

Viewpoint: How the Canadian Broadcasting Corp. fails viewers in its misleading coverage of GMO crops and glyphosate

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Robert Wager | Genetic Literacy Project | April 3, 2019



It's no secret the Canadian Broadcasting Corporation (CBC) is not a fan of modern agriculture. Over the last two decades, this publicly funded news organization has promoted unjustified fear of genetically engineered (GE) crops based on pseudo-scientific claims, incomplete evidence and conspiracy theories—failing to mention that every food safety authority in the world says crop biotechnology is no threat to human health.

By ignoring this expert consensus and giving air time to activist researchers and trial lawyers, the CBC has left Canadian taxpayers with the impression that their food supply is dangerous.

Although dozens of prominent environmental groups and rogue researchers have stoked consumer fear of GE crops, French biologist Gilles-Éric Séralini and the International Agency for Research on Cancer (IARC) have arguably done the most damage. The CBC has misinformed its audience about both. Séralini, funded largely by staunch anti-GMO interests, has produced several “studies” showing that GE crops are dangerous. For instance, Séralini published an infamous (and now retracted) study in 2012 showing that GE corn and the weed killer glyphosate, commonly paired with GE crops, caused cancer in rats. Even though four EU-funded, properly controlled studies failed to replicate Seralini’s paper, the CBC has never bothered to inform its audience of the scandal.

IARC, a subgroup of the World Health Organization (WHO) that evaluates carcinogenic hazards (not to be confused with risks) to humans, declared glyphosate a “probable carcinogen” in 2015, breaking with the global consensus on the herbicide’s safety. [Note that IARC did find that glyphosate is not harmful to humans as a result of minute residues in their food; it only found mixed evidence that those who apply the herbicide continuously over years might have a cancer threat dependent upon exposure.] The CBC has repeatedly cited IARC’s 2015 evaluation of glyphosate in order to spread fear about the weed killer, and by extension GE crop technology. Many experts have criticized the WHO agency for omitting important glyphosate research from its 2015 monograph, including the largest epidemiological study in the world on pesticide use. This massive study followed more than 50,000 farmers and pesticide applicators over twenty years and found no link between glyphosate exposure and cancer.



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Critics have also raised concerns that IARC’s carcinogenic classification of glyphosate was pre-determined, based on revelations that predatory law firms manipulated the agency into adding the weed killer to its 2015 monograph. Armed with the IARC classification, tort lawyers have launched thousands of lawsuits against Bayer, the original manufacturer of glyphosate, which have so far resulted in two jury verdicts against the company. As with GE crops, every other regulatory body and public health agency around the world has found that glyphosate doesn’t pose a cancer risk to humans, as the GLP reported in a recent summary of world regulatory findings.

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?
EPA United States Environmental Protection Agency	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"
EPA Office of Pesticide Programs	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'"
NTP National Toxicology Program	USA	"Little evidence of toxicity, and there was no evidence of glyphosate causing damage to DNA"
Health Canada	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"
		"Based on the epidemiological data as well as on data from long-term

 EUROPEAN CHEMICALS AGENCY	Europe	studies in rats and mice, taking a weight of evidence approach, no hazard classification for carcinogenicity is warranted"	2017
 European Food Safety Authority	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"	2015
 ANSES	France	"Level of evidence of carcinogenicity in animals and humans is considered to be relatively limited and does not allow for a 1A or 1B classification (known or suspected carcinogen for humans)"	2016
 Bundesinstitut für Risikobewertung	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
 Federal Department of Home Affairs FDHA Federal Food Safety and Veterinary Office FSVO	Switzerland	"Residues of glyphosate in the foods investigated do not represent a risk of cancer"	2018
 Australian Pesticides and Veterinary Medicines Authority	Australia	"Glyphosate does not pose a carcinogenic risk to humans... Products containing glyphosate are safe to use as per the label instructions"	2016
 Environmental Protection Authority Te Mana Rauhi Kaitiaki	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
 ANVISA Agência Nacional de Vigilância Sanitária	Brazil	"No evidence to indicate that the herbicide glyphosate is carcinogenic"	2019
 Food Safety Commission of Japan	Japan	"No neurotoxicity, carcinogenicity, reproductive toxicity, teratogenicity, and genotoxicity"	2016
 Rural Development Administration	Korea	"Epidemiological studies on glyphosate... found no cancer link"	2017
 World Health Organization	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
 World Health Organization Drinking-water quality guidelines	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
 World Health Organization International Programme on Chemical Safety	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 64,254 pesticide applicators since 1993			
 Agricultural Health Study	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?			
 International Agency for Research on Cancer	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
 Genetic Literacy Project SCIENCE MEET TECHNOLOGY	<small>Click on the linked conclusions to take you to the document issued by the regulatory or research agency. Infographic by Raylene Schubert, PhD, adapted from infographic by Maxime Pissard and Nicolas Fardoux. Maxime Pissard is a media blogger focusing on digital analysis of online science news and author of ClimateSensations, a media analysis, critical thinking, Data Substudies is a blogger specializing in biomedical research and author of Thinkingscience.com</small>		

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When allegations of data manipulation at IARC came to light, the US House Science, Space and Technology Committee sent a letter to the head of the WHO agency requesting answers:

Recent news media reporting has revealed troubling evidence of data deletion, manipulation, and potential conflicts of interest with Monograph 112 on glyphosate. Additionally, there seems to be a lack of transparency in the science used to justify the findings on glyphosate.

IARC refused to come before the committee to address the allegations, and the CBC said nothing about the situation. However, the news organization found its voice when Health Canada released its 2017 re-evaluation of glyphosate. Among its key findings:

- *Glyphosate is not genotoxic and is unlikely to pose a human cancer risk.*
- *Dietary (food and drinking water) exposure associated with the use of glyphosate is not expected to pose a risk of concern to human health.*
- *Occupational and residential risks associated with the use of glyphosate are not of concern, provided that updated label instructions are followed.*

Instead of highlighting any of these results, CBC's headline read, "Glyphosate labels to change, Health Canada announces." Following allegations that Bayer had covered up evidence of glyphosate's carcinogenicity, Health Canada released a third re-evaluation in January 2019, which matched its previous conclusions. In what can only be described as a hit piece, the CBC reported on March 17 that Bayer may have "captured" Health Canada. CBC personality Wendy Mesley began the segment with an insinuation that Bayer had copied the tobacco industry in attempting to conceal the dangers of its product. She went on to cite IARC's glyphosate classification without mentioning the fatal flaws in the agency's monograph. She also used graphic photos of Dwayne Johnson, the California groundskeeper who successfully sued Bayer for allegedly causing his non-Hodgkin's Lymphoma.

But it got worse.

Mesley segued into an interview with Brent Wisner, a lawyer whose firm sued Bayer on Johnson's behalf. Wisner proceeded to slander Health Canada, suggesting Bayer had cast a "magic spell" on the agency. The last few seconds of the report presented two print statements from Health Canada and Bayer countering Wisner's assertions. But the segment was mostly one-sided propaganda that left viewers with the false impression that glyphosate poses a serious cancer risk to consumers.

There is no excuse for such misinformation from Canada's 'National News Agency.' The CBC receives hundreds of millions of dollars each year from Canadian taxpayers, and the least they deserve for such a massive investment is accurate news coverage. Instead, the CBC provides biased reporting on GE crops and pesticides, which does a tremendous disservice to Canada's hard-working farmers and to the public as a whole.

Robert Wager has been a faculty member of the biology department at Vancouver Island University for 24 years. He specializes in public outreach on Genetically Engineered crops and derived foods. Follow him on Twitter @RobertWager1 and his website