



Use Weed Killers Safely

Follow these steps to safely apply herbicides

Read the label and follow it exactly

Some home and garden (H&G) herbicides are “ready to use” and require no mixing, while others are sold in concentrate form and must be mixed with water. The label on the product’s container will tell you how to correctly mix and apply the product, along with any necessary restrictions and precautions you must take to avoid problems.

Many H&G herbicides have peel-back labels where you will find the instructions and precautions on the inside pages. Be sure you read the entire label before you apply it.

Never mix and apply the product at a stronger concentration than stated on the label. Higher concentrations will not be more effective at killing weeds and could damage your lawn or other plants. Always wear the protective clothing specified on the label (rubber gloves, boots, etc).

Be careful of the wind

Never spray when it’s too windy or when the wind is blowing towards nearby sensitive plants. If you are spraying close to the ground and not using excessive pressure, a light breeze shouldn’t be a problem. However, stronger winds will cause the spray to drift. Watch the spray as it comes out of the nozzle. If it’s moving away from where you are directing it, it’s either too windy or the spraying pressure is too high.

Don’t spray during high temperatures

Usually the best time to spray is spring or fall, when weeds are growing and day-time temperatures are not too high. Generally, you won’t get good weed control at high temperatures when weeds are stressed. Certain kinds of herbicides will also evaporate (volatilize) after being applied when temperatures get into the mid-70s or higher.

The vapors, or fumes, created by applying at high temperatures can drift long distances and cause severe damage to orchards, vineyards, landscapes and gardens, including your own. If temperatures are predicted to reach 80 degrees, it’s a good idea to hold off on applying herbicides.



Herbicides are a useful tool for keeping your lawn and landscape free of weeds, but make sure to use them correctly and safely.

Very small amounts can cause severe damage when they drift onto sensitive crops or plants.

Follow these tips and see more detail in this fact sheet:

- Always read the entire label and follow it exactly.
- Don’t spray when it’s too windy (or during dead calm conditions when spraying large areas).
- Don’t spray at high temperatures (when forecasted to reach 80° or higher).
- Don’t pump up your sprayer excessively or operate your sprayer at high pressures.
- Be especially careful when spraying large areas or spraying near sensitive plants or crops.

Be especially careful when spraying large areas

If you are spraying only your own lawn with a hand-held sprayer, problems are usually limited to damage of yours or your neighbor's property. As you spray larger areas, the potential to cause severe and widespread damage increases.

Ironically, a very bad time to spray is during a temperature inversion when there is no air movement (dead calm). During inversion conditions, tiny droplets that are too small to see become suspended in the air and will move off-site, damaging any sensitive plants in their path. Never apply during temperature inversions, which in Eastern Washington commonly start in the evening and last until morning in the fall and spring, and at variable times of year in Western Washington.

Be aware of temperature, wind speed and direction, proper pressure, and potential temperature inversion conditions (no air movement). Spray only when conditions are right, using a properly calibrated sprayer.

Operate your sprayer correctly

Apply the right amount of herbicide evenly to the area you want to treat. The label will tell you how much spray mix to apply to a given area. For instance, the label may say to apply one gallon of spray mix to 1,000 square feet. To help you gage how fast to walk to spray evenly, try applying one gallon of water to a marked-off 1,000 square-foot area before you mix the herbicide.

Spray from hand-held and backpack sprayers can drift if the sprayers are not operated correctly. Don't pump up your sprayer excessively. This creates very fine droplets that drift more easily and travel farther. The herbicide should come out as a coarse spray with a minimum of tiny droplets.

The potential for drift is even greater when using power spray equipment. Be sure you set up, calibrate and operate your power sprayer correctly. Check out resources on the Internet for calibrating sprayers, such as these:

- Calibrating Ride-on Pesticide Sprayers and Fertilizer Spreaders: ppp.purdue.edu/wp-content/uploads/2016/08/PPP-104.pdf
- ATV Boom Sprayer Calibration (video): goo.gl/dfHWY5 Please note: this shortened url is case sensitive.

The Washington State Department of Agriculture (WSDA) does not make recommendations on which herbicides to use. If you have questions about proper spraying operations, contact WSDA at 877-301-4555 or by email at compliance@agr.wa.gov.

