



About NYCCAS

The [New York City \(NYC\) Community Air Survey \(NYCCAS\)](#) is a study of street level air pollution across NYC neighborhoods. Measurements are taken at 150 locations throughout NYC each season of the year.

NYCCAS is a part of [PlaNYC](#) -NYC's long-term plan for sustainability. It complements ongoing regulatory monitoring and it examines how pollution from traffic, buildings, and other sources affect air pollution across our diverse neighborhoods.

About NYCCAS and Health

The focus of NYCCAS is to help identify sources of air pollution in the City. The pollutants we measure include: [fine particulate matter \(PM2.5\)](#), [ground-level ozone \(O3, summer\)](#), [nitrogen oxides \(NOx\)](#), [elemental carbon \(EC\)](#) - a marker for diesel exhaust, [sulfur dioxide \(SO2, winter\)](#) and [nickel \(Ni, winter\)](#). These pollutants can worsen respiratory illness and heart conditions, especially in older adults, children and people with existing heart or lung diseases.

About the Data and Indicators

NYCCAS uses a statistical technique called "[land-use regression](#)" modeling to examine how pollution levels vary in relation to traffic, buildings, ground cover and other factors near the monitoring locations. This technique allows us to estimate air pollution levels throughout the City. While the study helps to identify important pollution sources, it is not designed to evaluate the impact of any individual facility on a particular neighborhood, or accurately predict pollutants at specific locations.

NYCCAS results cannot be compared directly to National Ambient Air Quality Standards - limits set to protect public health -because the measurement methods are different. For example, NAAQS are for measurements taken at roof height, whereas NYCCAS monitors are at street level.

Key Messages

Higher concentrations of the air pollutants studied by NYCCAS tend to occur in areas where fuel combustion source -especially emissions from vehicles and oil burning buildings - are more abundant. Many contributors to poor air quality in NYC are targeted for improvements as part of PlaNYC. Air quality initiatives currently focus on reducing emissions from motor vehicles, reducing traffic and congestion, promoting the use of cleaner burning heating fuels and planting trees. More information can be found on the [NYCCAS](#) site

Prevention

To promote healthier air in NYC, NYCCAS data can be used to:

- Guide and prioritize local air quality initiatives, such as efforts to reduce traffic and promote use of cleaner burning heating fuels.
- Inform air quality surveillance and health impact assessment.
- Provide exposure estimates to study health effects of air pollution.

Related Websites

[EPA AIRNow](#) (local air quality forecasts) - [New York City Community Air Survey](#) - [NYS DEC Air Monitoring](#) - [PlaNYC Air Quality Chapter](#)



NEW YORK CITY DEPARTMENT of HEALTH and MENTAL HYGIENE

NYC DOHMH Metadata

Abbreviated Dataset Name

NYCCAS

Full Dataset Name

New York City Community Air Survey

Data Steward

New York City Department of Health and Mental Hygiene

Purpose

New York City Community Air Survey (NYCCAS) data are collected to estimate the variation in street-level ambient air quality across the City's neighborhoods.

Abstract

The New York City Community Air Survey (NYCCAS) monitors fine particles (PM_{2.5}), Nitrogen Oxides (NO_x), Sulfur Dioxide (SO₂), Ozone (O₃) and elemental carbon (EC) at 150 locations throughout New York City during each season of the year. These data are analyzed using an approach known as "land-use regression" which examines how measured pollution levels vary in relation to traffic, buildings, and other factor near the monitor locations. The association between nearby factors and measured pollutant levels are used to develop a statistical model to predict air pollution concentrations throughout the city.

Geographic Resolution

Neighborhoods (UHF-34)

Data Access

Contact:

New York City Community Air Survey, DOHMH

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Data Quality

New York City Community Air Survey (NYCCAS) data must pass several quality assurance tests throughout the sample collection, laboratory analysis, and data analysis process. Details on the QA/QC procedures are available in the Technical Appendices on the NYCCAS Home Page.

Program-Specific Data Notes

[NYC Tracking Data Use Notes - NYCCAS](#)

<http://www.nyc.gov/html/doh/html/tracking/meta.shtml#NYCCAS>

Featured NYC Health Department Data Summaries

[NYCCAS Winter, Summer Reports](#)

<http://www.nyc.gov/health/nyccas>

Dates Available for Analytic Purposes

2009

More Information About Source Data

[NYCCAS Home Page](#)

<http://www.nyc.gov/health/nyccas>

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