

Standing Committees on Community Affairs: Impact of microplastics and other toxics on human health

Introduction to the National Female Infertility Advisory Group

The **National Female Infertility Advisory Group** brings together ten people from across Australia who have unique current and past first-hand experience of female fertility care, through IVF treatment or similar. We are engaged in guiding research into female infertility and plastic chemicals. Members of this group are aged from 28-41 years old, with diversity of occupation, cultural background and geographical location across Australia (NSW, QLD, VIC, SA and WA) in both metropolitan and regional areas.

This group was made possible by funding from the Australian Commonwealth's Medical Research Future Fund (MRFF) Emerging Priorities and Consumer Driven Research Initiative Infertility, Pregnancy Loss and Menopause Grant '***The impact of plastic food and drink packaging toxicants on infertility***' led by Dr Jessie Sutherland from the University of Newcastle.

This purpose of this project is to reduce the risk of female infertility linked to unsafe bisphenol exposure applying a bench to bedside consumer-centred model. This model is underpinned by the key principles of *doing research, together*¹ a resource to support co-design in medical research and guided by the MRFF², National Health and Medical Research Council³ and Australian Commission on Safety and Quality in Health Care National Standard for Partnering with Consumers⁴. Central to this project is an overwhelming body of evidence demonstrating that that dietary exposure to the plastics packaging chemicals "bisphenols" and particularly bisphenol-A (BPA) negatively impacts egg quality and health at or below levels currently considered safe for consumption in Australia⁵.

Together, we are working to:

	Increase knowledge of how bisphenols pose risks to fertility		Improve medical practices and find strategies to improve fertility treatment outcomes
	Raise public awareness of bisphenols		Advocate for policy change and develop recommendations

Members of this Group have worked together to compile this submission*. Our response will focus on items **e.** and **f.** It includes their direct quotes to highlight the unique lived-experience perspective. This submission should be read in conjunction with the submission by the Plastics and Female Infertility Research Team.

Comments in relation to Terms of Reference

1. The effectiveness of any education or informative efforts to notify the public of potential harms and prevention opportunities.

The human problem

“In the vacuum of trustworthy, evidence-led information, people are going to social media and other sources about the risks of plastics to fertility. There's simply no base education or knowledge to be careful.”

Many Australians navigating female fertility concerns want to understand the risks of bisphenols and other hormone-disrupting chemicals to their fertility, but there is no clear or consistent source of trustworthy information. Advice is often confusing, particularly when Australian Food Standards statements don't align with international best practice guidelines^{6,7}.

“When I was undergoing egg collection treatment, I was not provided with any information about environmental exposures such as BPA and their potential impact on fertility. At a time when patients are highly motivated to improve outcomes, this felt like a missed opportunity for preventative education.”

This leaves the public unsure of what to take seriously or what steps to take to protect themselves in relation to plastic packaging exposures. This uncertainty is even greater for those in rural and remote areas, where packaged food and drink may be harder to avoid and exposure may be higher. The burden is placed on individuals to research, understand and manage these risks on their own *“at a time when capacity is limited, leading to inequitable outcomes and missed prevention opportunities.”*

For people undergoing fertility treatment, this adds to an already overwhelming and emotionally demanding experience. Being across environmental exposure risks can feel like "one more thing", even though the impacts are real. This lack of clear, accessible guidance can leave people feeling anxious, unsupported, and responsible for navigating a complex health issue without timely, credible advice from trusted health professionals.

“I think the problem is that people don't even know. We're all looking into them when we're knee-deep in, you know, potentially years of treatments and then we're trying to look at any lever that can help, and it's only almost so far into the process that we even know to think about these things.”

2. The potential benefits of a national standard for consumer product.

The human problem

“Over the past six years, my husband and I have experienced repeated miscarriages, causing significant emotional and financial strain. This has led us to question the impact of everyday exposure to endocrine-disrupting chemicals such as BPA, which is still present in food packaging, food-handling materials, and plastic containers used at home, particularly when heated.”

Australians should be able to trust that everyday consumer products are safe according to best practice international evidence-based standards^{6,7}. Instead, many consumers are left to educate themselves, compare products, and try to work out what information to trust. This places an unfair burden on individuals and creates inequity, because not everyone has the time, resources, or knowledge to research potential health risks.

“I wish there was more knowledge and regulations around BPA surrounding the impact on fertility. When I moved to Australia [from Europe], I started to feel that Australia is letting people down...in the legislation of BPA, Europe has done a lot more”.

Without a clear national standard, responsibility is shifted away from industry and government and onto consumers, leaving people unsupported when trying to protect their health and fertility. This lack of consistent regulation and trusted guidance limits people’s ability to make informed choices, and contributes to preventable harm, increased pressure on the public health system, and the sense that profit is being prioritised over basic health and human rights.

“The government has a vested interest in supporting people to have children, so much so that it is supported through Medicare. Shouldn’t they take every step to ensure that people have the best chance of success?”

Position Statement

We know first-hand the profound pain and significant personal, financial, and emotional costs of infertility. That burden is made heavier by the realisation that we were never informed about the risks that everyday plastic chemicals can pose to female fertility. Individuals who are trying to conceive should not be expected to shoulder this responsibility alone.

Stronger safety standards, evidence-based public advice, and accessible preventative education enable people to make informed reproductive health decisions. Just as importantly, the public should be able to trust that products meet robust safety requirements. Shifting responsibility back to

systems, while ensuring equitable access to clear information, creates safer choices and better reproductive health outcomes for all.

We recommend:

1. Point of care education

Education should not rely on patients finding information themselves or finding out about the risks for the first time when they reach a fertility specialist. Education efforts should aim to reduce the burden on individuals by embedding trusted system-level guidance. It should come from trusted sources integrated across the reproductive lifespan at multiple touchpoints. We recommend the development of simple, accessible, standardised resources to empower clinicians and educators to provide guidance confidently, enabling consumers to understand and act. Removing the need for individuals to seek out alternative information sources that may be incomplete or inaccurate.

“There is a responsibility on the health system to make sure accurate information can be found for people seeking it out.”

Practical steps include:

- Developing materials and resources for community, infertility patients, and clinicians. Such resources must be targeted and accessible, outlining common sources of harmful chemicals and simple ways to reduce exposure. These should be co-developed with people with lived experience of infertility and clinicians for maximum trust and impact.
- Empowering and enabling fertility care providers to provide mandatory point of care education that uses clear, evidence-based information on environmental exposures and risks to fertility, including endocrine disrupting chemicals.
- Upskilling primary health care providers with the knowledge and resources needed to support proactive and preventative community education. Such opportunities include at; GP appointments when women are discussing falling pregnant, pre- and post-natal maternity visits, child health appointments for newborns, annual health checks, and early intervention health education programs in schools.

We recommend:

2. Population protection

Strengthening and regularly updating national standards for BPA in all food-contact materials to ensure products sold in Australia equitably limit the risks to consumers and reflect current international best practice. Australian consumers should *“be able to go pick something off a shelf and know it’s fine”*.

Practical steps include:

- Revisit and update Food Standards Australian and New Zealand regulations for tolerable daily intake limits for BPA. To make sure Australia is keeping up with best practice international standards.
- A national policy for the testing of food storage and packaging products and a standard reporting and labelling system. To enable consumers to transparently identify products that are safest.

Composed by

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References

(1) NSW Regional Health Partners, McKercher, K. A., & Muller, S. (2024). Doing research together. <https://doingresearchtogether.com.au> (2) Australian Government Department of Health and Aged Care. (2023). Principles for consumer involvement in research funded by the Medical Research Future Fund. <https://www.health.gov.au/resources/publications/principles-for-consumer-involvement-in-research-funded-by-the-medical-research-future-fund?language=en> (3) National Health and Medical Research Council & Consumers Health Forum of Australia. (2016). Statement on consumer and community involvement in health and medical research. <https://www.nhmrc.gov.au/about-us/publications/statement-consumer-and-community-involvement-health-and-medical-research> (4) Australian Commission on Safety and Quality in Health Care. (2021) National Safety and Quality Health Service Standards. 2nd ed. – version 2. Sydney: ACSQHC. (5) Peters, A. E., Ford, E. A., Roman, S. D., Bromfield, E. G., Nixon, B., Pringle, K. G., & Sutherland, J. M. (2024). Impact of Bisphenol A and its alternatives on oocyte health: a scoping review. Human Reproduction Update, 30(6), 653-691. <https://doi.org/10.1093/humupd/dmae025> (6) EFSA Panel on Food Contact Materials, Enzymes and Processing Aids (2023). Scientific Opinion on the re-evaluation of the risks to public health related to the presence of bisphenol A (BPA) in foodstuffs. EFSA Journal 2023; 21(4):6857, 392 pp. <https://doi.org/10.2903/j.efsa.2023.6857> (7) European Commission (December 31, 2024) “Commission Regulation (EU) 2024/3190.”.

