

The ethics of risk communication under uncertainty: A case study of PFAS mixtures and inter-agency environmental communication



Core Question: What communication strategies can help the public better understand toxicity findings?

Effective communication is essential for public health, yet translating complex scientific data into accessible messages often involves difficult trade-offs. This research project will investigate the “translation” process of PFAS contamination data in Michigan, specifically tracking how technical information moves from the data-generating agency, the Michigan Department of Environment, Great Lakes, and Energy (EGLE), to the public-facing communication platform known as Michigan PFAS Action Response Team (MPART). While simplifying technical jargon makes information more reachable, it raises significant ethical questions regarding what context might be lost in the process, such as scientific uncertainty or the distinction between ecological and human health risks.

The study aims to identify which pieces of information are altered, omitted, or reframed during this communication chain. Researchers are particularly interested in how professional communicators decide what to emphasize for different groups. For example, communities that are already highly engaged in PFAS monitoring often demand raw, detailed data and may become distrustful if they receive oversimplified messages. In contrast, audiences who are

newly learning about these “forever chemicals” may require more foundational context to interpret risks meaningfully. By examining these dynamics, the project explores how public awareness and prior engagement influence overall trust in government science.

The project’s goal is to establish communication strategies that prioritize transparency and integrity without overwhelming the audience. The findings will help scientific agencies tailor their messaging to ensure that all Michigan residents, regardless of their technical background, have the information they need to understand environmental risks and make informed decisions. This approach ensures that the path from the laboratory to the community remains both accurate and effective.

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