

Glyphosate - ToxFAQs™

What is glyphosate?

Glyphosate is the active ingredient in weed killer products such as RoundUp™. Glyphosate products are one of the most widely used weed killers worldwide in farms and in home gardens and lawns. These products typically contain glyphosate in combination with other ingredients that help improve the absorption of glyphosate into plants. Glyphosate-based formulations (GBFs) are easily bought in most stores. These products can have different combinations of other ingredients and different concentrations of glyphosate.



What happens to glyphosate in the environment?

- Plants can absorb glyphosate through their leaves.
- Glyphosate sticks tightly to soil but is quickly broken down by bacteria.
- Some glyphosate may stay in the air for a short time when it is being sprayed on plants, but glyphosate does not normally enter air from the soil.
- Glyphosate does not normally enter water unless it is sprayed onto water surfaces.
- Glyphosate does not build up in the food chain.

How can I be exposed to glyphosate?

- Glyphosate may get on unprotected skin and eyes when it is sprayed.
- You may breathe in glyphosate while you spray it on plants.
- You may be exposed to very small amounts of glyphosate from food.

Always wash your hands after applying ANY weed killer.

Do not let kids or pets play on or touch areas where weed killer has been applied until 24 hours have passed.

How can glyphosate affect my health?

If a large amount is swallowed, glyphosate can cause nausea and vomiting. It can be very irritating if it is left on your skin or eyes.

Glyphosate has been associated with respiratory effects (lung and nose), such as irritation in the nose, or asthma, in people using glyphosate products. Workers that use large amounts of glyphosate products for long periods of time may be more likely to develop respiratory effects.

Studies in animals have shown that glyphosate can cause developmental effects (such as lower body weight and problems with bone and organ growth) when the pregnant animals were given very large amounts of glyphosate.

Glyphosate

Can glyphosate cause cancer?

There have been several agencies and organizations both in the United States and internationally that have reviewed studies and made an assessment about whether glyphosate could cause cancer.

The [U.S. Environmental Protection Agency \(EPA\)](#) classification for glyphosate is “not likely” to be carcinogenic (causing cancer) to humans, based on evidence from animals and humans.

The [International Agency for Research on Cancer \(IARC\)](#) has classified glyphosate as “probably” carcinogenic to humans, which means there was sufficient evidence of cancer in animals, but limited evidence of cancer in humans.

Can I get a medical test to check for glyphosate?

There are tests to measure glyphosate in blood and urine. However, these are not part of a standard health test in a doctor’s office. The tests may only tell you if you have been very recently exposed to glyphosate and cannot give you information about your total exposure to glyphosate in your lifetime. These tests can’t predict if you will have health problems from exposure to glyphosate.

How can I protect my family from glyphosate exposure?

Always follow the directions on the label when using a product with glyphosate.

- Wear protective clothing and eyewear.
- Do not stand in the spray or let it drift on you.
- Do not let the chemical stay on your skin or get in your eyes.

Always wash your hands after applying ANY weed killer.

- Do not eat, drink, or smoke while applying weed killer, and always wash your hands before eating.
- Do not walk barefoot on a sprayed area for 24 hours after it is applied, or wait until after a rainfall or watering.
- Thoroughly wash all produce (fruits and vegetables) prior to eating, and be sure to wash your hands after handling plants that have been treated with the product.
- Make sure that children stay away from all pesticides and areas recently treated with pesticides.
- Do not let children or pets play on or touch lawns, gardens, golf courses, parks, or other grassy areas after weed killer is applied until 24 hours have passed since it was applied, or until after a rainfall or watering.

Want more information?

Call **CDC-INFO** at 1-800-232-4636, or submit your question online at <https://wwwn.cdc.gov/dcs/ContactUs/Form>

Go to ATSDR’s [Toxicological Profile for Glyphosate](#)

Go to ATSDR’s Toxic Substances Portal: <http://www.atsdr.cdc.gov/substances/index.asp>

If you have any more questions or concerns, you can also find & contact your ATSDR Regional Representative at http://www.atsdr.cdc.gov/DRO/dro_org.html