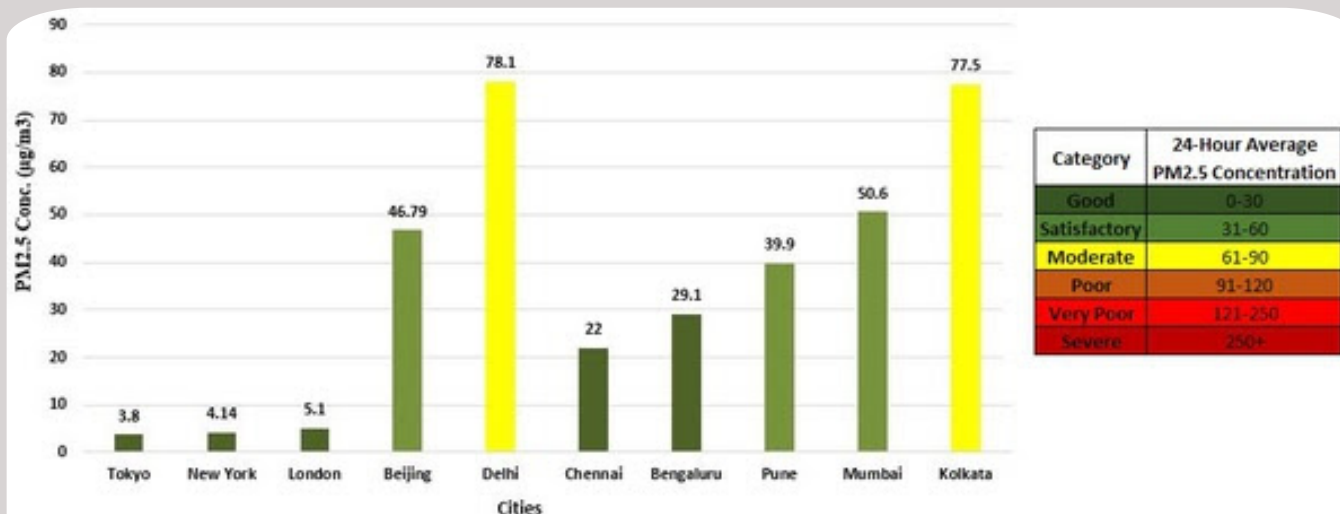


CERCA Weekly Newsletter



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

Air Quality in Different Cities

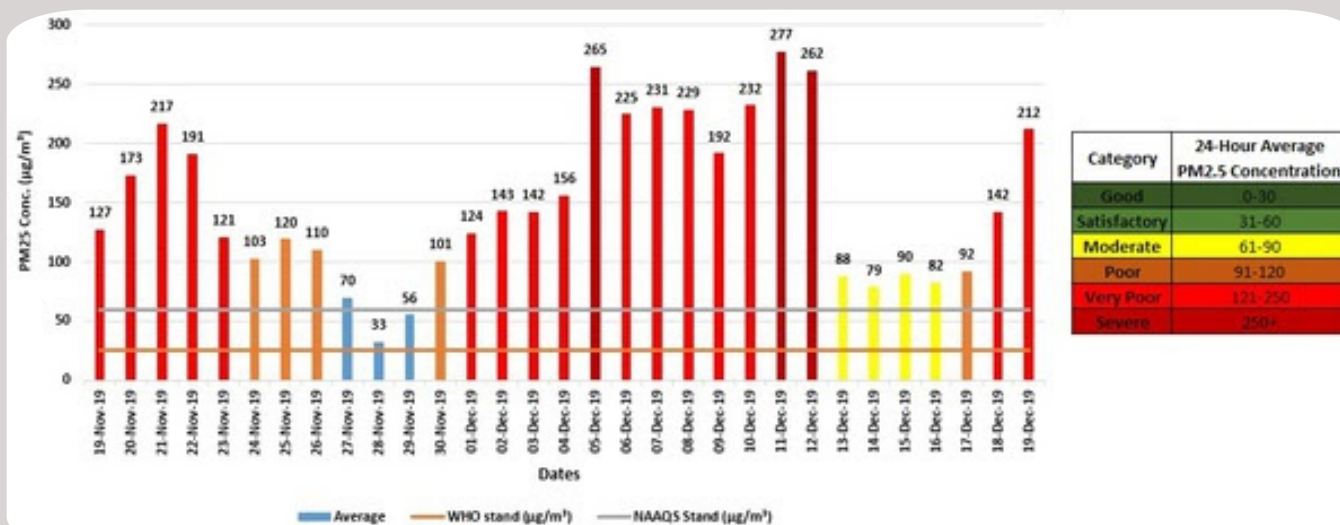


January 09, 2020, 11:00-12:00 IST (Hourly Average)

Delhi Air Quality was in 'Moderately Polluted' category in comparison to other cities in India and Globally.

Data Source: Berkeley Earth

"Delhi Air Quality" for last 30 days



Average PM 2.5 values for 10 Stations (Dilshad Garden, Shadipur, NSIT Dwarka, ITO, DTU, Siri Fort, Anand Vihar, Mandir Marg, R.K Puram and Punjabi Bagh)

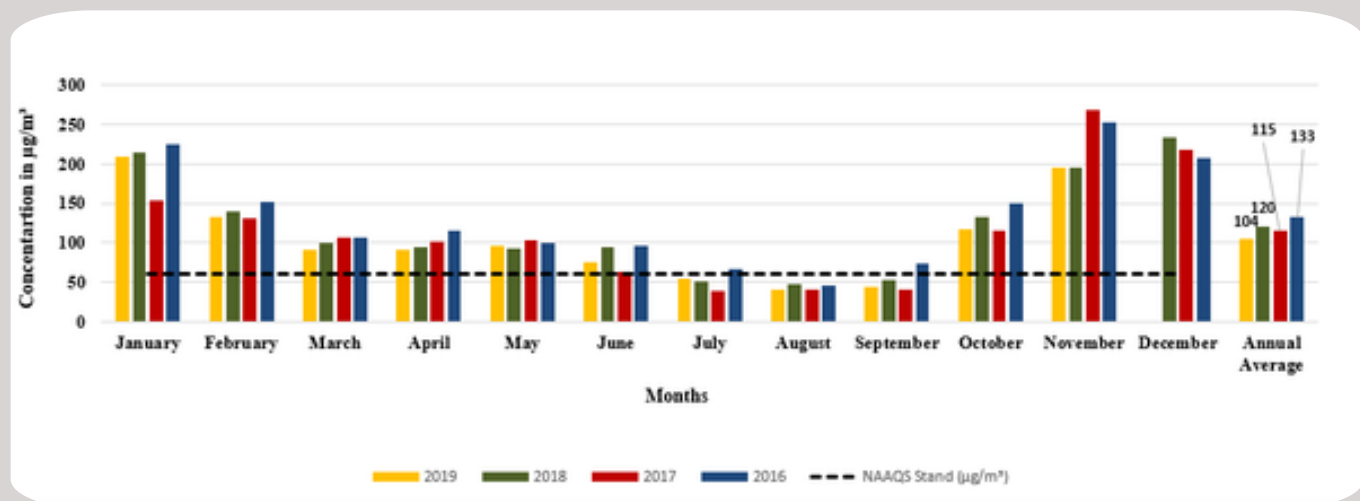
* WHO - World Health Organization

* NAAQS - National Ambient Air Quality Standards

During the last 30 days, Delhi Air Quality was in "Very Poor" category.

Data Source: CPCB

Delhi Long Term Air Quality Trend



PM 2.5 values from 10 monitoring stations in Delhi (Dilshad Garden, Shadipur, NSIT Dwarka, ITO, DTU, Siri Fort, Anand Vihar, Mandir Marg, R.K Puram and Punjabi Bagh)

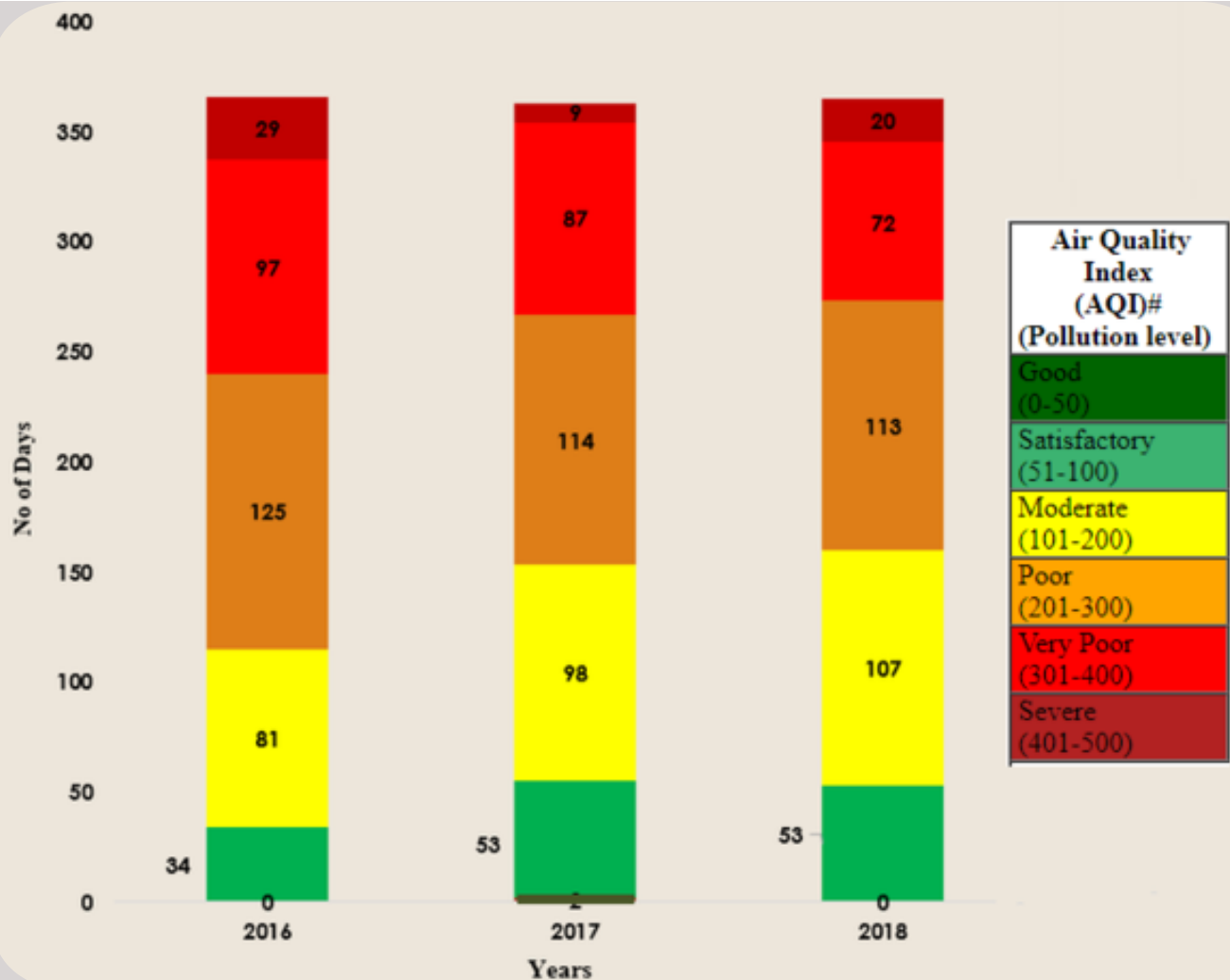
Note: Data for 2019 has been considered till the month of November 2019 only

* NAAQS - National Ambient Air Quality Standards

Average Air Quality has marginally improved in 2019 vis-a-vis 2018, 2017 & 2016

Source: Data from 10 monitoring stations (CPCB)

Delhi Air Quality trend in terms of days from good to severe category



The graph represents 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.

Source: 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



Source: *The Wire*

New Measures and Initiatives



Source: *Economic Times*



Source: *The Hindu*

Health Impact



Source: *Economic Times*

Air Pollution and Bad Health - From the Minister's Perspective

India expects some gumption on Prakash Javadekar's part to convince the Centre to fund research on air pollution that is impossible to ignore.

'Delhi CycleWalk' project to reduce air pollution in Delhi at least by 20%: Amit Shah

Union Home Minister Amit Shah on Monday laid the foundation stone for the 'Delhi Cycle Walk', a dedicated 200-km track for cycling and walking, claiming it will reduce pollution in the national capital "at least by 20 per cent"

Residents to get air pollution data

Air monitoring stations to be set up at four apartment buildings. The public will get a detailed analytical data on air pollution following the implosion of the apartment complexes at Maradu within two days.

Long-term exposure to tiny air pollutants can increase risk of stroke

Long-term exposure to PM2.5, tiny particulate matter less than 2.5 microns in diameter that can enter deep into the lungs, increases the risk of stroke among Chinese adults, according to a study which highlights the chronic health effects of air pollution.

Air Pollution May Make Kids More Prone to Schizophrenia

According to a study published in the Journal of the American



Source: News18

International Developments



Source: Air Quality News



Source: Egypt Today

New Research (study) or Policy



Source: Public Radio International

Medical Association, particulate matter in air may not only harm the physical well-being of children, but also mental health.

The horror of the Australian bushfires and air pollution

Wildfires have been ravaging Australia for several months, with fires beginning in September and continuing to spread today. According to a report an estimated 90% of the total particle mass emitted from wildfires is fine particles, this, therefore, makes particulate matter (PM2.5) the number one public health threat from long-term exposure to wildfire smoke.

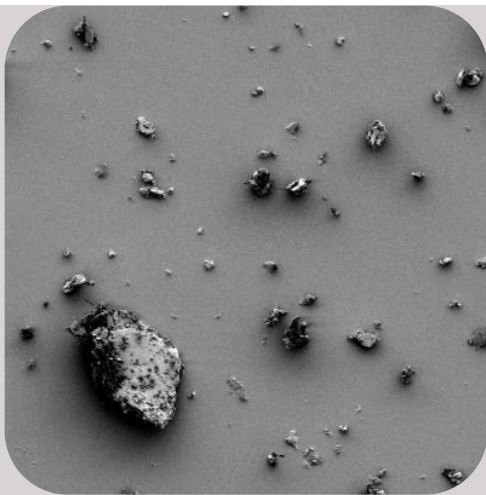
Environment Min. aims to reduce air pollution by end of 2030

The Ministry of Environment is currently implementing several measures to control air pollution for the first time, as it aims to reduce the pollution caused by solid particles by 50 percent by the end of 2030

Air pollution is a silent killer, even when it meets EPA standards

Evidence from a new study indicates that supposedly safe levels of air pollution can actually be deadly.

Brake dust air pollution may have same harmful effects on immune cells as diesel exhaust



Source: EurekaAlert

Metal particles from the abrasion of brake pads - up to a fifth of fine particulate matter (PM2.5) air pollution at roadsides - may cause inflammation and reduce the ability of immune cells to kill bacteria a new study has found, similarly to particles derived from diesel exhaust.

New Technology



Source: Economic Times

How to fight air pollution and make animal feed cheaper? Ask Fermentech Labs

IIT-Roorkee supported Fermentech Labs has a simple solution to their woes which involves reusing crop stubble to produce commercial enzymes.



London's air pollution putting you off cycling? This new air filter mask is here to help

The Atmos Facewear device claims to be 50 times more effective than existing facemasks.

Source: Standard

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

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