EPIDEMIOLOGICAL STUDIES

CPCB has sponsored two Epidemiological studies that are being carried out by Chittaranjan National Cancer Institute (CNCI), Kolkata. The details of the study are as follows. The final report is awaited.

**Epidemiological to find the Effect of Air Pollutants especially Respirable Suspended Particulate Matter (RSPM) and other carcinogens on Human Health in Delhi**

A study is being carried out on Epidemiological to find the Effect of Air Pollutants especially Respirable Suspended Particulate Matter (RSPM) and other carcinogens on Human Health in Delhi. The study is being carried out by Chittaranjan National Cancer Institute (CNCI), Kolkata and is sponsored by CPCB.

**Objectives**

The objectives of the study are as follows:

To prepare a database on air pollution related respiratory symptoms among the residents of Delhi.

To assess the degree of lung function impairment in persons chronically exposed to city's air.

To explore the underlying mechanism of air pollution related pulmonary dysfunction at the cellular and subcellular level.

**Scope of Work**

The scope of work involves health assessment including evaluation of respiratory symptoms through questionnaire survey and clinical examination, assessment of lung function, assessment of cellular lung response to air pollution, assessment of systemic effects of Delhi's air pollution, assessment of hematological profile, changes in liver and kidney function, assessment of genotoxic effects and correlation between health effect and air quality.

Parameters examined

- Respiratory symptoms and general health including blood pressure and blood glucose
- Lung function test
- Hematology, immunology, liver and kidney function, antioxidant status
- Cytopathology and functional state of airway epithelial cells and immunocytes in sputum
- Genotoxicity test
- Correlation of the findings with air quality data with special reference to RSPM

**A Study on Ambient Air Quality, Respiratory Symptoms and Lung Function of Children in Delhi**

A study is being carried out in Delhi on Health effects of air pollution on Children in Delhi. The study is being carried out by Chittaranjan National Cancer Institute (CNCI), Kolkata.

**Objectives**

The objective of the study is

Assessment of the respiratory health status of school children chronically exposed to ambient air.
Establishment of a database relating to pollution related respiratory problems among children of the city.

Scope of Work

Prevalence, duration and severity of respiratory symptoms will be determined from questionnaire responses and actual tests on various physiological parameters like lung function tests.

Study protocol:

- Questionnaire survey to obtain respiratory symptoms and illness data.
- General health check up, measurement of blood pressure.
- Spirometric measurements of lung function.
- Correlation of the findings with RSPM value of the sampled areas

Study on Ambient Air Quality, Respiratory Symptoms and Lung Function of Children in Delhi

A study is being carried out in Delhi on Health effects of air pollution on Children in Delhi. The study is being carried out by Chittaranjan National Cancer Institute (CNCI), Kolkata.

Objectives

The objective of the study is

Assessment of the respiratory health status of school children chronically exposed to ambient air pollution of Delhi and

Establishment of a database relating to pollution related respiratory problems among children of the city.

Scope of Work

Prevalence, duration and severity of respiratory symptoms will be determined from questionnaire responses and actual tests on various physiological parameters like lung function tests.

Study protocol:

- Questionnaire survey to obtain respiratory symptoms and illness data.
- General health check up, measurement of blood pressure.
- Spirometric measurements of lung function.
- Correlation of the findings with RSPM value of the sampled areas