Saint Louis University
Health Exposures and Reporting
## Exposure Routes

<table>
<thead>
<tr>
<th>Route</th>
<th>Cause</th>
<th>Immediate Action</th>
<th>Prevention</th>
</tr>
</thead>
<tbody>
<tr>
<td>Inhalation (Breathe in a hazard)</td>
<td>Exposure to vapors, mists, fumes, aerosols, dusts.</td>
<td>Move to fresh air.</td>
<td>Use a chemical fume hood or BSC. Proper PPE.</td>
</tr>
<tr>
<td>Ingestion (Swallow a hazard)</td>
<td>Improperly stored/handled items. Inadequate hand washing.</td>
<td>Seek medical attention.</td>
<td>Proper hand washing and PPE. Store food and drinks outside of lab.</td>
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<tr>
<td>Injection (Contaminated object breaks the skin)</td>
<td>Needles, broken glass, animal bites/scratches.</td>
<td>Wash affected areas.</td>
<td>Use sharps and broken glass containers. Proper PPE.</td>
</tr>
<tr>
<td>Absorption through skin and eyes</td>
<td>Improperly stored/handled items. Splashes or spills.</td>
<td>Wash affected areas.</td>
<td>Proper PPE. Safe storage of hazardous materials.</td>
</tr>
</tbody>
</table>
Chemical Hazards

Exposure to certain chemicals can cause acute and/or chronic health effects.

Most chemical exposures can be prevented by:

- Using a chemical fume hood
- Wearing appropriate PPE
- Properly storing and segregating hazardous chemicals
- Following lab safety procedures

Ensure safety shower is available and eye wash is flushed weekly for use in case of a chemical exposure.
Biological Hazards

Laboratory Acquired Infections
- Virus, bacteria, parasites, mold, fungi
- Acquired from lab specimens, blood, or other body fluids
- Most are acquired via inhalation

Safe Work Practices and Procedures
- Biological Safety Cabinet/Engineering Controls
- PPE
- Sharps Containers
- Proper biohazardous waste handling
  - Solid waste can be autoclaved or disposed of using Stericycle biohazard waste bags/boxes.
  - Liquid waste decontaminated with 10% final bleach concentration.
Radiation Hazards

Radiation exposure can be reduced by using appropriate shielding and PPE, minimizing time working with radiation, and increasing distance from radioactive materials.

Radiation Dosimeters (Badges)

- Personnel using high energy beta emitters (e.g., P-32) or gamma/x-ray emitters (e.g., I-125) are monitored for exposure using whole body radiation dosimeters and ring dosimeters (if necessary).
- [Dosimeter application](#)
Physical Hazards

More likely to result in sudden injury and generally involve a rapid release of energy.

- Fire
- Explosive materials
- Compressed gases
- Extreme temperatures
- Radiation
- Slips, trips, and falls
- Electrical hazards

General awareness and good housekeeping practices can help prevent injury.
Occupational Health Program Services

Available for all laboratory and animal research personnel.

Assists with:

- Medical clearance
- Vaccination review
- Respirator fit testing

Provides confidential assistance for:

- Laboratory animal allergies
- Pregnancy
- Immunocompromised individuals
Occupational Health Program Contact Information

Occupational Health Program Manager

- Steven Cummings, MD
- steven.cummings@health.slu.edu
- Doisy Hall, R311
- (314)977-7026

Please Note: The OHP office is staffed part time and does not provide injury care.
Injury/Illness Reporting

Following an injury or illness, laboratory or animal facility personnel should:

1. Report to supervisor
2. Complete Employee Report
3. Seek treatment
   a. ABSL-3/BSL-3 Incidents and Emergencies
      i. SSM Health Saint Louis University Hospital Emergency Department
   b. Other Work-Related Injuries
      i. Concentra - 3100 Market Street; phone (314)421-2557
         • During normal business hours, 8:00 AM - 5:00 PM
      ii. SSM Health Saint Louis University Hospital Emergency Department
         • After hours
Injury and Illness Reporting Flowchart

I am a SLU...

Employee in a lab or animal facility
1. Report to supervisor
2. Complete Employee Report
3. Seek treatment at Concentra Urgent care

Student
In a teaching lab for a grade
1. Report to TA/Lab Coordinator
2. Seek treatment at Student Health

In a research lab
1. Report to supervisor
2. Complete Employee Report
3. Seek treatment at Concentra Urgent care

All emergencies, after-hours or ABSL-3/BSL-3 incidents should report directly to the SSM Health Saint Louis University Hospital Emergency Department

Environmental Health and Safety  ehs@slu.edu  slu.edu/ehs
Employee Records

- You have a right to access your employee exposure and employee medical records.
- How do I obtain a copy of my employee medical records?
  a. Provide a written request to Saint Louis University Risk Management
- How do I obtain a copy of my radiation dosimetry records?
  a. Provide a written request to Saint Louis University Environmental Health and Safety
- More information is available [here](#).
Summary

Contact ehs@slu.edu or steven.cummings@health.slu.edu with any questions.

Please complete the Safety Awareness Quiz on Health Exposures and Reporting by October 31st, 2023.