Summary

Air pollution is the contamination of the air by substances or pollutants in quantities which are may be harmful or injurious to human health or welfare, animal or life .

Atmospheric particulate air pollution arises from a variety of sources, both natural (e.g., sea spray, windblown dust) and synthetic sources (e.g., power plants, motor vehicles). Particulate material that enters the atmosphere can be primary (particles emitted directly) and secondary (particles that from by chemical reactions that involve gas-phase precursors, such as sulfur dioxide and oxides of nitrogen).

Many pollutants, from both man-made and natural sources, can be found in outdoor air. Some naturally occurring pollutants in outdoor air are well documented as causing or exacerbating pulmonary diseases (e.g., pollens and fungi).

As the World Health Organization (WHO) points out, outdoor air pollution contributes as much as 0.6 to 1.4 percent of the burden of disease in developing regions, and other pollution, such as lead in water, air, and soil, may contribute 0.9 percent.

Many people spend large portion of time indoors; as much as 80-90% of their lives. We work, study, eat, drink and sleep in enclosed environments where air circulation may be restricted. For these reasons, some experts feel that more people suffer from the effects of indoor air pollution than outdoor pollution

The major source of indoor pollution is from combustion, particularly second hand smoke (SHS) exposure, gas stove use, and wood burning in stoves and fireplaces. Kerosene space heaters are also an important source of indoor air pollution.

The human health effects of poor air quality principally affect many systems specially the respiratory and the cardiovascular systems. Individual reactions to air pollutants depend on the type of pollutant a person is exposed to, the degree of exposure, the individual's health status and genetics.

Air pollution contributes to various respiratory diseases as asthma, emphysema, chronic bronchitis, lung infections and bronchogenic carcinoma. It also leads to cardiovascular illness such as hypertension and coronary heart diseases.

Controlling the health effects of indoor and outdoor air pollution requires strategies oriented toward populations and toward individual patients. Clinicians can make practical recommendations to their patients in order to reduce risk for diseases and for exacerbation of established diseases. Clinicians may serve as consultants or as advocates in seeking to reduce the effects of indoor and outdoor air pollutants through population-oriented control approaches.