CODE PURPLE UPDATE

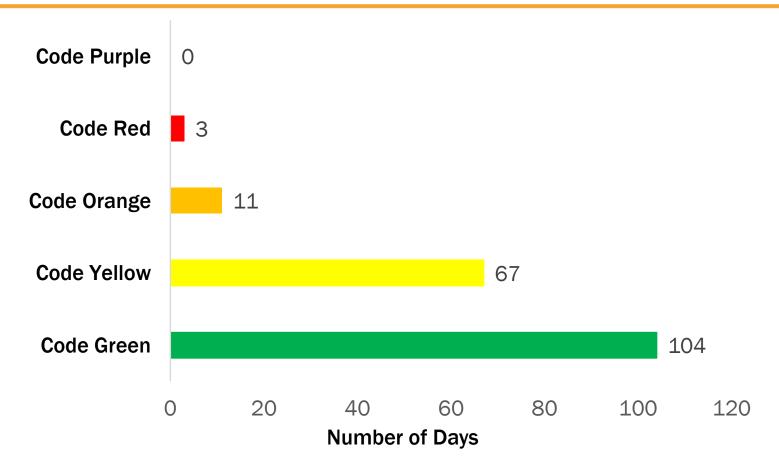
Jeff King Director, Climate, Energy, and Air Programs

ACPAC July 17, 2023



2023 - Daily Air Quality Index

(January 1-July 4, Combined Ozone & PM2.5)



^{* 2023} data is draft and incomplete as of July 4, 2023.



24-Hour Average PM2.5 Levels (µg/m³)

26 27 05 06 6.8 9.2 1 12 13 19 20 4.7 10.7 1 26 27 6.8 15.3 6 May 20 Sunday Monday Tu 30 01 5.0 5.0 5.0 07 08 10.0 11.3 1 14 15 10.6 6.9 1	28	ednesday Thursd 01 02 10.9 11. 08 09 3.6 5.1	6 8.6	2.9		
05 06 08 9.2 12 13 8.3 10.0 4 4.7 10.7 1 26 27 6.8 15.3 6	07 5.3	10.9 11.1 08 09 3.6 5.1	6 8.6	2.9		
6.8 9.2 13 8.3 10.4 4 19 20 4.7 10.7 1 26 27 6.8 15.3 6 May 20 Sunday Monday Tu 30 01 5.0 5.0 08 10.0 11.3 15 10.6 6.9 1 21 22 13.9 14.6 1	07 5.3	08 09 3.6 5.1	10			
6.8 9.2 13 13 10.4 19 20 4.7 10.7 1 26 27 26 6.8 15.3 6 15.3 6 15.0 10.0 11.3 14 15 10.6 6.9 1 13.9 14.6 1 10.0 13.9 14.0 14.0 14.0 14.0 14.0 14.0 14.0 14.0	5.3	3.6 5.1				
12 13 8.3 10.4 4 19 20 4.7 10.7 1 26 27 6.8 15.3 6 Way 20 Sunday Monday Tu 30 01 5.0 5.0 3 07 08 10.0 11.3 8 14 15 10.6 6.9 1 21 22 13.9 14.6 1	14		07	11		
8.3 10.4 4 19 20 4.7 10.7 1 26 27 6.8 15.3 6 May 20 Sunday Monday 70 5.0 5.0 5.0 5.0 07 08 14 15 10.6 6.9 1 21 22 13.9 14.6 1		15 16	0.7	4.1		
May 20 Long Monday 30 07 08 08 09 09 00 00 00 00 00 00 00 00 00 00 00	4.5	13 10	17	18		
4.7 10.7 1 26 27 6.8 15.3 6 May 20 Sunday Monday Tu 30 01 5.0 5.0 5 07 08 10.0 11.3 8 14 15 10.6 6.9 1 21 22 13.9 14.6 1		4.0 6.1	21.5	5 5.5		
26 27 6.8 15.3 6 27 20 20 20 20 20 20 20 20 20 20 20 20 20	21	22 23	24	25		
May 20 Sunday Monday Tu 30 01 5.0 5.0 5.0 07 08 11.3 8 14 15 10.6 6.9 1 21 22 13.9 14.6 1	.0.7	9.8 17.	9 8.6	10.1		
May 20 Sunday Monday Tu 30 01 5.0 5.0 5.0 07 08 10.0 11.3 8 14 15 10.6 6.9 1 21 22 13.9 14.6 1	28	29 30	31			
Sunday Monday Tu 30 01 5.0 <td>6.1</td> <td>6.5 7.0</td> <td>8.8</td> <td></td>	6.1	6.5 7.0	8.8			
30 01 5.0 5.0 3 07 08 10.0 11.3 8 14 15 10.6 6.9 1 21 22 13.9 14.6 1	May 2023					
5.0 5.0 3 07 08 11.3 8 14 15 10.6 6.9 1 21 22 13.9 14.6 1	iesday Wi	ednesday Thursd	lay Frida	y Saturday		
07 08 10.0 11.3 8 14 15 10.6 6.9 1 21 22 13.9 14.6 1	02	03 04	05	06		
10.0 11.3 8 14 15 10.6 6.9 1 21 22 13.9 14.6 1	3.3	2.5 2.5	5.0	8.5		
14 15 10.6 6.9 1 21 22 13.9 14.6 1	09	10 11	12	13		
10.6 6.9 1 21 22 13.9 14.6 1	8.2	9.0 13.	0 16.2	2 14.6		
21 22 13.9 14.6 1	16	17 18	19	20		
13.9 14.6 1	.0.7	9.0 5.9	7.7	7.8		
	23	24 25	26	27		
28 29	8.1	13.7 7.0	7.3	6.6		
		31				
7.0 7.2 2	30	24.4				

Ар	ril	2023				
Sunday	Monday	Tuesday	Wednesday	Thursday	Friday	Saturday
26	27	28	29	30	31	01
						6.9
02	03	04	05	06	07	08
4.4	8.2	8.4	13.6	8.3	5.3	6.4
09	10	11	12	13	14	15
8.3	6.5	7.4	10.0	11.5	11.8	8.9
16	17	18	19	20	21	22
9.2	4.5	5.4	9.3	14.0	18.8	16.5
23	24	25	26	27	28	29
6.3	5.6	7.5	9.8	11.4	7.2	4.8
30]			
30	ne	2023				
30 5.0	ne Monday	2023	Wednesday	Thursday	Friday	Saturday
5.0 Jui	-			Thursday 01	Friday 02	Saturday 03
30 5.0 JUI Sunday	Monday	Tuesday	Wednesday			
30 5.0 JUI Sunday	Monday	Tuesday	Wednesday	01	02	03
30 5.0 JUI Sunday	Monday 29	Tuesday 30	Wednesday 31	34.4	30.8	16.5
30 5.0 JUI Sunday 28	Monday 29 05	Tuesday 30 06	Wednesday 31 07	01 34.4 08	02 30.8 09	16.5
30 5.0 JUI Sunday 28 04 9.0	Monday 29 05 8.7	30 06 36.9	07 103.2	34.4 08 146.8	30.8 09 23.8	16.5 10 21.1
30 5.0 JUI Sunday 28 04 9.0	05 8.7	30 06 36.9	31 07 103.2	01 34.4 08 146.8 15	02 30.8 09 23.8	03 16.5 10 21.1
30 5.0 JUI Sunday 28 04 9.0 11 27.5	Monday 29 05 8.7 12 13.1	30 06 36.9 13 8.8	07 103.2 8.2	01 34.4 08 146.8 15 7.7	30.8 09 23.8 16 16.1	03 16.5 10 21.1 17 26.8
30 5.0 JUI Sunday 28 04 9.0 11 27.5 18	05 8.7 12 13.1	Tuesday 30 06 36.9 13 8.8 20	07 103.2 8.2 21	01 34.4 08 146.8 15 7.7 22	02 30.8 09 23.8 16 16.1	03 16.5 10 21.1 17 26.8
30 5.0 JUI Sunday 28 04 9.0 11 27.5 18 22.6 25	Monday 29 05 8.7 12 13.1 19 24.8	30 06 36.9 13 8.8 20 19.5	07 103.2 8.2 21 7.7	01 34.4 08 146.8 15 7.7 22 4.7	30.8 09 23.8 16 16.1 23 6.9	03 16.5 10 21.1 17 26.8
30 5.0 JUI Sunday 28 04 9.0 11 27.5 18 22.6	05 8.7 12 13.1 19 24.8 26	7uesday 30 06 36.9 13 8.8 20 19.5	07 103.2 8.2 21 7.7 28	01 34.4 08 146.8 15 7.7 22 4.7 29	30.8 09 23.8 16 16.1 23 6.9 30	03 16.5 10 21.1 17 26.8

Ju	ly	2023				
Sunday	Monday	Tuesday	Wednesday	Thursday	Friday	Saturday
25	26	27	28	29	30	01
						31.6
02	03	04	05	06	07	08
14.5	9.6	47.7				
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.



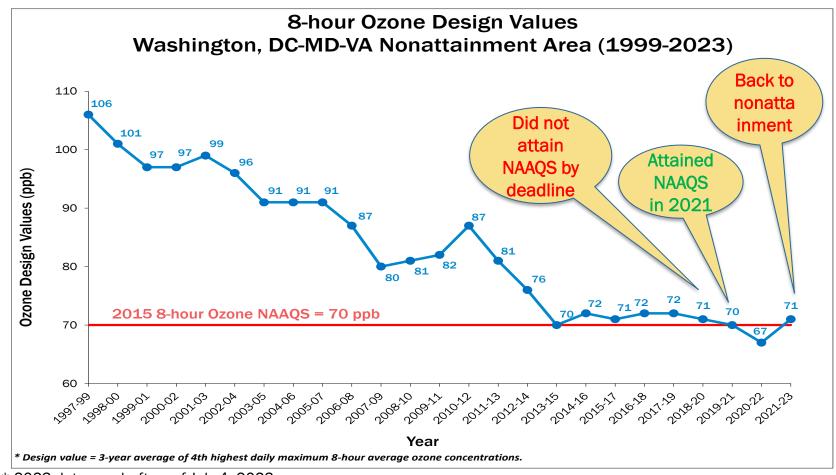
Health Advisory - Code Purple (June 7)

AQI Range	AQI Color	8-Hour Ozone	24-Hour PM2.5
		Range (ppb)	Range (µg/m³)
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.



Ozone Design Value Trend



^{* 2023} data are draft as of July 4, 2023.



Attainment Status – 2015 Ozone NAAQS

Monitor	Draft Design Value (ppb)*
MoMillon (DC)	74
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.

