

Does Roundup weed killer cause cancer?

Opinions appear to be divided on the issue of whether Roundup can be linked to cancer.

Some experts have claimed that glyphosate, the active ingredient in Roundup, appears to be carcinogenic.

Beate Ritz, an epidemiologist at the University of California, Los Angeles, said her review of scientific literature led her to conclude that glyphosate and glyphosate-based compounds such as Roundup can cause non-Hodgkin's lymphoma.

Ritz said a 2017 National Institutes of Health study, that found no association between glyphosate and non-Hodgkin's lymphoma (NHL), had major flaws.

But in the US government regulators have rejected a link between cancer and glyphosate.

Makers Monsanto has vehemently denied such a connection, saying hundreds of studies have established that the chemical is safe.

Lorelei Mucci, a cancer epidemiologist at the Harvard T.H. Chan School of Public Health, said: "When you look at the body of epidemiological literature on this topic, there's no evidence of a positive association between glyphosate and NHL risk."

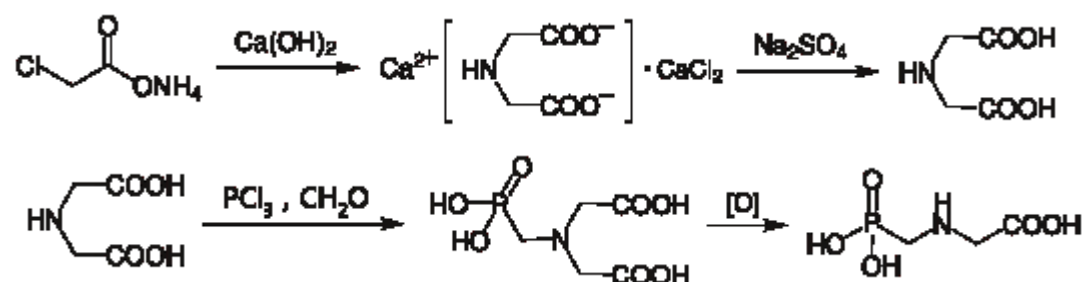
The US Environmental Protection Agency says glyphosate is safe for people when used in accordance with label directions.

In 2018 jurors agreed the product contributed to a groundskeeper's cancer - and awarded him £226m.

Johnson's lawyers sought and won £30 million in compensatory damages and £196 million of the £292 million they wanted in punitive damages.

"The biggest impact of glyphosate on bees is the destruction of the wildflowers on which they depend," said Matt Sharlow, at conservation group Buglife. "Evidence to date suggests direct toxicity to bees is fairly low, however the new study clearly demonstrates that pesticide use can have significant unintended consequences."

The [Sun](https://www.thesun.co.uk/news/6749228/roundup-weed-killer-cause-cancer-glyphosate-lawsuit-monsanto/): <https://www.thesun.co.uk/news/6749228/roundup-weed-killer-cause-cancer-glyphosate-lawsuit-monsanto/>
<https://www.theguardian.com/environment/2018/sep/24/monsanto-weedkiller-harms-bees-research-finds>



Why is Roundup safe?

You may have recently heard that glyphosate (Roundup's main ingredient) could be a cause of cancer.

On March 20, 2015, the International Agency for Research on Cancer* (IARC) published the conclusion that it found five substances – including glyphosate – to be “possibly” or “probably” carcinogenic to humans. The news then rapidly spread in many media.

Since such news may naturally cause confusion and concerns amongst consumers, Roundup Garden would like to take to raise and answer a few important questions.

Are Roundup users exposed to a risk of cancer? No.

All glyphosate-based herbicides on the market meet rigorous standards of approval set by regulatory and health authorities to protect the public, including infants and children. In Europe, substances like glyphosate must undergo a rigorous periodical safety evaluation.

In fact, the latest re-evaluation process is currently on-going. Germany has been appointed as coordinator and has considered and reviewed all available data on glyphosate, including studies the IARC took into consideration. Yet, they concluded in December 2014: “[...]the available data do not show carcinogenic or mutagenic properties of glyphosate nor that glyphosate is toxic to fertility, reproduction or embryonal/fetal development[...]

Since March 20, German authorities have confirmed their conclusions and made clear in their statement that they found **no correlation between glyphosate exposure and any type of cancer**. These findings confirm what authorities worldwide have concluded on glyphosate.

How could IARC come to such conclusions then?

If public authorities are so clear about glyphosate, one may then wonder how the IARC could come to so different conclusions. In this respect, Roundup Garden would like to draw you attention to an important point.

Public authorities and IARC play different roles. On the one hand, public authorities' job is to make sure that the use of a substance like glyphosate does not expose us and the environment to risks. To do so, they consider all available data (including epidemiological data) over a long period of time and consider the use of the substance in the real world. On the other hand, the IARC is a research-driven agency. They look at data from a purely scientific perspective and do not take into consideration the use of the substance in the real world. IARC's assessment tells us that glyphosate has a potential to cause cancer in a lab – like a number of substances and items we are daily exposed to (IARC's classification includes for instance cell phones, the occupation of barbers and aloe vera extract). What authorities tell us however is whether this potential materializes in the real world, or not. In the case of glyphosate, they tell us it does not.

Taken from a [Monsanto press release](https://www.roundup-garden.com/why-is-roundup-safe) <https://www.roundup-garden.com/why-is-roundup-safe>

Carcinogenicity^[edit]

There is limited evidence that human cancer risk might increase as a result of occupational exposure to large amounts of glyphosate, such as agricultural work, but no good evidence of such a risk from home use, such as in domestic gardening.^[22] The consensus among national pesticide regulatory agencies and scientific organizations is that labeled uses of glyphosate have demonstrated no evidence of human carcinogenicity.^{[23][24]} Organizations such as the [World Health Organization](#) (WHO) and the [Food and Agriculture Organization](#), [European Commission](#), [Canadian Pest Management Regulatory Agency](#), and the German [Federal Institute for Risk Assessment](#)^[25] have concluded that there is no evidence that glyphosate poses a carcinogenic or [genotoxic](#) risk to humans.^[23] The final assessment of the [Australian Pesticides and Veterinary Medicines Authority](#) in 2017 was that "glyphosate does not pose a carcinogenic risk to humans".^{[23][26]} The EPA has classified glyphosate as Group E, meaning "evidence of non-carcinogenicity in humans".^{[23][27]} Only one international scientific organization, the International Agency for Research on Cancer (IARC), affiliated with the WHO, has made claims of carcinogenicity in research reviews. The IARC has been criticized for its assessment methodology by failing to consider the broad literature and only assessing [hazard](#) rather than [risk](#).^[23]

From [Wikipedia](#)

Glyphosate is a broad-spectrum herbicide, currently with the highest production volumes of all herbicides. It is used in more than 750 different products for agriculture, forestry, urban, and home applications. Its use has increased sharply with the development of genetically modified glyphosate-resistant crop varieties. Glyphosate has been detected in air during spraying, in water, and in food. There was limited evidence in humans for the carcinogenicity of glyphosate. Case-control studies of occupational exposure in the USA,¹⁴ Canada,⁶ and Sweden⁷ reported increased risks for non-Hodgkin lymphoma that persisted after adjustment for other pesticides. The AHS cohort did not show a significantly increased risk of non-Hodgkin lymphoma. In male CD-1 mice, glyphosate induced a positive trend in the incidence of a rare tumour, renal tubule carcinoma. A second study reported a positive trend for haemangiosarcoma in male mice.¹⁵ Glyphosate increased pancreatic islet-cell adenoma in male rats in two studies. A glyphosate formulation promoted skin tumours in an initiation-promotion study in mice.

Glyphosate has been detected in the blood and urine of agricultural workers, indicating absorption. Soil microbes degrade glyphosate to aminomethylphosphoric acid (AMPA). Blood AMPA detection after poisonings suggests intestinal microbial metabolism in humans. Glyphosate and glyphosate formulations induced DNA and chromosomal damage in mammals, and in human and animal cells in vitro. One study reported increases in blood markers of chromosomal damage (micronuclei) in residents of several communities after spraying of glyphosate formulations.¹⁶

Bacterial mutagenesis tests were negative. Glyphosate, glyphosate formulations, and AMPA induced oxidative stress in rodents and in vitro. The Working Group classified glyphosate as "probably carcinogenic to humans" (Group 2A).

<https://www.thelancet.com/journals/lanonc/article/PIIS1470-2045%2815%2970134-8/fulltext> Taken from the Lancet, oncology