



ACTIVITY DESCRIPTION:

Key Messages:

1. Make children aware of chemical hazards around the home
2. The three methods of human exposure to pesticides include oral, inhalation and absorption
3. Pesticides can damage the natural ecology of a lawn and are unnecessary
4. Some types of pesticides applied to lawns can end up in natural aquatic ecosystems

MATERIALS

- 2 pieces of sod (cut to two different heights)
- Specially designed table for holding sod and channel for water
- Watering can
- Water
- Kool-aid crystals
- Criteria for Hazard Labeling poster
- Flash cards for hazard symbols exercise
- Sample pesticide container (preferably empty)
- Variety of plastic insects (both beneficial and pests) or
(if available) Live ladybugs, preying mantis and earth worms
- 1 bag of Grass seed
- One pesticide notification sign

Make sure you have all items before the students arrive!

BEGIN THE ACTIVITY**What will I be doing?**

You may be assisting the York Region Community and Health Services Dept. representative running the activity outlined below or you may be performing the activity with a fellow volunteer.

To prepare display (before children arrive):

1. Ensure that the table is steady and that there is clean sod on top
2. Ensure that the pail is hanging from the table ready to catch any water added
3. Ensure you have plenty of colourful drink crystals
4. Ensure you have a selection of plastic insects for display purposes
5. Ensure you have a source of water (watering can)
6. Place insects under a slice of sod

Gather everyone around the display. Show them the sod and ask them to run their hands over the grass. *What kinds of activities do you do on your lawns? What do you think makes a nice lawn? Do you like dandelions? Insects?*

Can you name a few pests? Ants, bacteria, cockroaches, wasps, mosquitoes, rats, etc.

Does anyone know what a beneficial backyard insect is? These are insects that help keep our lawns and gardens healthy by preying on damaging insects like grubs and aphids, or by aerating our soil and pollinating our plants. Can you name any beneficial backyard insects? Bees, ladybugs, earth worms, butterflies, bacteria, nematodes etc. Lift slice of sod and show children the amazing diversity of beneficial insects and show the earth worms in the container.

A pesticide is any substance that is used to repel, destroy or prevent the development of a pest. Pests are living organisms that can damage buildings, plants and animals.

Can you name any pesticides? Weed and feed, Killex, ant baits, mouse poison, fly tape, insect repellent, chlorine in drinking water, etc.

Have any of you ever seen your parents or anyone else add pesticides to their lawn? Hold up the Pesticide warning sign. Have any of you seen a sign like this? Do they know what the sign means?

Now broaden the scope and refer to “Criteria for Hazard Labeling” poster and quickly run through the meaning of each hazard symbol. *Hazardous chemicals can be absorbed into our bodies orally, inhaled or through our skin. It is very dangerous to play with containers that have one of the hazard symbols on the label. What would you do if you were accidentally exposed to a hazardous chemical? Make sure the Poison Control Centre is called and/or rush to the hospital.*

Now, we are going to see what happens when we use pesticides on our lawns! Sprinkle kool-aid crystals over the “down stream” section of sod. These crystals will represent our pesticide. Move the beneficial insects off the treated side. When we put pesticides on our lawns we kill off the beneficial organisms. They would much prefer to be on the safer pesticide-free side. Losing all of the beneficial insects will harm our lawn in the long run and disrupt the natural ecosystem.

Now, give a watering can to a volunteer and let them water both sections of sod. *See what happens when we put water on a lawn with pesticides? This is called runoff and it can run into our streams and rivers contaminating the water and habitat of many fishes and aquatic insects. Explain that pesticide residues have been found in our watercourses. Explain that we are overusing and misusing pesticides in our communities just to make our lawns look green. Remove the fish from the channel. Healthy rivers, streams and lakes are not only important for fishing and swimming. What else are they important for? Where does our water come from? That’s right! All living creatures depend on clean water for survival, including us!*

What can we do?

1. Keeping our grass long is very important to prevent runoff.
2. We should never touch any container with a hazard symbol on it like pesticides and other hazardous chemicals.
3. Pesticides applied to a lawn can hurt the natural beneficial insect population.
4. Pesticides applied to a lawn can wash off into streams and rivers contaminating ecosystems.
5. A healthy lawn doesn’t need pesticides and is a safer place to play!

WHAT HAVE WE LEARNED?

Not to take water for granted and not to waste water! It can be used for more important things!

Updated Jan. 9, 2009