

# Indian Medical Association

Headquarters, New Delhi



## **Air Pollution & Health (Prescription for Prevention)**

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# Air Pollution



- It is estimated that air pollution in urban areas contributes to 2.4 million deaths annually, and almost two thirds of these occur in developing countries of Asia.
- Population exposed to urban air pollution is rapidly expanding with high rate of rural to urban migration.

# Air Pollution



- **Unprecedented increase in the number of motor vehicles with inferior technology, poor maintenance, and inferior quality of fuel is aggravating the problem of ambient air pollution. Industrial activity-in residential areas in several towns and cities of India.**

# Air Pollution and its effect

Air pollution is the human introduction into the atmosphere of chemicals, particulate matter, or biological materials that cause harm or discomfort to humans or other living organisms, or damages the environment (1) Air pollution causes deaths (2)and respiratory disease. (3) Air pollution is often identified with major stationary sources, but the greatest source of emissions is mobile sources, mainly automobiles. (4) Gases such as carbon dioxide, which contribute to global warming, have recently gained recognition as pollutants by climate scientists, while they also recognize that carbon dioxide is essential for plant life through photosynthesis.

# Air Pollution and its effect

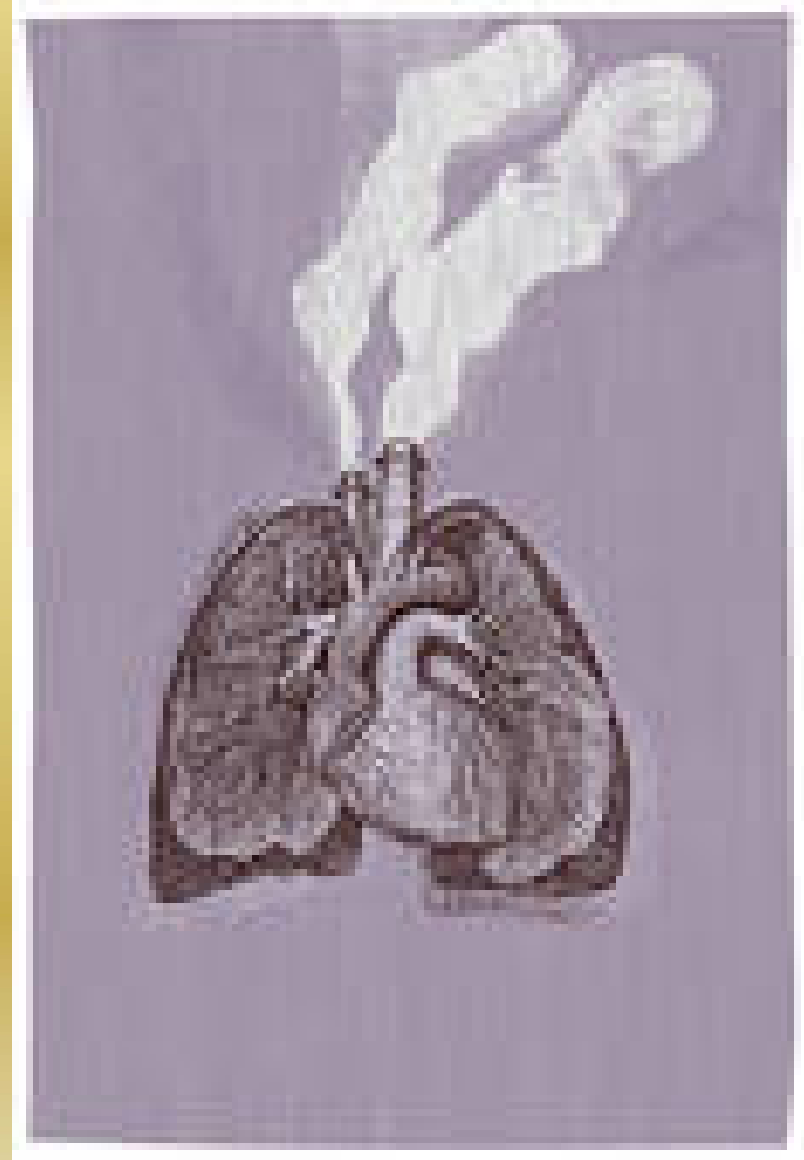


- **The atmosphere is a complex, dynamic natural gaseous system that is essential to support life on planet Earth. Stratospheric ozone depletion due to air pollution has long been recognized as threat to human health as well as to the Earth's ecosystems.**

# Air Pollution and its effect

Main health effects of air pollution are:

- Coughing, Nose and throat irritation, Chest pain, Reduced lung function, Increased susceptibility to respiratory illnesses, Aggravation of asthma, etc.
- Fine particles from Diesel exhaust can cause lung cancer, Premature death, Acute respiratory symptoms, Chronic bronchitis, Decreased lung function (shortness of breath), People with existing heart and lung disease, as well as the elderly and children, are particularly at risk.



# Air Pollution and its effect



- **Acute lower respiratory tract infection in children under 5 years of age, COPD in women chronically exposed, Aggravation of asthma and COPD , Ischemic heart disease, Tuberculosis, Adverse Pregnancy outcome, Cataract, Lung Cancer. Children response to even low level of pollutants is high.**

# Prescription for prevention

- **Protecting everyone's right to breathe clean air. Works through public education, community advocacy, and government oversight to ensure enforcement of environmental laws.**
- **Environmental Education-**
- **Avoiding environmental allergens and irritants is one of the primary goals of good asthma management.**
- **Integrate environmental education into clinical visits.**
- **Improve ability to communicate with patients about environmental exposures.**



# Prescription for prevention

- Increase ability to individualize treatment plans.
- Increase capacity for building patient-provider relationships.
- Enhance quality of care and increase patient capacity for disease self management.
- Encourage families to be advocates for their own health.
- Everyone should be encourage to increase plantation and not to destroy the plans

# Prescription for prevention

- Cigarette smoking ban should be taken seriously and a law should be more complaint.
- We should encourage not to burn the waste and dry leaves rather it should buried for good manure effect.



# Prescription for prevention

- **Should know at what time of day pollution is high, we should avoid going outdoors.**
- **Stay indoors as much as you can during days when pollution levels are high. Many pollutants have lower levels indoors than outdoors.**
- **If you must go outside, limit outdoor activity to the early morning hours or wait until after sunset. This is important in high-ozone conditions (such as in many large cities) because sunshine increases ozone levels.**

# Prescription for prevention



- **Don't exercise or exert yourself outdoors when air-quality reports indicate unhealthy conditions. The faster you breathe the more pollutant you take into your lungs.**
- **During a day an adult exhale air which can fill 3000 balloons child can do even more.**



## **IMA's ROLE**



- **Indian Medical Association can plan many workshops to educate members regarding how to identify early effects of pollution on health. Through community service project, can educate public regarding what is air pollution?, How each one of us is contributing to pollution? Then only educate them how to avoid exposure to pollution.**





Thank You