

Call to Action: Cancer Council Australia's position on evidence linking pesticides and cancer

15 May 2025

Attention: CEO Mr. Mark Nevin and members of the Board of Cancer Council Australia

Pesticide Action Australia is a for-purpose, not-for-profit charity dedicated to reducing the health and environmental harm caused by pesticides.

We commend Cancer Council Australia for the 5 February 2025 submission to the Australian Pesticides and Veterinary Medicines Authority (APVMA) 'Renewing the APVMA's engagement model', in which you stated:

As a cancer control organisation, we believe that the purpose of chemical regulation is to protect human, animal, and environmental health. Therefore, our primary concern relates to the effect that pesticides and veterinary medicines may have on cancer in humans, and we recognise the importance of having an effective, robust, and trusted regulatory system for agricultural and veterinary chemicals.

In light of this statement, we write to request that the Cancer Council Australia adopts the precautionary principle with regard to its advice relating to pesticide exposure and cancer. Adopting the precautionary principle means acknowledging that when there is substantial, credible evidence of danger to human or environmental health, protective action should be taken even if the threshold of scientific certainty has not been met.

In this letter, we provide examples of international bodies who adopt a precautionary approach. **A non-exhaustive list of bodies taking such an approach and speaking out about the evidence linking pesticides with cancer include:**

- **Breast Cancer UK** has publicly stated that '*pesticides could increase breast cancer risk by acting as carcinogens*', and have referenced studies demonstrating pesticide exposure may be associated with an increased risk of breast cancer. Accordingly, Breast Cancer UK advise the public to '*avoid gardening with pesticides*.'ⁱ
- **Irish Cancer Society** lists certain pesticides as a risk factor for developing Acute Myeloid Leukaemia.ⁱⁱ
- **New Zealand Breast Cancer Foundation** writes '*all cancers develop because of gene changes. Usually, these changes are due to chance or to factors such as ageing, exposure to carcinogenic substances or to damaging environmental effects like sunshine, radiation exposure, pesticides, cigarette smoke or alcohol*.'ⁱⁱⁱ
- **The American Academy of Pediatrics**, an organisation of 67,000 US paediatricians committed to the optimal physical, mental, and social health and well-being for all infants, children, adolescents, and young adults has written a position paper on pesticides, stating: '*Epidemiologic evidence demonstrates associations between early life*

exposure to pesticides and pediatric cancers, decreased cognitive function, and behavioral problems. Related animal toxicology studies provide supportive biological plausibility for these findings.^{iv}

- **The Childhood Leukemia International Consortium** advises *'it would appear prudent to limit the use of home pesticides before and during pregnancy, and during childhood.'*^v
- The **Canadian Cancer Society** lists exposure to certain pesticides pre-conception, in utero or as a child as a possible risk factor for increasing the risk of developing childhood leukaemia.^{vi}
- **Harvard University School of Public Health** conducted research that found children exposed to indoor insecticides have a higher risk of childhood hematopoietic cancers, stating that *'preventive measures should be considered to reduce children's exposure to pesticides at home.'*^{vii}
- **Breast Cancer Prevention Partners** in the USA state that *'fewer than 10% of breast cancer cases are due to family history'* and go on to advise *'many studies show links between specific pesticides and breast cancer.'*^{viii}
- A panel of the leading, independent world experts from the **International Agency for Research on Cancer** (IARC) found glyphosate to be a probable carcinogen to humans.

Australia's cancer rates:

According to the most recent International Agency for Research on Cancer's (IARC) Cancer Today figures^{ix}, Australia has the highest diagnosed incidence rates of:

- cancer in the world,
- leukaemia in the world,
- cancer for people aged 0-19 in the world,
- cancer for people aged 0-49 in the world, and
- among the highest rates of breast cancer in the world.

The Australian Institute of Health and Welfare projects that cancer incidence rates will continue to rise in Australia.^x

Given the above, the Australian public have the right to know of the overwhelming, independent evidence that associates pesticide exposure with increased cancer risk, and be authoritatively advised that they should take appropriate precautions. This is particularly important for pregnant women and children, given the body of research that exposure to pesticides during critical periods of development, such as prenatally and in early childhood, is associated with an increased risk of developing cancer.^{xi}

Cancer Council Australia's public position on pesticides:

We note two references to pesticides on the Cancer Council's website, one of which (a blog from 2014) states that pesticides are 'established carcinogens'^{xii} and another that advises 'if you are worried about pesticide residue on fruit and vegetables, wash them before use.' The word 'herbicide' is mentioned in the Environmental Causes section, where it is written:

'Involuntary exposure to carcinogens often comes to the public's attention through reports in the media concerning particular issues (use of herbicides, contaminants of food, hazards associated with cosmetics etc.). However, in all such instances, the level of cancer risk is rarely made clear. Such reports can cause alarm and confusion, even though there may be no risk or minimal risk.'^{xiii}

We ask you to consider whether this messaging and advice is accurate, sufficient, consistent, appropriate and reflective of the internationally-accepted current evidence base, and how this reflects on the Cancer Council.

Australian children are being repeatedly exposed to low level dosages of internationally-banned, carcinogenic pesticides in utero, in homes and schools, on lawns and gardens, in food residues and contaminated drinking water, in waterways, public parks and sporting grounds, as well as from agricultural application drift, overspray, or off-gassing, and from carry-home exposure of parents occupationally exposed to pesticides.

Australia still uses hazardous pesticides that have been banned in the UK and EU for decades due to their demonstrated health and environmental harm, making the risk of hazardous pesticide exposure even greater and more relevant for Australians. As of December 2024, Australia has banned only 24 hazardous pesticides, compared with 225 banned in the UK and EU.^{xiv}

Australia's pesticide regulator, the APVMA, is the only pesticide regulator in the OECD which is majority-funded by the industry it is mandated to regulate. It has been found by independent review to be industry-captured.^{xv} This has led to legitimate public distrust of APVMA assessments, and also impacts authorities who cite APVMA assurances. Given a regulatory framework with an embedded conflict of interest at its core, it is important that bodies such as the Cancer Council Australia take the lead in adopting the precautionary principle, and work to protect Australia's health outcomes by advocating for a reduction in our exposure to harmful chemicals.

Beyond the deficiencies in regulation of active pesticide ingredients, we note that the toxicity of pesticide product formulations, their adjuvants and their uses in combination are not tested for impact on human health. For instance, many pesticides now contain per- and polyfluoroalkyl substances (PFAS),^{xvi} which in and of themselves are linked with cancer and should be cause for Cancer Council Australia to speak out.

We understand that the Council's Prevention Policy is undergoing significant review in terms of occupational and environmental risk factors, and we will be looking forward to reviewing the findings of the expert Occupational and Environmental Cancer Committee and their naming the evidence linking pesticides and cancer.

We note public media statements of Megan Varlow, Director of Cancer Control Policy stating the Cancer Council is '*not aware of strong evidence*' to suggest environmental factors may increase cancer risk.^{xvii} We are concerned that this messaging is not in alignment with the precautionary principle and that it significantly downplays decades of robust evidence and research. Aiming for an unreachable standard of causative evidence would require highly unethical controlled studies, which must not be conducted in a modern society. A cancer body cannot be implicitly advocating for this, nor wait for this standard to be reached.

We note the Council does not have a current position paper on glyphosate-based herbicides, despite the former CEO of Cancer Council Australia, Professor Sanchia Aranda, publicly stating the Council had accepted the findings of the World Health Organisation's cancer agency, the International Agency for Research on Cancer, that glyphosate is a probable carcinogen. We could not find mention of this on the Council's website.

Conclusion

We strongly urge Cancer Council Australia to take positive steps to align with comparable international bodies by naming pesticides as an environmental risk factor, and start publicly advocating on the evidence, the risks to Australians, and the actionable prevention steps Australians can take to reduce their risk of cancer. Given both the weight of evidence and our world highest cancer rates, it is imperative for the health of Australians that the Cancer Council lean into this issue despite the inevitable industry-led, profit-driven pushback and adopt the precautionary principle.

As an example of an advocacy position adopting the precautionary principle, you will note Parkinson's Australia is advocating on behalf of Parkinson's Disease sufferers regarding the demonstrated harm caused by the pesticide paraquat.^{xviii} This is the type of action and leadership needed by more health and advocacy bodies in Australia in the wake of decades of well-funded industry campaigns which have attempted to hide the truth about the dangers of pesticide exposure, silence truth-tellers, attack credible and expert findings such as that of the World Health Organisation, and promote industry-funded research over independent, peer-reviewed evidence.^{xix}

Recommendations

We urge Cancer Council Australia to:

- Adopt the precautionary principle regarding the evidence linking pesticides and cancer;

- Cite pesticides as a risk factor of cancer, including but not limited to Acute Myeloid Leukaemia, Non-Hodgkin's lymphoma, breast cancer and bladder cancer;
- Publicly support the findings of the IARC on glyphosate being a probable carcinogen and release a position paper on steps Australians should take to reduce exposure and risk;
- Publish a position paper advising Australians of the independent evidence linking pesticide exposure with cancer, and steps they can take to minimise their risk;

We look forward to your response, and more importantly your action, in this regard.

Pesticide Action Australia would be happy to work with you to positively contribute and advise further should you wish.

Kind regards,

Pesticide Action Australia

ⁱ Breast Cancer UK: <https://www.breastcanceruk.org.uk/links-between-pesticides-and-breast-cancer/> & <https://www.breastcanceruk.org.uk/reduce-your-risk/chemicals-and-our-environment/pesticides-and-organic-food/>

ⁱⁱ Irish Cancer Society: <https://www.cancer.ie/cancer-information-and-support/cancer-types/leukaemia/acute-myeloid-leukaemia-aml/what-increases-my-risk-of-aml>

ⁱⁱⁱ Breast Cancer Foundation: <https://www.breastcancerfoundation.org.nz/breast-awareness/inherited-risk/faqs>

^{iv} American Academy of Pediatrics: <https://publications.aap.org/pediatrics/article/130/6/e1757/30399/Pesticide-Exposure-in-Children?autologincheck=redirected>

^v International Agency for Research on Cancer: <https://www.iarc.who.int/reference/home-pesticide-exposures-and-risk-of-childhood-leukemia-findings-from-the-childhood-leukemia-international-consortium/>

^{vi} Canadian Cancer Society: <https://cancer.ca/en/cancer-information/cancer-types/leukemia-childhood/risks>

^{vii} American Academy of Pediatrics: <https://publications.aap.org/pediatrics/article-abstract/136/4/719/73869/Residential-Exposure-to-Pesticide-During-Childhood?redirectedFrom=fulltext?autologincheck=redirected>

^{viii} Breast Cancer Prevention Partners: <https://www.bcpp.org/resource/pesticides-other/>

^{ix} International Agency for Research on Cancer: <https://gco.iarc.fr/today/en/dataviz/maps-heatmap?mode=population>

^x Australian Institute of Health and Welfare: <https://www.aihw.gov.au/reports/cancer/cancer-data-in-australia/data>

^{xi} Breast Cancer Prevention Partners: <https://www.bcpp.org/resource/pesticides-other/>

^{xii} Cancer Council Australia: <https://www.cancer.org.au/blog/what-are-cancer-clusters>

^{xiii} Cancer Council Australia: <https://www.cancer.org.au/cancer-information/causes-and-prevention/environmental-causes>

^{xiv} Pesticide Action Australia: <https://pesticideaction.org.au/2024/12/16/risk-and-hazard-based-approach/>

^{xv} Australian Government Department of Agriculture, Fisheries and Forestry Clayton Utz Strategic Review Report: <https://www.agriculture.gov.au/sites/default/files/documents/APVMA%20-%20Strategic%20Review%20Report.PDF>

^{xvi} Environmental Health Perspectives: <https://ehp.niehs.nih.gov/doi/10.1289/ehp13954>

^{xvii} The Sydney Morning Herald: <https://www.smh.com.au/lifestyle/health-and-wellness/lifestyle-and-the-lag-effect-what-s-causing-the-rise-of-early-onset-cancer-20241114-p5kqlb.html>

^{xviii} Parkinson's Australia: <https://www.parkinsons.org.au/banpq/>

^{xix} Merchants of Poison Report from US Right to Know, Friends of the Earth: <https://foe.org/resources/merchants-of-poison/>