Additional Resources Regarding Glyphosate's Potential Health Effects

US EPA
The following is from the EPA's website (accessed on 9-11-20)
https://www.epa.gov/ingredients-used-pesticide-products/glyphosate

Human Health
"EPA scientists performed an independent evaluation of available data for glyphosate and found:

- **No risks of concern to human health from current uses of glyphosate.** Glyphosate products used according to label directions do not result in risks to children or adults.

- **No indication that children are more sensitive to glyphosate.** After evaluating numerous studies from a variety of sources, the Agency found no indication that children are more sensitive to glyphosate from *in utero* or post-natal exposure. As part of the human health risk assessment, the Agency evaluated all populations, including infants, children and women of child-bearing age, and found no risks of concern from ingesting food with glyphosate residues. EPA also found no risks of concern for children entering or playing on residential areas treated with glyphosate.

- **No evidence that glyphosate causes cancer in humans.** The Agency concluded that glyphosate is not likely to be carcinogenic to humans. 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.

  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. For instance, IARC only considered eight animal carcinogenicity studies while EPA used 15 acceptable carcinogenicity studies. EPA does not agree with IARC's conclusion that glyphosate is "probably carcinogenic to humans."

  EPA's cancer classification is consistent with other international expert panels and regulatory authorities, including the Canadian Pest Management Regulatory Agency, Australian Pesticide and Veterinary Medicines Authority, European Food Safety Authority, European Chemicals Agency, German Federal Institute for Occupational Safety and Health, New Zealand Environmental Protection Authority, and the Food Safety Commission of Japan and the Joint Food and Agriculture Organization/World Health Organization (FAO/WHO) Meeting on Pesticide Residues (JMPR)."

  For more information, read the Revised Glyphosate Issue Paper: Evaluation of Carcinogenic Potential.

- **No indication that glyphosate is an endocrine disruptor.** Glyphosate has undergone Tier I screening under EPA's Endocrine Disruptor Screening Program. Based on all available information, EPA concluded, using a weight-of-evidence approach, that the existing data do not indicate that glyphosate has the potential to interact with the estrogen, androgen or thyroid signaling pathways. The screening program did not indicate the need for additional testing for glyphosate.

Health Canada
As stated in early 2019 by Health Canada, "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." (Health Canada, 2019).
https://www.canada.ca/en/health-canada/news/2019/01/statement-from-health-canada-on-glyphosate.html

Health Canada further elaborated
https://www.canada.ca/en/health-canada/services/consumer-product-safety/reports-publications/pesticides-pest-management/decisions-updates/registration-decision/2017/glyphosate-rvd-2017-01.html

"The overall finding from the re-examination of glyphosate is highlighted as follows:
- 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.
- The environmental assessment concluded that spray buffer zones are necessary to mitigate potential risks to non-target species (for example, vegetation near treated areas, aquatic invertebrates and fish) from spray drift.
- When used according to revised label directions, glyphosate products are not expected to pose risks of concern to the environment.
- All registered glyphosate uses have value for weed control in agriculture and non-agricultural land management."

Food and Agricultural Organization and World Health Organization
From the 2016 Joint Meeting on Pesticide Residues (JMPR) report.
"In view of the absence of carcinogenic potential in rodents at human-relevant doses and the absence of genotoxicity by the oral route in mammals, and considering the epidemiological evidence from occupational exposures, the Meeting concluded that glyphosate is unlikely to pose a carcinogenic risk to humans from exposure through the diet."