



## Claim examples & considerations

# Microplastics

Over the past 2 years, microplastics have been the subject of hundreds of articles and studies discussing their prevalence and potential impact on the environment and all forms of life. The extent to which microplastics might be harmful is currently unclear; but the science is continuing to develop. Furthermore, while litigation surrounding microplastics has not yet begun in earnest, it's ripening.

### **Background**

Microplastics are classified as any plastic particles measuring less than 5 mm, often existing in far smaller, nanoscopic dimensions. Microplastics are formed two ways: 1.) fragmentation of larger pieces of plastics into smaller pieces/particles; and 2.) intentional manufacturing for application in products such as personal care, cosmetic and cleaning products, paints, fertilizers, detergents and sandblasting materials. Scientific studies have established that microplastics are essentially everywhere and have been found at earth's highest peaks and at the depths of the ocean floors. They are in our soil, drinking water, air and food sources, including livestock, poultry, fish and produce. Given the ubiquity of microplastics in our food and water supply, it is no surprise that microplastics have been found in our gastrointestinal system.

A recent study conducted out of the University of Newcastle, Australia<sup>1</sup>, noted that the average person ingests approximately 5 grams of microplastics every week and further studies have documented the presence of microplastics in our blood and lungs. Thus, it appears that microplastics are both ingested and small enough to be inhaled and absorbed into the bloodstream.

### **Potential effects**

The potential adverse effects of microplastics are presently unclear and currently subject to much research; particularly in terms of the potential impact on humans. Most of the research thus far has related to the effects on animals and marine life. Studies on rodents have identified adverse effects on the male reproductive system. Marine organisms also appear susceptible. Scientists have found that microplastics seem to concentrate in deep sea areas important for biodiversity and potentially threaten the ecosystem. Moreover, studies also show that microplastics tend to bind to other contaminants, such as heavy metals like chromium, and serve as a vehicle to disperse such contaminants more widely. These sort of findings in nature are spurring researchers to rapidly investigate potential human health consequences. Scientific literature on the topic is anticipated soon.

## Litigation

Once there is science that definitively links microplastics to human health concerns, litigation can be expected to follow. While personal injury claims have not yet materialized, there have already been several noteworthy lawsuits against manufacturers of plastic products. For instance, there have been two notable instances where citizen groups have sued under the federal Clean Water Act and/or Resource Conservation and Recovery Act for alleged discharges of plastic pellets and solid waste into waterways<sup>2</sup>. These cases resulted in the manufacturers paying millions of dollars to fund environmental projects to offset the alleged harm. Litigation relating to the alleged practice of “greenwashing” has also been seen. “Greenwashing” is a form of marketing spin in which companies allegedly oversell or misrepresent their products’ sustainability, biodegradability and/or environmentally friendly attributes. In one such notable suit, shareholders of a plastic company asserted a derivative action for significant stock market losses because of the company’s alleged false promises that its product was 100% biodegradable, renewable and sustainable. The environmental group, Earth Island Institute, has also asserted multiple lawsuits against some of the largest plastic bottle producers alleging that the defendants’ plastic products pollute the environment and do not live up to their claims of being environmentally friendly<sup>3</sup>.

Thus, given the ubiquitous presence of microplastics, the escalation of scientific studies on the possible effects on humans and the ripening litigation environment, microplastics should be monitored as a potential emerging risk.

1 <https://www.newcastle.edu.au/newsroom/featured/plastic-ingestion-by-people-could-be-equating-to-a-credit-card-a-week>

2 [https://www.americanbar.org/groups/environment\\_energy\\_resources/publications/natural\\_resources\\_environment/2021-22/summer/plastic-pollution-litigation/](https://www.americanbar.org/groups/environment_energy_resources/publications/natural_resources_environment/2021-22/summer/plastic-pollution-litigation/)

3 <https://www.earthisland.org/index.php/advocates/suit/taking-on-big-plastic>