EDEN PRAIRIE SCHOOLS

Inspiring each student every day

ART & INDUSTRIAL TECHNOLOGY EMPLOYEE RIGHT TO KNOW TRAINING

REQUIRED QUIZ

- There is a quiz for this training that must be completed as documentation that you have received the training.
- On the last slide of this presentation there is a link to the quiz.
- If you have any questions, please contact Kyle Fisher, Facilities and Safety Coordinator at 952-975-7000 or by email at Kyle_fisher@edenpr.k12.mn.us

ERK OVERVIEW

- The ERK Coordinator for your district is Kyle Fisher.
- The ERK standard requires employers to make employees aware of hazardous substances and/or agents that may be encountered at work.

TRAINING OVERVIEW

- Responsibility
- Hazard determination by employers
- Written program – available at the District Office
- Safety Data Sheets (SDSs)
- Labels and other warnings
- Methods of protection
- Emergency procedures

You have a right to know

- In 1983, the Federal Government established the OSHA Hazard Communication Standard. This standard is designed to protect employees who use hazardous materials on the job.
- The Hazard Communication Standard - The Occupational Safety & Health Administration mandate, 29 CFR 1910.1200, states that companies producing and using *hazardous materials* must provide employees with information and training on the proper handling and use of these materials
- You, as an employee, have a Right to Know about the hazardous materials used in your work area and the potential effects of these materials upon your health and safety.

WRITTEN PROGRAM COMPONENTS

- Who is covered
- Chemical inventory
- SDSs
- Training components
- Training records

COMMON CHEMICALS FOUND IN INDUSTRIAL TECHNOLOGY

- Glues
- Paints
- Stains
- Thinners
- Linseed Oil

- Belt Dressing
- Oil
- Spray Adhesives
- WD-40
- Aerosols

COMMON INDUSTRIAL TECHNOLOGY HAZARDS

- Wood dust - can cause allergic reactions such as contact dermatitis, causes asthma flare-ups, and is considered carcinogenic.
- Solvents – can cause irritation of eyes, nose, throat. Prolonged exposure could cause reproductive or CNS problems. Usually are extremely flammable.
- Noise – can cause long term hearing damage.
- Electrical – can cause shock injury or even death.

HAZARDS COMMONLY FOUND IN ART DEPARTMENTS

Jewelry Making

- Metals – could cause acute or chronic lung irritation, prolonged exposure could cause cancer.
- Acids – could cause eye irritation/damage, dermatitis, acute or chronic lung damage, chemical burns to skin.
- Fluorides – irritating to lungs and eyes, corrosive to teeth.
- Heat – could cause thermal burns, heat stress.

HAZARDS COMMONLY FOUND IN ART DEPARTMENTS

Ceramics

- Clay – inhalation of dust could cause respiratory irritation.
- Glazes – effects of inhalation or skin contact range from causing irritation to causing lung cancer (if contain toxic metals).
- Kiln firing – effects of inhalation of kiln fumes range from eye irritation to causing lung cancer (if contain toxic metals).

HAZARDS COMMONLY FOUND IN ART DEPARTMENTS

Painting

- Pigments and oil paints – many are highly toxic and may cause systemic poisoning. Long term exposure to manganese can cause nerve damage. Chronic exposure to lead can cause toxic build-up in body.
- Solvents – could cause skin or respiratory irritation. Prolonged exposure could cause kidney damage or cardiac arrest.
- Acrylic paints or epoxy resins – cause skin and respiratory allergies. Ammonia can be irritating to the eyes.

HARMFUL PHYSICAL AGENTS

Physical agents may also be present in the workplace

- Heat
- Noise
- Vibrations
- Ionizing radiation
- Non-ionizing radiation

HEALTH EFFECTS

Acute

- Generally manifests quickly (either immediately or within days after an exposure).
- An example would be a chemical spill on skin or splash in to the eyes. The acute effect is immediate irritation or corrosion of the skin or eyes.

Chronic

- Usually takes longer to develop through repeated exposures.
- May target certain organs (i.e. asbestos targets the lungs).
- An individual may not be able to sense the exposure.

ROUTES OF ENTRY

Dermal or Skin

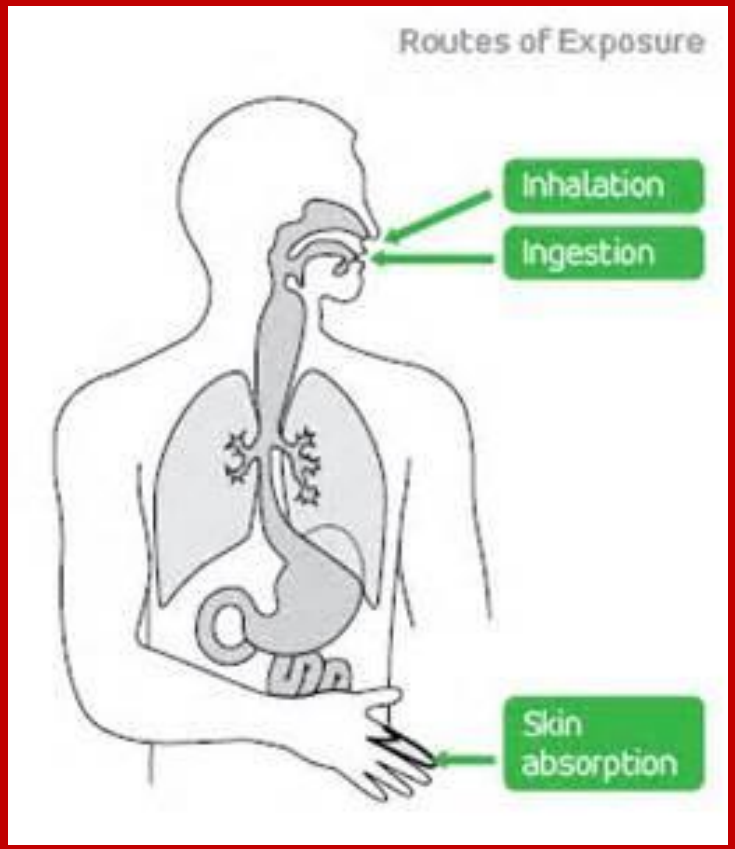
- Absorption
- Direct contact
- Open wound

Inhalation

- Throat and lungs

Ingestion

- Mouth / gastrointestinal tract



SAFETY DATA SHEETS

- Manufacturer's recommendation on how to use the chemical safely.
- **All** chemicals should have an SDS available. Each time a new chemical is acquired, the SDS must be added to the SDS inventory.
- SDSs are available online on the Facilities and Safety page of the Eden Prairie Schools Website.

ROLE OF THE SDS

- **Primary Use:** The Workplace
- The SDS should provide comprehensive information about a chemical substance or mixture.
- **Employers and employees use the SDS as a source of information about hazards and to obtain advice on safety precautions prior to use of chemicals.**

SAFETY DATA SHEET (SDS)
16 SECTIONS

1. Identification of the substance or mixture and of the Supplier
2. Hazards Identification
3. Composition/Information on ingredients
4. First Aid Measures
5. Firefighting Measures
6. Accidental Release Measures
7. Handling and Storage
8. Exposure Controls/Personal Protection
9. Physical and Chemical Properties
10. Stability and Reactivity
11. Toxicological Information
12. Ecological Information (not mandatory)
13. Disposal Considerations
14. Transport Information
15. Regulatory Information
16. Any other information including date or revision date of SDS

PICTOGRAM HAZARD INFORMATION

Pictograms have a black symbol on a white background with a red diamond frame

GHS Pictograms

Flame
(Flammables)

Flame Over Circle
(Oxidizers)

Exploding Bomb
(Explosives)

Corrosive
(Corrosives)

Gas Cylinder
(Gases Under Pressure)

Skull & Crossbones
(Acute Toxicity)

Exclamation Mark
(Irritants/Sensitizers/
Other Hazards)

Environment
(Aquatic Hazards)

Health Hazard
(Specific Toxicity
Hazards)

GHS LABELING – SIGNAL WORDS

Signal words

- Used to emphasize hazard and discriminate between levels of hazard.

The signal words used in the GHS are:

for more severe hazards

for less severe hazards

HAZARD STATEMENTS

A statement assigned to a hazard class and category that describes the nature and degree of the hazard(s) of a chemical.

- Example: Flammable liquids
  - **Extremely flammable liquid and vapor**
  - **Highly flammable liquid and vapor**
  - **Flammable liquid and vapor**
  - **Combustible liquid**

PRECAUTIONARY STATEMENTS

Precautionary information which briefly provides measures to be taken to minimize or prevent adverse effects from physical, health or environmental hazards.

First aid is included in precautionary information

For example:

- **Wear splash protection for face**
- **Keep away from heat/sparks/open flame**
- **Use explosion-proof electrical equipment**
- **Wear protective gloves**

EXAMPLE GHS LABEL

GHS LABELING

Secondary Labels

- Need all the information from the original shipping label…

OR

- Product identifier & words, pictures, symbols which provide at least general information regarding the hazards including the specific information regarding the physical and health hazards.

EXCEPTION

- Portable, immediate-use containers used by the employee who transferred the chemicals do not have to be labeled (not a change).

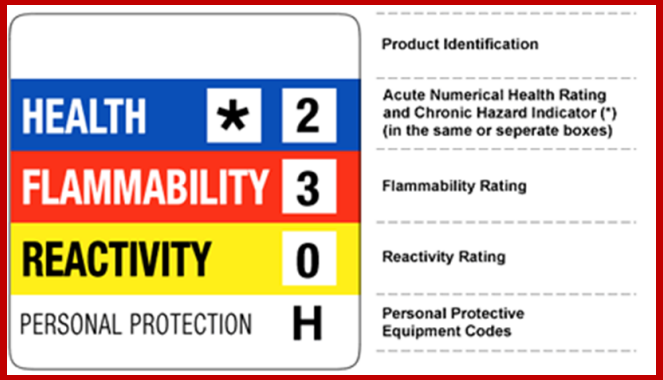
SECONDARY LABELS

- All labels and warnings shall be in English, and prominently displayed, or readily available.

- Employers may add information in a second language, but English must always be present.

NFPA/HMIS CHEMICAL LABELING

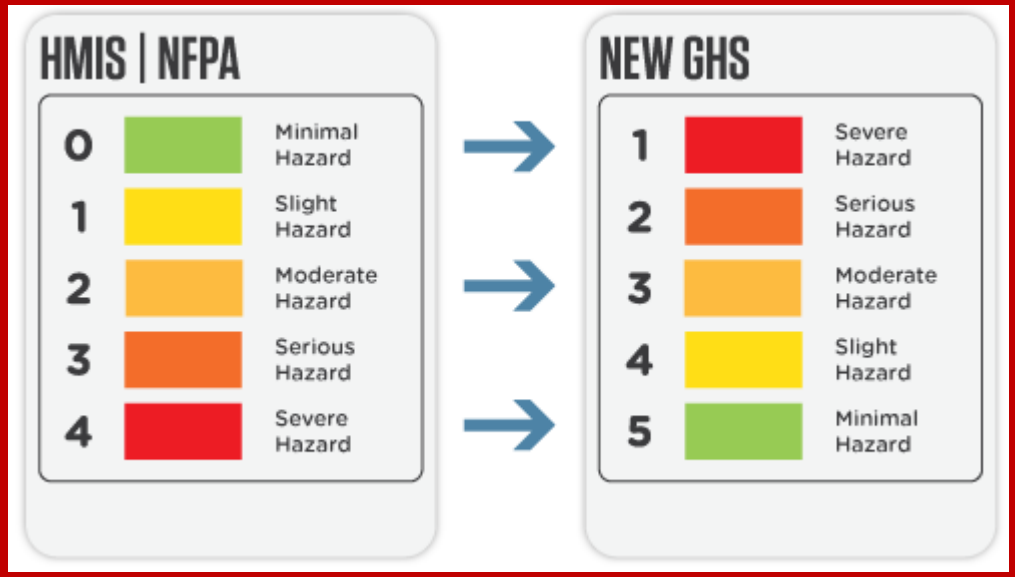
- Blue = Health/Toxicity
- Red = Fire Hazard
- Yellow = Reactivity
- White = Special Information



4 = Deadly
3 = Severe
2 = Moderate
1 = Slight
0 = No Hazard

OTHER WARNING SYSTEMS VS. GHS

- NFPA & HMIS uses 0-4 scales with 4 being most hazardous
- GHS uses 1- 4 scales with 1, 1A or Type A as most hazardous



CONTROL OR ELIMINATE THE HAZARD

- Ventilation - use local exhaust.
- Use least toxic solvent/chemical possible.
- Use personal protective equipment.
- Employees authorized to conduct Lockout/Tagout must shut off and lock-out all power sources, including electrical, gas, fuel oil, mechanical, hydraulic, and pneumatic, etc., before servicing or maintenance activities are performed on equipment.
- Do not eat or allow food in work areas.

METHODS OF PROTECTION

- Safety Goggles or Glasses
  - Chemical splash goggles – use when handling chemicals
  - Glasses for wood dust, metal shavings

- Gloves
  - Disposable – only use once!
  - Reusable – Heavy duty, clean immediately after use
  - Heat resistant

- Ear Protection
  - Ear plugs
  - Ear muffs

METHODS OF PROTECTION

Half-face respirator

Dust mask

- If using a half-face respirator you must comply with the Respiratory Protection Program.
- If using N95/dust mask, user must review and sign “Voluntary User” form.

WASH YOUR HANDS!!!

- Use warm water
- Wet both hands and wrists
- Apply liquid soap to palms first
- Lather well, spread lather to back of hands and wrists
- Scrub for at least 15 seconds
- Rinse well and dry completely
- Turn off faucet using disposable towels

EMERGENCY PROCEDURES

- Know where the nearest eyewash is located.
- Immediately report to health office if exposed.
- Contact supervisor for spills greater than one gallon.

HAZARDOUS WASTE

- Must be labeled as "**hazardous waste**" with a descriptive name and date.
- Paper towels, rags used for stains may be thrown in trash.
- Paper towels, rags used for thinners must be disposed of as hazardous waste.
- Aerosol cans that are empty may be thrown in trash; if there is any product left in an aerosol can it must be disposed of as hazardous waste.
- Latex paint may be thrown in trash if solid (no liquid left).
- Oil-based paints or stains must be disposed of as hazardous waste, regardless of liquid/solid.

ELECTRICAL SAFETY

- Do not service equipment unless it is locked out first.
- Only authorized employees are allowed to conduct lockout-tagout on hard-wired equipment.
- Electrical cords should never be repaired with duct tape or electrical tape.
- If equipment has frayed or worn cords, the cords should be replaced.
- Equipment should have a 3-prong (grounded) plug or be double insulated.

WEEKLY EYEWASH/SHOWER INSPECTIONS

Emergency Eyewashes & Showers require weekly inspections which must be documented on the inspection tag.

- All plumbed eyewashes must be flushed for 3 minutes weekly.
- Plumbed showers should be flushed briefly on occasion (monthly) to ensure proper function.
- All units must be accessible, clearly marked, clean, and nozzle covers must be in place.

MONTHLY FIRE EXTINGUISHER INSPECTIONS

- Ensure that the fire extinguisher is accessible.
  - Are any materials blocking the fire extinguisher?
  - Is it visible from all points in the room?
    - If not, is there proper demarcation above the fire extinguisher?
- Is the fire extinguisher properly mounted in a cabinet, on the wall, or in a secure location?
- Is the pressure indicator in the 'green'?
  - Tap the pressure indicator to ensure it is functional.
- Has the fire extinguisher been vandalized in any way to compromise its function?
- Make sure to initial and date the inspection tag at time of inspection.

THANK YOU FOR COMPLETING THE EMPLOYEE RIGHT TO KNOW TRAINING

- Again, If you have any questions regarding this training or any other health and safety topic, please contact Kyle Fisher, Facilities and Safety Coordinator at 952-975-7000 or by email at Kyle_fisher@edenpr.k12.mn.us

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LINK TO THE REQUIRED QUIZ

https://forms.gle/vascttmhMW5YQpqu6