

GREEN FINGERS

Urgent warning to gardeners as soil 'increases risk of killer heart disease'

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GARDENERS have been warned that their habit could leave them at an increased risk of heart disease.

Medics found that pollutants in the soil could have a 'detrimental effect on the cardiovascular system'.



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Gardeners have been warned about the possible dangers lurking in their soilCredit: Getty

The results of the analysis pushed experts to recommend that people wear a [face mask](#), if they are in close contact with the soil.

Experts at the University Medical Center Mainz, [Germany](#) said pollution of air, water and soil is responsible for at least nine million deaths each year.

They highlighted that more than 60 per cent of pollution-related deaths are due to heart issues such as strokes, [heart attacks](#), heart rhythm disorders and chronic ischaemic heart disease.

Writing in *Cardiovascular Research*, a journal of the European Society of Cardiology, the authors said soil pollutants include heavy metals, pesticides, and plastics.

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They state that contaminated soil could then lead to increasing oxidative stress in the blood vessels, which in turn leads to heart disease.

Dirty soil can get into the blood stream, through inhalation.

Soil pollutants also flow into rivers, making dirty water, which may later be consumed.

Pesticides were also linked to cardiovascular disease.

The experts added that while people who work in agriculture and chemical industries will be most at risk - the general public could also ingest pesticides from contaminated food, soil and water.

The experts said: "Although soil pollution with heavy metals and its association with cardiovascular diseases is especially a problem low- and middle-income countries since their populations are disproportionately exposed to these environmental pollutants, it becomes a problem for any country in the world due to the increasing globalisation of food supply chains and uptake of these heavy metals with fruits, vegetables and meat."

Medics also investigated cadmium, which is a heavy metal that occurs naturally in small amounts in air, water, soil and food, and also comes from industrial and agricultural sources.

Their analysis showed mixed results in the relationship between cadmium and heart disease.

Through analysis they found that the number of cardiovascular emergency department visits in Japan was 21 per cent higher on days with heavy exposure to Asian dust.

This dust is hazardous because it is usually contaminated and is airborne.

Professor Münzel added that more studies are needed on the combined effect of multiple soil pollutants on cardiovascular disease since we are rarely exposed to one toxic agent alone.

"Research is urgently required on how nano- and microplastic might initiate and exacerbate cardiovascular disease.

"Until we know more, it seems sensible to wear a face mask to limit exposure to windblown dust, filter water to remove contaminants, and buy food grown in healthy soil."