



Stony Brook **Medicine**

Hazard Communication/ Right-to-Know

**for Medical Staff Office (MSO), Residents, Medical
Students and Nursing Students**



Environmental Health & Safety, 4-6783

<https://ehs.stonybrook.edu/programs/healthcare-safety>



Any Questions or Concerns?

- For answers to questions or concerns regarding Environmental Health & Safety, please call:

Jill Kavoukian, Hospital Safety Officer, at
516-790-5046





Training Outline


- Environment of Care
- Occupational Injury & Illness Prevention
 - Injury Reporting
 - Latex Allergy
 - Slips & Trips Prevention
 - Ergonomics & Safe Patient Handling
 - Respiratory Protection
 - Contaminated Sharps Injury Prevention
 - Radiation Safety
- Hazard Communication/Right to Know
 - Safety Data Sheets and Chemical Inventories
 - Eyewashes/Safety Showers
 - Chemical Spill Response
 - Hazardous Drugs Safety
 - High Level Disinfectants & Ethylene Oxide Safety
 - Formaldehyde (Formalin) Safety
 - Waste Anesthetic Gases Safety
 - Environmental Awareness & Hazardous Waste
 - Transporting Infectious and Biological Specimens




Environment of Care (EOC) Reference Cards:

Located in front pocket of Dept's Emergency Management binder and on Intranet>Resources>Manuals

[EOC Reference Cards](#)



ENVIRONMENT OF CARE
(EOC)



HOSPITAL

EOC REFERENCE CARDS

SAFETY MANAGEMENT/HAZARD COMMUNICATION
 FIRE SAFETY/SECURITY MANAGEMENT
 MEDICAL EQUIPMENT MANAGEMENT
 UTILITIES MANAGEMENT
 HAZARDOUS MATERIALS & WASTE MANAGEMENT
 RADIATION PROTECTION SERVICES
 EMERGENCY MANAGEMENT
 SPILL RESPONSE
 CLEAR EGRESS/AIR PRESSURE MONITORS

REVISED 9/2017

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click.




Resources

Committees & Initiatives : ▾

Departments / Divisions: ▾

Forms: ▾

Manuals: ▾

 Microsoft Outlook 2010 On-Line Reference
 & Also See: [Outlook Office365 Instructions.pdf](#)

Policies and Procedures for SBM:

- » [Policy Manager for Policies & Procedures](#)
(Administrative, Nursing and Labs P & Ps)
- » [Policy Manager User Guide](#)

Other Policies and Procedures: ▾

Regulatory: ▾

» [SharePoint Sites Catalog](#)

- » [Attending Physician - NP - PA Privileges Resident Procedure Credentials:](#)
- NEW INNOVATIONS**
- » [Call Bell Logging](#)
- » [Citrix Apps: EMR/STARS PowerChart](#)
- » [Communications Toolkit \(Logos, etc\)](#)
- » [Drug References:](#) ▾
- » [Drug Shortages](#)
- » [Events: Tools to Promote & Use at Events](#)
- » [Clinical & Professional Resources](#)
- » [Hospital Reporting Systems:](#) ▾
- » [Facilities & Plant Operations \(coming soon\)](#)
- » [Find a Physician](#)
- » [HANYS ACOG Fetal monitoring: See Clinical & Prof Resources link above](#)
- » [HSC Lib - Health Sciences Center Library](#)
- » [Lawson Financial Portal](#)
- » [Lawson Support](#)
- » [Nursing](#)
- » [PeopleSoft](#)
- » [Physician Portal](#)
- » [Physician Well-Being Task Force](#) **NEW**
- » [Safety Data Sheets & Departmental Chemical Inventories](#)
- » [SB Safe Patient Safety Event Reporting](#)
- » [VisualDx Clinical Decision Support](#)

[\[Hospital Internet \]](#) [\[HSC Internet \]](#) [\[Stony Brook University \]](#) [\[Site Map \]](#)
 If you experience issues, call 444-HELP (631-444-4357) or email the HelpDesk@sbumcconnect.com
 Please email feedback to the [SBUH Web Team](#)



1. Know who the Hospital Safety Officer is:
 - *Jill Kavoukian*
2. Always wear your Stony Brook ID badge.
3. Know proper procedure for Major Chemical Spill response.
 - Call University Police at 911 or 631-632-3333 from cell phone. (Off sites: call 911)
4. Know location of your department's Emergency Management Manual and Plan.
5. Know location of your unit's disaster kit for power outages (flashlights, batteries, extension cord, duct tape, glow sticks).
6. Know how to shut off an oxygen supply valve.



7. Report hospital building issues to Plant Operations at 4-2400 or on hospital intranet under “My Requests” >> “Facility Maintenance/Repair”.
8. Report offsite building issues to Offsite EOC Manager at 4-4066 (Tech Park: contact Off site Facilities Management, 4-4380).
9. Know proper fire response procedures (RACE), locations of nearest fire alarm pull stations and how to use a fire extinguisher (PASS).
10. Secure your personal belongings.
11. Know how to access Chemical Inventories and Safety Data Sheets (SDS) on hospital intranet under “Resources”.
12. Adhere to tobacco free policy.



Program Elements:

- **Safety compliance component in all staff performance programs.**
- **Safety performance will be evaluated at least annually.**
- **Recognize employees who promote a safe and healthy work environment through the “You Got Caught Being Safe Program”.**
- **Compliance with safe work practices and procedures will be enforced.**

Review OIIP brochure

The Process/Two-Way Communication:

- **New employee orientation and recertification training**
- **Daily briefing huddles**
- **Safety huddles**
- **Posted and distributed safety information**
 - **OIIP News Brief**
- **Safety committees**
- **OIIP Work Group**



Employee Injury/Illness Reporting

- ✓ If you experience an injury or illness at work, immediately report it to your supervisor and,
 - ✓ If necessary, seek medical attention at Employee Health & Wellness
 - ✓ During off hours or if life threatening, go to ED).
- ✓ Fax a completed Employee Injury/Illness form to Fax number listed on form.
- ✓ For a contaminated sharps injury: follow instructions on “Blood borne Pathogens & Needlestick” icon on hospital intranet.
- ✓ Contact the NYS Accident Reporting System (ARS) at 888-800-0029.
- ✓ For additional information, refer to Admin Policy HR:0016, Employee Occupational Injury/Illness Reporting.



- If you know or suspect that you have a latex allergy, notify your supervisor and go to Employee Health & Wellness for an evaluation.
- Lawson requisitioning
 - Store Room items are labeled as LATEX or NON-LATEX in Lawson.





Preventing Slips - Reporting Unsafe Conditions

- On average, **20-25 staff annually** experience reportable slip-related injuries resulting in fractures, strains or contusions. Each injured staff is out of work about **90 days**.

If you see a wet or slippery floor, immediately clean it up safely or report it to appropriate staff for clean up.





EH&S is responsible for managing the Ergonomics Program in consultation with Employee Health & Wellness

Ergonomics: Science of human work focusing on designing work stations, tools & tasks for safety, and efficiency & comfort.

Musculoskeletal Disorders: (MSD) result from bodily reactions due to bending, climbing, crawling, reaching, twisting, overexertion, or repetitive motion.

- Injuries can occur to muscles, nerves, tendons, ligaments, joints, cartilage, and spinal discs in back, neck shoulder, elbow, wrist or hand.



Reporting: Employees need to report work related injuries to their supervisor.

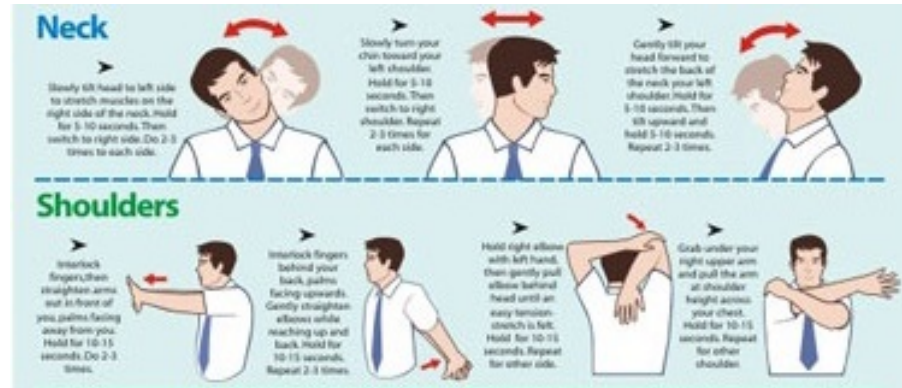
Incident Trending: when a trend of MSD injuries is identified in an area, a hazard assessment will be conducted.

Response: Controls may be used to reduce hazards.

Training: General ergonomics awareness will be provided by EH&S during Orientation and recertification.



How we move and use our body can determine how healthy and comfortable we feel.



TRY THE FOLLOWING NOW...

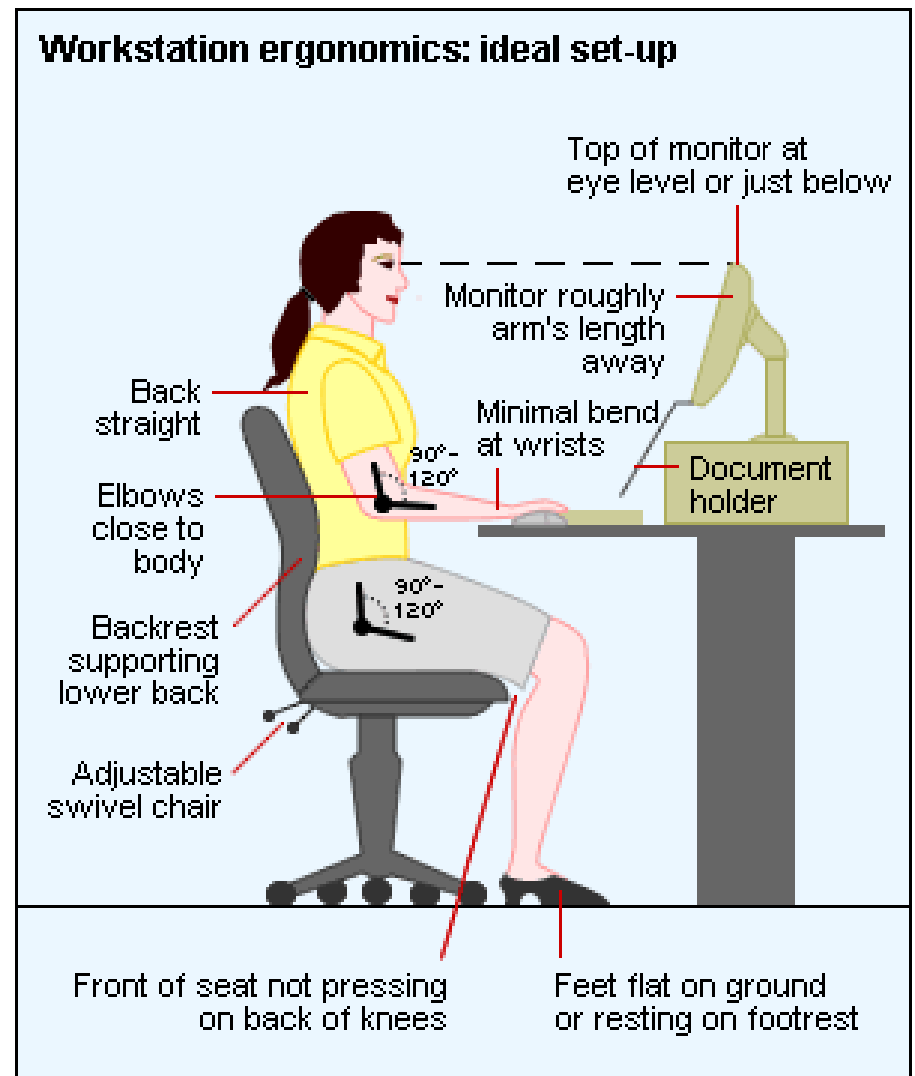
1. Move or change positions ~ every 30 minutes.
2. Stand up when talking on the phone or when reading documents, if possible.
3. Practice the 20/20/20 rule: Every 20 minutes focus on something 20 feet away, for 20 seconds.



Request an ergonomic workstation evaluation

contact: **EH&S at 4-6783**

For additional information,
refer to Admin policy EC:0034
Ergonomics and EH&S policy
EHGS0001 Computer Workstations.





What is Safe Patient Handling?

A practice that creates a safe work environment for patients and healthcare workers by eliminating hazardous manual lifting tasks through the implementation of new technologies, such as mechanical lifts and repositioning devices.

- NYS Regulation on Safe Patient Handling
- Active Hospital SPH Committee
- SPH Icon on Intranet includes:
 - Educational Materials
 - Algorithms
 - Equipment
 - Standards & Policies

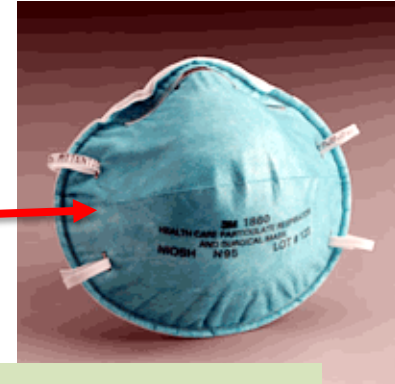


Staff in Respiratory Protection Program must be **annually trained and fit tested** with a hospital approved N95 respirator

- Those in regular contact with patients with known or suspect TB or other **airborne pathogens** or hazards



3M 1860 or Moldex 1500 series



NURSING: annual fit testing during recert
 RESIDENTS: Fit testing during Orientation
 ALL OTHERS: Open **monthly fit testing schedule** listed on [Hospital's Intranet](#) under weekly announcements and Hot Topics.



- Anyone with **interfering facial hair** cannot be fit tested or wear a N95 respirator as the hair prevents an adequate seal. Staff w/ beard for religious or medical reasons can use a powered air purifying respirator (PAPR) available from EH&S.
- Significant **weight gain or loss, dental or facial surgery**, or other condition that may affect respirator fit: Get re-fitted, even if within a year of your last fit test.



PPE - N95 User Instructions:

1. Prior to being issued a respirator you must be trained and fit tested by EH&S, and medically cleared by Employee Health. Fit testing and training is required annually.
2. Only wear the Type, Make, Model and Size respirator you were fitted with (e.g., N95, 3M 1860S). Keep fit test card with N95 information in your ID badge.
3. Prior to each use: **inspect** your respirator and review fitting instructions. Mold metal nosepiece to nose, if applicable. Ensure straps are not twisted, or crisscrossed. Conduct User Seal Check.
4. Put your respirator on BEFORE entering isolation room that requires a respirator.
5. Discard N95 respirator when soiled or damaged, unless directed otherwise.



Position the respirator in your hands with the nose piece at your fingertips.



Cup the respirator in your hand allowing the headbands to hang below your hand. Hold the respirator under your chin with the nosepiece up.



The top strap goes over and rests at the top back of your head. The bottom strap is positioned around the neck and below the ears. Do not crisscross straps.



Place your fingertips from both hands at the top of the metal nose clip (if present). Slide fingertips down both sides of the metal strip to mold the nose area to the shape of your nose.

To Remove (Doffing):



DO NOT TOUCH the front of the respirator. It may be contaminated!



Remove by pulling the bottom strap over back of head, followed by the top strap, without touching the respirator.



Place in sealable plastic bag or discard in waste container if contaminated. **WASH YOUR HANDS!**



Reducing Contaminated Sharps Injuries

- ✓ If you are unsure how to use a device, seek guidance.
- ✓ Explain the procedure to the patient before any venipuncture.
- ✓ TAKE YOUR TIME... don't rush!
- ✓ Limit distractions and conversations.... avoid disturbing colleagues while they use a sharp.
- ✓ Use safe passing zones.
- ✓ Communicate with team members when passing a sharp.
- ✓ Ensure the sharps safety feature is fully activated.



Many injuries are during suturing and passing...

**PRACTICE
SHARP
SAFETY**



- ✓ Immediately discard used sharp in sharps container to avoid injuring coworkers.
- ✓ When a sharps containers is $\frac{3}{4}$ full, contact Housekeeping at 4-1455.
 - ✓ Off-sites: contact Off-site EOC Coordinator at 4-4066
- ✓ Actively participate in trials of new safety devices

Report all injuries and complete an Employee Injury/Illness Report and Sharps Injury Log.

For additional information, refer to [BBP/Needlestick icon](#) on **click.** hospital intranet under “Hot Topics” and Admin policy EC0061, Sharp Safety Device

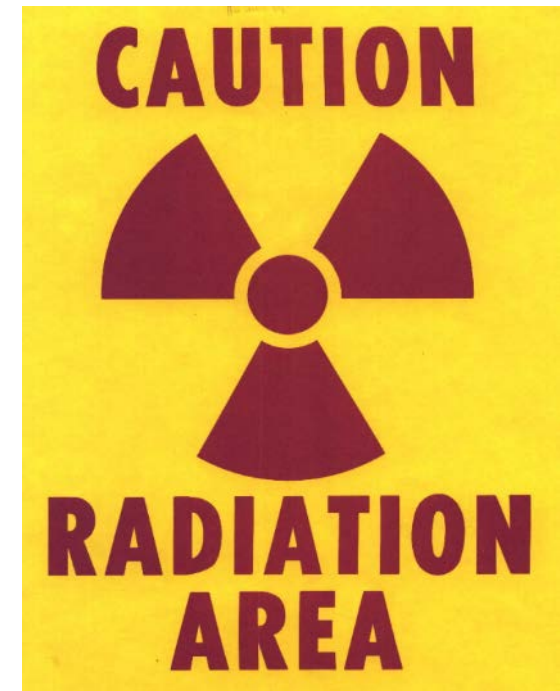




Radiation Safety

**Hospital Radiation Safety Officer is:
Paul Zahra**

- Be aware of radiation and laser safety signage. Do not enter without authorization from Area Manager or Radiation Protection Services (RPS).
- Protect yourself from radiation through:
Time, Distance, and Shielding.
 - ALARA = As Low as Reasonably Achievable
- Maintain security and control of all radioactive substances and sources in your work area.





- When working around ionizing radiation, you must be issued a radiation dosimeter (badge) to routinely monitor your ionizing radiation exposure if exposure is likely to be over annual limits dictated by NYSDOH BERP.
- Some typical work areas where ionizing radiation is employed include: radiology facilities and equipment (Nuclear Medicine, CT, X-Ray, etc.); Radiation Oncology; areas/procedures using fluoroscopy.
- Contact RPS to perform a hazard evaluation to ascertain whether your work meets the criteria to be monitored.





- If issued dosimetry badges or rings to measure radiation dose, always wear properly.
- Return badges/rings promptly to your badge coordinator at end of wear cycle (9th of month).





- When wearing lead aprons/shields as PPE, inspect for damage before use and ensure the PPE is tagged indicating a current annual inspection by RPS.
- If a radioactive spill occurs, follow emergency procedures posted in your area.
- **Questions? Call RPS:**
 - UH Associate RSO 631.638.2356
paul.zahra@stonybrookmedicine.edu
 - UH Radiation Safety Specialist 631.444.3196
richwood.schurig@stonybrookmedicine.edu
 - SBU RSO 631.632.9676
sean.harling@stonybrook.edu





OSHA Hazard Communication Standard 29CFR 1910.1200 and

Required Posting

NY State Right-to-Know Law (PESH) Article 28,
requires public employers to develop programs to inform their employees of the potential hazards of chemicals found in the workplace.

Occupational Safety & Health Administration (OSHA) = private sector employees

Public Employees Safety & Health Bureau (PESH) = public (state & local) employees

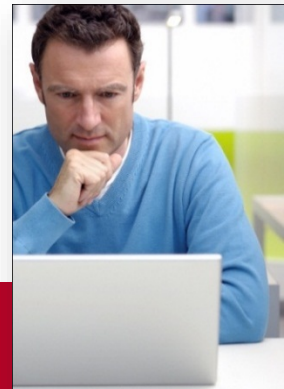
Review OSHA Haz Comm Quick Cards





Right to Know Law guarantees employees the right to information, training and education regarding toxic substances in the workplace

- Employees have access to Safety Data Sheets of hazardous chemicals used
- Guidelines for proper container labeling
- Information on what protective measures are available to prevent exposure or injuries
- Annual training requirements



In 2013, OSHA revised the Hazard Communication Standard to align with the United Nations' Globally Harmonized System of Classification and Labeling of Chemicals (GHS)

Materials Safety Data Sheets (MSDS) are now called Safety Data Sheets (SDS)

New labeling requirements

Standardized 16-section format





Your department's chemical inventory & SDSs are on the Hospital Intranet

Resources

Committees & Initiatives : ▾

Departments / Divisions: ▾

Forms: ▾

Manuals: ▾

Microsoft® Outlook® 2010 On-Line Reference
& Also See: [Outlook Office365 Instructions.pdf](#)

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- » [Call Bell Logging](#)
- » [Citrix Apps: EMR/STARS PowerChart](#)
- » [Communications Toolkit \(Logos, etc\)](#) UPDATE
- » [Drug References:](#) ▾
- » [Drug Shortages](#)
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Blue binders are obsolete!

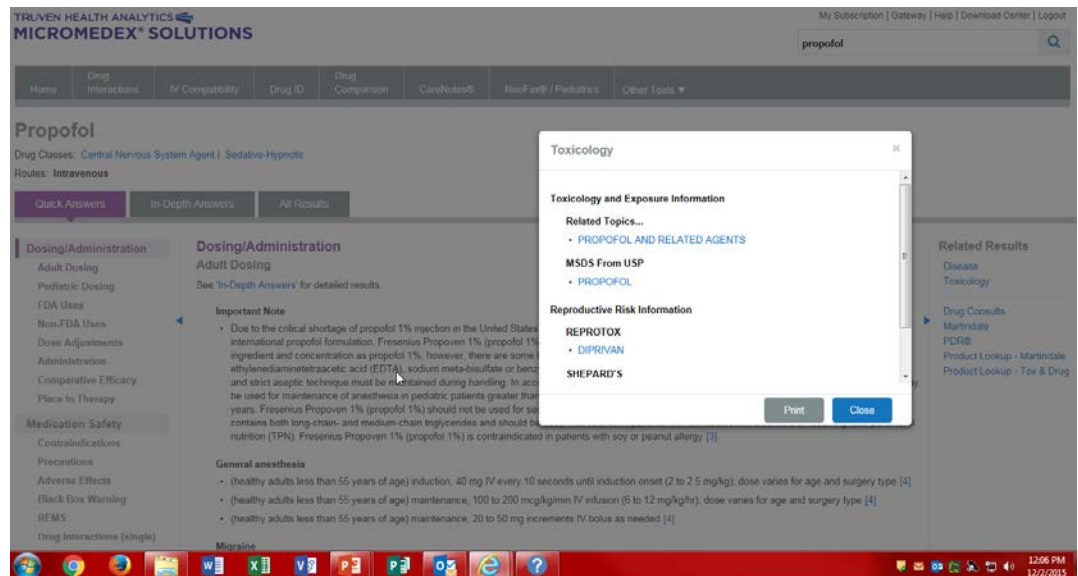


Click on [Safety Data Sheets](#) link under "Resources", then Stony Brook Medicine>Hospital, ACP, ASC or Off-Site >Your Dept





- ❖ On the Hospital Intranet page, scroll down to *Resources*.
- ❖ Select drop down for [Drug References](#)  **click.**
and select *MicroMedex*
- ❖ Type in the name of the drug in the search field and click “*Search*”
- ❖ Select “*Toxicology,*”
under Related Results
- ❖ Select *MSDS*.





Before you handle
or open a chemical
container,

***READ THE
LABEL!***

Follow the
directions to use the
product safely!





Label format

Info on hazard, storage, PPE, handling, & first aid information



SAMPLE LABEL

PRODUCT IDENTIFIER

CODE _____
Product Name _____

SUPPLIER IDENTIFICATION

Company Name _____
Street Address _____
City _____ State _____
Postal Code _____ Country _____
Emergency Phone Number _____

PRECAUTIONARY STATEMENTS

Keep container tightly closed. Store in cool, well ventilated place that is locked.
Keep away from heat/sparks/open flame. No smoking.
Only use non-sparking tools.
Use explosion-proof electrical equipment.
Take precautionary measure against static discharge.
Ground and bond container and receiving equipment.
Do not breathe vapors.
Wear Protective gloves.
Do not eat, drink or smoke when using this product.
Wash hands thoroughly after handling.
Dispose of in accordance with local, regional, national, international regulations as specified.
In Case of Fire: use dry chemical (BC) or Carbon dioxide (CO₂) fire extinguisher to extinguish.
First Aid
If exposed call Poison Center.
If on skin (on hair): Take off immediately any contaminated clothing. Rinse skin with water.

HAZARD PICTOGRAMS



SIGNAL WORD
Danger

HAZARD STATEMENT

**Highly flammable liquid and vapor.
May cause liver and kidney damage.**

SUPPLEMENTAL INFORMATION

Directions for use

Fill weight: _____ Lot Number _____

Gross weight: _____ Fill Date: _____

Expiration Date: _____



WHY IMPORTANT ???

- 1. Hazards**
- 2. How to protect yourself from injury or illness**
 - Exposure controls
 - Safe work practices
 - PPE to wear
- 3. What to do if a spill occurs**
- 4. What to do if you or a co-worker are exposed**
 - First aid
 - Emergency response
- 5. Environmental & disposal information**





16 sections:

- 1. Identification**
- 2. Hazards Identification**
- 3. Composition/Ingredients**
- 4. First Aid Measures**
- 5. Fire Fighting Measures**
- 6. Accidental Release Measures**
- 7. Handling & Storage**
- 8. Exposure Controls & Personal Protection**
- 9. Physical & Chemical Properties**
- 10. Stability & Reactivity**
- 11. Toxicological Info.**
- 12. Ecological Info.**
- 13. Disposal Info.**
- 14. Transport Info.**
- 15. Regulatory Info.**
- 16. Other Info.**



SAFETY DATA SHEET

click.



Go to SDS [database](#)

Issuing Date January 5, 2015

Revision Date New

Revision Number 0

1. IDENTIFICATION OF THE SUBSTANCE/PREPARATION AND OF THE COMPANY/UNDERTAKING

Product identifier

Product Name Clorox® Clean-Up® Cleaner + Bleach, - Original

Other means of identification

EPA Registration Number 5813-21

Recommended use of the chemical and restrictions on use

Recommended use Disinfecting bleach spray cleaner

Uses advised against No information available

Details of the supplier of the safety data sheet

Supplier Address

The Clorox Company
1221 Broadway, Oakland, CA 94612
USA
Phone: 1-510-271-7000

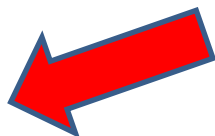
Emergency telephone number

Emergency Phone Numbers

For Medical Emergencies, call: 1-800-446-1014
For Transportation Emergencies, call Chemtrec: 1-800-424-9300



Product identifier



In case of an emergency.

1. Identification
Product name,
description,
address/phone

PRODUCT IDENTIFIER:
how the hazardous
material is identified



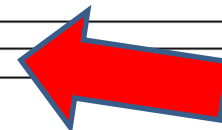
2. HAZARDS IDENTIFICATION

Classification

This chemical is considered hazardous by the 2012 OSHA Hazard Communication Standard (29 CFR 1910.1200).

Skin corrosion/irritation	Category 3
Serious eye damage/eye irritation	Category 2A

How this product could harm me if improperly handled




Other label elements, including precautionary statements

Emergency Overview

Signal word: **Warning**

Hazard Statements
Causes mild skin irritation
Causes serious eye irritation



Appearance Clear, pale yellow Physical State Liquid Odor Citrus, herbaceous, bleach

WARNING

2. Hazard ID
Signal Word

Precautionary Statements - Prevention

Wash hands and any exposed skin thoroughly after handling.
Wear eye protection/face protection such as safety glasses.

SIGNAL WORD:

Indicates severity of hazard and alerts reader to a hazard

- Danger – more severe hazard
- Warning – less severe hazard

Only one signal word used on label & SDS

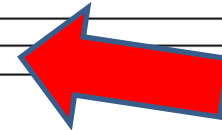


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How this product could harm me if improperly handled

GHS Label elements, including precautionary statements

Emergency Overview

Signal word	Warning		
Hazard Statements	Causes mild skin irritation Causes serious eye irritation		
	IRRITANT		
Appearance	Clear, pale yellow	Physical State	Liquid
		Odor	Citrus, herbaceous, bleach

2. Hazard ID Pictogram

Precautionary Statements - Prevention

Wash hands and any exposed skin thoroughly after handling.
Wear eye protection/face protection such as safety glasses.

Precautionary Statements - Response

Eyes
IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present and rinsing. If eye irritation persists: Get medical advice/attention.

Skin
If skin irritation occurs: Get medical advice/attention.

Precautionary Statements - Storage

None

Precautionary Statements - Disposal

None

Hazards not otherwise classified (HNOC)

The following medical conditions may be aggravated by exposure to high concentrations of vapor or mist: heart conditions or chronic respiratory problems such as asthma, emphysema, or obstructive lung disease.

Unknown Toxicity

0.08% of the mixture consists of ingredient(s) of unknown toxicity

HAZARD STATEMENTS
 Nature and degree of hazard

- Example: "Causes mild skin irritation. Causes serious eye irritation"

All hazard statements must be on label & SDS



Pictograms and Hazard Classes on Labels and Safety Data Sheets

GHS Pictograms and Hazard Classes

Oxidizer: Oxygen combines chemically to other materials; increases chance of fire/explosion



• Oxidizers



• Flammables
• Self Reactives
• Pyrophorics
• Self-Heating
• Emits Flammable Gas
• Organic Peroxides



• Explosives
• Self Reactives
• Organic Peroxides

Self Reactives: Chemically unstable

Toxic Substances: poisonous



• Acute toxicity (severe)



• Corrosives



• Gases Under Pressure

Corrosives: destroy living tissue

Carcinogens cause cancer
Mutagens: can change genetic info
Teratogens: cause birth defects



• Carcinogen
• Respiratory Sensitizer
• Reproductive Toxicity
• Target Organ Toxicity
• Mutagenicity
• Aspiration Toxicity



• Environmental Toxicity



• Irritant
• Dermal Sensitizer
• Acute toxicity (harmful)
• Narcotic Effects
• Respiratory Tract Irritation

Irritants: inflame tissue on contact

Sensitizers: cause allergic reactions



3. COMPOSITION/INFORMATION ON INGREDIENTS

Chemical Name	CAS-No	Weight %	Trade Secret
Sodium hypochlorite	7681-52-9	1 - 5	*
Sodium hydroxide	1310-73-2	0.1 - 1	*

* The exact percentage (concentration) of composition has been withheld as a trade secret.

4. FIRST AID MEASURES

First aid measures

General Advice	Show this safety data sheet to the doctor in attendance.
Eye Contact	Rinse immediately with plenty of water, also under the eyelids, for at least 15 minutes. Remove contact lenses, if present and easy to do. Continue rinsing. Keep eye wide open while rinsing. Do not rub affected area. Get medical attention if irritation develops and persists.
Skin Contact	Take off contaminated clothing. Rinse skin immediately with plenty of water for 15-20 minutes. If irritation develops, call a doctor.
Inhalation	Move to fresh air. If breathing is affected, call a doctor.
Ingestion	Call a poison control center or doctor immediately. Have person sip a glassful of water if able to swallow. DO NOT induce vomiting unless told to do so by a poison control center or doctor.
Protection of First-aiders	Avoid contact with skin, eyes or clothing. Use personal protective equipment as required. Wear personal protective clothing (see section 8).

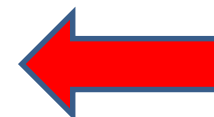
Most important symptoms and effects, both acute and delayed

Most Important Symptoms and Effects Stinging and irritation of eyes.

Indication of any immediate medical attention and special treatment needed

Notes to Physician Treat symptomatically.

What do I do if this chemical get on my skin, in my eyes, or if I breathe it in?



3. Ingredients

4. First Aid



5. FIRE-FIGHTING MEASURES

Suitable Extinguishing Media

Use extinguishing measures that are appropriate to local circumstances and the surrounding environment.

Unsuitable Extinguishing Media

CAUTION: Use of water spray when fighting fire may be inefficient.

Specific Hazards Arising from the Chemical

No information available.

Explosion Data

Sensitivity to Mechanical Impact None.

Sensitivity to Static Discharge None.

Protective equipment and precautions for firefighters

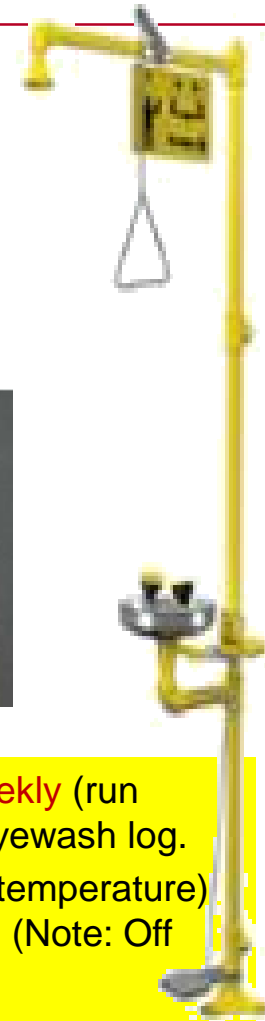
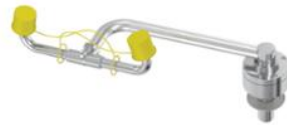
As in any fire, wear self-contained breathing apparatus pressure-demand, MSHA/NIOSH (approved or equivalent) and full protective gear.

5. Fire Fighting Measures



Emergency Equipment – Eyewashes & Safety Showers

- **Know locations** of eyewashes and emergency showers in your area.
- **Never block** eyewashes or showers!
- **Know how to use** equipment.
 - Eyewash activation depends on style:
 - ❖ push paddle or pin
 - ❖ lift cover
 - ❖ swing down
 - ❖ swing over sink
 - **Keep dust caps on eyewash** when not in use. (Note: you don't need to remove caps before activation.)
 - **Flush eyes for at least 15 minutes.**
 - For shower, pull chain
- **Practice activating eyewash.**
- Any questions, ask your supervisor or EH&S (4-6783).



- User area must **test eyewashes weekly** (run water for 1 minute) and complete eyewash log.
- For operational issues (i.e., flow or temperature) contact Plant Operations at 4-2400. (Note: Off sites call 4-4066)
- Refer to **Admin policy, EC0039**, Emergency Safety Showers & Eyewashes.



6. ACCIDENTAL RELEASE MEASURES

Personal precautions, protective equipment and emergency procedures

Personal Precautions Avoid contact with eyes, skin, and clothing. Use personal protective equipment as required.

Other Information Refer to protective measures listed in Sections 7 and 8.

Environmental precautions

Environmental Precautions See Section 12 for ecological information.

Methods and material for containment and cleaning up

Methods for Containment Prevent further leakage or spillage if safe to do so.

Methods for Cleaning Up Absorb and containerize. Wash residual down to sanitary sewer. Contact the sanitary treatment facility in advance to assure ability to process washed-down material.

6. Accidental Release
Measures

7. Handling & Storage

7. HANDLING AND STORAGE

Precautions for safe handling

Handling Handle in accordance with good industrial hygiene and safety practice. Avoid contact with skin, eyes or clothing. Do not eat, drink or smoke when using this product.

Conditions for safe storage, including any incompatibilities

Storage Keep containers tightly closed in a dry, cool and well-ventilated place.

Incompatible Products Products containing ammonia, toilet bowl cleaners, rust removers, or acids.



Minor spills of less than 1 gallon
(<50 ml for hazardous drugs)
Cleaned up by trained staff using a spill kit.

Major spills over 1 gallon
(>50 ml haz drugs)

Call University Police at 911
(cell: 631-632-3333).

Note: Offsites: Call 911



If at any time during clean up of a minor spill, you need assistance, call 911 (631-632-3333).



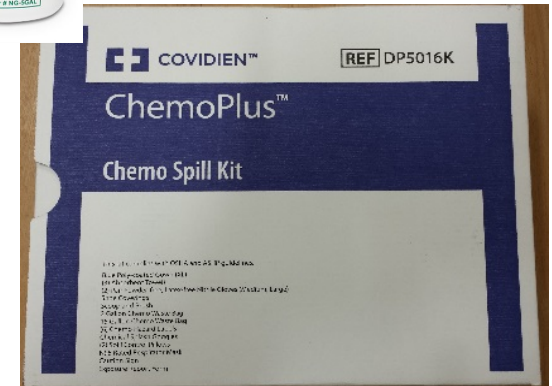
Glutaraldehyde/OPA Spill Kits

- by GUS stations and areas where glutaraldehyde/Cidex OPA used



Chemotherapy Spill Kits

- areas where chemotherapy prepared and/or administered



Formalin Spill Kits

- labs and areas using formalin



Acid Spill Kits

- powered industrial truck charging areas and other non-alkaline battery areas.

Only trained staff can use a minor spill kit. Unit Educators train clinical staff annually on applicable spill kits. Lab staff are trained annually during Lab Recertification. Off-site staff are trained by the off-site EOC Coordinator.



8. EXPOSURE CONTROLS/PERSONAL PROTECTION

Control parameters

Exposure Guidelines

Chemical Name	ACGIH TLV	OSHA PEL	NIOSH IDLH
Sodium hydroxide 1310-73-2	Ceiling: 2 mg/m ³	TWA: 2 mg/m ³	IDLH: 10 mg/m ³ Ceiling: 2 mg/m ³

ACGIH TLV: American Conference of Governmental Industrial Hygienists - Threshold Limit Value. OSHA PEL: Occupational Safety and Health Administration - Permissible Exposure Limits. NIOSH IDLH: Immediately Dangerous to Life or Health.

Appropriate engineering controls

Engineering Measures

Showers
Eyewash stations
Ventilation systems

8. Exposure Control & Personal Protective Equipment

Individual protection measures, such as personal protective equipment

Eye/Face Protection

If splashes are likely to occur: Wear safety glasses with side shields (or goggles). None required for consumer use.

Skin and Body Protection

Wear protective gloves and protective clothing.

Respiratory Protection

If exposure limits are exceeded or irritation is experienced, NIOSH/MSHA approved respiratory protection should be worn. Positive-pressure supplied air respirators may be required for high airborne contaminant concentrations. Respiratory protection must be provided in accordance with current local regulations.

Hygiene Measures

Remove and wash contaminated clothing before re-use. Avoid contact with skin, eyes or clothing. Do not eat, drink or smoke when using this product.



9. PHYSICAL AND CHEMICAL PROPERTIES

Physical and Chemical Properties

Physical State	Liquid	Odor	Citrus, herbaceous, bleach
Appearance	Clear	Odor Threshold	No information available
Color	Pale yellow		

<u>Property</u>	<u>Values</u>	<u>Remarks/ Method</u>
pH	12.4 - 12.8	None known
Melting/freezing point	No data available	None known
Boiling point / boiling range	No data available	None known
Flash Point	Not flammable	None known
Evaporation rate	No data available	None known
Flammability (solid, gas)	No data available	None known
Flammability Limits in Air		
Upper flammability limit	No data available	None known
Lower flammability limit	No data available	None known
Vapor pressure	No data available	None known

9. Physical/Chemical Properties
10. Stability & Reactivity

10. STABILITY AND REACTIVITY

Reactivity

Reacts with other household chemicals such as products containing ammonia, toilet bowl cleaners, rust removers, or acids to produce hazardous gases, such as chlorine and other chlorinated compounds.

Chemical stability

Stable under recommended storage conditions.

Possibility of Hazardous Reactions

None under normal processing.

Conditions to avoid

None known based on information supplied.

Incompatible materials

Products containing ammonia, toilet bowl cleaners, rust removers, vinegar, or acids.

Hazardous Decomposition Products

None known based on information supplied.

Other Information

- Softening Point
- VOC Content (%)
- Particle Size
- Particle Size Distribution





11. TOXICOLOGICAL INFORMATION

Information on likely routes of exposure

Product Information

- Inhalation** Exposure to vapor or mist may irritate respiratory tract.
- Eye Contact** May cause eye irritation.
- Skin Contact** Prolonged contact may cause irritation.
- Ingestion** Ingestion may cause irritation to mucous membranes and gastrointestinal tract, nausea, vomiting, and diarrhea.

11. Toxicological Info

Component Information

Chemical Name	LD50 Oral	LD50 Dermal	LC50 Inhalation
Sodium hypochlorite 7681-52-9	8200 mg/kg (Rat)	>10000 mg/kg (Rabbit)	-
Sodium hydroxide 1310-73-2	-	1350 mg/kg (Rabbit)	-

Information on toxicological effects

Symptoms May cause redness and tearing of the eyes.

Delayed and immediate effects as well as chronic effects from short and long-term exposure

Sensitization No information available.

Mutagenic Effects No information available.



12. ECOLOGICAL INFORMATION

Ecotoxicity

Toxic to aquatic life with long lasting effects.

Persistence and Degradability

No information available.

Bioaccumulation

No information available.

Other adverse effects

No information available.



- 12. Ecological Info
- 13. Disposal Considerations
- 14. Transport Info

13. DISPOSAL CONSIDERATIONS

Disposal methods

Dispose of in accordance with all applicable federal, state, and local regulations.

Contaminated Packaging

Do not reuse empty containers. Dispose of in accordance with all applicable federal, state, and local regulations.

**How should I dispose
of this product safely?**



14. TRANSPORT INFORMATION

DOT

NOT REGULATED

TDG

UN-No	UN3082
Proper Shipping Name	ENVIRONMENTALLY HAZARDOUS SUBSTANCE, LIQUID, N.O.S.
Hazard Class	9
Packing Group	III
Description	UN3082, ENVIRONMENTALLY HAZARDOUS SUBSTANCE, LIQUID, N.O.S. (SODIUM HYPOCHLORITE), 9, III, MARINE POLLUTANT



**What
must I do
if I need
to ship
this
product?**



15. REGULATORY INFORMATION

Chemical Inventories

TSCA All components of this product are either on the TSCA 8(b) Inventory or otherwise exempt from listing.

DSL/NDSL All components are on the DSL or NDSL.

TSCA - United States Toxic Substances Control Act Section 8(b) Inventory
DSL/NDSL - Canadian Domestic Substances List/Non-Domestic Substances List

U.S. Federal Regulations

SARA 313
 Section 313 of Title III of the Superfund Amendments and Reauthorization Act of 1986 (SARA). This product does not contain any chemicals which are subject to the reporting requirements of the Act and Title 40 of the Code of Federal Regulations, Part 372

SARA 311/312 Hazard Categories

Acute Health Hazard	Yes
Chronic Health Hazard	No
Fire Hazard	No
Sudden Release of Pressure Hazard	No
Reactive Hazard	No

15. Regulatory Info



16. Other Info



16. OTHER INFORMATION

NFPA	Health Hazard 2	Flammability 0	Instability 0	Physical and Chemical Hazards -
HMIS	Health Hazard 2	Flammability 0	Physical Hazard 0	Personal Protection B

Prepared By Product Stewardship
 23 British American Blvd.
 Latham, NY 12110
 1-800-572-6501

Revision Date New

Revision Note New

Reference 1086795/50546003.004

General Disclaimer

The information provided in this Safety Data Sheet is correct to the best of our knowledge, information and belief at the date of its publication. The information given is designed only as a guidance for safe handling, use, processing, storage, transportation, disposal and release and is not to be considered a warranty or quality specification. The information relates only to the specific material designated and may not be valid for such material used in combination with any other materials or in any process, unless specified in the text.

Clean Water Act
 This product contains the following substances which are regulated pollutants pursuant to the Clean Water Act (40 CFR 122.21 and 40 CFR 122.42)

Chemical Name	CWA - Reportable Quantities	CWA - Toxic Pollutants	CWA - Priority Pollutants	CWA - H Substances
Sodium hypochlorite 7681-52-9	100 lb			
Sodium hydroxide 1310-73-2	1000 lb			

CERCLA
 This material, as supplied, contains one or more substances regulated as a hazardous substance under the Comprehensive Environmental Response Compensation and Liability Act (CERCLA) (40 CFR 302)

Chemical Name	Hazardous Substances RQs	Extremely Hazardous Substances RQs	RQ
Sodium hypochlorite 7681-52-9	100 lb	-	RQ 100 lb fi RQ 45.4 kg f
Sodium hydroxide 1310-73-2	1000 lb	-	RQ 1000 lb fi RQ 454 kg fi

EPA Statement

This chemical is a pesticide product registered by the Environmental Protection Agency and is subject to certain label requirements under federal pesticide law. These requirements differ from the classification criteria and hazard information required for safety data sheets and for workplace labels of non-pesticide chemicals. Following is the hazard information required on the pesticide label:

WARNING: EYE AND SKIN IRRITANT. Causes substantial but temporary eye injury. Do not get in eye: clothing. Avoid contact with skin. Wear protective eyewear. Wash thoroughly with soap and water after h before eating, drinking, chewing gum, or using tobacco. Remove and wash contaminated clothing before re Harmful if swallowed. For sensitive skin or prolonged use, wear gloves. Vapors may irritate. Avoid prolong of vapors. Use only in well ventilated areas. **Not recommended for use by persons with heart conditions or chronic respiratory problems such as asthma, emphysema or obstructive lung disease.**



Common hospital chemical hazards:

1. Hazardous Drugs (e.g., chemo)
2. High Level Disinfectants and Sterilizers
3. Formalin (formaldehyde)



Hazardous Drugs

Uses: Patient treatment and therapy

Locations: Pharmacy, BMT and Oncology, OR, Radiation Oncology, Peds, Cancer Center

Routes of entry: Inhalation, skin

Health Hazard: Reproductive hazards (genotoxicity, teratogen, fertility), carcinogen, organ toxicity

Controls: Local ventilation, work practices, PPE

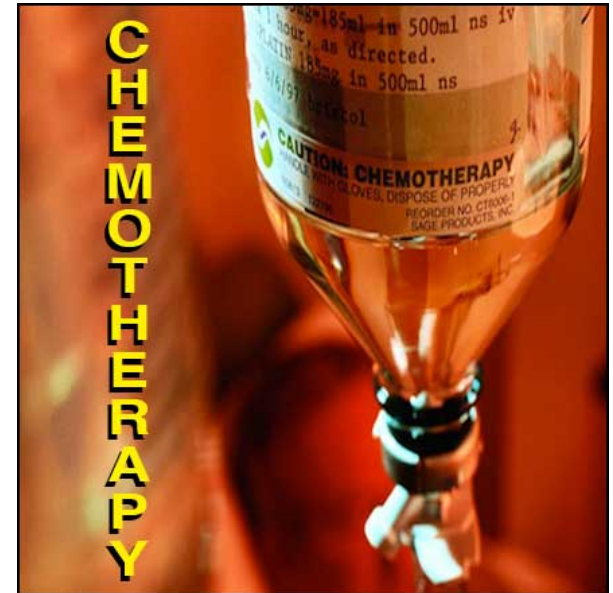
Reminder: Drug Safety Data Sheets found on Hospital Intranet under [Resources-Drug References](#), Micromedex





Hazardous Drugs (HD) Safety

- Look for “HD Precautions” sign on in-patient room doors
- Wear appropriate PPE
 - Anticipation of hand exposure – wear double nitrile gloves, change out after 30 minutes
 - For chemo and for anticipation of body splash – wear chemo gown
- Avoid crushing or cutting HD tablets
- Review HD Management policy, MM:0081



Hazardous Drug - as defined by NIOSH (National Institute of Occupational Health & Safety), any drug identified by at least 1 of the following 6 criteria: carcinogenicity, teratogenicity or other developmental toxicity, reproductive toxicity in humans, organ toxicity at low doses in humans or animals, genotoxicity, or new drugs that mimic existing HDs in structure or toxicity. Include drugs for cancer chemotherapy, antiviral drugs, hormones, some bioengineered drugs and other miscellaneous drugs and are identified on [NIOSH's List of Antineoplastic and Other Hazardous Drugs in Healthcare Settings](#).



**Medivators Endoscope
Reprocessors** (22% hydrogen
peroxide HP & 5% peracetic acid)
Endoscopy & CSS



These units are used for high level disinfecting or sterilizing of medical equipment. All units **are automated, closed systems** which greatly reduce risk of exposure!

Trophon EPR (35% HP)
L&D, Ultrasound, ACP Imaging, **Urology &
ObGyn clinics**



Do NOT defeat safety controls

Sterrad 100S/NX/100NX
(50-70% HP)
CSS





LOOK UP
symbols on
OSHA Quick Card



SIGNAL WORD: Danger

Uses: high level disinfectants

Locations: Endoscopy, Radiology, OR,
Heart Institute, labs, Cancer Center,
offsites

Route of Entry: Inhalation or skin

Health Hazard: respiratory, eye and skin
irritant

Controls: Local ventilation (GUS
station), keep containers closed, PPE

Glutaraldehyde & OPA





LOOK UP
symbols on
OSHA Quick Card



SIGNAL WORD: **Danger**

Uses: gas sterilization of medical
equipment and instruments

Location: **Central Sterile Supply**

Route of entry: Inhalation

Health Hazard: Carcinogen

Controls:

-Ventilation

-Abators & negative pressure

Ethylene Oxide





LOOK UP symbols on OSHA Quick Card



SIGNAL WORD: Danger

Formaldehyde/Formalin

Uses: Specimen preservative

Locations: Labs, Radiology, Endoscopy, OR, offsites, Cancer Center, Breast Center, Ambulatory Surgery

Routes of entry: inhalation, skin

Health Hazards: carcinogen, ENT irritant, skin irritant

Controls:

- Use in chemical fume hood where feasible
- Minimize time containers are open
- Avoid spills, trained staff clean up spills immediately
- Wear PPE (e.g., nitrile gloves and gown/lab coat)



ORIGINAL AND SECONDARY CONTAINERS MUST HAVE LABEL!



- WAG = nitrous oxide and halogenated anesthetics (e.g., sevoflurane, isoflurane, desflurane).
 - exposure from leakage of patient's anesthetic breathing circuit during delivery of anesthetic and exhalations of patients recovering from anesthesia
- Use anesthesia delivery units with gas scavenging as per manufacturer's instructions.
- Face masks used for administering inhaled anesthetics should be available in variety of sizes, pliable, provide effective seal to prevent leakage, and positioned on the patient's face properly.
- Wear PPE during spills of liquid anesthetic agents (gloves, goggles, face shields).

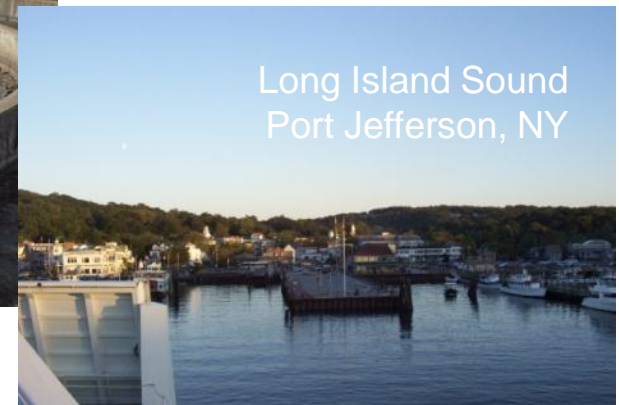


Environmental Awareness

What happens to waste that is poured down the drain?



It goes to the Sewage Treatment Plant at the University and then into the Long Island Sound.



**Do not put any hazardous waste down the drain.
Follow Hazardous Waste disposal procedures.**



How do I know if I have to manage a chemical as a **hazardous or universal waste**?

Most hazardous wastes & universal wastes have already been identified and are being collected.

- e.g., medications, paints, solvents and other lab chemicals

Review the Waste Determination

- Located in **Safety Data Sheet database (SDSPro)** on Hospital Intranet.
- For waste effluent from lab equipment or processes that contain multiple chemicals/products, EH&S maintains waste determinations.
- Any questions, contact EH&S at 4-6783.





What is a Hazardous Waste?

A waste that exhibits one of the following characteristics:

- Harmful or fatal when ingested or absorbed (**Toxicity**)
- Unstable under normal conditions (**Reactivity**)
- Flashpoint $<60^{\circ}\text{C}$ (140°F) (**Ignitability**)
- $\text{pH} \leq 2$ or ≥ 12.5 (**Corrosivity**)

Or is listed in the applicable NYS regulations (6 NYCRR Part 371)





Chemical Waste Containers

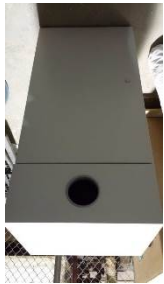
Use the proper waste disposal containers:



- Pharmacy Return Box – Unused drugs



- Black 2-gallon container – Drugs with a HW label 



- Locked Container w/ fiberboard drum (Critical Care Areas) – epinephrine, propofol/diprivan, eptifibatide/integrilin and nitroglycerin



- Chemo container (Oncology Areas) – Chemotherapy waste



How should Hazardous Waste be stored?

- Hazardous waste is stored in a Satellite Accumulation Area (SAA) or a <90 Day Storage Area.
 - Store up to 55 gallons of waste in a SAA.
- Label waste with orange hazardous waste label.
- List name of hazardous waste on the label, along with hazard(s). No abbreviations permitted.
- Write date on <90 Day Storage Area label, but not on SAA label.
- Keep waste containers closed.
- Hazardous Waste contractor collects hazardous waste as per schedule.



STATE UNIVERSITY OF NEW YORK AT STONY BROOK
HAZARDOUS WASTE for DISPOSAL

INSTRUCTIONS:

1. SEGREGATE CHEMICALS FOR DISPOSAL BY HAZARD CATEGORY.
2. COMPLETE AND AFFIX THIS LABEL TO EACH CONTAINER.
3. SAFELY TRANSPORT CHEMICAL WASTE TO CHEMICAL COLLECTION SITE.
4. CONTACT EH&S IF THERE ARE ANY QUESTIONS: 2-6410

Name	Date	Department	Location	Telephone
Name(s) of Hazardous Waste:				
MATERIAL		FORM		HAZARD
<input type="checkbox"/> CHEMICAL	<input type="checkbox"/> SOLID	<input type="checkbox"/> LIQUID	<input type="checkbox"/> IRRITANT	<input type="checkbox"/> POISON (TOXIC)
<input type="checkbox"/> SOLVENT	<input type="checkbox"/> LIQUID	<input type="checkbox"/> GAS	<input type="checkbox"/> AIR REACTIVE	<input type="checkbox"/> OXIDIZER
<input type="checkbox"/> BIOLOGICAL SUBSTANCE	<input type="checkbox"/> GAS	<input type="checkbox"/> Other (specify)	<input type="checkbox"/> WATER REACTIVE	<input type="checkbox"/> EXPLOSIVE
<input type="checkbox"/> DRUG SUBSTANCE	<input type="checkbox"/> Other (specify)	<input type="checkbox"/> FLAMMABLE	<input type="checkbox"/> Other (specify)	<input type="checkbox"/> Other (specify)
<input type="checkbox"/> Other		<input type="checkbox"/> CORROSIVE		

Material Must Be Refrigerated. EH&S STORAGE DATE _____
1M 10/01

Any hazardous waste questions, contact
EH&S(4-6783).



What is **Universal Waste**?

A special type of hazardous waste



Lamps (bulbs)

Contact Plant Operations at 4-2400
for pick up

Mercury-containing equipment

Thermometers, Thermostats,
Sphygmomanometers (blood pressure monitors)
Contact EH&S at 4-6783 for pick up



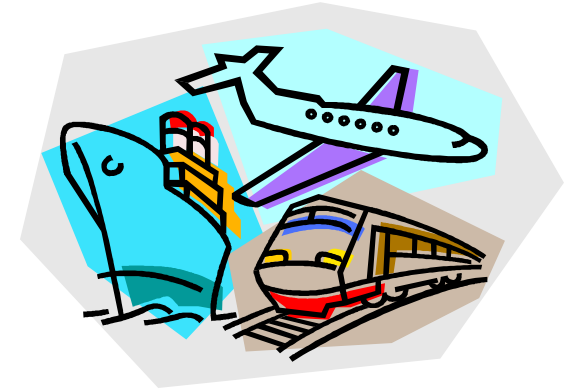
**UNIVERSAL WASTE
cannot be
disposed in the
regular trash**



Batteries

Contact Hospital Recycling at 4-1462
for pick up





- Training is required for:
 - Anyone who handles,
 - Offers for transport, or
 - Transports infectious substances and/or biological specimens
- Training is required every two years.
- Training is available from EH&S, 4-6783.





Why are SDS important?

- a. Provide nutritional information
- b. Provide economics information
- c. Provide safety information about the material including what to do in the event of an exposure or spill
- d. Provide biomedical engineering information

Answer: C



Why are SDS important?

- a. Provide nutritional information
- b. Provide economics information
- c. Provide safety information about the material including what to do in the event of an exposure or spill
- d. Provide biomedical engineering information

Answer: C



What phone number would you call for a major chemical spill response?

- a. 321
- b. From a hospital phone call 911 or 631-632-3333 from a cell phone which will connect you with University Police (Off-sites call 911.)
- c. 444
- d. 311

Answer: B



What phone number would you call for a major chemical spill response?

- a. 321
- b. From a hospital phone call 911 or 631-632-3333 from a cell phone which will connect you with University Police (Off-sites call 911.)
- c. 444
- d. 311

Answer: B



- Contact EH&S at 4-6783
 - Ask to speak to a staff member in the Healthcare Safety team!
- Email us at *ehsafety@stonybrook.edu*
- Review Admin and EH&S P&Ps on hospital intranet under “Resources”
- OSHA Hazard Communication Standard:
 - <https://www.osha.gov/dsg/hazcom/HCSFinalRegTxt.html>
- OSHA Hazard Communication Resources:
 - <https://www.osha.gov/dsg/hazcom/index.html>

