SUPERVISOR INSTRUCTIONS:

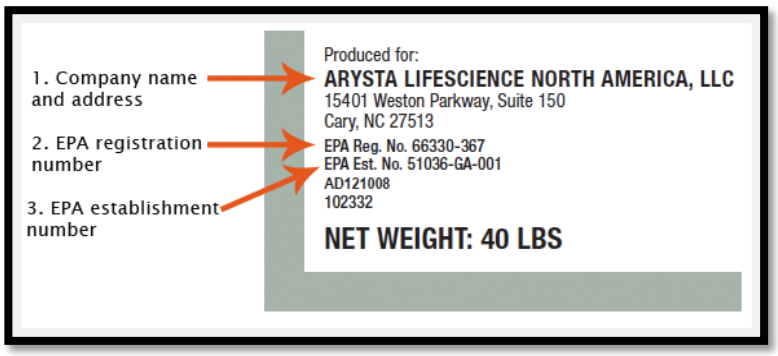
- *Use toolbox trainings to encourage safety/environmental discussions during monthly meetings with employees*.
- *Campus Services' employees should maintain the employee sign-in sheet in their department's safety/environmental compliance binder as a record of training. All other groups should maintain a record of training in accordance with their Division's training procedures*.

When most people think of pesticides, they usually think about a chemical that will kill weeds and insects. According to the Environmental Protection Agency (EPA), a pesticide is any chemical that will kill a "pest". Pests include weeds and insects, but also include bacteria, fungi, viruses, parasites, prions, etc.

Pesticides are regulated by the EPA. Additionally, manufacturers must register their pesticide products with the EPA. The EPA regulates pesticide manufacturing, use, disposal, and worker safety. They also regulate the maximum amount of pesticide allowed in our food and drinks.

Identifying Pesticides and Using Labeling

The easiest way to identify a pesticide is by the label. Pesticides are identified with an EPA Registration Number, often abbreviated as EPA Reg. No.



Pesticide containers have very strict labeling requirements which are regulated by the EPA. It is important to note that the labeling for pesticides is different from the labeling required by OSHA. Pesticides are exempt from the Hazard Communication Standard.

You must read the pesticide label before using a pesticide.

Pesticide labels include the following information:

- Product Name
- Manufacturer
- EPA Registration Number
- Ingredients

- Precautionary Statements & Hazards
- Use classifications (what pests can be controlled with this pesticide)
- Directions for use
- Personal Protection Equipment

Use Classification and Directions for Use

When pesticides are registered with the EPA, they are classified by their use. Some pesticides may be effective for killing weeds, while others are effective for killing bacteria. The label has instructions to inform the user of the type of pest(s) controlled with that particular pesticide. For example, Roundup™ is an herbicide used for weed control, while Virkon™ is a disinfectant used to control viruses, fungi and bacteria.

A pesticide must be used for the same purpose for which it is registered with the EPA. A pesticide that is registered as an herbicide (weed killer) cannot be used as a disinfectant. Pesticides must also be used according to the Directions for Use on the label.

It is a violation of EPA regulations to use any pesticide product in a way that is <u>not</u> consistent with the labeling.

As an example, a portion of the Directions for Use on the label of a Clorox® Bleach bottle is found below.

DIRECTIONS FOR USE

It is a violation of Federal law to use this product in a manner inconsistent with its labeling.

	Amount of this product	Amount water	Instructions
FOR SANITIZING			
Work Surfaces	1 Tbsp	1 Gallon	Wash, rinse, wipe surface area with bleach solution for at least 1 minute, let air dry.
Dishes, Glassware, Utensils	1 Tbsp	1 Gallon	Wash and rinse. After washing, soak for at least 1 minute in bleach solution, drain and air dry.
Refrigerators, Freezers	1 Tbsp	1 Gallon	Wash, rinse, wipe surface area with bleach solution for at least 1 minute, let air dry.
Mops, Brushes, Sponges, Brooms and Rags	3/4 Cup (6 oz)	1 Gallon	Pre-wash items, then soak them in bleach solution for at least 1 minute. Rinse well and air dry.
FOR DISINFECTING			
Floors, Walls, Vinyl, Tiles	3/4 Cup (6 oz)	1 Gallon	Pre-wash surface, mop or wipe with bleach solution. Allow solution to contact surface for at least 10 minutes. Rinse well and air dry.
Bathtubs, Showers and Kitchen Sinks	3/4 Cup (6 oz)	1 Gallon	Pre-wash surface[. and] Wipe with bleach solution. Allow solution to contact surface for at least 10 minutes. Rinse well and air dry.
Laundry	1 Cup	Standard Washer	Use 1 1/2 cups bleach for extra large washers -or- heavily soiled loads. Use a detergent.

Pesticide Application at Emory

Interior Application:
Emory University uses contractors to apply pesticides inside of our buildings for the control of pests such as insects and rodents. Building and Residential Services uses a number of disinfectants to clean the buildings on campus. Maintenance personnel may occasionally use items like wasp killer on an as needed basis.

Exterior Application:
Emory has staff within the Roads and Grounds department that applies pesticides to maintain the grounds of our University. There are also licensed contractors that occasionally apply pesticides outside. These applicators are either licensed by the State of Georgia to apply pesticides or are supervised by a licensed applicator.

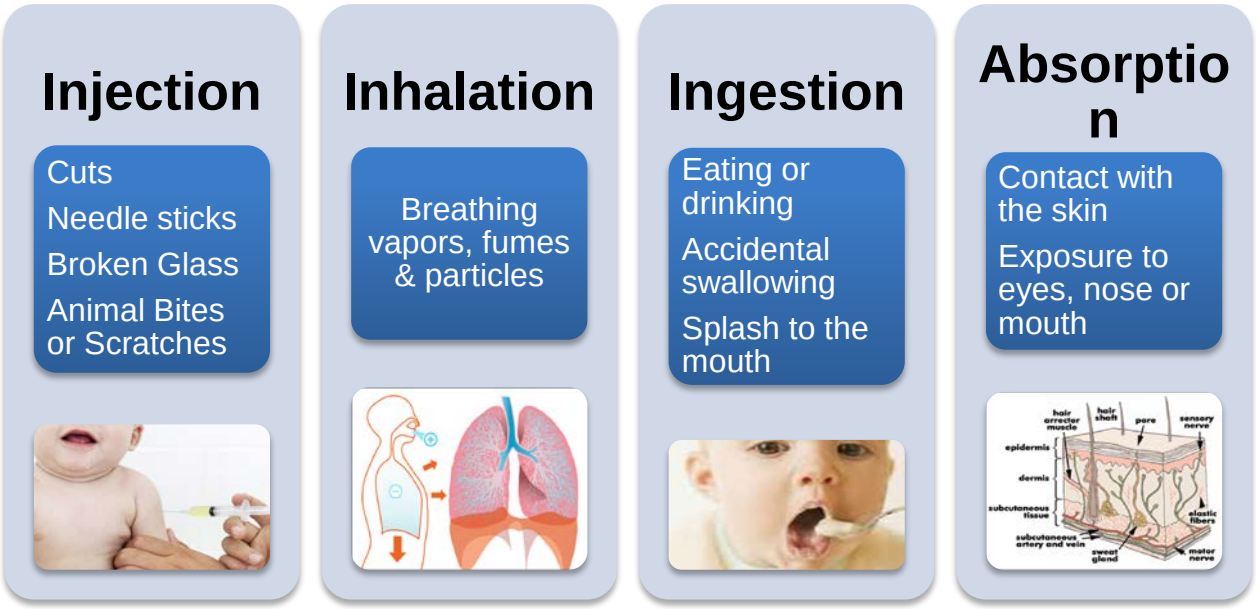
Other than using certain disinfectants to clean your desk (i.e. Lysol® or Clorox® wipes), Emory employees should not bring pesticide products to work from their homes. Non-maintenance personnel should not order or use pesticides to control pests such as insects and rodents within our buildings. If you have a pest problem, Campus Services Customer Service should be contacted and a work order submitted to ensure that pests within our buildings are appropriately controlled.

Hazards, Routes of Exposure and Precautions

Hazards
Pesticides pose certain risks to humans and are classified by the following signal words that are found on pesticide labels. Under each signal word are examples of phrases found on pesticide labels that correspond to the hazard.

Danger	Warning	Caution
Highly toxic	Moderately toxic	Slightly toxic
Fatal if swallowed inhaled or absorbed through skin	May be fatal is swallowed, inhaled or absorbed through skin	Harmful if swallowed, inhaled or absorbed through skin
Corrosive, causes eye and skin damage or skin irritation	Causes eye and skin irritation	

Routes of Exposure
Pesticides can enter the human body via the following routes of exposure:



Precautions
Before using a pesticide product, you should read the label. The label contains information about how to protect yourself by using personal protective equipment such as gloves, goggles, chemical aprons, etc. The pesticide label also details how to respond in the event of exposure to the pesticide.

Questions for Discussion

1) Which of the following is a pest?
   - Bacteria
   - Fungus
   - Rodents
   - Weeds
   - **All of the above**

2) What number identifies a product that is registered as a pesticide?
   - EPA ID Number
   - **EPA Registration Number**
   - EPA Product Number
   - EPA Establishment Number

3) List the signal words found on a pesticide label from highest risk to lowest risk.
   Danger, Warning and Caution

4) Discuss what types of personal protective equipment can help prevent exposure through the route of absorption.
   Possible responses include: goggles, safety glasses, gloves, long-sleeves, long pants, close-toed shoes, chemical aprons, Tyvek suits, etc.