



What do global **regulatory** and **research** agencies conclude about the health impact of

GLYPHOSATE?


Risk Assessment

What is the likelihood this will cause harm, based on dose and exposure?

 <div>United States Environmental Protection Agency</div>	USA	“Human health risk assessment concludes that glyphosate is not likely to be carcinogenic to humans... [and] no other meaningful risks to human health when the product is used according to the pesticide label”	2017
 <div>Office of Pesticide Programs</div>	USA	“Not strong support for... ‘suggestive evidence of carcinogenic potential...’ based on the weight-of-evidence... Even small, non-statistically significant changes... were contradicted by studies of equal or higher quality. The strongest support is for ‘ not likely to be carcinogenic to humans’”	2017
 <div>NTP National Toxicology Program U.S. Department of Health and Human Services</div>	USA	“ Little evidence of toxicity , and there was no evidence of glyphosate causing damage to DNA”	1992
 <div>Health Canada</div>	Canada	“Products containing glyphosate do not present unacceptable risks to human health or the environment when used according to the revised product label directions... Risks to [occupational] handlers are not of concern for all scenarios” “ No pesticide regulatory authority in the world currently considers glyphosate to be a cancer risk to humans at the levels at which humans are currently exposed”	2017 2019
 <div>EUROPEAN CHEMICALS AGENCY</div>	Europe	“Based on the epidemiological data as well as on data from long-term studies in rats and mice, taking a weight of evidence approach, no hazard classification for carcinogenicity is warranted” “ECHA's Committee for Risk Assessment (RAC) agrees to keep glyphosate's current classification as causing serious eye damage and being toxic to aquatic life ...[but] again concludes that classifying glyphosate as a carcinogen is not justified. ”	2017 2022
 <div>European Food Safety Authority</div>	Europe	“Glyphosate is unlikely to be genotoxic or to pose a carcinogenic threat to humans ... Neither the epidemiological data nor the evidence from animal studies demonstrated causality between exposure to glyphosate and the development of cancer in humans” “ The assessment of the impact of glyphosate on the health of humans, animals and the environment did not identify critical areas of concern ... It is the most comprehensive and transparent assessment of a pesticide that EFSA and the EU Member States have ever carried out, taking into account thousands of studies [2,500+] related to human and animal health and the environment, and involving dozens of scientists from EFSA and national authorities across Europe.	2015 2023
 <div>European Commission Assessment Group on Glyphosate</div>	Europe	“Taking all the evidence into account i.e. animal experiments, epidemiological studies and statistical analyses... The AGG proposes that a classification of glyphosate with regard to carcinogenicity is not justified. ”	2021
 <div>ANSES agence nationale de sécurité sanitaire alimentation, environnement, travail</div>	France	“ Level of evidence of carcinogenicity in animals and humans is considered to be relatively limited ” "36 [glyphosate-based] products ... will no longer be allowed for use from the end of 2020, due to a lack or absence of scientific data which would allow all genotoxic risk to be ruled out”	2016 2019
 <div>Bundesinstitut für Risikobewertung</div>	Germany	“Available data do not show carcinogenic or mutagenic properties of glyphosate nor that glyphosate is toxic to fertility, reproduction or embryonal/fetal development in laboratory animals”	2015
 <div>Federal Department of Home Affairs FDHA Federal Food Safety and Veterinary Office FSVO</div>	Switzerland	“Residues of glyphosate in the foods investigated do not represent a risk of cancer ”	2018
 <div>Australian Government Australian Pesticides and Veterinary Medicines Authority</div>	Australia	“Glyphosate does not pose a carcinogenic risk to humans.... Products containing glyphosate are safe to use as per the label instructions”	2016
 <div>Environmental Protection Authority Te Mana Rauhi Taiao</div>	New Zealand	“ Unlikely to be carcinogenic to humans or genotoxic (damaging to genetic material or DNA) and should not be classified as a mutagen or carcinogen”	2016
 <div>ANVISA Agência Nacional de Vigilância Sanitária</div>	Brazil	“ No evidence to indicate that the herbicide glyphosate is carcinogenic ”	2019
 <div>Food Safety Commission of Japan</div>	Japan	“ No neurotoxicity, carcinogenicity, reproductive toxicity, teratogenicity, and genotoxicity ”	2016
 <div>Rural Development Administration</div>	Korea	“Epidemiological studies on glyphosate... found no cancer link ”	2017
 <div>World Health Organization</div>	Global	“Glyphosate is unlikely to be genotoxic at anticipated dietary exposures . Glyphosate is unlikely to pose a carcinogenic risk to humans from exposure through the diet”	2016
 <div>World Health Organization Drinking-water quality guidelines</div>	Global	“Under usual conditions, the presence of glyphosate and AMPA [aminomethylphosphonic acid, glyphosate’s primary metabolite] in drinking-water does not represent a hazard to human health”	2004
 <div>World Health Organization International Programme on Chemical Safety</div>	Global	“Available data on occupational exposure for workers applying Roundup indicate exposure levels far below the NOAELs [no observed adverse effect levels] from the relevant animal experiments”	1994


Longitudinal Study

How glyphosate impacted 54,251 pesticide applicators since 1993.

 <div>Agricultural Health Study</div>	USA	“ No association was apparent between glyphosate and any solid tumors or lymphoid malignancies overall, including non-Hodgkin's lymphoma and its subtypes... some evidence of increased risk of AML [acute myeloid leukemia] among the highest exposed group that requires confirmation”	2018
---	-----	---	------

Hazard Assessment

What is the potential to cause harm, regardless of dose or exposure?

<div>International Agency for Research on Cancer</div> 	Global	“ Limited evidence in humans for the carcinogenicity of glyphosate... Evidence in humans is from studies of exposures, mostly agricultural [e.g. not from dietary exposure]... A positive association has been observed for non-Hodgkin lymphoma... There is ‘ strong ’ evidence that exposure to glyphosate or glyphosate-based formulations is genotoxic ” IARC placed glyphosate in its hazard category "Group 2A: probably carcinogenic to humans" along with red meat, hot beverages, and working as a barber. The evidence on carcinogenicity was less robust than for agents such as bacon, salted fish, oral contraceptives and wine.	2015
---	--------	--	------