

### Learning Objectives

When you have completed this section, you should be able to:

- minimize the exposure of the applicator and bystanders to pesticides

### Applicator Risk

#### Pesticide Safety

The time of greatest risk of human exposure to a significant amount of pesticides is during the mixing and loading operation.

- Mixing and loading should not be done at the water's edge since spills of concentrated insecticides could enter the water.
- Mixing and loading should never be done in a boat. The boat is extremely unstable. Working with concentrated insecticide in a boat significantly increases the chance of spills, human exposure and improper measurements. Spills in these circumstances may be impossible to clean up. The spilling of concentrated insecticide into one site may have significantly more negative effects than the even application of the insecticide over a large area.
- Mixing and Loading should be done in a well ventilated area away from the water.

#### Water Safety

With work near or in an aquatic environment the potential for drowning is always present. **The applicator should never work alone.** If you are applying the insecticide from the shore or by walking through the site, the extra weight of the application equipment and the insecticide increases the risk of stumbling and falling into the water. This risk can also be increased if you are preoccupied with the application process. It may be difficult to get up after falling if you are laden with application equipment. You may strike a hard object and be knocked unconscious. If you are alone the results could be disastrous.

If you are using a boat for application, follow safe boating procedures during the application. Again do not work alone. It is not possible for one person to operate the boat and properly apply the insecticide. Examine the area before treatment. Be aware of any hazards such as rocks, submerged logs, etc. Do not overload the boat.

### **Reducing Bystander Exposure**

The application of pesticides in populated areas can concern the public. Before and during application, you should be aware of surrounding human activity at all times.

To reduce bystander exposure, you should:

- make applications, if possible, when human activity is at a minimum (e.g., after dark or early morning).
- take precautions that bystanders do not come in direct contact with the spray or applied material;
- undertake a public notification program to inform when, where and what pesticides will be applied to an area.

## Review Questions

1. Why should you not work alone?
2. Why is it important to examine the treatment area before application?
3. Why should mixing and loading never be done in a boat?

