilities

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- Program Coordinator
  - Write and maintain the written program
  - Establish training program and keep documentation
  - Keep chemical inventory updated
  - Maintain old MSDSs/SDSs for 30 years
  
- Supervisor
  - Informs coordinator and H&S manager of job requirements and hazard exposure of their staff
  - Enforces compliance
  
- Employee
  - Use proper PPE as necessary
  - Know location of emergency equipment
  - Inform supervisor of potential hazardous situations/events



## Almost Done!

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- Discuss the components of the HazCom Program at your Park
- Document your training

