

The purpose of this newsletter is to unite all the UNBC campus's (Prince George, Prince Rupert, Terrace, Gitwinksihlkw, Quesnel, Likely, Ft St John) and grow our UNBC Community's Safety Culture together by regularly communicating important Safety information. UNBC's mission is to Ignite, Inspire, and Lead change.

Welcome to the July edition of our Safety Newsletter! This month, we will discuss the critical aspects of managing Hazardous Materials in the workplace and the regulatory bodies that govern the products. What effects Hazardous Materials have on the body and the importance of occupational hygiene processes for exposure prevention.



**Hazardous materials** are substances that can pose a significant risk to health, safety, or property. Here are a few general Hazardous Materials categories:

- Chemical Hazards: Substances like acids, solvents, and heavy metals that can cause burns, poisoning, or other health issues.
- Biological Hazards: Pathogens such as bacteria, viruses, and fungi that can lead to infections and diseases.
- Radiological Hazards: Materials that emit ionizing radiation, which can cause cancer and other health problems.
- Physical Hazards: Items like asbestos or silica dust that can cause respiratory issues and other health problems.

Hazardous materials and occupational hygiene are governed by <u>WorkSafeBC</u> along with several other regulatory bodies and organizations to ensure workplace safety. Together these regulations ensure the safe handling, disposal, and management of hazardous materials to protect workers, the environment and public health.

Through WHMIS, **WorkSafeBC** ensures that workers are informed about the hazards associated with materials they may encounter and that proper safety protocols are followed. WHMIS stands for the <u>Workplace Hazardous Materials</u> <u>Information System (WHMIS) - Canada.ca</u> which is a comprehensive system for providing health and safety information on hazardous materials used in Canadian workplaces. It includes classification, labeling, and safety data sheets (SDS). Workers that use or could be exposed to these products need to be educated and trained in WHMIS to protect themselves and their colleagues from hazardous products.

**<u>CCOHS: Globally Harmonized System (GHS)</u>**: WHMIS is aligned with the GHS, which standardizes the classification and labeling of chemicals internationally.

Additionally, <u>CCOHS: Transportation of Dangerous Goods (TDG) - Overview (Road)</u> training in British Columbia is designed to educate individuals on the safe handling, transportation, and storage of dangerous goods. This training is essential for anyone involved in shipping, receiving, transporting, or handling hazardous materials.

Environmental Management Act (EMA): Legislation and protocols - Province of British Columbia: his act prohibits the introduction of waste into the environment in a way that will cause pollution, except in accordance with a regulation, permit, approval, or code of practice issued under the Act.

#### Hazardous Material handling at UNBC:

UNBC supports numerous teaching, research, and analytical labs. These laboratories purchase and utilize hazardous materials, following occupational hygiene guidelines for the safe use of each product. We then arrange for the safe disposal of hazardous material waste through Chemstores.

#### Guidelines for Hazardous Material waste disposal / collection at Chemstores:

- Broken glass must be in puncture proof containers or cardboard glass waste boxes,
- Needles and scalpels must be in dedicated sharps containers,
- · All chemical wastes must be labelled,
- Liquid chemical wastes must have an appropriate liquid waste tag and be sealed in an appropriate container with about 3" of head space for expansion,
- · Wastes cannot be left unattended outside of Chemstores,
- · Biohazardous materials must be placed in biohazardous waste bag or pail.

## **Occupational Hygiene:**

Occupational hygiene is the science of anticipating, recognizing, evaluating, and controlling the hazardous conditions that may cause workers' injury or illness. Occupational Hygiene processes are as follows:

- Hazard Identification: Determining the presence of hazardous materials and assessing the risk they pose.
- Exposure Assessment: Measuring the extent of workers' exposure to hazardous materials and comparing it to established safety standards.
- **Control Measures:** Implementing strategies to reduce or eliminate exposure to hazards. This can include engineering controls (e.g., ventilation systems), administrative controls (e.g., training and procedures), and personal protective equipment (PPE) (e.g., gloves, masks) or other specialized PPE.

## **Laboratory Safety Process:**

Safety is one of UNBC's operational values. UNBC's laboratory safety program ensures that lab users can safely and effectively pursue research and teaching regimens. The following safety manuals describe our laboratory safety process for faculty, staff and students:

- · Chemical Safety Manual,
- Biosafety Manual
- Radiation Safety Manual

For any chemical concerns and or disposal questions here at the main campus, contact Chemstores **Room 4-203** or call Jordan Wilbey at 250-960-6472, email: **chemicalsafety@unbc.ca** 

# **Positive Observations**

Promoting a Safety Conscious Culture for our UNBC Community

The scaffolding unit has I.D. tags verifying it has had an inspection prior to use verifying the scaffolding unit is in good condition to use.

The area directly below was also caution taped off to create a work zone barrier.



The Chemstores office has various WHMIS tags and labels for product identifiers readily available for use.



If you see any positive safety initiatives, please photograph them, and send the pictures to safety@unbc.ca





# Working together for safety

We would like to thank everyone for participating in our growing Safety Community at UNBC!