

GET THE FACTS: MICROPLASTICS

MICROPLASTICS

Microplastics are small pieces of plastic, less than 5 mm (0.2 inch) in length. Microplastics include broken pieces of plastic, microfibers, resin pellets from manufacturing, and microbeads. Microfibers are small fibers from cloth spun from petroleum based plastic polymers. Microbeads are very small pieces of plastic often found in cosmetic and hygiene products (also see our Fact Sheet on microbeads).

WHY ARE THEY DANGEROUS?

Since the 1950s, humans have produced more than 8 billion tons of plastic with less than ten percent being recycled. These plastics break down into smaller and smaller pieces as they pass through our environment and eventually make their way into our lakes, rivers and oceans.

Humans consume tens of thousands of microplastic particles each year. They are found in our drinking water, in animals we consume and food packaging. Many plastics are toxic and attract or combine with other toxins. The accumulation of these particles can damage the intestinal tract and the lungs, cause reproductive and organ harm, and developmental delays in children.

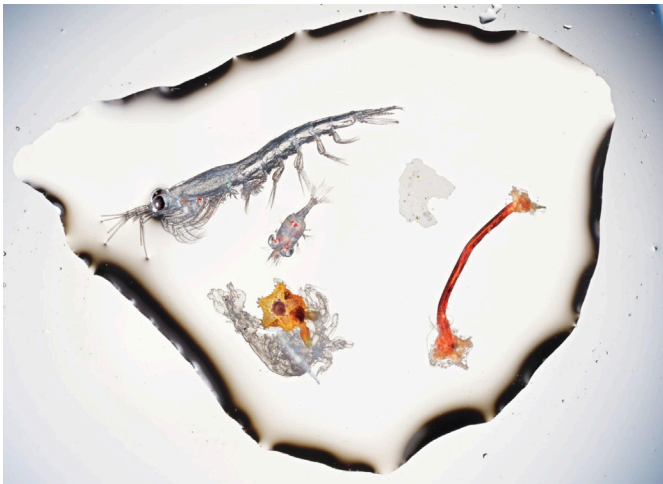


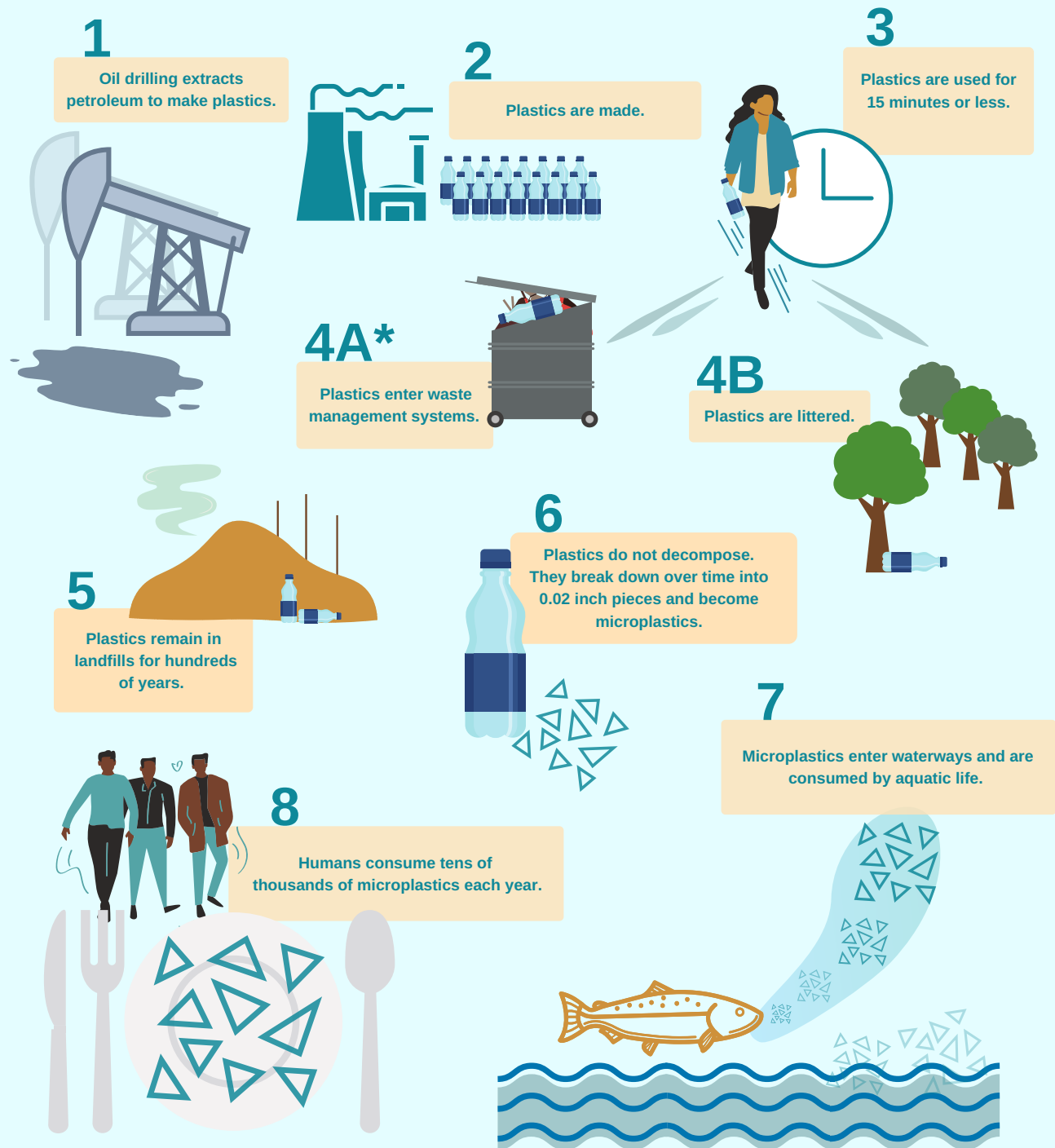
IMAGE SOURCE
nationalgeographic.com/magazine/2019/05/microplastics-impact-on-fish-shown-in-pictures/

microplastics include:

- ➔ plastic pieces
- ➔ microfibers
- ➔ resin pellets
- ➔ microbeads

A dollop of surface water from the English Channel contains a shrimp-like krill, about a third of an inch long; a smaller decapod crustacean; and an orange sea star just emerging from its filmy floating larval stage. The white chip and the fraying red fiber on the right are polyethylene—but to a young fish they too may look like food. Three percent of the larval fish caught for a 2017 study by researchers at Plymouth Marine Laboratory and the University of Plymouth had eaten microplastic fibers.

The Lifecycle of Microplastics



4A* This diagram doesn't include recycling because recycling is not a viable option in microplastics reduction.

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Illustrator: Joanna Levin

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WHAT WE CAN DO

Drink water from your tap, if it is clean and safe. This is recommended because the bottles that result from consumption of bottled water have nearly doubled microplastic levels in the environment.

Refuse and reduce plastic use, avoid packaged foods, use laundry balls that attract tiny plastics and microfibers before they are rinsed out into waterways from your laundry cycle, and avoid products that contain microbeads. Lastly, conduct cleanups in your community to keep larger plastics from breaking down in the environment.



IMAGE SOURCE

agsci.oregonstate.edu/article/baby-fish-have-started-eating-plastic-we-haven't-yet-seen-consequences

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