

UF/IFAS Extension Hendry County

Author: Gene McAvoy, Extension Agent IV Emeritus

Mixing and Loading Pesticides Safely

Program ID -002846 - expires 9/14/2025

Pesticides are one of many tools available for effective protection of crops from weeds, insects, and diseases. Pesticides require special care and handling. The following article will outline safe, responsible, and effective procedures for pesticide mixing and loading that can help protect the environment, water supplies and pesticide applicators and handlers.

A few pesticides may be used as is, in the form they are purchased. These include baits, garden dusts, dry granular materials, aerosols, and some liquid household and livestock sprays primarily intended for homeowner use.

Most agricultural and commercial applicators will purchase concentrated pesticides, such as wettable powders or emulsifiable concentrates which must be diluted with other liquids before using. Water is the most common liquid used for diluting pesticides.

Mixing and loading pesticides can be very hazardous because you're working with a pesticide in its most concentrated, undiluted form. Exposure to even a small amount of a highly toxic, undiluted pesticide can cause serious harm.

Goals of This Module

- Understand the potential hazards of mixing and loading
- Know how to determine PPE requirements for mixers and loaders
- Learn to determine how, when, and where to mix concentrations of pesticides.
- Understand the importance of protecting the environment from spills and the safety measures that should be taken.
- Learn how to determine the compatibility of pesticides.

Caution during mixing and loading are worth your time and effort and will pay off in increased safety for applicators and handlers, the environment and may result in cost savings as well.