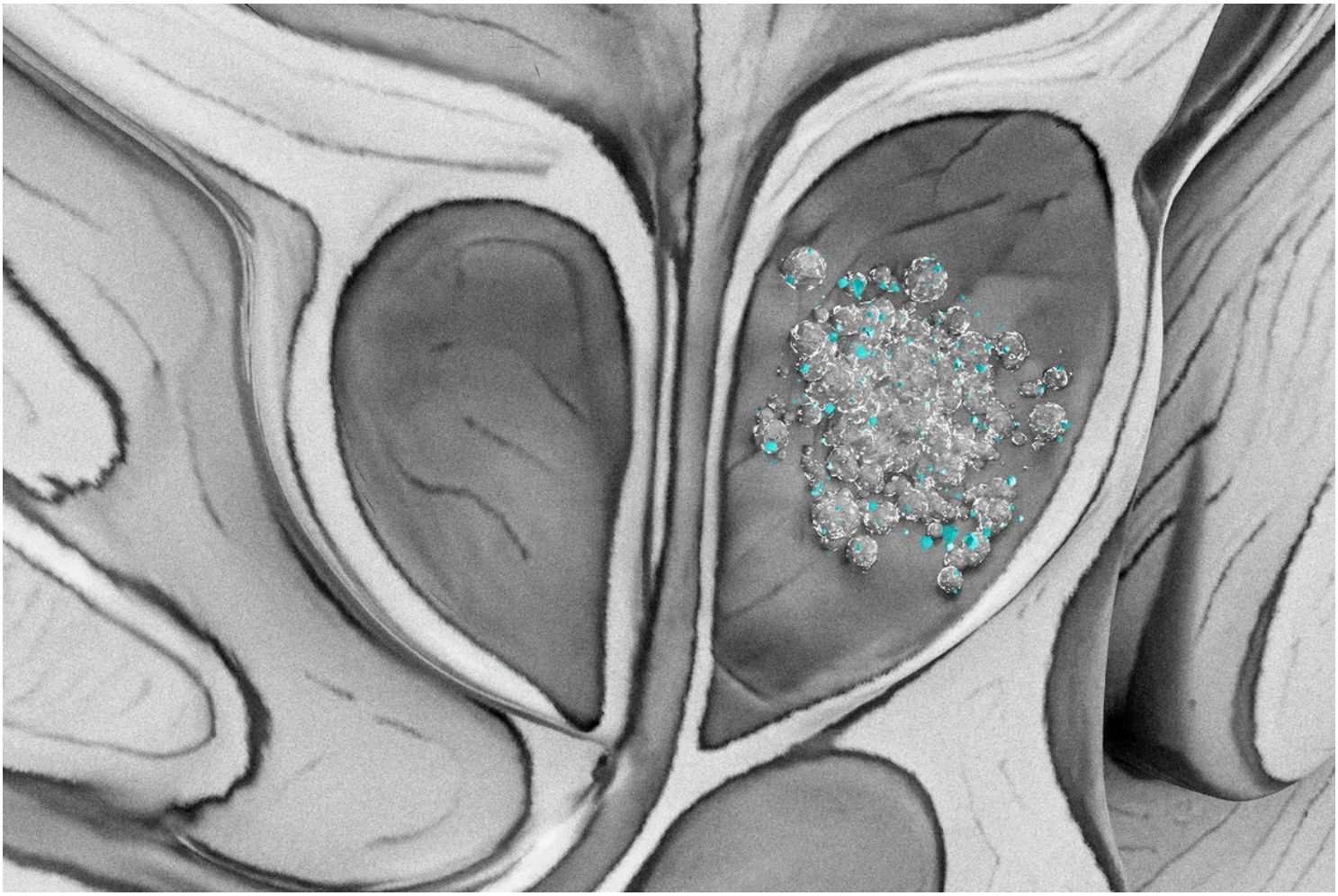
HEALTH NEWS

Microplastics Found in 9 of 10 Prostate Cancer Samples in Pilot Study

Researchers caution that larger studies are needed before any causal link can be established.



The Epoch Times/Shutterstock

George Citroner

3/31/2026 | Updated: 4/8/2026

Tiny plastic particles were found in nine out of 10 prostate cancer tumor samples in a new study, with cancerous tissue containing more than twice the concentration of microplastics as nearby healthy tissue.

The findings are from a pilot study that examined tissue samples from 10 men who had their entire prostate removed because of cancer—a sample size researchers acknowledge is too small to draw firm conclusions from.

The findings have been recently presented at the American Society of Clinical Oncology's Genitourinary Cancers Symposium.

"By uncovering yet another potential health concern posed by plastic, our findings highlight the need for stricter regulatory measures to limit the public's exposure to these substances, which are everywhere in the environment," study senior author Vittorio Albergamo, an assistant professor at NYU Grossman School of Medicine's Department of Pediatrics, said in a statement.

Plastic in Cancerous Tissue

Researchers detected plastic particles in 90 percent of tumor samples and in 70 percent of noncancerous prostate tissue. On average, cancerous tissue contained about 2 1/2 times more plastic than healthy tissue—about 40 micrograms per gram of tissue, versus 16 micrograms in healthy samples.

Special precautions were taken during analysis to avoid contamination, including the use of aluminum and cotton tools and clean-room conditions. The team focused on 12 common types of plastic molecules.

"Our pilot study provides important evidence that microplastic exposure may be a risk factor for prostate cancer," Dr. Stacy Loeb, a professor of urology and population health at the NYU Grossman School of Medicine and study lead author, said in the statement.

This is the first Western assessment of its kind to examine microplastic levels in prostate tumors and compare them with plastic buildup in noncancerous prostate tissue, she said.

Importantly, the study found an association—not proof of causation. Researchers have not established that microplastics cause prostate cancer,

and the science on microplastics and human health more broadly remains unsettled.

Why Prostate Cancer Matters

Other than skin cancer, prostate cancer is the most common cancer among men in the United States, according to the American Cancer Society.

Incidence in the United States has increased by 3 percent every year over the past 10 years. For every 100 American men, roughly 13 will develop prostate cancer during their lifetime, with two to three of them dying from it.

Microplastics are known to enter the human body through ingestion, inhalation, and skin contact. Previous studies have found these particles in nearly every human organ, but their effects are still not well-understood.

Findings Are a 'Red Flag'

Some physicians see the findings as a warning sign worth taking seriously.

"This NYU study found 2.5 times more plastic inside the tumors than in the healthy tissue right next to them," Dr. Joseph Mercola, a board-certified family physician, told The Epoch Times.

"That does not prove plastic caused the cancer, but it raises a serious red flag."

Mercola has previously drawn scrutiny from federal health regulators over some of his public health claims, and was not involved in the study.

There are a few features of prostate cancer that suggest environmental exposures as a contributing factor, he noted.

"First, the prostate runs on hormones," he said. It needs them to work properly.

"Microplastics are loaded with chemicals that mess with your hormones—specifically phthalates and bisphenols," he said. "They are not locked into the plastic. They leak out. When they reach your prostate, they can throw off the hormone balance that keeps cells growing normally."

Prostate cancer "almost always" shows up in tissue that is already inflamed, he said, and inflammation is the body reacting to repeated toxic exposure, such as that caused by exposure to microplastics.

"They stress your cells, hurt your mitochondria, and trigger the kind of long-term inflammation that gives cancer a foothold," he said.

Dr. Nhan Nguyen, a physician and Houston-based attorney specializing in per- and polyfluoroalkyl substances claims, compared the news findings to the breaking news of an oil spill.

"Except this spill is chronic, affecting generations through our water, food, and everyday items," he told The Epoch Times.

Others urge caution about drawing conclusions.

One study from 2018 found that when fish ingest plastic, including polyvinyl chloride, nylon, ultra-high-molecular-weight polyethylene, polystyrene (a thermoplastic), and medium-density polyethylene, it passes right through without any effect.

"This latest study is the same," Chris DeArmitt, who holds a doctorate in chemistry and is the founder and president of the Plastics Research Council, a nonprofit that reviews plastic science, told The Epoch Times.

"They find plastic and no link to any health effects," he said. "We are being frightened over nothing."

He pointed out that although there is currently no direct link or correlation between microplastics and cancer development, there are naturally occurring particles that have been shown to cause cancer, such as quartz from soil and rocks, wood dust, and leather dust.

DeArmitt wasn't the only expert skeptical of the study findings.

This study is "hypothesis-generating, not practice-changing," Dr. David Shusterman, a urologist at New York Medicine Doctors, and not involved in the study, told The Epoch Times.

His advice to men concerned about environmental exposures and prostate cancer risk is that they should focus on evidence-based, risk reduction strategies, which include:

- Maintaining a healthy body weight
- Exercising regularly
- Optimizing metabolic health
- Avoiding tobacco
- Limiting excessive alcohol
- Following appropriate prostate cancer screening guidelines

"Importantly, fear should not drive decision-making," he said. "There is currently no clinical test to measure microplastic burden in the prostate, and no validated intervention to remove them."

George Citroner
Author

George Citroner reports on health and medicine, covering topics that include cancer, infectious diseases, and neurodegenerative conditions. He was awarded the Media Orthopaedic Reporting Excellence (MORE) award in 2020 for a story on osteoporosis risk in men.

Author's Selected Articles

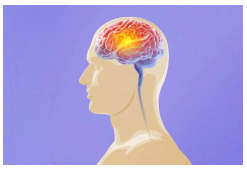
4 Outdoor Activities for the Outdoor-Averse
Apr 10, 2026

Cooking Once a Week May Cut Dementia Risk by 70 Percent

Apr 05, 2026

What Makes Superagers' Brains So Special

Apr 02, 2026



Your Evening Eating Window May Protect Your Heart

Mar 29, 2026

Explore Our Health Newsletters

Get the best in health and wellness. See all of our inspiring newsletter.

CHOOSE YOURS NOW

Newsletters

- Rise & Shine
- Wellness
- Integrative Medicine

Essential Guides

- Parkinson's Disease
- ADHD
- Sciatica

Original Series

- Virtue Medicine
- The Roots of Hair Loss
- Harnessing Vagus Nerve Power