

REGIONAL AIR QUALITY UPDATE

December 2019

In the mid-1990's, the region experienced an average of 77 unhealthy air days to just 12 on average over the past few years. All six pollutants regulated by the Clean Air Act have shown a downward trend, and all but one pollutant, ground-level ozone, meet federal health-based air quality standards.

This is thanks to more than a decade of action at the federal, state, and local government levels to reduce emissions from power plants, passenger vehicles, and heavy-duty diesel engines as well as programs to improve energy efficiency and renewable energy use.

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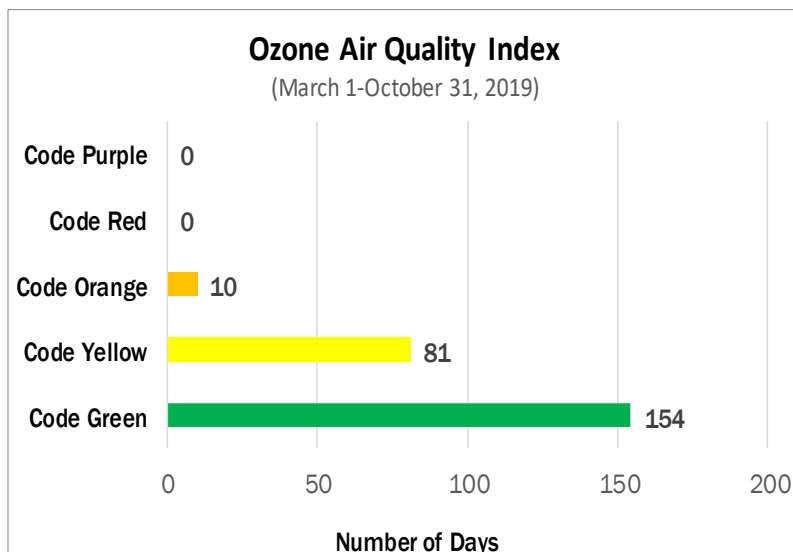
Despite this good news, air quality monitors show that people in the region continue to breathe unhealthy air on too many days. There is still more work to be done to reduce pollutant levels to achieve no unhealthy air days and protect the public's health. Each of us can help. Government members can implement measures to reduce pollution such as enhanced energy efficiency in buildings, green purchasing programs, reduced vehicle idling, and green electricity generation. The public can help as well. When there are unhealthy air days, days when there are high ozone concentrations, individuals should take actions such as postponing mowing, filling up gas tanks during the evening hours, using transit or carools, and using less electricity.

GROUND-LEVEL OZONE

Ozone (O₃) is a colorless, odorless gas found in the atmosphere. At ground-level, ozone is an air pollutant affecting the health and well-being of area residents.

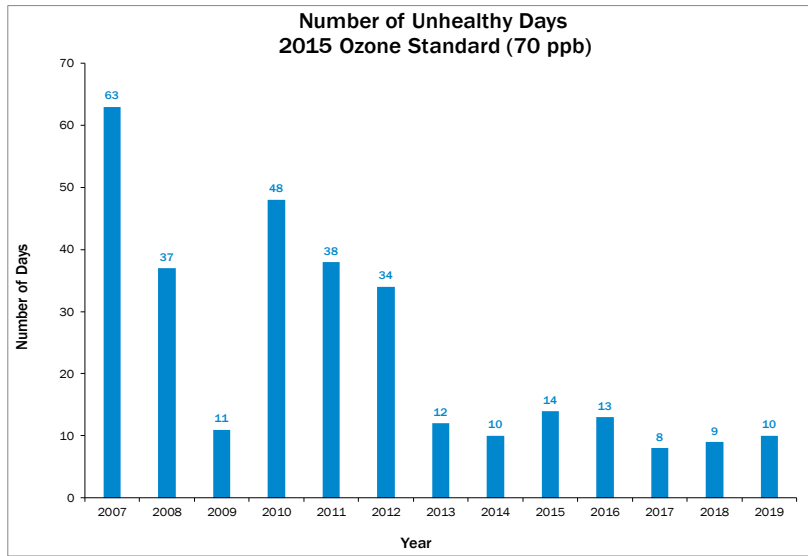
High concentrations of ground-level ozone can reduce lung function and cause respiratory symptoms, such as coughing, throat irritation, and shortness of breath. Ozone exposure also aggravates asthma and lung diseases.

The most vulnerable groups affected by ground-level ozone include children, people with respiratory problems, athletes and individuals who exercise outdoors, and older adults.



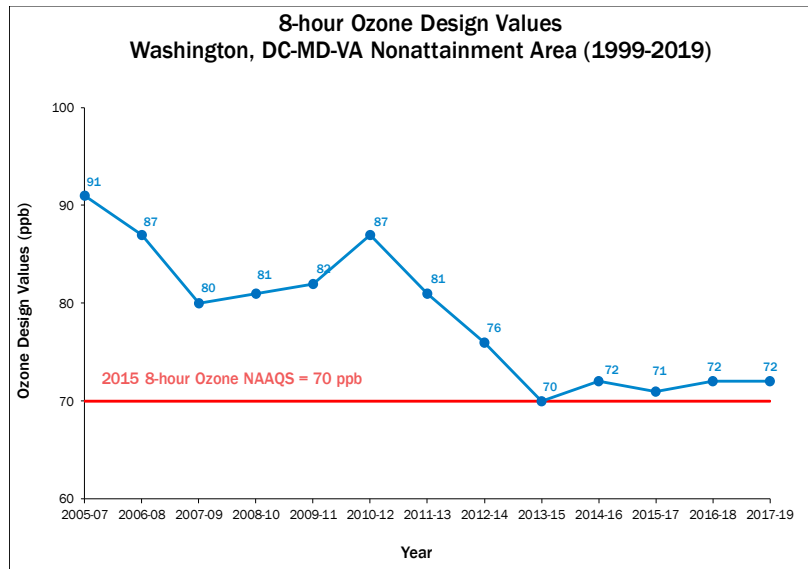
Source: COG (2019 data is preliminary and subject to change.)

Just a decade ago, the combination of high emissions and temperatures resulted in more than 40 unhealthy ozone days each summer. This can be seen by examining the trends for number of exceedance days. An exceedance day is when ozone concentration, averaged over 8-hours, has reached above the ozone threshold. Since there were different federal standards in place over the years, the ozone threshold changed. Based on current data, the number of exceedance days has decreased by 84 percent between 2007 and 2019.



Source: COG (2019 data is preliminary and subject to change.)

Trends can also be illustrated using the Environmental Protection Agency's (EPA) design value. Design values for ozone are the three-year average of the fourth highest ozone concentration. The graph to the right shows that ozone levels have been decreasing over the past 12 years, however, they do not meet the 2015 ozone standard. The region has until 2021 to show compliance with the standard.



Source: COG (2019 data is preliminary and subject to change.)

Additional historical data for ozone and other criteria pollutants can be found in *Air Quality Trends Report*.

RESOURCES:

COG Air Quality Program
www.mwcog.org/airquality
 Clean Air Partners
www.cleanairpartners.net

Air Quality Forecast Hotline
 NOAA/NWS Baltimore Washington Forecast Office
 (703) 996-2200
 Select Option 1, then Option 7

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