

Ozone Exceedance Days

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Issue

Provide the dates and locations for which the state's ozone threshold was exceeded in 2023.

Summary

Ground-level [ozone \(smog\)](#) is formed by a chemical reaction between volatile organic compounds (VOCs) and oxides of nitrogen (NOx) when there is sunlight. Many factors impact the ozone's development, such as temperature, wind speed and direction, time of day, and driving patterns.

The state Department of Energy and Environmental Protection (DEEP) monitors ground-level ozone at 12 sites throughout the state from March through September. In 2023, there were 19 days during which at least one DEEP monitoring site recorded an ozone level that exceeded the federal standard (70 parts per billion (ppb), eight-hour average).

The table following the summary shows all the days in 2023 that had at least one site exceed the 70-ppb threshold. Amounts from (1) 71 to 85 ppb (shaded in orange) are considered unhealthy for sensitive groups and (2) 86 to 105ppb (shaded in red) are unhealthy for all people. The month with the most exceedance days was July (nine). Only one month recorded no exceedance days (March). The sites that exceeded the threshold the most days were Greenwich and West Haven (each with 14 of the 19). Additionally, 5 of the 19 days had at least one site record an ozone amount that reached the unhealthy level for all people.

Additional information about ozone in New England is available on [this](#) Environmental Protection Agency website.

Table 1: Ozone Exceedance Days in Connecticut, 2023

Site	4/13	4/14	5/12	6/1	6/2	6/11	6/30	7/1	7/6	7/11	7/12	7/19	7/26	7/27	7/28	7/29	8/21	9/3	9/7
Abington	69	74	63	61	53	56	57	71	56	45	53	49	58	55	54	52	42	48	51
Cornwall	67	82	65	76	58	65	78	79	59	55	57	51	67	52	47	42	41	47	58
Danbury	68	85	60	73	58	72	85	83	68	56	64	55	75	59	50	55	47	50	70
East Hartford	67	84	59	73	69	41	73	82	69	48	64	47	64	61	48	53	60	48	61
Greenwich	72	76	66	73	81	64	81	82	77	72	89	70	82	72	75	71	66	61	87
Groton	76	73	70	40	49	58	70	76	62	60	81	61	59	49	69	71	50	61	64
Madison	82	75	75	50	66	60	78	77	61	68	81	62	64	55	64	81	74	71	69
Middletown	75	82	62	68	68	63	69	80	65	52	70	60	63	59	62	80	48	55	61
New Haven	58	66	64	50	65	66	80	82	69	54	66	66	61	52	64	82	49	60	54
Stafford	71	88	64	65	51	58	68	76	60	45	61	48	61	56	49	50	47	47	59
Stratford	77	72	69	57	75	63	81	86	76	70	89	73	70	62	72	86	74	66	77
West Haven	79	78	70	72	80	63	79	82	71	68	89	74	75	74	74	79	69	60	76

Source: DEEP 8-Hour Ozone Daily Maximums, March through September, 2023, available at: <https://portal.ct.gov/DEEP/Air/Monitoring/Annual-Summary-Information-for-Ozone>

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