Impact of ‘Air Pollutants’ on the Health of Traffic Police

in Mangaluru, Karnataka

Anti-Pollution Drive (APD) Foundation
ABOUT THE PROJECT

Scale of the Issue: Mangaluru is one of the rapidly growing cities of India. The growth is associated with an enormous increase in vehicular traffic emitting exhausts and polluting the atmosphere. Airborne dust plays a major part in the overall atmospheric pollution and Motor vehicle emissions constitute the most significant source of pollution in an urban environment. Road traffic produce volatile organic compounds, suspended particulate matter, oxides of sulphur, oxides of nitrogen, and carbon monoxide which makes adverse health effects on the exposed population. Traffic related air pollution is a day to day health hazard to individuals who commute to work/school/colleges. Several students use the public or the transportation provided by the educational institute exposing them to the hazardous toxins in the air. School children at the tender age are exposed and quickly effected by the air pollution and develop health hazards is their respiratory system due to automobile exhaust. Each year percentage of asthmatic children rise in numbers and mainly due to being exposed to pollution caused in urban areas. Vehicular pollution is the sole pollution contributing elements in large scale within city limits affecting residents, school students and officer goers.

Air Pollution and its Impact on Health:
As a first step towards gauging the scale of the problem at hand, the intent was to augment the understanding of the science of air pollution and to assess the impact of pollutants on public health.
Many of us experience some kind of air pollution-related symptoms such as watery eyes, coughing, or wheezing. The actual risk depends on the person’s current health status, the pollutant type and concentration, and the length of exposure to the polluted air. Those most vulnerable are - Outdoor workers (Traffic Police, Auto/Bus/Taxi Drivers, Street Vendors, Street Sweepers and Construction workers), children under age 14 (whose lungs are still developing), individuals with heart disease, individuals with lung disease, pregnant women and those engaging in outdoor recreational activities (jogging and walking outdoors). *This project aims to assess the impact specifically on the health of the Traffic Police and Traffic Wardens in Mangaluru*

**Project Modules**

The Components of the project include the following modules

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<th>Deliverables/Outcomes</th>
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<td>Assessing the perception of Air Pollution through a manual survey</td>
<td>Survey Results</td>
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<td>2</td>
<td>Conducting the Pulmonary Function Test (PFT)</td>
<td>Actual Health Impact on Lungs, most affected individuals</td>
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<td>3</td>
<td>Provision of medication</td>
<td>Temporary relief (adaptation)</td>
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<td>4</td>
<td>Provision of scientific pollution masks</td>
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<td>Identification of the sources of pollution and the levels - including site study, monitoring using sensors, etc.</td>
<td>Solution possibilities for mitigating air pollution</td>
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**Methodology**

Our Approach is to evolve an action plan along with the stakeholders based on our strategy for deployment.

- Connect to all stakeholders
  - Impact Group – Mangaluru City Traffic Police
  - Hospital / Pulmonologist to conduct PFT
  - RTO / Traffic Department
  - Pollution Control Board
  - Media

- Perception Survey and PFT

- Collation and analysis of the results

- Identification of locations of the most affected individuals

- Distribution of masks and medication

- Preparation of Reports

**Results:** The test shows significant amount of traffic personnel have affected lungs. The results shows 22.3% of the policemen having 5 and lesser years of service are showing signs of restrictive lungs. 26.3% Policemen having more than 5 years’ experience are showing restrictive lung capacity.
Conclusion: by the Dept. of Respiratory Yenepoya Medical College. There is a significant correlation in lung function and exposure to vehicular pollutants. The number of traffic police with restriction increased with the duration of exposure.

Solution to Pollution – Phase 1

As an immediate remedy to the problem we choose to provide them with scientifically designed mask which give a higher degree of protection against pollution. On May 22nd 2016, we distributed the mask and handed over Health remedies for lung pamphlet to the traffic department.

The Pamphlets were launched by our Honble Minister for Health & Family Welfare, Govt of Karnataka Sri. UT Khader. The masks were handed over to the Commissioner of Police Mangaluru Sri M Chandra Sekhar IPS by the MLA of Mangaluru South Sri JR Lobo.

Also present at the event were Sri Mohiuddin Bawa MLA Mangaluru North, Dr Sanjiv Patil, Deputy Commissioner of Police (Crime & Traffic), Sri Udaya Nayak Assistant Commissioner of Police (Traffic), & Dr Lakhsmi Khantha of Karnataka State Pollution Control Board.
ABOUT THE ORGANISATION

Name of the entity: Anti-Pollution Drive (APD) Foundation

Website: http://www.antipollution.org/


Date of formation: 2nd October (2014), registered officially on the 16th October, 2015

Mission: To work towards mitigating air pollution and improvise public, environment and economic health in India

Vision: A clean and healthy environment

Organisation structure:

APD Foundation has four core teams. These are specified below:

→ Public Health Team
→ Awareness & Behavioural Change Team
→ Legal Team
→ Solutions and Strategy Team

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Traffic Police Worst Hit by Air Pollution: Study

A study has revealed that the breathing capacity of traffic police increased with the duration of exposure to vehicular pollution.

**PUBLIC WANT UNDERPASS**

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