

Colour-coded Weather Alerts

Overview



In November 2025, Environment and Climate Change Canada's (ECCC) Meteorological Service of Canada (MSC) is implementing changes to the way severe weather warnings are communicated to Canadians. A colour-coded weather alert system will be introduced to place more emphasis on the potential impact a severe weather event may have on the lives of Canadians.

What are colour-coded weather alerts

Colour-coded weather alerts tell you what risk the weather is to you. Every type of weather alert – Warnings, Advisories, and Watches – has a colour when it is issued. The weather alert colours move from Yellow, to Orange, to Red, as the potential risk increases.

Alert colours

The same weather can have different impacts, depending on timing, location, and population. That's why each weather alert has a colour, to tell you the level of impact possible in your area, so you can prepare appropriately.



Yellow

- **Hazardous weather may cause damage, disruption, or health impacts**
- Impacts are moderate, localized and/or short-term
- Yellow alerts are the most common



Orange

- **Severe weather is likely to cause significant damage, disruption, or health impacts**
- Impacts are major, widespread and/or may last a few days
- Orange alerts are uncommon



Red

- **Very dangerous and possibly life-threatening weather will cause extreme damage and disruption**
- Impacts are extensive, widespread, and prolonged
- Red alerts are rare

Remember to **always read the full weather alert text**, no matter the colour. We always include details about the weather and actions you can take to keep safe.



How we choose weather alert colours

To choose a colour that describes the risk level of a weather alert, we analyze two types of information. We consider:

- How confident we are the weather will occur
- The possible impact that weather may have on you

We use an Alert Colour Matrix to help us choose the colours for our alerts.

CONFIDENCE	Very High				
	High				
	Moderate				
	Low				
		Low	Moderate	High	Extreme

It has a vertical and horizontal axis, to show the different levels of forecast confidence and possible weather impact.

The levels of forecast confidence we have that the weather will occur, ascend vertically up the side from bottom to top from lowest to highest:

- Low forecast confidence
- Moderate forecast confidence
- High forecast confidence
- Very High forecast confidence.

The levels of possible weather impact are horizontal along the bottom from left to right, least to greatest:

- Low weather impact
- Moderate weather impact
- High weather impact
- Extreme weather impact

Where our level of confidence meets with our level of impact on the matrix, we find the colour to describe that alert.

Levels of forecast confidence

We use a variety of information sources to decide the level of forecast confidence that a weather event will occur:

- Current observations
- Weather prediction models
- Forecaster expertise

Ultimately, it is our forecasters who decide that there is low, moderate, high, or very high confidence that a weather event will happen. We use this confidence in our Alert Colour Matrix to help choose a weather alert's colour

Levels of weather impact

We only issue weather alerts for three levels of weather impact: moderate, high, and extreme.

Impact guides help us decide what impact level we use to describe a weather event. This in turn helps us choose the alert colour.

Weather impact levels describe how the weather will affect:

- Travel delays
- Utilities disruption
- Damage to property
- Danger to people's health
- Time for society to recover

For low-impact weather, when day-to-day activities are not affected, we do not send out a weather alert. Instead, we may create a Metnote or a Special Weather Statement.