

Power outages

Overview

A power outage is a temporary or prolonged loss of electricity, occurring as localized disruptions, brownouts or blackouts. Outages can be sudden or scheduled for repairs, affecting a single property or an entire community. In Alberta, hazards like high winds, freezing rain, flooding, and extreme temperatures can damage power lines and strain the power supply.

Types of outages

- **Localized disruption:** a loss of electrical service that might affect a single home, community, or specific area.
- **Rotating outage:** scheduled in 20- to 30-minute increments and occurring simultaneously across the province. These temporary outages are used as a last resort to manage demand and maintain system reliability during tight supply and emergency operating conditions. Services such as hospitals, police and fire are excluded.
- **Blackout:** a sudden, widespread loss of power that can last from minutes to days, often caused by severe weather, cascading electrical equipment outages, or human error. It affects entire regions or cities, disrupting households, businesses, and public services.

Grid Alerts are issued by the Alberta Electric System Operator (AESO) when the power system is strained and using emergency power reserves to meet demand. AESO may issue an alert asking Albertans to conserve energy with the goal of avoiding rotating outages.

Before an outage

Individuals and households have a role to play in preparing for outages and conserving power when needed to help prevent outages from occurring. Being prepared before an outage occurs ensures you have what you need to stay safe and comfortable, reducing stress and risk.

Be prepared tips:

- Know the risks. If you rely on power for heating, cooling, medical devices or charging vehicles, understanding your needs allows you to take actions to reduce outage effects on your household.
- Get informed:
 - Download apps like [WeatherCan](#), [Alberta Emergency Alert](#) and [Alberta Wildfire](#) to receive alerts for your area.
 - Sign up for service impact notifications from [AESO](#) and utility providers such as [Fortis Alberta](#).

- Identify trusted communication channels for updates and information such as news, social media and community webpages.
- Start a conversation and build community connections. This is a convenient way to encourage community members to consider their risk factors and take proactive steps to mitigate potential issues. Consider developing a buddy system (an individual who checks on and supports you) with those around you as relationships created before an emergency make it easier to ask for help and offer help when it is needed most.
- Build emotional preparedness. Coping and wellness actions help you think clearer, make informed decisions and recognize when it is time to ask for help.

Keep cash on hand as ATMs and card payment systems may not work during outages.

Financial preparedness

Being financially prepared is about more than just having money in the bank.

- Reach out to your insurance provider to learn what your policy does or doesn't cover and what type of assistance they offer for emergencies, if any.
- Gather emergency supplies over time to reduce preparedness costs. Assess what you already have in your home (e.g., flashlights, batteries) and consider obtaining the items you still need in case of emergency. Check thrift shops and dollar stores for deals on items you don't have. Update and replace items seasonally if possible.
- Gather important and hard to replace documents and identification and store hard and digital (USB) copies in a secure location, such as a safe. Create electronic password protected copies that you can access from anywhere (e.g., Cloud) and on devices that do not require constant power (e.g., tablet).

Power outages happen for a variety of reasons and vary in duration. Always follow directions from the utility provider for your area.

Make a plan

Homes without power can become dark and extremely cold or hot, making your home uncomfortable and even dangerous. Outages can disrupt services we rely on like grocery stores, fuel, banking services and communications, making it difficult to stay informed or call for help. Having an emergency plan ensures you stay safe and connected. Consider the following:

- Create seasonal plans to account for varying needs such as an outage in the winter vs. summer. Where would you go if it were too hot or cold to stay put?
- Always keep vehicle(s) fuel tanks at least half full, and electric vehicles at least half charged in case fuel or

charging stations lose power or close. Identify nearby supports outside of your community that could provide a back-up charge location if needed.

- Practice preparing [meals](#) for your household that do not require power. If you own a BBQ, consider cooking outdoors, some BBQs have side burners.
- Natural gas stoves may be used during an outage to prepare food but are not to be used as a heat source.
- Plan for your unique needs. If mobility is a factor, discuss support options with your loved ones, property manager, etc. for how you would evacuate during an outage.
- Consult healthcare providers on how to manage medical conditions, devices and refrigerated medications during outages. If you rely on an uninterrupted power supply for medical equipment (e.g., ventilators), contact your healthcare provider for support and guidance.
- Create a back-up plan to power essential electric appliances like sump pumps, tankless water heaters, pump-assisted toilets, etc. If financially able, consider:
 - Alternative toilet options like a five-gallon bucket, a composting toilet or portable toilet to help reduce the risk of sewage back-up.
 - Having a professional install a generator for continued power of heat sources and must-run operations, especially on a farm. Always follow manufacturer's instructions.
- Keep mobile phones and other electronics charged so they are not on low battery when an outage occurs. If possible, get a mobile power bank.
- Identify how you will stay connected with loved ones if communications are disrupted (e.g., create a group text message, social media group chat or shared email distribution list).
- Talk to the people who live around you to learn what skills, abilities and resources exist (e.g., satellite phone, solar antenna, licensed amateur radio operator (HAM radio, Citizen Band Radio)) that enhance your community's resilience.
- Map community hubs such as libraries, community centres or places of worship as they can provide information and support.
- Build a contact list that includes your utility service providers and emergency services. Check [211 Alberta](#) for local information, resources and supports and document how to access them.
- Create an [Alberta.ca account](#) to get online access to government services and programs.
- Plan low energy activities like cards, puzzles and board games to keep occupied.
- If applicable, plan for your [pets](#) and/or [farm animals and livestock](#). Consider their dependence on power.

If you have unique medical needs or rely on power for critical medical equipment, sign up for a local

medical alert program to ensure emergency responders know your needs.

Gather supplies

Gathering supplies ahead of an outage helps ensure your household is ready. Stock up on essentials that meet your unique needs and will keep everyone safe and comfortable for a minimum of 72 hours. Consider the following:

- Battery-powered/hand-powered devices such as a crank radio, fans, lanterns, solar lights and candles. Make sure to store supplies in a place that is safe and easy to access or grab and go with, even in the dark.
- Back-up power like batteries, power banks and a generator to keep medical, mobility, cooling/heating equipment and communications working.
- [Adequate adapters](#) to ensure your electric vehicle can be charged at various locations.
- [Stored or bottled water](#) for drinking, cooking and hygiene (four litres per person per day – more for pregnant women, those with illnesses and pets). In multi-story buildings, water pumps can fail during outages, cutting off water supply quickly.
- Keep a supply of easy to make meals and high protein, [non-perishable foods](#) and snacks to avoid costly restaurant and takeout expenses.
- Keep a bag or block of ice in your freezer to put in your fridge if an outage occurs, helping to keep it cold longer to preserve food. Alternatively, fill unused containers with water to store in your freezer, space permitting. This reduces electrical costs, keeps food frozen longer and provides water when thawed.
- If you have [farm animals and livestock](#), keep extra feed and water on hand that does not require power.

Prevent carbon monoxide poisoning. Generators, camp stoves, and barbecues do not belong indoors; gas stoves and ovens are not a safe source of heat.

Home preparedness tips

Take steps that will help mitigate risks to your property.

- Keep a checklist of to-dos before and after an outage such as unplugging appliances and electronics to avoid damage when the power is restored.
- Protect electronics and home appliances with surge protectors to avoid damage during power surges.
- Know how to [shut off the main water supply](#) to your property if directed to do so by your water supplier or utility provider.
- Install smoke and carbon monoxide detectors with back-up battery power. Test them regularly.
- If you have a wood-burning fireplace, clean your chimney every fall and stock up on wood for use to keep warm.
- Do you have a sump pump that relies on power? If so, talk to a professional to learn how to keep it working.

- If you have a garage, learn how to manually open and close the garage door to get your vehicle in and out.

Practice power conservation

Conserving power through small changes at home and reducing usage during peak hours helps save you money, lowers your carbon footprint and frees up electricity for those who need it for life safety, benefiting both your energy bill and the grid.

• Build habits to help

- Use fans, instead of indoor cooling/heating, to circulate air to maintain a consistent temperature.
- Service mechanical systems regularly.
- Seal air leaks around doors and windows.
- Use a power bar for multiple appliances so you can turn them all off at once.
- Turn off electronics and lights when you leave a room.
- Buy energy-efficient products.
- If able, dry clothes on a drying rack outside in the summer or inside in the winter.
- Check local, provincial and federal governments for grants, rebates and information that can assist you with transitioning to alternative energy sources (e.g., solar).

Taking action to reduce electricity use is especially important during extreme temperatures, when demand on the power grid is at its highest.

- **During peak hours (summer: 5 to 9:30 p.m., winter: 4 to 7 p.m.)**
 - Don't use major appliances such as washers, dryers, dishwashers, stoves and indoor cooling. If needed, use appliances that use less power like a microwave, crockpot, air fryer, toaster oven or kettle.
 - If you must wash clothes, use cold water and limit loads.
 - Turn off lights, appliances and fans when not in use.
 - If possible, delay plugging in block heaters and charging electric vehicles until after peak hours.
 - Use a laptop instead of a desktop computer and charge after peak hours.

Building energy-efficient habits enables you to better navigate outages or usage restrictions when they occur.

During an outage

Power outages can leave you without heat, water, lights, indoor cooling, information and vital communications.

Be prepared tips:

- Stay informed by following trusted communication channels. Pay close attention to alerts and local news.

- Check in with loved ones, your buddy and community members throughout the day, especially if the outage occurs during extreme temperatures.
- Turn cell phones to battery-saving mode and use for emergency calls only.
- Turn down your thermostat and unplug unused or heat-producing appliances (like computers) to reduce the risk of damage or fire when power is restored.
- Limit water use during outages. Avoid using household appliances that require water and reduce toilet flushes to help prevent sewer backups and potential flooding.
- Avoid unnecessary travel by car as traffic lights may be out of service, increasing the risk of vehicle accidents.

Know when to stay or go

Evacuating during an outage may be necessary if conditions become unsafe.

- Grab your [emergency kit](#) and follow the directions of local authorities.
- Unplug electrical appliances to reduce the risk of fires caused by power surges.
- Refer to your emergency plan that details your communication plan and how you will reunite if cellular or internet services may be unavailable.
- Keep all receipts for additional expenses as this supports insurance claims if applicable.

Visit [Alberta.ca/BeReady](https://alberta.ca/BeReady) for more information on how to prepare for evacuations.

Outage troubleshooting

- If the power is still on in your community but not in your home, check your breaker panel or fuse box.
- Call your utility provider or check their website to determine if the interruption is widespread or only affecting your property. Many utilities in Alberta have outage information including estimated restoration times available online.
- Leave one light on inside and one light on outside so you and the utility worker will know when power has been restored.

Extreme cold

Increased demand on the power grid for heating, along with infrastructure failures (e.g., roads, rail and power lines), can lead to outages.

- Head to the lowest level of the building. Heat is drawn from the ground so it will stay warm longer.
- Keep doors and blinds closed. Use towels to block drafts.
- Use a wood-burning or gas fireplace to keep warm.
- Keep extra blankets and warm clothes on hand.
- To prevent pipes from freezing, drain excess water by turning off the main water supply and allowing faucets to drip slightly. Older homes are often at an increased risk due to a lack of insulation around pipes. If needed, wrap

outside pipes connecting to the basement and garage with blankets, towels or foam.

- Keep [pets](#) indoors and provide a warm space.
- Keep [farm animal and livestock](#) enclosures (e.g., barn doors) closed with windows slightly open for ventilation.

Know the signs of frostbite and hypothermia and watch for them. If it is too cold to stay where you are, and it is safe to leave, head to a shelter until it is safe to return.

Extreme heat

Hot, dry weather can strain power systems, damage infrastructure and increase the risk of other hazards like wildfires.

- Drink water and other non-caffeinated/non-alcoholic fluids often to keep hydrated, even when not thirsty.
- Close all windows and doors and use window coverings to stop the sun from coming in (aluminum foil, shiny side facing towards outside).
- Check with your community to find out if supports and services like water stations and cooling centers are available.
- Get your pet(s) cooling gear like vests and mats.

Food safety

- Only open refrigerator/freezer doors if necessary. Check the temperature with a thermometer to determine if food is still cold or frozen enough:
 - A full freezer will keep food frozen for about 48 hours.
 - A half-full freezer will keep food frozen for about 24 hours. If possible, move fridge food to the freezer.
 - An unopened refrigerator will keep food cold for about four hours.
 - Frozen dinners, desserts, and ice cream should not be refrozen once thawed.
- If you know the outage could last longer than four hours, ask a loved one or friend who has power if you can store your food in their fridge or freezer.
- No matter the season, do not place food outside as it can become contaminated, or animals can get into it.

After an outage

Outages can create safety risks and cause property damage. If you have been evacuated, contact your local authority for specific directions related to safe re-entry and reconnection of services. Be cautious and thorough when assessing potential hazards when power returns.

Be prepared tips:

- Know the risks.
 - Check your property for damage, debris, fallen trees or power lines when safe to do so. Stay a minimum of 10 metres (33 feet or the length of a city bus) from downed power lines and report them to the power provider in

your area. Call 9-1-1 if there is an immediate threat to life or property.

- Never use water-damaged appliances, electrical outlets or fuse-breaker panels until they have been checked by a qualified electrician.
- Keep household members and pets away from affected areas in your community. Do not enter a flooded basement or other areas unless you know the power is disconnected.
- Water may become unsafe to drink or use after an outage. If a [boil water advisory](#) is in place, follow the directions to make your water safer. If preferred, use bottled water.
- After 24 hours of no power, all refrigerated medication should be thrown out, unless the label says otherwise.
- Stay informed
 - Continue to monitor trusted sources of information to stay up to date on directions from local authorities and your utility provider.
- Start a conversation and build community connections
 - Talk with those around you to learn about their outage experiences and how they overcame obstacles.
 - Check-in on your buddy and those around you to ensure they are safe.
- Financial preparedness
 - Document damages, take photos and report it to your insurance provider. Discuss your insurance policies to determine if they adequately protect you, your property and belongings.
- Gather supplies
 - Recharge devices, power banks and batteries.
 - Restock [non-perishable foods](#), snacks and medications.
 - Replace any items you used from your emergency kit.
 - Add new supplies that will enable you to navigate outages more easily in the future.

Home preparedness tips

Mitigate risks to your property when power returns by:

- Referring to your check list of to-dos before and after an outage for guidance.
- Following the below steps when turning on the main power switch:
 - Ensure items like appliances, tools and electronics are unplugged.
 - Turn on the main power switch.
 - Wait 15 minutes for the power to stabilize before plugging items back in.
 - Turn on appliances and electronics gradually, starting with the essentials first: heat, refrigerator and freezer.
 - Turn on the main water supply.
 - Wait for the hot water tank to fill before turning it on.

For more information

Visit alberta.ca/BePrepared or scan the QR code for the Be Prepared program.

