

**Minnesota Now (MPR) | Minnesota Now Minnesota Now - After the second snowiest November in 25 years, more snow is on the way 01GK588J9FQGNKA9CHK419J2DJ**

---

**CATHY** The tail end of that snowstorm is pulling out of the region. Residual flakes in places like I-Falls and Thief River Falls right now. There have been hundreds of crashes across Minnesota over the past 24 hours. Dozens of jack-knifed semi-trucks, vehicles, spinouts. At least 40 people injured according to the State Patrol because of the snow, the ice, and the reduced visibilities.

Meteorologist Sven Sundgaard is back for a look at just how much snow we got yesterday and what the rest of the week might look like. Hey, Sven.

**SVEN** Hi. Yes, we got that first snowstorm out of the way. It's always a relief, right?

**SUNDGAARD:**

**CATHY** Yes. [CHUCKLES] Yes, we did.

**WURZER:**

**SVEN** You know, I've been watching here-- I've been watching here as I've been waiting to chat with you, looking at a bus stop. And every time the wind blows, people in unison turn their backs to the blowing snow. So that's where we're at.

**SUNDGAARD:**

Yes, we picked up 8.4 inches of snow officially in the Twin Cities. North Saint Paul picked up 9 inches. We had it quite the swath from about Mankato through the Twin Cities and through Northwestern Wisconsin of generally a half foot or more. But Southeastern Minnesota fared a little bit less, only an inch or so in Maple-- that is in far Southeastern Minnesota-- 3 inches in Rochester.

And the North Shore this time, for a change, got some of the lower amounts, only a few inches-- 2.3 in Duluth. This is our top three snowfall of the last two years. Oddly enough, the last few winter seasons, our only big snowfalls had been in either November or December, then the rest of the winter was pretty quiet.

**CATHY** Really? So this is-- I didn't realize that this was our third largest November snowstorm. What the heck?

**WURZER:**

**SVEN** Yes. It doesn't necessarily mean anything for the rest of the winter. It could or it could not. But, yes, we finished the second snowiest November in 25 years. Our total, thanks to yesterday's storm, 13 inches in the Twin Cities-- 16th snowiest November overall. The 1970s and '80s had some pretty crazy snowy Novembers, but, yes, the third biggest November snowstorm since the Halloween blizzard of 1991.

So these big storms are not necessarily common, but, of course, they could be notorious. You think of the Halloween blizzard, which mostly fell on November 1, 1991, and then the Armistice Day blizzard, which a lot of people had stories from, of 1940-- 16.8 inches of snow out of that, and, of course, it killed 49 Minnesotans, 154 people in total.

So November can really whip up some big storms because a warmer atmosphere-- we talked about this all the time in the climate change context, a warmer atmosphere holds more water vapor. So your best chance of getting big storms in Minnesota is in November or March, beginning in late season, when there is still some warmer air around and more moisture content.

**CATHY** So you're speaking of warmer air or air coming in from a different part of the world. You were talking a little bit in  
**WURZER:** your notes here about Greenland.

**SVEN** Yes.

**SUNDGAARD:**

**CATHY** So are we getting a shot of cold air from Greenland? Is that what's happening here when it comes to our  
**WURZER:** weather?

**SVEN** Kind of, sort of. We monitor a thing all winter called the NAO index, or North Atlantic Oscillation. It basically  
**SUNDGAARD:** measures what's the pressure pattern over the North Atlantic versus the Arctic. And when those-- they sort of  
slosh back and forth. And the reason we watch that is because that has a big impact on overall weather patterns  
for the Northern Hemisphere.

And some of the computer models are forecasting record high pressure in Greenland potentially over the next  
couple of weeks. And this has got in a lot of meteorologists' attention because what happens basically is when  
warm air surges into a place like Greenland, you can imagine that that pushes air out of place in the Arctic and  
the North Pole. And there's only a couple of places it can go. One of them is Minnesota, and the other one is  
Central Asia.

So we're watching for potentially this pretty extraordinary blocking pattern that could mean cold air for us. But  
Greenland might be running 20 to 25 degrees above normal next week.

**CATHY** Wow. Wow. OK, so if we're going to have this, if this happens then, do you see in the crystal ball that you have in  
**WURZER:** front of you any other chances for snow?

**SVEN** Yes. We got a couple of them over the next several days. So, yes, this can lead to a stormy pattern too. So the  
**SUNDGAARD:** next one coming looks to be more of a northern Minnesota storm. So they got largely missed by yesterday's  
snow. Late Friday into Friday night, a system is going to ride the Canadian-Minnesota border. We're talking the  
potential for several inches of snow for places like Grand Forks, Hallock, International Falls, Ely.

And this is going to be a fluffy, powdery snow that can really add up pretty quickly. Further south, we're going to  
see substantially less, but it's still possible we could get a coating, maybe a little bit more, in the Twin Cities. And  
much warmer ahead of that, we're talking 40's Friday in Southern Minnesota, but it's going to be in the 'teens in  
the northwestern part of the state, kind of squeezing that out.

But then next week, models are all over the place. But there's going to be a big storm system developing-- looks  
a lot like the one we had yesterday-- somewhere in the central part of the country Monday into Tuesday. Will it be  
here? Will it be Missouri? Will it be Illinois? That's still the question mark, kind of anyone's guess at this point.

But we're definitely heading into a more active pattern. November was our wettest month since August, which is  
encouraging. But, yes, you've got to stay tuned.

**CATHY** And, by the way, before you go here with about a minute left or so, Sven, how, when you look at the models, is it  
**WURZER:** becoming more-- is it becoming easier to forecast or harder to forecast snowstorms given climate change?

**SVEN** I would say harder. One of the things we look at with the computer models we have are models that just basically  
**SUNDGAARD:** play out the scenario of the atmosphere. But also we have statistical models that take a look at, OK, what's happened in the past? How might this storm behave given past behavior? And past behavior has to be thrown out the window. So, increasingly, some of these storms are defying the odds a little bit because we're in a warmer world that has more water vapor, which can make storms more powerful.

**CATHY** All right, thank you for that. I appreciate you joining us here on the noon show, and I hope you have a good rest  
**WURZER:** of the day.

**SVEN** You too. Stay warm out there.

**SUNDGAARD:**

**CATHY** Yes. We'll try. Sven Sundgaard has been with us. He is our meteorologist here-- one of our meteorologists at MPR  
**WURZER:** News. He joins me on *Morning Edition* every morning, Monday through Friday. By the way, for more from Sven, you can go to [mprnews.org](http://mprnews.org), go to the "Updraft" blog.