



## 2004 Forecast and Ozone Action Day Program

MWAQC Meeting

April 28, 2004



## What Are The Main Issues This Ozone Season?

- § Forecasting will be based on predicting the next day's 8-hour ozone Air Quality Index.
  
- § Multi-pollutants
  - Forecasts for particles will be issued for the Baltimore/Washington Metropolitan Area.



## What is an Ozone Exceedance?

**8-hr Ozone Standard** = any 8-hr averaging period greater than or equal to 85 ppb is an exceedance of the standard

**1-hr Ozone Standard** = any 1-hr averaging period greater than or equal to 125 ppb is an exceedance of the standard



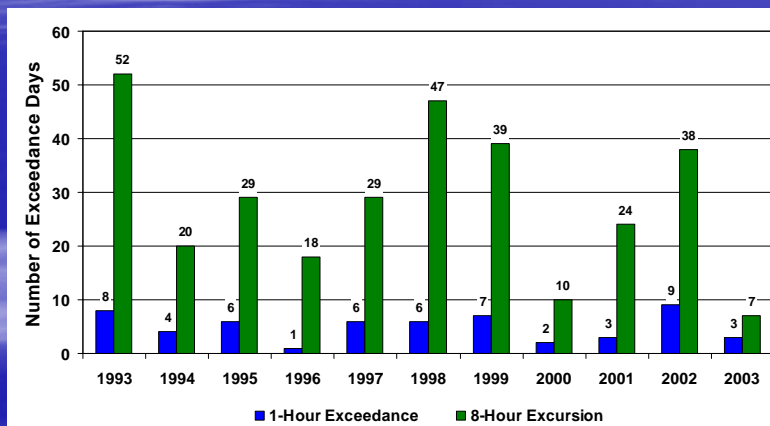
Eight-hour exceedances are based on an 8-hour running average. An 8-hour exceedance will not be known until the end of the day.

One-hour exceedances are based on an hourly average. A 1-hour exceedance will be known at the end of an hour.



## 8-Hour Ozone vs. 1-Hour Ozone Exceedances

(1993-2003 Washington Region Data)





## The New Forecast Approach

AQI Range	AQI Color
201-300	Purple
151-200	Red
101-150	Orange
51-100	Yellow
0-50	Green

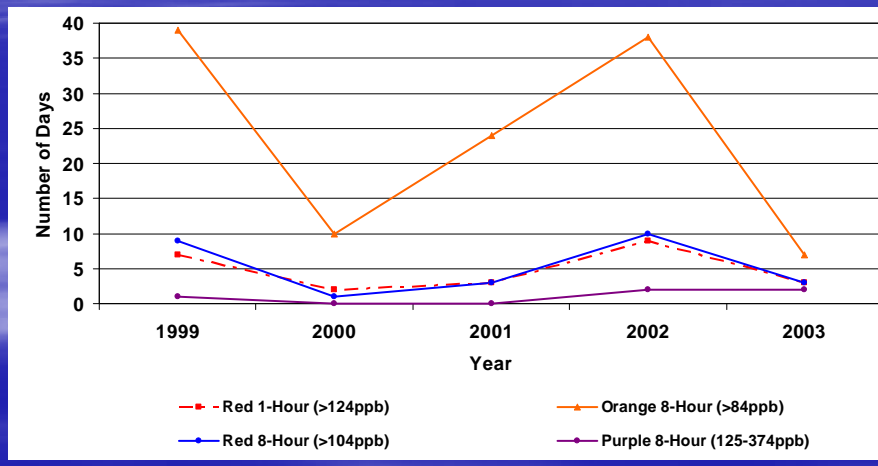
§ An Ozone Action Day will be called at an AQI level of 151 (Code Red).

§ An Ozone Action Day will be called if the next day is forecasted to be a "High Orange" (AQI of 125) AND the following day is forecasted to be a Code Red.



## Comparison of Choices for Ozone Action Day Criteria

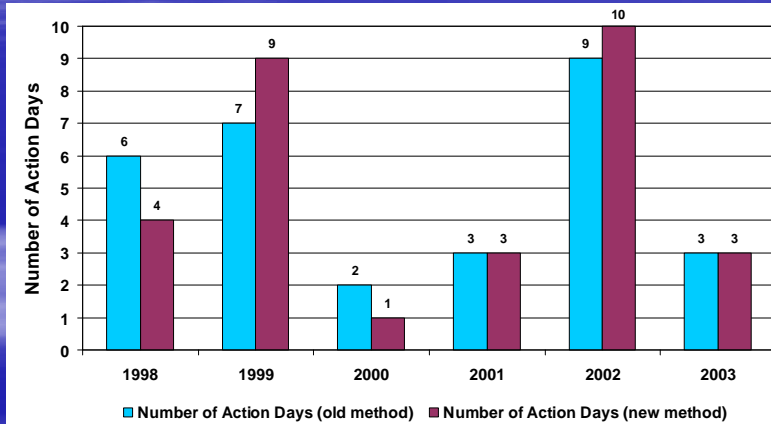
(1999-2003 Washington Region Data)





## How Many **Code Red** Action Days Will We Have?

(1998-2003 Washington Region Data)



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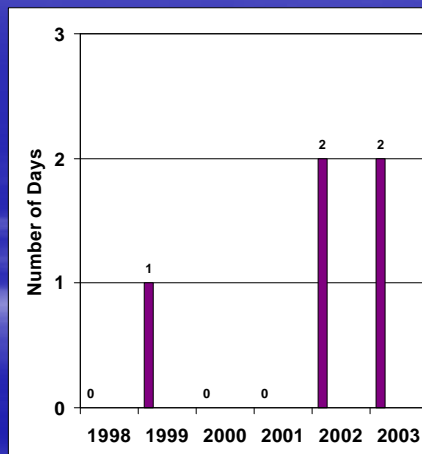


## What is Code Purple?

(1998-2003 Washington Region Data)

AQI Range	AQI Color	Health Descriptor	8-Hr O3 Range (ppb)
201-300	Purple	Very Unhealthy	125-374

Active adults and kids – and adults and children with lung disease like asthma – are sensitive to air pollution and should **avoid all** outdoor exertion while we are in the purple range.



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## Addressing The Multi-Pollutant Issue

AQI Range	AQI Color	8-Hr O3 Range (ppb)	24-Hr PM <sub>2.5</sub> Range (µg/m <sup>3</sup> )
201-300	Purple	125-374	150.5-250.4
151-200	Red	105-124	65.5-150.4
101-150	Orange	85-104	40.5-65.4
51-100	Yellow	65-84	15.5-40.4
0-50	Green	0-64	0-15.4

EPA's Air Quality Index Reporting Rule: Final August 4, 1999

§ Forecasts will be issued using the Air Quality Index (AQI) color codes.

§ There will be no mention of pollutant or pollutant concentration numbers.

§ Integrated health message to address both ozone and particles.

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## Integrated Health Message

People with **HEART OR LUNG DISEASE**, older adults, children, and even healthy adults may experience health effects when air pollution levels are high (Code Orange or worse). Should air quality exceed the federal health standard, an Air Quality **Code Red Health Advisory** will be issued advising the following precautions:

- Children and older adults should reduce outdoor activities.
- Healthy individuals should limit strenuous work or exercise, especially outdoors.
- Individuals with respiratory and heart ailments, emphysema, asthma, or chronic bronchitis should limit their activity level.

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## Sample Washington Press Release

\*\*\*\*\* Air Quality Forecast valid through sunset, May 1, 2004 \*\*\*\*\*



### Air Quality Forecast

Metropolitan Washington Council of Governments  
777 N. Capitol Street, NE  
Suite 300  
Washington, DC 20002

For Immediate Release  
April 30, 2004

**MEDIA INQUIRIES: (202) 962-3787**

#### Air Quality Forecast for May 1, 2004

Forecast Region	Primary Pollutant	AQI	Color Code	Air Quality Description
Washington Metropolitan Area	Ozone	151	Red	Unhealthy

**Air Quality Reports:**

Air quality reports use the Air Quality Index (AQI), which represents the pollutants – ground level ozone and particles. Ground level ozone values are based upon an 8-hour running average. Particles with a diameter less than 2.5 microns (PM<sub>2.5</sub>) are based upon a 24-hour daily average. The primary pollutant represents the pollutant, either ozone or particles, that is expected to reach the highest concentration.

**Health Warning:**

People with heart or lung disease, older adults, children, and even healthy adults may experience health effects when air pollution levels are high (Code Orange or worse). Should air quality exceed the federal health standard, an Air Quality Code Red Health Advisory will be issued advising the following precautions:

- Children and older adults should reduce outdoor activities.
- Healthy individuals should limit strenuous work or exercise, especially outdoors.
- Individuals with respiratory and heart ailments, emphysema, asthma, or chronic bronchitis should limit their activity level.

**Prevention Tips:**

Much of the air pollution in our region is created from vehicles, lawnmowers, other garden equipment, and common household products. In order to prevent high levels of air pollution from forming, residents are strongly urged to:

- Limit driving and, when possible, combine errands.
- Use area bus and rail lines, or share a ride to work.
- Avoid mowing lawns with gasoline-powered mowers.
- Refuel vehicles after dusk.

**For More Information:**

COG provides the daily air quality conditions and next-day forecast at 3:30 p.m. during the summer ozone season. For more information, call the Air Quality Hotline at (202) 952-3299 or visit our website at [www.mwco.gov/dept/air/airquality\\_index.htm](http://www.mwco.gov/dept/air/airquality_index.htm)



[www.mwco.gov/dept/air/index.htm](http://www.mwco.gov/dept/air/index.htm)

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## Metropolitan Washington Council of Governments

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### Conclusion

- § 2004 will be a transition year from 1-hour to 8-hour ozone forecasting.
- § Ozone Action Day name will need to be changed.
- § Code Purple message will be developed.
- § Address the multi-pollutant issue.