



# Glyphosate

## Should I be concerned about potential exposure to glyphosate?



- Glyphosate is on the [Proposition 65](#) list because it has been identified as a carcinogen.
- Proposition 65 requires businesses to determine if they must provide a warning about significant exposure to [listed chemicals](#).

## What is glyphosate?

- Glyphosate is a chemical used in herbicides to kill or suppress a variety of plants, including weeds and aquatic plants.
- Glyphosate-based herbicides have broad applications, from agricultural and commercial uses to home uses (including on lawns and gardens).
- Herbicides containing glyphosate or glyphosate salts are sold as liquids, gels, and solids.

---

## How does exposure to glyphosate occur?

- Glyphosate-based herbicides can be applied to target plants directly or by using hand-held sprayers and wands or commercial ground and aerial sprayers.
- During their application, exposure can result from:
  - ▶ Skin contact.
  - ▶ Breathing in aerosol droplets.
- Glyphosate has been detected in a variety of foods, but available information on levels in food is limited. It is unclear if consumption of any specific food would pose a significant cancer risk from glyphosate exposure.
- During pregnancy, glyphosate can pass from mother to baby.

## How can I reduce my exposure to glyphosate?

- ✓ Follow label directions in handling or use of glyphosate herbicides.
- ✗ Do not handle or use glyphosate herbicides without skin protection, such as gloves. Wash your hands after handling or using glyphosate herbicides.
- ✓ Limit your and your child's contact with surfaces that have been recently treated with glyphosate herbicides. Wash your hands and your child's hands after contact with these materials or surfaces.

**For more information:****General Fact Sheets and Resources**

- World Health Organization (WHO)  
International Agency for Research on Cancer (IARC)
  - ▶ Q&A on Glyphosate  
[https://www.iarc.fr/en/media-centre/iarcnews/pdf/Q&A\\_Glyphosate.pdf](https://www.iarc.fr/en/media-centre/iarcnews/pdf/Q&A_Glyphosate.pdf)
  - ▶ IARC Monographs on the Evaluation of Carcinogenic Risks to Humans, vol. 112 (2017). “Glyphosate” in Some Organophosphate Insecticides and Herbicides, pages 321-412. <https://publications.iarc.fr/549>
- US Environmental Protection Agency (EPA)
  - ▶ EPA Releases Draft Risk Assessments for Glyphosate  
<https://www.epa.gov/pesticides/epa-releases-draft-risk-assessments-glyphosate>
  - ▶ Revised Glyphosate Issue Paper: Evaluation of Carcinogenic Potential  
[https://cfpub.epa.gov/si/si\\_public\\_file\\_download.cfm?p\\_download\\_id=534487](https://cfpub.epa.gov/si/si_public_file_download.cfm?p_download_id=534487)
  - ▶ Pesticide Product Ingredients Page: Glyphosate  
<https://www.epa.gov/ingredients-used-pesticide-products/glyphosate>
- US Department of Health and Human Services (HHS)  
US Food and Drug Administration (FDA)
  - ▶ Questions and Answers on Glyphosate  
<https://www.fda.gov/food/pesticides/questions-and-answers-glyphosate>
- European Union (EU) - European Chemicals Agency (ECHA)
  - ▶ ECHA News Release (March 15, 2017)  
<https://echa.europa.eu/-/glyphosate-not-classified-as-a-carcinogen-by-echa>
  - ▶ Committee for Risk Assessment: Opinion proposing harmonized classification and labelling at EU level of glyphosate (ISO); N-(phosphonomethyl)glycine  
<https://echa.europa.eu/documents/10162/2f8b5c7f-030f-5d3a-e87e-0262fb392f38>
- Joint FAO/WHO Meeting on Pesticide Residues (JMPR)
  - ▶ Summary Report (Diazinon, glyphosate, and malathion)  
<http://www.who.int/foodsafety/jmprsummary2016.pdf>
- National Pesticide Information Center (NPIC), Oregon State University (OSU)
  - ▶ Glyphosate General Fact Sheet  
<http://npic.orst.edu/factsheets/glyphogen.html>

**Proposition 65**

- California Environmental Protection Agency (CalEPA)  
Office of Environmental Health Hazard Assessment (OEHHA)
  - ▶ Proposition 65: Background  
<https://www.p65warnings.ca.gov/faq>
  - ▶ Proposition 65: The List of Chemicals  
<https://www.p65warnings.ca.gov/chemicals>
  - ▶ Proposition 65: Fact Sheets  
<https://www.p65warnings.ca.gov/fact-sheets>