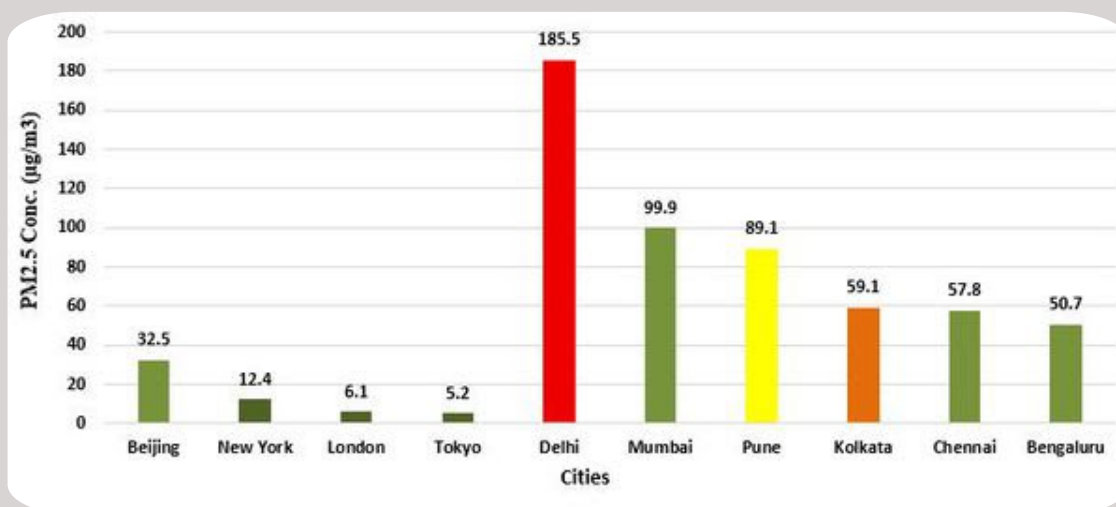


CERCA Weekly Newsletter



Centre of Excellence for Research on Clean Air (CERCA)
Indian Institute of Technology, Delhi

Air Quality in different cities

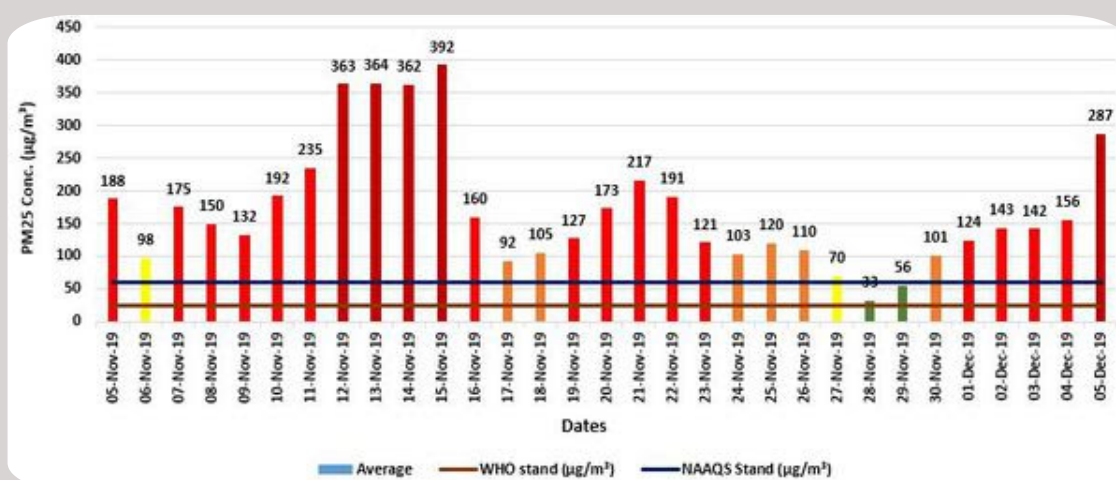


Delhi Air Quality is in 'very poor' category in comparison to other cities in India and Globally.

December 27, 2019, 11:00-12:00 IST (Hourly Average)

Data Source: Berkeley Earth

Delhi air quality for last 30 days

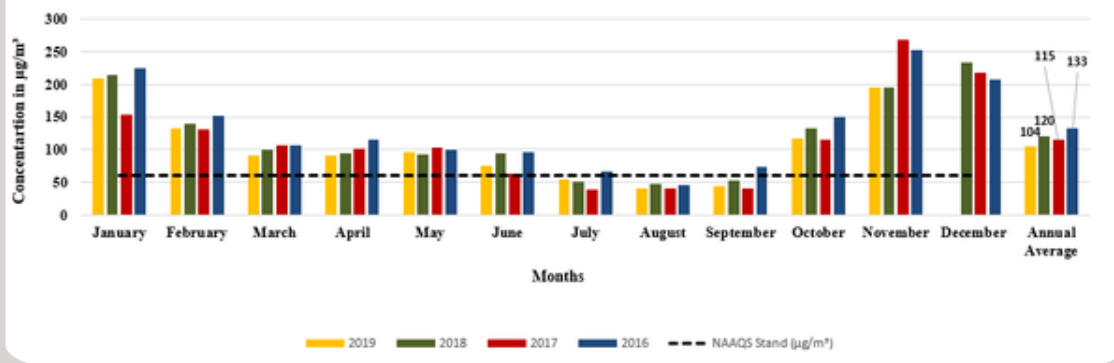


During the last 30 days, Delhi Air quality is in "severe" category.

Average PM2.5 Air Quality for 10 monitoring stations in Delhi

Data Source: CPCB

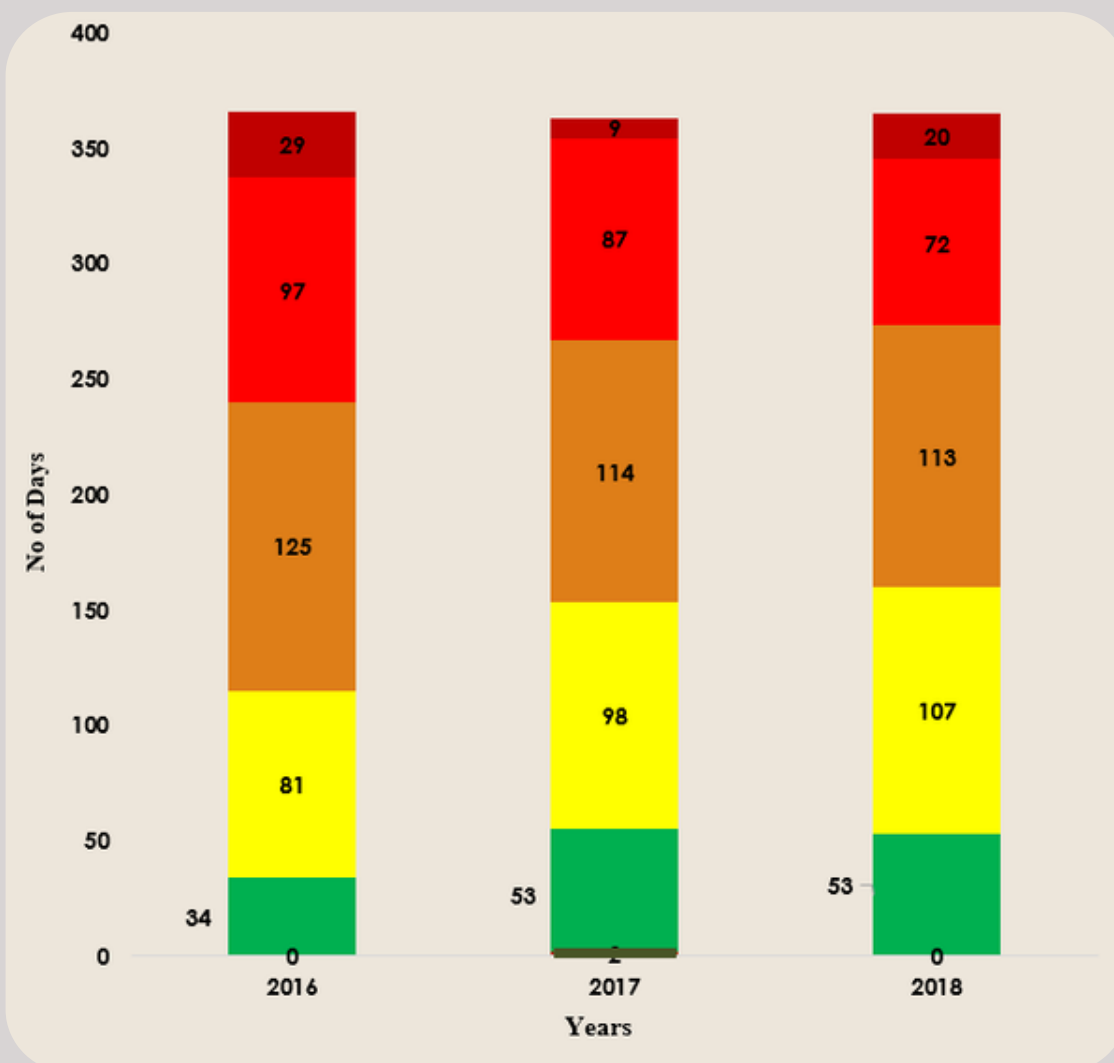
Delhi long term air quality trend



Average Air Quality has marginally improved in 2019 w.r.t 2018, 2017 and 2016.

Data Source: Source: Data from 10 monitoring stations (CPCB)

Delhi Air Quality



The graph represent the no of days in each category i.e., Good to Severe for last three years (2016-2018). The no of days in severe category reduced from 29 (2016) to 09 (2017) and then increased to 20 in 2018..

Data Source: Source: Data from AQI (CPCB)

Air quality health impacts

AQI	Associated Health Impacts
Good (0–50)	Minimal Impact
Satisfactory (51–100)	May cause minor breathing discomfort to sensitive people
Moderate (101–200)	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 (201–300)	May cause breathing discomfort to people on prolonged exposure and discomfort to people with heart disease with short exposure
Very Poor (301–400)	May cause respiratory illness to the people on prolonged exposure. Effect may be more pronounced in people with lung and heart diseases
Severe (401–500)	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

Thought Leadership



The unintended consequence of India's rural employment programme: air pollution

Income growth from low levels is often associated with reductions in environmental quality but evidence that the relationship is more than correlational remains scarce.

Source: Quartz India

New Measures and Initiatives



Delhi govt passes electric vehicle policy to tackle air pollution, 5 lakh EVs to be registered in 5 years

The EV policy further states that over the next five years, the government will likely register at least 5 lakh new EVs in Delhi.

Source: Indian Express



This railway station opens an 'oxygen parlour' to combat air pollution

In a unique initiative to battle rising air pollution in cities, an 'Oxygen Parlour' has been opened at Nashik railway station to provide an experience of breathing clean air to the commuters.

Source: Economic Times

Health Impact

Delhi's air quality index: Toxic pollution can affect your unborn child



Source: Financial Express

Researchers have found that there is a correlation between breathing polluted air and the gestation periods, birth weights, and lung health after birth.



Impact of air pollution on health may be far worse than thought, study suggests

Results chime with earlier review indicating almost every cell in the body may be affected by dirty air.

Source: The Guardian

International Developments

ScienceDaily

Tackling air pollution: Researchers present emissions inventory for Nepal

Scientists have presented the first high-resolution inventory to record emissions of greenhouse gases and air pollutants in Nepal over an extended period of time. Their research reveals that the air pollution problem is growing at a much faster rate than the economy.

Source: Science Daily

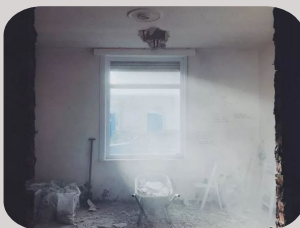


Iran's air pollution: Schools shut, children kept indoors

Government says it is investing millions to reduce pollution but many believe quality of fuel in vehicles is to blame.

Source: MSN

New Research (study) or Policy



Homes in Delhi-Ncr Have Cancer-Causing Indoor Pollutants Like Formaldehyde: Dyson Study

The study also revealed that dust mites, moulds and harmful bacterias are also found in these homes.

Source: First Post

ScienceDaily

Untangling links between nitrogen oxides and

airborne sulfates helps tackle hazy air pollution

A research team has unveiled a first-in-kind study of nitrogen oxides (NO_x) and its role in the rise and fall of airborne sulfates in hazy air pollution, offering policymakers new insights into ways to tackle smoggy weather.

Source: Science Daily

New Technology



Meet these 4 startups fighting pollution with ideas from thick air

From Beijing-based Smart Air to Delhi's Air Pollution Action Group, a number of social enterprises and business ventures are collaborating with government bodies, civil society, and NGOs to fight air pollution.

Source: Your Story

ScienceDaily

Smog-eating graphene composite reduces atmospheric pollution

A graphene-titania photocatalyst degrades up to 70% more atmospheric NO_x than standard titania nanoparticles in tests on real pollutants.

Source: Science Daily

For more details visit <http://cerca.iitd.ac.in/>

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