

# Seattle air quality among worst in world due to wildfire smoke

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Credit: Unsplash/CC0 Public Domain

Seattle ranked as the worst city worldwide for air quality and pollution Sunday evening as wildfire smoke coated the region.

A gray haze crept over Western Washington throughout the day, blanketing the area with a definitive reminder that we've entered the season of wildfires and worsening [air quality](#).

Seattle's air quality index hovered between 170 and 190 Sunday evening. Around 6 p.m. the AQI was ranked worst globally among 90 major cities, according to air quality technology company IQAir. Doha, Qatar, ranked second after Seattle and Portland came in third.

The smoke, which drifted over from fires in British Columbia, Eastern Washington and the Cascade Mountains in recent days, prompted the National Weather Service and the Puget Sound Clean Air Agency to issue an air quality alert for most of Western Washington that will last until noon Monday.

A red flag warning, which means any fires that develop could spread quickly, is also now in effect for the western side of the Cascades, said Jeff Michalski, a meteorologist with National Weather Service's Seattle office. Critical fire conditions continued near the Cascades on Sunday, and were expected to continue Monday, largely because of dry weather and fuels, he said.

Ongoing fires and smoke dragged the region's air quality into "unhealthy" and "unhealthy for sensitive groups" categories—an index ranging between 101 to 200—throughout Western Washington as Sunday progressed, weather service meteorologist Kayla Mazurkiewicz said Sunday afternoon.

Conditions are even worse near Bellingham and east of the Cascades, Mazurkiewicz said. According to the weather service's Spokane office, air quality levels were the worst in the country—with an index around 400 to 500, with some even higher—as of Sunday afternoon.

By the afternoon, Eastern Washington's air quality had improved slightly, but it was still considered very unhealthy, according to the state's smoke blog.

The region should expect to breathe easier Monday, when hazy conditions will likely blow out of the area, weather experts said.

"The wind flow pattern is affecting where the smoke is going," Michalski said Sunday morning. That pattern should turn more westerly on Monday, he added, "so that should help push some of the smoke out of the area."

Mazurkiewicz said she hopes there will be a "dramatic difference" in air quality by Monday evening, but the exact timing of the wind changes is tricky to predict.

The thick smoke also threw off the Seattle area's high temperatures Sunday, blocking the sun's rays from heating the region up into the mid-to high-80s, as predicted, Mazurkiewicz said.

Instead, the "reflection of the smoke bounces some of the energy back out," Michalski said. By 3 p.m. Sunday, the Seattle area had hit 79 degrees.

Cooler temperatures should settle in Monday and Tuesday, in addition to high humidity and an overall lower fire threat. There's also a chance of showers Monday night into Tuesday, with the coast, near the Olympic Mountains, likely to see the most rain, Michalski said.

"It's not a widespread rain across the region," he added.

The combination of increased wind and some precipitation should improve air quality in much of the state as the week progresses, but different parts of the region could feel the effects sooner than others, Michalski said.

"Sometimes it's slower to mix out of the valleys, like near the Cascades,

and quicker to improve on the coast," he said.

Until then, he recommended those who are sensitive to smoke try and limit outdoor activity. According to the state Department of Health, anyone with lung diseases, respiratory infections, heart or circulatory problems, diabetes, or a prior history of heart attack or stroke, among others, is more at-risk of feeling severe symptoms from inhaling too much smoke.

Dr. Bonnie Ronish, a pulmonologist at UW Medicine, compared the impacts of the weekend haze with those of a "giant cigarette."

"It is full of [particulate matter](#), it is full of [organic matter](#) and it is filled with burned matter," Ronish said in a video statement Sunday morning. "Anytime you have anything burned get into your lungs, that's bad for you."

While people's airways—through hairs and mucus—are designed to remove bigger particles, smaller particles, like smoke, can more easily get into breathing spaces. Staying inside and using high-quality face masks, like N95s or KN95s, when outside can help limit smoke inhalation, she said.

Most people will likely smell the smoke and feel it in their eyes and nose first, but an increase in coughing, phlegm production or shortness of breath—to the point where it's impacting daily activities, like getting dressed—could signal the need for a clinic visit, Ronish said.

At least six large fires were burning throughout the state Sunday morning, including near Spokane and elsewhere in Eastern Washington, as well as around the Cascades, according to the Northwest Interagency Coordination Center.

The Gray fire, one of the region's largest blazes, began near Medical Lake in Spokane County around noon Friday and has since eaten through more than 10,800 acres, according to the state Department of Natural Resources.

The fire has killed at least one person, destroyed more than 185 buildings, closed parts of Interstate 90 and prompted the county to declare a state of emergency Saturday, the Spokesman-Review reported.

Another Spokane County fire, called the Oregon Road fire, also broke out this weekend and has spread about 9,200 acres, according to the state. As of Sunday morning, it was 0% contained.

The Sourdough fire, started by a lightning strike, has been burning near Newhalem, Whatcom County, since late July and is about 12% contained.

Gov. Jay Inslee declared a state of emergency on Saturday in response to the ongoing wildfires, which he said have burned more than 34,000 acres in the past several days.

Temperatures will likely warm and reach the 80s again in Western Washington by the end of the week, according to weather experts.

"We could see another round of elevated fire concerns in the mountains, but the main focus really is early in the week ... with all the critical [fire](#) weather conditions and the smoke," Michalski said.

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