

NINA MOINI: Many of us woke up to a smoky sky this morning as much of Minnesota's blanketed under unhealthy levels of wildfire smoke. The Minnesota Pollution Control Agency has most of the state's air quality indexed as hazardous and unhealthy. And here at *MPR*, we're breaking out the air filters to circulate some fresh air. But is that enough, should we avoid going outside, and how much smoke is too much?

Here to tell us about the best ways to handle this smoke is Dr. Dylan Wyatt, Chair and Medical Director of the Emergency Department at Aspirus Saint Luke's in Duluth. Thanks so much for being with us, Dr. Wyatt.

DYLAN WYATT: Thanks so much for having me, Nina.

NINA MOINI: I know people should just stay inside, but it sort of feels like today, that's not even as helpful. It just seems like it's kind of inescapable today. I can't imagine what you're seeing up north in the Duluth area. What is it like up there?

DYLAN WYATT: So full disclosure, I'm currently actually trying to ride out the smoke at my cabin, where yesterday, it was at least around 150 Air Quality Index, but today is over 600.

NINA MOINI: Wow.

DYLAN WYATT: I have three young kids so I was trying to get them away.

NINA MOINI: Yeah.

DYLAN WYATT: From the pictures and from colleagues and friends that I saw, it is, I think, the only word that comes to mind is apocalyptic, right? We have this orangish cast to the sky, this almost yellowish look. It seems like something out of a movie. But you're absolutely right in that, it's hard to, especially when we look back at previous years when the air quality was maybe more of a 100 to 200 level bad, but not as bad as we have now, it can be hard to come to terms with the difference between let's try and avoid it and stay inside, and this hazardous level, this Air Quality Index greater than 300, where you absolutely do not want to go outside, unless absolutely necessary.

NINA MOINI: Yeah. I think, sometimes, people think it's just another smoky day. We had a really smoky summer, I remember, back in 2023, and this just really does feel really different. What do you think, folks should be doing? Our meteorologist, Ben Cathey, was with us earlier, and he was talking about people who have window unit ACs, and just the different ways that, that smoke can get inside. What are you suggesting for people when they're inside?

DYLAN WYATT: So when folks are inside, I'm sure many have begun to smell the smoke even inside as this Air Quality Index has climbed. Filtration is really key. Whether that's masks, if you have to go outside, or using a MERV 13 or higher air filter and taping it to a box fan, so the airflow, it can pull the air through that fan.

There's also a way, you can Google search it, where you can take five different MERV 13 filters, tape them together along with a fan to form a cube. They found that that's better than most industrial units for air purification. So if you really want to take it to the next level, that's something that can be easily found online.

But it's doing everything you can to try and avoid that exposure, especially if you have pre-existing respiratory conditions, especially if you've had hearts or strokes before, or at risk for a heart or stroke, or if you have kids. If you have young kids, remember they breathe more of that air per pound of their body weight, so they get more of that small particle into their bloodstream. It results in more of that system-wide inflammation. And for little developing bodies, little developing brains and lungs and heart, that's really something we want to avoid.

NINA MOINI: Oh. Well, I wonder too, what symptoms people should be looking out for? Sometimes, it's like you don't even know how badly something is impacting you or affecting a loved one, maybe an older parent or a little one, like you were saying, until things get out of hand. What are some of the earlier symptoms people should be on the lookout for?

DYLAN WYATT: I'm really glad you mentioned that because there's an unfortunate overlap between some of those symptoms and the normal things we sometimes feel in the summer, because we're not hydrating as well as we should. A little bit of headache. More tired than normal. Maybe you're a little more irritable. Is that because of the high air quality, or is that because it's warmer and your body still hasn't adjusted to that heat? It's hard to know.

As the air quality numbers climb higher and as your exposure amount goes up, you'll start to have more telltale signs. Sometimes, the actual particles can irritate your eyes, so you can have watering of your eyes. You can have trouble breathing, especially cough. Your body will try and clear that out with its mucus, clear all of those particles out. And sometimes, folks can even start to develop some chest pain, some achiness, almost flu-like symptoms because of that system-wide inflammation.

NINA MOINI: I know it sounds like you're not at work today, which is obviously OK, but I do wonder what the emergency departments in the area are seeing, as just days of this smoke continues. People are being evacuated out of the forest and out of different campsites. Are you feeling like people are dealing with more patients coming in? Are you concerned about an influx of people to the ER?

DYLAN WYATT: I think there's absolutely going to be more patients coming in, simply because whether it's the close-range smoke exposure, like you talked about from folks being evacuated, where they're actually inhaling the fumes directly, that's going to be a different kind of injury pattern than folks who are dealing with this sort of smog and smoke cloud. I know that the numbers will be going up. In fact, they're going up as far away as New York, where people are being affected. I had some friends from New York reach out to me and talk about that.

But I don't want people to ever be worried about coming in too much, especially at a time like now. This is when emergency medicine professionals, we don't mind at all seeing folks. We want to see people when they're feeling badly. If they're having bad symptoms, especially chest pain, trouble breathing, if they have those pre-existing conditions that are making them worried, I would urge people to seek medical attention and not try and put it off.

A little headache and achiness is one thing, but some of those more severe symptoms, we really want to see them, rather than have folks try and, as we often do in Minnesota, sort of just take it on the chin.

NINA MOINI: Yeah. Dr. Wyatt, how much water should folks be drinking to just offset not only the smoke, but this incredible heat?

DYLAN WYATT: So that's a great question. And a lot of it depends on your size. Generally speaking, if you are drinking anywhere from 6 to 12 ounces of water a day, that's a pretty good start. An even better way to think about it is if your urine is lighter color than what you'd find at a store-bought lemonade, that's your body's way of letting you know, I have enough water. That's also helpful for wildfire smoke exposure because some of those particles are filtered out by our kidneys, some go through the liver, but some are filtered out by the kidneys. So the more water we can give the kidneys to do their job, the better.

NINA MOINI: Dr. Wyatt, thank you so much for breaking that down. I really appreciate your expertise and your time. Take care.

DYLAN WYATT: You, as well. Everybody, stay inside.

NINA MOINI: Stay inside and drink some water. I'm going to put my coffee away. Dr. Dylan Wyatt, Chair and Medical Director of the Emergency Department at Aspirus Saint Luke's in Duluth.