## Stocked up, but unprepared:

How COVID-19 preparation has created a false sense of storm season security



# Stocked up, but unprepared: How COVID-19 preparation has created a false sense of storm season security

In recent years, B.C. has experienced extreme weather events that have caused unprecedented damage to BC Hydro's electrical system. This year, while many British Columbians have stocked up on household supplies because of the COVID-19 pandemic and think they are more prepared for an extended power outage, most do not have an emergency kit or plan, and are not ready to ride the storm out at home.

## **Highlights**

- New BC Hydro data shows there has been a 117% increase in storms that it has responded to over the past several years, rising from 52 in 2014 to an average of 113 over the past three years.
- O Storm-related damage has caused over one million outages on average annually over the past few years, and has included two of the largest individual storms in BC Hydro history.
- A recent survey¹ conducted on behalf of BC Hydro finds nearly 20% of British Columbians think they are more prepared for winter storms this year because of COVID-19.
- O This sense of preparation comes from stocking up on household supplies like toilet paper, hand sanitizer, disinfectant wipes, groceries and alcohol—which 44% indicate they have done.
- The survey also found that unlike years past, half of British Columbians would not leave home to wait out an extended outage
  in a public place like a mall, restaurant or movie theatre because of the pandemic.
- O Despite the desire to stay closer to home and a feeling of preparedness, over half of British Columbians do not have an emergency preparedness kit—and most do not plan to purchase one this winter.
- And while nearly 50% of British Columbians think storms are getting stronger and have experienced a weather-related outage
  in recent years, about 30% have not taken any steps to prepare for power outages that could last several hours or days.
  - O British Columbians aged 18 to 34 are the least prepared for extended power outages with nearly 50% admitting to not being prepared.
- O Whether they are prepared or not, British Columbians have three top concerns when the power goes out:
  - O two-thirds worry about food in the fridge or freezer spoiling;
  - O 16% worry about being cold; and,
  - O nearly 10% worry about their cell phone dying.
- While many continue to stock their fridges and freezers with groceries to limit trips to the store, some are not sure what to do
  with these items during a power outage.

<sup>1</sup> Online survey conducted by Majid Khoury with Ipsos Reid on behalf of BC Hydro of 803 British Columbians between October 8 and 11, 2020.

#### **Solutions**

In order to prepare for a unique storm season this year, BC Hydro recommends customers:

- O Get prepared: Have an emergency preparedness kit ready that will last at least 72 hours. The kit should include a first aid kit, bottled water, non-perishable food items, a flashlight and batteries, a battery pack for your cell phone, warm clothes and blankets, among other things.
- O Have a plan: Since going to a public place during a long-term outage might be difficult this year, make a contingency plan with your household.
- O Stay safe: A downed line is an emergency, and customers should stay back at least 10 metres and call 9-1-1 immediately should they encounter one.
- Know the rules: Keep refrigerator and freezer doors closed tight during an outage to avoid food spoiling, and keep these rules
  - O A freezer that is fully packed will hold food safely for up to 48 hours; a freezer that is half full will hold food safely for up to 24 hours.
  - O If power is out for less than four hours, the food in the refrigerator is safe to consume.
- O Stay updated: For information on preparedness visit bchydro.com/getprepared and for up-to-date outage information visit bchydro.com/outages.

#### The new normal storm season

Storms in British Columbia are getting worse. Over the past several years, B.C. has experienced more frequent extreme weather events that have caused damage to BC Hydro's electrical system, resulting in more power outages for its customers.

This storm season is unique because the COVID-19 pandemic is adding extra pressure on BC Hydro and its customers. This report will explore why many British Columbians are unprepared for storm season this year, despite stocking up on supplies and making preparations for COVID-19.

BC Hydro has three times more trees per kilometre of power lines than any utility in North America, and most BC Hydro outages are caused by adverse weather causing trees or branches to fall on power lines.

## Changing climate, changing storms

BC Hydro data shows it has responded to a 117% increase in storms over the past few years. Storms BC Hydro responded to increased from 52 in 2014 to an average of 113 over the past three years. Additionally, the number of customer outages during a storm increased from 323,000 in 2014 to an average of more than one million customers over the past three years.



Average of 52 storm events and 323,000 customer outages



Average of 113 storms over past three years and over one million customer outages BC Hydro has also recently experienced two of the largest individual storms in its history. For example, In December 2018, BC Hydro experienced the most damaging storm in its history that left around 750,000 customers without power—with around 7% of impacted customers out for more than 72 hours. Similarly, on New Year's Eve 2019 a major snowstorm hit the Central and Southern Interior of B.C., causing damage to BC Hydro's system resulting in more than 100,000 customers left without power—many in the hardest hit areas for several days.

Extreme weather events such as these can be linked to a changing climate in British Columbia. The Pacific Climate Impacts Consortium (PCIC) reports that over the last century the average temperature in British Columbia has risen by 1.2 degrees Celsius and annual precipitation has increased by about 20%, and these trends are expected to continue.<sup>2</sup> 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.<sup>3</sup>

## The importance of preparedness

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, especially during the COVID–19 pandemic. However, a recent survey<sup>4</sup> commissioned on behalf of BC Hydro finds while almost 20% of British Columbians think they are more prepared for winter storms this year because of COVID–19, most are not prepared for extended outages and instead have a false sense of preparedness from stocking up on household supplies for the COVID–19 pandemic.

The survey found nearly 50% of British Columbians think storms are getting stronger and 44% have experienced a weather-related power outage over the last 12 months. Of those who have experienced a weather-related power outage over the past year, 33% indicated they have experienced at least two, and 17% said they have experienced three to four.

In the event of a major storm that causes damage to BC Hydro's system, 90% believe power should be restored within 24 hours or less. However, in major storms such as the 2018 event that left 750,000 without power, some customers were not fully restored for days, highlighting the need for adequate household preparation for power outages, especially in the winter months when strong wind, heavy rain, snow and ice can cause trees and branches to knock down power lines and damage other electrical equipment.

Despite this, about 30% have not taken any steps to prepare for power outages that could last several hours or days, and over half do not have an emergency preparedness kit. Of those that do not have an emergency preparedness kit, 63% do not plan to buy one this year.

## False sense of security

The survey found that many British Columbians are confusing being prepared to stay at home more because of the COVID-19 pandemic with being prepared for extended power outages. For example, 44% indicated they have stocked up on household supplies for the pandemic, leading to a sense of preparedness. However, many of the supplies that British Columbians have stocked up on cannot replace the contents of a well-stocked emergency kit which should include a first aid kit, bottled water, non-perishable food, a flashlight, extra batteries, and an emergency plan.

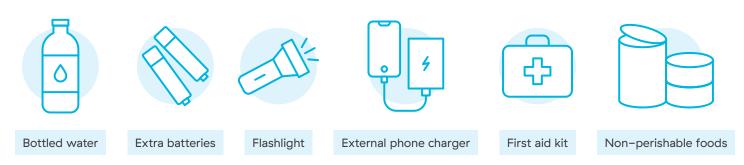
<sup>2</sup> A regional climate service centre at the University of Victoria that provides practical information on the physical impacts of climate variability and change in the Pacific and Yukon.

<sup>3</sup> 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.

<sup>4</sup> Online survey conducted by Majid Khoury with Ipsos Reid on behalf of BC Hydro of 803 British Columbians between October 8 and 11, 2020.

Instead, some of the most popular items British Columbians indicated stocking up on include COVID-19 related supplies such as disinfectant wipes (58%), personal hygiene products like soap (43%), and toilet paper/paper towels (68%). Nearly a quarter admit to stocking up on alcoholic beverages, while 70% said they have purchased more groceries than normal.

#### **EMERGENCY KIT**



#### COVID-19 KIT-WHAT BRITISH COLUMBIANS HAVE STOCKED UP ON



The survey also found that unlike years past, half of British Columbians would not leave home to wait out an extended outage in a public place like a mall, restaurant or movie theatre because of the pandemic, and almost 20% said they would have to be without power for more than two days to even consider seeking power at a public place. This need to stay at home and avoid public places as much as possible makes being prepared with an emergency kit and plan more important than ever.

## Millennials and Lower Mainlanders least prepared for outages

When it comes to preparedness, the millennial generation is the least ready to ride out a storm at home. Almost 50% of British Columbians aged 18–34 said they have not taken any steps to prepare for weather–related outages.

Regionally, those who live in the Lower Mainland are the least likely to have taken steps to prepare for weather–related outages, with over 30% indicating they have not taken any steps to prepare. Those in Northern B.C. and Vancouver Island were the most likely to indicate they have taken steps to prepare for outages. This is likely because those who live in Northern B.C. and Vancouver Island are also the most likely to experience multiple weather–related outages over the past year. In fact, Vancouver Island and the Gulf Islands were the hardest hit by the December 2018 storm—the worst in BC Hydro's history—with over 87% of BC Hydro customers experiencing an outage during the event, and many on the Island and Gulf Islands being in the dark for more than 72 hours.

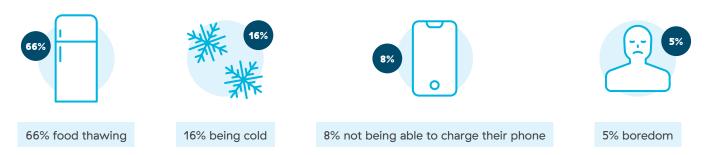


BC Hydro crews hard at work restoring power on Vancouver Island during the 2018 wind storm—the worst storm in BC Hydro's history.

## More outages, more problems

Because many British Columbians are continuing to stock their fridges and freezers to limit trips to the store, more food is at risk of spoiling during a power outage, and this is causing concern for many British Columbians. For example, 66% said their biggest concern during a power outage is food thawing, followed by being cold (16%), not being able to charge their cell phone (8%), and boredom (5%).

#### BRITISH COLUMBIANS' GREATEST CONCERNS IN A POWER OUTAGE



To make matters more stressful, many do not know what to do with perishable grocery items in their fridge or freezer during an extended power outage, which could mean loss of food or eating something that might cause illness. For instance, if food in a fridge has been held above four degrees Celsius for more than four hours, there are some items such as meat products that will likely have to be discarded—yet 31% were not aware of this. Similarly, 22% were not aware that a fully packed freezer can hold food safely for 48 hours only if the freezer door is kept tightly shut.

## BC Hydro crews and COVID-19

BC Hydro has taken a number of steps to ensure its crews can continue to respond quickly to outages and other emergencies during COVID-19.

Some of the measures implemented include having crews work in smaller pods who interact with members of their individual group. This allows crews to perform their work as normal, while trying to maintain physical distancing as much as possible to minimize the potential for exposure to other workers, contractors and the public. BC Hydro is also reminding the public to keep two metres distance and avoid approaching crews working in the field to ensure safety.

Other measures include ensuring employees reporting to work are symptom free, and sanitizing tools and trucks daily.

BC Hydro is fortunate to have crews located in more than 55 communities across B.C. so it can safely move them to support during storm events if required.

## The best defense is preparedness

Despite the increasingly challenging storms, BC Hydro's response times continue to be among the best in North America. On average, BC Hydro crews restore over 95% of customers within 24 hours following a storm.

However, even with the best restoration efforts it is difficult to predict how long a storm will last or how much damage it will cause. That is why the key to staying safe during a power outage is to prepare in advance and have an emergency plan.

During a power outage, necessities such as phone access, electrical and water services may disappear. BC Hydro recommends making an emergency plan for the family, as well as a list of local emergency contact numbers (fire, police, ambulance, etc.), including 1800 BCHYDRO for outage information.

Also, make sure to use surge protectors to protect sensitive electrical equipment such as computers, set-top boxes, media players and TVs. And since almost 10% of British Columbians indicated they feel anxious that their phone battery might die in a power outage, BC Hydro also suggests investing in a portable phone battery charger—there are plenty of portable charging and battery pack options with massive capacity for worry–free scrolling during an outage.

In addition, prepare an emergency kit and store it in an easy-to find location. Check regularly to make sure the kit is well stocked and that all equipment is in good working order. BC Hydro recommends its customers get prepared for the possibility of being without power for 72 hours with a kit that includes:

- O Bottled water (2 litres per person per day)
- Three day supply of non-perishable, ready-to-eat foods (for each person in the household)
- Manual can opener
- O First-aid kit
- O Medications and/or eyewear prescriptions
- Ice packs
- Whistle
- Flashlights or headlamps
- Extra batteries
- Battery or crank operated clock and radio
- External power bank

- Warm clothing and blankets
- O Cash in small bills
- O Multi-function tool & knife
- Garbage bags
- Duct tape
- Dust masks
- O Personal hygiene items
- A copy of emergency plan and emergency contact numbers
- Important family documents
- O A local map with family meeting place identified
- Extra keys for house and car

Keeping all that stocked food safe is another preparation must. Make sure to keep the fridge and freezer doors closed tight during an outage to avoid food spoiling, and check with health authorities if unsure something is safe to consume once power is restored.

Also keep these rules in mind as a guide:

- A freezer that is fully packed will hold food safely for up to 48 hours; a freezer that is half full will hold food safely for up to 24 hours.
- O If power is out for less than four hours, the food in the refrigerator is safe to consume.

## Staying safe and informed

Stronger and more frequent storms increase the potential for emergency situations created by damage to BC Hydro's system, including downed power lines.

When a power line is down there is no way to tell if it is live—and a live line can be deadly. This is why it is important for the public to assume every downed or damaged power line is live and dangerous—even if it is not smoking, sparking, or making a buzzing sound. Downed lines are an emergency, and customers should stay back at least 10 metres and call 9–1–1 immediately should they encounter one.

For more information on what to do before, during and after a power outage, visit **bchydro.com/getprepared** and for outage updates go to **bchydro.com/outages**.

