

See factbox: "How to protect yourself from wildfire smoke".) As climate change makes wildfires more intense, here are some of the profound and unexpected ways air pollution affects our bodies, and what we can do to minimise exposure. The worst days of air pollution ("hazardous" or maroon, under the EPA's system) are expected to rise by 27%. Wildfire smoke is one of the factors driving this trend. One study of PM2.5 (see fact box: What is PM2.5?) from wildfire smoke found that levels had increased by up to 5 micrograms per cubic metre in the western US in the past decade – enough to reverse "decades of policy-driven improvements in overall air quality", the authors concluded. If there is a wildfire nearby, the Centers for Disease Control and Prevention advise taking steps to limit your exposure where possible: Choose a room to close off from outside air Wear a tightly fitting respirator, if it is safe for you to do so Keep track of fires nearby using services such as AirNow's fire and smoke map Pay attention to health symptoms and seek medical care if needed Read the full advice on protection from wildfire smoke from the CDC online. Even in the relatively wealthy, developed nations of Europe and North America, the toll taken by air pollution is borne predominantly by those who are least well off or from minority communities that face systemic inequalities. These tiny particles can be made up of a mixture of solid and liquid substances, varying in their chemical composition, including carbon, metals and organic compounds. These specks of airborne soot, dust and other substances can trigger inflammation, which may cause damage the neural connections in the brain. In 2023, large portions of the US saw significant dips in air quality and visibility as smoke from wildfires north of the Canadian border billowed across the continent. People who have existing respiratory conditions and newborns with developing lungs are the most affected by wildfire smoke. To put this in context – one study found that a quarter of the US's PM2.5 pollution was caused by wildfire smoke. In western regions, as much as half was caused by smoke. With climate change expected to increase the risk of wildfires around the world, it is likely that air quality will .also suffer