This is the last Safety Talk on Colby’s HazCom program. The intent of this Safety Talk is to familiarize yourself with basic chemical hazards and the terminology found in every workplace. Finally, we will discuss some of the specific chemical hazards you have to contend with and protect yourself from as part of your job.

**Examples of Health Hazards:**
- Corrosives - cause tissue damage and burns on contact with the skin and eyes
- Irritants - cause intense redness or swelling of the skin or eyes on contact but with no permanent tissue damage
- Sensitizers - cause an allergic skin or lung reaction
- Carcinogens - may cause cancer
- Mutagens - may cause mutations or birth defects
- Target Organ Toxicants - impacts specific organ(s)
- Aspirants - enter the lungs and cause damage
- Asphyxiants - cause suffocation

**Examples of Physical Hazards:**
- Explosives - react violently
- Flammable gases, solids, and liquids - obvious fire hazards
- Oxidizing liquids, solids and gases - adds to combustion
- Gases under pressure - may react violently and is rapidly released
- Pyrophoric liquids or solids - spontaneously combust
- Substances that react with water emit flammable gases
- Organic peroxides - can act as an oxidizer in a fire
- Substances corrosive to metal

**Primary Routes of Exposure:**
- Ingestion
- Skin Contact
- Absorption through the skin
- Inhalation (breathing)
Common Chemicals used by Custodians:

- Strong basic floor strippers (Sodium Hydroxide)
- Acid (HCl) based toilet cleaners
- Solvent aerosol cleaners and glass cleaning sprays
- Industrial Detergents (TSP)
- Bleach
- Ammonia based cleaners
- More, more, more?

Primary Hazards Related to These Products:

**Corrosive Bases:** Custodians use a variety of sodium hydroxide and amine based floor and base strippers. These are on the basic end of pH scale and can cause significant chemical burns if left on skin. Always wear gloves and safety glasses when using these products.

**Corrosive Acids:** The primary ingredient in the toilet bowl cleaner is hydrochloric acid. It is capable of seriously damaging your eyes and casing skin burns.

**Eye Irritants:** All of these products are considered eye irritants. If you get these products in your eyes, flush with water for 15 minutes and tell your supervisor to arrange for additional medical treatment if needed.

**Skin Irritants:** Long term contact with many of these products can lead to skin irritation. Wear gloves and wash your hands frequently to prevent this.

**Compatibility Issues:** Mixing ammonia with bleach forms toxic chloramine vapor and in a confined area (bathroom), this can be deadly. In addition, never mix bleach with strong acids (toilet bowl cleaner) because that will form chlorine gas.
Review / Discussion Questions:

1. Were any common products not included? What are some of the hazards of these products?
2. What do you think is the primary route of chemical exposure for custodians?
3. In general, what in your opinion is the most hazardous chemical custodians frequently work with? Why?

Questions, concerns or comments contact the EHS Director at extension 5504.