

Ready, set, storm:

How preparedness for storm-related power outages varies across B.C.



Ready, set, storm: How preparedness for storm-related power outages varies across B.C.

Storm season in B.C. is already in full swing, with many more challenging weather events expected. This year, La Nina weather has created stormier conditions than usual. That is why it is more important than ever that customers be prepared for the possibility of extended power outages. However, while some regions experience more outages than others, there is an overconfidence in parts of the province about their level of power outage readiness.

Highlights

- A new survey¹ commissioned on behalf of BC Hydro finds many British Columbians are overconfident and underprepared for storm-related power outages—in some regions more than others.
- Those who live in the Lower Mainland are particularly overconfident—over half listed their region as the most prepared in the province for power outages.
 - This is despite the fact that they are the least likely to have taken steps to prepare for storm-related outages or have an emergency kit.
- Lower Mainlanders are also the most likely to think storms are getting worse—over half said winter storms are becoming more severe— even though they report experiencing less outages than other regions over the past year.
 - In contrast to the Lower Mainland, regions that experience more frequent storm events and the most power outages tend to be most prepared, but less confident in some cases.
 - Northern British Columbians are the most likely to experience multiple outages in a year and are also the most likely to have taken steps to prepare for outages (62 per cent) and have an emergency kit (56 per cent).
 - Vancouver Islanders are a close second in preparation, with 58 per cent reporting taking steps to prepare for outages, and 53 per cent having an emergency kit.
 - However, just 22 per cent of Vancouver Islanders think their region is the most prepared overall for storm-related outages.
- Lower Mainlanders are also more dependent than other regions on their mobile phones during outages:
 - Nearly three-quarters said having access to their cell phone is ‘important’ or ‘very important’ during an outage, compared to 65 per cent of Vancouver Islanders, 67 per cent of Southern Interior residents, and 49 per cent of Northerners, and;
 - They are the most likely of any region to use their phone to go online for entertainment (Netflix, YouTube, etc.) during an outage.
- Thirteen per cent of Lower Mainlanders also said they would rather go without their partner for a day during a power outage than their cell phone—the highest of any region.

Solutions

No matter which region of the province you live in, BC Hydro encourages customers to be prepared for storm-related power outages. Make sure to check out BC Hydro’s **outage checklist** to help prepare your home for an outage and ensure you know what to do before during and after an outage occurs.

¹ Online survey conducted by Majid Khoury of 801 British Columbians from Oct.15–19, 2021. Margin of error 3.46%.

Preparation for an outage includes having a well-stocked emergency kit with supplies for each member of the household for at least 72 hours. An emergency kit should include basic supplies, such as:

- A flashlight and extra batteries
- First aid kit
- Required medications
- Non-perishable food and bottled water

BC Hydro is also reminding British Columbians that if they come across a down or damaged power line, it should be considered live and dangerous and be reported to 9-1-1. For more information on how to prepare for storm-related power outages visit bchydro.com/getprepared.

A challenging storm season ahead

Storm season is off to an early start this year—numerous atmospheric river events and a bomb cyclone brought high levels of wind and precipitation to B.C. over the past couple of months. According to Environment Canada, B.C. experienced nearly 300 per cent of its usual rainfall in September—151 mm compared to the usual 51 mm.²

These conditions are in part due to La Niña, which is predicted by BC Hydro meteorologists in a recent **report** to bring colder, wetter, and windier weather to the West Coast. At the same time, record-breaking temperatures across B.C. this summer caused drought that weakened trees. Weakened vegetation coupled with stormier weather could mean more power outages this fall and winter. That is why it is important that British Columbians are prepared for potential power outages caused by storms.

However, a recent survey conducted on behalf of BC Hydro finds many British Columbians are overconfident and underprepared for storm-related power outages—in some regions more than others. This report will examine which regions of the province are most prepared to weather the storm during power outages, and which regions might be overestimating their level of preparedness.

Storms the new norm in every region

Extreme weather events and storms are becoming more common in B.C. as climate change is taking a toll. In fact, Natural Resources Canada studies on the impacts of climate change concluded that future changes in the frequency and magnitude of extreme weather events particularly ice storms, heavy snow storms and wind storms are likely to increase the risk of interrupted electricity supply.³

Here in B.C., there has already been a 117 per cent increase in storms that BC Hydro has responded to over the past several years, rising from 52 in 2014 to an average of 113 over the past few years. As BC Hydro continues to experience more weather-related system damage, it is more important than ever that customers be prepared for the possibility of prolonged outages—the majority of which are caused by trees and adverse weather.



Nearly 60% of outages are caused by trees and adverse weather.

Twenty-seven per cent of British Columbians said they have experienced at least one storm-related power outage over the past year, with 17 per cent having experienced at least two. Those who live on Vancouver Island are the most likely to report experiencing three or more storm-related outages over the past 12 months, while those in Northern B.C. are most likely to have experienced five or more.

² Environment Canada

³ Lemmen, D.S., Warren, F.J., and Bush, E., editors (2008): From Impacts to Adaptation: Canada in a Changing Climate 2007; Government of Canada, Ottawa, ON, 448p.

However, even though storms are getting worse, almost half of British Columbians (48 per cent) said they have not taken any steps at all to prepare for storm-related outages, and 52 per cent said they do not have an emergency kit. This lack of preparation could pose challenges in the event of prolonged outages—and some regions think are more prepared than they are.

Preparation perceptions

When it comes to preparation, those who live in the Lower Mainland are particularly overconfident—over half listed their region as the most prepared in the province for storm-related power outages. This is despite the fact that they are the least likely to have taken steps to prepare for storm-related power outages—53 per cent said they have not taken any steps at all to prepare and 55 per cent do not have an emergency kit. Lower Mainlanders are also the most likely to have the perception that storms are getting worse—over half said they think the number of fall and winter storms (October—March) are increasing in B.C.

In contrast to the Lower Mainland, regions that experience more frequent storm events and more power outages tend to be most prepared, but less confident in some cases. For example, Northern British Columbians are the most likely to experience multiple outages in a year and are also the most likely to have taken steps to prepare for outages (62 per cent) and have an emergency kit (56 per cent). Vancouver Islanders are a close second in preparation, with 58 per cent taking steps to prepare for outages, and 53 per cent having an emergency kit. However, just 22 per cent of Vancouver Islanders think their region is the most prepared overall for storm-related outages.

Islanders and those in the North are also the most tolerant when it comes to outage duration—almost 15 per cent of Vancouver Islanders said they think it is reasonable for a power outage to last 12–24 hours, with 11 per cent of Northern British Columbians and eight per cent of Southern Interior residents agreeing. Just five per cent of Lower Mainlanders said this would be a reasonable outage duration. In fact, most Lower Mainlanders (29 per cent) said the most reasonable amount of time for an outage to last is two to less than four hours.

REGIONAL READINESS

% that have taken steps to prepare for storm-related outages

Lower Mainland



43%

Vancouver Island



58%

Southern Interior



53%

North



62%

Mainlanders and mobiles

During a storm-related power outage, 70 per cent of British Columbians said it is ‘important’ or ‘very important’ they have access to their cellular phone. However, Lower Mainlanders proved most dependent than other regions on their mobile phones during outages—nearly three-quarters said having access to their cell phone is ‘important’ or ‘very important’ during an outage, compared to 65 per cent of Vancouver Islanders, 67 per cent of Southern Interior residents, and 49 per cent of Northerners. In fact, 11 per cent of Northerners said it is not important to them at all to have access to their cell phone during an outage—the most in any region.

Lower Mainlanders are also the most likely of any region to use their phone to go online for entertainment (Netflix, YouTube, etc.) during an outage. In addition, thirteen per cent of Lower Mainlanders said they would rather go without their partner for a day during a power outage than their cell phone—the highest of any region.



13% of Lower Mainlanders said they would rather spend a day in the dark without their partner rather than go a day without their cell phone during a power outage.

Veg management prevents outages

The combination of falling trees and branches with adverse weather account for nearly 60 per cent of all BC Hydro outages. In B.C., there is an abundance of trees—more than many jurisdictions in North America. That is why BC Hydro works year-round on vegetation management—and it has increased its program this year given the challenges like drought and extreme storms brought on by climate change.

BC Hydro regularly inspects trees and other vegetation growing under or adjacent to its power lines and performs regular maintenance and upgrades to the system to help ensure reliability and prevent outages. This includes replacing approximately 10,000 power poles each year that become damaged by adverse weather, wildlife or weakened by age.

Regional safety

Damages to the electrical system caused by storms can present many dangers—one of which is downed or damaged power lines. Northern British Columbians are the most likely to have encountered a downed or damaged power line (51 per cent), followed by those in the Southern Interior (45 per cent), Vancouver Island (42 per cent) and the Lower Mainland (31 per cent). There is often no way to tell that a power line is live—if you see one call 9-1-1, as it is an emergency.

Preparing like a pro

No matter which region of the province you live in, BC Hydro encourages customers to be prepared for storm-related power outages. This includes having a well-stocked emergency kit with supplies for each member of the household for at least 72 hours.

AN EMERGENCY KIT SHOULD INCLUDE BASIC SUPPLIES, SUCH AS:

- A flashlight and extra batteries
- First aid kit
- Required medications
- Non-perishable food and bottled water

Make sure to check out BC Hydro's **outage checklist**. To help prepare your home for an outage and ensure you know what to do before, during and after an outage occurs. Here are some initial steps you can take: beyond having an emergency kit on-hand:

- Develop a preparedness plan and share it with everyone in your home.
- Check emergency equipment periodically (flashlights, radios, generators, etc.) to make sure they are in working order.
- Use surge protectors to protect your electronic devices such as computers, printers, and televisions.
- Develop a list of important local telephone numbers. Include numbers for police, fire, poison control centre and include us to report an outage: **1 800 BCHYDRO (1 800 224 9376)** or ***49376** on your mobile device.

BC Hydro is also reminding British Columbians that if they come across a down or damaged power line, it should be considered live and dangerous and be reported to 9-1-1. For more information on how to prepare for storm-related power outages visit [bchydro.com/getprepared](https://www.bchydro.com/getprepared).

