Everything around us is made of chemical elements. For example, water is \( \text{H}_2\text{O} \) and salt is sodium chloride, \( \text{NaCl} \). However, some chemicals are hazardous and therefore present a health hazard if handled improperly. The Occupational Safety and Health Administration (OSHA) regulates hazardous chemical usage to prevent injuries to employees.

The most common injuries from hazardous chemicals are burns to the eyes and skin. Chemical health hazards can also come from inhaling a gas, mist, or dry particles suspended in the air.

This fact sheet provides general tips about chemical safety on and off campus.

If you have any questions, please contact the Environmental Health and Safety Office at 704-687-1111 or EHSoffice@uncc.edu.

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**Chemical Safety**

**Chemical Safety On Campus**

- The Environmental Health and Safety (EHS) office provides safety services to assist the campus community with managing chemicals on campus. In addition, the Hazard Communication and Laboratory Chemical Hygiene Plan provides specific OSHA information regarding how to use chemicals safely on campus. The minimum items to address include:
  - Following all manufacture guidelines and procedures.
  - Order small quantities of hazardous chemicals.
  - Ensure all employees have completed Hazard Communication and/or Laboratory Chemical Hygiene training.
  - Make sure all containers are properly labeled.
  - Ensure Safety Data Sheets (SDS) are accessible for all chemicals.
  - Ensure the personal protective equipment (PPE) is worn as outlined on the SDS.
  - Store chemicals in approved containers and locations.
  - Separate incompatible chemicals.
  - Ensure emergency equipment such as spill kits are accessible.
- The EHS office will inspect areas for chemical safety regulatory compliance.

**Chemical Safety Off Campus**

- Never mix chemicals. For example, bleach and ammonia should never be mixed, because they release a toxic chloramine gas. Exposure to high concentrations of this gas could be fatal.
- Properly use, handle, and dispose of all chemicals in accordance with the manufacture guidelines.
- Store chemicals away from children.
- Do not eat or drink where chemicals are handled, processed or stored.
- After using chemicals, wash hands carefully.
- Make sure all chemical containers are labeled with chemical name and do not use chemicals if the label is missing.
- Always wear safety protective equipment.

**Group Discussion Topics**

- Does anyone know someone who suffered an injury due to chemicals?
- Has anyone previously reported or corrected a hazard related to chemicals?
- Are chemicals regulated on campus?
- What are some safety precautions when using chemicals off campus?