

GLYPHOSATE-BASED HERBICIDES HAVE A LONG HISTORY OF SAFE USE

More Than 40 Years on the Market, Glyphosate-Based Herbicides Are Some of the Most Extensively Studied and Reviewed Products of Their Kind

855 Studies Submitted to Regulators



As part of the registration process, that relate to human or mammalian health, and support the safety of glyphosate when used as directed.¹

160 Countries



Approved glyphosate-based products for use.²

Studies Relevant to EPA's 2017 Cancer Risk Assessment³

Studies: epidemiologic, long-term animal and genetic toxicity

11

110

- Sponsored by Monsanto
- Sponsored by other parties

Conclusion:

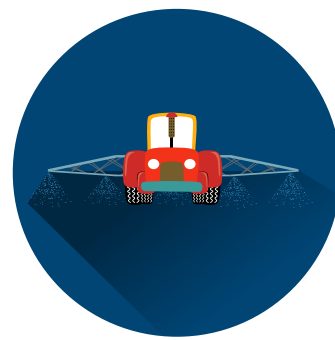
"Glyphosate is not likely to be carcinogenic to humans," the agency's most favorable rating.

2018 Agricultural Health Study⁴ The Largest Epidemiologic Study on Glyphosate-Based Herbicides Supported by U.S. National Cancer Institute

20 Year Study Period (1997-2017)



Followed over 50,000 Licensed Pesticide Applicators



Conclusion:

"We observed no associations between glyphosate use and NHL [non-Hodgkin's Lymphoma] overall or any of its subtypes."

Regulatory and International Agency Conclusions Post-IARC Support the Safe Use of Glyphosate-Based Herbicides and That Glyphosate Is Not Carcinogenic

2015

IARC monograph
German BfR⁵
EFSA⁶
Canada PMRA⁷

2016

WHO / JMPR⁸
Japan FSC⁹
Australia PVMA¹⁰
New Zealand EPA¹¹

2017

ECHA¹²
U.S. EPA¹³
Korea RDA¹⁴

Infographic prepared by Bayer, for educational purposes only

Sources:

¹2016/2017 EPA database on glyphosate and Monsanto's formulation, <https://www.regulations.gov/document?D=EPA-HQ-OPP-2009-0361-0086>

²2018 Monsanto's What is Glyphosate Booklet, <https://monsanto.com/app/uploads/2018/08/What-is-Glyphosate-booklet.pdf>

³2017 U.S. EPA OPP Revised Glyphosate Issue Paper: Evaluation of Carcinogenic Potential, https://cfpub.epa.gov/si_public_record_report.cfm?Lab=OPP&dirEntryId=337935

⁴2018 Glyphosate Use and Cancer Incidence in the Agricultural Health Study, <https://www.ncbi.nlm.nih.gov/pubmed/29136183>

⁵2015 German Federal Institute for Risk Assessment (BfR) re-evaluation of glyphosate, https://www.bfr.bund.de/en/the_bfr_has_finalised_its_draft_report_for_the_re_evaluation_of_glyphosate-188632.html

⁶2015 European Food Safety Authority (EFSA) Peer Reviewed Assessment of Glyphosate, <http://www.efsa.europa.eu/en/efsajournal/pub/4302>

⁷2015 Canadian Pest Management Regulatory Agency (PMRA) re-evaluation of glyphosate, <https://www.canada.ca/en/health-canada/services/consumer-product-safety/pesticides-pest-management/public consultations/proposed-re-evaluation-decisions/2015/glyphosate/document.html>

⁸2016 Joint FAO/WHO Meeting on Pesticide Residues (JMPR), <http://www.who.int/foodsafety/jmprsummary2016.pdf?ua=1>

⁹2016 Food Safety Commission of Japan (FSCJ) Risk Assessment of Glyphosate, https://www.jstage.jst.go.jp/article/foodsafetyfscj/4/3/4_2016014s/_article

¹⁰2016 Australian Pesticides and Veterinary Medicines Authority (APVMA) Post-IARC Review of Glyphosate, <https://apvma.gov.au/sites/default/files/publication/20701-glyphosate-regulatory-position-report-final.pdf>

¹¹2016 New Zealand Environmental Protection Authority (EPA) Review of Glyphosate and Carcinogenicity, <https://www.epa.govt.nz/assets/Uploads/Documents/Everyday-Environment/Publications/EPA-glyphosate-review.pdf>

¹²2017 European Chemicals Agency (ECHA) Conclusion on the Carcinogenicity of Glyphosate, <https://echa.europa.eu/-/glyphosate-not-classified-as-a-carcinogen-by-echa>

¹³2017 U.S. Environmental Protection Agency's Office of Pesticides Programs (EPA OPP) Revised Glyphosate Issue Paper: Evaluation of Carcinogenic Potential, https://cfpub.epa.gov/si_public_record_report.cfm?Lab=OPP&dirEntryId=337935

¹⁴2017 Korea Rural Development Administration (RDA) Evaluation of Glyphosate, http://www.rda.go.kr/board/board.do?mode=view&prgId=day_farmprmninfoEntry&dataNo=100000731828