

Trimming trouble:

Pandemic leads to more 'backyard logging' close calls with electricity in B.C.



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With more time at home due to the pandemic, many British Columbians have been inspired to do more yard work and outdoor projects, but there is a disturbing trend on the rise. Electrical contact incidents have increased significantly since last March, and new research indicates most are unaware of the electrical hazards in their own backyards and the vital rules to keep them safe.

Highlights

- Since the pandemic began last year, about a third of British Columbians indicate they are doing more yard work and gardening because they are spending more time at home.
- However, new data from BC Hydro shows a concerning trend—there has been a 30% increase in dangerous ‘backyard logging’ incidents involving power lines and electrical equipment at home since last March.
- Between March 2020 and March 2021, BC Hydro received reports of more than 100 incidents involving ‘backyard logging’; yet, the number of incidents is likely much higher because most go unreported.
- The most common backyard electrical incidents involve tree trimming—with branches falling on power lines causing power outages in many cases.
- While most incidents were near misses causing power outages, these incidents could have resulted in significant injury or death as power distribution lines typically found in British Columbians’ yards can carry anywhere from 12,000 to 25,000 volts of electricity.
- A recent survey¹ conducted on behalf of BC Hydro found nearly a quarter of British Columbians—about 1.3 million people—have contacted or have had a close call with power lines or electrical equipment at some point.
- Over the past eight years, BC Hydro has recorded almost 600 incidents.
 - Since 2013, there has been an 80% increase.
- This concerning upwards trend in incidents could be attributed to the fact more than three quarters of British Columbians are unaware of the basic vital safety rules for performing work in their yards near electrical equipment.

Solutions

Electricity can be dangerous. BC Hydro is urging the public to make safety around power lines a priority, especially as the weather heats up and British Columbians spend more time outdoors in their own backyards because of the COVID-19 pandemic.

BC Hydro suggests British Columbians keep in mind the following while working in their yard:

- Follow safe distance rules that focus on a minimum of three metres of clearance from persons, equipment and all parts of a tree, and anyone who cannot do their own pruning or is unsure how to do it safely is urged by BC Hydro to contact a certified utility arborist to prune trees.
- Call 1 800 BCHYDRO if any part of a tree or hedge is within three metres of a power line.
- Call or click before you dig: If planting, plan carefully and remember to always call or click BC1 Call before digging to locate any underground electrical or other infrastructure. Make a request online at bc1c.ca or call 604 257 1940, 1 800 474 6886 outside the Lower Mainland.

¹ Online survey conducted by Majid Khoury of 800 British Columbians from Apr. 15–16, 2021. Margin of error is +/- 3.5%, 19 times out of 20.

BC Hydro is also taking the following actions:

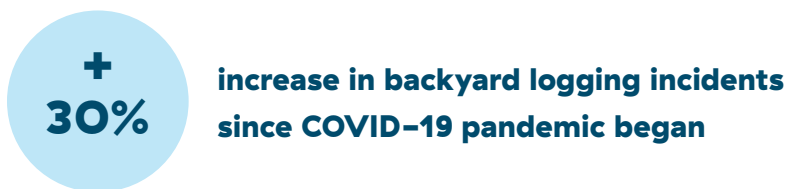
- BC Hydro is increasing awareness of electrical safety rules through its annual **Electrical Safety Week** in schools from May 10–16. It is BC Hydro’s chance to deliver the potentially life-saving message of electrical safety to students across B.C. This year BC Hydro’s Power Smart for Schools program is delivering electrical safety information to elementary school students and their families, through **online resources**.
- BC Hydro also provides free electrical safety awareness training to trades workers and to first responders, including police, fire and ambulance personnel.
- BC Hydro raises awareness through numerous safety campaigns each year aimed at helping British Columbians better understand how to stay safe around electricity.

Close calls with electricity on the rise during pandemic

The COVID-19 pandemic has resulted in many British Columbians spending more time at home than ever before. This has led to a home improvement boom and a desire to improve outdoor spaces—including trimming trees, gardening and doing outdoor repair work. In fact, since the pandemic began last year, about a third of British Columbians indicate they are doing more yard work and gardening because they are spending more time at home.

However, ‘backyard logging’—homeowners trimming trees or doing other work outdoors on their property near electrical equipment—can be dangerous. Accidental contact with power lines can cause serious injury or death, and new data from BC Hydro shows a concerning trend. There has been a 30% increase in dangerous ‘backyard logger’ incidents involving power lines and electrical equipment since the pandemic began last March. For example, between March 2020 and March 2021, BC Hydro received reports of more than 100 incidents, and the number is likely much higher as most incidents go unreported.

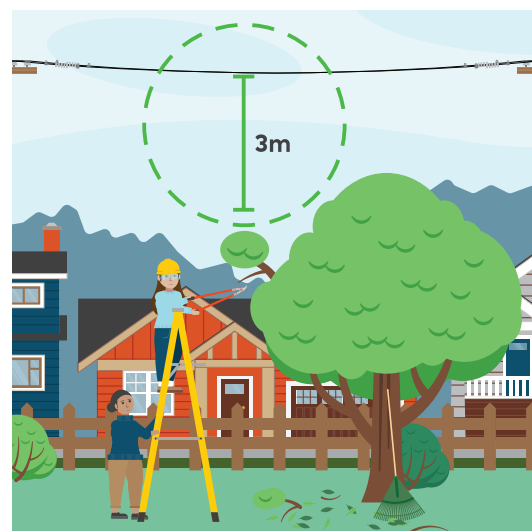
This report will examine why backyard logger incidents are on the rise and how British Columbians can make safety around power lines a priority.



Dangers increase in spring and summer

Since 2013, there has been an 80% increase in backyard logger electrical safety incidents in B.C., with almost 600 incidents occurring over the past eight years. This has become worse over the past year because more British Columbians have chosen to garden, trim trees and work in their yard near electrical equipment during the COVID-19 pandemic.

In a typical year, backyard logger incidents tend to increase in the spring and summer months and could rise even further this year with more British Columbians at home working in their yards. The most common backyard electrical incidents involve tree trimming—with branches falling on power lines causing power outages in many cases. However, other activities such as cleaning gutters, gardening or making roof repairs can also mean dangerous proximity to power lines or other electrical equipment.



Stay 3 metres from power lines and electrical equipment.

While most weekend logging incidents are near misses, all have the potential to result in significant injury or death. That is why it is vital that British Columbians maintain a three-metre safe distance from all electrical lines and equipment.

Two of the most common electrical dangers to watch out for in the backyard are overhead distribution and service lines. BC Hydro distribution lines are the pole-to-pole lines that carry electricity from substations to homes and businesses and carry between 12,000 to 25,000 Volts. Most service lines from BC Hydro poles to houses carry both 120-Volts and 240-Volts, the higher voltage used to power large appliances such as clothes dryers and stoves. The severity of injury from electrical shock from contacting a service line depends on the amount of electrical current and the length of time the current passes through the body. Prolonged exposure to even 120-Volt household electrical current—something that can happen when muscles in hands and arms “freeze” or continue to hold on as a reflex to the shock—can lead to respiratory paralysis to the point that breathing stops.

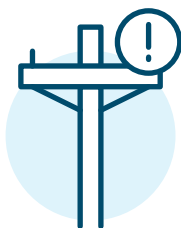


Most British Columbians unaware of safety rules

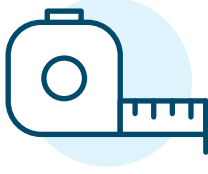
Nearly a quarter of British Columbians—about 1.3 million people—have contacted or have had a close call with power lines or electrical equipment at some point.

This concerning upwards trend in incidents could be attributed to the fact more than three quarters of British Columbians are unaware of the basic vital safety rules for performing work in their yards near electrical equipment. For example, few British Columbians (23%) know that people and any tools being used including ladders, need to be at least three metres from power lines when pruning trees or doing other work in and around their homes. A tool does not need to be touching a power line directly to be dangerous. In fact, the electricity voltage from the pole-to-pole distribution lines in B.C. neighbourhoods is capable of “arcing” or jumping to persons or objects—including tools—that come within three metres of the power line.

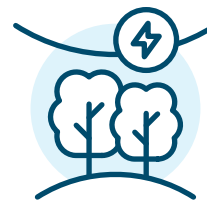
NEAR MISSES IN B.C. BACKYARDS



25% have had a close call with power lines or electrical equipment



23% know the 3-metre rule



16% have gardened, landscaped or trimmed vegetation near electrical wires

BC Hydro has communicated widely in recent years that the public must stay at least 10 metres away—at least the length of a bus—from a downed or damaged power line. The 3-metre rule applies to undamaged distribution power lines—those BC Hydro power lines in neighbourhoods that run from pole to pole and carry enough voltage to arc to persons or materials, even if there is no contact.

Regional safety

Those who live in the Southern Interior and Vancouver Island are the most likely to have increased the frequency of gardening, landscaping or outdoor home improvements since the beginning of the COVID-19 pandemic, likely due to longer growing seasons, while those who live in Northern B.C. are least likely to have increased these activities.

When it comes to close calls with electricity, those in Northern B.C. (23%), followed by the Southern Interior (20%) are the most likely to say they have trimmed vegetation or worked outside at home near electrical wires or equipment.

Southern Interior residents are the most knowledgeable about backyard electrical safety rules, with 27% aware that they should stay at least three metres away from electrical wires and equipment when trimming vegetation. When it comes to close calls, those in the Lower Mainland are tied with Northern B.C. (26%) for being the most likely to have had a near miss or contacted electrical wires or equipment when gardening, landscaping or trimming vegetation.

The importance of teaching kids about electrical safety

The survey found less than 20% of British Columbians have talked to their kids about electrical safety in the past year. Electrical safety knowledge is potentially life saving, that is why it is vital to educate kids on potential dangers. BC Hydro's Electrical Safety Week is May 10–16. It is BC Hydro's chance to deliver the potentially life-saving message of electrical safety to students across B.C. This year thousands of students will learn how to spot an electrical hazard (like a damaged power line) and how to stay safe around electricity at home and outdoors.

Safety solutions—BC Hydro's role

Electricity can be dangerous. BC Hydro is urging the public to make safety around power lines a priority, especially as the weather heats up and British Columbians spend more time outdoors at home because of the COVID-19 pandemic.

BC Hydro is helping the public to make safety around power lines a priority. For example, BC Hydro's Power Smart for Schools program delivers electrical safety information to elementary school students and their families through online resources and via in-class education. This year, BC Hydro will connect virtually with hundreds of schools across the province through online resources to reach thousands of students with information on electrical safety during Electrical Safety Week from May 10–16.

BC Hydro also provides free electrical safety awareness training to trades workers and to first responders, including police, fire and ambulance personnel.

When it comes to problem vegetation, BC Hydro has a hazard tree program aimed at preventing trees and branches from falling on transmission and distribution power lines. Trees identified as too tall, dead or dying, diseased, unstable, or with damaged root systems, are often removed. For trees that are near distribution power lines—the higher-voltage lines that stretch between BC Hydro poles—BC Hydro uses certified arborists who are qualified to work close to energized lines and are trained in proper pruning techniques.

Backyard safety solutions

British Columbian property owners are responsible for keeping the service wires on their properties—the twisted lines that run from the BC Hydro pole to their homes—clear of vegetation. Those who choose to do their own pruning must know safe distance rules that focus on a minimum of three metres of clearance from persons, equipment and all parts of a tree, and anyone who cannot do their own pruning or is unsure how to do it safely is urged by BC Hydro to contact a certified utility arborist to prune trees. Branches rubbing on service wires wear through the wires' weather coating and may cause home electrical appliance damage. BC Hydro recommends calling **1 800 BCHYDRO** if any part of a tree or hedge is within three metres of a power line. It is also vital that British Columbians call or click BC1 Call before digging in their yards to locate any underground electrical or other infrastructure. Make a request online at bc1c.ca or call **604 257 1940, 1 800 474 6886** outside the Lower Mainland.

