

# Environmental Air Report for Washington, DC

**Date:** February 20, 2026

This report compiles current air quality, pollutant levels, radiation monitoring, pollen counts, UV index, and other relevant environmental factors from multiple authoritative sources. Data is real-time or near-real-time as of the report date, with variations due to different monitoring stations and methodologies. Standard air quality is measured using the Air Quality Index (AQI), ranging from 0-50 (Good, green) to 301+ (Hazardous, maroon). Key pollutants include fine particulate matter (PM2.5), coarse particulate matter (PM10), ozone (O3), nitrogen dioxide (NO2), carbon monoxide (CO), and sulfur dioxide (SO2, though not always reported). Additional metrics like radioactivity, pollen, allergens, and UV are included where available. Levels are generally moderate today, with no major alerts.

## Overall Air Quality Index (AQI)

- **Current AQI:** 53-72 (Moderate). Air quality is acceptable, but may pose minor risks for sensitive groups (e.g., those with respiratory issues) during prolonged exposure. Reduce heavy outdoor activities if symptomatic.
- **Health Advisory:** Tiny particles like PM2.5 can irritate eyes, nose, and lungs; long-term exposure may aggravate heart and lung conditions. Dominant pollutant: PM2.5.
- **Hourly Variations:** AQI may fluctuate; for example, early morning lows around 27-49 (Good) and afternoon peaks up to 105 (Unhealthy for Sensitive Groups) in some forecasts.

## Detailed Pollutant Levels

The following table summarizes measured pollutants from various sources. Units are in  $\mu\text{g}/\text{m}^3$  unless noted as sub-AQI values (0-500 scale). PM2.5 levels are 2.1 times the WHO annual guideline in some readings, indicating moderate concern.

| Pollutant                               | Description   | Current Level   | Category/Notes                                      |
|---|---|---|---|
| <b>PM2.5 (Fine Particulate Matter)</b>  | Tiny particles $\leq 2.5 \mu\text{m}$ that can enter lungs and bloodstream. | 10.4-38.0 $\mu\text{g}/\text{m}^3$ (or sub-AQI 23-38) | Moderate; main pollutant today. 2.1x WHO guideline. |
| <b>PM10 (Coarse Particulate Matter)</b> | Larger particles $\leq 10 \mu\text{m}$ from dust, smoke, etc.               | 11-17.0 $\mu\text{g}/\text{m}^3$ (or sub-AQI 11-17)   | Good to Moderate.                                   |

|                                |   |   |   |
|--------------------------------|---|---|---|
| <b>O3 (Ground-Level Ozone)</b> | Formed by sunlight on pollutants; irritates respiratory system. | 8-54 $\mu\text{g}/\text{m}^3$ (or sub-AQI 8-25)     | Good; lower levels today.                                       |
| <b>NO2 (Nitrogen Dioxide)</b>  | From vehicle emissions; contributes to smog and acid rain.      | 18.3-37.0 $\mu\text{g}/\text{m}^3$ (or sub-AQI ~42) | Moderate.   |
| <b>CO (Carbon Monoxide)</b>    | Colorless gas from combustion; reduces oxygen in blood.         | 343.5 $\mu\text{g}/\text{m}^3$                      | Low; no significant concern.                                    |
| <b>SO2 (Sulfur Dioxide)</b>    | From fossil fuel burning; irritates airways.                    | Not widely reported today                           | Typically low in urban areas unless industrial activity spikes. |

## Radioactivity Levels

Radioactivity is monitored via EPA's RadNet system, which tracks background gamma and beta radiation 24/7. No elevated levels or incidents reported today.

- **Gamma Radiation:** Normal background fluctuations; monitors show typical environmental levels (e.g., 50-200 counts per minute in various energy ranges, no anomalies).
- **Beta Radiation (Gross Beta):** Standard background; air filters analyzed show no deviations from norms.
- **Notes:** RadNet data establishes baseline radiation from natural sources (e.g., soil, cosmic rays). Higher readings would indicate an incident, but current data confirms normalcy.

## Pollen Counts and Allergens

Pollen levels are low today, typical for late winter. No significant allergens reported.

- **Overall Pollen Count:** Low to Low-Medium (10 grains per cubic meter).
- **Tree Pollen:** Low/None.
- **Grass Pollen:** None.
- **Weed Pollen:** None.
- **Mold and Other Allergens:** Not reported high; reduce exposure if sensitive.
- **Forecast:** Levels remain low through the week, with slight increases possible by weekend.

## UV Index and Other Environmental Factors

- **UV Index:** 2 (Fair/Low). Minimal risk; no special precautions needed beyond standard sun protection.
- **Weather Context:** Temperature ~4-5°C, humidity 97-100%, wind 5-7 km/h. These can influence pollutant dispersion (e.g., high humidity may trap particles).
- **Other Measured Factors:** No reports of elevated salt, dust, soot, or chemical pollutants beyond standards. Wood-burning contributions noted historically in winter PM2.5 (up to 63% in DC).

## Summary and Recommendations

Air quality in Washington, DC is moderate today, with PM2.5 as the primary concern. Radioactivity remains at safe background levels, and pollen is minimal, making it a good day for outdoor activities for most people. Sensitive individuals should monitor symptoms and limit exposure. For updates, check [AirNow.gov](https://www.airnow.gov), [IQAir](https://www.iqair.com), or [EPA RadNet](https://www.epa.gov/radnet). This report draws from diverse sources to provide a balanced view.