Chemical Safety Sheet

Safety First!

- Do not use chemically contaminated items (gloves, containers, shoes, coveralls, etc.) in your display/presentation.
- Wear proper protective clothing and gear appropriate for the chemicals displayed.
- Do not use open or partial containers of chemicals for your presentation.

Break the Ice

- Tell participants about yourself and your experiences working with chemicals.
- Ask questions to encourage children to be more involved!
- For example:
    - Name a chemical that can be found in your home or farm. What are chemicals used for?
    - Do you know anyone who has been poisoned or become sick from chemicals?

Take-Home Messages

- Emphasize the danger of chemicals and how to avoid contact.
- Proper clothing and gear are very important for handling chemicals.
- For younger children, stress the importance of staying away from chemicals and contaminated clothing and gear.
- Explain each of the symbols that can be found on chemical containers and what they mean.
    - **Danger! Poison!** Skull/Crossbones – Exposure by oral, skin absorption or inhalation is highly toxic. A very small amount (single drop to a teaspoon) can be fatal.
    - **Warning!** – Exposure by oral, skin or inhalation is moderately toxic and can cause slight skin/eye irritation. Moderate amount (one teaspoon to one tablespoon) can be fatal.
    - **Caution!** – Exposure by oral, skin absorption or inhalation is low toxicity. Moderate amount (one tablespoon to one cup) can be fatal.

- Discuss the different routes of exposure.
    - **Skin** – Chemicals can get on the skin from spills, touching or wiping the skin with contaminated clothing or walking in a recently sprayed field.
    - **Oral** – Ingestion through the mouth can occur by not washing hands before eating, or by putting contaminated objects in the mouth or by accidentally drinking chemicals.
    - **Inhalation** – Chemicals can get in the lungs by breathing in fumes or dust.

Interactive Activities

Wear the Gear!

- Review the proper protective gear when working with chemicals. Make this interactive by having a box with a mixture of clothing that is both appropriate (long-sleeved shirt, long pants, approved chemical suit, hard hat, proper gloves, face shield, goggles) and inappropriate (shorts, sandals, tank top, gloves with holes, etc.)
- Instruct participants to go through the items in the box and pick out the appropriate clothing/ protective gear. Ask a volunteer to dress up in the appropriate gear and a volunteer to dress up in inappropriate gear. You will get a good comparison of appropriate versus non-appropriate clothing and kids will have fun with the hands-on approach.
- Discuss the differences and the importance of staying away from chemicals or wearing proper gear when working with chemicals.

Chemical Look-Alikes

- Many food/drinks that we consume can look very similar to harmful substances. This activity will demonstrate just how easy it can be for young children to confuse a safe substance with a harmful substance. Ensure container lids are **securely** fastened using crazy glue or hot glue. Hold up two look-alikes and have the children try to guess what each one is. Stress the message: "Do not putting anything in your mouth unless an adult tells you it is okay."
- This is also a great chance to discuss the importance of not putting chemicals in different containers unless they are well labelled. Give the message: "If you find a harmful product, tell an adult."
- *Possible look-alikes*
    - Nerd candies – fertilizer
    - Mountain Dew pop – Mr. Clean
    - Blue Kool Aid – Windex
    - Parmesan cheese container – Comet cleaner
    - Blue Gatorade – windshield washer fluid
    - Water – rubbing alcohol
    - Toothpaste – kitchen/tile caulking
    - Yellow Gatorade – antifreeze
    - Listerine – turpentine
    - Orange pop – Treflan herbicide