

Setting The Record Straight On Glyphosate And Roundup®



Glyphosate and Roundup® products have been used safely and successfully worldwide for over four decades. These products are a valuable tool to help farmers deliver crops to markets and practice sustainable farming by supporting biodiversity as well as reducing soil erosion and carbon emissions.

“If we are going to feed 10 billion people by 2050, we are going to need all the tools at our disposal, which includes the use of glyphosate.”

— U.S. Secretary of Agriculture Sonny Perdue, April 2019

Today, glyphosate-based products are the most widely used weed control products in the world. This widespread adoption is due not only to the effectiveness and extensive economic and environmental benefits, but also due to the strong safety profile of these products.

The U.S. Environmental Protection Agency (EPA), the European Food Safety Authority (EFSA), and other regulatory authorities in Canada, Japan, Australia, Korea, Brazil, and elsewhere routinely review all approved pesticide products. When it comes to safety assessments, glyphosate is among the most extensively tested pesticides on the market. Evaluations spanning more than 40 years, and the overwhelming conclusion of experts and regulators worldwide, support the safety of glyphosate and that glyphosate is not carcinogenic.

The U.S. has one of the most stringent pesticide registration processes in the world. In April 2019, the EPA published the results of its latest assessment of glyphosate and stated:

“EPA continues to find that there are no risks to public health when glyphosate is used in accordance with its current label and that glyphosate is not a carcinogen.

The agency’s scientific findings on human health risk are consistent with the conclusions of science reviews by many other countries and other federal agencies.”

— U.S. Environmental Protection Agency Press Release, April 2019

Additionally, the largest and most recent epidemiology studies, which are the most relevant studies for assessing exposure effects in the human population, each found no association between glyphosate-based herbicides and non-Hodgkin’s lymphoma (NHL) overall in real-world use when adjusted for the use of other pesticides. These studies include:

- // The 2018 National Cancer Institute-supported Agricultural Health Study
- // The 2019 Leon Agricoh Consortium Study
- // The 2016 North American Pooled Project

Does glyphosate cause cancer?

The confusion about glyphosate and cancer primarily stems from one place: an opinion by a group called IARC. IARC is not a regulatory authority and did no original scientific studies. IARC's opinion is inconsistent with the conclusions of regulatory authorities and other experts around the world, who have assessed all the studies examined by IARC and many more.

“EPA considered a significantly more extensive and relevant dataset than the International Agency on the Research for Cancer (IARC).

EPA's database includes studies submitted to support registration of glyphosate and studies EPA identified in the open literature.”

— U.S. Environmental Protection Agency Webpage, April 2019

IARC is an outlier even within the World Health Organization (WHO). IARC is one of four programs within the WHO that has evaluated the safety of glyphosate and is the only one to find an association between glyphosate and carcinogenicity. The WHO's International Programme on Chemical Safety and Joint FAO/WHO Meeting on Pesticide Residues (JMPR) both found that glyphosate is not carcinogenic, and the WHO's Guidelines for Drinking-Water Quality found that glyphosate does not present a hazard to human health.

After IARC's opinion was announced in 2015, U.S. trial lawyers started running advertising campaigns to recruit people for lawsuits against Monsanto and Bayer. The current U.S. glyphosate litigation began just months after the publication of IARC's opinion.

We have deep sympathy for anyone suffering from cancer but the extensive body of science on glyphosate-based herbicides over four decades supports the conclusion that Roundup® does not cause NHL. Bayer will continue to vigorously defend glyphosate and Roundup® products.

Importantly, none of the verdicts in the U.S. glyphosate litigation are final at this stage. We believe that the extensive body of science (hundreds of studies over several decades), the more than 40 years of safe use, and the conclusions of regulators around the world will ultimately be determinative in the litigation.

“Glyphosate: a once-in-a-century herbicide.”

— Dr. Stephen Duke, Research Leader, United States Department of Agriculture (USDA)

Glyphosate will continue to play a vital role in agriculture and in Bayer's portfolio, and we recently announced a more than **\$5.5 billion investment** to research and develop additional weed-control methods to complement glyphosate.

For more information
about glyphosate:
www.Bayer.com/glyphosate

For information about the
U.S. glyphosate litigation:
www.GlyphosateLitigationFacts.com