

Heat Waves and Poor Air Quality

What is the Heat Index and the Air Quality Index?

The Heat Index measures the combined impact of high temperatures and humidity. (Picture 1)

The Air Quality Index (AQI) measures ozone, particle pollution, carbon monoxide and sulfur dioxide in the air. The day's AQI is determined as the highest measure of any one of the four pollutants, but does NOT reflect a combined measure. (Picture 2)

How does climate change impact heat waves and air quality? Increased concentrations of greenhouse gases will increase land and ocean temperatures, making heat waves more frequent.

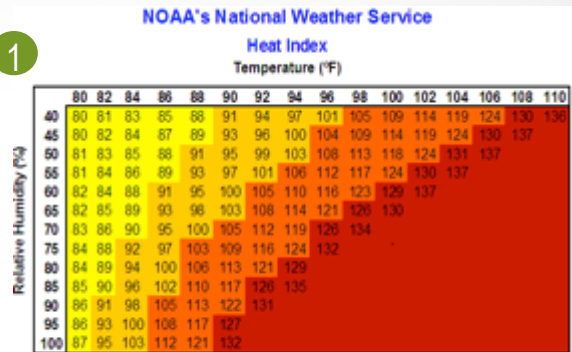
Rising temperatures are associated to a rise in ozone and nitrogen dioxide in the air. Without cooling rains, the particulate matter in urban increases. Ozone and particulates are strong respiratory irritants.

Warmer temperatures and increased rainfall will stimulate plants to bloom earlier, have longer bloom periods and produce more pollen. This impacts allergy sufferers and asthmatics.

What residents need to do.

- Pay attention to the air quality and the heat index, or sign up for alerts by phone or email from NOAA or OSHA.
- When air quality is poor, stay in air conditioned places. Avoid exertion outdoors. If you exercise outside, do it in the morning away from heavy traffic roadways.
- When in the car, set car air conditioner on re-circulate.
- Keep asthma and allergy medications on hand and take them before symptom onset. Consider using a mask outdoors.

1



2

Likelihood of Heat Disorders with Prolonged Exposure or Strenuous Activity

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

Heat Waves	Poor Air Quality
Dehydration	Asthma
Heat Stress	Emphysema
Heat Stroke	Cardiac Conditions
Heart Attacks/Stroke	Eye Irritation
Violence	Throat Irritation
	Skin Cancer

- When the heat index rises above 91° vulnerable populations should stay in air conditioned places. Stay on the lower level of a non-air conditioned building.
- If outdoors, remain in shaded areas and use pools or sprinklers to cool down. Wear light color breathable clothing, like cotton and linen.
- Drink plenty of non-alcoholic beverages. Be vigilant of health impacts and seek medical attention, if necessary.