

Delhi's Air: A Three-Year Analysis (2020–2023)

Unpacking the Data Behind a Public Health Crisis

Data Analytics Unit

Delhi's air quality is consistently hazardous, with average PM2.5 levels far exceeding safe limits.

300.09

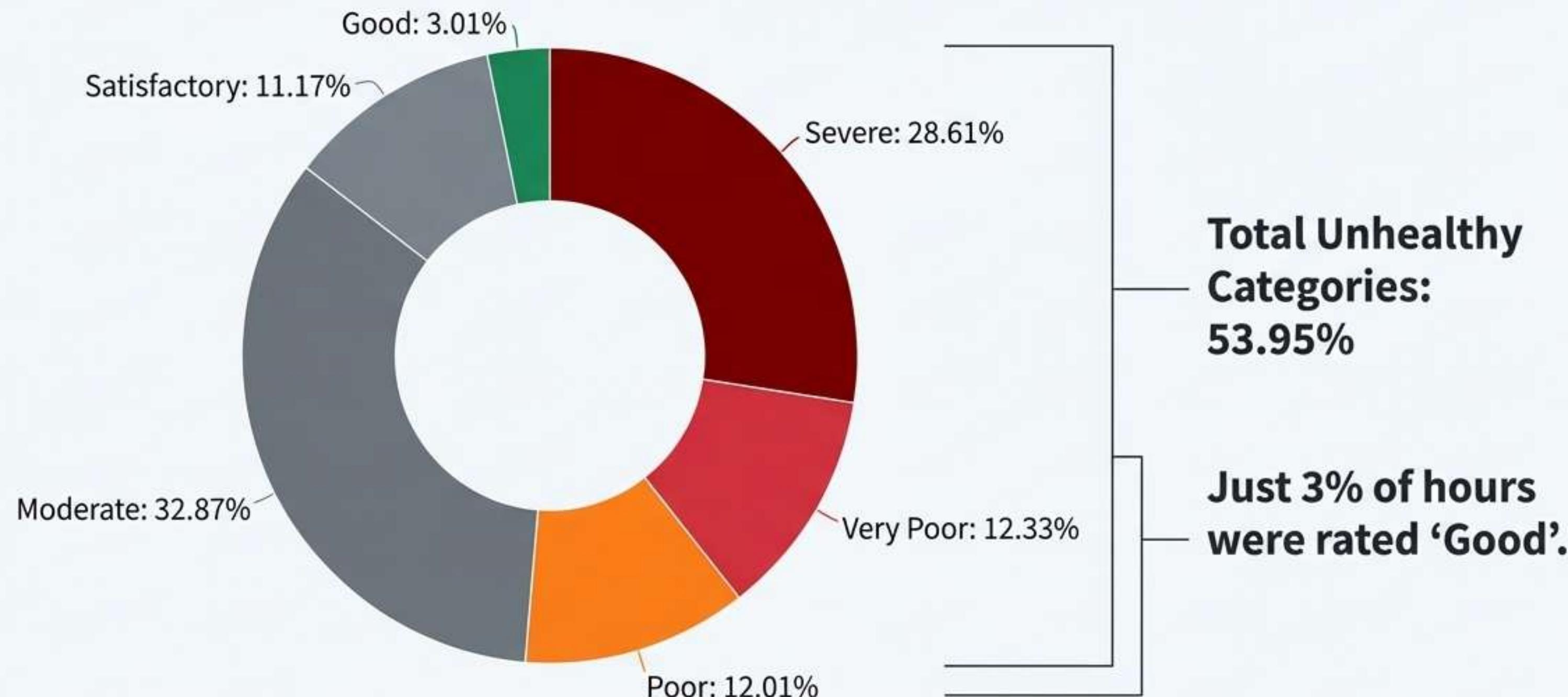
Average PM10 Level (2020-2023)

238.13

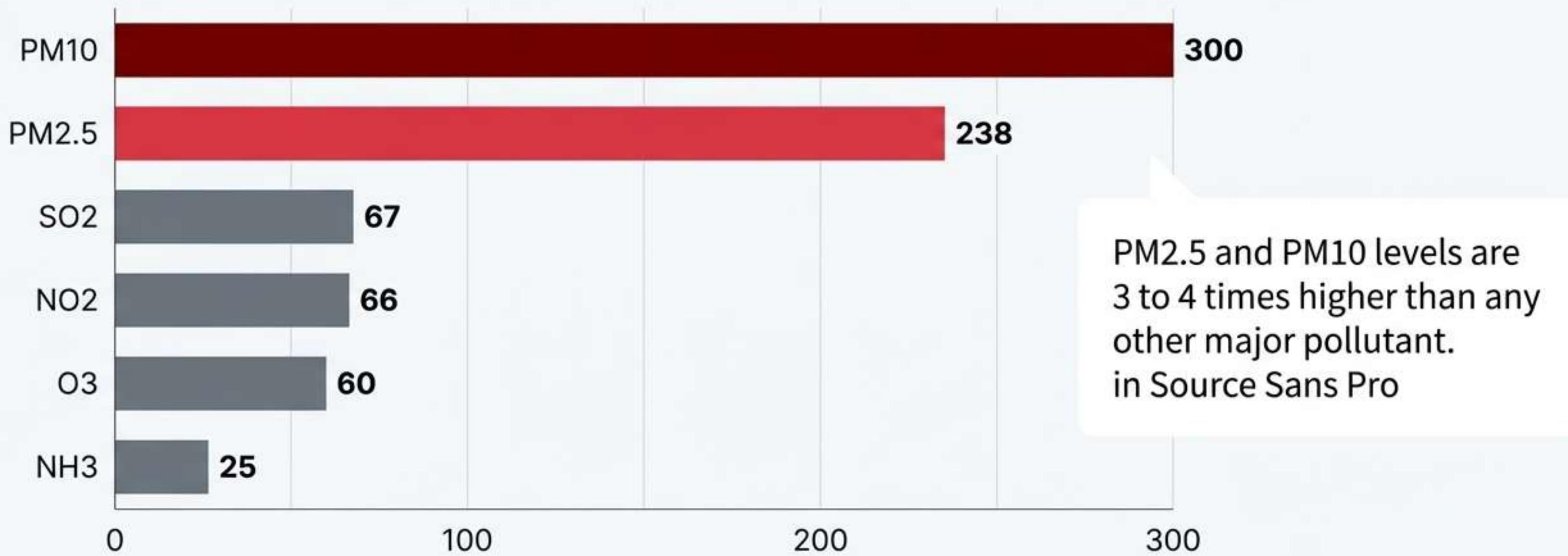
Average PM2.5 Level (2020-2023)

Over a three-year period, the average concentration of fine particulate matter (PM2.5) was nearly 16 times the WHO's recommended annual guideline (15 µg/m³).

Over 53% of the time, Delhi's air quality was rated Poor, Very Poor, or Severe.

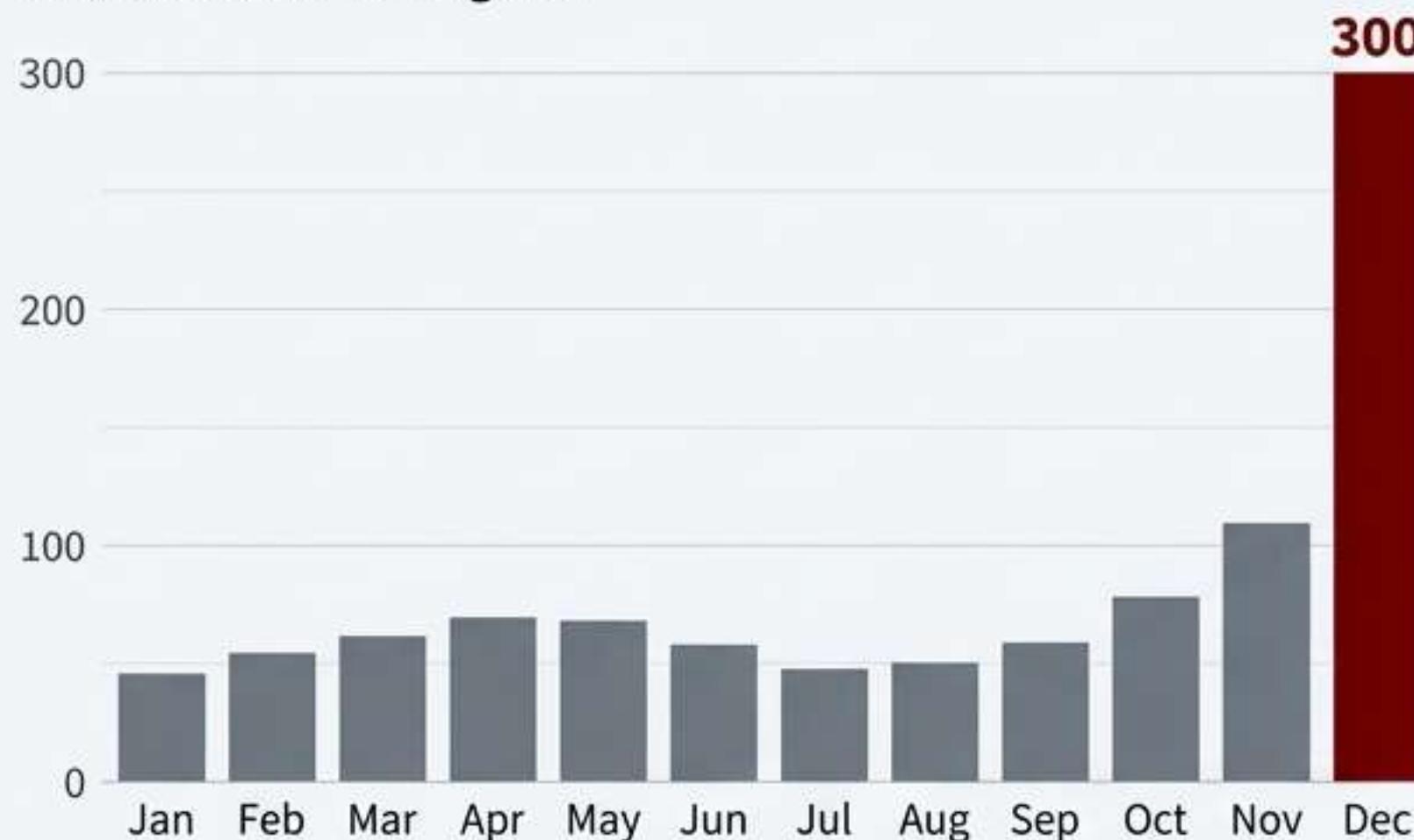


Particulate matter pollution is the overwhelming driver of Delhi's air quality crisis.



Air pollution follows a severe seasonal pattern, peaking to extreme levels in winter.

Average PM10 by Month
Source Sans Pro Regular

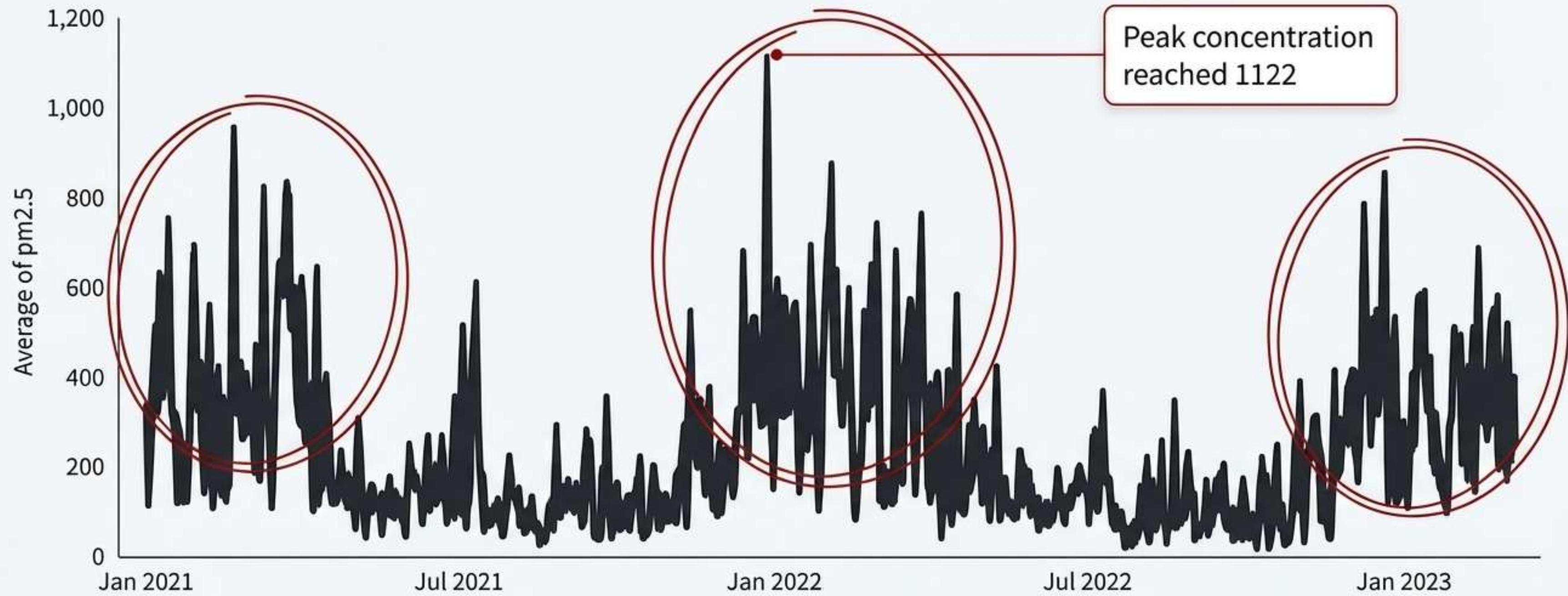


Average PM2.5 by Month
Source Sans Pro Regular



Analysis of monthly data shows that December consistently records the highest average pollution levels, transforming the seasonal change into an annual public health emergency.

The three-year data reveals a predictable cycle of extreme pollution spikes each winter.



These recurring peaks demonstrate a chronic, systemic issue rather than isolated events.

In contrast, monsoon seasons offer a temporary but significant drop in pollution levels.



The dramatic improvement during the monsoon months highlights the significant impact of meteorological conditions on pollution dispersion.

The Three-Year Reality: A Summary in Numbers



>53%

Percentage of time air quality
was ‘Poor’ to ‘Severe’.



**PM2.5 &
PM10**

The primary pollutants, with
concentrations 3-4x higher
than any other.



31

Total ‘Clean Days’ (defined as
‘Good’ air quality) recorded
between 2020 and 2023.

The data is clear: Delhi faces a predictable and severe annual air quality crisis.

हाल केहाल बा राजधानी में हमार

(The situation is dire in our capital)

This recurring seasonal emergency demands sustained, evidence-based intervention.