

# WHY IARC'S OPINION ON GLYPHOSATE IS AN OUTLIER

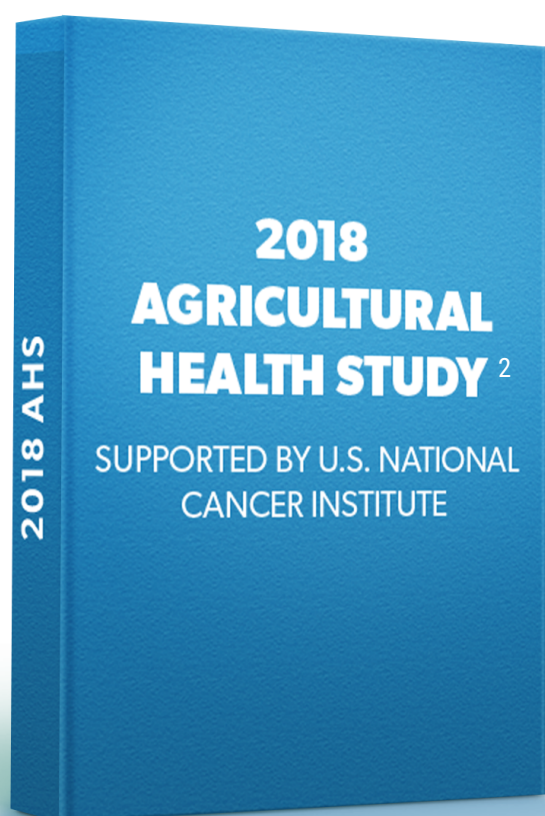
## IARC'S CLASSIFICATION DOES NOT REFLECT REAL WORLD HUMAN EXPOSURE

IARC's hazard classification system does not reflect real world exposure levels which are essential to assess any risk to the human population.<sup>1</sup> IARC puts common every day substances like red meat and hot beverages in the same category as glyphosate.



## KEY SCIENCE NOT CONSIDERED

IARC does not do its own studies; it only reviews selective, existing science. The 2015 IARC assessment did not consider significant data available at the time and later published from the largest study examining real world exposure to glyphosate, which found no connection between the herbicide and Non-Hodgkin's lymphoma (NHL).



The largest and most recent epidemiological study conducted, which found no association between glyphosate-based products and NHL at any level of exposure and for any subtype.

## IARC'S CLASSIFICATION IS AN OUTLIER TO A LONG HISTORY OF SAFE USE



### MORE THAN 800 STUDIES

on glyphosate or Bayer's glyphosate-based formulations submitted to EPA, European and other regulators in connection with the registration process, support the safety of glyphosate when used as directed.



### MORE THAN 100 STUDIES

EPA considered relevant to its 2017 Cancer Risk Assessment in which EPA concluded "Glyphosate is not likely to be carcinogenic to humans," the agency's most favorable rating.<sup>3</sup>



### 3 OTHER W.H.O. UNITS

reached contrary conclusions: the World Health Organizations International Programme on Chemical Safety,<sup>4</sup> Joint FAO/WHO Meeting on Pesticide Residues (JMPR),<sup>5</sup> and Guidelines for Drinking-Water Quality.<sup>6</sup>



### REGULATORY AND INTERNATIONAL AGENCY CONCLUSIONS

reached since IARC support the safe use of glyphosate-based herbicides and that glyphosate is not carcinogenic.

2015

IARC monograph  
German BfR<sup>7</sup>  
EFSA<sup>8</sup>  
Canada PMRA<sup>9</sup>

2016

WHO / JMPR<sup>10</sup>  
Japan FSC<sup>11</sup>  
Australia PVMA<sup>12</sup>  
New Zealand EPA<sup>13</sup>

2017

ECHA<sup>14</sup>  
U.S. EPA<sup>15</sup>  
Korea RDA<sup>16</sup>

## WHY THIS MATTERS

Plaintiffs based much of their case in the first glyphosate trial on IARC's opinion, and one of their attorneys even recently said their case is "framed around IARC."<sup>17</sup>

Infographic prepared by Bayer, for educational purposes only

#### Sources:

- <sup>1</sup> <https://monographs.iarc.fr/wp-content/uploads/2018/05/CurrentPreamble.pdf>
- <sup>2</sup> 2018 Glyphosate Use and Cancer Incidence in the Agricultural Health Study, <https://www.ncbi.nlm.nih.gov/pubmed/29136183>
- <sup>3</sup> 2017 U.S. EPA OPP Revised Glyphosate Issue Paper: Evaluation of Carcinogenic Potential, [https://cfpub.epa.gov/si/si\\_public\\_record\\_report.cfm?Lab=OPP&dirEntryId=337935](https://cfpub.epa.gov/si/si_public_record_report.cfm?Lab=OPP&dirEntryId=337935)
- <sup>4</sup> <http://www.inchem.org/documents/ehc/ehc/ehc159.htm>
- <sup>5</sup> <http://www.who.int/foodsafety/jmprsummary2016.pdf?ua=1>
- <sup>6</sup> [https://www.who.int/water\\_sanitation\\_health/water-quality/guidelines/chemicals/glyphosateampa290605.pdf?ua=1](https://www.who.int/water_sanitation_health/water-quality/guidelines/chemicals/glyphosateampa290605.pdf?ua=1)
- <sup>7</sup> 2015 German Federal Institute for Risk Assessment (BfR) re-evaluation of glyphosate, [https://www.bfr.bund.de/en/the\\_bfr\\_has\\_finalised\\_its\\_draft\\_report\\_for\\_the\\_re\\_evaluation\\_of\\_glyphosate-188632.html](https://www.bfr.bund.de/en/the_bfr_has_finalised_its_draft_report_for_the_re_evaluation_of_glyphosate-188632.html)
- <sup>8</sup> 2015 European Food Safety Authority (EFSA) Peer Reviewed Assessment of Glyphosate, <http://www.efsa.europa.eu/en/efsajournal/pub/4302>
- <sup>9</sup> 2015 Canadian Pest Management Regulatory Agency (PMRA) re-evaluation of glyphosate, <https://www.canada.ca/en/health-canada/services/consumer-product-safety/pesticides-pest-management/public/consultations/proposed-re-evaluation-decisions/2015/glyphosate/document.html>
- <sup>10</sup> 2016 Joint FAO/WHO Meeting on Pesticide Residues (JMPR), <http://www.who.int/foodsafety/jmprsummary2016.pdf?ua=1>
- <sup>11</sup> 2016 Food Safety Commission of Japan (FSC) Risk Assessment of Glyphosate, [https://www.jfsa.go.jp/article/foodsafetyfscj/4/3/A\\_2016014s/\\_article](https://www.jfsa.go.jp/article/foodsafetyfscj/4/3/A_2016014s/_article)
- <sup>12</sup> 2016 Australian Pesticides and Veterinary Medicines Authority (APVMA) Post-IARC Review of Glyphosate, <https://apvma.gov.au/sites/default/files/publication/20701-glyphosate-regulatory-position-report-final.pdf>
- <sup>13</sup> 2016 New Zealand Environmental Protection Authority (EPA) Review of Glyphosate and Carcinogenicity, <https://www.epa.gov.nz/assets/Uploads/Documents/Everyday-Environment/Publications/EPA-glyphosate-review.pdf>
- <sup>14</sup> 2017 European Chemicals Agency (ECHA) Conclusion on the Carcinogenicity of Glyphosate, <https://echa.europa.eu/-/glyphosate-not-classified-as-a-carcinogen-by-echa>
- <sup>15</sup> 2017 U.S. Environmental Protection Agency's Office of Pesticides Programs (EPA OPP) Revised Glyphosate Issue Paper: Evaluation of Carcinogenic Potential, [https://cfpub.epa.gov/si/si\\_public\\_record\\_report.cfm?Lab=OPP&dirEntryId=337935](https://cfpub.epa.gov/si/si_public_record_report.cfm?Lab=OPP&dirEntryId=337935)
- <sup>16</sup> 2017 Korea Rural Development Administration (RDA) Evaluation of Glyphosate, [http://www.rda.go.kr/board/board.do?mode=view&grd=day\\_farm&minioEntry&dataNo=10000731828](http://www.rda.go.kr/board/board.do?mode=view&grd=day_farm&minioEntry&dataNo=10000731828)
- <sup>17</sup> <https://www.reuters.com/article/bayer-glyphosate/monsanto-mdl-judge-mulls-banning-evidence-on-glyphosate-agency-findings-in-trials-idUSL1N1YB2DA>