

BREAKDOWN · ATTACK · SHORTAGE ·
UK FIELD REFERENCE



UK CRISIS SURVIVAL

MASTER GUIDE

Stay Warm · Stay Fed · Stay Together

Blackouts, shortages, cyber attacks and strikes on the systems Britain runs on — and what to do when they stop.

Edition 2.0 · UK Edition

Print this guide and keep it with your home supplies. In a real crisis you may not be able to look anything up.

Compiled from UK National Risk Register · NESO · National Gas · Met Office Space Weather · Ofcom · NCSC · NAO · Defra · UK Government (prepare.gov.uk) · NHS · FSA · HSE · CPS · Coeliac UK · Red Cross

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UK Crisis Survival Master Guide

Blackouts, shortages, cyber attacks, strikes & long-term breakdown · **UK Edition 2.0** · Print & keep with your supplies

Most emergency advice assumes the lights come back on within a day or two. This guide is for the case where they don't. It covers a national blackout, a severe solar storm, a fuel or gas crisis, food imports cut off, cyber attacks on the NHS, banks, water or the grid, missile and drone strikes, sabotage of undersea cables, or a collapse of phone and internet networks. Any of them can last for weeks, and each failure makes the others worse. It covers what actually happens, hour by hour and week by week; what to store for a family of four; how to keep warm, fed, clean and safe at home in winter, summer or a storm; how to stay in touch when phones are dead; how to handle unrest, stay unseen and defend yourself within the law; what to keep in the car if you're caught away from home; how to decide whether to stay, move somewhere remote, or leave the country; and ten crisis scenarios played out hour by hour.

IMPORTANT — PLEASE READ FIRST

This is an educational preparedness reference, not professional medical, legal, security or emergency-services advice. It cannot replace official instructions. In any emergency, follow the guidance of the emergency services, your local council and the government (broadcast on BBC radio and published at gov.uk) first.

Medicines, doses and diets: notes on medicines, insulin, infant feeding and gluten-free eating are general reference information. Speak to your GP, pharmacist or dietitian *now*, while services are working, about building a safe reserve for your own household's needs.

The law still applies. UK law on fuel storage, weapons, self-defence, trespass and theft does not stop in a crisis. Nothing in this guide suggests carrying weapons or using force beyond what the law allows. The safest way to win a confrontation is to avoid it.

Plan, practise, rotate. Figures for durations, quantities and distances are planning estimates. Test your kit, practise your plan (try one evening with the main fuse off), and rotate food, water, medicines and batteries before they expire.

The three rules of any long crisis:

1. **Act early.** The first 24–48 hours, while shops, cash machines and fuel stations still have stock and the streets are calm, are worth more than everything that comes after. Most of the choices in this guide get harder or impossible by day 3–5.
2. **Stay put unless staying is worse.** Your home, your supplies and your neighbours are your strongest assets. Moving is dangerous and should be a decision, not a panic.
3. **Stay together, stay quiet, stay warm.** Groups survive; isolated people and people who advertise their supplies struggle. Cold kills faster than hunger.

● IT'S HAPPENING NOW

Go straight to The First 72 Hours, then find your situation in the ten scenarios. Under attack? See Take cover.

● PREPARING AHEAD

Start with The Home Stash, Car Kit and The Grab Bag, then build your family plan.

📍 DECIDING TO MOVE

Read Stay, Move or Leave, Going Somewhere Remote and Leaving the UK.

Throughout the guide, tags show who a point matters most for: **CITY** **SUBURB / TOWN** **RURAL / REMOTE** and when:

WINTER

SUMMER

STORM

GLUTEN-FREE

marks food advice for coeliac and gluten-intolerant people.

Contents

Tap any entry on screen to jump to that section. The guide is in eight parts: what is happening, the first 72 hours, keeping the household going, staying safe, moving, the long haul, ten crisis scenarios hour by hour, and the checklists to prepare.

PART 1 UNDERSTANDING THE CRISIS

- 01 How a Long-Term Breakdown Unfolds
- 02 The Triggers — and How Each One Differs
- 03 Solar Storms & Geomagnetic Blackouts
- 04 Attacks on Infrastructure: Cyber, Missiles, Drones & Sabotage

PART 2 THE FIRST 72 HOURS & BIG DECISIONS

- 05 The First 72 Hours: Action Checklist
- 06 Stay, Move or Leave: Making the Big Decision
- 07 City, Suburb or Countryside: What Changes

PART 3 KEEPING THE HOUSEHOLD GOING

- 08 Water: Storing, Finding & Making It Safe
- 09 Food: The Home Stash for a Family of Four
- 10 Gluten-Free, Allergies & Special Diets
- 11 Cooking & Fuel Without Mains Power
- 12 Heat: Surviving a Winter Without Power or Gas
- 13 Summer & Heatwaves Without Power
- 14 Storms, Flooding & Bad Weather on Top
- 15 Light & Power: Batteries, Solar & Generators
- 16 Sanitation, Hygiene & Disease Prevention
- 17 Health, Medicines & First Aid
- 18 Communication When Phones & Internet Fail
- 19 Money, Documents & Information

PART 4 STAYING SAFE

- 20 Security: Unrest, Looting & Dangerous Groups
- 21 Staying Unseen: Light, Noise, Scent & Movement
- 22 Self-Defence & Personal Protection — Within UK Law
- 23 Community: Neighbours, Groups & Mutual Aid
- 24 Children, Older People, Disabled People & Pets

PART 5 ON THE MOVE

- 25 Transport: When Cars Work — and When They Don't
- 26 Caught Out Away From Home: Car Kit & Get-Home Bag
- 27 Moving on Foot: Routes, Pace & Safety
- 28 The Grab Bag: A Light Bag for Moving on Foot
- 29 Going Somewhere Remote
- 30 Leaving the UK: Land, Sea or Air?

PART 6 THE LONG HAUL

- 31 The Long Haul: Weeks to Months
- 32 When Things Come Back

PART 7 TEN CRISIS SCENARIOS, HOUR BY HOUR

- 33** Scenario 1 · Food Imports Cut Off
.....
- 34** Scenario 2 · A Fuel Crisis That Empties the Shelves
.....
- 35** Scenario 3 · Cyber Attack on the NHS
.....
- 36** Scenario 4 · Cyber Attack on Banks & Payments
.....
- 37** Scenario 5 · Cyber Attack on the Water Supply
.....
- 38** Scenario 6 · Cyber Attack on the Power Grid
.....
- 39** Scenario 7 · Losing the Gas Supply in Winter
.....
- 40** Scenario 8 · Missile & Drone Strikes on Energy and Infrastructure
.....
- 41** Scenario 9 · Undersea Cable & Pipeline Sabotage
.....
- 42** Scenario 10 · The Combined Winter Crisis
.....

PART 8 PREPARE & REFERENCE

- 43** The Home Stash: Complete Checklist for a Family of Four
.....
- 44** Quick-Reference: One-Page Summaries
.....

Understanding the Crisis

What breaks, in what order and why: blackouts, solar storms, cyber attacks, strikes and sabotage.

01 How a Long-Term Breakdown Unfolds

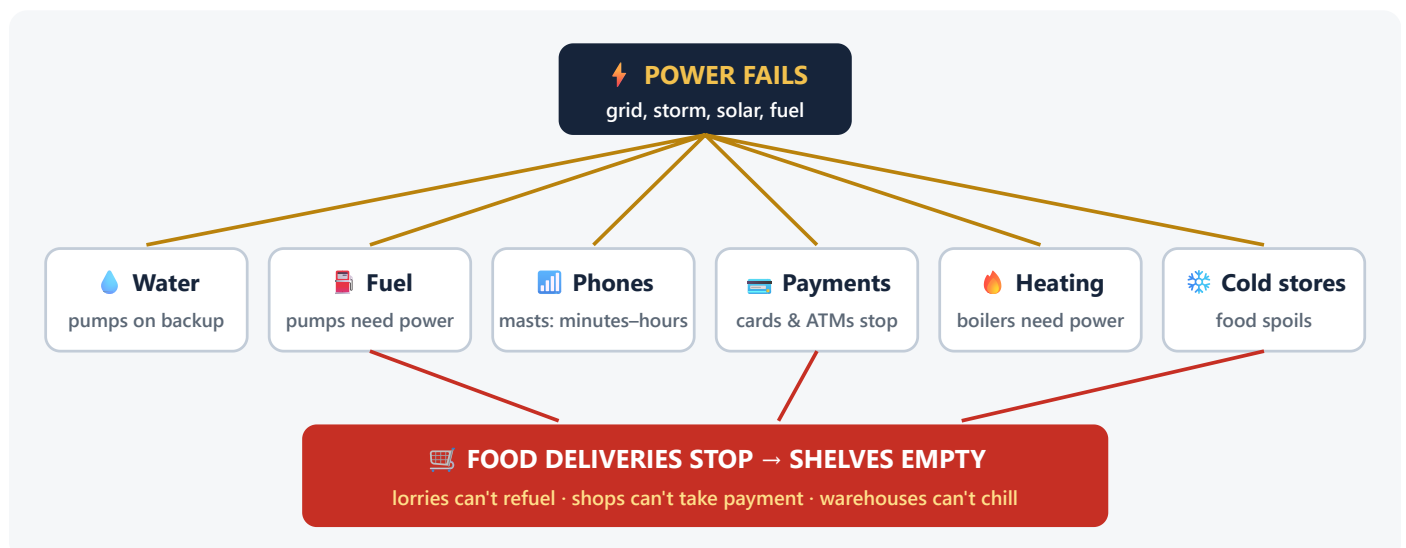
02 The Triggers — and How Each One Differs

03 Solar Storms & Geomagnetic Blackouts

04 Attacks on Infrastructure: Cyber, Missiles, Drones & Sabotage

01 ⚙️ How a Long-Term Breakdown Unfolds

Modern Britain runs on a chain of systems that depend on each other. Electricity runs the water pumps, the fuel pumps, the phone masts, the card machines and the cold stores. Fuel moves the food. Phones and the internet coordinate everything. When one link breaks for more than a day or two, the others start to fail too — and that cascade, not the original cause, is what makes a long outage dangerous.



One failure triggers the rest. Fuel and communications outages can start the same cascade even with the grid working.

What to expect, and when

Hours 0–6

"just a power cut"

- Lights, heating, fridges, card machines, traffic lights, lifts and most broadband stop. Trains stop; some areas lose water pressure.
- Mobile signal fades within minutes to hours: Ofcom found only about **1 in 5 mast sites has an hour or more of battery backup**, and about 1 in 20 has six hours.
- Digital (VoIP) landlines stop unless they have a battery unit. BBC radio and some transmitters keep going on generators.
- **Most people assume it will be fixed by tonight. This is your best window to act.**

Day 1–3

the rush

- Shops that can open sell out of water, bread, batteries, candles, gas cartridges and fuel; queues and short tempers.
- Fuel stations can't pump without power; those that can are mobbed. In the September 2000 fuel protests, around 3,000 stations were dry within four days and supermarkets warned they would run out of food "within days".
- Freezers defrost (a full one stays frozen for about 48 hours). Homes cool by a few degrees a day in winter.
- Water companies switch to generators and must provide alternative supplies (bottled water, bowzers) within 24 hours, prioritising vulnerable customers.

Days 4–14

the new normal

- Shelves stay empty; cash runs out; generators run short of fuel; some water and sewage services fail.
- Hospitals, police and councils run emergency services from a few powered sites. Rest centres open.
- Older and vulnerable people are at serious risk from cold, missed medicines and isolation.
- Opportunistic crime rises, especially at night (see Security).

Weeks 2+

long haul

- If power is restored in stages, rationing and rolling cuts may continue for weeks. If the cause is physical damage (destroyed transformers, a prolonged fuel or supply-chain collapse), parts of the country may be affected for months.
- Communities that organised early stabilise; isolated households struggle. See The Long Haul.

How likely is a national blackout? Great Britain has never had a complete nationwide loss of power. The government's National Risk Register (2025) rates it as having a 1–5% chance in any five-year period but a *catastrophic* impact: in its worst case, a stable skeleton network returns within a few days and full restoration takes up to **7 days**, with some critical services disrupted for months. The national grid operator's target, legally binding from the end of 2026, is to restore 60% of demand in each region within 24 hours and all of it within 5 days. Spain and Portugal's total blackout of 28 April 2025 lasted about 16–19 hours. Most outages are far shorter — but this guide is about the ones that aren't.

Sources: National Risk Register 2025 (Cabinet Office); NESO Electricity System Restoration Standard; Ofcom mobile power resilience technical report (Feb 2025); ENTSO-E Iberian blackout report (2026).

02



The Triggers — and How Each One Differs

The guide covers eight kinds of crisis. They often arrive together, but each starts differently, gives different warning, and fails in a different order. Knowing which one you're facing tells you what will break next. Each one has an hour-by-hour payout in Part 7.

Trigger	Typical causes	Warning	What fails first	What still works
 Long power outage ▶	Grid failure, storm damage, cyber-attack, sabotage, energy shortage leading to rolling blackouts	None to days (rolling cuts are usually announced)	Lights, heating, phones, water pressure, payments	Mains gas (but not boilers), cars with fuel, battery radios
 Solar storm	Severe space weather: coronal mass ejection hitting Earth's magnetic field	About 15 hours to a few days for the main impact; severity known only ~30 minutes ahead	Parts of the grid, GPS, satellite links, HF radio, flights	Cars, phones and small electronics themselves
 Fuel crisis ▶	Refinery or import disruption, blockades, driver shortage, war, panic buying	Usually days — news of shortages, queues	Fuel stations, deliveries, then food on shelves	Power, water, phones (at first)
 Comms outage ▶	Network failure, cyber-attack, cable cuts, power loss to masts and exchanges	None	Mobile, internet, card payments, online ordering, coordination	Broadcast radio, power, fuel
 Food supply failure ▶	Any of the above; transport collapse; import disruption; crop failure; pandemics	Days to weeks	Fresh and chilled food, then everything on the shelves	Home stores, gardens, local producers
 Gas supply loss ▶	Pipeline or terminal damage, sabotage, a cold snap, global shortage	Usually days (supply warnings)	Industry, then gas power stations (so power cuts), then home heating and cooking	Electricity (at first), camping stoves, wood burners
 Cyber attack ▶	Ransomware or state attackers hitting the NHS, banks, water or the grid	None	Hospital systems, card payments, water treatment controls, power	Cash, paper records, stored water, radio
 Strikes & sabotage ▶	Missiles or drones on energy sites, undersea cable or pipeline damage	Minutes, or none	Power, gas and fuel in the region; internet if cables are cut	Battery radio, home stores, community



WHY FUEL IS THE HIDDEN WEAK POINT

- Almost all food reaches shops by diesel lorry, mostly from a few large distribution centres.
- In September 2021, a lorry-driver shortage plus panic buying left 50–90% of filling stations dry in parts of England within days, and the army was brought in to deliver fuel.
- In September 2000, blockades of refineries emptied around three-quarters of stations in five days and supermarkets began rationing.
- **Lesson:** keep your car tank at least half full at all times, and keep two weeks of food at home — fuel problems become food problems within a week.



HOW MUCH FOOD IS IN THE SYSTEM?

- Retailers run "just-in-time" supply: stock is delivered daily to match sales. Government estimates suggest the supply chain holds something like 10 days of non-fresh stock; fresh and chilled food much less.
- Panic buying empties shop shelves in a day or two even when the warehouses are full.
- The often-quoted warning that society is "nine meals from anarchy" (attributed to Lord Cameron of Dillington) makes the point: three days without food is when public order starts to strain.

Sources: Defra / IGD via Full Fact; reporting on the 2000 fuel protests and the 2021 UK fuel supply crisis.

03



Solar Storms & Geomagnetic Blackouts

A severe solar storm is one of the few events that could damage the grid itself, over a wide area, at the same moment. It is also widely misunderstood. It is **not** the same as a nuclear EMP: it doesn't fry phones and cars. It damages very long conductors — high-voltage power lines, the big transformers they connect to, pipelines and undersea cables — plus satellites, GPS and radio.

1859

the Carrington Event — the largest on record

15–18 h

fastest arrival of a CME after it leaves the Sun

~30 min

warning of the storm's real strength (from satellites)

1–2 weeks

UK reasonable worst case for the storm itself

WHAT HAPPENED BEFORE

- **1 September 1859 — Carrington Event:** a huge flare was seen from England; about 17–18 hours later the storm hit. Auroras were seen as far south as the Caribbean; telegraph systems sparked, failed, or ran without batteries.
- **13 March 1989 — Quebec:** the grid collapsed in about 90 seconds, leaving around 6 million people without power for about 9 hours; a large transformer was damaged in New Jersey.
- Estimates put a Carrington-scale storm at roughly once every 100–200 years. The UK government rates severe space weather as one of its higher-likelihood national risks (5–25% chance in five years).

WHAT THE UK EXPECTS (NATIONAL RISK REGISTER)

- Power disruption is expected to be **regional, not national**. Safety trips in cities recover within hours.
- Where high-voltage transformers are damaged — especially in remote and coastal areas — recovery could take **several months**. Replacing one takes around 8–16 weeks even when a spare exists.
- GPS and satellite navigation disrupted for days; satellite communications and HF radio disrupted; flights grounded or rerouted, with schedules taking weeks to recover.
- Mobile networks may need backup generators "for a sustained period" in some areas.

What a solar storm does not do: it doesn't damage phones, laptops, radios, torches, solar panels, batteries or cars that aren't connected to the grid. You don't need to put them in a Faraday cage for a solar storm (that's a nuclear-EMP precaution). But they will still be affected indirectly: no mains power to charge them, no mobile signal, no GPS, and fuel stations that can't pump.

Use the warning: the 15-hour window

The Met Office Space Weather Operations Centre (MOSWOC) watches the Sun 24 hours a day and issues forecasts and alerts. If the news reports a **severe or extreme geomagnetic storm warning**, treat it like an amber weather warning and spend the hours before arrival doing the first 72 hours checklist early:

- ★ Fill water containers and the bath; charge every battery, power bank and phone.
- ★ Fill the car's fuel tank; withdraw some cash.
- ★ Buy any missing medicines, baby supplies and a few days' extra food — quietly, before the rush.
- Download offline maps and print anything you need; tell family your meeting plan.
- Unplug sensitive electronics from the mains during the storm (protects against surges if the grid trips).
- If flying in the next 48 hours, expect disruption; if abroad, consider heading home early.

Sources: National Risk Register 2025; Royal Academy of Engineering, "Extreme space weather: impacts on engineered systems and infrastructure" (2013); NOAA Space Weather Prediction Center; Met Office.

04

 Attacks on Infrastructure: Cyber, Missiles, Drones & Sabotage

Since 2022 the threat has changed. Ukraine has lived through years of deliberate strikes on its power stations, substations and heating plants. In northern Europe, undersea cables and a gas pipeline have been damaged, and drones have closed airports. In the UK, cyber attacks have already shut down hospital systems. None of this needs a full-scale war to reach Britain. What matters for you is the same in every case: **the systems you rely on stop, often without warning, and the effects spread.**

Attack	What it hits	Warning	How long it lasts	Your first move
 Cyber attack	Hospital and GP systems, banks and card payments, water treatment controls, grid control rooms, shop tills, ports	None	Hours to months. London's pathology services took months to recover in 2024.	Cash, a paper list of your medicines, stored water. See NHS, banks, water, grid.
 Missile strike	Power stations, large substations, fuel depots, gas terminals, ports, military sites	Minutes at most (a phone Emergency Alert may sound)	Damage takes weeks to months to repair. Rolling blackouts in the meantime.	Take cover (below), then switch to grid-down mode. See Strikes.
 Drone attack	Airports, refineries, fuel and gas terminals, substations	Minutes, or none	Hours (an airport closing) to months (a damaged plant)	As for missiles. Expect fuel panic.

Attack	What it hits	Warning	How long it lasts	Your first move
 Sabotage	Undersea internet and power cables, gas pipelines, rail signalling, substations	None	Days to months. There are few cable-repair ships.	Offline maps and documents, a radio, cash. See Cables.
 Disinformation	Public trust: fake alerts, false "shortage" stories that start panic buying	None	Runs alongside any of the above	Check BBC radio, gov.uk and your council before acting or sharing.

How seriously the government takes it. The UK's National Risk Register plans for cyber attacks on electricity, gas, fuel, health, transport, telecoms and banking. The 2025 Strategic Defence Review set aside up to £1 billion for homeland air and missile defence. That is a recognition that Britain's defences against long-range missiles and drones are limited. Parliament's national-security committee warned in September 2025 that the UK's undersea cables are increasingly exposed, and named Russia as the most capable threat.

Sources: National Risk Register 2025 (Cabinet Office); Strategic Defence Review 2025; Joint Committee on the National Security Strategy, *Subsea telecommunications cables: resilience and crisis preparedness* (Sept 2025).

If missiles or drones are striking: take cover

WHEN AN ALERT SOUNDS OR YOU HEAR EXPLOSIONS

- **UK Emergency Alerts** make 4G and 5G phones sound a loud siren and vibrate for about 10 seconds, even on silent. Read the message and act on it. Genuine alerts are listed at gov.uk/alerts and never ask for personal details.
- **Get inside a solid building at once.** Do not go to a window or outside to look.
- Use the **"two walls" rule** from Ukraine: shelter in a room with at least two walls between you and the outside. Good places are a hallway, an inner bathroom, under the stairs, a basement or an underground car park.
- **Flying glass causes most injuries**, even from blasts far away or from missiles shot down overhead. Stay away from windows and glass doors. Lie down if blasts are close.
- Stay under cover until the all-clear or until BBC radio says it is safe. Strikes often come in waves.

PREPARE NOW (A FEW HOURS' WORK)

- Choose your shelter spot at home and at work. Make sure everyone knows it.
- Keep shoes, a torch, water, your medicines and a charged phone or power bank near it.
- Close curtains and blinds at night. They catch some flying glass. Safety film on large windows helps more.
- Know your nearest underground space: a basement, an underground car park or a subway.
- Keep a grab bag ready, because fires or damage may force you out.
- Agree a family meeting point in case phones fail.

AFTER A STRIKE

- **Stay away from the site.** Damaged buildings collapse, fuel fires spread, and attackers sometimes strike the same place again when rescuers arrive.
- **Don't post photos, videos or locations** of strikes or air-defence positions. Ukraine bans this, because it helps the attacker aim the next strike. Tell the police, not social media.
- Smoke from burning fuel or chemicals: go indoors, shut windows and doors, and turn off extractor fans and any ventilation that draws in outside air.
- Expect power cuts, fuel queues and rumours within hours. Switch to the first 72 hours checklist.

Sources: gov.uk/alerts; Ukrainian civil-protection guidance (dovidka.info); reporting on Copenhagen and Aalborg airport closures by drones, Sept 2025.

The First 72 Hours & Big Decisions

What to do while shops, cash machines and fuel stations still work, and how to decide whether to stay or go.

05 The First 72 Hours: Action Checklist

06 Stay, Move or Leave: Making the Big Decision

07 City, Suburb or Countryside: What Changes

05



The First 72 Hours: Action Checklist

Act as if it will last weeks, from the first hour. If it ends tonight, you've lost nothing. If it doesn't, these hours are worth more than anything you can buy later.

First hour

secure the basics

- ★ **Fill water containers, the bath, buckets and pans** while there's still pressure. Then fill more. (Taller buildings and hilltop homes lose pressure first.)
- ★ Find torches, radio and batteries; switch the radio to BBC local radio or Radio 4 / Radio 5 Live for official information.
- ★ Switch off and unplug appliances (prevents a surge when power returns); leave one light switched on so you'll know.
- ★ Keep fridge and freezer doors shut.
- ☐ Check on vulnerable neighbours and family. Agree when you'll next check.
- ☐ Send one short text to family with your plan (texts often get through when calls don't), then save your phone battery: low-power mode, flight mode between checks.

Hours 1–12

while shops & pumps work

- ★ **Fuel:** fill the car if you can do so safely; don't queue for hours.
- ★ **Cash:** take out cash (small notes) if any machine is working.
- ★ **Medicines:** collect any prescriptions due; buy painkillers, rehydration salts, children's medicines.
- ☐ **Top up:** water, food you're short of, gas cartridges, batteries, baby supplies, pet food, toilet roll. Buy calmly and moderately — don't contribute to the stampede.
- ☐ Charge everything you can wherever power exists (car charger while driving, work, a café with a generator).
- ☐ Bring everyone home. Agree your family plan if phones fail.

Day 1–2

settle in

- ★ **WINTER** Set up the **warm room** before the house gets cold (see Heat). Fit CO alarms.
- ★ Eat from the fridge first, then the freezer. Move food that needs cooling somewhere cold.
- ★ Set up the toilet plan in case water fails (see Sanitation).
- ☐ Inventory food and water; work out how many days you have; start gentle rationing.
- ☐ Talk to neighbours: who has what, who needs help, a meeting point, a watch rota (see Community).
- ☐ Write down the radio news with the time.

Day 2–3

decide

- ★ Review: is it getting better or worse? Use the Stay, Move or Leave flowchart.
- ☐ If you plan to move to family or a retreat, **this is the last good window** while fuel and roads last.
- ☐ If staying: secure the house quietly, reduce light and noise at night, and settle into a routine.
- ☐ If water has stopped: start treating stored water, find the nearest bottled water or bowser point, and look for other sources (see Water).

06



Stay, Move or Leave: Making the Big Decision

The most important decision in a long breakdown is whether to stay where you are, move to somewhere better within the UK, or try to leave the country. Panic pushes people to run; evidence from real disasters says that **for most households, staying at home with supplies and neighbours is safer than moving** — until specific conditions make home worse than the road. Decide your conditions in advance, so you act on facts, not fear.

1. Is there an official instruction to evacuate your area (flood, fire, chemical, unsafe building)?



YES → Go, by the route and to the place the authorities name. This overrides everything else in this guide.

↓ No

2. Can you keep everyone **warm enough** (one room above ~12°C in winter), with **safe water** and at least **2 weeks of food**?



YES → Stay. Shelter in place, organise with neighbours, follow this guide. Re-check every few days.

↓ No

3. Is your area becoming **unsafe** (homes being broken into, fires uncontrolled, you've been targeted)?



4. Do you have a **known destination** — a relative, friend or retreat expecting you, with water and heat — and a realistic way to get there?



YES → Move early, in daylight, together, light, with a route and a fallback. See Moving on Foot and Going Somewhere Remote.

NO destination → Go to an official rest centre or the nearest organised community group, or pool resources with neighbours in the safest, warmest house. Moving with nowhere to go is the most dangerous option.

Staying vs going: the honest trade-offs

Factor	Staying home	Moving
Supplies	All your stash, tools and clothes	Only what you can carry (10–15 kg each)
Shelter	Walls, roof, beds, a room you can heat	Uncertain — exposure is the biggest killer on the move, especially in winter
People	Neighbours who know you; a support network	You're a stranger everywhere; locals may be wary or hostile
Risk on the way	None	Injury, blisters, weather, robbery, getting lost, separation
When it wins	Most of the time, for most households	When home has no heat or water, is unsafe, and you have somewhere better to go

If you're going to go, go early

The window for an orderly move is usually the **first 24–72 hours**: cars still have fuel, roads are open, trains may run, ferries and flights may operate, people are calm, and you can still buy things. After that, roads clog, fuel is gone, and you will be walking — with everyone else. If your plan is to reach family in the countryside or to leave the country, the decision has to be made fast. If in doubt, stay and prepare.

07



City, Suburb or Countryside: What Changes

Where you live shapes almost every decision. Cities have more people, more help and more danger; the countryside has more space and resources but less help and longer outages. Read the column that fits you — and the other columns, in case you have to move.

Issue	CITY flats & terraces	SUBURB / TOWN	RURAL / REMOTE
Water	Mains pressure fails first in tower blocks (pumped). Few natural sources; rivers and canals heavily polluted.	Mains lasts a little longer. Rain butts, garden ponds, some streams.	Private supplies may need electric pumps. Springs, streams, wells — still treat it.
Heat	Flats keep heat well (neighbours above and below) but few have fireplaces.	Mix: some wood burners and chimneys. Draughty older houses cool fast.	More wood burners, fuel and wood available; homes often older and colder.
Food	Small storage space; shops empty in a day; no growing space.	Room for a stash; gardens and allotments.	Space, land, farms nearby — but shops are far and empty fast.
Sanitation	Biggest problem: high-rise toilets fail without pumped water; nowhere to bury waste.	Gardens allow burying and composting.	Easiest — but septic tanks and pumps may fail.
Security	Highest risk of unrest and looting, but also most police and help nearby.	Moderate; streets can organise effectively.	Low crowd risk; isolated homes are vulnerable and help is far away.
Help & information	Rest centres, aid points and news arrive first.	Usually reached within days.	Reached last; outages last longest.
Moving	Leaving on foot means crowded routes; plan early or stay.	Bikes and side roads work well.	You may be the place people move to.
Key actions	Store water in the flat (bath + containers); bucket toilet kit; know your block's neighbours; plan an early exit route.	Organise the street; store a large stash; set up rain collection; grow food.	Store fuel and wood; hand pump or water source plan; link up with neighbours and farms; plan for longer outages.

CITY HIGH-RISE FLATS

- Lifts stop: older and disabled residents can be trapped upstairs. Know who they are.
- Upper floors lose water first. Fill containers *immediately*.
- Stairwells are dark: put glow sticks or battery lights on landings.
- Communal rubbish chutes will overflow — agree a collection point.

COASTAL VS INLAND

- **Coastal:** fishing and sea access; a possible (risky) route out by boat; but storms, tidal flooding and, if people try to leave by sea, crowds at harbours.
- **Inland:** sheltered, often better for growing; far from ports; more reliant on roads and on rivers and reservoirs for water.
- See Leaving the UK for routes by sea.

Keeping the Household Going

Water, food, cooking, warmth, light, sanitation, health, communication and money when the systems stop.

08 Water: Storing, Finding & Making It Safe

09 Food: The Home Stash for a Family of Four

10 Gluten-Free, Allergies & Special Diets

11 Cooking & Fuel Without Mains Power

12 Heat: Surviving a Winter Without Power or Gas

13 Summer & Heatwaves Without Power

14 Storms, Flooding & Bad Weather on Top

15 Light & Power: Batteries, Solar & Generators

16 Sanitation, Hygiene & Disease Prevention

17 Health, Medicines & First Aid

18 Communication When Phones & Internet Fail

19 Money, Documents & Information

08 Water: Storing, Finding & Making It Safe

You can live for weeks without food but only a few days without water. Mains water depends on electricity for pumping and treatment; companies have backup generators, but these need fuel and not every site has one. Water companies must provide an alternative supply — bottled water and bowsers — within 24 hours, prioritising vulnerable customers, but in a widespread emergency the queue may be long and the walk far.

2.5–3 L

per person per day: survival
minimum (drinking)

10 L

per person per day: drinking,
cooking & basic washing

168 L

family of 4, 2 weeks at 3 L
(drinking only)

560 L

family of 4, 2 weeks at 10 L
(comfortable)

Government advice ([prepare.campaign.gov.uk](https://www.prepare.campaign.gov.uk)) gives 2.5–3 L per person per day as the survival minimum and 10 L as comfortable. Plan more for hot weather, breastfeeding, illness, heavy work and pets.

Where water hides in your home

Source	Typical amount	Use
Stored bottled water	Whatever you've stored	Drinking. Rotate yearly (follow the date).
Bath (filled at the start)	150–200 L	Washing and flushing; drinking only after treatment — or use a bath water bladder to keep it clean.
Hot-water cylinder (if you have one)	100–200 L	Drain from the tap at the bottom (turn off the heater first). Usually drinkable after boiling.
Cold-water tank in the loft	50–200 L	Washing; treat before drinking (can contain debris).

Source	Typical amount	Use
Toilet cisterns (not the bowl)	6–9 L each	Washing/flushing; treat before drinking. Not if it contains blue cleaning blocks.
Pipes	a few litres	Open the highest tap, then drain from the lowest.
Tinned fruit/veg liquid, ice cubes	small	Drink it — don't pour it away.

Water from outside

BETTER SOURCES

- Rainwater from a clean roof via a gutter into a clean container (let the first few minutes wash the roof).
- Springs, fast-flowing streams upstream of houses and farms.
- Official bowsers and bottled water stations (listen to local radio).

POOR OR DANGEROUS SOURCES

- Rivers and canals in towns (sewage overflows, chemicals, rats).
- Flood water — always contaminated.
- Water near farmland, roads, industrial sites or after heavy rain (run-off).
- Swimming pools and hot tubs (chemicals) — washing only.
- Radiators and central-heating systems — never drink (chemical inhibitors).

Making water safe to drink

Treat all water that isn't sealed bottled water or your own stored tap water. If it's cloudy, first let it settle, then pour it through a clean cloth or coffee filter.

Method	How	Kills / removes
Boiling (best)	Bring to a full rolling boil, let it cool, keep covered. Store boiled water in a clean, covered container and use within 24 hours (in a cool place).	Bacteria, viruses, parasites. Not chemicals.
Purification tablets	Follow the pack exactly (usually 1 tablet per 1 L, wait 30 minutes; longer if cold).	Bacteria, viruses; chlorine dioxide tablets also kill most parasites.
Filters	Hollow-fibre or ceramic filters (0.1–0.2 micron) on a squeeze bottle, straw or gravity bag.	Bacteria and parasites. Most don't remove viruses — boil or add a tablet as well for town water.

Method	How	Kills / removes
Unscented bleach (last resort)	There is no official UK dose. US guidance (CDC): 2 drops per litre of plain, unscented bleach containing about 5–6% sodium hypochlorite (8 drops per US gallon); double it if the water is cloudy or very cold; stir and wait 30 minutes . It should smell slightly of chlorine — if not, repeat and wait 15 minutes more. Only use plain bleach with no detergent, thickener or fragrance (most "thick" bleaches are unsuitable); check the strength on the label.	Bacteria and viruses. Less effective on some parasites.
Sunlight (SODIS)	Clear plastic bottles of clear water in full sun for 6 hours (2 days if cloudy).	Bacteria and viruses. Slow, weather-dependent — a summer backup.

Storing water: use food-grade containers; fill from the tap, cap tightly, label with the date, and keep in a cool, dark place off concrete floors. Replace home-filled tap water about every 6 months; keep sealed bottled water until its date. Rinse containers with a weak bleach solution before refilling. Pour drinking water from containers rather than dipping cups into them.

Sources: UK Government preparedness campaign; National Risk Register 2025; Drinking Water Inspectorate (boil water notices); US CDC emergency water guidance.

09

 Food: The Home Stash for a Family of Four

UK supermarkets run on "just-in-time" deliveries: stock arrives daily to match sales, and estimates suggest the whole supply chain holds something like 10 days of non-fresh food (much less fresh and chilled). Panic buying empties the shelves within a day or two of a crisis being announced. Whatever food you have at home on day one is very likely all the food you will have for the first weeks. The goal is simple: **enough calories, eaten in the right order, stored in a way you'll actually rotate.**

~8,000

kcal per day for a family of 4
(2 adults, 2 children)

2 weeks

minimum target ≈ 110,000
kcal

3 months

resilient target ≈ 700,000
kcal

3 rules

store what you eat · eat what
you store · first in, first out

How much does each person need?

Person	Normal daily need	Crisis minimum (light activity)
Adult man	2,500 kcal	2,000 kcal
Adult woman	2,000 kcal	1,800 kcal
Child 4–8	1,400–1,600 kcal	full need
Child 9–13	1,800–2,200 kcal	full need

Person	Normal daily need	Crisis minimum (light activity)
Teenager	2,200–3,000 kcal	full need
Pregnant / breastfeeding	+200 / +500 kcal	full need
Heavy work in the cold (wood, water, walking)	add 500–1,000 kcal	

The stash: quantities for a family of four

Quantities give roughly 2 weeks ($\approx$ 140,000 kcal) and 3 months ($\approx$ 680,000 kcal), with a little margin. Swap items for your family's tastes — but keep the calories. Items marked **GF** have a gluten-free swap in the next section.

Food	2 weeks	3 months	Notes
Rice (white, keeps longest)	5 kg	25 kg	Naturally gluten-free. Brown rice goes rancid within a year.
Pasta / noodles GF	4 kg	15 kg	Quick-cooking, filling.
Porridge oats GF	3 kg	12 kg	Breakfast staple; can be eaten soaked cold.
Dried lentils, split peas, beans	1 kg	10 kg	Cheap protein; red lentils cook in 15 min without soaking.
Instant mash / potato flakes	1 kg	5 kg	Needs only hot water. Check labels for gluten.
Tinned beans, chickpeas, lentils	14 tins	60 tins	Ready to eat cold or hot.
Tinned meat & fish (tuna, salmon, sardines, mackerel, corned beef, chicken)	14 tins	80 tins	Protein and fat. Oily fish give vitamin D — important in a dark winter.
Tinned soups, stews, curries GF	14 tins	60 tins	Many contain wheat flour — check.
Tinned vegetables & tomatoes	14 tins	80 tins	Vitamins and variety.
Tinned fruit (in juice), dried fruit	14 tins + 1 kg	60 tins + 5 kg	Vitamin C, morale.
Peanut / nut butter	2 kg	8 kg	Very calorie-dense. Check for nut allergies.
Nuts, seeds, trail mix	2 kg	8 kg	No-cook energy. Rotate — oils go rancid in 6–12 months.
Cooking oil (olive/rapeseed)	2 L	10 L	The most calorie-dense food there is: $\sim$ 8,000 kcal per litre.
UHT / powdered milk	12 L UHT	6 kg powder	Powdered milk lasts much longer than UHT.
Crackers, oatcakes, crispbreads GF	2 kg	8 kg	Bread replacement.

Food	2 weeks	3 months	Notes
Flour + yeast/baking powder GF	—	10 kg	For flatbreads in a pan; needs fuel and skill.
Sugar, honey, jam	1 kg	6 kg	Honey never spoils.
Chocolate, biscuits, cereal bars	2 kg	8 kg	Morale is a survival need.
Salt, stock cubes, spices, tea, coffee GF	basics	2 kg salt + plenty	Salt also preserves food. Many stock cubes contain wheat.
Multivitamins (adult + child)	1 pack each	3 packs each	Covers gaps in a tinned diet.

STORE IT WELL

- Cool, dark, dry, off the floor. Not a damp garage or hot loft.
- Dry goods in airtight food-grade buckets or containers — mice and moisture are the enemy.
- Mark the purchase date on everything; put new stock at the back.
- Most tins last 2–5 years past purchase; best-before dates are about quality, use-by dates are about safety.
- Have **two manual tin openers**.

EAT IN THIS ORDER

- **Day 1–2:** the fridge — milk, meat, leftovers.
- **Days 2–4:** the freezer, while it stays frozen. Keep the door shut; a full freezer stays frozen longer. Cook and share defrosting meat with neighbours rather than waste it.
- **Week 1:** fresh fruit, vegetables, bread, eggs.
- **Then:** tins, dry goods — rationed.
- **WINTER** An unheated room, garage or a shaded cool box outside works as a fridge.

Build it gradually: add £5–£10 of long-life food to every shop. In 3 months you'll have a 2-week stash without noticing the cost — and because it's food you already eat, you'll rotate it naturally. Avoid panic-buying in a crisis: it empties shelves for everyone, including you.

10



Gluten-Free, Allergies & Special Diets

In an emergency, shops lose their specialist ranges first and food parcels rarely cater for allergies. If anyone in your household is coeliac, allergic or on a medical diet, their stash must be planned separately — and kept separate.

Naturally gluten-free, long-life staples:

- Rice (all types), rice noodles, rice cakes
- Potatoes, instant mash (check label), potato flakes
- Maize: polenta, cornmeal, corn tortillas, popcorn
- Quinoa, buckwheat, millet, sorghum, amaranth
- Dried and tinned beans, lentils, chickpeas, split peas
- Plain tinned fish, meat, vegetables and fruit
- Nuts, seeds, nut butters, dried fruit
- Oils, honey, sugar, jam, plain chocolate (check)
- Plain UHT milk, powdered milk, hard cheese
- **Certified gluten-free** oats, pasta, crackers, flour, breakfast cereals and bars

⚠️ HIDDEN GLUTEN IN "EMERGENCY" FOODS

- **Stock cubes and gravy granules** — most contain wheat; buy GF versions.
- **Soy sauce** — usually wheat-based; use tamari labelled GF.
- **Tinned soups, stews, curries, baked beans in sauce, meatballs** — often thickened with wheat flour.
- **Sausages, burgers, corned beef products, ready meals.**
- **Breakfast cereals** — many contain barley malt extract.
- **Ordinary oats** — contaminated with wheat during growing and milling; only oats labelled gluten-free are suitable.
- Couscous, bulgur, semolina, spelt, barley, rye — not gluten-free.
- Military/camping ration packs — check every pack.

- **Read every label** for wheat, barley, rye and oats (allergens are in bold in UK ingredients lists). "May contain" warnings matter to coeliacs.
- **Keep GF food separate**, clearly labelled, in its own sealed box — in a crisis, well-meaning people share pans and spoons. Use separate pans, utensils and a separate tin opener if you can.
- Gluten-free bread doesn't store; plan on rice cakes, GF crackers, potatoes and polenta instead. GF flour + baking powder makes pan flatbreads.
- A coeliac who is accidentally "glutened" may have diarrhoea and vomiting for days — dangerous when water is short. Carry rehydration salts.
- Coeliacs should carry a card stating their condition in their grab bag.

Other allergies and medical diets

Need	Plan
Severe allergy (nuts, milk, egg, fish, sesame...)	At least two in-date adrenaline auto-injectors per person (ask your GP), antihistamines, a written allergy plan. Keep the allergen out of the shared stash, or clearly separate it. Peanut butter, a classic emergency food, is a risk in shared shelters.
Diabetes	Store fast sugar (glucose tablets, juice cartons) for hypos and slow carbohydrates (oats, beans, lentils). Keep spare testing strips, lancets and batteries. See Health for insulin storage.
Lactose intolerance / dairy-free	Long-life oat, soya or rice milk (check GF if needed); calcium from tinned sardines and salmon (with bones), fortified foods.
Vegetarian / vegan	Beans, lentils, peas, nuts, seeds, soya products, nut butters. Add a vitamin B12 supplement for vegans.
Kidney, heart or other medical diets	Ask your dietitian or GP now for a crisis version of the diet; many tinned foods are very high in salt — rinse tinned vegetables and beans.

Need	Plan
Babies and toddlers	Formula (ready-to-feed cartons as backup), baby food pouches and jars, see Vulnerable people.

11 Cooking & Fuel Without Mains Power

Hot food and drinks keep people warm, make dry stores edible and lift morale. You need a way to cook that doesn't depend on mains electricity — and enough fuel for weeks, not days.

Method	Indoors?	Fuel to store (family of 4, 2 weeks)	Notes
Gas hob on mains gas	Yes (as normal)	—	Usually keeps working in a power cut — light with a match if the igniter is electric. Ovens and hobs with electronic flame-failure controls may not. Gas supply may fail later if the network loses pressure.
Butane/propane camping stove (cartridge)	Ventilated room only, with CO alarm	~14–20 × 220 g cartridges (one hot meal + drinks a day)	Simple and reliable. Butane works poorly below about 5°C — use propane/butane mix or keep cartridges warm.
Two-burner camping stove on a propane bottle	Outdoors / porch	One 13 kg propane bottle lasts weeks	Propane works in freezing weather. Store bottles outside, upright, shaded.
Wood burner / multi-fuel stove with hotplate	Yes	Seasoned logs: 1–2 m ³	Heats, cooks and boils water at once. Only burn dry wood (under 20% moisture).
Rocket stove / Kelly kettle	Outdoors	Twigs, sticks, cardboard	Boils water fast on scraps. Excellent long-term fuel independence.
BBQ / charcoal / disposable BBQ	NEVER	—	Gives off deadly carbon monoxide for hours, even once it looks out. Never bring one into a house, tent, caravan or garage.

SAVE FUEL

- **Haybox / thermal cooking:** bring rice, porridge, lentils or stews to the boil for 5 minutes, then wrap the lidded pot in blankets or a sleeping bag (or put it in an insulated box) for 1–3 hours. It finishes cooking on its own with no more fuel.
- Soak dried beans and lentils overnight; choose quick-cooking rice, couscous (not GF), instant oats and noodles.
- Cook once a day and fill vacuum flasks with the rest of the boiled water for drinks.
- Always use a lid. Cook for the whole street together if you can.

NO-COOK FOOD

- Most tinned food is already cooked and can be eaten cold: beans, meat, fish, soup, rice pudding, fruit.
- Peanut butter, crackers or rice cakes, nuts, dried fruit, cereal bars, UHT milk.
- Keep 3–5 days of no-cook food so a fuel failure never means no food.

12



Heat: Surviving a Winter Without Power or Gas

In a British winter, cold is the most immediate killer in a long power cut. Almost every modern home loses its heating when the electricity goes — **including homes with gas central heating**, because the boiler's pump, fan, controls and ignition all need power. An unheated, well-insulated house typically cools by a few degrees a day; a poorly insulated one can be close to outdoor temperature within 2–3 days. Plan to keep **people** warm, not the whole house.

18°C+

healthy indoor temperature
for older people

below 16°C

raises risk of chest infections,
strokes and heart attacks

below 12°C

serious risk; move vulnerable
people

1 room

heat and live in one small
room together

The warm-room plan

1. **Pick one room:** small, south-facing if possible, few outside walls and windows, ideally with a fireplace or wood burner. Upstairs rooms stay warmer (heat rises); avoid rooms over a garage.
2. **Close it in:** shut doors to the rest of the house, hang blankets or duvets over doorways and windows, cover windows with bubble wrap, cardboard or foil-backed insulation, use draught excluders. Thick curtains closed at dusk, open on sunny days.
3. **Insulate the floor:** rugs, camping mats, cardboard. You lose a lot of heat to cold floors.
4. **Everyone in together:** four people give off roughly as much heat as a small heater (about 100 W each at rest). Sleep in the same room.
5. **Build a "room in a room":** a tent pitched indoors, or a blanket den over a table, with everyone's sleeping bags inside, stays several degrees warmer than the room.
6. **Ventilate briefly** twice a day, especially with any flame or stove in use, to stop CO and condensation building up.

DRESS FOR IT — INDOORS

- Layers: thermal base layer (wool or synthetic), fleece, insulated jacket. Avoid cotton next to the skin.
- Hat, scarf and fingerless gloves indoors. Warm socks and slippers or boots.
- Change out of damp clothes immediately — wet clothing removes heat 20+ times faster.

SLEEP WARM

- Good sleeping bags (rated to -5°C or lower) inside duvets are the single best purchase for a winter outage.
- Insulate underneath: mats or folded blankets — more matters below than above.
- Hot-water bottles (filled from a kettle on the stove) and a hot drink before bed. Never use hot-water bottles for babies.
- Eat a fatty snack before sleep — your body burns it for heat overnight.

SAFE HEAT SOURCES

- **Wood burner or open fire** with a swept chimney — the best option. Store at least a few weeks of seasoned wood, dry and under cover.
- **Indoor-rated portable gas heater** (cabinet heater, butane): only with ventilation and a CO alarm, never while sleeping.
- **Paraffin heater:** same rules; store paraffin safely outside.
- Hot food and drinks, and exercise (a brisk 10 minutes), warm you from inside.

NEVER USE FOR HEAT:

- Gas cooker rings or oven left on to heat a room.
- BBQs, charcoal, patio heaters or camping stoves in an enclosed room.
- Generators anywhere inside or near the house.
- Burning painted or treated wood, plastics or furniture indoors (toxic fumes).

Protect the house too

- **Frozen pipes:** if the house will drop below freezing for long, turn off the water at the stopcock and drain the system (open the lowest taps, flush toilets) — once you have filled your containers. Burst pipes cause floods when power and heat return.
- Gather all food that needs cool storage in the coldest room or a cool box outside in a shaded, animal-proof spot.

Hypothermia: spot it early

Stage	Signs	Action
Mild	Shivering, cold pale skin, tiredness, clumsy hands, "the umbles" (mumbling, fumbling, grumbling)	Get to the warm room, remove wet clothes, dry layers, wrap in blankets including the head; warm (not hot) non-alcoholic drinks and sugary food if fully awake; share body warmth.
Moderate to severe	Shivering stops, confusion, slurred speech, slow breathing, drowsiness, blue lips	Emergency: handle gently, keep horizontal, warm the body core (chest, armpits, groin) first with blankets and body heat — not arms and legs. Don't use a hot bath, hot-water bottle or heat lamp, and don't rub limbs. Get medical help by any means (999). If not breathing, start CPR.

Older people and babies can become hypothermic without shivering. Check them by feeling the skin of the chest or tummy, not hands.



A summer outage is easier to live through than a winter one, but brings its own dangers: food spoils in hours, water needs double, flies and disease spread faster, and in a heatwave, older people, babies and the sick can overheat in homes that can't be cooled. UK homes — especially top-floor flats and loft rooms — trap heat.

**KEEP THE HOUSE COOL**

- Close curtains and blinds on sun-facing windows by mid-morning; open windows at night and early morning for through-draughts.
- Live in the coolest room — usually downstairs and north-facing.
- Hang damp sheets in doorways or windows for evaporative cooling (only where air moves).
- Cook outdoors or at dawn; don't add heat indoors.

**KEEP PEOPLE COOL**

- Drink regularly before you feel thirsty — plan 4–6 litres per person per day in hot weather, more if working.
- Cool showers or strip washes; damp cloths on the neck, wrists and feet; a spray bottle.
- Avoid the sun from 11am to 3pm; loose, light-coloured clothes; hats.
- Battery or USB fans help — and use little power.

Heat illness

Condition	Signs	Action
Heat exhaustion	Headache, dizziness, nausea, heavy sweating, cramps, fast pulse, very thirsty, pale clammy skin	Move to a cool place, lie down with feet raised, drink water or rehydration solution, cool the skin. Should improve within 30 minutes.
Heatstroke	Hot skin (may be dry), confusion, fits, collapse, not responding, temperature 40°C+	Life-threatening: get help by any means. Cool urgently — wet the skin and fan, cool packs to armpits and neck. Put in the recovery position if unresponsive.

In summer, a fridge without power keeps food safe for about 4 hours if the door stays shut; a full freezer for about 2 days, a half-full one for about 1 day. Eat or cook fresh food first, and never leave cooked food out in the warm.

Also in summer: water treatment matters more (warm water grows bacteria faster); keep flies away from food and toilets (cover everything, use fly screens or netting); watch for wildfire risk in dry spells — never light fires in the open in dry weather, and keep a bucket of water and a spade by any outdoor stove.



Many UK power cuts are caused by storms, and a storm can strike during a longer outage. Wind brings down trees, lines and roof tiles; heavy rain floods roads and homes; snow and ice cut off villages. Combine those with no power and no phones, and small injuries become emergencies.

BEFORE THE STORM HITS

- Listen for Met Office warnings on the radio (amber and red mean act now).
- Bring in or tie down anything that could blow away: bins, garden furniture, trampolines, solar panels.
- Fill every container with water; charge everything; refuel the car if possible.
- Park away from trees; know where your stopcock, gas valve and fuse box are.
- Move valuables, supplies and medicines upstairs if flooding is possible.

DURING THE STORM

- Stay indoors, away from windows. Shelter in an inside room on the lower floor (or upper floor if flood risk).
- Do not go outside to check damage or move cars until it has passed.
- Do not walk or drive through flood water: 15 cm of moving water can knock you off your feet, 30 cm can float a car, and flood water hides open drains and is contaminated with sewage.

AFTER THE STORM

- **Treat every fallen line as live.** Stay at least 10 metres away and keep others away; report it (105 when phones work).
- Check for gas leaks (smell) — if you smell gas, don't use switches or flames, open windows, leave, and turn off at the meter if safe.
- Check neighbours, especially older people.
- Photograph damage; make temporary repairs with tarps and battens to keep the weather out.

IF YOUR HOME FLOODS

- Turn off electricity at the fuse box only if you can reach it without standing in water.
- Move people and pets upstairs with supplies, water, torch, radio, phone and warm clothes.
- Assume all flood water is contaminated: gloves, boots, wash hands, throw away any food it touched.

Snow and ice **WINTER** : you may be cut off for days even when the grid works. Keep a shovel, salt or grit, and boots; don't let ice build up on steps; look after your roof (heavy snow on flat roofs and conservatories). In a car, carry blankets, a shovel, food, water, a torch, and keep the exhaust pipe clear if you are stuck with the engine running.

15



Light & Power: Batteries, Solar & Generators

You don't need to power a house — you need to power a few small, vital things: light, a radio, phones, and perhaps a medical device. Small batteries and a modest solar panel do this quietly and safely for weeks. Plan your power the way you plan food: by daily need.

What things actually use

Device	Typical use per day	Notes
LED head torch / lantern (3–5 hours)	1–5 Wh	AA/AAA or USB-rechargeable. The best value in the whole stash.

Device	Typical use per day	Notes
Smartphone (one full charge)	12–20 Wh	Flight mode + low-power mode makes a charge last 2–4 days when there's no signal.
Radio (FM/DAB, several hours)	1–3 Wh	Batteries last weeks in most portable radios.
Laptop (2 hours)	60–100 Wh	Use sparingly — documents and maps are better printed.
CPAP machine (one night)	40–100+ Wh	Without heated humidifier uses far less. Ask your supplier about a battery.
Fridge / freezer	500–1,500 Wh	Too much for small systems. Use the "cold room" methods in Food instead.
Electric heater (1 hour)	2,000–3,000 Wh	Impossible to run off batteries or solar. Heat people, not rooms — see Heat.

BATTERIES & POWER BANKS

- 2–3 power banks of 10,000–20,000 mAh ($\approx$ 37–74 Wh each) keep a family's phones going for a week or more.
- A **portable power station** (300–1,000 Wh, ideally LiFePO4 chemistry) runs lights, phones, radio and a laptop for days and can be recharged by solar. LiFePO4 is safer and lasts many more cycles than ordinary lithium.
- Stock AA and AAA batteries — lithium AAs last 10–20 years in storage and work in the cold. Standardise devices on one battery size if you can.
- Keep power banks 50–80% charged and top up every 3 months; check the date on stored batteries.

SOLAR

- A folding 60–100 W panel can recharge phones and power banks even on a cloudy UK day — expect only 10–25% of the rated output in winter or under cloud.
- UK winter daylight is short (7–8 hours in December in the south, under 7 in Scotland), so in winter solar is a top-up, not a supply.
- Point the panel south, tilt it steeply in winter, keep it clean, and keep it out of sight — a panel on display is a sign of power.
- A geomagnetic storm does not damage small solar panels, batteries or phones.

Generators: useful, dangerous, and noisy

CARBON MONOXIDE KILLS

A petrol generator produces as much carbon monoxide as hundreds of cars idling. **Never run one indoors, in a garage, shed, porch, cellar or near open windows or vents** — not even "just for a minute" with the door open. Place it outdoors, at least 6 metres (20 ft) from doors, windows and vents, with the exhaust pointing away. Fit battery **CO alarms** in every sleeping area and every room with a flame. Symptoms — headache, dizziness, nausea, tiredness, confusion — are easily mistaken for flu; if several people feel unwell at once, get everyone into fresh air immediately.

- Connect appliances with heavy-duty extension leads. **Never plug a generator into a house socket ("back-feeding")** — it can electrocute engineers working on the lines and start fires. A proper changeover switch must be fitted by an electrician.
- Let it cool before refuelling; store fuel away from the house (see fuel storage law).

- Noise and fuel make a generator a security risk in a long outage. Run it for short periods to cool the freezer, charge batteries and pump water, then switch off.
- A small inverter generator (1–2 kW) is quieter and far more economical than a large site generator.

Lighting without fire risk

Use: LED head torches (one per person), LED lanterns, solar garden lights brought indoors at night, glow sticks for children and toilets.

CANDLES & OIL LAMPS

Fires cause many deaths in long power cuts. If you use candles: in a holder on a non-flammable surface, away from curtains, out of reach of children and pets, never left unattended, never to sleep by. Paraffin lamps and heaters need ventilation and a CO alarm.

16 Sanitation, Hygiene & Disease Prevention

In long emergencies, more people are made ill by dirty water, poor hygiene and human waste than by violence or hunger. Diarrhoea and vomiting spread fast through families and streets, and without clean water and medical care they can kill — especially children and older people. Good sanitation is a life-saving skill, not a nicety.

Toilets when the water stops

Water still flowing

but power off

Toilets flush normally while mains pressure lasts. Fill the bath and containers immediately in case it fails (see Water). Reduce flushing: "if it's yellow, let it mellow".

Water off

sewers working

Flush by pouring a bucket (6–8 litres) of **grey water** (washing-up or bath water) quickly into the bowl. Don't use drinking water for this. The cistern water is clean — save it for washing.

Sewers backing up

or no water at all

Stop flushing. Use the **bucket toilet** system below. If sewage backs up into the house, block the toilet and floor drains (a bag of sand or a sealed bag of water pushed into the bowl outlet).

THE TWO-BUCKET TOILET

- Bucket 1 (pee): urine is almost sterile. Dilute and pour onto soil or a garden drain away from water sources.
- Bucket 2 (poo): line with two strong bin bags. After each use, cover with a scoop of **clay cat litter**, sawdust, soil, ash or shredded paper — it controls smell and flies.
- A toilet seat on a lidded 20-litre bucket, or the bagged bowl of your own toilet, works well. Keep the lid shut.
- Tie off bags when a third full; store in a lidded bin away from the house until collections resume, or bury (see below).

BURYING WASTE **SUBURB** **RURAL**

- Dig a trench or pit at least 30 m from any well, stream, pond or vegetable bed, and downhill from them.
- Cover each deposit with soil. Fill to within 30 cm of the top, then backfill and mark it.
- **CITY** In flats with no garden: bag, store in a sealed bin on a balcony or in a communal area agreed with neighbours. Councils usually set up emergency collection points.

Handwashing: the most important habit

Wash hands with soap after the toilet, before handling food or water, and after caring for anyone sick. Make a **tippy-tap** or use a water container with a tap by the door so washing takes a few seconds and very little water. Hand sanitiser is a backup, not a replacement — it doesn't work on dirty hands or on some stomach bugs such as norovirus.

WASHING WITH LITTLE WATER

- Strip wash with a flannel and a bowl: face, armpits, groin, feet. 2 litres is enough.
- Wet wipes, no-rinse shampoo and dry shampoo save water.
- Wash clothes in a lidded bucket with a plunger (a "bucket washing machine"); reuse rinse water for flushing.
- Keep fingernails short — dirt under nails spreads infection.

KITCHEN & RUBBISH

- Wash dishes in hot soapy water, then rinse in water with a few drops of unscented bleach; air dry.
- Keep food covered; flies spread disease from waste to food.
- Rubbish: separate food waste (bury or compost in a closed bin) from dry waste. Flatten and bag the rest. Rats arrive fast — keep everything sealed.

Diarrhoea & vomiting: treat dehydration fast

Step	What to do
1. Replace fluids	Small, frequent sips of oral rehydration solution (Dioralyte sachets, or homemade: 1 litre of safe water + 6 level teaspoons sugar + ½ level teaspoon salt). Keep breastfeeding babies.
2. Isolate	One person cleans up; use gloves and a bleach solution. Separate towels; the sick person doesn't prepare food for 48 hours after symptoms stop.
3. Danger signs	Very little or no urine, sunken eyes, drowsiness or confusion, blood in stools, a baby with a sunken soft spot or no wet nappies, symptoms lasting more than a few days — seek medical help by any means available.



In a long breakdown, GP surgeries and pharmacies close or run out, 999 may not connect, ambulances are stretched and hospitals run on generators with limited capacity. Minor problems — a cut, a chest infection, a missed tablet — can become serious. Prevention, a good kit and basic skills matter more than ever.

♥ **Emergency first aid in depth:** CPR and defibrillators, choking, severe bleeding and tourniquets, anaphylaxis, seizures, stroke, burns, sepsis, broken bones, and caring for someone for days when no ambulance is coming are covered step by step in the free **Emergency Medical Survival Master Guide** (survivalmg.com/emergency-medical-survival-guide). Print it and keep it with your first aid kit.

Medicines: build a reserve now

- **Talk to your GP and pharmacist.** Many will help you build a small buffer by ordering repeat prescriptions a little early each month until you have 2–4 weeks in hand. Keep the oldest stock in use.
- Keep a **written list** for each person: medicine names, strengths, doses, times, allergies, conditions, NHS number, GP. Medicines look alike when they're out of their boxes.
- Store medicines cool, dry and dark — and away from children.
- If supplies run low, **never** share prescription medicines or change doses without advice — speak to any pharmacist, doctor or nurse you can reach (rest centres and hospitals will have them).



INSULIN WITHOUT A FRIDGE

- Unopened insulin is kept in a fridge (2–8°C). Insulin in use can be kept at room temperature for a limited time — **most for 28 days**, some longer — below 25°C or 30°C depending on the product. **Check your own leaflet**, and note the new expiry date when you take a pen or vial out of the fridge.
- Never let insulin freeze or overheat; keep it out of direct sun and away from stoves.
- Evaporative cooling wallets (e.g. Frio, sold via Diabetes UK) keep insulin cool for around two days per soak, using only water — have one per insulin user. Don't put insulin directly on ice packs.
- **WINTER** An unheated room is a good store; **SUMMER** a cool cellar, or a pot-in-pot clay cooler.
- Keep extra testing strips, lancets, meter batteries, hypo treatments and ketone strips.



POWERED MEDICAL EQUIPMENT

- Oxygen concentrators, CPAP, nebulisers, suction, feeding pumps, home dialysis — all need a backup plan now.
- Ask your supplier about backup cylinders and battery packs; ask your clinical team what to do and where to go if power fails for more than a few hours.
- Register on the **Priority Services Register** (call 105 or your electricity network) — you'll get priority contact and support.
- Know which hospital or community building nearby has a generator.

The 10 problems most likely to need first aid

Problem	Key action
Cuts and wounds	Pressure to stop bleeding; clean with plenty of safe water; cover with a clean dressing; watch for infection (spreading redness, heat, pus, fever).

Problem	Key action
Severe bleeding	Firm direct pressure with a pad for at least 10 minutes; if a limb is bleeding uncontrollably, a tourniquet high and tight above the wound. Note the time.
Burns (stoves, candles, hot water)	Cool under cool running water for 20 minutes; cover loosely with cling film; don't burst blisters or use creams. Children's burns bigger than their palm need medical help.
Sprains, strains, possible fractures	Rest, support, cold compress, raise. Splint suspected fractures in the position found.
Carbon monoxide poisoning	Fresh air immediately, turn off the source, get medical help. See Light & Power.
Hypothermia / heat illness	See Winter and Summer.
Diarrhoea & vomiting	Rehydrate; isolate; hygiene. See Sanitation.
Chest infections	Warmth, fluids, rest. Seek help for breathlessness, chest pain, confusion, blue lips or a high fever that won't come down.
Toothache	Painkillers, clove oil, temporary filling material. Keep teeth clean — dental infections can become dangerous.
Anxiety, panic, low mood	Calm breathing, company, routine, purpose. See Community.

Learn first aid now. A half-day course with St John Ambulance, the British Red Cross or St Andrew's First Aid (Scotland) is the most valuable preparation in this guide. Include CPR and how to use a defibrillator — and note where public defibrillators are on your street (many have their own batteries).

Getting medical help when phones are down

- Try 999 or 112 anyway — emergency calls are prioritised and can use any network.
- Go in person to the nearest hospital A&E, GP surgery, pharmacy, fire or police station, or council rest centre. Send two people, not one, and send a written note with symptoms and the patient's details.
- Listen to local radio for the locations of emergency medical points.

18



Communication When Phones & Internet Fail

Expect mobile signal to fade within minutes to hours of a widespread power cut: Ofcom found that only about one in five mast sites has an hour or more of battery backup. Broadband stops with your router. Digital home phones stop too — the old copper landline network is being switched off by **31 January 2027**, and the new digital lines don't work in a power cut without a battery unit. Plan as if you'll be cut off from people outside walking distance.



LISTENING: YOUR LIFELINE

- The BBC is the UK's emergency broadcaster: the government can require it to broadcast emergency announcements. Main transmitter sites have backup power.
- Have a **battery or wind-up radio with FM and DAB** — plus medium wave (AM) if possible. BBC local radio, Radio 4 and Radio 5 Live carry emergency information.
- **Radio 4 long wave (198 kHz) was switched off in June 2026** — don't rely on old advice that says to use it.
- Note the news with the time, and schedule listening (e.g. on the hour) to save batteries.



GETTING THE MOST FROM YOUR PHONE

- Texts use far less network capacity than calls and often get through when calls fail.
- 999 / 112 calls can use any available network, not just yours.
- Battery: low-power mode, low brightness, flight mode between checks, close apps. A phone with no signal searches constantly and drains fast.
- Download offline maps and keep key documents and this guide on the phone — but have paper copies too.
- If you depend on a landline (no mobile signal at home), ask your provider for the free battery backup unit they must offer (at least 1 hour).

Talking: two-way radio

Type	Licence?	Range (typical)	Best for
PMR446 walkie-talkies (446 MHz, 0.5 W, 16 analogue channels)	No — licence-free	A few hundred metres in towns; 1–3 km in open country; more from high ground	Family, street watch, a group on the move. Cheap, simple, AA batteries. Agree a channel and code (e.g. channel 3, code 5).
CB radio (27 MHz, 4 W FM; 12 W SSB on the CEPT band)	No — licence-free	5–15 km car to car; much further on good days	Vehicle and house-to-house over a few miles. Channel 9 is traditionally used for emergencies, but nobody is obliged to monitor it.
Amateur (ham) radio	Yes — pass an exam first (Foundation: up to 25 W)	Local to worldwide	Long-range contact; the amateur emergency network (RAYNET) supports emergency services. Learn now — it's a skill, not a purchase.

US "FRS/GMRS" radios sold online are not legal to use in the UK. Don't fit amplifiers to CB or PMR radios — they're illegal and interfere with others.

The family communication plan (write it down)

- 1. Where we meet:** home; if home isn't safe → a named nearby place (a friend's house, church, school); if the area isn't safe → an out-of-area place (a relative's house).
- 2. Who collects whom:** children from school, older relatives, pets. Schools will hold children until collected — make sure they have a list of who may collect yours.
- 3. When we check in:** fixed times (e.g. 8am and 8pm) for texts, radio calls or a visit, so silence at other times isn't alarming.
- 4. A message drop:** if you leave home, leave a dated note inside (out of view from the street) saying where you've gone and when.
- 5. Out-of-area contact:** one relative far away whom everyone calls or texts — long-distance links often work when local ones are jammed.
- 6. Printed contacts:** everyone carries a paper copy of names, numbers and addresses. Few people remember phone numbers any more.

When all else fails: runners and noticeboards. Community buildings (churches, schools, libraries, pubs) become information hubs; pin notes with names, dates and where you are. Send messages in pairs, in daylight. Councils and rest centres usually post official updates on their doors.

Sources: Ofcom (mobile power resilience report 2025; future of landline calls); BBC Framework Agreement cl.67; Ofcom licence-exempt radio guidance (PMR446, CB); Ofcom amateur licence guidance.

19



Money, Documents & Information

CASH IS KING (FOR A WHILE)

- No power means no card machines, cash machines, online banking or contactless — for every shop at once.
- Keep **£200–£500 per household** at home in **small notes and coins** (shops won't have change), split between several hiding places.
- Cash is most useful in the first 1–2 weeks. After that, goods (food, fuel, batteries, medicine) and skills often matter more.
- Don't flash money; carry only what you need.

DOCUMENTS GRAB-FILE

- Passports, driving licences, birth and marriage certificates.
- Prescriptions and a medicines list for each person; NHS numbers; GP details.
- Insurance policies, mortgage/tenancy, bank details.
- Printed emergency contacts and family plan.
- Store originals in a waterproof, fire-resistant pouch; copies on paper in the grab bag and on an encrypted USB stick.

Information: paper beats screens

- ★ Printed copy of this guide (and any other guides you rely on).
- ★ Paper maps: an OS Explorer or Landranger map of your area and your routes to any fallback place, plus a road atlas of Great Britain.
- ☐ A first-aid manual (St John Ambulance or Red Cross).
- ☐ Printed contact list: family, neighbours, GP, pharmacy, vet, utilities, council.

- ☐ A notebook and pencils (pens freeze and leak; pencils always work).

RUMOURS SPREAD FASTER THAN FACTS

In every long emergency, rumours cause panic buying, dangerous journeys and conflict ("the army is taking food", "the water is poisoned", "the border is open"). Trust official broadcasts (BBC radio, government and council notices) first. Check anything else against two independent sources before acting. Write down what you hear, with the time and source, so you can compare.

Staying Safe

Security, staying unseen, self-defence within UK law, your community, and the people who need most help.

20 Security: Unrest, Looting & Dangerous Groups

21 Staying Unseen: Light, Noise, Scent & Movement

22 Self-Defence & Personal Protection — Within UK Law

23 Community: Neighbours, Groups & Mutual Aid

24 Children, Older People, Disabled People & Pets

20



Security: Unrest, Looting & Dangerous Groups

Most people in a long emergency behave well — studies of disasters consistently find that neighbours help each other far more than they harm each other. But a small number of desperate, opportunistic or organised people can do a great deal of damage, and hunger changes behaviour. Your aim is not to "win" against them; it is to **never be chosen** as a target, and to have nothing worth the risk if you are.

The best defence is not to be noticed. The second best is to look like more trouble than you're worth. Fighting is the last, worst option.

How the security picture changes over time

When	What typically happens	What to do
Days 1–3	Mostly calm. Panic buying, queues, short tempers at fuel stations and shops. Opportunistic theft from empty shops and cars.	Buy early and quietly. Avoid crowds and queues after dark. Keep your car out of sight if it has fuel.
Days 4–14	Shops empty. Cash and food become valuable. Burglaries of homes thought to be empty or well-stocked. Rumours spread. Some people leave cities.	Look occupied but not well-supplied. Start a street rota. Stop sharing what you have outside your trusted group.
Weeks 2–6	If no relief arrives: organised looting, groups moving between areas, pressure on anyone visibly fed, warm or lit. Police and army focus on key sites.	Light, noise and smell discipline (below). Barricade quietly. Decide your trigger points for leaving.
Beyond	Highly variable. Areas with strong community organisation usually stabilise; isolated households and lawless areas get worse.	Be part of a group. Relocate with others if your area becomes untenable.

Don't advertise: the "grey" household

LIGHT

- A lit window on a dark street says "they have power or fuel". Use blackout curtains, blankets or cardboard; check from outside.
- Use torches pointed down and red-light settings at night; keep lights to inner rooms.
- Don't run outdoor lights or decorative solar lights.

NOISE

- A generator can be heard hundreds of metres away and tells everyone you have fuel. Run it briefly, in daylight, in an enclosed outbuilding with ventilation — **never indoors**.
- Keep voices, music and children's play low after dark.

SMELL & SMOKE

- Cooking smells carry — especially meat and frying. Cook simple foods, in the daytime, with lids on.
- Chimney smoke in summer stands out; in winter it is normal.

RUBBISH & TALK

- Don't leave food packaging in bins or on view — flatten, bag and store it, or burn paper safely.
- Don't tell anyone outside your trusted circle what you have. Children talk — explain why it's a family secret.
- Look as thin, tired and short of supplies as everyone else when you're out.

Making your home a hard target (lawfully)

- ★ Look occupied: curtains move, someone answers, but nothing to suggest plenty.
- ★ Strengthen the obvious entry points first: front and back doors. Fit a London bar / door reinforcer, door chain, extra bolts top and bottom, and wedge stops. Most break-ins are through doors.
- ☐ Ground-floor windows: window locks; in a crisis, screw plywood or furniture across the inside of rarely-used windows.
Keep at least two ways out for fire safety.
- ☐ Store supplies spread out and out of sight — not all in one cupboard, garage or shed. Keep a small, visible "decoy" stock you could hand over.
- ☐ Gravel paths, motion-triggered battery alarms and a dog all give early warning.
- ☐ Lock sheds, bikes, fuel cans and gas bottles away — they are the first things taken.
- ☐ Keep a fire extinguisher and fire blanket by each exit; fires (candles, stoves) are a far bigger risk than intruders.

Street and neighbourhood security

One household can't keep watch 24 hours a day. A street can. Organising early, while people are calm, is the single most effective security measure there is.

- **Meet your neighbours now.** Agree a simple plan: who checks on whom, a meeting point, a signal (whistle blasts, a pan banged) for "come and help".
- **Watch rota:** pairs, in 2–4 hour shifts, at the street's entry points at night. Watch and warn — don't confront.
- **A visible, organised street deterrents.** People looking for easy targets go elsewhere.
- Agree how you will treat strangers: polite, firm, from a distance, with others present. Direct people asking for help to official centres.
- Keep a written log of incidents and descriptions to give to police later.

If you are confronted

Do:

- Stay calm, keep your hands visible and your voice level.
- Give up things, not lives. Hand over the decoy stock, cash, or whatever they ask for.
- Keep a barrier between you (a closed door, a gate, a car).
- Get away the moment you can; make noise to attract neighbours.
- Remember descriptions and report to police when possible.

DON'T:

- Don't open the door to strangers at night — talk through it.
- Don't chase or follow anyone.
- Don't threaten, bluff or show a weapon — it escalates and can make you the offender in law.
- Don't go out alone after dark or carry visible supplies through busy areas.

 **UK law doesn't stop in a crisis.** You may use **reasonable force** to protect yourself, others or your property, judged on the circumstances as you honestly believed them to be. Outside the home, disproportionate force is never reasonable; householders defending against an intruder in their home are given more latitude, but "grossly disproportionate" force is never lawful. (Scotland has its own, similar common-law rules.) Carrying an **offensive weapon** in public is a crime, and so is carrying any bladed article in public without good reason — the only exception is a **non-locking folding pocket knife with a cutting edge of 3 inches (7.62 cm) or less**. Lock knives are not exempt. Machetes, flick and butterfly knives, knuckledusters and telescopic batons are banned outright. Tools in your bag (axes, saws, machetes, fixed blades) need a genuine reason, such as moving to a known work or camping site, and must never be carried as a weapon. Laws on firearms, crossbows and pepper spray (illegal to possess in the UK) remain in force.

Sources: Criminal Justice and Immigration Act 2008 s.76; Criminal Justice Act 1988 s.139; Prevention of Crime Act 1953; gov.uk "Buying and carrying knives".

Trigger points: when your home is no longer the safest place

Decide these *in advance* with your household, write them down, and act on them without arguing in the moment:

- ☐ Homes on your street are being forced and the police aren't responding.
- ☐ Fires are spreading in your area with no fire service.
- ☐ You have been targeted once and the people know you're there.
- ☐ Water has stopped and you have no safe source within walking distance.
- ☐ You can no longer keep at least one room above about 12–14°C in winter.
- ☐ An official evacuation order is given — follow it.

If two or more are true, move to your pre-planned fallback (a relative's home, a rest centre, a retreat — see Stay, Move or Leave) **in daylight, together, and quietly**.

21 Staying Unseen: Light, Noise, Scent & Movement

In a long crisis, the people who get targeted are the ones who stand out: the lit window, the generator hum, the smell of frying bacon, the family walking past with full rucksacks. Staying unseen is not about

hiding in the woods. It is a set of small habits, used **at the right times**, that make your household look like every other cold, tired, ordinary household.

 **BY DAY, AMONG PEOPLE: BE "GREY"**

- Wear **ordinary, muted everyday clothes**: dark jeans, a plain coat, a dull rucksack or a shopping bag.
- **No camouflage, military or "tactical" gear**. It tells everyone you have kit worth taking, and draws police attention.
- No expensive brands, jewellery or new-looking outdoor gear.
- Look as tired and short of supplies as everyone else. Walk with purpose, and don't linger.

 **AT NIGHT OR CROSSING OPEN GROUND: BE DARK**

- Wear **dark, matt, non-rustling clothes**: navy, charcoal, dark brown or olive. Black stands out against grass and in moonlight more than people expect.
- Cover reflective strips with tape, or carry a separate hi-vis vest and put it on **only** when walking on roads with traffic. Being seen by drivers matters more there.
- Gloves and a hat hide pale hands and faces, and keep you warm.

The four disciplines

Discipline	At home	On the move
 Light	Use blackout curtains, cardboard or blankets on windows, and check from outside. Keep lights in inner rooms. Turn off standby LEDs and phone screens near windows. Don't run outdoor or solar garden lights.	Use a red or dim head torch pointed at the ground, and only when needed. Shield phone screens, because one lit screen can be seen across a field. Your eyes take 20–30 minutes to adjust to darkness; red light keeps that night vision.
 Noise	Run generators only by day, briefly, in a ventilated outbuilding. Keep voices, music and play low after dark. Tools and chopping wood belong in daylight. Grease squeaky gates and doors.	Pack soft and tape anything that rattles: keys, buckles, mugs, the tin in your bag. Wear soft-soled shoes. Agree hand signals. Voices carry much further at night and over water.
 Scent	Cooking smells travel, especially meat, frying and baking. Cook simple food with lids on, in daylight. Wood smoke in summer stands out. Bag and store rubbish indoors, and deal with toilet waste promptly.	Use scent-free soap, deodorant and washing powder. Perfume and fragranced laundry can be smelt metres away. Smokers' smoke and smell carry a long way. Carry rubbish out with you.
 Movement	Avoid routines others can learn: different times, and different people fetching water. Don't carry obvious supplies past neighbours. Bring deliveries in out of sight.	Travel at quiet times, such as early morning in first light. Avoid crowds, queues and known trouble spots. Don't stand on skylines or bridges, and stop to look and listen before open ground or junctions. If you're seen, act normally.

GIVEAWAYS PEOPLE FORGET

- **Footprints in snow** leading to a store or shed, and tyre tracks in and out.
- **Melted snow on your roof**, which shows heat when every other roof is white.
- **Solar panels**, power stations or generators on show.
- **Bins full of packaging** while everyone else's are empty.
- **Children talking** at school or in the street about what you have.
- **Social media** posts and photos of your stores or your empty house.

STAYING UNSEEN, LAWFULLY

- Obey **curfews** and police or military instructions. Being found moving secretly at night during a curfew invites the worst assumptions.
- Trespass and theft laws still apply. Don't cross private land or use other people's buildings without permission, except to escape immediate danger.
- If stopped, be calm, polite and honest about where you're going. Carry ID.

22



Self-Defence & Personal Protection — Within UK Law

Self-defence that actually works is mostly about **not being there**, **not being chosen**, and **getting away**. Physical fighting is the last option. Even people who "win" are often badly hurt, and in a crisis with no hospitals, a cut hand or a broken bone can be life-threatening. Everything in this section stays within UK law. The law does not stop in an emergency, and people who go beyond it end up as the defendant.

Avoid → Escape → De-escalate → Defend only to get away. In that order, every time.

1 • Awareness and avoidance

HABITS THAT PREVENT MOST TROUBLE

- Take headphones out and keep your phone in your pocket when out. Notice who is around you and what they are doing.
- Trust the "something's wrong" feeling. Cross the road, turn back or go into a shop. You don't have to explain.
- Go out in pairs or groups, in daylight, and tell someone your route and return time.
- Avoid queues and crowds after dark: fuel stations, cash machines, food handouts. These are where tempers break.
- Don't show supplies, cash, fuel or a full shopping bag.

PLAN YOUR EXITS

- Wherever you are, know two ways out.
- Park facing out, with room to drive away.
- At home, everyone knows the safe room and the escape route (below).
- Agree a family code word that means "leave now, no questions".

2 · De-escalation: talking your way out

- **Keep distance.** Stay at least two arm's lengths away. Step back and to the side, keeping something like a car, a table or a gate between you.
- **Open hands, raised in front of your chest.** It looks calm and non-threatening, but your hands are ready to protect your head.
- **Calm, low, slow voice.** Use short sentences, and their name if you know it. Don't argue, insult, or try to prove a point.
- **Give them a way out:** "Take it, it's fine." Hand over property. Things can be replaced.
- If they move to attack anyway, **shout loudly** ("Get back! Help! Call the police!") and move away. Noise draws witnesses and puts attackers off.

3 · If you are attacked: escape first

Principles that work for anyone:

- **Protect your head.** Hands up, elbows in, chin down. Most serious injuries are head injuries, often from falling.
- **Stay on your feet.** If you're knocked down, get up as fast as you can, keeping your arms over your head.
- **Break contact and run** towards people, light and open shops, not into dead ends.
- **Use only the force you need to get free**, then stop and go. Chasing or "finishing it" is where self-defence turns into assault.
- If a weapon is shown, **give them what they want** and get away.

TRAIN NOW, WHILE IT'S EASY

- A few months at a **local club** teaches balance, falling safely, breaking grips and moving under stress far better than any book. Judo, boxing, Brazilian jiu-jitsu, Krav Maga and women's self-defence courses all help.
- **Fitness is protection:** being able to run 1–2 km and climb a wall matters more than any technique.
- Take a **first-aid course**, because after any confrontation someone may need it.

4 · Protective kit: what is legal

Item	Legal status (UK)	Notes
Personal attack alarm (120–140 dB)	Legal	The best legal deterrent: it startles, draws attention and leaves your hands free. One per family member, especially children.
Bright torch (500+ lumens)	Legal	Lights your way, checks dark corners, and dazzles briefly so you can get away. Carry it as a torch, not as a weapon.
Work gloves, eye protection, sturdy boots	Legal	Protect against broken glass, debris and cuts when moving through damaged or unsettled areas.
Bike or climbing helmet	Legal	Protects against falls, debris and thrown objects in unrest. It doesn't look aggressive.
Stab-resistant vest	Legal for adults to own and wear	May attract police attention, and in a crisis it marks you as someone expecting trouble. Keep it for genuinely dangerous journeys, under a coat.

Item	Legal status (UK)	Notes
Dye "criminal identifier" spray	Sold as legal; no official ruling	Marks an attacker with dye. Using anything to hurt someone can still be assault. An alarm is the safer choice.
Pepper spray, CS gas, stun guns, Tasers	Illegal (prohibited weapons)	Up to 10 years in prison for possession, even if bought abroad or online.
Knives, batons, knuckledusters, "improvised" weapons	Illegal to carry in public	Only a non-locking folding knife with a blade of 3 inches (7.62 cm) or less is exempt. Any ordinary object (a bat, a hammer, a torch) carried <i>in order to use it on someone</i> becomes an offensive weapon in law.

5 • Defending your home: layers

Layer 1 — Don't be chosen. Grey, quiet and dark (see Staying Unseen). Look occupied but not well supplied.



Layer 2 — Early warning. Gravel paths, locked side gates, battery motion alarms, a dog, and neighbours on watch (see Security).



Layer 3 — Hard to get in. Reinforced doors (door reinforcer, extra bolts, door chain), window locks, and boarded rarely-used ground-floor windows. Always keep two ways out for fire.



Layer 4 — The safe room. An upstairs room or inner room with a solid door (swap a hollow interior door for a solid or fire door) and strong bolts or a door brace. Keep a phone or radio, water, a torch, a first aid kit, a personal alarm, and a way out of the window if you are on the ground floor.

NIGHT ROUTINE

- Check all doors and windows, gates and sheds. Put car keys somewhere you can reach.
- Keep shoes, a torch and the phone or radio by every bed.
- Agree who does what if someone breaks in: one adult gets the children to the safe room, another raises the alarm.
- Keep watch in shifts if your street is at risk.

IF INTRUDERS GET IN

- **Get everyone into the safe room** and lock or brace the door.
- **Make noise:** sound the alarm, shout that the police are on their way, bang on walls for neighbours. Call 999 if any network works.
- **Don't go downstairs** to confront them. Let them take things and leave.
- If they come at you and there is no way out, you may use reasonable force (below), only to protect yourselves, and stop the moment you can get away.

6 · Travelling safely

BY CAR

- Keep doors locked, windows up and valuables out of sight.
- In queues and at junctions, leave enough gap to see the back tyres of the car in front, so you can drive around it.
- Don't stop for obstructions, fake "accidents" or people waving you down in a lonely place. Reverse away or drive around if it is safe, and report it.
- Travel in two cars if you can, in daylight, on planned routes that avoid town centres and fuel queues (see Car kit).

ON FOOT

- Move in a small group and keep the pace of the slowest person.
- Choose routes with people and light by day, and quiet routes by night.
- Avoid alleys, underpasses and crowds. Cross the road early if you're unsure about someone.
- Carry your load in a plain bag. Keep cash in more than one place, with a little in an easy pocket to hand over.

 **Reasonable force, in plain English.** In the UK you may use **reasonable force** to protect yourself or others, to prevent a crime, or to protect property. "Reasonable" is judged on the situation *as you honestly believed it to be* at the time, even if you were mistaken. You don't have to wait to be hit first, and doing only what you honestly and instinctively thought necessary is strong evidence it was reasonable. In **your own home**, against an intruder, the force must not be *grossly* disproportionate. Outside the home, it must not be disproportionate at all. Force used for revenge, or after the danger has passed, is never reasonable. Scotland's rules work in a similar way. See also the weapons law in Security.

Sources: Criminal Justice and Immigration Act 2008 s.76 (as amended by the Crime and Courts Act 2013); Criminal Law Act 1967 s.3; Firearms Act 1968 s.5; Criminal Justice Act 1988 s.139; Prevention of Crime Act 1953; CPS guidance on self-defence and the prevention of crime.

IF ARMED GROUPS OR SOLDIERS APPEAR

- Stay calm. Keep your hands visible and empty, and do exactly as instructed. Don't run, film or argue.
- Carry ID. Answer simply and honestly.
- **Don't take up arms.** In wartime, civilians who take a direct part in fighting lose the protection the laws of war give civilians. In the UK, carrying weapons remains a crime. Your job is to keep your household alive and out of the way.
- Remember faces, places and times, and report to the police or authorities when it is safe.

23



Community: Neighbours, Groups & Mutual Aid

Every long-term survival account says the same thing: **groups survive, lone households struggle**. A group can keep watch at night, share one fire and one cooking pot, nurse the sick, pool skills and walk to fetch water in pairs. The time to build that group is before you need it.

START NOW (IT COSTS NOTHING)

- Know the names of the people in the 10–20 homes around you.
- Find out who is elderly, disabled, on oxygen or dialysis, or has small children — they will need checking on first.
- Find out who has skills: nurses, carers, electricians, plumbers, mechanics, builders, gardeners, anglers, radio amateurs, ex-forces.
- Ask your council or parish whether there is a **Community Emergency Plan** or community resilience group, and join it.
- Share a printed contact sheet and a meeting point (a church hall, school or the house with a wood burner).

IN THE FIRST DAYS

- Hold a short street meeting in daylight: what's working, who needs help, what the plan is.
- Check every vulnerable neighbour within 24 hours, then daily.
- Agree a noticeboard (a front window, a church door) for news, needs and offers.
- Set up the watch rota (see Security).
- Agree simple rules: no one goes out alone after dark; tell someone where you're going.

Sharing without being stripped bare

Generosity holds a community together; giving everything away makes you the next person in need. A workable approach:

- **Share effort and skills freely** — carrying water, minding children, first aid, repairs.
- **Pool some resources** for one shared warm room or one big daily meal for the street. Communal cooking uses far less fuel than ten separate stoves, and lets people who have little eat without being singled out.
- **Keep your household's core stash private.** Contribute from a set "share" portion.
- Prioritise children, the sick, the elderly and nursing mothers.
- Trade, don't hoard: surplus of one thing for what you lack (batteries for fuel, tinned fish for medicine).

Useful barter items (small, valuable, durable)

Item	Why it's valued
Batteries (AA/AAA), lighters, matches	Light and fire for everyone; quickly run out.
Painkillers, rehydration salts, plasters, sanitary products	Cheap now, priceless later.
Coffee, tea, sugar, salt, spices	Morale and flavour; light and long-lasting.
Tobacco, alcohol (small bottles)	Traditional crisis currency — trade discreetly.
Seeds, fishing kit, snares wire*, tools	Long-term food production. (*Check the law — many snares and traps are illegal.)
Skills and labour	Repairs, childcare, nursing, chopping wood — often worth more than goods.

Morale and mental health

Routine is survival equipment. Fixed times for waking, meals, chores, schoolwork for children, a daily news update and a short "what we achieved today" talk keep people steady. Give everyone — including children — a job. Expect grief, anger and anxiety, especially in weeks 2–4; talk about it openly, keep people busy and together, and watch for anyone withdrawing, not eating or talking about not wanting to go on. Keep books, cards, board games and a musical instrument in the stash — they matter more than people expect.

24



Children, Older People, Disabled People & Pets



BABIES & YOUNG CHILDREN

- **Infant formula:** store at least 4–6 weeks of the brand your baby uses, plus **ready-to-feed cartons** — they need no water or sterilising. Powdered formula must be made with water boiled and cooled to no less than 70°C; if you can't boil water, use cartons.
- Breastfeeding is the most resilient food supply there is — mothers need extra water and calories (roughly +500 kcal/day).
- Nappies (a month's supply, or cloth nappies + extra wipes/bin bags), barrier cream, Calpol/ibuprofen for children, a children's thermometer, oral rehydration sachets.
- Babies lose heat fast: hats, layers, sleep with a parent in a warm room (on a firm surface, not a sofa) only if that's safe; never use hot-water bottles or electric blankets in a baby's bed.
- Comfort items, books, crayons, a simple routine. Explain things honestly and calmly.



OLDER PEOPLE

- Most at risk from cold (hypothermia can develop indoors at 10–15°C), dehydration and missed medication.
- Check twice a day in winter. Bring them into the shared warm room rather than leaving them alone.
- Keep a list of their medicines, doses, GP and allergies on paper.
- Spare glasses, hearing-aid batteries, denture supplies, continence pads.
- People living with dementia may be distressed by darkness and change — keep familiar routines and a small light on.



DISABLED PEOPLE & MEDICAL EQUIPMENT

- Register now on your electricity network's **Priority Services Register** (free; call 105 or your supplier) and your water company's register — they prioritise contact and help in outages.
- Powered equipment (home oxygen concentrators, ventilators, suction, powered wheelchairs, hoists, pressure mattresses, home dialysis) needs a plan: backup cylinders, battery packs, a manual alternative, and where to go — ask your equipment supplier and clinical team now.
- Know that stairlifts and lifts will stop. Move bedding downstairs early if needed.



PETS & ANIMALS

- Store 4–6 weeks of pet food and any pet medicines; dogs need about 50–60 ml of water per kg of body weight per day.
- Keep a lead, carrier, collar tag and vaccination record ready if you have to move. Many rest centres don't accept pets.
- A barking dog is an excellent alarm — but a hungry one is a burden. Plan honestly.
- Livestock and poultry: stored feed, water (cattle and horses drink a lot) and a plan for electric fences and water pumps failing.

On the Move

Cars, the get-home bag, travelling on foot, the grab bag, remote retreats and leaving the UK.

25 Transport: When Cars Work — and When They Don't

26 Caught Out Away From Home: Car Kit & Get-Home Bag

27 Moving on Foot: Routes, Pace & Safety

28 The Grab Bag: A Light Bag for Moving on Foot

29 Going Somewhere Remote

30 Leaving the UK: Land, Sea or Air?

25 Transport: When Cars Work — and When They Don't

Whether you can drive depends less on the car than on fuel, roads and safety. A solar storm won't damage a car; a power cut stops the fuel pumps; a fuel crisis empties the tanks of everyone else; and a long breakdown fills roads with stranded vehicles and anxious people.

Vehicle	In a long outage	Keep ready
Petrol / diesel car	Works until the tank runs dry. Most filling stations can't pump without power; those that can sell out fast.	Tank at least half full at all times . Legal home fuel store (below). Siphon pump.
Hybrid	As petrol; plug-in hybrids lose their electric range.	As above.
Electric car	Works until the battery is flat; public and home chargers stop. Can power small devices from its 12 V socket or vehicle-to-load adapter.	Keep charged above 70–80% when warnings are issued; know your real range in cold weather (often 20–30% less).
Bicycle / e-bike	The best transport in a long breakdown: quiet, fast, carries 20–40 kg with panniers or a trailer. E-bikes become ordinary (heavy) bikes once the battery is flat.	Tyres pumped, puncture kit, spare tubes, lights, lock, panniers or trailer.
Motorbike / scooter	Very fuel-efficient; gets past blocked roads.	Fuel, helmet, waterproofs.
Trains, buses, flights	Electric trains stop with the grid; buses run while depots have fuel; flights depend on airport power, fuel and air-traffic control.	Don't plan on them after the first day.



Storing petrol at home (Petroleum (Consolidation) Regulations 2014): you can keep up to **30 litres** at home without telling anyone — in suitable containers of no more than **10 L each if plastic** or **20 L each if metal** (or one demountable tank up to 30 L). Storing **30–275 litres** means notifying your local Petroleum Enforcement Authority in writing; more than 275 L needs a licence. Never store petrol inside the house or in any room people live in — use a detached shed or garage away from ignition sources. You may also carry up to 30 L in no more than two containers in your vehicle. **Diesel** isn't covered by these rules, but store it safely in proper containers away from the house.

Source: HSE guidance on petrol storage; SI 2014/1637.



MAKE FUEL LAST

- Petrol starts to degrade after about 6 months; add a fuel stabiliser and rotate stored fuel into the car every few months.
- Drive gently at 45–55 mph; remove roof boxes; don't idle for heat.
- Plan one trip, not several. Share journeys with neighbours.
- A full tank in a small car is often 400–600 miles — enough to reach family almost anywhere in Great Britain.



ON THE ROAD IN A CRISIS

- Traffic lights are out: treat junctions as unmarked; go slowly.
- Avoid motorways in the first days (queues, breakdowns, closures); use A and B roads and paper maps — satnav may lose GPS in a solar storm.
- Expect police checkpoints and closed roads; follow instructions.
- Keep doors locked and windows up in towns; don't stop for strangers flagging you down — report them instead.
- Car kit: blankets, water, food, torch, shovel, tow rope, jump leads, first aid, phone charger, paper maps and a high-vis vest. The full list, and a get-home bag, are in Car Kit & Get-Home Bag.

26



Caught Out Away From Home: Car Kit & Get-Home Bag

Most crises don't wait until you're at home. On a normal weekday, adults are at work, children are at school, and someone is on a motorway. The first hours decide whether the family reunites easily. So keep a **car kit** that lets you stay safe in the car for a night, and a small **get-home bag** you can walk home with if the car has to be left.

The get-home plan (agree it today)



WHO GOES WHERE

- **School pick-ups:** schools keep children until they're collected. Agree who collects whom if phones are down, and give the school written permission for a trusted neighbour.
- **Meeting points:** home first. If home isn't safe, a named second place, such as a relative's house or a church hall.
- **A fallback time:** "if we haven't heard from each other, we meet at ___ at 6 pm".
- Write it on a card for every wallet and school bag.



KNOW THE WALK

- Plan **three routes** home from work and school, avoiding motorways, town centres and big junctions.
- A fit adult walks about **3 mph (5 km/h)**, or 15–20 miles in a long day with rests. Children, older people and bad weather halve that.
- Walk the route once in good weather, to find the water, toilets, shelters and steep or flooded bits.

The car kit (lives in the boot)

Group	Items
 Water & food	2–4 L water (rotate every 6 months), a filter bottle, high-calorie long-life snacks such as nuts, cereal bars, oatcakes and peanut-butter sachets, plus gluten-free if needed, and a few boiled sweets
 Warmth & shelter	A sleeping bag or wool blanket per regular passenger, foil emergency blankets, a hat, warm gloves and waterproof gloves, warm socks, a waterproof, a bivvy bag , and disposable hand warmers
 Walking	Comfortable walking shoes or boots and socks , if you drive in work shoes. This is the most forgotten item of all. Add blister plasters.
 Light & power	A head torch with spare lithium batteries, a 12 V phone charger, a charged power bank and a spare USB cable for each phone type
 Navigation & comms	A paper road atlas, an Ordnance Survey map of home and work areas, a compass, a printed contact list, a notebook and pencil, a whistle, and the family plan card
 First aid & safety	A first aid kit with a tourniquet, a pulse oximeter and an ear thermometer, a 10–20 ml syringe for cleaning wounds, 3 days of essential medicines (not insulin, which spoils in heat), hand gel, two hi-vis vests, a small car fire extinguisher, and a seatbelt cutter and window breaker
 Car tools	Jump leads or a lithium jump-starter, a 12 V tyre inflator or foot pump , a tyre sealant kit, a tow rope, a folding shovel, an ice scraper and de-icer, and duct tape
 Money & hygiene	£50–100 in small notes and coins hidden in the car, toilet roll, wet wipes, sanitary products, nappies if needed, and bin bags
 Winter extras	Extra blankets, a bag of cat litter or a strip of carpet for grip, snow socks for rural roads, and a flask you can fill before setting off
 Summer extras	Double the water, plus a sunhat, sun cream and a windscreen sunshade

The get-home bag (a small daypack, 5–8 kg)

CONTENTS

- ★ 1.5 L of water and a filter bottle
- ★ A day's food, about 2,500 kcal of no-cook snacks
- ★ A waterproof jacket, a warm layer, a hat, warm gloves and waterproof gloves
- ★ A head torch, a power bank and cable, and the printed map and contacts
- ★ A small first aid kit with blister plasters and personal medicines
- ☐ A foil blanket or bivvy bag, and hand warmers
- ☐ A face covering or FFP2/FFP3 mask (smoke, dust)
- ☐ Cash, a copy of ID, and a personal alarm
- ☐ A small knife **only** if it is a non-locking folding knife with a blade under 3 inches, the only kind you may carry in public without a reason

STAY WITH THE CAR, OR WALK?

- **Stay with the car** if you're stuck in snow or on a closed motorway, help is likely, and it's dark or freezing. Run the engine for about 10 minutes an hour for warmth, **with the exhaust pipe clear of snow** (carbon monoxide), and keep a window slightly open.
- **Walk** if the crisis is clearly getting worse (no power, no fuel, no phones), home is within reach, and you can travel in daylight.
- Before leaving, lock the car, take the get-home bag and the hidden cash, and leave a note *inside, out of sight* saying where you've gone.
- Walk facing traffic, wearing hi-vis on roads. Then switch to grey, quiet movement in towns (see Staying Unseen).

Sources: Met Office and RAC winter driving advice; UK government knife law (gov.uk "Buying and carrying knives"); prepare.gov.uk.

27



Moving on Foot: Routes, Pace & Safety

If you have to move and there's no fuel, you'll walk or cycle. People badly overestimate how far they can go, especially with children, packs and bad weather. Plan realistic distances, travel in daylight, and stay together.

How far can you really go?

Who	Pace on roads/paths	Realistic distance per day
Fit adult, light pack (5–10 kg)	4–5 km/h	25–35 km
Average adult, 10–15 kg pack	3–4 km/h	15–25 km
Family with children 6–12	2.5–3 km/h	10–15 km
With toddlers, older or less mobile people	1.5–2.5 km/h	5–10 km
Bicycle with luggage	12–15 km/h	50–80 km
Winter, rain, hills, night or rough ground	Expect 30–50% less. Add about an hour for every 600 m of climbing (Naismith's rule).	

These are planning estimates, not official figures — always plan for the slowest walker and add 25–50% to timings. Day 2 is usually slower than day 1 as blisters and aches set in. Plan a rest of 10 minutes every hour and a long break at midday.

PLAN THE ROUTE

- Use paper maps: quiet roads, bridleways, canal towpaths and footpaths avoid crowds and checkpoints.
- Avoid motorways, city centres, retail parks and large housing estates.
- Know where water is along the way (rivers, streams, churchyard taps, public toilets) and where you can shelter (churches, barns with permission, friends' houses).
- Have a **primary route, an alternative and a "turn back" point**.
- Leave a note at home (inside, out of view) with route and destination.

ON THE MOVE

- Leave at first light; be in shelter before dark.
- Walk at the pace of the slowest person; keep the group in sight of each other.
- Agree signals and what to do if separated (go back to the last agreed point and wait).
- Dress to look ordinary, not "tactical" — camouflage and military kit attract attention.
- Avoid groups, queues and confrontations; step aside and let others pass.
- Drink before you're thirsty; eat little and often.

LOOK AFTER FEET

- Stop and tape a "hot spot" the moment you feel rubbing.
- Change into dry socks at midday; dry wet ones on the outside of the pack.
- Air feet at every long stop; keep toenails short.

WEATHER

- **WINTER** Daylight is 8 hours or less: plan short days, carry a sleeping bag even for "one day" trips, stay dry.
- **SUMMER** Walk early and late, rest in shade at midday, carry more water.
- **STORM** Don't set out into a red or amber warning: falling trees, flooding and exposure kill. Wait it out.

Overnight on the move: sheltering on land or in buildings without permission is trespass, staying in someone else's home without permission can be a criminal offence (squatting in a residential building is a crime in England and Wales), and taking anything is theft. Ask permission; head for rest centres, churches, community buildings or campsites; or carry your own shelter (tarp and bivvy) and stay out of sight.

28



The Grab Bag: A Light Bag for Moving on Foot

A grab bag (or "bug-out bag") is what you carry if you have to leave on foot — to walk home from work, to reach a relative's house, or to move to a safer place. The biggest mistake is packing too much. A bag you can't carry for 8 hours a day is a bag you'll abandon on day one. **Pack for the journey you actually plan, not every possible disaster.**

10–15%

of body weight: comfortable all-day load (rule of thumb)

≤ 20%

sensible upper limit for most adults (rule of thumb)

~1.5 kg

water per person carried (refill on the way)

2 kg

food per person for 3 days (high-calorie)

Three bags for three plans

Plan	Journey	Target weight (adult)	Focus
Get-home bag	Work/school to home, up to ~1 day on foot	4–6 kg	Walking shoes, water, snacks, weather layer, torch, power bank, map, cash
72-hour bag	Home to a known destination, 1–3 days	8–12 kg	Adds shelter, sleep system, cooking, water filter, more food
Long move	Relocation, 3+ days, no certain destination	12–16 kg	Adds tools, repair kit, more medicine; use a trolley, bike or pram to carry extra

Children: about 10% of body weight at most — their own water, snacks, a layer and a comfort item. Adults carry the shared kit. A **bike, cargo trailer, pram or garden trolley** can carry 20–40 kg on roads and paths — far more than a person can.

The core list (72-hour bag, per adult)

WATER & FOOD

- ★ 1–2 water bottles (1.5 L total) + collapsible 2 L bladder
- ★ Water filter (squeeze or straw type) + purification tablets as backup
- ★ 3 days' food: ~2,500 kcal/day of no-cook, lightweight, high-energy food — nut butters, oat bars, nuts, dried fruit, chocolate, crackers, jerky
 - GF** pick certified gluten-free bars and rice crackers
- ☐ Small stove + **winter-grade** gas cartridge (propane/isobutane mix) + lighter, metal mug/pot, spork, a sheet of foil (or skip cooking to save weight)
- ☐ Electrolyte / rehydration sachets

CLOTHING & WEATHER

- ★ Broken-in walking boots or trail shoes — worn, not packed
- ★ Waterproof jacket *and* overtrousers
- ★ Warm insulating layer (fleece or synthetic jacket — not cotton)
- ★ 2–3 pairs of good walking socks
- ☐ Hat, **warm gloves and waterproof gloves** (or over-mitts) **WINTER** ; sun hat, sunscreen **SUMMER**
- ☐ Spare base layer and underwear in a dry bag
- ☐ Buff/neck gaiter (warmth, dust, sun)
- ☐ Dark, plain outer layers. Avoid camouflage or "tactical" gear (see Staying Unseen).
- ☐ Disposable hand warmers **WINTER**

SHELTER & SLEEP

- ★ Emergency bivvy bag (not just a foil blanket — bivvies are far warmer)
- ☐ Lightweight tarp (2×3 m) + 6 pegs + 15 m cord
- ☐ Foam sit-mat or light sleeping mat — ground cold steals heat
- ☐ Light sleeping bag rated to the season **WINTER**

LIGHT, POWER & NAVIGATION

- ★ Head torch with red mode + spare batteries
- ★ Paper OS map(s) of your route and compass — phones die and mobile data may be down
- ★ Phone + charged power bank (10,000 mAh) + a spare cable for each device
- ☐ Small wind-up/battery radio (FM/DAB)
- ☐ Whistle (3 blasts = help) and a small signal mirror



HEALTH & HYGIENE

- ★ At least 7 days of every prescription medicine + a written list of medicines and doses
- ★ Blister kit (Compeed, tape), plasters, dressings, crepe bandage, tweezers, painkillers, antihistamines, loperamide
- ☐ Fingertip pulse oximeter and a small ear or digital thermometer; a 10–20 ml syringe for cleaning wounds
- ☐ Hand sanitiser, small **scent-free** soap and deodorant, toothbrush, dry shampoo, toilet roll in a bag, trowel
- ☐ Sanitary products / menstrual cup
- ☐ Sun cream, lip balm, insect repellent (midges in Scotland!) **SUMMER**



TOOLS & REPAIR

- ☐ Non-locking folding knife with a cutting edge of 3" or less (the only blade legal to carry in public without good reason) or a multi-tool with the same
- ☐ Duct tape (wrap 2 m round a bottle), cable ties, a few safety pins
- ☐ Lighter + matches in a waterproof bag + firestarters
- ☐ Small sewing kit (needles and strong cotton thread), spare bootlaces, fishing line and a few hooks
- ☐ Work gloves (debris, broken glass)

Documents, money & contacts (in a waterproof pouch)

- ★ Passports (essential if leaving the UK), driving licence, photocopies of both, and spare house and car keys
- ★ Cash in small notes and coins — £100–£300 per adult; card payments and cash machines will be down
- ★ Printed list of contacts, addresses, meeting points and your family plan
- ☐ Copies of prescriptions, insurance, house deeds/tenancy, birth certificates on a USB stick and on paper
- ☐ Photos of each family member (to show if separated)



THE THINGS PEOPLE FORGET

- ❗ **Spare glasses** or contact lenses and solution — you can't navigate or read a map without them.
- ❗ **Foot care:** blisters end more journeys than anything else. Tape hot spots early; change wet socks at every stop.
- ❗ **A second pair of dry socks kept for sleeping only.**
- ❗ **Sanitary products** and **incontinence pads.**
- ❗ **Hearing-aid batteries,** inhalers, EpiPens, insulin and its cooling pouch.
- ❗ **Charger cable that fits your phone** — and a car charger if you might drive part-way.
- ❗ **Keys** to where you're going, and its address written down.
- ❗ **A child's comfort toy** and a small game.
- ❗ **Pet lead, food and bowl.**
- ❗ **Bin bags:** rain cover, ground sheet, poncho, water collector.
- ❗ **Earplugs** — you won't sleep in a rest centre without them.
- ❗ **Lip balm and sun cream** — even in a British winter, wind burn is real.

Pack smart: heaviest items (water, food) close to your back between the shoulder blades; line the bag with a rubble sack so everything stays dry; keep water, map, snacks, head torch and waterproof in outer pockets; use a **hip belt** so weight sits on your hips, not your shoulders. Walk a full day with it once a season — you'll learn more from that one walk than from any list.



The idea of escaping to the countryside is appealing, but in reality a remote place only helps if it has **water, a way to heat it, food or land, and people who expect you**. Turning up somewhere unannounced, with nothing, in winter, among locals who are as worried as you are, is usually worse than staying home. A retreat works when it is *arranged beforehand*.

A good fallback place has...	Why it matters
Its own water: a spring, well, borehole with a hand pump, or a stream nearby	Rural homes on private supplies often still need an electric pump — check for a hand pump or gravity option.
Non-electric heat: wood burner, open fire, Rayburn/Aga on solid fuel, and a woodpile	Oil and LPG boilers usually need electricity too.
Space to grow food, and seeds/tools already there	Gardens and allotments feed people from late spring onwards.
People who know you and want you there	Family, friends, a shared plan. Strangers are met with suspicion in a crisis.
Distance from main roads and towns, but not total isolation	Too close: crowds pass through. Too isolated: no help if injured, and an easy target.
A route you can travel on foot or by bike if roads are blocked	Plan for no fuel. 80 km is 3–4 days on foot for a family.

Arrange it now:

- Agree with the household there, in writing, who would come and when.
- Pre-position supplies there: sleeping bags, food, medicines, clothes, tools.
- Keep a key, and practise the route once a year — by car *and* by bike or on foot for part of it.
- Bring something to the group: food, skills, labour, fuel.

RURAL REALITIES

- Rural areas lose power first and get it back last.
- Septic tanks may have electric pumps; plan for a compost or bucket toilet.
- Village shops empty in a day; locals will need what's there.
- Farms are not food stores — crops are seasonal, livestock needs feed and water, and farmers protect both.
- Camping in the wild is legal in only some places (much of Scotland under access rights, parts of Dartmoor) and is very hard in a British winter.

Holiday homes, caravans and boats make poor winter retreats: thin walls, little insulation, and often no water in winter (drained to stop pipes freezing). They can work well in summer, or as a short stop on the way somewhere.



Leaving the country sounds like an escape, but it is rarely the right answer. A solar storm or energy crisis may affect much of Europe at the same time; other countries will be prioritising their own people; and the routes out — the Channel Tunnel, ferries and airports — need power, fuel and staff, and will be the first places everyone else heads for. **Leaving only makes sense early, with a destination where you have a right to stay and people expecting you, and when your journey can be completed in one go.**

Route	Depends on	Realistic window	Biggest risks
Air	Airport power, jet fuel, air traffic control (NATS), airline crews, and a working booking/payment system	Only in the first hours to day or so — and only if flights are operating	Airports close quickly when systems fail: the NATS failure of August 2023 disrupted 700,000+ passengers, and a substation fire closed Heathrow in March 2025. Thousands stranded at terminals.
Channel Tunnel (Eurostar, LeShuttle)	High-voltage power (fed from both the UK and France), signalling, staff	First day or two, if running	A single power fault stopped all services for hours in December 2025. Queues of thousands at Folkestone.
Ferries (to France, the Netherlands, Spain, Ireland)	Port power, fuel, crew, booking systems; road access to the port	Days, if operating — expect long queues and cancellations	Ports become bottlenecks; roads to Dover, Holyhead, Portsmouth and Hull can gridlock. Check routes and ID rules with operators before relying on them — they change.
Private boat	Your own seaworthy boat, fuel/sails, real skills, weather	Only for experienced sailors, in suitable weather	The Dover Strait is the world's busiest shipping lane (several hundred ships a day); cold water, tides and weather kill. Harbours may fill with panicking people. Legal entry abroad still applies.

Inland or coastal: what it means for you

INLAND HOUSEHOLDS

- You're a long way from any port. The journey there — on congested roads, with uncertain fuel — is the hard part.
- Leaving the country is only realistic if you go in the first day or two, by car, to a ferry or the tunnel you've already booked or confirmed is running.
- For most inland households, a retreat within the UK (relatives, friends) is the better plan.

COASTAL HOUSEHOLDS

- Your local harbour may be where others head for. Expect crowds, theft of boats and fuel, and conflict.
- If you own a boat and have the skills, the sea can be a route to Ireland, France or the Channel Islands — but only in good weather and with legal entry arranged.
- Fishing and the sea can be a food source if you stay.

If you do leave by sea in your own boat

- ★ You must be competent: RYA qualifications, experience of the passage, tides and night sailing. In doubt, don't go.

- ★ Check the weather (inshore waters forecast, Shipping Forecast on BBC Radio 4 FM) — never sail into a gale warning.
- ★ Lifejackets for everyone, worn; VHF radio (licensed), flares, EPIRB/PLB, liferaft if crossing open water.
- ★ Cross shipping lanes at right angles (international collision rules), keep watch, and stay clear of large ships — they can't stop or turn quickly.
- Report your departure to UK customs (HMRC Pleasure Craft Report).
- Arriving in France or another Schengen country from the UK: you must clear in at a designated **port of entry**, with passports, and non-EU citizens can stay only 90 days in any 180. Arriving elsewhere without clearing is illegal entry.

Before you decide to leave

ASK HONESTLY:

- Is the destination actually better? (Is it affected too? Will they let you in? Do you have a right to stay, money, a home, people?)
- Can the whole household make the journey, including the slowest member, in winter?
- Do you have valid passports for everyone? (For Ireland, British citizens don't legally need a passport under the Common Travel Area, but carriers require photo ID — take passports anyway.)
- What happens if the route closes halfway? Stranded at a port or on a motorway is worse than at home.
- If the answer to any of these is unclear: **stay, and prepare where you are.**

Sources: CAA review of the August 2023 NATS failure; NESO North Hyde substation review (2025); HMRC Pleasure Craft Report guidance; COLREGs Rule 10; EU Schengen entry rules; Common Travel Area guidance.

The Long Haul

Weeks to months without normal services, and what to do when things come back.

31 The Long Haul: Weeks to Months

32 When Things Come Back

31 The Long Haul: Weeks to Months

If the breakdown lasts beyond a few weeks, life settles into a new routine built around water, warmth, food and safety. Households that do best treat it like running a small expedition: ration early, produce what you can, keep everyone healthy, and stay organised.

Ration from day one, not when you run low

- **Count it.** List every food item and its calories; divide by your household's daily need to see how many days you really have.
- **Eat perishables first:** fridge (first 1–2 days), then freezer (while it stays frozen), then fresh fruit and vegetables, then tins and dry goods.
- **Reduce, don't starve:** adults doing light work can manage on 1,800–2,000 kcal/day for a long time. Children, pregnant and breastfeeding women, and anyone doing heavy work need their full share.
- Keep a multivitamin going if stores are mostly dry and tinned food.

Growing food in the UK

Season	What you can grow or get
Spring (Mar–May)	Sow salad leaves, radishes, peas, broad beans, spinach, potatoes (first earlies in March–April). Fast crops are ready in 4–8 weeks.
Summer (Jun–Aug)	Harvest salads, peas, beans, early potatoes, courgettes. Sow kale, chard, beetroot and leeks for winter.
Autumn (Sep–Nov)	Main potato, squash and apple harvests; store in a cool, dark, dry place. Sow overwintering onions, garlic, broad beans.
Winter (Dec–Feb)	Kale, leeks, parsnips, sprouts and stored roots. Little grows — this is when stored food matters most.

Keep seeds in the stash: a "survival seed" pack of open-pollinated varieties (so you can save seed), plus potatoes for planting. Sprouting seeds (mung beans, alfalfa) give fresh greens in 3–5 days on a windowsill, all year round.

Foraging, fishing and hunting — with care

Never eat a wild plant or mushroom unless you are 100% certain what it is. Several deadly UK species (hemlock, hemlock water dropwort, death cap and destroying angel mushrooms) look like edible ones. A good field guide and practice *now* are essential.

- Safe, easy starts: blackberries, nettles (cooked), dandelion, wild garlic (spring), elderflower and elderberries (cooked), sloes, hazelnuts, sweet chestnuts, crab apples.
- Fishing needs a rod licence in England and Wales and permission on most waters; sea fishing from the shore is free.
- Most snares and traps are illegal or tightly regulated, and poaching laws still apply. Keeping rabbits or chickens at home is far more reliable than hunting.

Keeping the household going

DAILY JOBS

- Water collection & treatment
- Fuel: wood cutting, drying
- Cooking (one hot meal)
- Watch rota
- Toilet & rubbish

WEEKLY

- Stock count & ration check
- Laundry
- Repairs
- Community meeting
- Health check of everyone

KEEP GOING

- Schooling for children
- Exercise, daylight
- Shared meals, games, music
- A news update each day
- Rest days

32



When Things Come Back

Power and services usually return in stages, often patchily and with repeated cuts. The return is a dangerous time: fires, electrical faults, food poisoning, scams and a rush on shops all peak in the first days.

⚡ WHEN THE POWER RETURNS

- Leave **one light switched on** during the outage so you know when power returns; switch everything else off at the wall to avoid a surge when it comes back.
- Turn appliances back on one at a time, over several minutes. Heaters and kettles last.
- Check for burning smells, damaged sockets or flood-damaged wiring — if in doubt, keep the circuit off and get an electrician.
- Remove any temporary generator connections.
Never back-feed a generator into house wiring without a proper changeover switch — it can kill line workers.

🍷 FOOD & WATER SAFETY

- Food that has been above 8°C for more than 4 hours (meat, fish, dairy, cooked food) — throw it away. If in doubt, throw it out.
- Food that is still frozen solid, or has ice crystals, can be refrozen.
- Follow your water company's notices: "boil water" advice can continue for days after supply returns.
- Run taps for a few minutes before use; flush water heaters if the supply was contaminated.



GETTING BACK TO NORMAL

- Restock gradually — avoid adding to the rush.
- Expect fuel rationing and long queues for days to weeks.
- Check on vulnerable neighbours; they may be the last to be reached.
- Photograph damage and keep receipts for insurance.



LEARN FROM IT

- Hold a family "what worked, what didn't" talk while it's fresh.
- Replace and rotate everything you used.
- Note the gaps — they are your shopping list for next time.
- Beware scams: fake utility workers, fake relief appeals, "emergency" price gouging.

Ten Crisis Scenarios, Hour by Hour

Realistic UK crises played out from the first hours to months later, with what to do at each stage.

33 Scenario 1 · Food Imports Cut Off

34 Scenario 2 · A Fuel Crisis That Empties the Shelves

35 Scenario 3 · Cyber Attack on the NHS

36 Scenario 4 · Cyber Attack on Banks & Payments

37 Scenario 5 · Cyber Attack on the Water Supply

38 Scenario 6 · Cyber Attack on the Power Grid

39 Scenario 7 · Losing the Gas Supply in Winter

40 Scenario 8 · Missile & Drone Strikes on Energy and Infrastructure

41 Scenario 9 · Undersea Cable & Pipeline Sabotage

42 Scenario 10 · The Combined Winter Crisis

How to use these playouts. Each scenario follows a realistic UK crisis from the first hours to months later: what you are likely to see, and what to do at each stage. They are built from real events, in Britain where possible and abroad where Britain has no example yet. Real crises rarely follow a script, and they often arrive together. Read the one closest to what is happening, then use the practical sections it links to. The timings are planning estimates, not predictions.

33



Scenario 1 · Food Imports Cut Off

Britain grows a lot of its own food, but not all of it, and not evenly. The food in shops depends on a constant stream of lorries, especially across the Channel. If the border closes or trade is disrupted for more than a few days, the gaps appear first in fresh food, then in anything made with imported ingredients or packaging.

62%

of the UK's food supply is produced at home (2023)

16%

of fresh fruit is home-grown; the rest is imported

~10,000

lorries a day normally cross between Dover and Calais

48 hrs

France closed the border in Dec 2020, stranding thousands of lorries in Kent

What could cause it: a border closure (disease or politics), a cyber attack on port or customs systems, sabotage or war affecting Channel shipping, strikes, a currency crash that makes imports unaffordable, or bad harvests across Europe. In February 2023, bad weather in Spain and Morocco alone led UK supermarkets to limit tomatoes, peppers and cucumbers to two or three per customer for several weeks.

How it plays out

Hours 0–24

news, queues in Kent

- News of the closure or disruption. Lorries are held on the M20 and around Dover. The government and supermarkets say "there is plenty of food".
- For a day or two, that is true: shelves are full and warehouses still hold stock.

Do: quietly top up to two weeks of the food you normally eat, before the rush. Add tinned and frozen fruit and vegetables, and order repeat prescriptions now, because many medicines are imported too.

Days 2–7

fresh food gaps

- Gaps appear in salad, fruit and vegetables first, especially in winter and spring, when much of it comes from southern Europe and North Africa.
- News coverage starts panic buying, which empties shelves of staples far faster than any real shortage would. Purchase limits appear.
- Prices of imported foods jump.

Do: stay out of the stampede and use your stores. Buy what is plentiful and British-grown, such as potatoes, root vegetables, milk, eggs and bread. Check on older neighbours who shop daily.

Weeks 2–4

the long gaps

- Processed foods that rely on imported ingredients, oils, spices or packaging run short, along with pet food, some baby products and some medicines.
- Food banks are overwhelmed. Tension rises in queues, and shoplifting increases.
- The government may use emergency powers: priority freight, waived lorry-driver hour limits, and help for vulnerable people.

Do: switch to your three-month staples (see Food). Take a multivitamin and eat tinned fruit or vegetables for vitamin C. Sow quick crops: salad leaves and radishes are ready in 4–6 weeks. Pool buying with neighbours.

Months 1–3+

a narrower diet

- Britain produces most of its own cereals, milk and eggs, and much of its meat, so a long disruption **narrows the diet rather than emptying it**. Fresh fruit, many vegetables, rice, coffee, tea, chocolate and spices become scarce and expensive.
- Formal rationing is possible, and was last used in Britain in 1954. Local markets, farm shops and growing schemes matter more.

Do: grow what you can, preserve gluts by drying, pickling and bottling, buy direct from local farms, and keep rotating your stores. See The Long Haul.

↑ WHAT MAKES IT WORSE

- Winter or early spring, the hungry gap, when the UK grows least fresh produce.
- A fuel crisis at the same time (see Scenario 2).
- A falling pound, which makes every import dearer.
- Rumours on social media that set off panic buying.

↓ SIGNS IT'S EASING

- Supermarkets lift purchase limits.
- The queues at the ports clear.
- Prices of fresh produce stop rising.
- Normal delivery slots return for online shopping.

Sources: Defra, *United Kingdom Food Security Report 2024*; Road Haulage Association; reporting on the French border closure of 20–23 December 2020 and on the produce limits of February 2023.

34



Scenario 2 · A Fuel Crisis That Empties the Shelves

Fuel crises in Britain move fast, because almost everyone reacts at once. The shortage is often small at first. The panic is what drains the forecourts, and within a week the lorries that carry food, medicines and heating oil start to run short too.

4 days

for about 3,000 stations to run dry in the September 2000 protests

50–90%

of stations dry in parts of England in September 2021

15 L

per purchase: the government's planned emergency fuel limit

30 L

of petrol you may legally keep at home without telling anyone

What could cause it: refinery breakdowns, a cyber attack or strike on fuel terminals or pipelines, a war cutting oil imports, a tanker-driver shortage, blockades or protests, or simply a news story about "a few stations closing". That last one is what set off September 2021.

How it plays out

Hours 0–24

the queues start

- A news story or rumour, and queues form at forecourts within hours. People top up full tanks and fill jerry cans, sometimes unsuitable containers.
- Stations that run dry put out cones. The queues move to the next one.

Do: if your tank is at least half full, **stay out of the queue**. That is what the half-tank habit is for. Plan which journeys really matter this week, and check bikes and your public transport options.

Days 1–4

forecourts dry

- Large numbers of stations are dry, especially in cities and the south-east. Tempers flare at pumps.
- The government may use its National Emergency Plan for Fuel. That plan allows a **maximum purchase limit** of 15 litres per sale, which can be tightened, and **designated filling stations** that serve only priority users such as the emergency services, councils and utilities. The full plan has never yet been used. In 2021 the army was brought in to drive tankers instead.
- Carers, nurses and delivery drivers struggle to get to work. Home-visit care is cut back.

Do: work from home if you can, share journeys, and check on anyone who relies on carers. Never store petrol indoors or in unapproved containers. The legal limits are in Transport.

Days 5–14

deliveries falter

- Food and medicine deliveries slow. Supermarkets ration some lines, and online delivery slots disappear.
- Heating-oil and bottled-gas deliveries to rural and off-grid homes are delayed. In winter, this is the dangerous part.
- Buses run reduced timetables. Rural areas are cut off first.

Do: live from your home stash. If you use heating oil or LPG, keep the tank topped up from autumn onwards and never let it fall below a quarter. Organise one shared shopping trip for your street.

Weeks 2–6

if supply stays short

- Formal rationing of fuel, priority access for key workers, and possibly food rationing.
- Businesses close and people lose wages. Cash and goods become more valuable. Opportunistic theft of fuel from cars and tanks rises.

Do: fit a locking fuel cap, store fuel out of sight, use the bicycle, and follow the long-haul routines. Most fuel crises in Britain have eased within two to three weeks once supply and calm return.

↑ WHAT MAKES IT WORSE

- Media pictures of queues and dry pumps.
- Winter, because of heating oil, LPG and longer journeys.
- A real supply loss behind the panic, such as an import cut-off or a damaged refinery.
- A cyber attack on card payments at the same time.

↓ SIGNS IT'S EASING

- Queues shorten and most stations reopen.
- Purchase limits are lifted.
- Army or extra tanker drivers are announced and deliveries recover.
- Supermarket limits end.

Sources: gov.uk, *Summary of response tools in the National Emergency Plan for Fuel*; Petrol Retailers Association, Sept 2021; reporting on the 2000 fuel protests and the 2021 UK fuel supply crisis.



Scenario 3 · Cyber Attack on the NHS

This has already happened in Britain, more than once. A cyber attack doesn't close hospitals. It forces them back onto paper, which makes everything slower: tests, prescriptions, transfers, operations. Emergencies are still treated, but planned care stops, and the effects last for months.

81

NHS trusts in England disrupted by WannaCry in May 2017, plus 603 GP practices and other NHS bodies

~19,000

appointments cancelled because of WannaCry

10,000+

outpatient appointments postponed after the June 2024 attack on London pathology services

1,680

planned operations postponed at two London trusts after the same attack

What it looks like: ransomware locks a trust's computers or a key supplier's, such as a pathology lab or a GP records system. In June 2024 an attack on Synnovis, which runs blood testing for two large London trusts, stopped them matching blood for transfusion as often as usual. The NHS appealed nationally for O-type blood donors. In July 2024 a faulty software update (not an attack) knocked out the EMIS appointments and prescriptions system in most GP practices for a day.

How it plays out

Hours 0–6

screens go dark

- Hospital and GP systems fail. Staff switch to paper. Some A&E departments divert ambulances elsewhere, as five did during WannaCry.
- Electronic prescriptions, test results and the NHS App may not work. Phone lines are swamped.
- **999 and emergency care continue.**

Do: if it's an emergency, call 999 or go to A&E as normal. Otherwise, go to appointments unless you are told they are cancelled, and use 111 rather than ringing your GP.

Days 1–7

planned care stops

- Operations, scans and outpatient appointments are cancelled. Blood tests and results are delayed.
- Pharmacies may not be able to see your electronic prescription.
- Scam calls and texts appear, claiming to be from the NHS and asking for payment or bank details, especially if patient data has been stolen.

Do: show the pharmacist your repeat slip or the medicine packet. **In England a pharmacist can make an emergency supply** of most regular medicines without a prescription, if satisfied you need it. Hang up on any "NHS" caller asking for money or bank details.

Weeks 1–8

backlogs

- Postponed appointments pile up. Cancer and urgent referrals are prioritised, but delays spread.
- Blood stocks may run low, prompting donor appeals.
- Stolen patient data may be published by the attackers, as it was after the Synnovis attack.

Do: keep a note of every cancelled appointment and chase it once systems return. If you are well, give blood when appeals are made. Watch your bank accounts for fraud.

Months

slow recovery

- Full recovery can take months, as it did for London's pathology services in 2024. If the NHS is hit during a wider crisis, such as winter flu, a blackout or strikes, the pressure multiplies.

Do: look after long-term conditions carefully, because routine monitoring may lapse. See Health and the home medical kit.

Your NHS-outage file (do it today): a printed sheet for each person with:

- NHS number, GP surgery, conditions and allergies
- Every medicine with its dose, and your repeat slip
- Recent blood results and clinic letters
- Blood group if known
- For anyone frail or disabled, a one-page "hospital passport"

Keep 30 days of medicines in hand by ordering repeats a week early.

Sources: National Audit Office, *Investigation: WannaCry cyber attack and the NHS* (2017); NHS England London updates on the Synnovis cyber incident (June–Aug 2024); NHS England statement on the EMIS outage, 19 July 2024; Human Medicines Regulations 2012 (emergency supply).

36



Scenario 4 · Cyber Attack on Banks & Payments

Most of Britain now pays by card or phone, and many shops no longer handle much cash. If a major bank, a card network or the systems behind them are knocked out, you may have money but be unable to spend it. Food, fuel and medicines all become harder to get, even though the shelves are full.

2.4 m

UK card payments failed in a single Visa outage on 1 June 2018 (5.2 million across Europe)

~6–10 hrs

how long that outage lasted

£200–500

of cash in small notes and coins: a sensible household reserve

2+

banks and card networks (Visa and Mastercard) to spread the risk

What could cause it: a cyber attack on a bank, a card network or a payment processor; a failed IT upgrade; an attack on the cloud services that many banks share; or a wider power or internet outage. The 2018 Visa failure was a hardware fault, not an attack. The National Risk Register plans for a deliberate attack on retail banking.

How it plays out

Hours 0–6

"card declined"

- Card and phone payments fail at tills and pumps. Apps and online banking stop. Some cash machines work, some don't.
- Shops put up "cash only" signs or close. Queues build at working cash machines.

Do: use your cash reserve. If you need more, withdraw a modest amount early, and don't join a crowd at an ATM after dark. Try a card from a different bank or network.

Days 1–3

the cash crunch

- Cash machines empty faster than they can be refilled. Shops run short of change.
- Wages, benefits and bills may not go through on time. People without cash can't buy food or fuel.
- Scams surge: fake "your bank" calls asking you to "move money to a safe account". **No real bank ever asks this.**

Do: spend cash only on essentials, keep it out of sight, and help vulnerable neighbours with shopping. Hang up and call your bank back on the number on your card, from a different phone if you can.

Days 4–14

workarounds

- Banks open branches for longer and may limit cash withdrawals. Regulators and the government step in.
- Local trust systems appear: tabs, IOUs and barter between neighbours and small shops.
- If balances or records were corrupted, sorting out who owns what takes weeks.

Do: keep paper records: recent statements, screenshots of balances, and receipts for large payments. They help you prove what you're owed. Write down any IOUs.

Weeks+

recovery

- Services return in stages, with compensation schemes. Expect fraud attempts for months afterwards.

Do: check statements line by line, and report anything odd straight away.

SET UP NOW

- Cash at home: £200–500 in £5 and £10 notes and coins (see Money & documents).
- Accounts at two unrelated banks, with a Visa card and a Mastercard.
- Two or three weeks of food and fuel, so you never have to buy in a hurry.
- Printed statements and a list of your bank and insurer phone numbers.

SIGNS IT'S EASING

- Contactless works again at major chains.
- Cash machines are refilled and limits lifted.
- Banks confirm wages and benefits have been paid.

Sources: Visa Europe letter to the Treasury Committee (June 2018); Payment Systems Regulator; National Risk Register 2025.



Water treatment works and pumping stations are run by computers. An attack could stop the pumps, or tamper with the chemicals that make water safe. Either way, you would be told to stop drinking tap water, or the taps would simply run dry. Water companies must then supply you, but only with a small daily ration.

10 L

per person per day: what water companies must plan to supply within 24 hours of a mains failure

20 L

per person per day once a failure lasts more than five days

3 L

per person per day: the minimum for drinking alone

2021

Florida: a hacker tried to raise a chemical to a dangerous level. An operator spotted it.

What has happened so far: in the UK, ransomware has hit water companies' office systems. South Staffs Water in 2022 and Southern Water in 2024 both suffered attacks; customers' supplies were not affected. Abroad, an attacker at Oldsmar, Florida in 2021 tried to raise the level of sodium hydroxide in the treated water to a dangerous level. A watchful operator reversed it. The worst case for the UK is an attack that reaches the controls at several treatment works at once.

The three notices: know the difference

Notice	What it means	What you can do with tap water
Boil water	Possible germs (bacteria or parasites)	Boil, cool, then use for drinking, food, teeth and baby feeds. Washing and toilets are fine.
Do not drink	Possible chemical contamination. Boiling does not help and can concentrate some chemicals.	Toilets, and often washing (follow the notice). Drink and cook only with bottled or stored water.
Do not use	Serious contamination	Toilet flushing only, or nothing. Stored or bottled water for everything else.

How it plays out

Hours 0–12
the warning

- Pressure drops, the taps run dry, or a notice arrives by text, leaflet, website or local radio. You may notice a change in taste, smell or colour first.
- Shops are stripped of bottled water within hours.

Do: if the water still runs and there is no "do not use" notice, **fill your bath and containers at once**. That water is for washing and flushing. Drink from your stored drinking water. Report any odd taste or smell to your water company.

Days 1–5

bottled water
stations

- Bottled-water stations and bowzers open, with deliveries to people on the company's Priority Services Register. Queues are long, and bottles are heavy.
- If pumping fails, sewage pumping can fail too. Toilets may not flush, and drains may back up in low-lying areas.

Do: use your stored water, rationed for drinking first (see Water). Set up the bucket toilet if flushing stops (see Sanitation). Collect water for neighbours who can't queue.

Days 5–14

longer haul

- Supplies rise to 20 litres a person a day. Engineers run works by hand while systems are rebuilt and the network is flushed and tested.
- Hygiene suffers, and stomach bugs spread.

Do: treat any water you collect from rain, rivers or butts (see Water). Keep handwashing going with a bowl of soapy water and a rinse bowl.

Weeks

back on tap

- Supply returns area by area. The notice is lifted only after testing. Run your cold taps as the company instructs before using the water.

Do: refill and re-treat your stored water, and replace what you used.

Your priorities: store at least 3 litres of drinking water per person per day for two weeks. For four people that is 168 litres. Keep a way to treat other water, and join your water company's **Priority Services Register** if anyone in your home is elderly, disabled, ill or has a baby. Those households get bottled water delivered first.

Sources: water company alternative-supply policies under the Security and Emergency Measures Direction (Water Industry Act 1991 s.208); Drinking Water Inspectorate; reporting on the South Staffs Water (2022) and Southern Water (2024) cyber incidents and on the Oldsmar, Florida incident (2021).

38



Scenario 6 · Cyber Attack on the Power Grid

A cyber attack on the grid looks like any other big power cut at first. The difference is what comes after. Engineers can't trust their control systems, so they restore power slowly, partly by hand. The attackers may strike again, and the outage may be timed to hit when demand is highest, or alongside other attacks.

225,000

customers lost power in
Ukraine's 2015 grid cyber
attack, the first confirmed
one

1–6 hrs

before Ukrainian engineers
restored power by hand at
substations

1.1 m

GB customers cut off within
seconds by one lightning
strike in August 2019

5 days

the target for restoring all
GB demand after a total
blackout, from end of 2026

What has happened: on 23 December 2015, attackers took remote control of three Ukrainian power companies. They opened breakers, wiped computers, and flooded the customer phone lines so people couldn't report faults. Power came back only when engineers drove to substations and switched them by hand. Britain has not had a confirmed grid cyber

attack. But the August 2019 power cut, caused by lightning and two generators tripping, showed how fast a small fault can cascade to a million homes, trains and a hospital.

How it plays out

Hours 0–6

a big power cut

- Power fails across a region or the country. Mobile signal fades, and trains, traffic lights and card payments stop. It is the same picture as in How a breakdown unfolds.
- Network operators' phone lines and websites may be overloaded or attacked as well.
- Rumours spread fast about who did it and how long it will last.

Do: follow the first 72 hours checklist. Fill water containers while pressure lasts, switch to battery radio (BBC), and unplug sensitive electronics to protect them from surges when power returns.

Days 1–3

slow restoration

- Power returns in islands: hospitals, water works and key sites first. Engineers may have to visit sites by hand and check every system for hidden malware.
- Supply may be **rationed by rota**. Under the Electricity Supply Emergency Code, every connection is in a lettered block. If there isn't enough power for everyone, blocks are cut and restored in turn to a published schedule. Your network operator can tell you your block letter.

Do: when the power is on, charge everything, run the washing machine, cook ahead, and fill flasks and hot-water bottles. When it is off, use your plan for light & power and heat.

Days 4–14

repeat attacks

- A determined attacker may strike again, or damage equipment that takes months to replace, such as large transformers.
- Rota cuts may continue for weeks while capacity is rebuilt. Businesses close, and fuel and food supplies are strained.

Do: run your home on a rota rhythm: plan cooking, charging, laundry and showers for the "on" hours. Check on neighbours who rely on powered medical equipment, and make sure they are on the Priority Services Register.

Weeks+

normal, but
fragile

- Supply returns to normal, but appeals to save power may continue.

Do: restock batteries, fuel and food straight away. Another outage is more likely while the system is recovering.

↑ WHAT MAKES IT WORSE

- A January cold snap, when demand is highest.
- Gas shortages at the same time (see Scenario 7).
- Attacks on phone networks and on the networks' call centres.
- Physical damage to transformers alongside the cyber attack.

🕯 BEFORE THE POWER COMES BACK

- Switch off cookers, heaters and irons. A house full of appliances starting together can trip fuses, and an unattended cooker is a fire risk.
- Leave one light switched on so you know when power returns.
- Don't open the freezer to check it until power has been back for a few hours.

Sources: E-ISAC/SANS, *Analysis of the Cyber Attack on the Ukrainian Power Grid* (2016); Ofgem report on the 9 August 2019 power disruption; NESO Electricity System Restoration Standard; Electricity Supply Emergency Code (DESNZ).

39 🔥 Scenario 7 · Losing the Gas Supply in Winter

About three-quarters of homes in England and Wales heat with mains gas (Census 2021). Britain keeps very little gas in storage, so it depends on a steady flow from the North Sea, Norway and tankers of liquefied gas. If that flow is cut by an attack, sabotage, a cold snap or a global shortage, homes are protected for as long as possible. But if domestic gas is cut, it cannot simply be switched back on. **An engineer has to visit every home.**

~12 days

of average demand held in UK gas storage in January 2025 (Germany: about 89)

~1/3

of winter gas expected from Norway, a third from LNG tankers, a quarter from UK fields (2025/26)

2 weeks

some Sheffield homes waited for gas after water flooded the mains in December 2022

~1/4–1/3

of Britain's electricity is made from gas, so a gas emergency can cause power cuts too

A real example: on 2 December 2022 a burst water main flooded the gas network in Stannington, Sheffield, just as a cold snap began. Around 2,000 homes were left without heating or cooking. More than 250 engineers had to call at every house to make the gas safe, then pump water from the pipes. They could reconnect only homes where someone was in to let them test the appliances. Most homes waited up to two weeks. A national gas emergency would mean the same process, multiplied across whole regions. The Health and Safety Executive's own exercise found that restoring very large numbers of homes could take weeks or months.

How it plays out

Warning days before

- News of a supply problem, such as a damaged pipeline or terminal, a cold snap, or a shortage of tankers. The gas grid operator may issue a "gas deficit warning", as it did during the "Beast from the East" on 1 March 2018, asking big users to cut back.

Do: charge power banks, check the CO alarm, sleeping bags and heaters (see Heat), and fill flasks. Find your gas meter and its lever now. If you rely on gas for cooking, get your camping stove and fuel ready.

Hours-Days

industry cut first

- In a declared **Network Gas Supply Emergency**, the largest users are cut first: industry, then gas-fired power stations. Homes are protected as long as possible.
- Cutting power stations can mean **electricity rota cuts** (see Scenario 6). Electric heaters then can't replace the boiler for everyone.
- Public appeals: turn heating down, heat one room, don't use gas unless you have to.

Do: follow the appeals. Every home that cuts back makes a domestic cut less likely. Move the household into one warm room.

If homes are cut

"turn off at the meter"

- If pressure can't be held, people in an area are told to **turn off their gas at the meter** ("self-isolate") so the network can be safely refilled later. Boilers, gas fires and hobs stop.
- Rest centres and warm spaces open, with priority help for vulnerable people.

Do: turn the meter lever a quarter turn so it sits across the pipe. **Never try to turn gas back on yourself**, and never use a gas oven or hob to heat a room. Use your winter heat plan: one room, insulation, layers, sleeping bags, hot drinks. Cook on a camping stove in a ventilated room with a CO alarm, or outdoors.

Weeks

street by street

- When gas is available again, engineers restore it area by area. Each home must be visited, its meter turned on, its pipes purged of air, and its appliances checked and relit.
- Fake "gas engineers" target older people. Real engineers carry ID and will wait while you ring the network to check them.

Do: be at home, or leave a contact number, when your street is being restored. Check every caller's ID by phoning your gas network on the number on its website or your bill, not one the caller gives you.

SET UP NOW

- Join the **Priority Services Register** (through your energy supplier) if anyone at home is over pension age, disabled, ill or has a young child.
- A camping stove with **winter-grade gas** (propane/isobutane mix), a CO alarm and two weeks of fuel.
- Sleeping bags rated to -5°C , wool blankets, thermal layers, hot-water bottles.
- Electric heaters for when power is on, never left running overnight.

SMELL GAS?

- Call the National Gas Emergency number, **0800 111 999**, at any time. In Northern Ireland, call **0800 002 001**.
- Don't use switches, flames or phones near the leak. Open doors and windows, and turn off the meter if it is safe to.
- Leave the building. Wait outside or with neighbours.

Sources: HSE, *Gas supply emergencies – consumer self isolation and restoration*; Centrica statement on UK gas storage (Jan 2025); National Gas, *Gas Winter Outlook 2025*; reporting on the Stannington gas outage (Dec 2022); Elexon and NESO generation data 2024; ONS Census 2021, *How homes are heated in your area*.



Scenario 8 · Missile & Drone Strikes on Energy and Infrastructure

This is the scenario most people find hardest to imagine in Britain, and the one Ukraine has lived with since October 2022. Waves of missiles and cheap long-range drones targeted power stations, substations, gas production and heating plants. Within hours, cities moved to **scheduled blackouts**, and water, heating and lifts stopped with the power. Ukrainians adapted, and their lessons apply directly here.

Minutes

of warning, at most, before a strike

Hours a day

of scheduled blackouts in Ukrainian cities after strike waves

4,000+

"Points of Invincibility"
(warm, powered hubs)
opened in Ukraine in winter 2022

£1 bn

set aside in the 2025
Defence Review for UK
homeland air and missile
defence

What the UK would face: Britain has a handful of large gas terminals, LNG import sites, refineries, grid substations and ports. Damage to a few of them would be felt nationwide. Drones have already shut airports: Gatwick for about 36 hours in December 2018, when around 1,000 flights and 140,000 passengers were affected, and Copenhagen and Aalborg in September 2025. A deliberate campaign would combine strikes with cyber attacks and disinformation.

How it plays out

Minutes the strike

- An Emergency Alert may sound on phones. Then come explosions, the sound of air defence firing, or simply the lights going out.

Do: take cover. Get inside, put two walls between you and the outside, and keep away from windows. Stay there until the all-clear. Don't film or post locations.

Hours 1–24 shock

- Regional blackouts, fires at fuel or gas sites, and smoke. Roads and rail are closed around the targets.
- Mobile networks are overloaded. Rumours and fake alerts spread.
- **Fuel and supermarket panic** starts within hours (see Scenario 2).

Do: follow the first 72 hours checklist. Fill water, check on family, get BBC radio on, and keep the car half full. Don't drive towards the damage.

Days 2–14

life on a schedule

- The grid operator rations power with **published rota blackouts**, often several hours at a time. Water pumps, mobile masts, lifts and boilers stop during "off" hours.
- If gas sites are hit, there may be a gas emergency too (see Scenario 7).
- Warm hubs open in schools, libraries and halls. Further strikes are possible, especially at night.

Do: live by the schedule. When the power is on, charge everything, cook, wash and fill flasks. When it is off, use torches, the camping stove and the warm room. People in flats should keep water and supplies upstairs, and avoid lifts near "off" times.

Weeks–Months

adaptation

- Repairs to large transformers and plants take months, so rota cuts may continue all winter. Businesses adapt with generators, and streets organise.
- Some people leave cities for relatives in the country. Some families split up for a time.

Do: see The Long Haul and Community. Decide your trigger points for moving (see Stay, Move or Leave).

UA WHAT UKRAINIAN HOUSEHOLDS LEARNED

- **Power banks for everyone**, and a portable power station if you can.
- **Gas camping stoves** and spare cartridges for cooking during blackouts.
- **Water stored** for at least 3 days, because pumps stop with the power, especially in flats.
- **Warm clothing and sleeping bags**, with the whole family sleeping in one room.
- **Offline everything:** downloaded maps, printed contacts, cash.
- A **battery radio** and an alert app or neighbours' warning system.

⚠ MISTAKES TO AVOID

- Going outside or to windows to watch an attack.
- Posting videos that show where missiles landed or where air defences are.
- Running generators or BBQs indoors. Carbon monoxide kills in every long blackout.
- Believing "official" messages that ask you to do something unusual. Check them first.

Sources: reporting on Russian strikes on Ukraine's energy system (2022–2025) and Ukraine's Points of Invincibility; Strategic Defence Review 2025; reporting on the Gatwick (Dec 2018), Copenhagen and Aalborg (Sept 2025) drone closures; gov.uk/alerts.

41



Scenario 9 • Undersea Cable & Pipeline Sabotage

Britain is an island joined to the world by cables and pipes on the seabed. They carry almost all of our international internet traffic, electricity from France and Norway, and much of our gas. They are easy to damage, by an anchor dragged across them, and hard to repair, because there are few specialist ships. Several have been damaged in northern Europe since 2022.

6 months

to repair the Balticconnector gas pipeline after an anchor damaged it in October 2023

Shetland

lost most phone and internet for a day after cable damage in October 2022

2030

Parliament's committee wants the UK to own a cable-repair ship by then

~1/3

of Britain's winter gas arrives by pipeline from Norway

What has happened: in October 2023 a ship's anchor damaged the Balticconnector gas pipeline and data cables between Finland and Estonia. On Christmas Day 2024, the Estlink 2 power cable between the same two countries was cut, and Finland detained a tanker suspected of dragging its anchor. In October 2022, damage to the cables serving Shetland cut most phone, internet and card payments on the islands, until a temporary fix the next day. Parliament's national-security committee warned in 2025 that the UK has little sovereign repair capacity.

How it plays out

Hours 0–24

things slow down

- **Internet cables:** some websites, apps and cloud services slow down or fail, especially those hosted abroad. Islands and remote areas with one or two cables can lose almost everything, including card payments and mobile data.
- **Power cables:** less imported electricity, so tighter supply and a higher risk of cuts in a cold snap.
- **Gas pipelines:** a supply warning (see Scenario 7).

Do: download what you need while you still can: maps, documents, this guide, and contacts. Get cash out, and switch to radio for news.

Days 1–7

rerouting

- Most mainland internet traffic is rerouted over other cables. Services return, but slower. If many cables are hit at once, that reserve runs out.
- Payment and banking services that depend on foreign data centres may become unreliable (see Scenario 4).
- Naval patrols and investigations. Rumours and accusations spread online.

Do: keep cash use going and avoid relying on any single app. Island and remote communities should switch to the plans in Communication: radio, notice boards and meeting points.

Weeks–Months

repair queue

- Repairs need a specialist ship and calm weather. In winter, and with several breaks at once, that can take weeks to months.
- Energy prices rise. Power and gas margins stay tight all winter.

Do: plan for an "offline winter". Keep a two-week home stash, a working radio, printed information and a local community network.

Be ready to go offline:

- An old phone or tablet with offline maps (OS Maps or Google offline areas), PDFs of this guide, insurance and ID copies.
- A paper road atlas and an Ordnance Survey map of your area.
- Printed phone numbers, including family, GP, school, bank, water, gas and electricity.
- Cash, and a battery or wind-up radio with FM, medium wave and DAB.

Sources: Joint Committee on the National Security Strategy, *Subsea telecommunications cables* (Sept 2025); reporting on the Balticconnector (Oct 2023) and Estlink 2 (Dec 2024) incidents and on the Shetland cable damage (Oct 2022); National Gas, *Gas Winter Outlook 2025*.

42



Scenario 10 · The Combined Winter Crisis

The scenarios above rarely arrive alone. A hostile state planning to do maximum damage would choose a January cold snap, and combine a cyber attack, strikes or sabotage, and a flood of disinformation. Each failure feeds the next. This payout is **illustrative**: a worst case built from the real events in this part of the guide, to show how the pieces connect and which of your preparations matter most.

How it plays out

Day 0

a freezing
Tuesday

- Overnight, a gas terminal is damaged and a cyber attack hits the grid control systems. A regional blackout spreads at the morning peak, while temperatures sit at -5°C .
- Card payments are patchy and mobile networks fade. Social media fills with fake "official" messages saying the water is poisoned and the army is taking over.

Do: fill water containers while pressure lasts. Get the radio on, bring the household into one room, check on elderly neighbours, and make sure the car is at least half full. **Don't share rumours.**

Days 1–3

cascade

- A gas supply emergency is declared. Industry is cut, then gas power stations, so rota power cuts are announced.
- Fuel panic empties forecourts. Supermarkets are stripped, and cash runs out at cash machines.
- Hospitals switch to paper and emergency-only care. Some homes in the worst-hit areas are told to turn off gas at the meter.

Do: live from the home stash. Run the warm room, the camping stove (ventilated, with a CO alarm) and the power-on rota routine. Keep a low profile: lights covered, no generator noise at night.

Days 4–14

the hard stretch

- Older people in cold homes, people on home oxygen or dialysis, and people who rely on carers are now in real danger. Rest centres and warm hubs fill up.
- Food deliveries are erratic. Theft of fuel and food rises, and some streets organise watches.
- Further strikes or attacks are possible. The government uses emergency powers and the military supports deliveries.

Do: organise your street: one shared warm room, a shared meal, and a list of who needs checking twice a day. Make your security trigger decisions (see Security). Keep a daily routine for morale.

Weeks 2–8

grinding on

- Power returns on a schedule. Gas is restored street by street as engineers reach each home. Prices soar, and some supplies are rationed.
- Many people leave cities for family elsewhere. Some never fully return to the old routines.

Do: restock everything you used as soon as shops recover, because a second wave is more likely while systems are fragile. Then use what you learned to fix your weak points.

The same twelve preparations carry you through every scenario in this guide.



AT HOME

1. Two weeks of water (3 L per person per day) and a way to treat more.
2. Two weeks of food you eat, plus three months of staples.
3. A warm room plan: sleeping bags, layers, insulation, hot-water bottles.
4. A camping stove with winter-grade gas, and a battery CO alarm.
5. Torches, power banks, batteries and a battery or wind-up radio.
6. A bucket toilet kit, and hygiene supplies.



PLANS & PEOPLE

7. 30 days of medicines, and a paper medical file for each person.
8. Cash in small notes, accounts with two banks, and printed documents.
9. A car kept half full, and a get-home bag in it (see Car kit).
10. A family plan for when phones are down: meeting points and who collects whom.
11. Neighbours you know, and a street plan.
12. A household that knows how to stay unseen and stay calm (see Staying Unseen).

Prepare & Reference

The complete home-stash checklist and one-page summaries to print.

43 The Home Stash: Complete Checklist for a Family of Four

44 Quick-Reference: One-Page Summaries

43



The Home Stash: Complete Checklist for a Family of Four

Everything a family of four needs to stay at home through a long breakdown, in one list. Build it in stages:

Level 1 (★) covers the first two weeks and should be every household's minimum; the rest takes you to three months. Tick items off, and note where each is stored.

WATER

- ★ Drinking water: at least 3 L per person per day (2.5–3 L is the survival minimum) — 168 L for four people for two weeks. Aim for 10 L per person per day if you can store it.
- ★ Large containers to fill at the first sign of trouble: 2 × 25 L water carriers, collapsible jerry cans, a **bath bladder** (holds ~200 L in a clean bath)
- ★ Unscented household bleach (sodium hypochlorite, no additives) + dropper/measuring syringe
- ★ Water purification tablets (chlorine dioxide or NaDCC), 2 packs
- ☐ Gravity water filter (ceramic or hollow-fibre) for long-term use
- ☐ Rain butt(s) + diverter, clean food-grade buckets with lids
- ☐ Large pan or kettle for boiling; funnel; hose for siphoning

FOOD (SEE FOOD FOR QUANTITIES)

- ★ 2 weeks of food you already eat (at least ~110,000 kcal for 4; the Food table gives ~140,000)
- ★ 3–5 days of no-cook food
- ★ 2 manual tin openers
- ★ Gluten-free / allergy-safe stock kept separately, labelled
- ☐ 3 months of staples: rice, oats, pasta, lentils, oil, tins
- ☐ Baby formula, food and supplies (4–6 weeks)
- ☐ Pet food (4–6 weeks)
- ☐ Multivitamins; salt; seeds for growing; sprouting seeds
- ☐ Airtight storage buckets; zip-lock bags; foil; cling film

HEAT, COOKING & FUEL

- ★ Two camping stoves (one as a spare) + 2+ weeks' fuel: **winter-grade** cartridges (propane/isobutane mix, because plain butane barely works below about 5°C) or a propane bottle
- ★ Lighters (5+) and matches in waterproof boxes
- ★ **Battery carbon monoxide alarms** (one per room with a flame or sleeper) + smoke alarms with spare batteries
- ★ Sleeping bags rated to -5°C or lower, one per person
- ★ Wool or fleece blankets: 2+ per person
- ☐ Seasoned firewood/fuel if you have a stove or fireplace; kindling, firelighters
- ☐ Indoor-safe gas heater + bottles (with ventilation)
- ☐ Thermal or merino base layers, hats, wool socks for everyone; **warm gloves and waterproof gloves** (or waterproof over-mitts) per person; disposable hand warmers
- ☐ Dark, plain outer layers and a breathable waterproof per person (see Staying Unseen)
- ☐ Hot-water bottles, vacuum flasks, a haybox or insulated bag
- ☐ Bubble wrap/foil insulation, duct tape, draught excluders, a 2–4 person tent for indoor "room in a room"
- ☐ Fire extinguisher + fire blanket

LIGHT, POWER & COMMUNICATIONS

- ★ Head torch per person + 2 LED lanterns
- ★ Wind-up / battery radio with FM and DAB (plus medium wave if possible — Radio 4 long wave closed in 2026)
- ★ Batteries: 40+ AA, 20+ AAA (lithium store longest)
- ★ Power banks (2–3 × 20,000 mAh), charged
- ☐ Portable power station (LiFePO4, 300–1,000 Wh) + folding solar panel (60–100 W)
- ☐ PMR446 walkie-talkies (family set) — licence-free
- ☐ Glow sticks (children, toilet, stairwells)
- ☐ Car phone charger and inverter; **spare USB cables** for every device
- ☐ All-band receiver (shortwave/AM/FM) or a pocket SDR receiver, to hear foreign broadcasts if UK stations go off air
- ☐ Spare old phone with offline maps and documents

SANITATION & HYGIENE

- ★ 2 × lidded 20 L buckets + toilet seat lid
- ★ Heavy-duty bin bags (100+) and clay cat litter / sawdust (2–4 large bags)
- ★ Toilet roll (a month's supply), wet wipes, hand sanitiser
- ★ Soap, toothpaste, toothbrushes, shampoo, dry shampoo
- ☐ Scent-free soap, deodorant and washing powder (see Staying Unseen)
- ☐ Camping shower (pump or solar bag): a proper wash with a few litres of water
- ★ Sanitary products / menstrual cups; nappies; incontinence pads
- ☐ Disinfectant, bleach, rubber gloves, nitrile gloves (100)
- ☐ Washing-up liquid, washing bucket + plunger, pegs, line
- ☐ Spade for latrine/burying waste

HEALTH & FIRST AID

- ★ 30+ days of all prescription medicines (ask your GP about a reserve), written list of medicines
- ★ Comprehensive first aid kit + first aid manual
- ★ Paracetamol, ibuprofen, antihistamines, loperamide, rehydration sachets, antiseptic
- ★ Fingertip **pulse oximeter (SpO₂)** and an **infrared ear thermometer** (or digital), with spare batteries. Cheap, and they tell you who is getting worse (see the Emergency Medical guide)
- ☐ Blood-pressure monitor if anyone has heart or blood-pressure problems
- ☐ Reusable 10–20 ml syringes (wound irrigation, measuring liquid medicines) and 5 ml oral syringes for children
- ☐ Spare glasses, contact lens supplies, hearing-aid batteries
- ☐ Dental kit: temporary filling, clove oil, floss
- ☐ Children's medicines (liquid paracetamol/ibuprofen)
- ☐ Insulin cooling pouch; glucose tablets; testing supplies
- ☐ Sun cream, insect repellent, lip balm, moisturiser

TOOLS & REPAIR

- ★ Multi-tool, adjustable spanner (for gas/water shut-off), screwdrivers, pliers
- ★ Duct tape (4+ rolls), cable ties, paracord/rope
- ☐ Bow saw and axe (firewood), hammer, nails, screws, cordless drill + spare batteries
- ☐ Plastic sheeting / tarps (window and roof repairs)
- ☐ Plywood or boards for windows; door reinforcements (see Security)
- ☐ Work gloves, safety goggles, dust masks (FFP2/FFP3)
- ☐ Sewing kit with strong needles and cotton thread, superglue, WD-40, spare fuses
- ☐ Bike + puncture repair kit + pump; trolley or cargo trailer
- ☐ Foot pump; hand siphon pump for fuel (never siphon by mouth); 2–3 m of hose; epoxy glue

MONEY, DOCUMENTS, INFORMATION

- ★ Cash in small notes and coins (£200–£500)
- ★ Documents grab-file (see Money & documents)
- ★ Printed copy of this guide, contact list and family plan
- ★ Paper maps of your area and routes; compass
- ☐ Notebook, pencils, permanent markers
- ☐ Books, cards, board games, toys, puzzle books
- ☐ One grab bag per person (see The Grab Bag)
- ☐ A car kit and get-home bag in each car (see Car Kit)
- ☐ A paper medical file per person (see NHS cyber attack)

⚠️ OFTEN FORGOTTEN AT HOME

- ! **Knowing how to turn off** the water (stopcock), gas (meter lever) and electricity (fuse box) — find them and label them today.
- ! **Keys** for the gas meter box, side gates and padlocks — and a spare set.
- ! **A non-electric way to open the garage door** (find the manual release now).
- ! **Battery smoke and CO alarms** — mains-wired alarms with no battery backup stop working.
- ! **A corded/analogue way to call out** is disappearing — know where the nearest working phone or emergency point is (see Communication).
- ! **Water in the hot-water cylinder** (often 100–200 L) and the toilet cistern — a hidden supply.
- ! **The freezer as a cold store**: fill gaps with bottles of water; frozen bottles keep food cold and become drinking water.
- ! **Spare car key**, car stocked with blankets and water, tank kept at least half full.
- ! **Enough fuel and batteries for the cold** — butane and ordinary batteries fail in freezing weather.
- ! **Reading glasses** for every adult who needs them, kept with the torches.
- ! **Something to do** — boredom and stress do real damage over weeks.

Storage & rotation: keep supplies spread across the house, not all in one place (security, fire and flood); store in a cool, dry, dark place; check dates, batteries and medicines every 6 months (when the clocks change); keep a written inventory and update it when you use anything.

44



Quick-Reference: One-Page Summaries



FIRST 72 HOURS

- ★ Fill water: bath, containers, pans
- ★ Radio on; torches out; appliances off
- ★ Fuel, cash, medicines — early, calmly
- ★ Check vulnerable neighbours
- ★ Warm room + CO alarms (winter)
- ★ Fridge → freezer → fresh → tins
- ★ Toilet plan ready
- ★ Day 2–3: decide stay or go



KEY NUMBERS

Drinking water	2.5–3 L / person / day
Comfortable water	10 L / person / day
Food, family of 4	~8,000 kcal / day
Fridge safe (door shut)	~4 hours
Freezer (full / half)	~48 h / ~24 h
Healthy room temp	18°C+ (12°C danger)
Petrol at home (no notice)	30 L max
Grab bag	10–15% body weight
Family on foot	~10–15 km / day
Power cut number	105
Gas emergency	0800 111 999
Emergency	999 / 112



STAY OR GO?

- **Official evacuation order** → **GO**
- Warm + water + 2 weeks food → **STAY**
- Home unsafe + known destination → **MOVE EARLY**, daylight, together
- Home unsafe + no destination → **rest centre / pool with neighbours**
- Leaving the UK → only early, with a destination and a right to stay



NEVER

- Run a generator, BBQ or charcoal indoors or in a garage
- Use a gas cooker to heat a room
- Back-feed a generator into house wiring
- Drink untreated water from rivers, floods or radiators
- Walk or drive through flood water
- Leave candles unattended or sleep near them
- Tell strangers what supplies you have
- Carry a weapon or a locking knife in public

Decision flowchart: the first days

Power, fuel, phones or food supply fails — expect it to last.



Hour 1: water stored · radio on · family texted · neighbours checked



Hours 1–12: fuel · cash · medicines · top-up supplies · everyone home



Day 1–2: warm room · CO alarms · toilet plan · eat perishables · street meeting



Day 2–3: is it getting worse?



Safe, warm, supplied → stay; ration; routine; community; watch rota

Unsafe or no heat/water → move early to a known destination, or to a rest centre

Act early · Stay put unless staying is worse · Stay together, stay quiet, stay warm.

UK Crisis Survival Master Guide — UK Edition 2.0

Print this document and keep it with your home supplies, your car kit and your grab bags.

Compiled from: UK National Risk Register, NESO, National Gas, Met Office Space Weather Operations Centre, Ofcom, NCSC, National Audit Office, NHS England, Defra, Drinking Water Inspectorate, HSE, Crown Prosecution Service, UK Government (prepare.gov.uk), Food Standards Agency, Coeliac UK, British Red Cross.

Remember: act early, stay together, stay warm, stay unseen. Most of the time, home is the safest place to be.

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