



Environmental Health & Safety

Contacts and Objectives

Working in laboratories carries risk of exposure and injury due to hazardous materials. Laboratory equipment and processes can cause physical injury, illness, or cause fires if not properly used. It is essential for everyone working in a laboratory to understand lab hazards and how to protect themselves and those working around them.

Training Objectives

- To provide safety guidelines for workers and researchers in USF laboratories
- To increase awareness of environmental compliance regulations
- To provide safety-related contact information and resources

Individual Responsibilities

The key to having a safe lab environment lies with an individual's commlt.rj0.30 17 >>BDC7.605 -1.4ease

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Recognizing Hazards: Resources

1.) Manufacturer's Label

The manufacturer of a chemical must provide a label that indicates:

- Full name of chemical
- Hazard warnings
- Name and address of manufacturer

* Chemical containers without manufacturer's labels should be

4. GHS Classification

The Globally Harmonized System of Classification and Labeling of Chemicals (GHS), is a universal approach to defining chemical hazards, criteria to compare these hazards, and hazard communication. Hazardous chemical labels and SDSs will present information in alignment with the GHS. It is important to remember that, within the GHS, hazards are rated from 1 (extremely hazardous) to 4 (no hazard), which is the opposite of the NFPA system.

Recognizing Hazards: Hazard Classes

FLAMMABLE

- A material that may catch fire and burn in air
- Any liquid having a flashpoint below 100 degrees F (37.8 degrees C).
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ART STUDIO

- EH&S offers a Safety & Compliance in the Arts Training, phone: (813) 974-4036

BIOSAFETY

- Wash hands before leaving lab, wear gloves and a lab coat, do not pipette by mouth, do not eat, drink,

LIGHT SENSITIVE CHEMICALS

- Light causes degradation, forming new chemicals or causing pressure build-up
- Examples include Bromine, Mercuric Salts, Potassium Ferricyanide, and Sodium Iodide

MERCURY

- Use non-mercury thermometers
- Mercury exposure damages every system in the body
- Wearing nitrile gloves, splash goggles and an impervious apron, seal a broken mercury thermometer in a container and call EH&S for pickup

NITRIC ACID

- Highly corrosive and a strong oxidizer
- Store separately from other chemicals or in secondary containment

P-

- Exposure frequency
- Exposure duration

Emergency Response: Accidents

If there is an emergency, call 911 or University Police. Be prepared to give detailed information about your location.

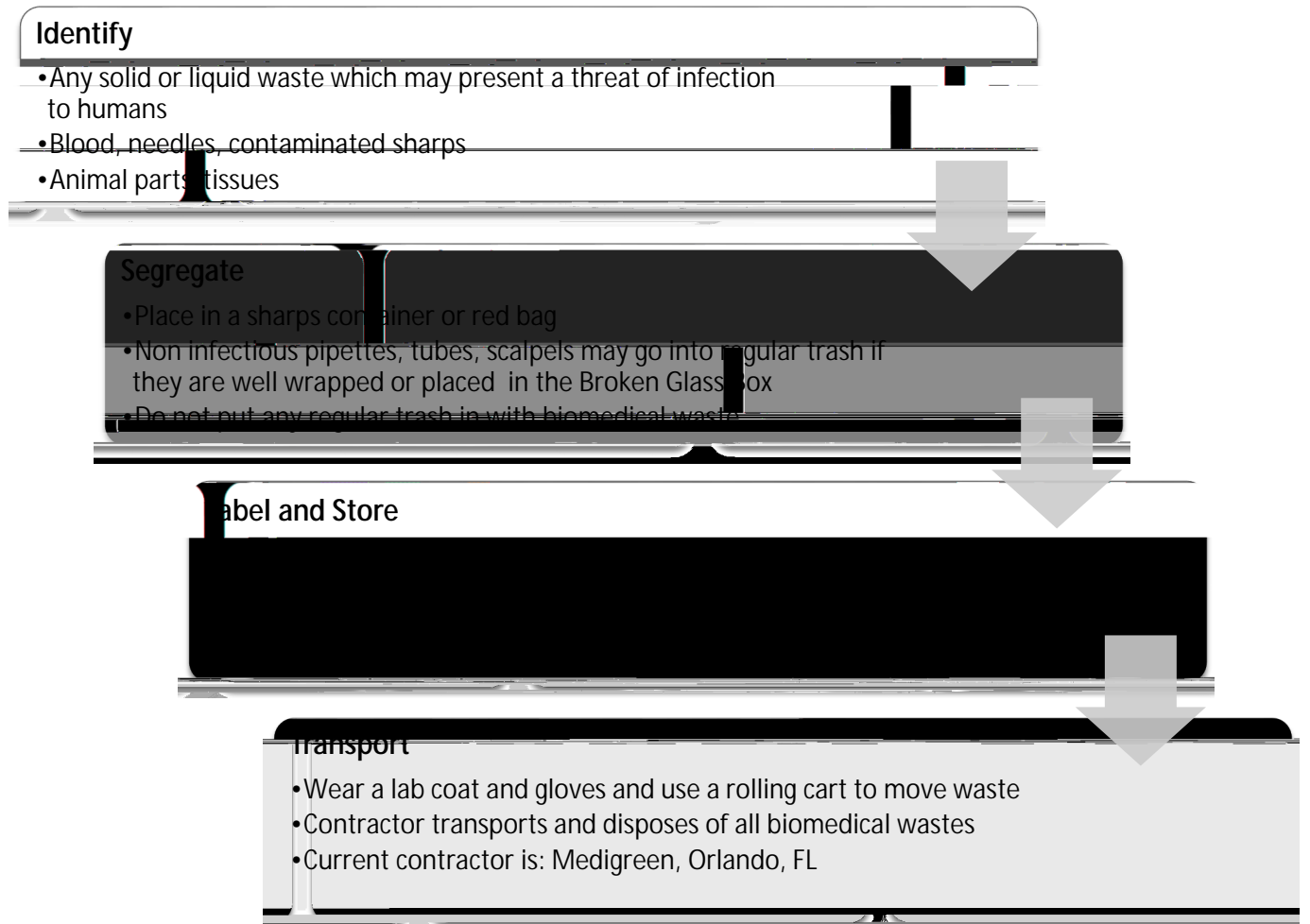
EYEWASH

- If chemicals get into eyes, flush eyes for 15 minutes
- Lab personnel must flush eyewash weekly and keep a record
- Do not block with glassware or equipment

SHOWER

- If chemicals get onto clothes/skin, rinse for 15 minutes, removing contaminated clothing
- FM-Ops flushes quarterly and performs maintenance inspection annually during one of the quarterly flush

Figure 4: Biomedical Waste Handling



References

provides the requirements for the proper management of biomedical waste at USF <http://www.usf.edu/administrative-services/environmental-health-safety/documents/bmwplannov2016.pdf>

is a broad outline of chemical safety procedures and must be available to all Principal Investigators, students, lab workers, and volunteers <https://www.usf.edu/administrative-services/environmental-health-safety/documents/chemical-hygiene-plan.pdf>

NIOSH (2005), Cincinnati, OH: Department of Health and Human Services, Centers for Disease Control and Prevention, National Institute for Occupational Safety and Health, DHHS (NIOSH) Publication No. 2005–139. <http://www.cdc.gov/niosh/docs/2005-139/pdfs/2005-139.pdf>

, 29 CFR Part 1910
http://www.osha.gov/pls/oshaweb/owastand.display_standard_group?p_toc_level=1&p_part_number=1910

collects anonymous reporting of activities that may involve misconduct, unsafe conditions, or other violations of USF System policies <https://secure.ethicspoint.com/domain/media/en/gui/14773/index.html>

outlines the regulations and procedures governing the accumulation and management of hazardous waste [http://pink.cmc.com/1\(t\)-3.8\(s\)et586120Td.1\(r\)-1.8\(t\)0.7](http://pink.cmc.com/1(t)-3.8(s)et586120Td.1(r)-1.8(t)0.7)

