

INVISIBLES: THE PLASTIC INSIDE US

Plastic fibers, fragments, and granules have been found in nearly every place researchers have looked – in the oceans, in sea ice, in remote lakes and rivers, and in the atmosphere. But until now one research frontier – drinking water – remained unexamined.

Our exclusive research found tap water samples in cities on five continents is contaminated with microscopic plastic fibers. Plastic is pouring out of faucets from New York to New Delhi. Scientists say they don't know how these fibers reach household taps, or what their health risks might be, but experts suspect plastic fibers transfer toxic chemicals when consumed by humans.

The contamination defies geography: The number of fibers found in a sample of tap water from the Trump Grill, at Trump Tower in Manhattan, was equal to that found in samples from Beirut. Orb also found plastic in bottled water, and in homes that use reverse-osmosis filters. **83 percent of samples worldwide tested positive for microscopic plastic fibers.**



Copyright Chris Tyree. Photo taken while reporting for Orb in the Philippines. January 2017.

The world cranks out more than 300 million tons of plastic each year. More than 40 percent is used once, sometimes for less than a minute, and discarded. But plastic persists in the environment for centuries. Cities are only beginning to reckon with this plastic microfiber pollution. Slowing the wastewater treatment process would allow for the capture of more plastic fibers, Kartik Chandran, an environmental engineer at Columbia University, said. It could also increase costs.

The challenge is to create safer substances as convenient as today's plastics. Budding solutions include bioplastics, polymers made from sources like corn starch and tapioca root, and AirCarbon, plastic made from captured greenhouse gases. Elsewhere, companies are using proteins made from spider silk to spin textiles that may prove more durable than synthetics. Meanwhile, household filters and washing machine inserts are gaining popularity as a way to reduce fiber pollution.

“Since the problem of plastic was created exclusively by human beings through our indifference, it can be solved by human beings by paying attention to it,” Muhammad Yunus, the 2006 Nobel Peace Prize laureate, told Orb. “Now what we need is a determination to get it done before it gets us.”

Orb journalists travelled to Hong Kong, the Philippines, Indonesia, Australia, India, Uganda, the UK, and the US to interview scientists, subject matter experts, and individuals involved in plastic production and recycling. The journalists explored how plastic has infiltrated communities around the globe and how those communities are responding to the threat of plastic.

More than a dozen news outlets are publishing with us in at least 13 countries and up to 32 languages. You can view the original reporting in full on our website in [multimedia](#), [text](#), [image](#), [audio](#), [data](#), and [community](#) formats in English, Portuguese, Spanish, and Arabic. Please share our story with your network using [#OrbPlastics](#). Below are ideas for social media posts, but please feel free to modify to fit your personal or organization's tone.

TWITTER

In the first global study, @OrbTweet found #plastic contamination in the tap water of cities around the world. View the report: https://orbmedia.org/stories/Invisibles_plastics/multimedia

Journalists @OrbTweet found #microplastics in tap water in more than 80% of samples collected on 5 continents. View the report: https://orbmedia.org/stories/Invisibles_plastics/multimedia

#Microplastics aren't just choking the #ocean; they've infested drinking water. View @OrbTweet's full report: https://orbmedia.org/stories/Invisibles_plastics/multimedia

FACEBOOK

From the soles of your shoes to the contact lenses in your eyes, the phone in your pocket to the food in your refrigerator, the evidence is unmistakable: We are living in The Plastic Age. But would you believe you could be drinking plastic too? In the first public scientific study of its kind, @1World1Story found previously unknown plastic contamination in the tap water of cities around the world. View their full report. #OrbPlastics #microplastics #BreakFreeFromPlastic #PlasticPollutes
https://orbmedia.org/stories/Invisibles_plastics/multimedia

Microplastics — tiny plastic fibers and fragments — aren't just choking the ocean; they have infested the world's drinking water. Why should you care? Microplastics have been shown to absorb toxic chemicals linked to cancer and other illnesses, and then release them when consumed by fish and mammals. View @1World1Story's full report. #OrbPlastics #microplastics #BreakFreeFromPlastic #PlasticPollutes
https://orbmedia.org/stories/Invisibles_plastics/multimedia

More than 322 million tons of plastic are produced each year. If plastic was a country, it would be the world's 20th-largest economy, bigger than those of Austria, Argentina, Egypt, and dozens of others. Where does all this plastic go? @1World1Story went looking for answers in an investigation across six continents. What they

found will shock you. #OrbPlastics #microplastics #BreakFreeFromPlastic #PlasticPollutes
https://orbmedia.org/stories/Invisibles_plastics/multimedia

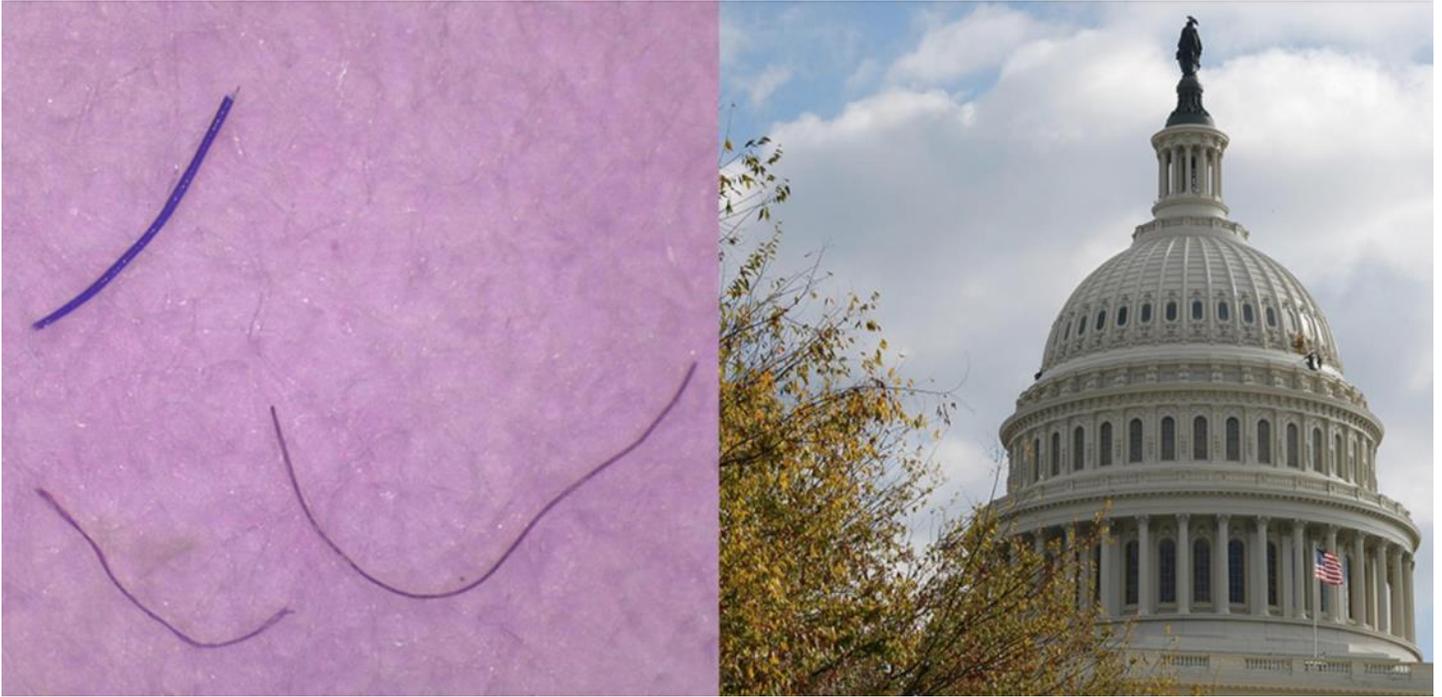
INSTAGRAM



In the first public scientific study of its kind, @OrbMedia found previously unknown plastic contamination in the tap water of cities around the world. More than 80 percent of the samples they collected on five continents tested positive for the presence of plastic fibers. View their full report at orbmedia.org (or add this link in the bio section and refer people there https://orbmedia.org/stories/Invisibles_plastics/multimedia). #OrbPlastics #microplastics #OurOceans #SDGs #GlobalGoals #Water #Recycling #CircularEconomy #Plastic #BeatTheBead #PlasticAge #CleanWater #PublicHealth #Health #BreakFreeFromPlastic #PlasticPollutes



orb
one world
one story



Location: Washington, DC.

@OrbMedia found approximately 16 fibers in the tap water at the visitor's center in the U.S. Capitol, home to both houses of Congress. Laboratory filter paper is dyed with a substance that turns it pink to better identify plastic fibers. View their full report at [orbmedia.org](https://orbmedia.org/stories/Invisibles_plastics/multimedia) (or add this link in the bio section and refer people there https://orbmedia.org/stories/Invisibles_plastics/multimedia). #OrbPlastics #microplastics #OurOceans #SDGs #GlobalGoals #Water #Recycling #CircularEconomy #Plastic #BeatTheBead #PlasticAge #CleanWater #BreakFreeFromPlastic #PlasticPollutes



Location: Jakarta, Indonesia.

A mother and children walk to collect water from a neighborhood tap while a nearby truck is loaded with plastic for recycling. Of 21 water samples taken in the Jakarta metropolitan area for @OrbMedia's study, 16, or 76 percent, tested positive for microscopic plastic fibers. their full report at orbmedia.org (or add this link in the bio section and refer people there https://orbmedia.org/stories/Invisibles_plastics/multimedia).

#OrbPlastics #microplastics #OurOceans #SDGs #GlobalGoals #Water #Recycling #CircularEconomy #Plastic #BeatTheBead #PlasticAge #CleanWater #BreakFreeFromPlastic #PlasticPollutes