CODE PURPLE UPDATE

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ACPAC
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Metropolitan Washington
Council of Governments

2023 - Daily Air Quality Index
(January 1-July 4, Combined Ozone & PM2.5)

Code	Number of Days
Code Purple	0
Code Red	3
Code Orange	11
Code Yellow	67
Code Green	104

Number of Days
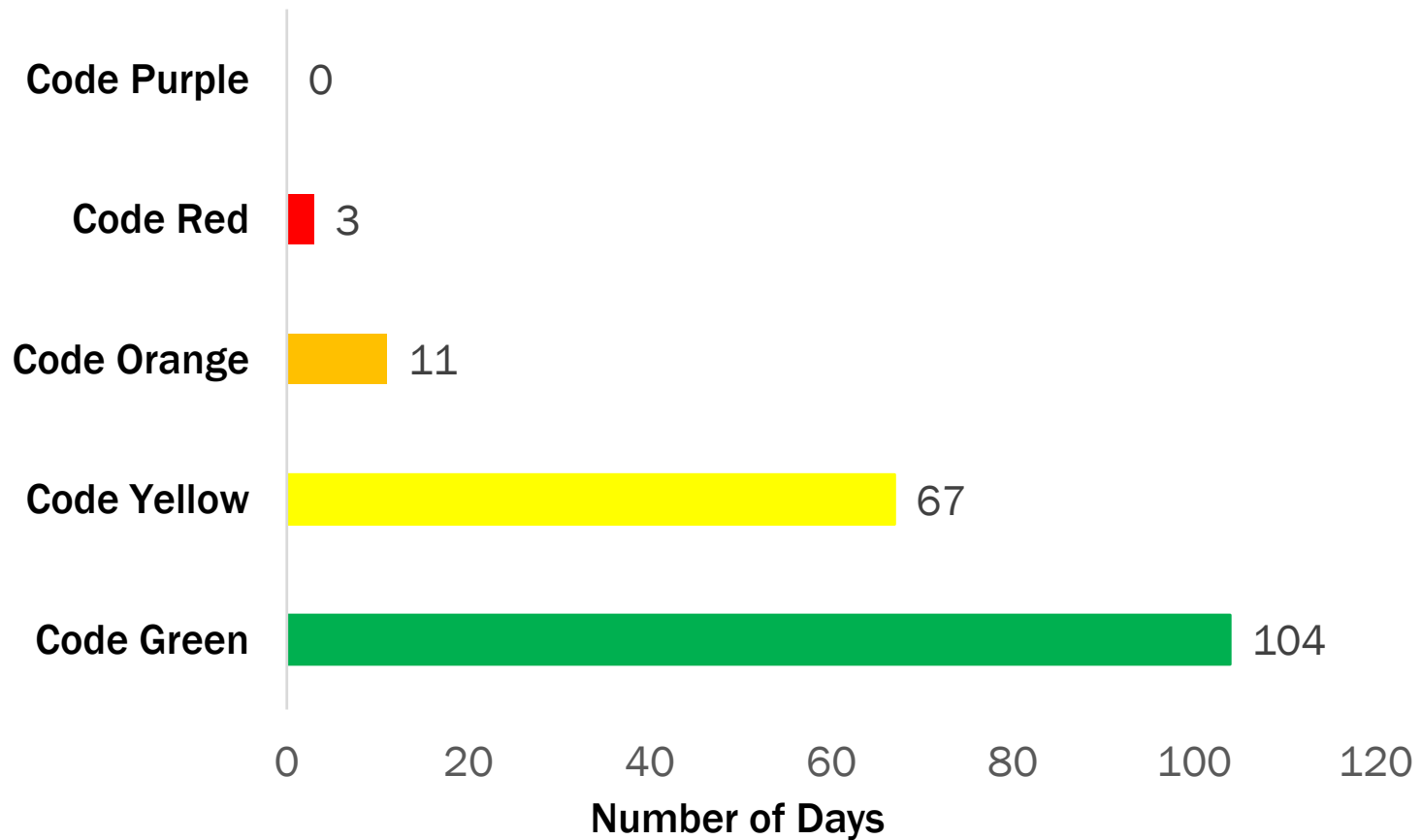
* 2023 data is draft and incomplete as of July 4, 2023.

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24-Hour Average PM2.5 Levels (µg/m³)

March 2023

Sunday	Monday	Tuesday	Wednesday	Thursday	Friday	Saturday
26	27	28	01 10.9	02 11.6	03 8.6	04 2.9
05 6.8	06 9.2	07 5.3	08 3.6	09 5.1	10 8.7	11 4.1
12 8.3	13 10.4	14 4.5	15 4.0	16 6.1	17 21.5	18 5.5
19 4.7	20 10.7	21 10.7	22 9.8	23 17.9	24 8.6	25 10.1
26 6.8	27 15.3	28 6.1	29 6.5	30 7.0	31 8.8	

April 2023

Sunday	Monday	Tuesday	Wednesday	Thursday	Friday	Saturday
26	27	28	29	30	31	01 6.9
02 4.4	03 8.2	04 8.4	05 13.6	06 8.3	07 5.3	08 6.4
09 8.3	10 6.5	11 7.4	12 10.0	13 11.5	14 11.8	15 8.9
16 9.2	17 4.5	18 5.4	19 9.3	20 14.0	21 18.8	22 16.5
23 6.3	24 5.6	25 7.5	26 9.8	27 11.4	28 7.2	29 4.8
30 5.0						

May 2023

Sunday	Monday	Tuesday	Wednesday	Thursday	Friday	Saturday
30 5.0	01 5.0	02 3.3	03 2.5	04 2.5	05 5.0	06 8.5
07 10.0	08 11.3	09 8.2	10 9.0	11 13.0	12 16.2	13 14.6
14 10.6	15 6.9	16 10.7	17 9.0	18 5.9	19 7.7	20 7.8
21 13.9	22 14.6	23 18.1	24 13.7	25 7.0	26 7.3	27 6.6
28 7.0	29 7.2	30 20.2	31 24.4			

June 2023

Sunday	Monday	Tuesday	Wednesday	Thursday	Friday	Saturday
28	29	30	31	01 34.4	02 30.8	03 16.5
04 9.0	05 8.7	06 36.9	07 103.2	08 146.8	09 23.8	10 21.1
11 27.5	12 13.1	13 8.8	14 8.2	15 7.7	16 16.1	17 26.8
18 22.6	19 24.8	20 19.5	21 7.7	22 4.7	23 6.9	24 6.7
25 6.7	26 12.7	27 7.1	28 47.5	29 93.1	30 45.4	

July 2023

Sunday	Monday	Tuesday	Wednesday	Thursday	Friday	Saturday
25	26	27	28	29	30	01 31.6
02 14.5	03 9.6	04 47.7	05	06	07	08
09	10	11	12	13	14	15
16	17	18	19	20	21	22
23	24	25	26	27	28	29
30	31					

3 Code Red, 4 Code Orange, 43 Code Yellow Days, rest all Code Green Days

Analysis is based on draft data as of July 4, 2023.

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Health Advisory - Code Purple (June 7)

AQI Range	AQI Color	8-Hour Ozone Range (ppb)	24-Hour PM2.5 Range ($\mu g/m^3$)
201-300	Purple	106-200	150.5-250.4
151-200	Red	86-105	55.5-150.4
101-150	Orange	71-85	35.5-55.4
51-100	Yellow	55-70	12.1-35.4
0-50	Green	0-54	0.0-12.0

- COG issues health alerts when the forecast or current air quality are Code Red or higher (e.g, Code Purple).

- On June 7, PM2.5 levels rose at very fast pace from early morning onwards. Levels reached above 150.5 ug/m3 at 9 am and continued for another hour. EPA's Airnow and COG/Clean Air Partners websites started showing current conditions at Code Purple levels. Expecting Code Purple and based on our protocol, COG issued a health advisory accordingly. However, atmospheric conditions changed shortly afterwards and the final PM2.5 recording (based on the 24-hour average) was short of meeting the criteria for Code Purple. It still recorded high Code Red level (103.2 ug/m3) though.

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Ozone Design Value Trend

8-hour Ozone Design Values
Washington, DC-MD-VA Nonattainment Area (1999-2023)

* Design value = 3-year average of 4th highest daily maximum 8-hour average ozone concentrations.
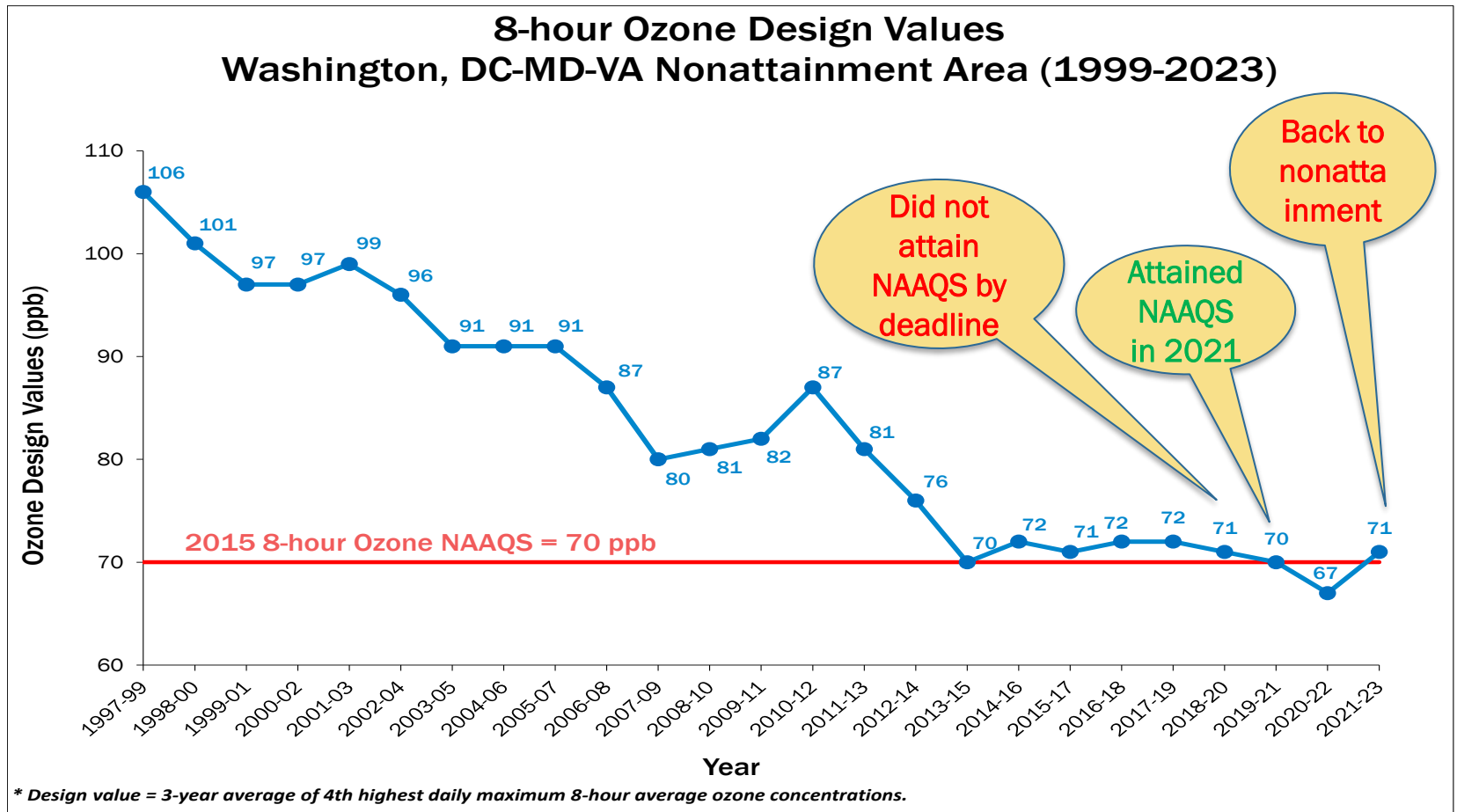
* 2023 data are draft as of July 4, 2023.

Attainment Status – 2015 Ozone NAAQS

Monitor	Draft Design Value (ppb)*
McMillan (DC)	71
Beltsville (MD)	68
Prince George's Equestrian Center (MD)	68

- Based on draft data as of July 4, 2023.
- These 3 monitors recorded highest ozone levels thus far in this season and are therefore being watched closely for nonattainment.

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