How pesticides get into our bodies

Farmers and farmworkers put pesticides on plants to kill bugs and weeds. Some of the pesticides get carried by the wind into our backyards or carried into our homes on our clothes and shoes or they come in on fruits and vegetables that we buy at the store. Sometimes we use pesticides in our homes. When we touch things that have pesticides on them, some of the pesticides stick to our hands. We cannot see the pesticides. When children play outside or play with toys inside, they can get pesticides on their hands. When you eat with pesticides on your hands, they can be ingested with your food, especially for children who use their hands to eat. This is one way pesticides get into our bodies.

This activity can show participants how both pesticides and germs can travel on hands and how effective handwashing can remove them, especially important before we eat.

Activity

Materials

- Ultraviolet light
- Powder or gel that simulates the presence of germs/pesticides on participants' hands and other surfaces.. These products are commercially available:
    - Glo Germ (http://www.glogerm.com/)
    - Germ Juice https://www.amazon.com/s?k=GermJuice
    - GlitterBug (Brevis) https://www.brevis.com/
- Sink
- Towels

At the beginning of the training, apply the lotion or powder to a door knob or other surface that will be touched by the participants. Fake produce with powder or lotion applied can be passed around. Powder can be sprinkled on the floor at the entry, showing how we walk pesticides into the house on our shoes.

When the activity begins, have a volunteer use the black light to show the powder or lotion "pesticide residue" on hands, the produce, surfaces touched by hands, the floor and on shoes. Talk about how children spend time playing on the floor where they can pick up pesticides on their hands. Removing shoes at the door helps to reduce pesticides on indoor floors and carpeting.

Have participants wash their hands using the CDC recommended steps:

1. **Wet** your hands with clean, running water (warm or cold), turn off the tap, and apply soap.
2. **Lather** your hands by rubbing them together with the soap. Lather the backs of your hands, between your fingers, and under your nails.
3. **Scrub** your hands **for at least 20 seconds**. Need a timer? Hum the "Happy Birthday" song from beginning to end twice.
4. **Rinse** your hands well under clean, running water.
5. **Dry** your hands using a clean towel or an air dryer.
6. After washing hands, use the ultraviolet light again to see if the handwashing was done correctly. There should be no residue visible on hands.

Choosing safer products: How to read a Safety Data Sheet

Many products we use in our homes contain toxic chemicals. One way to find safer products is to use products that have been certified as safer by an independent, third party organization.

Another way to look at the safety of products is to read the Safety Data Sheet for the product.

Activity

Provide participants with two Safety Data Sheets for different products that do the same thing. In this example we are using two kinds of disinfectant.

The SDS for Clorox bleach in Spanish is here and English is here.

The SDS for Oxivir TB in Spanish is here and English is here.

Have participants read the SDSs and fill out this form:

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Exercise on What's in Products

How do you understand if the product you are using is more or less toxic? The first step is to review the Safety Data Sheet.

Take a moment to review both of the Safety Data Sheets you were given. Then compare them using the questions in the chart. Which one would you prefer to use?

	Chlorox Bleach	Oxivir TB
Short term effects		
Long term effects		
What parts of the body it can affect		
What to do for first aid		
Recommended Personal Protective Equipment		
What to Keep this product away from		
What to do if there is an emergency spill		