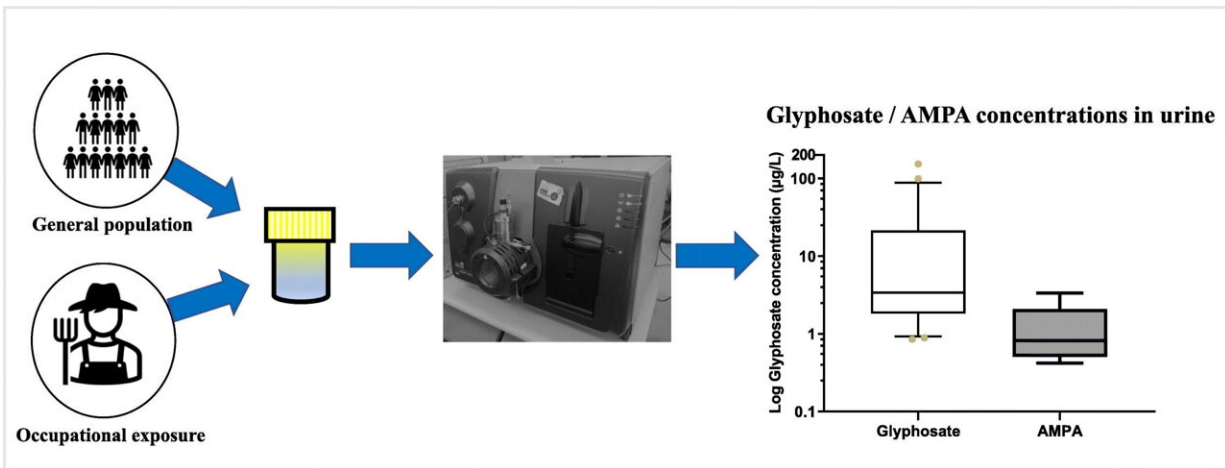


# Weed killer detected in Australian urine samples

September 30 2022



Graphical abstract. Credit: *Science of The Total Environment* (2022). DOI: 10.1016/j.scitotenv.2022.157585

Dr. Sarit Kaserzon and Ph.D. candidate Garth Campbell from UQ's Queensland Alliance for Environmental Health Sciences led a team which tested urine samples from more than 1,800 Australians and compared them with 27 samples from New Zealand farmers.

"We detected low levels of glyphosate, the world's most commonly used herbicide chemical, in 8% of the Australian samples," Dr. Kaserzon said.

"In comparison, there were high levels of glyphosate in 98% of the

samples taken from New Zealand farmers straight after they'd sprayed herbicide formulations.

"This indicates a strong link with [occupational exposure](#) for frequent users."

Glyphosate can be ingested in food or water, or inhaled or absorbed through the skin when using products like weed killer.

A [recent report](#) by the Center for Disease Control and Prevention in the United States found more than 80% of [urine samples](#) drawn from 2,310 American children and adults had traces of glyphosate.

The researchers say people shouldn't be concerned by the low levels detected in the Australian samples, but are advised to use safety precautions.

"There are many ways to reduce exposure to the chemicals we use in the home and garden every day," Mr. Campbell said.

"Farmers, or anyone else who regularly use chemicals containing glyphosate should wear goggles, protective gloves and avoid inhalation of dust and mist.

"I also highly recommend additional measures including [protective clothing](#), mask wearing and hand washing after handling a product with glyphosate, and ensure it is stored safely."

Dr. Kaserzon said there is currently limited evidence around how glyphosate affects human health.

"But by understanding how people are exposed we can reduce or eliminate the potential risk," she said. "We hope our research is used to

inform and improve regulatory decisions on protecting Australians' health."

The study is published in *Science of the Total Environment*.

**More information:** Garth Campbell et al, Characterization of glyphosate and AMPA concentrations in the urine of Australian and New Zealand populations, *Science of The Total Environment* (2022). [DOI: 10.1016/j.scitotenv.2022.157585](https://doi.org/10.1016/j.scitotenv.2022.157585)

Provided by University of Queensland

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