

# WHO's cancer agency: Diesel fumes cause cancer

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Diesel exhaust causes cancer, the World Health Organization's cancer agency declared Tuesday, a ruling it said could make exhaust as important a public health threat as secondhand smoke.

The risk of getting cancer from diesel fumes is small, but since so many people breathe in the fumes in some way, the science panel said raising the status of diesel exhaust to carcinogen from "probable carcinogen" was an important shift.

"It's on the same order of magnitude as passive smoking," said Kurt Straif, director of the IARC department that evaluates cancer risks. "This could be another big push for countries to clean up exhaust from diesel engines."

Since so many people are exposed to exhaust, Straif said there could be many cases of lung cancer connected to the contaminant. He said the fumes affected groups including pedestrians on the street, ship passengers and crew, railroad workers, truck drivers, mechanics, miners and people operating heavy machinery.

The new classification followed a weeklong discussion in Lyon, France, by an expert panel organized by the International Agency for Research on Cancer. The panel's decision stands as the ruling for the IARC, the cancer arm of the World Health Organization.

The last time the agency considered the status of diesel exhaust was in

1989, when it was labeled a "probable" carcinogen. Reclassifying diesel exhaust as carcinogenic puts it into the same category as other known hazards such as asbestos, alcohol and ultraviolet radiation.

The U.S. government, however, still classifies diesel exhaust as a likely carcinogen. Experts said new diesel engines spew out fewer fumes but further studies are needed to assess any potential dangers.

"We don't have enough evidence to say these new engines are zero risk, but they are certainly lower risk than before," said Vincent Cogliano of the U.S. Environmental Protection Agency.

Experts in Lyon had analyzed published studies, evidence from animals and limited research in humans. One of the biggest studies was published in March by the U.S. National Cancer Institute. That paper analyzed 12,300 miners for several decades starting in 1947. Researchers found miners heavily exposed to diesel exhaust had a higher risk of dying from lung cancer.

Lobbyists for the diesel industry argued the study wasn't credible because researchers didn't have exact data on how much exposure miners got in the early years of the study; they simply asked them to remember what their exposure was like.

A person's risk for cancer depends on many variables, from genetic makeup to the amount and length of time of exposure to dangerous substances.

A U.S. group that represents diesel engine makers says major technological advances in the last decade have cut emissions from trucks and buses by more than 95 percent for nitrogen oxides, particulate and sulfur emissions.

Some experts said the new classification wasn't surprising.

"It's pretty well known that if you get enough exposure to diesel, it's a carcinogen," said Ken Donaldson, a professor of respiratory toxicology at the University of Edinburgh who was not part of the IARC panel. He said the thousands of particles, including some harmful chemicals, in the exhaust could cause inflammation in the lungs and over time, that could lead to cancer.

But Donaldson said lung cancer was caused by multiple factors and that other things like smoking were far more deadly. He said the people most at risk were those whose jobs exposed them to high levels of diesel exhaust, like truck drivers, mechanics, or miners.

"For the man on the street, nothing has changed," he said. "It's a known risk but a low one for the average person, so people should go about their business as normal ... you could wear a mask if you want to, but who wants to walk around all the time with a mask on?"

**More information:** Online: [www.iarc.fr](http://www.iarc.fr)

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