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Coronary Heart Disease with Air Pollution

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Introduction

According to researchers, heavy metal contaminants can enter the environment naturally or through human activity and can end up in soils, water bodies, or the air. The organic element called humus, which gives soil its green colour, has a strong attraction for heavy metal cations and draws them out of the water that percolates through the soil. These elements are taken up by the roots of crops and other plants, along with water, and are subsequently transferred from plants to animals through plants. By adhering to mineral particles in the soil and precipitation processes, heavy metals are also kept in the soil [1]

Strict indoor-outdoor gradients are caused by HAP levels, which are frequently found in low-middle income nations. These levels can be an order of magnitude greater than ambient outdoor levels in the same area. For example, mean indoor 24-hour PM10 values of 200 to 2,000 mg/m3 are relatively typical [2]. Peak exposures of more than 30,000 mg/m3 have been recorded while cooking with low-efficiency combustion of biomass fuels. It is good to see that HAP is now contributing less to global morbidity and death than it was ten years ago.

The health impacts of particles from natural phenomena, such as desert dust, wildfires, and volcanic eruptions, have recently come to light. According to estimates, natural dust accounts for 18% of all premature deaths linked to air pollution. Exercise might lessen the harmful effects of air pollution. However, there might be a point at which excessively breathing in contaminants while exercising trumps any preventive advantages.

Description

This paper conducts an extensive assessment of numerous studies on soil heavy metal concentrations in China's industrial and agricultural areas.In this study, five heavy metals-Pb, As, Cd, Cr, and Hg-that have been identified by the US Environmental Protection Agency as priority heavy metal contaminants were included (USEPA). This review gathered heavy metal concentrations from 402 sampling sites in industrial regions and 1041 sampling sites in agricultural regions using the major literature databases, including Web of Science, China National Knowledge Infrastructure (CNKI), China WanFang Literature Database, and China Weipu Literature Database [3,4]. Each of these studies focused solely on one or a small number of contaminated sites spread throughout various Chinese provinces.

Numerous researchers have conducted in-depth study on the use of both living and non-living microorganisms as biosorbents. A potential substitute for the uptake of heavy metals from various contaminated media is microbial biomass. The inherent benefits of microbe-mediated bioremediation include the ability to obtain leftover microbial biomass (such as Citrobacter, Pseudomonas, Streptomyces, Bacillus, etc.) from fermentation industries and the potential for the microbes to absorb significant amounts of heavy metal ions, transferring those metals to a contaminated matrix of biomass [5].

Conclusion

Since carbon dioxide has a long atmospheric lifetime, aggressive policies to reduce it are required in the long run but insufficient on their own to slow down global warming in the coming decades. Instead of a policy focused on carbon dioxide, the adoption of policies with good effects on health and ecosystems may offer the best possibility for significant and immediate cobenefits. With the aim of preventing diseases linked to natural events, it is urgent to understand the health impact and, more importantly, the exposure-response relationship of particle constituents originating from natural events. This is due to the rising risk from natural events that are made worse by global warming, such as forest fires, volcanic eruptions, and dust storms.

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