

# Final Data

## What is the highest pollution rate in chicago?

Chicago established the Department of Air Pollution Control to investigate and regulate emission sources. Subsequent regulations, including the federal Clean Air Act of 1970. My data set is from 1998-01-05 -2005-12-31, And I got my data site from kaggle.com. The Air Quality Index (AQI) is used for reporting daily air quality. It tells you how clean or polluted your air is, and what associated health effects might be a concern for you. AQI ratings are calculated by weighting 6 key criteria pollutants for their risk to health. The pollutant with the highest individual AQI becomes the 'main pollutant' and dictates the overall air quality index. Fine particulate matter (PM2.5) and ozone represent two of the most common 'main pollutants' responsible for a city's AQI due to the weight the formula ascribes to them for their potential harm and prevalence at high levels.

I will find out what the main pollutant is from my dataset, also what the max was of the particulate matter (PM2.5) and ozone. First I changed the names of my data charts to be short and did a summary of my data , And I had to remove some Na's from my data. Also I had to figure out what the names in my data set mean. Like pm10mean2 to pm10, and o3tmean2 to o3, I did nothing to tmpd because it means temperature and it already had a short name. The data was already entered by the means so all I had to do was find the max from my data and put that into a calculator, lastly put them all in graphs. As a result I can tell you the main pollutant of my dataset is 97.5 and that it is a

moderate from the pm10 data and from ozone 3 = 58.84126 which also gave me moderate. The temperature was in the 60 to 80 most of the time. It was interesting to find out that being hot outside plays a role in why the air quality can be bad or good, and because Chicago is usually cold we have a moderate air quality. Also I found a website that tells more information that anyone can look at to learn more about the quality and where I found the calculator for my data.

<https://forum.airnowtech.org/t/aqi-calculations-overview-ozone-pm2-5-and-pm10/168>

<https://www.airnow.gov/aqi/aqi-calculator/>



