

- Air pollution

## Indoor air pollutants pose risk to health

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INDOOR air pollutants can be as dangerous to health as outdoor pollutants, a renowned pulmonologist said.

The World Health Organization said air pollution is one of the greatest environmental risks to health.

It was estimated to have caused 4.2 million premature deaths worldwide in 2019, and 89 percent of those deaths are in low- and middle-income countries, mostly in Southeast Asia and Western Pacific region.

In a media forum Tuesday, Dr. Albert Rafanan, a board member of the College of Chest Physicians, said air is composed of 78 percent nitrogen, 21 percent oxygen and 1 percent argon, carbon dioxide and other gases.

“When we say major air pollutants, we’re looking at the one percent that causes all the problems with health which includes particulate matter, carbon monoxide, oxides of nitrogen, volatile organic compounds and ozone,” Rafanan said.

Outdoor air pollution sources like power plants, construction and road dusts, biomass burning, transportation, open waste burning, industries, vehicle emissions and brick kilns can affect respiratory and cardiovascular systems, pregnancy and childhood, he said. But equally dangerous are pollutants from common household activities like the burning of candles and incense, woodworking, cooking with wood stoves and tobacco smoking, Rafanan said.

Particulate matter, also known as particle pollution, is a mixture of solid and liquid droplets that are small enough to be suspended in the air.

While some particles, such as dust, soot or smoke, are dark and large enough to be seen by the naked eye, others are so small and can only be detected using an electron microscope, he said.

Several months ago, the National Capital Region was enveloped in smog, a thick cloud of pollutants.

“Air pollution does not equate to smog. Smog is air pollution that reduces visibility, and you [can] see it occur when sunlight reacts with nitrogen oxides,” Rafanan said.