

Lung cancer leading cause of cancer deaths



Lung cancer is the leading cause of cancer mortality in males in the western world and in India. It is one of the top 5 causes of cancer mortality in females as well. Naturally, there is a huge impact on resources of a family and a country due to lung cancer, says Dr Jyotirup Goswami, consultant-clinical oncologist with Karkinos Healthcare.

The main causes for lung cancer are cigarette smoking. Around 80 per cent of lung cancer deaths are attributable to smoking. Coal tar containing PAHs (Polycyclic Aromatic Hydrocarbons) is the chief carcinogen.

Air pollution is caused by fine particulate matter from various sources, e.g. mines, factories, motor vehicles, burnt farmland stubble, forest fires and construction sites. This consists of tiny air-

borne particles known as PM2.5 that are 2.5 micrometers in diameter or smaller

The International Agency for Research on Cancer (IARC) has classified outdoor air pollution as a Group 1 carcinogen. The Lancet Commission on pollution and health established that all forms of pollution cause 43 per cent of lung cancer deaths in the world. Air pollution alone causes up to 29 per cent of all lung cancer deaths.

Studies have shown a correlation between PM2.5 exposure and mutations in the epidermal growth factor receptor gene found in human cells that are common in about half of non-smokers with lung cancer. Sadly, 99 per cent of the world's population is exposed to polluted air.

