Health Impacts

Exposure to microplastics as well as the array of chemicals added to plastic products can be harmful to human health. Humans ingest microplastics through food, water, skin absorption, and the air they breathe. Recent research among pregnant women in the U.S. found that they have an average of 54 different chemicals in their blood. Many of these chemicals may have originated from consumer products.

Research suggests that the chemicals added during plastics processing can cause hormonal imbalances, reproductive problems, neurological effects, and even cancer. For example, phthalates (which give plastic extra durability) can cause cancer. As is the case with styrene, the basis of EPS foam—a popular product in the food-service industry—studies have shown that exposure to phthalates can cause hormonal imbalances and neurological effects. As is the case with styrene, the basis of EPS foam—a popular product in the food-service industry—studies have shown that exposure to phthalates can cause hormonal imbalances and neurological effects.

Health Impacts

The Plastic Life Cycle

DID YOU KNOW: GREENHOUSE GASES ARE EMITTED AT EACH STAGE OF PLASTIC’S LIFE CYCLE?

Gas, oil, and coal are the fossil-fuel building blocks of almost all virgin (new) plastic produced today. The polluting processes begin with the extraction, transport, and refinement of these crude materials. Then, energy and emissions-intensive manufacturing processes convert these feedstock chemicals into plastic feedstock and eventually, end-use plastic products.

After its brief use, many plastic items end up as litter, where researchers estimate it may take centuries to degrade. Without downgrading, plastic continues to break into smaller pieces, which enter aquatic ecosystems. Whether ingested by animals, leaking into chemicals and groundwater and soil, or burning hazily, lifelong plastics have costly and long-lasting consequences.

If discarded, plastic ends up in landfills where it also degrades for centuries, releasing toxic fumes, or very rarely, recycled into plastic feedstock for future use.

It’s Time to Break Up with Plastic

The best solution to our plastic pollution crisis is to make less plastic to begin with. It’s true that plastic has become ubiquitous in our daily lives, attracting consumers with its convenience and the feel-good promise of “recycling.” But unfortunately, plastic pollution continues to be promoted across the country as a solution to handling the overflowing plastic waste stream. Advanced recycling is not recycling, by any definition!

CIVIC ENGAGEMENT.

What does civic engagement have to do with plastic pollution? Everything! It is essential that you know who represents you! Develop a relationship with your representative(s); tell them how you feel about plastic issues in your region! Second, advocate for policies that strengthen environmental protections and reduce plastic consumption. Oppose policies that weaken protections and reduce plastic waste. Third, encourage your lawmakers to develop the plastic industry to continue producing and polluting.

REFUSE SINGLE-USE.

Simply put, use less single-use plastic. Bring your own bag, bottle, container, etc. with you and encourage others to do the same.

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PLASTIC POLICIES

Policies like bag bans, EPS ban, bottle ban, producer responsibility (“producer pays”) and container deposit (“bottle bill”) systems all support the goal of making less plastic, recycling what we have, and achieving a circular economy. Such policies are gaining popularity in cities and states across the country. In Virginia, laws must pass the state legislature before they can be adopted by localities. The plastic bag (SB 1368) is one example of a second plastic reduction policy which has been adopted in 10 localities across the state and has already reduced the number of single-use plastic bags observed there!