Laws, Pesticide Safety & Personal Protective Equipment

Limited Commercial Landscape Maintenance (LCLM)
Pesticide Applicator Certification Workshop

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Who’s in charge?

- The Florida Department of Agriculture and Consumer Services (FDACS)
- The Division of Agricultural Environmental Services (AES)
- The University of Florida, Institute of Food and Agricultural Sciences (UF/IFAS)

- Approved by the U.S. Environmental Protection Agency (EPA)
Why have a license?

• Federal law requires all individual who use restricted use pesticides to be certified or work under the direct supervision of a certified applicator

• State laws and regulations in Florida impose additional certification and license requirements for certain types of pesticide applications
Structural Pest Control and Commercial Lawn & Ornamental Pest Control

• Buildings, structures or lawns & plant beds associated with a building
  ▫ All persons who apply ANY pesticide (either restricted use or general use) inside or to any part of a building or structure, or to ornamentals or turf associated with a building, including lawns and plant beds, must have a pesticide applicator certification
Limited Lawn & Ornamental Certification

- Individuals who apply pesticides as a government employee, or as a private property owner, or an employee making applications to private property owned by the employer
Limited Commercial Landscape Maintenance Certification

- For landscape maintenance personnel applying herbicides for controlling weeds in plant beds and to perform integrated pest management on ornamental plants using the following materials:
  - Herbicides, Insecticides and fungicides having the signal word “caution” on the label
  - You are not allowed to supervise others; everyone applying pesticides must be licensed
Chapter 482

- Pest Control
  - 482.156
    - Limited certification for commercial landscape maintenance personnel
  - http://www.flaes.org/
Here only

Never here

Images from UF EDIS publications
Signal Words

None
“Caution”

Okay to use

NO, Do not use
“Warning”
“Danger”
“Danger with Skull and Crossbones”
Yes, you can use these

No, you can not use these
What you can not do

• 482.156 (4) Certification under this section does not authorize:

  • (a) Application of pesticides to turf;
  • (b) Operation of a pest control business; or
  • (c) The application of pesticides by unlicensed or uncertified personnel under the supervision of the certified person.
What you have to do

• 482.156 (5) A person certified under this section shall maintain records documenting the pests and areas treated, plus the methods and materials applied for control of such pests, which records must be available for review by the department upon request.
Harmful Equation

Hazard = Toxicity x Exposure

Something to consider:

- Even if a chemical is not labeled with a strong warning disclosure and you are exposed to it for years, the hazard to your health may be just as high as if you were exposed to a highly dangerous chemical for only a few hours
What about other people?

- 482.2267
- Registry of persons requiring prior notification of the application of pesticides.

<table>
<thead>
<tr>
<th>County</th>
<th>Telephone</th>
<th>Pesticide or Class</th>
<th>Distance/Designation</th>
<th>Date Registered</th>
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<tr>
<td>Alachua</td>
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(County then names and address)
Types of Exposure

- Oral – swallowing a pesticide
- Ocular – pesticide spraying into eyes
- Inhalation – breathing in a pesticide (common in greenhouses)
- Dermal – pesticides on your skin
  - Skin is the body part mostly likely to receive exposure
  - Amount absorbed depends on:
    - Diluent used (i.e. oil soaks into the skin better than water)
    - Area of the body (genital area is the most absorbent)
    - Skin Condition – hot, sweaty, cuts
Relative absorption rates, as compared to the forearm (1.0)
Types of Harmful Effects

• Acute – illnesses/injuries usually appear within 24 hours
• Delayed – illnesses/injuries that do not appear within 24 hours
• Allergic – May affect some people while not affecting others
First Aid for Pesticide Exposure

1. Stop the source of exposure quickly

2. For pesticides in the eye: wash eye quickly, but gently for at least 15 minutes; after 5 minutes remove contact lenses and continue

3. If inhaled, get victim to fresh air or provide artificial respiration if needed

4. If swallowed or in mouth, only induce vomiting or provide water/milk if label says to do so AND only if victim is conscious

5. If on skin, remove contaminated clothing and wash with soap and water, put on clean clothes
Avoiding Heat Stress

- Drink plenty of water before, during, and after work.
- As recommended, consume 16 oz. of water per work hour.
- The more you drink, the more bathroom breaks!
- Use fans and provide shade.
- Choose PPE designed to be as cool as possible.
- Take rest breaks and schedule tasks properly.
Applying Pesticides Safely

• Wear PPE
  • Spraying a thick coat of starch on the bottom of your pants may offer some added protection and make the pants easier to clean

• Deliver pesticide to target site

• Check delivery rate and appearance of spray

• Avoid non-target organisms and surfaces

• Operate equipment according to instructions
Transporting Pesticides

• Never carry pesticides in the passenger section of your vehicle
• Never allow children or pets to ride with pesticides
• Never transport pesticides with food, clothing or other things meant to be eaten or in contact with people or animals
• Never leave your vehicle unattended
Measure correctly

- Use the correct amount
- Be careful pouring
- Try to pour at a comfortable height, near waist high
Maintain the Storage Area

- Prevent contamination
- Keep the labels legible
- Keep the containers closed
- Use the original containers
Pesticide Storage

- Secured and labeled
- Protected from weather
- Temperature control (vent fans)
- Adequate lighting
- Nonporous materials
- Prevent runoff – using collection pads
- Provide clean water
Maintain the Storage Area

- If container is damaged, use pesticide immediately at labeled site & rate
- Store volatiles separately
- Isolate waste products for disposal
- Inventory & dated (shelf life)

  • Operation Cleansweep (877) 851-5285
  • Cancelled, suspended and unusable pesticides
Personal Protective Equipment
Personal Protective Equipment

• NOTE: Shorts and T-shirts do not qualify as PPE, neither does ordinary clothing

• Minimal PPE is usually long pants, long-sleeved shirt and socks with shoes

• PPE for the same pesticide may vary depending on application site

• You are legally required to follow all personal protective equipment instructions that appear on the label!
Protecting Your Skin

• Long-sleeved shirts and long pants should be made out of sturdy material

• Fasten shirt collar completely to protect the lower neck

• Pants and shirts should be worn underneath coveralls

• Coveralls should fit loosely to provide a air layer between you and pesticide
Protecting Your Skin

- Most exposure occurs on the hands and forearms
- Chemical resistant apron can protect you and your clothing
- Plastic “safari” hats for head and neck protection are a good choice
Why protect your skin?

- It is your largest organ
- Dermal exposure is the most likely exposure you will have
- Your hands and forearms are the most likely part of your skin to be exposed
Protecting Yourself

- PPE is designed to keep pesticides off of you
- You must wear the PPE
- If you can keep the pesticides off of you and your PPE you can not be harmed by it
Protect your respiratory tract

• If needed the label will list the respirator that you need to wear

• NIOSH/MSHA approval number
Spills and Accidents
Protect yourself first

- Act fast and cautiously
- Make sure all involved have the correct PPE
- Follow the Cs
- Do not leave a spill unattended
- Report it
Protect others and the environment

- These three steps are frequently referred to as the “Three C's of spill control.
- 1. CONTROL the spill.
- 2. CONTAIN the spill.
- 3. CLEAN IT UP.
Residues or waste
• Follow label directions

• Use on listed site if at all possible

• Dispose of any material that cannot be used properly
Empty containers

• If paper make sure all product is removed
• If plastic triple rinse them and puncture
• Offer plastic containers for recycling
  some vendors may assist you in this