

Blackout: tips for the population



In the event of an emergency, such as a blackout, a number of establishments such as shops, pharmacies, banks may be closed. Make sure that there is a supply of food, water, medicines, cash and things you need at home.

In the event of hostilities, the supply of electricity, water, gas, heat, telephone, mobile communications, the Internet, ATMs and bank terminals, shops and pharmacies may be completely or partially blocked.

How to dress outside in winter so as not to freeze?

In case of an emergency in winter – evacuation, prolonged lack of heating due to a blackout, forced long stay outside, etc. – it is important to take care of warm clothes.

It is of high quality and designed for different temperature conditions. It is better not to choose military clothing (camouflage or green) for civilians in wartime. It was developed for the US military.

The seven-layer cold weather clothing system includes:

First layer. Underwear that wicks away moisture (should not keep warm)

Second layer. Insulating linen

Third layer. Fleece jacket (fleece items should not be worn on a naked body)

Fourth layer. Lightweight windproof jacket (protects against wind and moisture)

Fifth layer. Softshell jacket (protects against wind and moisture)

Sixth layer. Insulating jacket with membrane fabric (this is a breathable surface that does not allow wind and moisture to pass through)

Seventh layer. Insulation (for extreme cold weather)

These layers need to be combined with each other depending on the weather, conditions and activity.

1. If you are outside for a long time in the cold season (for example, standing in line at the border or checkpoint) and do not have the opportunity to actively move, wear all 7 layers.
2. If you have the opportunity to move, give up the upper layers, because it will be difficult and hot for you.
3. If the temperature outside is from +5 to +10, the first 4 layers will effectively protect from the cold. And at night, you can add a 5th layer.

How to choose thermal underwear?

1. Give preference to travel brands.
2. Wear two layers of thermal underwear:
 - The first layer, designed to wick away moisture, should be made of synthetic material.
 - The second layer - thin fleece or synthetic material with the addition of wool - should be warm.
3. Do not confuse the first and second layers of thermal underwear. If you wear only fleece, moisture will not escape and you will quickly sweat.

It is also best to choose shoes among tourist, trekking. Make sure that they are:

- not cramped
- Leather
- with a layer of Gore-tech ("breathable" fabric that does not allow moisture to pass through) on top
- with insulation such as Thinsulate and PrimaLoft (not fur, because then your foot will be wet)
- with VIBRAM sole

It is also worth remembering about a scarf, hat and mittens. The latter should be chosen from water-repellent fabric.

How to keep warm when you're cold

If you are outside and realize that you are frozen:

- Move more: this will help improve blood circulation and keep you warm
- if possible, drink hot tea
- Do not rub pale skin with snow
- Frozen hands can be quickly warmed up under the armpits
- Hide from the wind
- Try to find a room where you can keep warm
- If you are in the forest, light a fire, take off and dry your clothes (exercise at this time)

Please note that thermoregulation is not established in children, and in the elderly, it may be impaired. These categories of citizens are most susceptible to hypothermia.

If you, freezing, enter the room:

- Do not immediately go to a hot battery or dive into a hot bath, because recovery should be gradual
- Do not drink alcohol: it enhances metabolism and promotes heat transfer
- Remove wet clothes
- Wear warm woolen clothes
- Cover yourself with a blanket
- drink warm milk or tea

If the room is cold, you can use a **heating pad** to keep you warm. Which one to choose?

If you don't move most of the time and have electricity, choose **an electric heating pad**.

A cheaper option is a **regular heating pad for filling with hot water** (for several hours)

If it is not possible to buy a heating pad, you can use an ordinary **plastic bottle** of hot water (but not boiling water) instead.

If you have to move, you can buy a **chemical heating pad** (disposable, designed to warm hands or feet in critical cases for 5-6 hours). It cannot be applied to a naked body - there must be a layer of clothing.

The most expensive option is a **catalytic heating pad** (for 5-6 hours, convenient, small in size). Fill it with gasoline for lighters.

What to do in case of frostbite

Most frostbite occurs on the toes and hands, nose, ears and cheeks. **Signs of frostbite:**

- Lethargy, fatigue and drowsiness
- chills, tremors
- decreased body temperature
- pain in the fingers
- loss of consciousness
- weak breathing
- the frostbitten part of the body becomes pale, cold and insensitive

How to help:

Determine the degree of frostbite.

Grade I – pale skin, swelling, decreased sensitivity

grade II – blisters filled with clear or white liquid

grade III – skin necrosis, blisters filled with dark red

fluid **grade IV** – blisters filled with black fluid

With **the first degree** of frostbite, you need to warm the corresponding parts of the body with warm hands, light massage or breathing. Next, you should apply a bandage made of clean cloth.

With **II-IV degrees of** frostbite, massage cannot be done. It is necessary to immediately apply a bandage. Suitable areas of the body must be immobilized and covered with something warm (blanket, woolen cloth, etc.)

If possible, take the person to a warm room. Remove wet clothes, shoes, socks and gloves from it. This must be done carefully, without effort, so as not to damage even more.

If possible, call an ambulance.

If the person is conscious, give him a drink of warm tea.

Keep an eye on the person at all times until doctors arrive and/or transport them to the hospital.

What not to do with frostbite

- rub the frostbitten part of the body vigorously
- warm frostbitten areas close to the fire, or use heating pads or other heat sources

- use oils and fats on the affected areas, rub the limbs with alcohol

How to insulate a home

Make sure that your home is effectively heated in winter and there are no heat losses in the house or apartment. Effective insulation of housing will also help reduce the numbers in heating bills.

How to insulate a home for the winter - see the video for clear steps:

What to do if the electricity goes out

If you are on the street and the lines are broken near you:

Do not touch the wires or attempt to fix them!

If the wire breaks and falls nearby, leave the electrocution area with small steps or jumps (keeping the soles of your feet together) to avoid electric shock.

If you see a broken wire of a power line, do not come closer than 8 m to it and inform the dispatcher of the repair and maintenance department or regional power distribution company (dispatchers' phone numbers are indicated on switchboards, power cabinets, transformer substations).

Find the nearest shelter or head home.

If you are at home and the electricity is turned off:

- Unplug electrical appliances to avoid damage due to power surges.
- Do not use gas stoves for heating. There is a danger of carbon monoxide poisoning.
- If the house has an elevator, make sure no one is stuck in it.
- Follow the official messages of the authorities or the State Emergency Service. If the mobile network is down, look for the battery-operated radio.
- If you use a generator, install it outside the room and away from windows.
- In advance, in case of a blackout, have at home:
 - radio and battery-powered flashlights
 - a supply of matches, candles and dry alcohol
 - Charged Power Bank
 - a week's supply of drinking water and canned food or freeze-dried food
 - first aid kit, including personal medicines for at least a week.

How to make the Internet in the house independent of the availability of electricity

In the face of planned or emergency power outages, Ukrainians are looking for ways to make their home autonomous, regardless of whether there is electricity or not. This also applies to the Internet. We will tell you what are the ways to be "online" even after the lights are turned off at home.

Method 1. Uninterrupted Internet from the provider

Check with the company that provides you with Internet services if it has provided the possibility of accessing the network during a power outage. There are two options:

1. **PON technology.** In most cases, local providers use fiber optic to bring the Internet from their equipment to the Internet distribution point among users, i.e. a switch in the building. Usually they are installed in the basement or on the roof of an apartment building. A connection is laid to each apartment. However, in order for the Internet to work without electricity, this switch must be "powered". And the ideal solution would be an uninterruptible power supply unit with a battery.

Important: the provider does not always do this on its own initiative and at its own expense. Often, residents of a house or entrance themselves turn to the company with such an initiative and install uninterruptible power supply equipment for their own money.

2. **ADSL technology.** Some companies, such as Ukrtelecom, have an old ADSL technology, which allows you to use communication and the Internet through an analog telephone line. This works thanks to a copper cable to which home landline phones are connected. However, ADSL technology, like a telephone line, will work only if a powered/non-volatile PBX (automatic telephone exchange) is powered.

Have you checked and found out that your operator has provided for the stability of the network even in the event of a power outage? Great. However, it is worth adapting the equipment in your apartment next. Because Wi-Fi will be available only if you arrange backup power for your home router through a power bank, uninterruptible power supply or other devices. Otherwise, the Internet will work only on one device, to which you directly connect a fiber optic cable.

How to power a router so that it works without light

To provide power to your router, first look at the back of your router or router to see what voltage it needs. Most often it is 9 or 12 volts (less often - 5 volts).

Next, you need:

- **Power bank.** On the device, read if it is enough to power your router. The power is indicated by the letters W or W.
- **USB 5V/DC 9B or USB 5V/DC 12B converter cable.** It will convert the voltage at the output of your power bank to the voltage that your router or router needs. So which cable to buy – 9 or 12 volts – also depends on how much voltage your router or router consumes. There are also wires with a switch between 9 and 12 volts. Most often, routers have the same DC connector - 5.5 millimeters. However, before purchasing a cable, pay attention to which connector your device has.

If you have two devices, you need two cables and two power banks, or two cables and one power bank with two USB connectors.

A more expensive but more reliable option is an **uninterruptible power supply device**. Its price starts from 1600 hryvnias. Such a device will work as a stabilizer in case of voltage fluctuations, and if the power supply is turned off, it will transfer the work of the consumer to a rechargeable battery.

Method 2. Satellite Internet: Starlink or similar companies

This is almost a 100% guarantee of Internet availability. But there are also disadvantages - high cost and often low speed. You can order equipment on the official website [Starlink](#) Delivery directly to Ukraine is longer, but there is still a discount on the monthly fee for Ukrainians - \$ 75 instead of \$ 110. Equipment - terminal and router - \$ 600. Delivery - \$ 50.

There is a way to order equipment to another country, for example, to neighboring Poland, and from there transfer it to Ukraine. It can be faster. However, then you will pay a monthly subscription fee at the rates for Poland – without a discount.

For satellite Internet to work, uninterrupted power supply of equipment is also required. And besides, suitable conditions: a wide view of the sky without trees and tall buildings. The best is the roof of the building or the open balcony of the high floors of an apartment building.

In addition to Starlink, there are other providers that provide satellite Internet, such as the Ukrainian DataGroup and the Dutch Inmarsat.

The Instructions were developed jointly with the State Service for Special Communications and Information Protection of Ukraine

Offline messengers: when there is no Internet and mobile communication

In the absence of mobile communication due to network damage or a long-term lack of electricity, we advise you to use national roaming. This service is provided by all Ukrainian operators. How to connect – read [here](#).

And if the Internet or mobile network is unavailable at the same time, offline messengers can help you get in touch with relatives or neighbors.

According to the National Resistance Center, such applications have certain risks for residents of settlements temporarily under occupation. Because of this, the presence of such a messenger on the phone can raise additional questions from the occupiers and create a danger for a person.

In wartime, this option can be auxiliary during direct hostilities or street actions.

The peculiarity of using offline messengers is that they work via Bluetooth, Wi-Fi and a network of smartphones with the same installed applications. The range of these messengers is approximately 100 meters.

Please note that the download of these applications in Ukraine is not yet massive, so government agencies have not yet given official conclusions on the safety of their use and do not guarantee confidentiality.

Therefore, we advise you to use offline messengers only when absolutely necessary, when this is the only way for you to get in touch.

If you do decide to install an offline messenger, we remind you that you need to download applications only from official websites or stores – AppStore and GooglePlay.

What offline messengers are there?

Autonomous messenger for communication Bridgefy

Availability: free

Where to download? Link for IOS – [here](#), link for Android – [here](#).

How does it work? Through Bluetooth communication and only to communicate with users who have also installed this application.

Range: 100 meters around you.

Available modes:

1. Text messages and image sharing between two people or a group (neighbors, family). The addressee does not have to be in your contact book, but to write to him, you must enter his phone number.
2. Broadcast mode – sending messages to all familiar and unfamiliar users who have launched the application and are within a radius of up to 100 meters around

you (this function is a way to share information during large-scale events, protests, etc.).

Data security: All messages sent between two users or in a group are secure. You don't need to have an account in the app or share your phone number to use the app. However, verifying your phone number can make it faster to find the right users.

Please note that the "Broadcast" function does not protect the content of your messages and sends it to everyone who has the Bridjefy application within a radius of 100 m available around you.

Briar

Availability: Free, but only for *Android*

Where to download? Link for Android – [here](#).

How does it work? Via Bluetooth or WiFi connection and only to communicate with users who have also installed this application.

Range: 10 m around you, but if you're further away, the app will "remember" the message and send it to the user when you're back within range.

Available modes:

1. text chat with one or more people via Bluetooth (in the app, select a person and tap "Connect via Bluetooth" or a WiFi hotspot you created)
2. Thematic forum (test) – synchronized communication with people who have the application installed and to whom you send an invitation to join the forum. However, only after they accept the invitation
3. Blog: You can create a blog where posts are visible to all the people you've ever added to your contacts. Without access to the network, those within a radius of 10 m from you, as well as those whose gadget is connected to the network, no matter how far away they are from you

Data security: works without verifying the phone number. It is enough to enter your name (or fictitious login) and set a password. Other users will search for you using this login.

Walkie-talkie apps: Two Way: Walkie Talkie or Walkie Talkie Communication

Availability: free

Where to download? Download link for **Two Way: Walkie Talkie** for IOS – [here](#), link for Android – [here](#), **download link for Walkie Talkie Communication** for IOS – [here](#), link for Android – [here](#).

How do they work? Like a traditional walkie-talkie, without the need for a network connection. You can select a channel number or location on a map in the app and talk

to someone on the same channel.

Range: 60-100 meters around you.

Available modes: One voice mode. Just press the "Talk" button on the home screen and start talking. Release it and you will hear others talking.

Data security: does not require you to enter a phone number or any data. At the same time, there is no encryption of messages and you will be heard by everyone who is on the same channel where you report something.

By the way, walkie-talkies are another way to communicate when there is no mobile network and Internet. How to use them, read [here](#).

How to avoid fire when using alternative light and heat sources

In conditions of planned, emergency or emergency power and heating outages, Ukrainians use other sources of heat and light - generators, gas cylinders, potbelly stoves, etc.

The following are tips on how to take care of fire safety and use devices of this type during a blackout without endangering health and life.

Basic fire safety rules

Be sure to purchase a fire extinguisher. If you live in an apartment building, fire extinguishers should be in your entrance, preferably on every floor or at least on the highest floors of the building (if it is a high-rise building). You can initiate the purchase of fire extinguishers by enlisting the support of other neighbors.

Check if the emergency exits in your house are blocked (for high-rise buildings). Insist that the house management company take care of unblocking them or self-organize and do it together with your neighbors.

If possible, install a fire alarm at home. Its place is in areas with the highest fire danger (for example, in the kitchen). These can be sensors that react to smoke, flame or temperature rise.

Pay special attention to children: do not allow them to use electrical appliances and open flames. Remind children of fire safety rules. To make them interested in learning the rules, buy a laptop book "Fire Safety" developed for the New Ukrainian School (Ranok Publishing House) or any other book where these rules are explained in an easy form and accompanied by illustrations.

If you are at home during a power outage, unplug all electrical appliances. This will help to avoid damage to them due to voltage drops, especially for heating equipment and electric stoves.

You can also purchase and install a stabilizer that will help protect devices from voltage drops. If the voltage drops sharply or, on the contrary, increases, the relay will shut off the current supply until stabilization. The cost is from 700 hryvnias.

How to use gas burners safely

1. Buy only certified burners and cylinders from licensed points of sale.
2. Always check the integrity of the can. Whether gas leaks when you are not using it can be checked with soapy water. To do this, apply soapy water to the places where a leak is possible. If soap bubbles appear somewhere, this indicates a gas leak in this area.
3. Strictly follow the manufacturer's instructions.
4. Use the burner in a room where there is ventilation.
5. Keep cylinders away from sunlight and from exposure to high temperatures.
6. **Never install a gas burner or tourist stoves with gas cylinders on the surface of electric stoves or other equipment that may heat up.**

1.

How to use candles safely

1. Keep lit candles at a safe distance from clothing, curtains, books and other flammable items. Do not leave them unattended.
2. Do not place a candle in the immediate reach of children and pets.
3. Do not burn candles to the end - leave cinders 2-3 cm long. Then you can make a long-burning candle from it, instructions - [in this section](#).
4. Do not use the candle as a night light or while sleeping.
5. Do not make homemade devices for lighting or warming if you are not sure of their safety. Use improvised candle-based appliances only under constant supervision.

How to use generators safely

1. Buy only certified generators and only at licensed points of sale.
2. Strictly follow the manufacturer's instructions.
3. Use generators and fuel only outdoors at least 6 meters away from windows and doors. Do not install the generator on the balcony.
4. Keep the generator dry and protected from rain or flooding: Touching a wet generator or devices connected to it may result in electric shock.

5. Before refueling, the generator must be allowed to cool down to avoid fuel ignition.
6. Carbon monoxide detectors will help you recognize it in time and avoid poisoning.

How to use the stove safely

1. Before using stove heating on the floor made of combustible materials, nail a metal sheet measuring 50x70 in front of the furnace door.
2. Take care of the stove: clean the chimneys during the heating period and prevent it from overheating. Make sure that there are no cracks in the walls of stoves and chimneys.
3. Do not use flammable ignition fluids for furnaces or store them in front of the furnace opening.
4. Do not leave a hot stove unattended or ask children to supervise it.

How to safely store fuel for cars and generators at home

Choose the right fuel container.

To store gasoline in the cold season, polymer (plastic) canisters are required that meet the following standards:

1. the container should keep its shape well and not deform when pressed;
2. have the appropriate marking (the inscription "PETROL" or "GASOLINE"). It is best when the marking contains the abbreviation HDPE - high-density polyethylene that does not accumulate static charge.

For storing gasoline in the warm season, both polymer and metal canisters are suitable.

For storing diesel in both warm and cold seasons, both types of canisters are suitable.

⚠ IMPORTANT: In Ukraine, it is officially forbidden to fill fuel into glass canisters or containers made of food-grade plastic.

Keep an eye on the shelf life of stocks.

Petrol:

- Factory gasoline (ethanol content - up to 5%) - up to one year.
- Gasoline from a mini-refinery is not suitable for long-term storage, but in case of extreme need (for example, blackout), store it for no longer than one month

- Gasoline with a high ethanol content (more than 30%) is not suitable for long-term storage.

Diesel:

Depending on the time of year, summer or frost-resistant (winter) diesel is sold. It is important to remember this not only for proper storage, but also for use so as not to ruin the engine.

It is easier to store diesel than gasoline, but you need to comply with the temperature conditions specified in the documentation at the gas station.

Summer fuel, even with a slight frost, can become like jelly or sediment will appear in it. Most likely, such fuel will become unusable.

Frost-resistant diesel can be used in the warm season, but it is consumed much faster.

Do not store fuel in direct sunlight. Ideal conditions are at a temperature of 15-20 degrees in a dark place.

Do not experiment with diesel dilution methods (for example, to increase frost resistance). It is too dangerous to add kerosene, the positive effect of this manipulation is doubtful. Adding antigels at temperatures of -20 degrees and below is possible only in a room with a positive temperature, only in a canister - by no means in the tank, and immediately before you plan to use it.

Never use expired fuel to refuel your car or generator. Such gasoline darkens or turns brown instead of pale yellow. This can cause damage to the engine.

The instructions were developed according to the recommendations of fuel market expert Artem Kuyun

How to get compensation for the purchase of a generator in a high-rise building

Residents of apartment buildings in some cities of Ukraine can return part of the funds for the purchased generator. Money for compensation is allocated from local budgets. Currently, residents of **Kyiv, Lviv** and **Poltava** can do this. The amounts depend on the possibilities of the budget. We explain what is required to receive compensation.

Kiev

Compensation, which is **up to 75% of the cost of the generator**, can be counted on:

- association of co-owners of apartment buildings (condominiums)
- Housing and construction offices
- managers of apartment buildings

Compensation is possible for generators with a capacity of **5 kW or more for buildings that are equipped with individual heating points, water pumps or elevators, from 2 kW for houses without elevators and ITP (individual heating point).**

To receive money, you need to apply to the district state administration with an application for compensation (sample application [here](#)) and a package of documents, which should include:

- a certified copy of an extract from the Unified State Register of Legal Entities, Individual Entrepreneurs and Public Associations;
- a copy of the minutes of the meeting of the co-owners of the apartment building on the election of the manager of the building (in the absence of a condominium or housing association);
- a certified copy of the invoice for the purchase of independent sources of electricity.

The term of compensation in case of a positive response from the District State Administration is 2 months. The application can be rejected only in case of improper paperwork.

Lviv

Residents of apartment buildings (from 3 floors) can receive **50% of the price of the purchased generator, but not more than 30 thousand hryvnias**. Compensation was provided for generators with a rated power of **3 kW or more**.

To become a participant in the program, residents, together with the balance holder of the house (condominium, company manager, housing service provider, housing association), must first pay for the purchase of an electric generator through a bank.

To receive money, you need to submit the following package of documents through the ASC or the service of electronic appeals for consideration by the commission:

- an application for partial compensation of the cost of purchasing an electric generator;
- copies of payment documents (primary documents confirming the fact of receipt of an electric generator and payment for the goods provided);
- copies of documents indicating the technical characteristics and serial number of the electric generator (or other factory marking);
- a copy of an extract from the Unified State Register of Legal Entities and Individual Entrepreneurs of the legal entity that ensures the maintenance of the house;

- a document confirming the authority of the legal entity to manage the common property (a copy of the agreement or an extract from the minutes).

The commission must consider the application and make a decision on it within 10 days.

Poltava

Compensation in the amount of **50% of the cost of the generator, but not more than 80 thousand hryvnias**, can be counted on:

- association of co-owners of apartment buildings (condominiums)
- Housing and construction offices
- managers of apartment buildings

Compensation is possible for generators **with a capacity of at least 2 kW, and in the presence of an elevator, heating station or water pump - from 5 kW.**

To receive money, it is necessary to provide the city council:

- application for compensation (sample application [here](#))
- copies of payment documents and documents indicating the technical characteristics of electric generators
- a copy of an extract from the Unified State Register of Legal Entities, Individual Entrepreneurs and Public Organizations
- a document confirming the authority of the legal entity to manage the common property (a copy of the agreement or an extract from the minutes)

How do I withdraw money from my card during a blackout?

When preparing for power outages, you should take care not only of charging stations, flashlights and power banks, but also of your finances. After all, during blackouts, some bank branches, terminals and ATMs may not work. Therefore, it is worth stocking up on cash in advance, as well as knowing where and how you can withdraw it during outages.

What to do for payment autonomy?

1. **Open accounts with different banks.** The presence of accounts in different banks increases self-readiness if technical problems arise in one of them.
2. **Order several payment cards.** Storing money on different payment cards ensures good preparedness in case of a payment service failure. These can be

different types of payment cards (debit or credit card) issued by different card banks.

3. **Keep the cash.** It is needed if the electronic payment system is not available. Or in case of the fact that ATMs and terminals will not work due to a blackout. You need to determine the amount of cash individually, taking into account your needs and expenses. The cash supply should be calculated for approximately 7-14 days.

Where can I withdraw cash from my card during a power outage?

There are several ways to withdraw cash during a blackout:

- **at the cash desk of a bank branch;**
- **at ATMs or terminals** of the bank's branches on duty, which are provided with alternative energy sources;
- **using the "Cash at the checkout" service** when paying for goods in stores.

Banks operating during a blackout

The Ukrainian banking system has already adapted to power outages, so almost all branches were connected to the Power Banking system.

Power Banking is a united network of branches of Ukrainian banks that operate and provide the necessary services to customers even during a blackout. There are already more than 2,390 branches in the Power Banking network, which are provided with alternative energy sources and backup communication channels. In addition, when the lights are turned off and mobile communication failures occur, banking applications have the ability to digitally sign the client. It does not require receiving an SMS confirmation to debit funds.

Currently, Power Banking includes 14 Ukrainian banks: **PrivatBank, Oschadbank, Ukreximbank, Raiffeisen Bank, Ukrgasbank, Sense Bank, FUIB, Ukrsibbank, OTP Bank, Universal Bank, Pivdennyi, Kredobank, Taskombank, A-Bank.**

The map of the chain's branches is regularly updated. You can find a list of branches operating without electricity [here](#).

Also, banks on websites, social networks, and online support inform about their branches operating during a blackout.

At Power Banking points, you can withdraw cash from an ATM or cash desk, transfer funds through a terminal, exchange currency, and consult with financial managers.

However, it should be borne in mind that even in the Power Banking network, there are limits on cash withdrawals. On average, we are talking about the amount of 10 – 20

thousand UAH. UAH per day, although there are exceptions. For example, in Sberbank you can withdraw up to 50 thousand rubles. UAH per day.

Do ATMs work without electricity?

You can withdraw cash during a power outage at bank branches connected to generators.

In the event of an absolute blackout and, accordingly, a complete lack of communication, it is worth preparing in advance. The easiest way is to save information from the NBU or your bank on your phone: for example, take a screenshot or fully load the page.

It is worth noting that the network of ATMs operating without electricity is changing. The smooth operation of only ATMs in the branches on duty is guaranteed, and the rest depends on the availability of light, communication and cash inside.

The ATM turned off during the operation: what to do?

During the period of power outage, the ATM or terminal screen can go out at any time, even during the operation itself. You may not receive the funds you planned to withdraw, not wait for your bank card back, or never send money to the addressee, although you have already deposited a certain amount into the terminal.

The situation is unpleasant, but there is no need to panic. Customers could face similar problems even before the war, so banks have long had solutions.

The algorithm of actions is simple: come to the branch of your working bank and write a statement that the ATM did not issue money / card. You can also contact the bank's hotline if there is a connection. The number is always available directly at ATMs and terminals. The operator will apply for a refund.

As for the refund period, according to the NBU's instructions, it is up to 45 days. However, this is the maximum period that you should not focus on. Refunds can be made in almost a few hours or days.

By the way, you can contact about problems with the ATM both immediately and the next day or even a week later. There is no statute of limitations, but it is in your best interest to do it in the near future and forget about financial trouble.

Phone numbers of bank hotlines:

- PrivatBank — 3700
- Oschadbank — 0800 210 800
- Monobank — 0800 205 205
- Ukreximbank — 0800 50 44 50

- Ukrgasbank — 358 or 0800 309 000
- Raiffeisen Bank — 0 44 490 89 95
- Sense Bank (Alfa-Bank) — 0800 50 20 50
- Ukrsibbank — 729 or 0800 505 800
- FUIB — 050 290 7 290 or 093 290 7 290
- OTP Bank — 044 490 05 0
- Crédit Agricole — 0800 30 5555
- Taskombank — 0800 503 580 or 044 393 25 90
- Kredobank — 0800 500 850 or 032 240 06 00
- Ukrsotsbank — 0800 300 090
- Pivdennyi — 0800 307 030

How to withdraw money at the checkout of a store or at a pharmacy?

You can withdraw cash from a bank card at the cash desks of supermarkets, pharmacies and gas stations, where the "Cash at the checkout" service is available. It is important that money can only be withdrawn when paying for the purchase with a card. The limit for the maximum and minimum amount is determined by each institution independently. In most cases, you can withdraw no more than 6000 UAH at a time.

Each bank sets the commission for withdrawing money independently. For example, the commission of Monobank for personal money is 0.9%, credit money - 4% of the withdrawal amount. PrivatBank's commission for a card for payments is 0%, for "Universal" - 1% for personal funds, 4% - for credit funds.

In order to withdraw funds, you must:

- choose a product and go with it to the checkout (to withdraw cash, you must buy something, even for 1 hryvnia);
- inform the cashier of the intention to withdraw cash and clarify the amount of withdrawal;
- pay with a Mastercard or Visa card;
- receive cash from the cashier.

List of shops, pharmacies and gas stations where you can withdraw money from the card at the checkout

Supermarkets: Silpo, Fora, Fozzy, Novus, ATB, Auchan, Varus, Spar, Megamarket, Roshen, Svoyn Market, Torba, Lotok, THRASH! (TRASH), Tochka, SIM23, Nash Krai, Delvey, WineTime, Spirit&Food, Posad.

Pharmacies: ANC, Pharmacy 911, White Chamomile, Blagodiya, Kopeyka, Vitamin, Plantain, Med-Service, Salve, Shara, Pharmacy of Good Day, Pharmacy of wholesale prices, 1 Social Pharmacy.

PETROL STATIONS: OKKO, WOG, Ukrnafta, Avias, BRSM-Nafta, SOCAR, AMIC.

Other stores: KOLO, Epicenter, PROSTOR, Foxtrot, Dnepr-M, Chic and Shine, Kopyochka, Territory of Your Equipment, MasterZoo.

What products to stock up on

Take care of nutritious foods with long-term storage. If necessary, you can take them with you to the shelter. It is desirable that these products do not require a lot of water to cook.

- freeze-dried foods (cereals, soups, noodles)
- canned meat, fish, vegetable
- Breads and cookies
- Nuts
- chocolate
- Dried fruits

Also think about what foods you and your family consume. Make a three-day food supply for the home.

Even in the absence of electricity, keep food in the refrigerator: it will keep cold for several hours after being turned off. Try to open the door as little as possible. First, eat foods that are perishable.

If the temperature is low outside, food can be kept outside.

How not to stumble upon spoiled food in stores during power outages

In the face of rolling blackouts and emergency power outages or a possible blackout, the risk of purchasing spoiled food stored in improper conditions has increased – without observing the set cooling temperature.

- If there is a scheduled power outage in your area, we advise you to check the store address in the blackout schedule on the suppliers' websites when choosing a store. For example, for Kyiv - on the website [Clear](#) The best option is a store whose building is located on the same line with a critical infrastructure facility,

where shutdowns either do not occur or occur less often than on other lines. In such cases, there is less risk of stumbling upon products whose storage conditions have been violated due to the disconnection of refrigerators and freezers from the network.

- If there are no shops nearby that do not turn off the light, find the one where the owners installed the generator.
- Buy first of all those food products that have been produced recently and have been stored in trade establishments as little as possible.
- Try to buy food products in establishments where there is a greater turnover (more customers), and, accordingly, delivery schedules from manufacturers of perishable food are more frequent.
- Pay attention to the food load of refrigerators. Overloaded refrigeration equipment, where there is no air circulation, is not able to maintain temperature for a long time after a blackout.
- Avoid purchasing products from the list that deteriorate in the first place in the absence of electricity.
- Always pay attention to **the packaging date, end date for use, and storage conditions** (compare whether what is recommended on the label is the same as the conditions under which these products are stored in the store)
- Avoid half-price products that are already past their expiration date. In modern realities, the risk that the product has already deteriorated is higher.

Which foods spoil first and what alternatives are there

1.
 1. **Chilled meat.** If you doubt its quality, give preference to frozen meat. However, provided that it has not had time to thaw and does not show signs of spoilage.
 2. **Ready meals.** It is undesirable to store it without a refrigerator for more than 2 hours.
 3. **Boiled sausages** (sausages, sausages, boiled sausage). Alternatively, choose smoked or dry-cured sausage, packed in a vacuum.
 4. **Cottage cheese by weight.** Give preference to vacuum-packed cheese.
 5. **"Milk".** Instead of bottled milk with a short shelf life, choose milk in "tetrapaks", which can be stored without a refrigerator.

6. **Fish and fish products.**

7. **Confectionery (pastries, cakes, mousses).** Instead, choose sweets, bars, cookies that do not require special storage conditions.

How to understand that a product has begun to deteriorate

Fish

Fresh fish has dense and elastic scales, fins are moist and soft, gills are pink or bright red, without mucus, and eyes are transparent and convex. Fresh fish meat is elastic, moist, juicy and healthy shine To check, click on it with your finger: if the meat does not restore its former shape for a long time, you have a spoiled fish.

However, from the signs that the fish has begun to deteriorate, the smell of ammonia.

Meat

Fresh **chicken** always has a uniform color: pale or light pink. There should be no extraneous odors from the product. The peel in the bird can be exclusively white or yellow. If the chicken is sticky, smells bad (chemistry or has a sour smell), is too pale or stains appear on it, it has begun to deteriorate.

Fresh **beef** of a red or dark red hue, streaked and with a neutral smell. When pressed, the surface of the meat will quickly return to its previous shape. Grayishness, yellowing and spots are signs that beef is spoiling.

Fresh **pork** is pale pink in color. Darkening at the edges of a piece of meat or an uneven color may indicate weathering of the meat.

How to save food at home in a power outage

Keep an eye on the temperature in the refrigerator and freezer. The refrigerator should have a temperature of 4°C or lower. The freezer should be 0°C or lower. However, even in the absence of electricity, the refrigerator will remain cold for several hours after being turned off. Try to open the door as little as possible. First, eat perishable foods.

If the temperature is low outside, food can be kept outside.

Never taste food to check its safety.

Buy perishable food in small portions.

If you have a piece of meat or fish left in stock, it is better to cook it (provided that you have a gas stove or have alternative cooking methods, such as a barbecue in the yard). And if you are worried that you will not have time to eat, share the dish with someone, for example, with neighbors.

You can safely refreeze or cook frozen foods that still contain ice crystals or are 4°C or lower.

What to cook when there is no electricity

Some cereals do not need to be boiled, but just pour water and leave for a while. Therefore, in case of a blackout or other emergency, we advise you to have them in stock.

Porridge that requires boiling water to cook

- **Barley porridge**
Pour boiled water and leave for 2-3 hours.
- **Millet porridge**
Pour boiling water and wait 1 hour to infuse.
- **Wheat porridge**
Pour boiling water and wrap the vessel in a blanket to keep warm. Wait 30-50 minutes to infuse.
- **Bulgur**
You can not cook medium or small bulgur. Small bulgur is infused in boiling water for 20 minutes, medium bulgur for 40 minutes.

Cereals, for the preparation of which cold water (kefir or milk) is enough

- **Buckwheat porridge**
Brown buckwheat is sold in stores ready-made. The packaging indicates that it is fried and dried. If there is no gas and electricity, the cereal can be soaked in advance with water at room temperature, milk or kefir. It should be infused from 5 to 10 hours. Therefore, it is better to soak it overnight.
- **Barley porridge**
This cereal can be poured with both boiling water and plain water. But it should be infused in cold water from 10 to 24 hours. Therefore, it is better to pour it in the evening.
- **Couscous**
Groats filled with cold water are enough to leave for 20-30 minutes to cook. In the presence of hot water, 5-10 minutes is enough.
- **Oatmeal (or flakes) To cook in cold water,**
leave to infuse for 30 minutes or an hour. In boiling water - 20 minutes is enough.
- **Semolina porridge**
Pour the semolina porridge with cold water or milk, cover and let it brew for 15-20 minutes.
- **Quinoa**
Pour cold water and leave overnight.

All of these cereals can also be cooked in a thermos. One hour of boiling on the stove is equal to 4-5 hours of infusion in a thermos.

If you have a portable stove at home, you can cook a hearty dinner with a minimum set of products that almost everyone has. We suggest trying meat in sweet and sour sauce and couscous with vegetables. Cooking time - up to 30 minutes.

Required ingredients for 2 servings:

Chicken fillet - 500 gr.

Eggs - 1 pc.

Butter - 30 gr.

Salt - 1 tbsp. l.

Rice (can be replaced with ordinary) vinegar - 1 tbsp. l. l.

Starch – 1 tbsp. l.

Vegetable oil - 250 gr.

Ketchup – 3 tbsp. l.

Sugar - 1 tbsp. l. l.

Honey – 1 tsp.

Water – 1 l.

Couscous - 1 cup

Carrots - 1 pc.

Onion - 1 pc.

Garlic - 1 clove

Recipe for meat in sweet and sour sauce

Step 1. Marinate the meat

– **Cut 500 g** of chicken fillet into pieces

– Add salt (**1 tablespoon**), rice vinegar (**1 tablespoon**), egg (**1 pc.**) and starch (**1 tablespoon**)

– Stir and leave for a few minutes

Step 2. For sweet and sour sauce, take ketchup (**3 tablespoons**), sugar (**1 tablespoon**), honey (**1 tsp**), add **100 ml** of water and mix everything.

Step 3. Fry the marinated meat in a pan with hot oil (**150-200 ml**) until golden brown.

Step 4. Grease the pan with butter (**30 g**), add the sauce, meat and fry for about **5 minutes** over medium heat.

Couscous recipe with vegetables

- fry carrots (**1 pc**) with onions (**1 pc**)
- add a **clove** of garlic and a **pinch** of salt
- fry vegetables for **3 - 5 minutes**
- add a glass of water and **0.5 cups** of couscous - cook everything together for **5 minutes**.

What candles to buy in case of a blackout

Due to power outages and the threat of a possible blackout, Ukrainians are advised to stock up on candles. What types exist and how they differ, we explain.

Beeswax candles

The most environmentally friendly, safe and odorless. Such wax practically does not burn, but only melts. When burning, it does not leave soot.

Sometimes a proportion of paraffin is added to the composition of the mass in a strict percentage so as not to violate the natural properties of the wax. However, if there are horizontal cracks on the wax candle and it crumbles easily, it means that it contains more than 30% paraffin.

Such candles are more expensive than others due to the high cost of raw materials. The price starts from **100 UAH** for a set of thin ("church")

The burning time depends on the size, however, the smallest ones from the store **burn for up to an hour**.

Vegetable wax candles (stearin)

Stearin is made from various oils, such as palm oil. Stearic candles are easy to recognize: they are matte, and after burning, a transparent layer with a pattern similar to snowflakes is formed.

Palm wax candles. Hard and non-greasy material. It burns almost odorless. However, it is fragile - it is easy to break.

Soy candle wax candles. Matte white in color, when heated, the material becomes liquid and transparent with a "milky" smell.

Coconut wax candles. More expensive than palm and soybean, they also burn longer than others (1 cm - up to 5 hours) . However, they are rarely found in stores.

Such candles exude a concentrated aroma, so they are recommended for use in large rooms.

Prices for vegetable wax candles: **from 100 UAH** for a small candle.

The burning time depends on the size, however, the smallest ones **burn for up to 45 minutes.**

Paraffin

Paraffin is a product of oil distillation. Without impurities and without additional cleaning, it has an unpleasant odor. There are candles made of high-purity paraffin, those to which flavors are added.

The more poorly purified paraffin wax in the candle, the more soot, there will be an uneven flame and a black "coating" during combustion.

You should not abuse paraffin candles, burning them one after another. It is better to take short breaks and ventilate the room.

Their only plus is cheap. The price of a paraffin candle of the smallest size starts **from 20 UAH.**

The burning time depends on the size, but the smallest **ones burn out in half an hour.**

Gel candles

They are made from gel-like mineral oils or gel-like synthetic hydrocarbons. These candles are safer than those made of technical paraffin. But there is a nuance in gel candles - decorative filler. When burned, fabric and plastic can emit an unpleasant odor, in addition, they are easily ignited and the fire can become uncontrollable. Therefore, it is better to buy gel candles with pebbles that will not ignite.

The burning time is on average **4 hours** (but depends on the size).

The average price **is 250 hryvnias.**

How to make a candle with your own hands

Long-burning candle

From one wax candle 30 centimeters long, you can make 6 long-burning candles, each of which will burn for 10-12 hours.

What you need:

a small jar, glass or glass with thick glass

Paraffin candle

Wax candle

a pinch of salt

oil (refined, odorless)

knife

matches or lighter

How to make:

1. Divide the wax candle into several pieces of approximately 5 centimeters each.
2. Drop a little melted paraffin on the bottom of the container and, until it hardens, fix a piece of candle on it.
3. Pour vegetable oil into the container, add a pinch of salt, which will remove moisture from the oil.
4. The long-term burning candle is ready.

Potato candle

What you need:

small plate (made of glass or clay)

Potatoes

improvised wick – a rope made of natural fabric, gauze, bandage or lacing

oil (refined, odorless)

How to make:

1. Pour approximately 100 ml into a plate. Oil.
2. Cut a circle of potatoes 1 centimeter thick and make a hole in the middle for the wick.
3. Grease both the potato circle and the wick itself with vegetable oil.
4. Thread the wick through the potatoes so that about half a centimeter protrudes from the top.
5. Put the potatoes in a plate of oil and set fire to the wick.

Approximately 100 ml. vegetable oil and 3-5 cm. wick will burn for up to 6 hours

How to dress for the street when street lights are turned off

Due to the shelling of energy infrastructure facilities by the Russians, an emergency shutdown of street lighting during a complete blackout is possible, or planned in order to save electricity. Because of this, drivers do not always clearly see pedestrians on the street. Therefore, we advise you to pay attention to the selection of clothes in the dark.

1. **Choose light-colored clothes:** this makes it easier to spot you on the road. People in black are almost invisible when there is no street lighting. It is not

necessary to wear all white. Half of your clothes (jacket or pants) should be light-colored

2. **Purchase reflective items of clothing.** It can be a bracelet, armband or backpack, sticker or vest. A sticker or ribbon on the hand can be purchased for 50 hryvnias. Vests – 100-300 hryvnias. This way the driver will definitely notice you. According to statistics, reflectors reduce the risk of a car collision by six times.

Please note that since 2021, paragraph 4.4 of the Rules of the Road has been in force, which states that in the dark and in conditions of insufficient visibility, pedestrians moving along the roadway or side of the road must use reflective elements.

3. Take care of yourself and family members - **take care of your pets.** Get them a luminous collar or clothing with reflective elements.

How to wear reflective elements?

- they should be placed at the level of the driver's vision;
- The best visible elements are those larger than 15 square meters. Cm;
- the best visible color of the reflector is yellow;
- reflective jewelry, patches or keychains on bags and backpacks are best hung on the side of the car in relation to you or on both sides;
- Special attention is paid to children. There should be a lot of reflective elements on their clothes. Place them at the level of the child's head, body and arms - due to their smaller stature, children are less visible on the roads.

How to prepare a supply of water and disinfect drinking water

In case there is no central water supply, always have a supply of drinking and technical water at home. Calculate the stock according to the number of members of your family. One adult needs per day:

- 3 liters of drinking water (including liquids consumed with food)
- 10-12 liters for hygiene and for cooking.

Make sure you have a supply of water for yourself and your family for at least 72 hours.

Be sure to mark the containers with tags: *"Water disinfected for drinking", "Water for technical needs", "Water for household needs"*.

If there is no packaged bottled drinking water, **use drinking water from wells, mine wells, drinking water bottling points (including mobile ones), if any, and from pump rooms.** Look for their addresses on the website of the local water utility.

If there is no water in the taps for a long time or you have not made stocks in advance, here are tips that can help.

Where to get drinking water

Important: all these methods of water purification do not give a 100% guarantee that the water will be safe, but it can still save you from dehydration.

Boiling

method For drinking and cooking, boil water from alternative sources: wells, pump rooms, bottling points. This is an effective method of disinfecting it. You need to boil for at least 10 minutes from the moment of boiling. But even when storing it in a clean and well-closed container, the shelf life does not exceed one day.

Water

filters Buy several water filters now and purify water from wells, pump rooms additionally after boiling.

Travel tablets for water

disinfection You can disinfect water with tablets containing chlorine, iodine, chlorine dioxide or other disinfectants. Such tablets can be purchased in tourist shops, pharmacies. However, strictly follow the instructions for use.

Disinfection with activated charcoal

4-5 tablets are needed per liter of water. They must be crushed, wrapped in gauze and lowered into a container of water for 6-12 hours.

Disinfection with iodine

Attention! Consult your doctor before using this method! Iodine can be dangerous for pregnant women, people with thyroid problems, and those who are allergic to iodine.

Per liter of water - 3-4 drops of iodine. After that, it must be passed through a filter and wait an hour before drinking. However, there will be a smell and taste of iodine in the water. You can't drink such water for a long time.

Distillation of water with the help of the sun

Distill water using a solar distillation. To do this, stretch a transparent film over the vessel with water and place it so that the sun's rays shine on it. Under the influence of the sun and temperature differences, condensate of water will collect on the film, which will be distilled, i.e. purified. a plate bent lengthwise, through which purified water will drain.

Filtration of rainwater and water from open water (emergency method)

If the situation is critical, you can boil river or lake water and pass it through a filter, but only if the lake is clean and the water in the region is not contaminated with radiation dust. This method should not be applied to water from reservoirs where water stagnates or blooms: such water is a breeding ground for insects, bacteria and viruses. then it can also be passed through the filter after boiling. **This method can be used only when the situation is critical: there is no chance to find drinkable water or water from wells or pump rooms and disinfect it, and the priority is survival. In other cases, it is dangerous to use water from open water or rainwater. And you can only use it as a technical one.**

We do not recommend using the silver water purification method. It is not effective enough for disinfection, in addition, silver ions can be toxic to the body and cause irreparable harm to health.

Where to get technical water

If the situation in your city is not critical, **local authorities and utilities organize the delivery of water** to areas where there is no central water supply.

Water supply may be available to your friends from other areas of the city. Contact them or in chats in other areas of the city with strangers and ask for help with water.

Use as technical **water from open water** bodies, preferably from lakes where it does not stagnate. If there is no source, a river or lake with clean water is best. If technical water is needed not for washing hands, but, for example, for flushing the toilet, water from any reservoir is suitable.

For hand washing or other technical needs, you can use **water from the toilet tank**. One tank holds an average of 6 liters of water.

Rainwater. Some houses have a drain through the roof into special barrels or a tap through which you can collect rainwater flowing from the roof.

In winter, to obtain technical water, you can melt **snow from the street**.

Drain the water from the boiler, if you have one. Open the safety valve, which is located at the bottom of the water heater. Open the mixer in the "hot water" position and draw water into the container.

If your boiler is installed differently, find instructions on how to drain the water from your model.

Additionally, water can be disinfected for use as technical **water by settling**. To do this, you will need a resealable glass or ceramic container. But in no case aluminum. You can put the water overnight, and in the morning carefully strain it through several layers of gauze, leaving the sediment formed at the bottom intact.