

Information about wind chill. (National Weather Service)

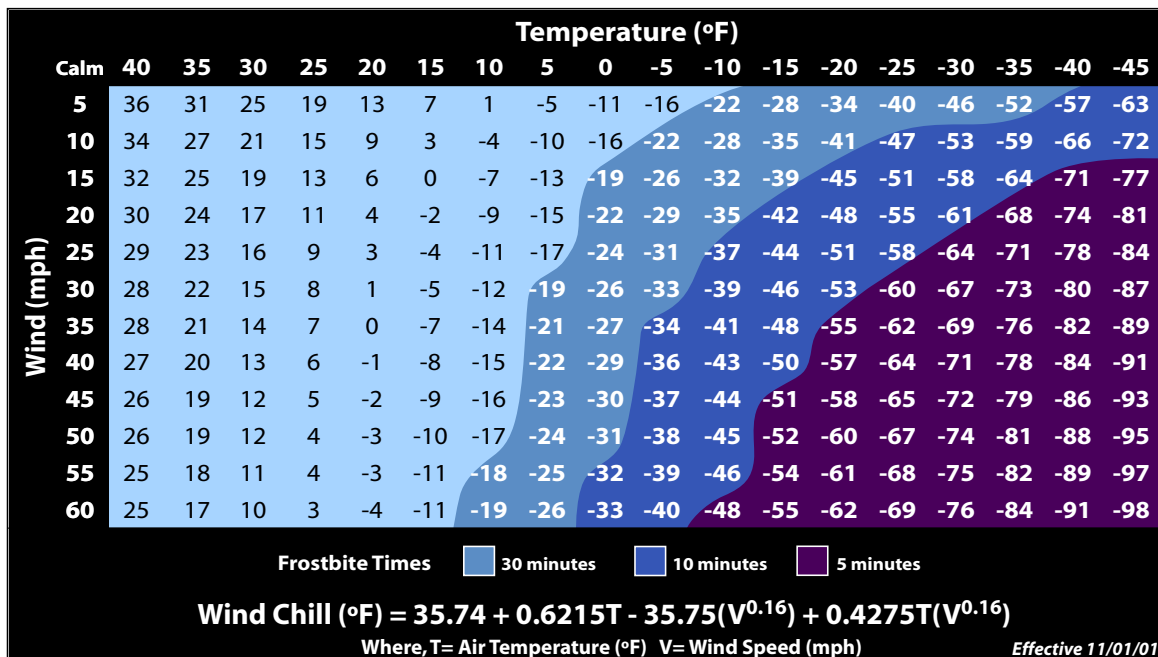
Many formulas exist for wind chill because, unlike temperature, wind chill has no universally agreed upon standard definition or measurement. All the formulas attempt to **qualitatively** predict the effect of wind on the temperature humans **perceive**.

Weather services in different countries use standards unique to their country or region; for example, the U.S. and Canadian weather services use a model accepted by the National Weather Service.

Wind Chill does not impact inanimate objects like car radiators and exposed water pipes, because these objects cannot cool below the actual air temperature.



Wind Chill Chart



It seems the older I get the more we worry about things. I know this is perceived on my part and I tend to fall back to the “in my day” comments that make my kids eyes begin to roll. With that said I think it has become necessary to

determine what we will use as a guideline for school delays so we can be consistent and help families with some advanced planning.

Why is it so important to have school on time? The biggest reason is that many families face a hardship when we delay or cancel school. They generally don't have childcare and delaying or cancelling means finding money in their family budget that they may not have or leaving kids unattended due to work requirements. I know kids and staff love snow days. I get that. But I also know that it causes some families to struggle. For that reason I take cancelling or delaying school very seriously.

Because wind chill cools exposed skin more quickly it can accelerate frostbite. Realize that wind chill is a perceived temperature and not the actual temperature. If it is 5 degrees with a wind chill of -10 then you are encountering 5-degree temperature all the time. The -10 is a perceived temperature. 5 degrees will freeze your skin and cause frostbite. What wind chill does is accelerate the process of your skin cooling but it can't cool any lower than 5 degrees. The faster the SUSTAINED wind speed, the faster your skin cools. So when we are dealing with wind chill we need to think about the amount of time of exposure to sustained wind chill. Looking at the chart on the first page, you can see that wind chill above -17 is not dangerous unless we have a sustained wind speed of 60 mph. (If we had sustained wind speed of 60 mph we won't be having school due to the danger of busses getting blown off the road.) Based on the National Weather Service, -17 wind chill is not dangerous unless you will have exposed skin for longer than 30 minutes. Also, realize that it takes longer than 30 minutes. How much longer? They don't determine it above -17. My guess is because it isn't much of a concern.

For that reason we will not delay school unless the wind chill is **below -15**. I choose -15 because it is close to the -17 area of concern and easier to remember. I use the NOAA app to determine what the wind chill is with current conditions. I use this app since the National Weather Service has the most reliable and most comprehensive data. Also they report wind chill on sustained conditions and not wind gusts. I suspect media outlets report on wind gusts. If there is a wind gust at 3 am that would put the wind chill at -20, I am guessing they are reporting the wind chill as -20 when it really isn't. That is my suspicion since their reports tend to be lower than NOAA.

If it is clear that we will be dealing with conditions the next morning that will put us in a delay status I will make the announcement the night before so families can plan. If it is not clear then we will have to wait. If the prediction is that wind chill may be -10 to -20 then a family can begin thinking about "what if." If they are predicting wind chill of -5 and no snow you can be pretty certain we will have school on time.

Ultimately we will make decisions to keep kids as safe as we can but we can't make decisions based on media hype, unscientific thinking or desire to please students or adults. I can't speak to what other districts do but at Centerburg we will follow scientific facts and a logical process all the time regardless of how many snow days we have used or how many we have left. We may be open when others close or we may close when others stay open. Know that our decision is based on fact and science and not conjecture.