

WELCOME!

FALL ENVIRONMENTAL HEALTH AND SAFETY WORKSHOP

THURSDAY, OCTOBER 26th, 2022



HAZARDOUS CHEMICALS IN SCHOOLS CAREER TECHNICAL EDUCATION (CTE) & ART SAFETY

Fall School Environmental Health and Safety Workshop
October 26, 2022

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INTRODUCTION

- Elizabeth Jakob, Industrial Hygiene Consultant, MS, CSRMM
- Puget Sound Workers' Compensation Trust & Unemployment Pool – employee protection
- Consulting with 34 school districts for 20+ years
- Background: chemistry, hazmat management, indoor air quality (IAQ)
- ejakab@psed.org 425-917-7640

GOALS – OVERVIEW ONLY

- ▶ Protect the health and safety of staff and students
- ▶ Protect the environment (indoor and outdoor air, solid waste)
- ▶ Increase awareness
- ▶ Provide tools
- ▶ Legal compliance
- ▶ Encourage hazchem management system
- ▶ **PARADIGM SHIFT: safety built into curriculum and all projects and experiments**

OVERVIEW

- ▶ What are the hazards?
- ▶ Where are the hazchems in schools?
- ▶ Legal requirements
- ▶ Risk / exposure reduction for chemicals

TYPES OF HAZARDS

Chemical hazards

- ▶ Unstable, reactive
- ▶ Flammable
- ▶ Toxic
- ▶ Corrosive
- ▶ Irritant, sensitizer

- ▶ Compressed gasses

- ▶ Biological hazards

Other hazards

- ▶ **Mechanical**
- ▶ Fire, heat exposure
- ▶ Electrical
- ▶ Building related: exits, egress
- ▶ Cuts, sharps
- ▶ Slips, trips and falls
- ▶ Ergonomics, lifting
- ▶ Lighting
- ▶ Noise
- ▶ Stress
- ▶ Pressure
- ▶ Radiation

RISK MANAGEMENT AND ACCIDENT PREVENTION



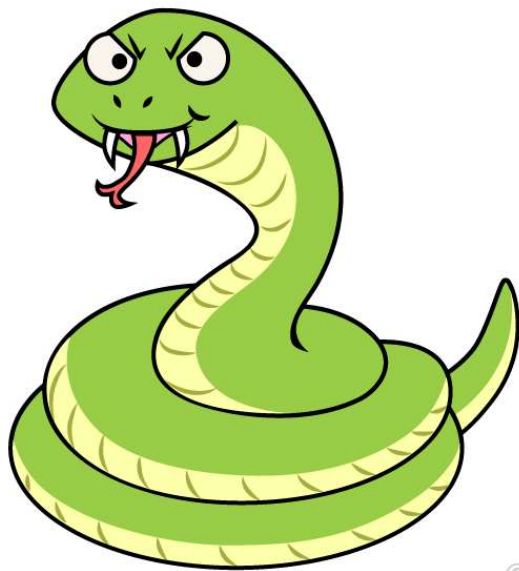
Starts with identification
of hazards and
assessment of risks

Awareness & experience

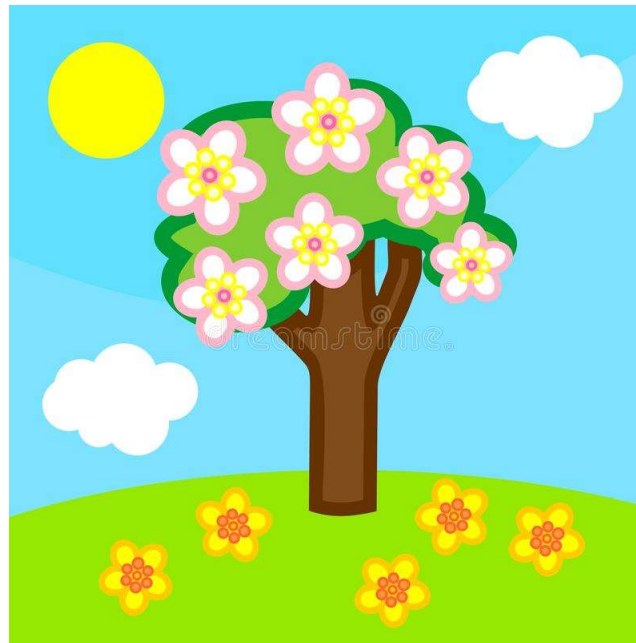
WHAT DO WE MEAN BY CHEMICALS?

- ▶ Natural – synthetic / artificial
- ▶ Organic - inorganic
- ▶ Pure chemicals - mixes
- ▶ Concentrated (strong) - diluted

NATURAL VS. SYNTHETIC – IS NATURAL ALWAYS BETTER?



© dak



ARE CHEMICALS HAZARDOUS?

This?

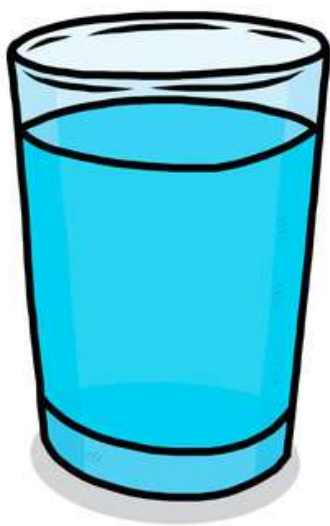


or

That?



Is H₂O HAZARDOUS?



HAZARD CATEGORIES – GHS PICTOGRAMS



- **Unstable/Explosive:** shouldn't be in schools
- **Highly reactive:** with water, air, organics
- **Flammable** or combustible
- **Toxic:** acute & chronic toxicity, target organ toxins, carcinogens, reproductive toxins
- **Corrosives:** can hurt skin, eyes and metal parts
- **Irritants, sensitizers:** almost anything

WHERE ARE THE HAZCHEMS IN THE SCHOOLS?

- ▶ Science laboratories
- ▶ CTE
- ▶ Art activities (photography, printing, painting, glass, pottery, glass etching, jewelry making, etc.)
- ▶ District maintenance & transportations
- ▶ Custodial supplies
- ▶ Health rooms
- ▶ Food services
- ▶ Offices (printers, copiers, laminators)
- ▶ Pools
- ▶ Classrooms – early learning
- ▶ Restrooms, etc.

EXAMPLES

- ▶ Cleaners, concentrates
- ▶ Disinfectants, bleach (kill living cells)
- ▶ Graffiti removers, spot cleaners, floor strippers, toilet cleaners
- ▶ Pesticides, insecticides
- ▶ Air “fresheners”, essential oils
- ▶ Lab chemical reactions:
 $A+B=C+D$
- ▶ Solvents (toxic & flammable vapors)
- ▶ Sprays (airborne, gets inhaled)
- ▶ Wood, metal & clay dust
- ▶ Coolant mist, welding fumes
- ▶ Epoxy compounds
- ▶ Emissions from equipment: copier, laminator, 3D printers, combustion equipment

WHAT CAN HAPPEN?

- Accidents: burns, inhalation, fire
- Long term chemical exposure & chronic illnesses
- Aggravation of pre-existing conditions – asthma
- Damage to buildings and equipment
- Legal noncompliance – associated **CO\$\$\$\$T**

ACCIDENT: METHANOL BURN



IN THE NEWS

- ▶ Oct 2015: 5 students and teacher injured in school science lab fire in Virginia
- ▶ July 2019: \$60 million awarded to N.Y. student engulfed in flames in chemistry accident
- ▶ School district offers 34 million settlement to students and staff exposed to hazchems



ACCUMULATED HAZARDOUS WASTE



- ▶ Dangerous
- ▶ Very expensive
- ▶ Compliance issues

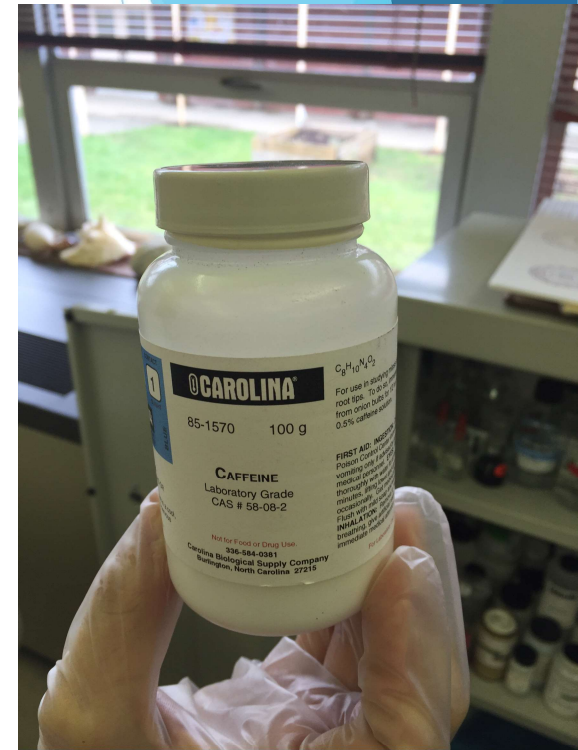
COMMON PROBLEMS IN SCHOOLS

- No hazchem management programs
- Not adapted to different programs' needs
- Purchases are not planned and coordinated
- Emissions are not considered: 3D printers
- No training or non-specific training
- Poor labeling, no SDS
- Accumulation of hazardous wastes



WHAT INFLUENCES THE HAZARDS?

- ▶ **Quality:** “ban candidates list”
- ▶ **Quantity, concentration:** caffeine, vinegar
- ▶ **Storage and use environment:** container integrity, shelves, special cabinets, safe usage techniques, ventilation, safety equipment, PPE
- ▶ **Exposure times & routes:** for how long are we exposed and to how much
- ▶ **Age of chemical**
- ▶ **Personal characteristics of the exposed person:** health & body weight, genetics, pre-existing conditions, etc.



QUALITY: DEADLY TOXINS

Potassium cyanide



Hydrogen fluoride



AGE, QUALITY & QUANTITY



ROUTES OF ENTRY

- ▶ **INHALATION** – when you smell something
- ▶ Ingestion
- ▶ Skin contact, skin absorption
- ▶ Injection (cuts with chemicals Involved)
- ▶ **COMBINATION** aka multiple routes of entry, ex. some solvents
- ▶ Highest hazard: volatile AND toxic or flammable

ASSESSING CHEMICAL HAZARDS

- ▶ Smell: never a good sign
- ▶ Observe: clutter, housekeeping, spills, lack of labels
- ▶ Read labels
- ▶ Consult safety data sheets (SDS)
- ▶ Don't assume and don't minimize
- ▶ Continue self-development and networking

- ▶ References: labels, SDS, manuals

LABORATORIES

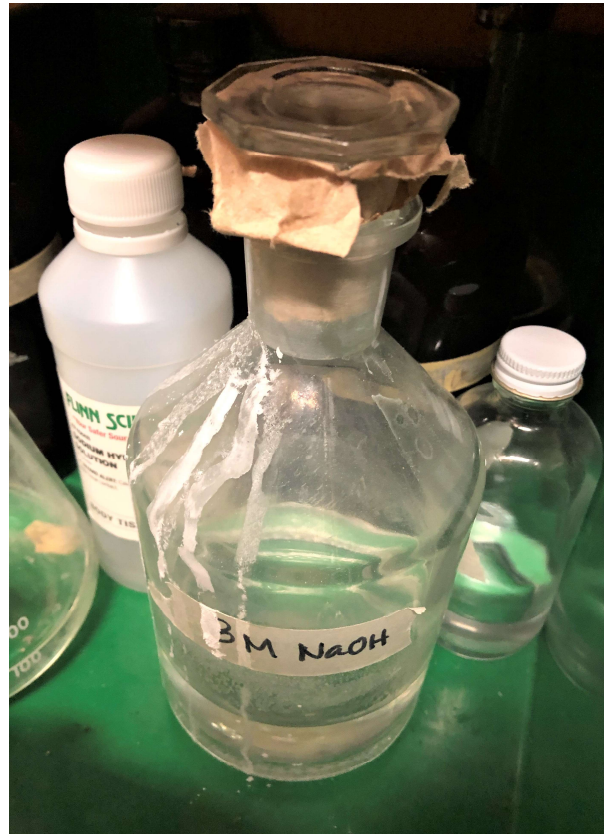
Please notice potential
problems



HOUSEKEEPING



HOUSEKEEPING



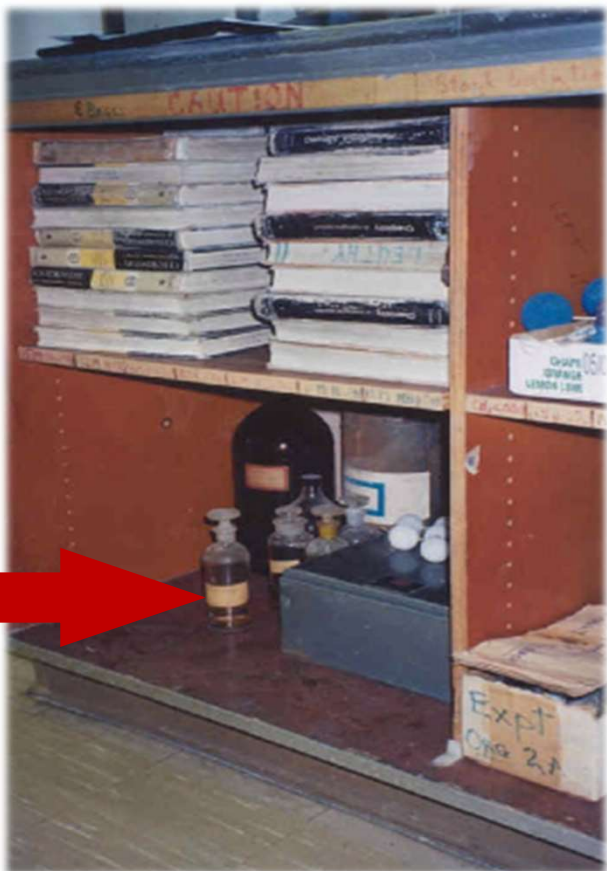


25 LBS. OF POISON

Do we really need this much?



DEADLY TOXIN IN ELEMENTARY SCHOOL



DEGRADATION & STRONG SMELL (ACID CABINET)



STORAGE & SPILLS

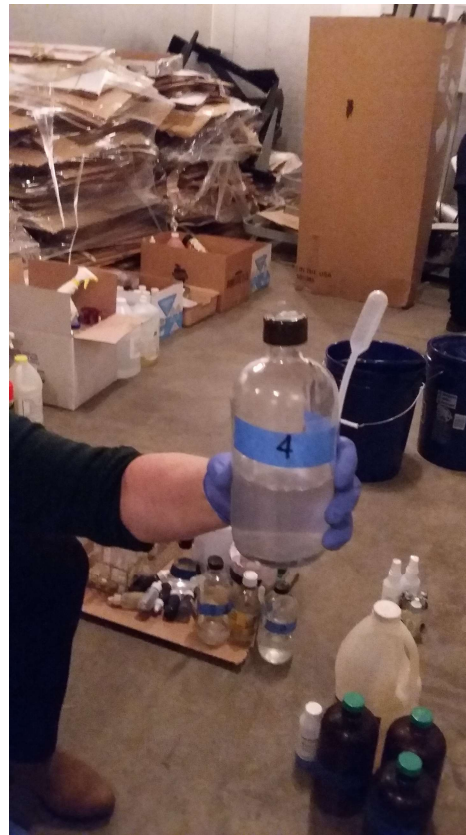
Chemical & Shelf Materials



Acid, Bleach & Base



PACKAGED BY TEACHERS IN BUTCHER PAPER



THE MYSTERIES OF BIOLOGY & FORMALIN



ART



POTTERY DUST CONTAINS CRYSTALLINE SILICA



POTTERY – STORAGE & CLAY RECYCLING



POTTERY GLAZES – READ THE LABEL



- ▶ Lead free
- ▶ May be harmful
- ▶ Target organ toxin
- ▶ Contains soluble cobalt
- ▶ Read the small print



KILN EXHAUST - VENTILATION



PHOTO LAB & AEROSOL SPRAYS



FIXERS & ADHESIVES - WARNING, DANGER



SPRAYS

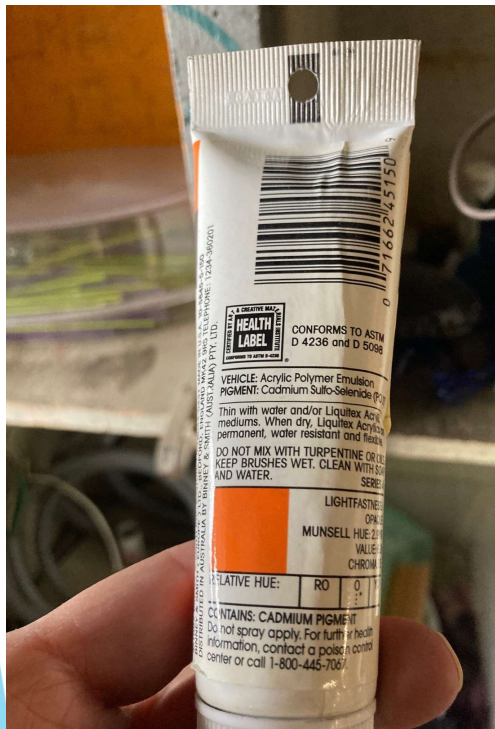
How much is getting on the art piece?

How much is entering your lungs?

Is it flammable, toxic or both?



PAINTING: HEAVY METALS, PAINT THINNERS



CLEANING BRUSHES



An odorless thinner
for artists' oil
colors, oils, and
varnishes. Cleans oil
painting brushes
and accessories.

**DANGER! HARMFUL OR FATAL
IF SWALLOWED. COMBUSTIBLE.**



JEWELRY MAKING

- ▶ Soldering
- ▶ Pickling
- ▶ Polishing

- ▶ Exhaust ventilation



OTHER ART MATERIALS

- ▶ Old crayons: heavy metals, talc
- ▶ Charcoal sticks: dust, fixers
- ▶ Markers: alcohol, solvents (xylene, toluene)
- ▶ Glues: rubber cement (hexane, heptane)
- ▶ Pastels: dust, heavy metals
- ▶ Encaustic wax fumes: irritation, possible asthma
- ▶ **Glass etching**: hydrogen fluoride - corrosive, toxic, absorbs through skin



LABELING ART PRODUCTS

- ▶ Federal law requires labeling of art materials: United States Code, 2011 Edition, Title 15 – Commerce and Trade Chapter 30 – hazardous substances Sec. 1277
- ▶ Standard D-4236 of American Society for Testing and Materials
- ▶ California regulations

ART LABELS - GOOD

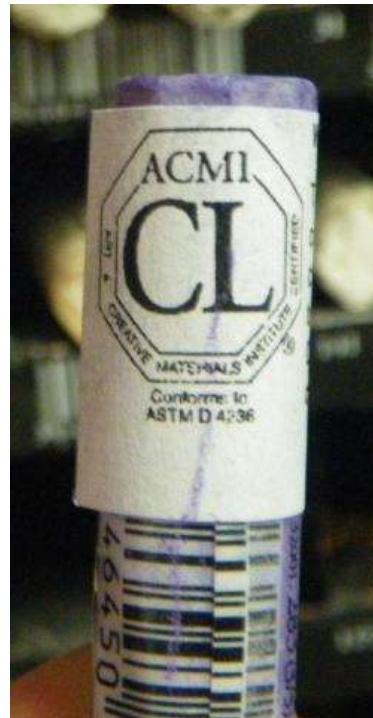
- ▶ **AP** – approved product
- ▶ **CP** – certified product
- ▶ **HL** – non-toxic health label

- ▶ Look for non-toxic



CAUTION LABELS - BAD

- ▶ CL – caution label
- ▶ Indicates toxic ingredient
- ▶ Needs info on safe & proper use
- ▶ NOT for K-6



REGULATION & REFERENCE

- ▶ CA Education Code Section 32064: prohibits schools from providing art supplies with any hazard warnings to K-6 school children
- ▶ <https://oehha.ca.gov/risk-assessment/art-hazards>
- ▶ List of unacceptable products



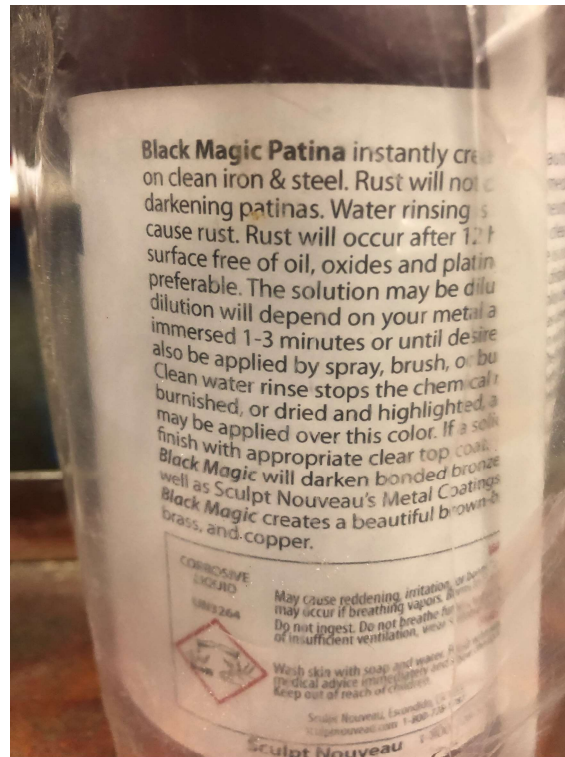
CTE & SHOPS



FLAMMABLE CABINETS



CTE – CORROSIVES, EYEWASH REQUIRED



COMPRESSED GAS NEEDS TO BE SECURED



WOOD SHOP - DUST

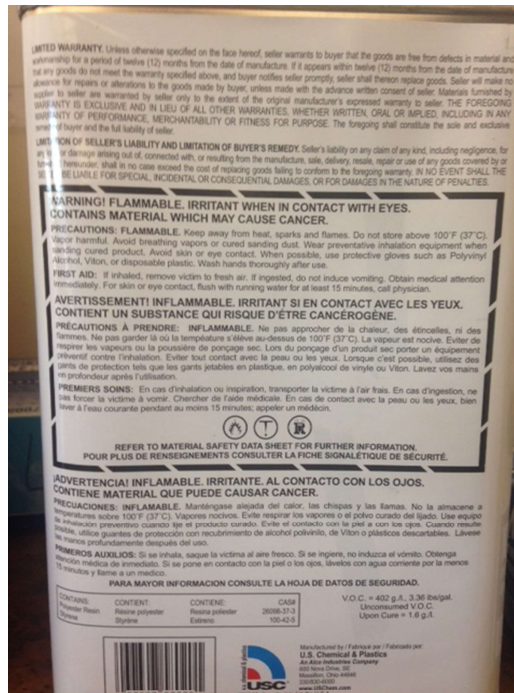
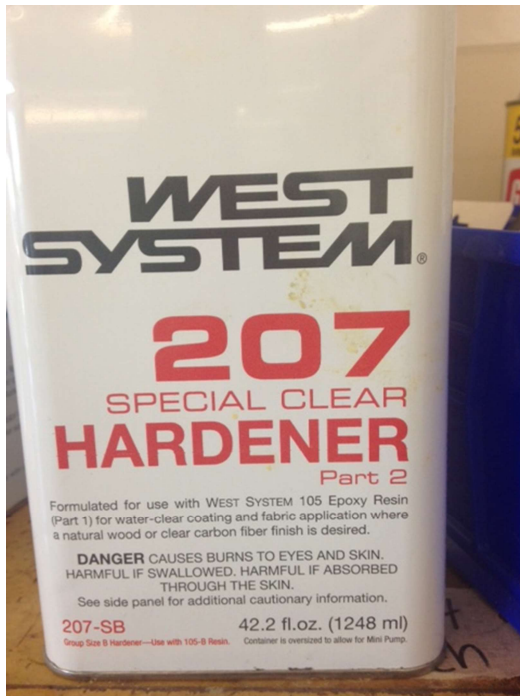


WELDING SHOP EMISSIONS

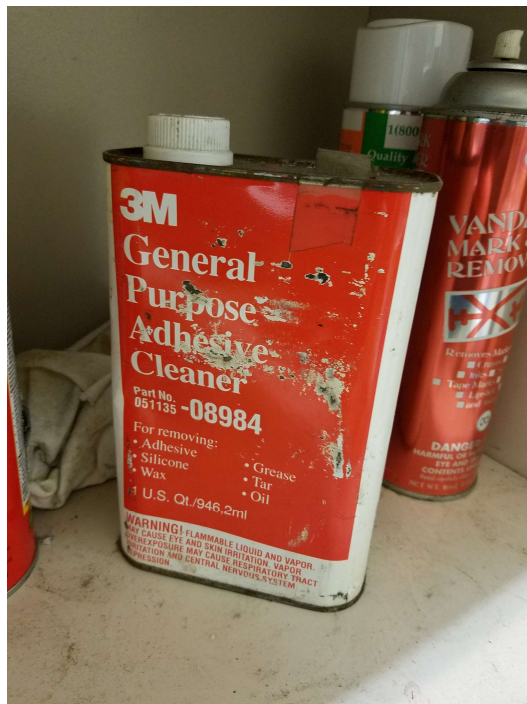


- ▶ Metal fumes and carbon monoxide exposure
- ▶ Has anyone checked the ventilation?

FLAMMABLE, CAUSES BURNS, TOXIC, POTENTIAL CARCINOGEN



SOLVENTS



- ▶ Highly flammable
- ▶ Irritant
- ▶ Toxic: CNS depressant
- ▶ Inhalation hazard

- ▶ Some chlorinated solvents are toxic and suspected human carcinogens



GASOLINE CONTAINER



STORAGE IN CARDBOARD BOX!



THE LABEL SAYS:

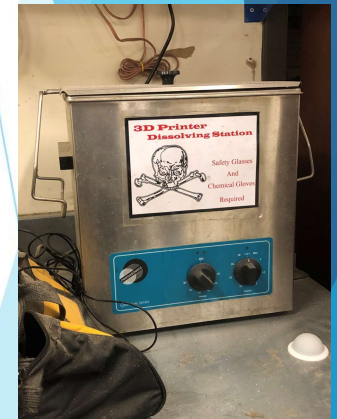
- ▶ Irritant
- ▶ Flammable
- ▶ Corrosive (burns skin and eyes)
- ▶ Absorbs through skin
- ▶ Contains chemical which may cause cancer

- ▶ And the safety precautions, like enhanced ventilation, eyewash, goggles protective gloves?

3D PRINTERS, COPIERS, LAMINATORS

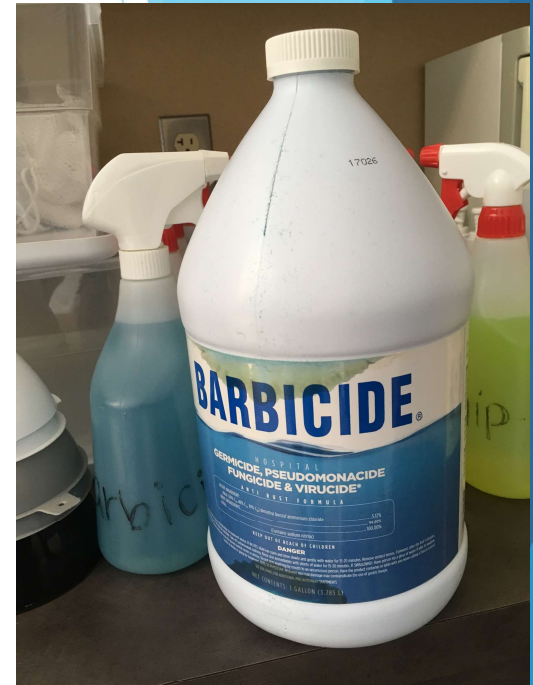


- ▶ What kind of materials are used?
- ▶ What kind of emissions are produced?
- ▶ How often, how much?
- ▶ How is the ventilation?
- ▶ Associated problems



OTHER PROGRAMS

- ▶ Health: biological hazards, disinfectants, cuts,
- ▶ Beauty: mixed hazards, sink disposal
- ▶ Vet: biological hazards, disinfectants, cultures, cuts, scrapes
- ▶ Agriculture: pesticides, insecticides
- ▶ Fire services
- ▶ ...



CLASSROOMS & CUSTODIAL SUPPLIES



SCENTED CLEANERS AND SPRAYS

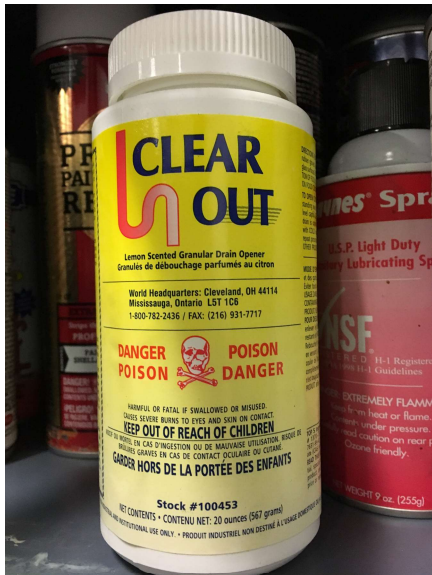


- ▶ Scents are mixes of volatile organic compounds (VOCs)
- ▶ They can be irritating, toxic, asthma causing, carcinogen, etc.
- ▶ About 1/3 of US population sensitive to chemicals
- ▶ About 9% of school age children have asthma
- ▶ Scents are not needed or useful
Clean doesn't smell

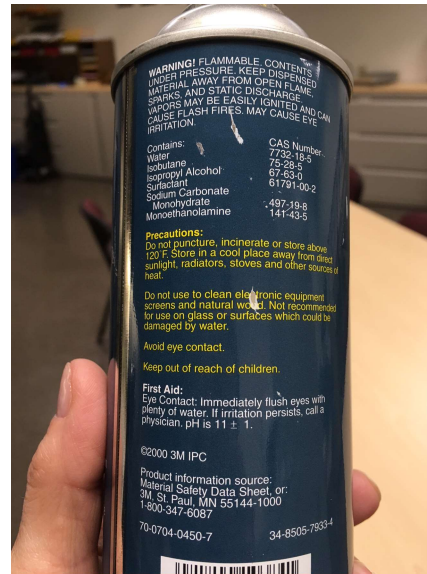


READ THE LABELS

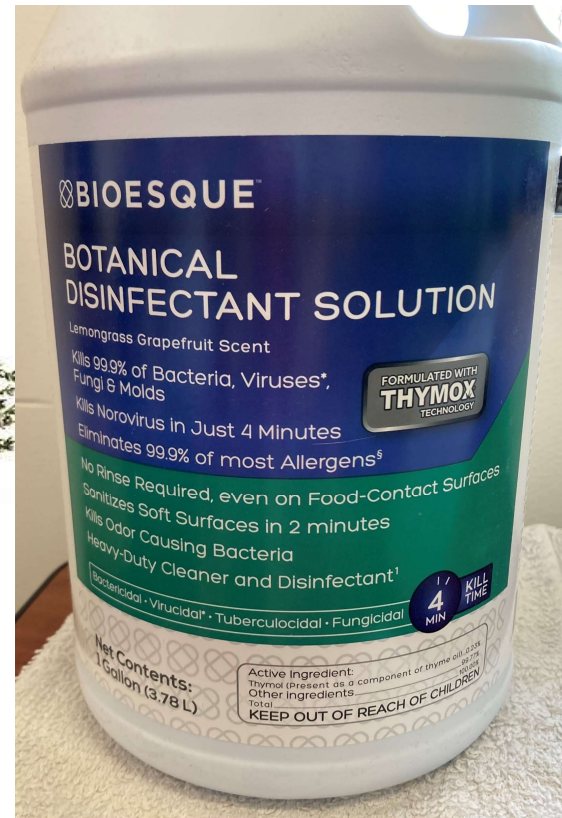
POISON, CORROSIVE



FLAMMABLE, TOXIC



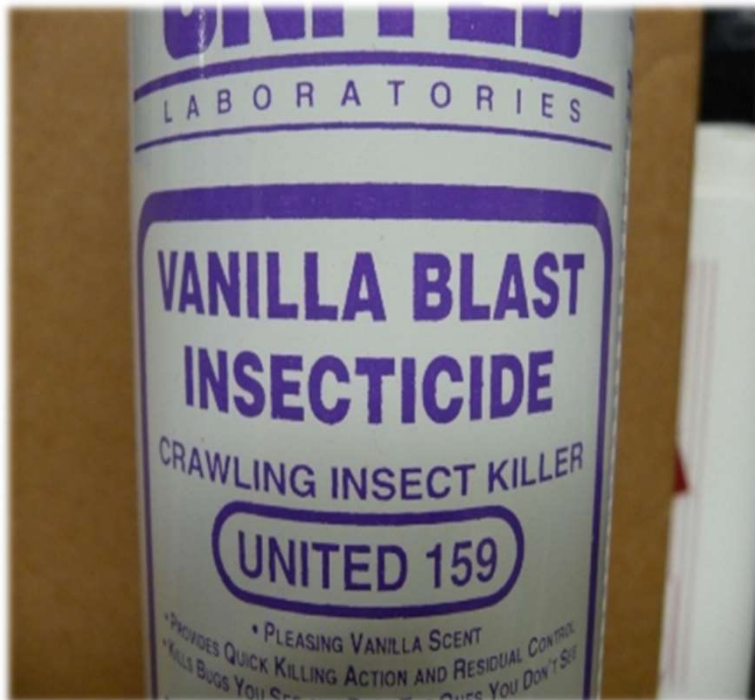
GETTING “NATURAL” GREENWASHING



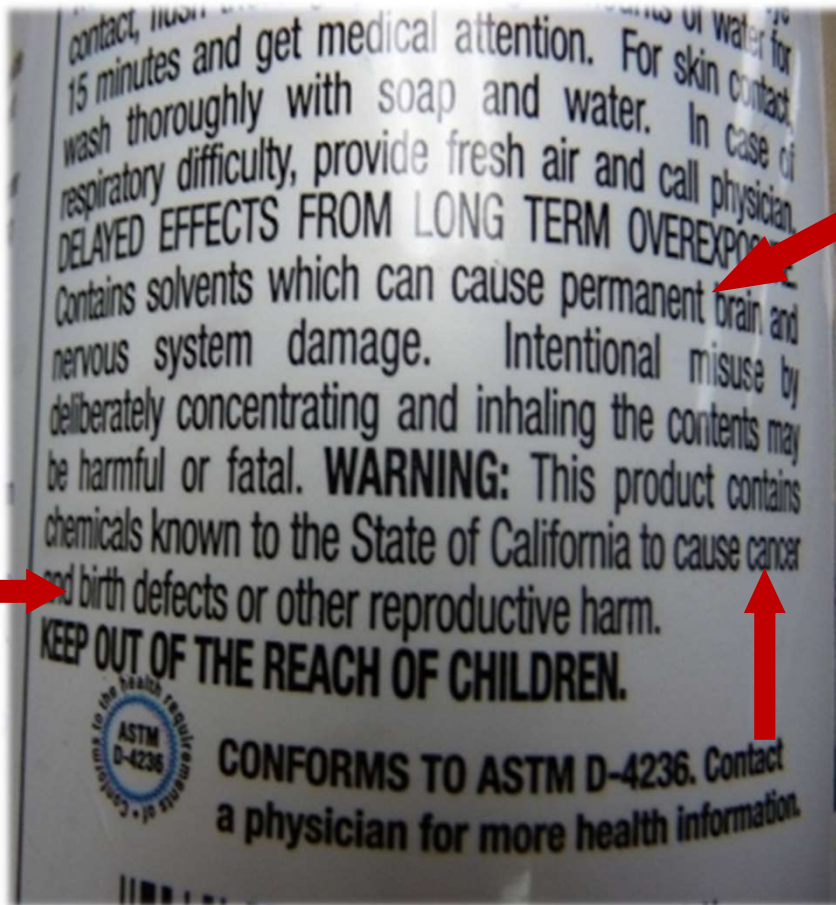
CLASSROOMS & RESTROOMS – JUST SAY NO!



SCENTED INSECTICIDE USED AS “AIR DISINFECTANT”



READ THE LABEL – AND SAY “NO”



- ▶ Permanent brain damage
- ▶ Cancer
- ▶ Birth defects

LOOK UNDER THE SINK!

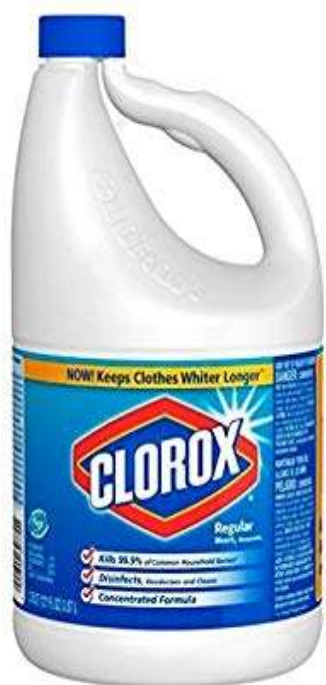


ELEMENTARY CLASSROOM



October 31, 2022

HEALTH ROOMS, KITCHENS, EARLY LEARNING, AGRICULTURE & VET PROGRAMS



- ▶ Corrosive
- ▶ Toxic
- ▶ Inhalation hazard
- ▶ Triggers the need for eyewash
- ▶ Possibly safety shower

- ▶ Dilution
- ▶ Ventilation

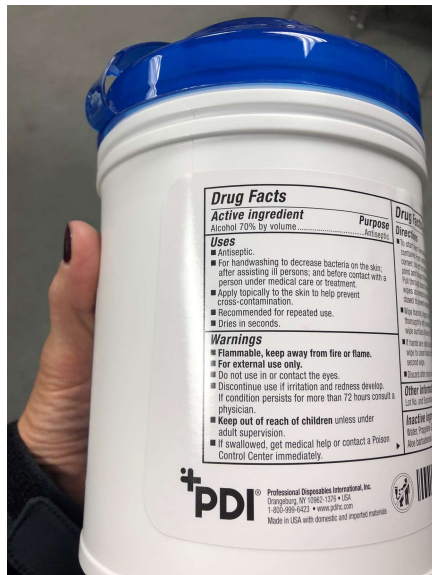


PUMPKIN SCENTED CANDLE



WIPES

FLAMMABLE & COSTLY



LOW HAZARD & INEXPENSIVE



MANAGING HAZARDOUS CHEMICALS



HAZCHEM MANAGEMENT CIRCLE

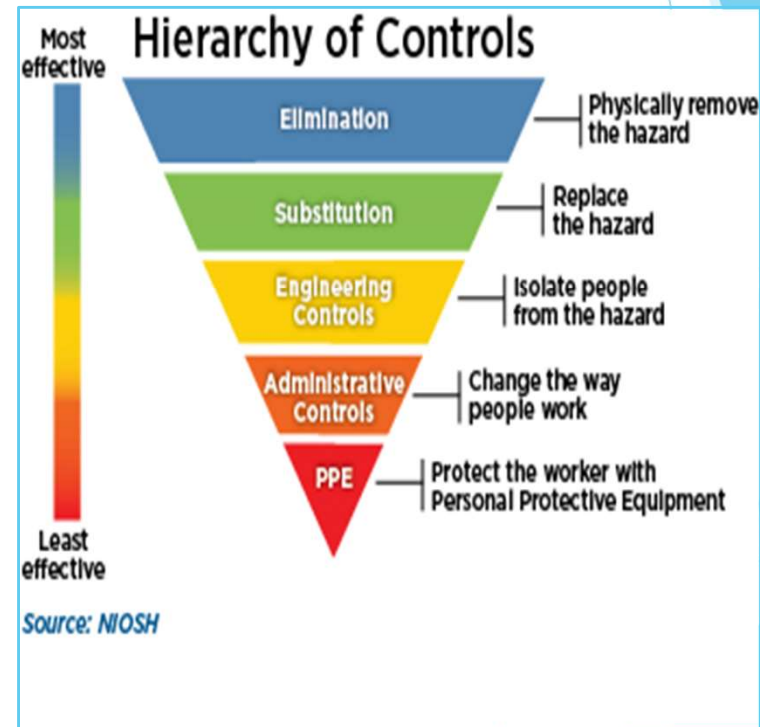


START WITH PREVENTION

- ▶ Curriculum
- ▶ Plan low hazard experiments and projects (minimum amounts of lowest hazard material / chemicals)
- ▶ Appropriate storage cabinets: flammable, corrosive
- ▶ Appropriate ventilation and safety equipment
- ▶ PPE available and used
- ▶ Good housekeeping
- ▶ Periodic waste cleanouts
- ▶ TRAINING

HIERARCHY OF CONTROLS

- Eliminate the hazchem
- Reduce: smaller amount & lower concentration
- Replace with less hazardous alternative
- Engineering controls: ventilation, hoods
- Safe procedures, training:
- Safety equipment and PPE

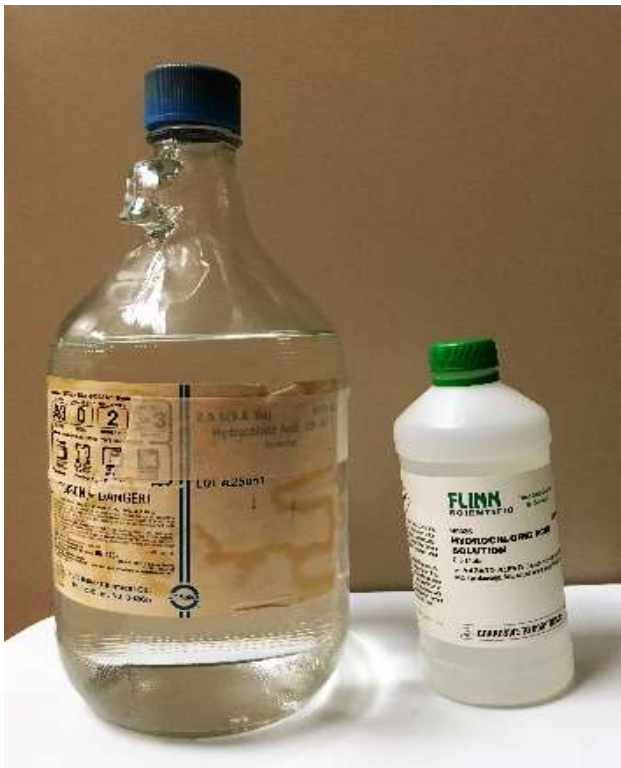


TO BUY OR NOT TO BUY - HOW DO WE DECIDE?

- ▶ Labels (GHS type)
- ▶ Safety Data Sheets (SDS)
- ▶ Green Seal certification
- ▶ EPA approved disinfectants N list for Covid
- ▶ Reliable resources: WA DOH

- ▶ WE decide, NOT the salesperson

THOUGHTFUL REPLACEMENT REDUCES HAZARDS



Notice:

- ▶ Size, weight
- ▶ Concentration
- ▶ Container material
- ▶ Spill
- ▶ Age

CLEANING WITH LOW HAZARD, NEUTRAL DETERGENT



- ▶ Liquid dish soap is a detergent
- ▶ It's low hazard
- ▶ Inexpensive
- ▶ Easy to prepare
- ▶ Everyone can use it

SPILL PREVENTION, SPILL RESPONSE, TRAINING & SPILL KITS



- ▶ For all the areas where hazardous chemicals are used or stored
- ▶ WAC Chapter 296-824



PRINCIPLES OF PROPER STORAGE



Separate chemicals by **HAZARD CATEGORIES**



Use appropriate storage cabinets; not floor



Lips on shelves, lower than eye level, uncrowded



Hazardous waste is different than **hazardous chemical** or **hazardous product**

USE OF HAZCHEMS

- ▶ Written, specific procedures
- ▶ Best practices
- ▶ Part of training
- ▶ Can add visuals of hazards and PPE to the procedure

BASIC LEGAL REQUIREMENTS:

LABS

- ▶ Chemical Hygiene Officer
- ▶ Chemical Hygiene Plan
- ▶ Inventories
- ▶ Labels
- ▶ Safety Data Sheets
- ▶ Training

- ▶ HAZARD SPECIFIC

- ▶ WAC 296-828

OTHER AREAS

- ▶ Hazard Communication Program
- ▶ Inventories
- ▶ Labels
- ▶ Safety Data Sheets
- ▶ Training

- ▶ HAZARD SPECIFIC

- ▶ WAC 296-901

HAZARD COMMUNICATION PLAN (MANDATORY)




- ▶ **Inventory:** up to date
- ▶ Labels: GHS compliant labels
- ▶ **SDS:** GHS compliant Safety Data Sheets.
- ▶ Written: Program updated as needed.
- ▶ **Training:** Specific

LABELS – INFO AT A GLANCE

EPICHLOROHYDRIN ¹




UN No. 2023
CAS No. 106-89-8

² **DANGER**

³ 

⁴ Flammable liquid and vapor. Toxic if swallowed. Toxic in contact with skin. Causes severe skin burns and eye damage. May cause an allergic skin reaction. May cause cancer.

⁵ Do not breathe dust/fume/gas/mist/vapors/spray. Wear protective gloves/protective clothing/eye protection.

⁶   

Fill Weight: 18.52 lbs. ⁷ Lot Number: A0323111323
Gross Weight: 20 lbs Fill Date: 1/15/2012
Expiration Date: 1/15/2018

⁶ JACKSON CHEMICAL COMPANY - City of Industry, Los Angeles, California, USA (800)-444-456-8989

SAFETY DATA SHEETS

Readily available?



SAFETY EQUIPMENT AND PPE

- ▶ Emergency washing stations
- ▶ Ventilation: different kinds
- ▶ Fire protection
- ▶ Spill kits
- ▶ Goggles, gloves, aprons
- ▶ Appropriate clothing
- ▶ First aid kits



SAFETY SHOWER



- ▶ Easily accessible?
- ▶ ADA accessible?
- ▶ Functional?
- ▶ Yearly check and maintenance completed?
- ▶ Periodic activation?



EYEWASHES – FUNCTIONAL?



HAZARDOUS WASTE DISPOSAL

What is HW?

How do we handle it?

How do we properly dispose?



Too hazardous (QUALITY)

Too much (QUANTITY)

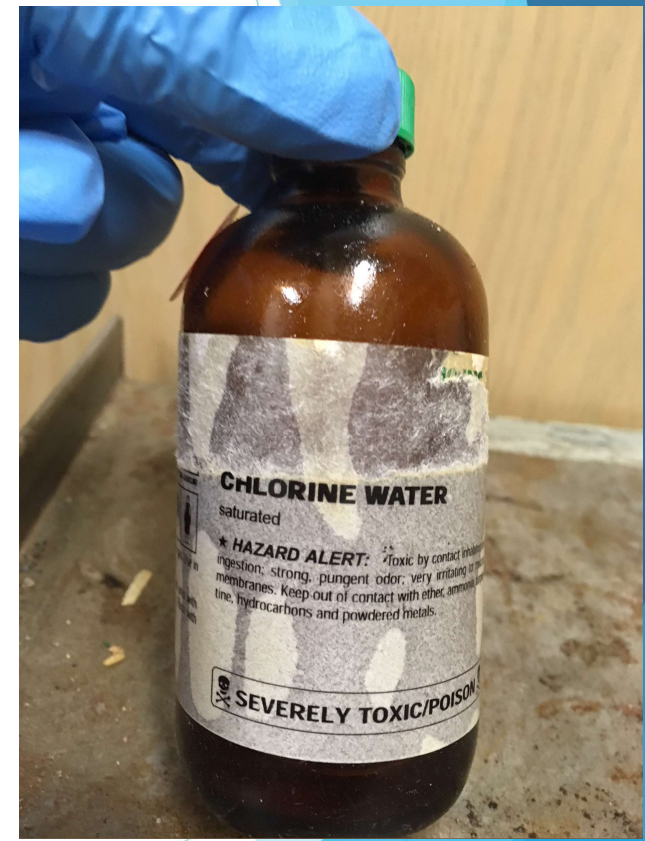
Too old (AGE)

Unknown (THE HIGHEST HAZARD)

Damaged container

Not enough space to properly store it

No longer needed



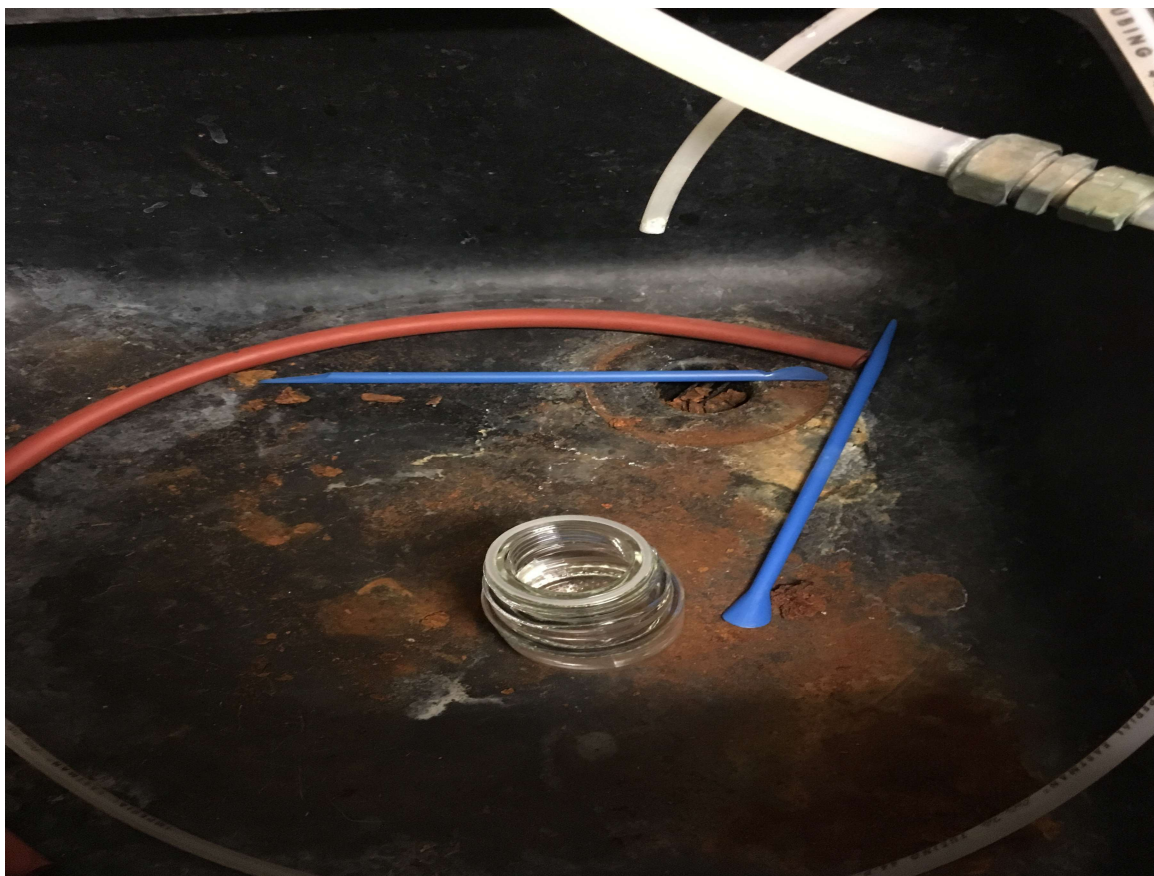
BAD HW STORAGE MOST COMMON MISTAKE



Problems:

- ▶ Mixed wastes & unknowns
- ▶ Cardboard is flammable
- ▶ Spills and unwanted reactions
- ▶ Cork stopper
- ▶ Most common source of lab fires

SINK DISPOSAL? IT'S A NO-NO!



ACTION ITEMS:

- Check & update plans and procedures
- Cleanout and proper disposal of hazardous wastes
- Preplan purchases; hazard analysis before purchase
- Always read the labels and the SDS first
- Always choose the lowest hazard & smallest amount
- Reduce chemical stock, max 2 years
- Training for staff and students (document)

- **PROACTIVE PLANNING:** are the room, the activity, the materials & equipment, the training of staff, and the age of students a good match?

Thank you for your time
Questions?

CTE SAFETY – SARA HATFIELD

- ▶ Sara Hatfield, BS, ME, Director of Career and Technical Education in South Kitsap School District
- ▶ Bachelor of Science and teaching credentials from WSU
- ▶ Master in Educational Leadership with Administrative and Principal Credentials from City University
- ▶ CTE Director credentials through CWU
- ▶ Adjunct professor at Olympic College in the CTE Teacher Preparation Program
- ▶ Supports over 145-course offerings in 16 different pathways district-wide in 7-12th grade
- ▶ Her focus is to prepares students with real-world, technical job skills for life beyond high school

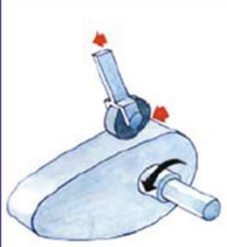
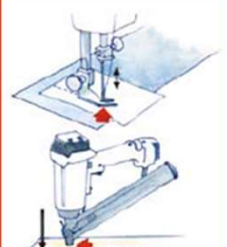
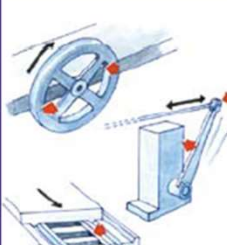

MANAGING MECHANICAL HAZARDS



WHAT DO WE MEAN BY MECHANICAL HAZARDS

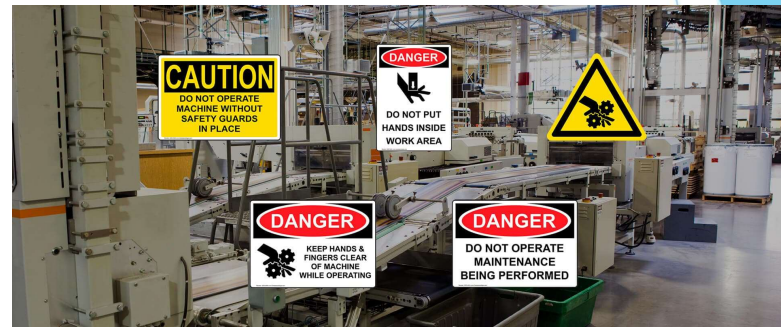
- ▶ Pinch Points
- ▶ Pulleys, belts
- ▶ Gears
- ▶ Clutches, breaks

- ▶ Equipment used by students
 - ▶ Mechanical
 - ▶ Powered (Electrical)
 - ▶ Some -Cutting/Sharps

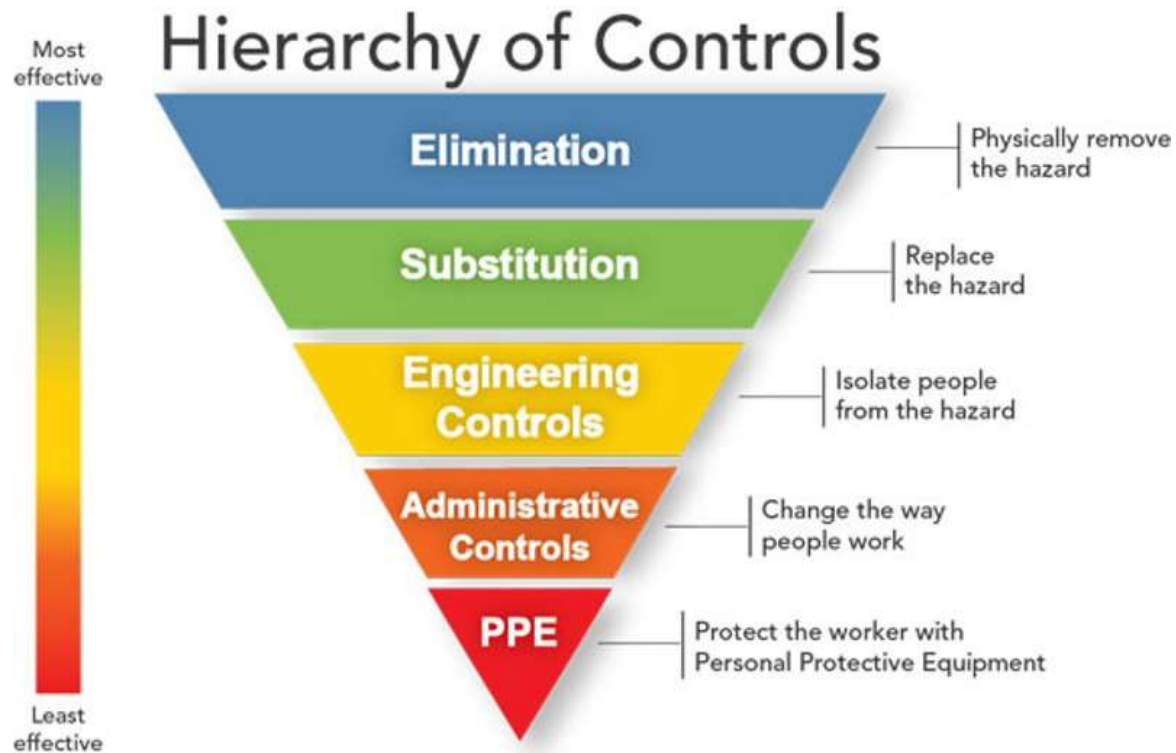
EXAMPLES OF MECHANICAL HAZARDS ASSOCIATED WITH COMPONENTS AND TOOLS			
Hazard	Possible consequences	Hazard	Possible consequences
	<ul style="list-style-type: none">• Impact• Crushing• Drawing in		<ul style="list-style-type: none">• Stabbing• Puncture• Punching• Projection
	<ul style="list-style-type: none">• Shearing• Severing• Winding• Entanglement• Impact• Crushing• Drawing in		<ul style="list-style-type: none">• Impact• Crushing

COMMON PROBLEMS IN SCHOOLS

- ▶ Missing all or part of the following components:
 - ▶ Lessons - Safety Testing
 - ▶ Maintenance records
 - ▶ Placement of equipment
 - ▶ Signage
 - ▶ Ventilation
 - ▶ Waste or output- collection/ disposal
 - ▶ PPE (issue and replacement)



WHAT CAN WE DO ABOUT THE HAZARDS



ACCIDENT PREVENTION PROGRAM

WAC 296-800-140

- ▶ To establish, supervise and enforce an accident prevention program (APP) that is effective in practice.
- ▶ Classroom/Program Specific Safety Plans



STANDARDS FOR EDUCATORS

REDUCING NEGLIGENCE

- ▶ Washington State Certificate appropriate for the programs they teach
- ▶ Training and certifications for staff
- ▶ Technical and Professional Skills current through the CTE program standards and business/industry advisory committee involvement
- ▶ Maintains current First Aid Card
- ▶ No hazardous material or equipment should be used with a substitute in place

FIRST AID WAC 296-800-150

- ▶ **Make sure first-aid trained personnel are available to provide quick and effective first aid**

You must:

- ▶ Make sure that first-aid trained personnel are available to provide quick and effective first aid [WAC 296-800-15005](#)
- ▶ Make sure appropriate first-aid supplies are readily available [WAC 296-800-15020](#)
- ▶ Make sure emergency washing facilities are functional and readily accessible [WAC 296-800-15030](#)
- ▶ Inspect and activate your emergency washing facilities [WAC 296-800-15035](#)
- ▶ Make sure supplemental flushing equipment provides sufficient water [WAC 296-800-15040](#)



LEGAL DUTIES OF INSTRUCTOR

REASONABLE AND FORESEEABLE

▶ DUTY TO INSTRUCT

“An instructor who does NOT instruct properly could place a student in a dangerous situation where the lack of appropriate information might contribute to an accident.”

▶ Provide Adequate Safety Training

- ▶ *Safety demonstrations—attentively watched by all.*
- ▶ *Safety videos.*
- ▶ *The proper and adequate wearing of personal protective equipment (PPE) appropriate to the industry or program area.*
- ▶ *Safety quizzes and tests, etc. (kept until student is 21)*
- ▶ *Students demonstrate proficiency in facility, tool, and equipment safety to the instructor, who uses his or her **professional** assessment in allowing the student to utilize shop facility*

DUTY OF SUPERVISION

Instructors are responsible for APPROPRIATE BEHAVIOR on the student's part.

- ▶ **Strictly Enforce Safety Rules**
- ▶ **Never Leave Your Students Unsupervised**
- ▶ **Certified teacher in the room or no lab activities or equipment use.**

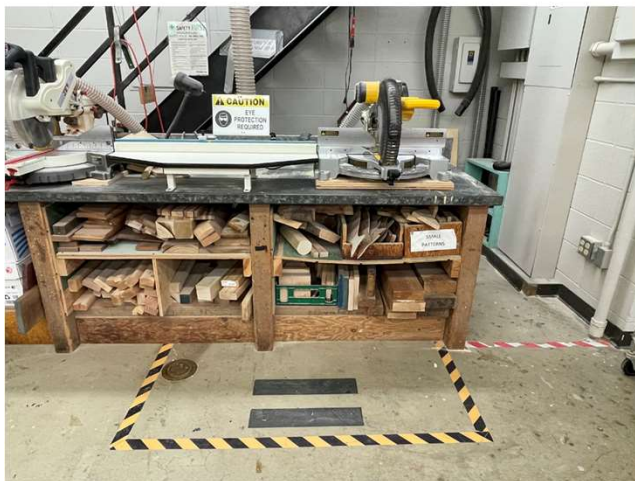
TO BUY OR NOT TO BUY – HOW DO WE DECIDE?

- ▶ Who will be using the equipment?
- ▶ What is the purpose of use?
- ▶ Where is it going?
- ▶ What are specifications?



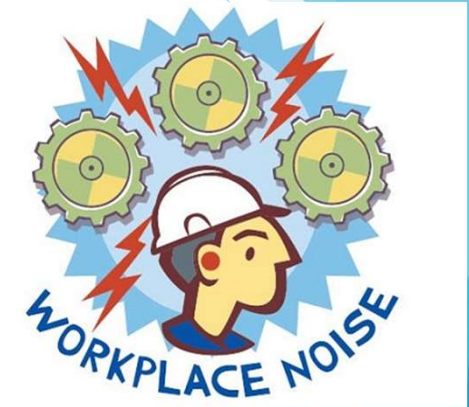
ASSESSING EQUIPMENT

- ▶ Space – egress, accessibility, classroom flow
- ▶ Review Owner Manual- to determine space specifications



ASSESSING EQUIPMENT CONT.

- ▶ Power
(UL Certification)
- ▶ Ventilation
- ▶ Lighting WAC 246-366A-115
- ▶ Noise WAC 246-366-110



EQUIPMENT

- ▶ PPE
- ▶ Safety training
- ▶ Output collection and disposal
- ▶ Maintenance plan



RECORD KEEPING

Routine Inspection: Documented writing pictures included as needed.

Document:

- ▶ Inspections
 - ▶ Safety Guarding
- ▶ Maintenance
- ▶ Replacement
- ▶ Identify the standard, frequency
- ▶ Who, What, When, Where



SAFETY PLAN – SHOULD INCLUDE...

- ▶ A demonstration of the commitment by management
- ▶ Some form of work site/ job hazard analysis-
- ▶ Responsibility of supervisor, managers, as well as employees.
- ▶ Enforcement



CLASSROOM SAFETY PLAN

- ▶ Basic safety rules
- ▶ How to report
 - ▶ Injuries-
 - ▶ Report unsafe conditions and practices
- ▶ Identify hazardous chemicals, mechanical and environmental
- ▶ Use and care of personal protective equipment (PPE)

CLASSROOM SAFETY PLAN

- ▶ Outline procedure for teaching and documentation (included materials)
- ▶ Classroom Specific Safety Contract
- ▶ Classroom layout
- ▶ Maintenance/Replacement

GENERAL SAFETY RULES

- ▶ Clearly posted in plain view
- ▶ Easily referred to
- ▶ Address safety concerns
- ▶ Phrased with positive intent

OUTLINE OF A LESSON ON SAFETY

- ▶ **Outline of a lesson on safety**
 - ▶ Instruction Sheet – How will you teach it?
- ▶ **Test materials (equipment or procedures) that must be passed with a score of 100%**
- ▶ **Interventions and differentiation- Note modifications on original assessment**

OUTLINE OF SAFETY LESSON BEST PRACTICE IMPLEMENTATION

- ▶ Teaching sheet- Documentation of presentation of information.
- ▶ Teacher Demonstration
- ▶ Student assessment – Documentation of student learning (100%)
- ▶ Student Demonstration
- ▶ Keep the Documentation for 3 years (suggest 7 years)

CLASSROOM SAFETY CONTRACT

- ▶ Classroom safety contract that includes the purpose, safety rules, necessary student information, contract agreement and signatures of both student and parents
- ▶ Signature block must stay intact with contract

CLASSROOM FLOOR PLAN AND LAYOUT

- ▶ **The classroom layout (floor plan)**
 - ▶ **Egress**
 - ▶ **Exits**
 - ▶ **Safety Equipment**
 - ▶ **Hazardous Storage Area**
 - ▶ **First Aid Kit**
 - ▶ **Stationary Equipment**
 - ▶ **ADA accessibility**

CLASSROOM SIGNAGE

- ▶ Safety Signage
 - ▶ Safety equipment
 - ▶ Exits
 - ▶ Electrical Panels

CLASSROOM SIGNAGE

- ▶ Safety reminder signage
 - ▶ On or near machinery/shop equipment
 - ▶ Wash hands, PPE, eye wash, ETC
 - ▶ Emergency shut down

CLASSROOM SIGNAGE

- ▶ Equipment Procedures posted on large equipment
- ▶ Inspection protocol for equipment
 - ▶ Maintain records for pre-operation and post operation inspections, maintenance, repairs



LIMIT LIABILITY EXPOSURE

- ▶ Educate Your Staff
- ▶ Educate Your Students
- ▶ Supervise Your Students
- ▶ Keep Your Instructional Area SAFE – model and practice good housekeeping.
- ▶ Keep Your Equipment & Machinery Up to Standards
- ▶ Provide Immediate Emergency Care

LIMIT LIABILITY EXPOSURE (CONT.)

- ▶ Emergency Evacuation Routes
 - ▶ Smoke, Darkness and Panic
- ▶ Clutter control
- ▶ Safely Store Materials
- ▶ Can everyone find the fire extinguisher and first aid kit?
- ▶ Do you know what you have?
 - ▶ Old machinery
 - ▶ Chemicals
 - ▶ Flammable materials

STATE REGULATORY CODES

- ▶ Primary and Secondary Schools : WAC 246.366: Minimum Environmental Standards
- ▶ Safety and Health Core Rules: WAC 296.800
- ▶ Department of Health
- ▶ Student Learner Variances -
<https://www.lni.wa.gov/workers-rights/youth-employment/variances#student-learner-variance>

SAFETY TEST RESOURCES

- ▶ <http://www.powertoolinstitute.com/pti-pages/ed-safety-education.asp>
 - ▶ Power Tool Institute
- ▶ <https://www.cdc.gov/niosh/topics/ergonomics/default.html>
 - ▶ Center for Disease Control, National Institute for Occupational Safety and Health

CONTACT US

October 31, 2022



UPCOMING TRAINING OPPORTUNITIES

- Presenter: Dr. Pyam Fallah, Phd, Idehl Laboratories
 - Date: June 2, 2022
 - Time: 10:00AM - 12:00PM
 - Location: Teams Webinar
- Register Here



Mold In Schools I: Fact Vs. Fiction



- Presenter: Tim Reeve, Attorney, Reeve Law Firm
 - Date: July 14, 2022
 - Time: 10:00AM - 12:00PM
 - Location: Teams Webinar
- Register Here



Mold In Schools II: Handling Mold Exposure Claims



- Presenter: Michelle David, Sr. Industrial Hygienist, Wood, Plc
 - Date: August 4, 2022
 - Time: 10:00AM - 12:00PM
 - Location: Teams Webinar
- Register Here



Mold In Schools III: Mold And Water Remediation



- Fall Educational Workshop (*In Person/Hybrid*)
 - Presenter: Nancy Bernard, WA State DOH
 - Date: October 26, 2022
 - Time: 8:00AM - 3:00PM
 - Location: Teams Webinar
- Register Here

WA State DOH: School Environmental Health and Safety



- Presenter: WCT/UP Loss Control Team
 - Date: September 29, 2022
 - Time: 10:00AM - 11:00AM
 - Location: Teams Webinar
- Register Here



ANNOUNCING DISTRICT SAFETY DASHBOARD



- Presenters: Reginald Reed; Principal, ReLife School
 - Kim Sanders; President, UKERU Systems & COO, Grafton Integrated Health Network
 - Date: September 1, 2022
 - Time: 10:00AM - 12:00PM
 - Location: Teams Webinar
- Register Here



Student Aggression Awareness I: Emotional Intelligence for Classroom Safety



- Presenter: Tovah Denaro, Innovative Behavior Consulting, Tacoma WA Health Network
 - Date: October 20, 2022
 - Time: 10:00AM - 12:00PM
 - Location: Teams Webinar
- Register Here



Student Aggression Awareness II: Emotional Intelligence for Classroom Safety



- Presenters: PSESD Student Support Services
 - Date: November 3, 2022
 - Time: 10:00AM - 12:00PM
 - Location: Teams Webinar
- Register Here



Student Aggression Awareness III: Emotional Intelligence for Classroom Safety

AVAILABLE MEMBER SERVICES

Workers' Compensation Trust

- ▶ Claim Intake / Reviews / Investigation
- ▶ Compensability Determination
- ▶ Disability Management / Vocational Rehabilitation
- ▶ Exposure Analysis
- ▶ Incident Reporting
- ▶ Legacy Claims Management
- ▶ Industrial Hygiene
- ▶ Litigation Management
- ▶ Loss Control and Prevention
- ▶ Management Reporting
- ▶ Medical Cost Management
- ▶ Return-to-Work Planning

Unemployment Pool

- ▶ Claim Management
- ▶ Compliance Management
- ▶ Legislative Updates
- ▶ Management Reporting
- ▶ Review, Hearings, Appeals
- ▶ Training & Education

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