

AIR QUALITY
GOOD

AIR QUALITY
UNHEALTHY
FOR SENSITIVE GROUPS

AIR QUALITY
**VERY
UNHEALTHY**

AIR QUALITY
MODERATE

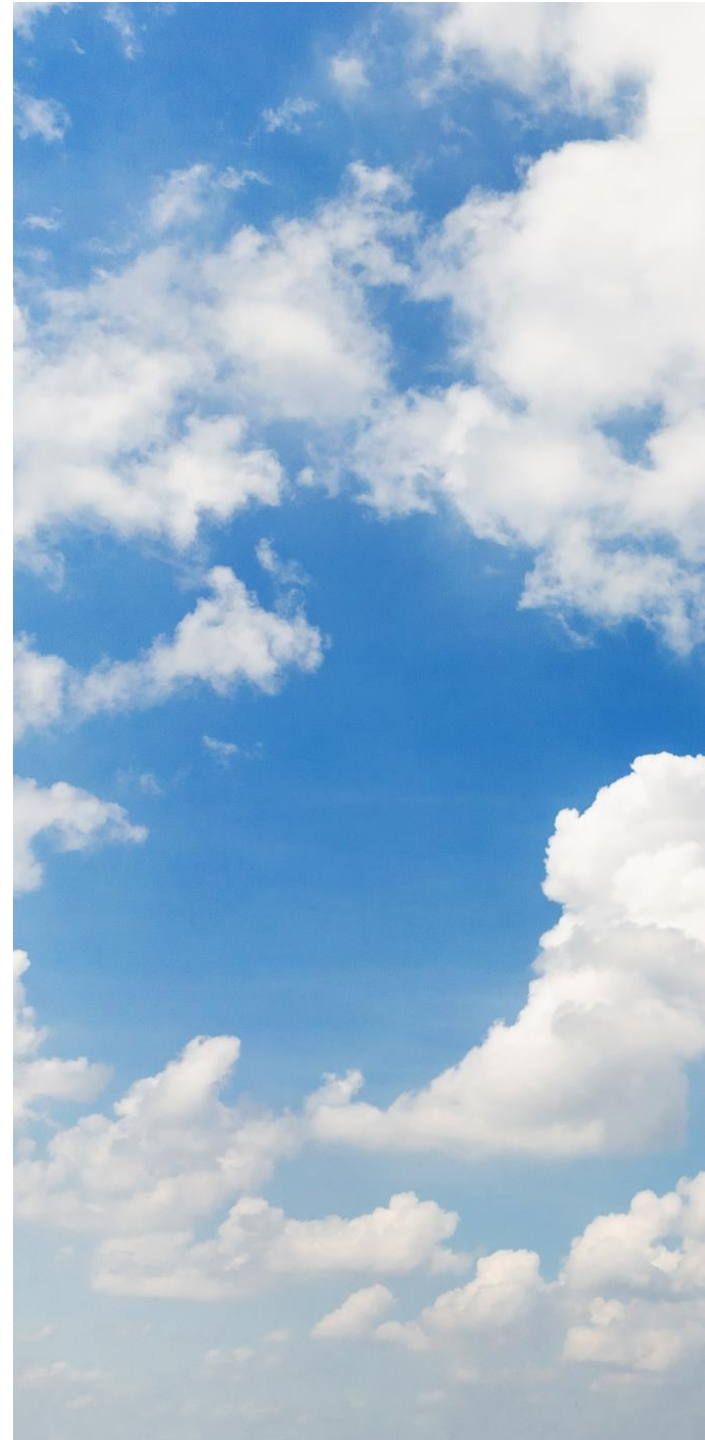
AIR QUALITY
UNHEALTHY

NJ Air Quality Flag Program



AGENDA

- **Why is Air Quality Important?**
- **Air Quality in NJ**
 - Trends
 - Ozone and PM2.5
- **Overview of the NJ Air Quality Flag Program**
 - Goals of the Program
 - How the Program Works
 - Implementation of the Program





Why Is Air Quality Important?

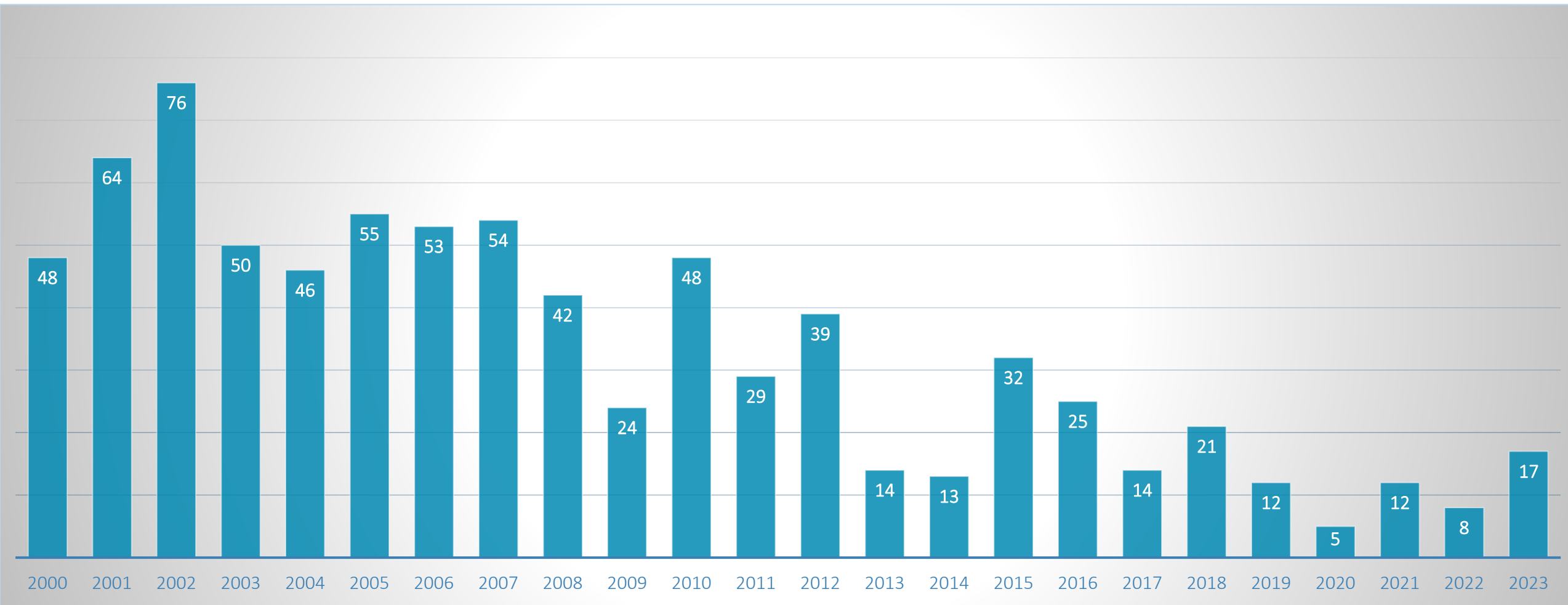
- ✓ We breathe in air every day! Being outside, exercising, playing sports
- ✓ Air pollutants at certain levels can be harmful to our health
- ✓ Populations particularly vulnerable to unhealthy levels of Ozone and PM2.5 include those with asthma, heart/lung problems, children and teens, and the elderly



National Ambient Air Quality Standards

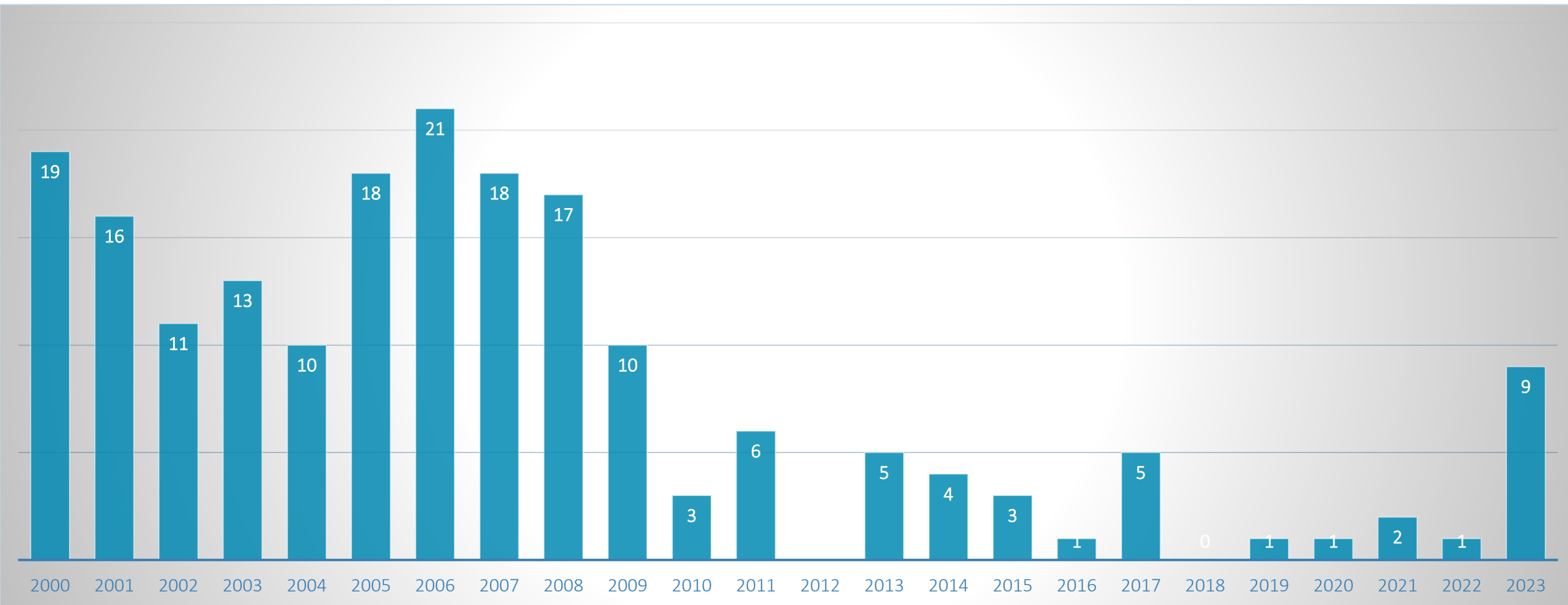
- **National Ambient Air Quality Standards (NAAQS)**
- **Six Criteria Pollutants**
 - Ozone
 - Particulate Matter
 - Carbon Monoxide
 - Lead
 - Sulfur Dioxide
 - Nitrogen Dioxide

Number of Days **2015 Ozone NAAQS*** was Exceeded 2000 - 2023



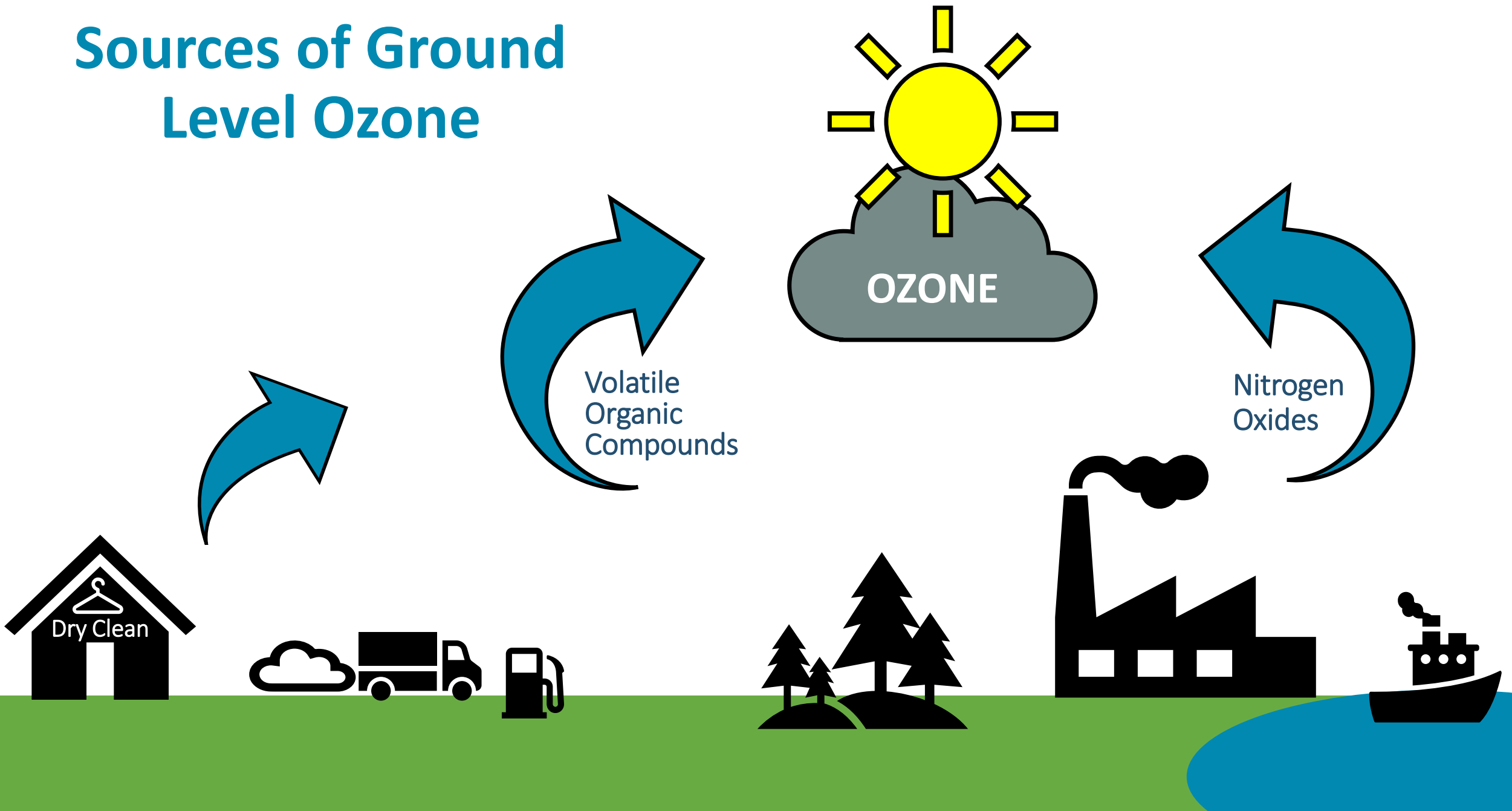
*NAAQS – National Ambient Air Quality Standard

Number of Days **PM2.5 NAAQS*** was Exceeded 2000 - 2023



*NAAQS – National Ambient Air Quality Standard

Sources of Ground Level Ozone



Ground Level Ozone

- NJ's most persistent air pollutant
- NO_x and VOCs react with sunlight to form ozone
- Higher levels during summer months
- March to October – NJ Ozone Season
 - Higher levels of outdoor activity



Fine Particulate Matter (PM 2.5)

- A mixture of extremely small particles and liquid droplets found in the air
- High levels can be harmful and threatening to our health, and also reduce visibility



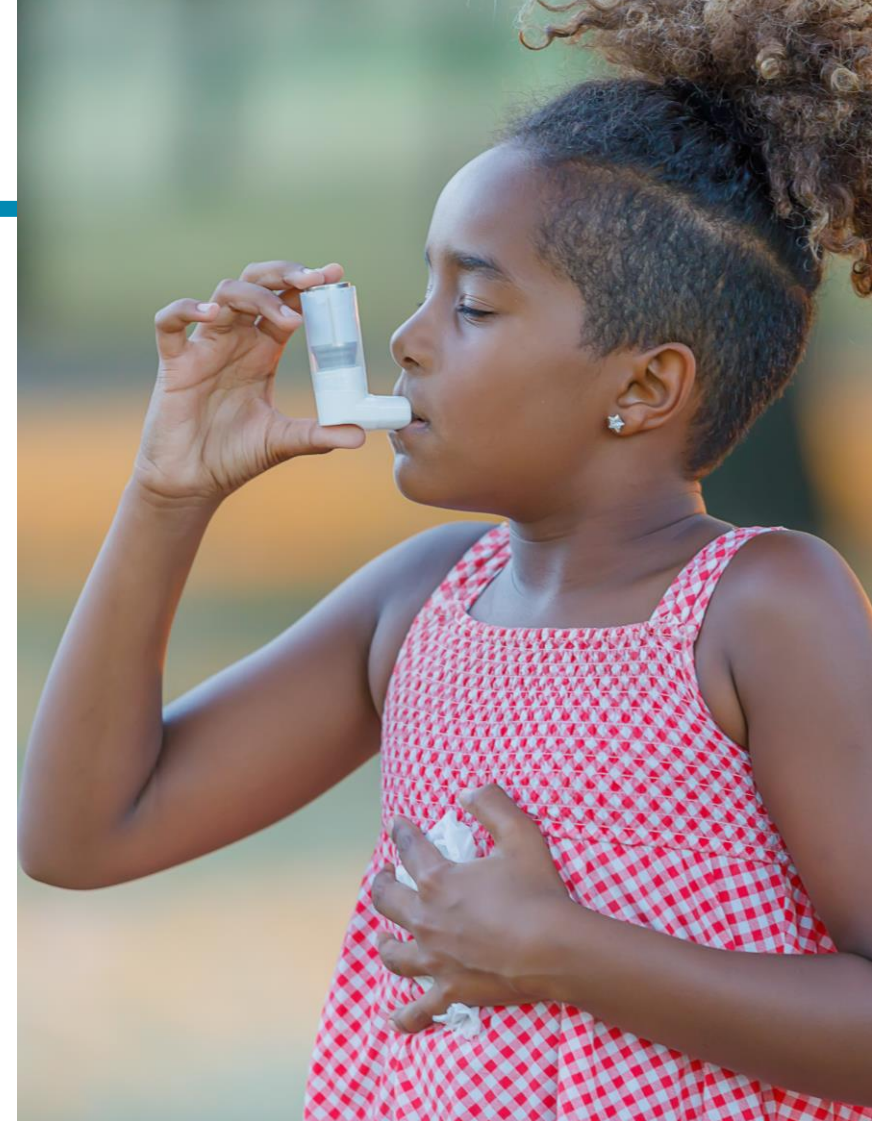
Sources Of PM 2.5

- Motor vehicles
- Power plants
- Industry sources
- Wood burning stoves
- Forest fires



Health Effects Of Ozone And PM2.5

- Damage to airways and lungs
- Difficulty breathing
- Shortness of breath and coughing
- Development of asthma and increased asthma attacks
- Death



Environmental (Welfare) Effects Of Ozone and PM2.5

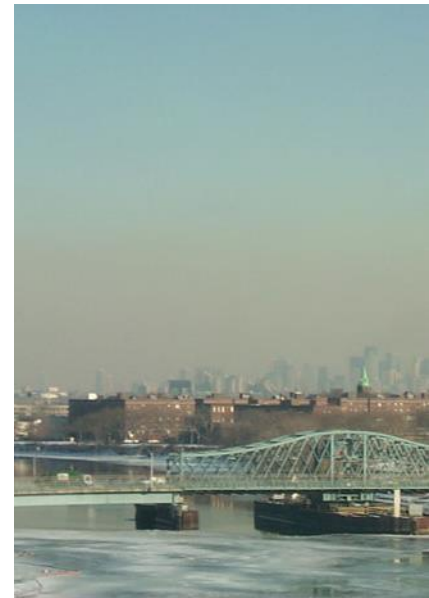
- Increases plants susceptibility to disease, insects, other pollutants and harsh weather
- Damage to trees and other plants
- Destroys landscapes, regional haze
- Damage to man-made materials



Source: www.ars.usda.gov



Good visibility



Poor visibility

Source: [Newark/NYC Haze Camera](#)

You Can Help Reduce Air Pollution



✓ Ride your bike

✓ Take public transportation

✓ Carpool and combine trips



⊘ Do not mow lawns on high ozone days

⊘ Do not idle cars for more than 3 min

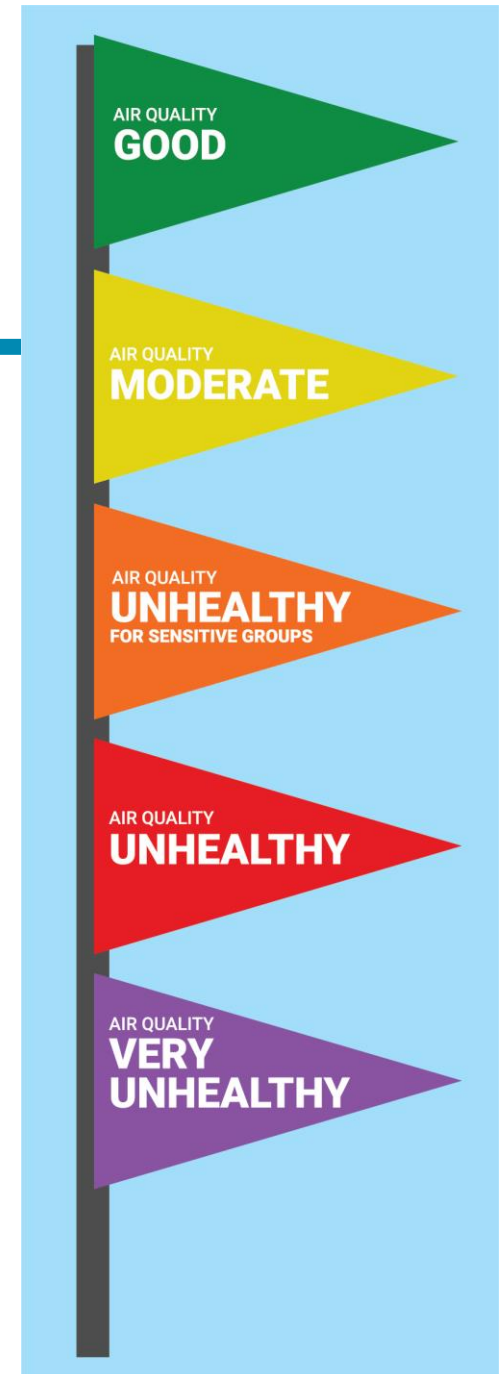


NJ Air Quality Flag Program Overview

- **Purpose:** provide a visible way for communicating outdoor air quality conditions to help protect public health, especially for the vulnerable population
- **Increase air quality awareness**
 - Know what actions to take
 - Know when it is safe to be active outside
- **Improve health and quality of life in NJ communities**

How Does The Program Work?

- Raise a color-coded flag each day to inform your community of outdoor air quality conditions
- Flag colors are based on the Environmental Protection Agency's "Air Quality Index" (AQI)



Air Quality Index



Air Quality Index (AQI) Values	Levels of Health Concern
0 to 50	Good
51-100	Moderate
101-150	Unhealthy for Sensitive Groups
151-200	Unhealthy
201-300	Very Unhealthy
301 to 500	Hazardous

- ✓ The AQI is a color-coded national air quality rating system
- ✓ It is used to report air quality for both ozone and PM2.5
- ✓ Each color represents a level of air quality/health concern
- ✓ Guidance on actions to take and when to be active is dependent on the air quality conditions

How Do I Know What Color Flag To Fly?

- Organization will sign up to receive "EnviroFlash" alerts
- EnviroFlash – free e-mail or text alert that provides daily Air Quality Forecasts
- Fly the corresponding flag color to let your community know the air quality conditions



Source: airnow.gov

What Actions Should I Take?

- AQI provides guidelines and recommendations for outdoor physical activity
- Adjust level of outdoor activity based on air quality





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<https://dep.nj.gov/njaqflagprogram>

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