

H3-4 Air Quality Index (AQI)

What Is the Air Quality Index (AQI)?

The AQI is an index for reporting daily air quality. It tells you how clean or polluted your air is, what associated health effects might be a concern for you, and if outdoor exertion is likely to be safe for you. The AQI focuses on health effects you may experience within a few hours or days after breathing polluted air. EPA calculates the AQI for five major air pollutants regulated by the Clean Air Act: ground-level ozone, particle pollution (also known as particulate matter), carbon monoxide, sulfur dioxide, and nitrogen dioxide. To make it easier to understand, the AQI is divided into six categories; each corresponds to a different level of health concern

Air Quality Index Categories

- **Good (0–50):** Air quality is considered satisfactory, and air pollution poses little or no risk.
- **Moderate (51–100):** Air quality is acceptable; however, for some pollutants there may be a moderate health concern for a very small number of people. For example, people who are unusually sensitive to ozone may experience respiratory symptoms.

- **Unhealthy for Sensitive Groups (101–150):** When AQI values are between 101 and 150, members of sensitive groups may experience health effects. This means they are likely to be affected at lower levels than the general public. For example, people with lung disease are at greater risk from exposure to ozone, while people with either lung disease or heart disease are at greater risk from exposure to particle pollution. The general public is not likely to be affected when the AQI is in this range.

- **Unhealthy (151–200):** Everyone may begin to experience health effects when AQI values are in this range. Members of sensitive groups may experience more serious health effects.

- **Very Unhealthy (201–300):** AQI values in this range trigger a health alert, meaning everyone may experience more serious health effects.

- **Hazardous (301–500):** AQI values over 300 trigger health warnings of emergency conditions. The entire population is more likely to be affected.

The sample AQI chart for ozone shown here illustrates the colors associated with each category. [SOURCE: EPA]

Air Quality Index (AQI): Ozone

Index Values	Levels of Health Concern	Cautionary Statements
0 - 50	Good	None
51 - 100*	Moderate	Unusually sensitive people should consider reducing prolonged or heavy exertion outdoors.
101 - 150	Unhealthy for Sensitive Groups	Active children and adults, and people with lung disease, such as asthma, should reduce prolonged or heavy exertion outdoors.
151 - 200	Unhealthy	Active children and adults, and people with lung disease, such as asthma, should avoid prolonged or heavy exertion outdoors. Everyone else, especially children, should reduce prolonged or heavy exertion outdoors.
201 - 300	Very Unhealthy	Active children and adults, and people with lung disease, such as asthma, should avoid all outdoor exertion. Everyone else, especially children, should avoid prolonged or heavy exertion outdoors.
301 - 500	Hazardous	Everyone should avoid all physical activity outdoors.

*An AQI of 100 for ozone corresponds to an ozone level of 0.08 parts per million (averaged over 8 hours).