

Air Pollution: How Clean is the Air you're Breathing Right Now?

Air pollution has emerged to be one of the greatest environmental and public health risks in the world. The World Health Organization estimates that air pollution contributes to approximately 800,000 deaths and 4.6 million lost life years annually.¹

The threat and impact of air pollution is even more severe in developing countries like India. India's Central Pollution Control Board (CPCB) has proclaimed Gujarat as the most contaminated State in the nation. Similarly, Gujarat also tops the list of the seven states that account for 80% of the aggregate waste in country followed by Maharashtra and Andhra Pradesh.

Air pollution is a more critical issue, especially for developing nations like India. In highly industrialized states like Gujarat, there appears to be a critical increase in air pollution levels in the recent years. As per the figures shared by Gujarat Pollution Control Board (GPCB) in its annual report 2015-16, the ambient air quality

(PM10) has degraded not only in industrial clusters like Vapi, Ankleshwar and Vatva, however has additionally in private and business zones of Surat, Vadodara, Ahmedabad and Rajkot.

Similarly, the GPCB has also classified Ahmedabad (Gujarat's chief city) as one of the most polluted urban centres in the world. The degradation in Ahmedabad's air quality has additionally brought about genuine health concerns, including unexpected life losses, allergic effects, fibrosis, microbial contamination and increased emergency room visits for respiratory illness. All these adverse impacts have led to a serious demand for an air pollution response plan.

Realizing the need to address the rising threat of air pollution in the city, the Ahmedabad Municipal Corporation (AMC) has taken a revolutionary step. The AMC has collaborated with many stakeholders to unveil and implement the city's *Air Information and Response Plan*. This

plan has been created utilizing the recommendations and best practices endorsed by civic experts, medical practitioners and community leaders, both national and international (Mexico City, Beijing and Los Angeles).

Consolidating the efforts of local government, scientists and NGO's, eight new air quality checking destinations in Ahmedabad are creating a day by day Air Quality Record (AQI) that is accessible to citizens through 11 LED screens across the city, as a feature of what is known as the Air Information and Response (AIR) plan.

The Air Information & Response Plan is one of its kind in India and Ahmedabad is the first city that has introduced the air action plan and has taken a small but progressive step towards mitigating the impacts of air pollution. This small step carries the potential of saving millions of lives from the adverse impacts of air pollution.

"Cleaning up the air we breathe prevents non-communicable diseases as well as reduces disease risks among women and vulnerable groups, including children and the elderly," says Dr Flavia Bustreo, WHO Assistant Director-General Family, Women and Children's Health.² ■

– AIDMI Team

AQI Category	Associated Health Impact
Good (0 to 50)	Minimal impact
Satisfactory (51 to 100)	May cause minor breathing discomfort to sensitive people
Moderately Polluted (101 to 200)	May cause breathing discomfort to the people with lung disease such as asthma and discomfort to people with heart disease, children and older adults
Poor (201 to 300)	May cause breathing discomfort to people on prolonged exposure and discomfort to people with heart disease
Very Poor (301 to 400)	May cause respiratory illness to the people on prolonged exposure. Effect may be more pronounced in people with lung and heart diseases
Severe (401 to 500)	May cause respiratory effects even on healthy people and serious health impacts on people with lung/heart diseases. The health impacts may be experienced even during light physical activity

<http://indiatogether.org/air-quality-index-colour-coding-in-india-cities-environment>

1 World Health Organization, "World Health Report 2002: Reducing risk, Promoting healthy life", World Health Organization. Geneva, Switzerland. Available from www.who.int/whr/2002/en/

2 <http://www.who.int/mediacentre/news/releases/2014/air-pollution/en/>