

BATHROOM EMERGENCY GUIDE / BOOK 7 OF 11



The Olive Book — Zombie Guide

Keep water, care, power, information, and cooperation working.

Actual emergency?

Stop reading and use the local emergency number. In the EU, call **112**. If calling is unsafe, get to a safer place or ask a trusted person to call.

What this book is for

- Which dependency fails first?
- What is the approved backup?
- How does the group coordinate?

What this book does

Keep essential household functions visible, assigned, backed up, and reviewed during disruption.

What it hands off

Does not replace official warnings, clinical device plans, or local evacuation instructions.

7. Deutscher Feuerwehrverband, carbon-monoxide prevention guidance: charcoal grills and generators do not belong in enclosed spaces, and an apparently open door or window does not make them safe. <https://www.feuerwehrverband.de/feuerwehrverband-klaert-auf-rechtzeitige-warnung-vor-kohlenmonoxid-vergiftungen-bieten-nur-co-melder/>↵
8. BBK, "Hygiene in Notsituationen," including water-saving hygiene and preparation for toilet failure. https://www.bbk.bund.de/DE/Warnung-Vorsorge/Vorsorge/Gesundheit-und-Hygiene/Hygiene-in-Notsituationen/hygiene-in-notsituationen_node.html↵
9. Drury J, Cocking C, Reicher S, "Everyone for themselves? A comparative study of crowd solidarity among emergency survivors," *British Journal of Social Psychology* 48 (2009): 487–506. <https://doi.org/10.1348/014466608X357893>↵↵↵
10. Ntontis E, Drury J, Amlôt R, Rubin GJ, Williams R, Saavedra P, "Collective resilience in the disaster recovery period: Emergent social identity and observed social support are associated with collective efficacy, well-being, and the provision of social support," *British Journal of Social Psychology* 60 (2021): 1075–1095. <https://doi.org/10.1111/bjso.12434>↵↵↵
11. Elinor Ostrom, "Beyond Markets and States: Polycentric Governance of Complex Economic Systems," Nobel Prize Lecture (2009). <https://www.nobelprize.org/prizes/economic-sciences/2009/ostrom/lecture/>↵
12. Strafgesetzbuch §32 Notwehr: "Notwehr ist die Verteidigung, die erforderlich ist, um einen gegenwärtigen rechtswidrigen Angriff von sich oder einem anderen abzuwenden." https://www.gesetze-im-internet.de/stgb/_32.html↵
13. BBK, *Ratgeber und Checkliste für Notfallvorsorge und richtiges Handeln in Notsituationen*, the maintained national preparedness guide. https://www.bbk.bund.de/DE/Warnung-Vorsorge/Vorsorge/Ratgeber-Checkliste/ratgeber-checkliste_node.html↵

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No confirmed zombie outbreak is known. Power cuts, floods, heat, cold, contaminated water, smoke, communication failures, and groups improvising a constitution before locating the first-aid kit are real enough.

Infrastructure is invisible right up until it stops. Then everything you never had to think about — water, warmth, medication, charging, sewage, transport, and knowing what is actually true — arrives at once, as a queue, and wants handling in order.

Which is the real work. Not wilderness theatre: **continuity engineering and queue management, with worse lighting.**

This book is for disruptions where ordinary infrastructure still exists in some form but one or more essential household functions are limited, failing, or uncertain. It keeps those functions visible, assigned, backed up, and reviewed. It does not replace live warnings, evacuation instructions, clinical device plans, or emergency services.

Where next?

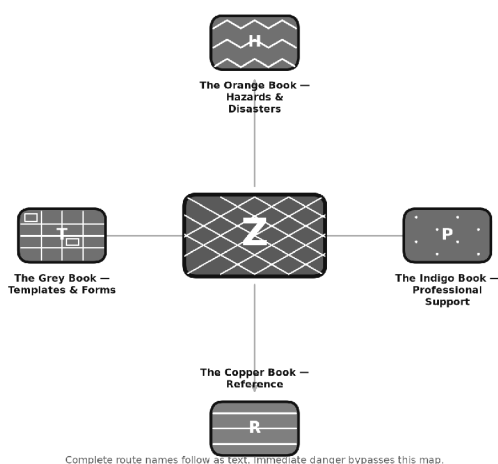
Z

You do not need to complete the shelf in order. Stay here while this is the primary problem; move when another title becomes more accurate.

- **H — The Orange Book — Hazards & Disasters** — use it when that problem becomes primary.
- **P — The Indigo Book — Professional Support** — use it when that problem becomes primary.
- **R — The Copper Book — Reference** — use it when that problem becomes primary.
- **T — The Grey Book — Templates & Forms** — use it when that problem becomes primary.

LOOK CLOSER / MAP · EVIDENCE · DIAGRAM

You are here: Z — The Olive Book — Zombie Guide



Connections from Z — The Olive Book — Zombie Guide

1. Bundesamt für Bevölkerungsschutz und Katastrophenhilfe (BBK), “Warn-App NINA” and “Cell Broadcast.” NINA carries official civil-protection warnings with weather and flood information; Cell Broadcast pushes short official warnings to compatible mobile devices and is designed to be supplemented by a fuller channel. https://www.bbk.bund.de/DE/Warnung-Vorsorge/Warn-App-NINA/warn-app-nina_node.html and https://www.bbk.bund.de/DE/Warnung-Vorsorge/Warnung-in-Deutschland/So-werden-Sie-gewarnt/Cell-Broadcast/cell-broadcast_node.html↵↵
2. BBK, “Essen und Trinken bevorraten.” Current text: an adult needs at least 1.5 litres of fluid per day, with about 0.5 litres of water extra per day if cooking is planned; aim where possible for ten days of self-supply, though a stock for at least three days already helps considerably and can be built up in stages. The combined 2 L/person/day figure used above is this guide's own planning convention. <https://www.bbk.bund.de/DE/Warnung-Vorsorge/Vorsorge/So-koennen-Sie-sich-vorbereiten/Bevorraten/bevorraten.html>↵↵
3. 116117 Patientenservice / ärztlicher Bereitschaftsdienst. The service states it is reachable around the clock, 24 hours a day and seven days a week, for urgent problems that are not life-threatening; life-threatening emergencies belong to 112. <https://www.116117.de/de/aerztlicher-bereitschaftsdienst.php>↵
4. Deutsches Rotes Kreuz, “Erfrierungen und Unterkühlungen.” DRK routes both described stages of hypothermia to 112. Stage I: warm place, slow warming, remove wet clothing, wrap in blankets, no active heat by rubbing or hot water bottle, warm sweet non-alcoholic drinks if the person is conscious. Stage II (slowed breathing, muscle rigidity, drowsiness or unconsciousness): no further warming attempts, recovery position if unconscious and breathing, CPR if breathing is not normal. <https://www.drk.de/hilfe-in-deutschland/erste-hilfe/erfrierungen-und-unterkuehlungen/>↵
5. BBK, current heat guidance: cooling, hydration, reduced exertion, checks on vulnerable people, and emergency escalation for severe heat illness. https://www.bbk.bund.de/DE/Warnung-Vorsorge/Vorsorge/Mit-Naturgefahren-umgehen/Hitze-Duerre/hitze-duerre_node.html↵
6. BBK, “Vorsorge und Handeln bei Stromausfall.” Covers alternative heating, oxygen-deficiency and flame-failure safety devices for gas appliances, carbon-monoxide detectors, cooking without mains power, and the explicit warning not to use a grill inside the flat or house because of the suffocation risk. https://www.bbk.bund.de/DE/Warnung-Vorsorge/Vorsorge/Stromausfall/stromausfall_node.html↵↵

FIELD NOTE 01

Verify before optimizing

[zomb.1.1]

Before rationing toothpaste or founding a perimeter committee, verify that the crisis exists and identify what kind of failure is actually occurring.

1. Check official warnings: **NINA**, Cell Broadcast, local radio, municipality, police, fire service, or BBK.¹
2. Identify the hazard: fire, flood, chemical release, outage, heat, cold, violence, or ordinary rumour wearing tactical trousers.
3. Decide whether authorities say **shelter** or **evacuate**.
4. Tell one other person what you know and where you are.
5. Recheck the source before forwarding it.

Live official instructions outrank this static book.

Cell Broadcast is deliberately short. Use a fuller official channel — NINA, local radio, the federal warning portal — for detail and updates when you can.¹

Do not leave a safe building merely because a group chat has cinematic energy.

FIELD NOTE 02

The continuity invariant

[zomb.1.2]

A disrupted household is easier to reason about as functions than as a pile of objects. For every essential function that is active, limited, failed, or uncertain, record:

1. **status** — what works right now?
2. **reserve** — how much safe time, stock, charge, treatment, or support remains?
3. **owner** — who is actually checking it?
4. **backup** — who or what takes over?
5. **next action** — what visible physical action happens next?
6. **review** — when will this be checked again?
7. **failure route** — what condition changes the plan or calls in outside help?

“Someone is handling water” is not continuity. “Mara checks the sealed-water count at 18:00; Deniz is backup; below twelve litres we call the distribution point” is.

Household continuity systems and ownership fields [zomb.fig.2]

What must be recorded for each household continuity function?

LOOK CLOSER / MAP · EVIDENCE · DIAGRAM

HOUSEHOLD CONTINUITY BOARD

Protect the function · name the owner · define the backup · set the next check

INFORMATION	AIR AND HAZARD
What is confirmed, by whom, and when will it be checked again? Use all full warnings, and are shared update channels.	Is the place safe to occupy? Run the environmental avoidance before trouble-shooting or conserving supplies.
CARE AND POWER	WATER
Which treatment, device, medicine, or caregiver function cannot pause? Use the approved personal backup and call early within a safe bridge interval.	What water is safe, how much remains, and what use has priority? Separate drinking and food preparation water from washing and waste water.
TEMPERATURE AND SHELTER	FOOD AND COOKING
Can everyone remain dry, ventilated, and within a safe thermal environment? Use the safest available shelter and restore exposure before activating comfort.	What can be eaten safely with the available water, energy, and access needs? Use safe preservation first, keep cold storage closed, and preserve familiar stable foods.
SANITATION	PEOPLE, ACCESS, AND TRANSPORT
How are hands, toilets, waste, and clean zones kept separate? Remove waste water (or drinking and essential food use), separate clean and dirty handling.	Who cannot receive a warning, leave, enter, communicate, or reach the destination without help? Ask what support is needed and name the destination, caregiver, route, and communication method.

FOR EACH ACTIVE SYSTEM

status · remaining safe window/stock · owner · backup · next action · review time · failure escalation

FUNCTION	STATUS QUESTION	RECORD NOW
information	what is confirmed and when is the next update?	source, owner, next check
air and hazard	is the place safe to occupy?	safe area, re-entry authority
care and power	what treatment, device, medicine, or caregiver cannot pause?	runtime, approved backup, destination
water	what is safe and how much remains?	stock, rate of use, refill route
temperature and shelter	can everyone stay dry, ventilated, warm or cool enough?	vulnerable people, room status, move trigger
food and cooking	what can be prepared safely with current water and power?	refrigeration, allergies, next meal
sanitation	how are hands, toilets, waste, and clean zones separated?	toilet status, waste route, supplies
access and transport	who cannot receive a warning, leave, enter, or travel without help?	person, helper, route, keys, communication

FIELD NOTE 03

First minutes — protect what fails fastest [zomb.1.3]

The exact order depends on the hazard. A useful default:

1. immediate safety and breathable air;
2. urgent medical needs;
3. protection from heat, cold, wind, and rain;
4. reliable water;
5. communication and location;
6. medication, essential care, and food continuity;
7. sanitation and longer-term organization.

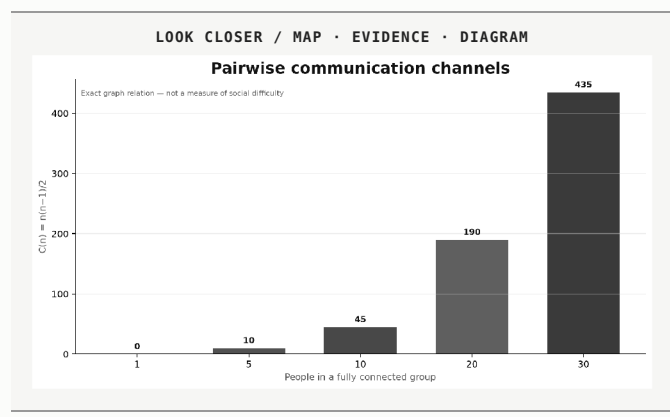
Food is important. It is rarely the first ten-minute problem unless someone has a condition requiring immediate intake.

Scaling chart — architecture sketch, not population law

Coordination scaling from one person to a community

[zomb.fig.3]

How does coordination change as a group grows?



The chart is kept as an architecture sketch. Do **not** read its head-count bands as empirical cut-offs. The operational text uses the qualitative transition instead: direct coordination → written assignments → shared logs and teams → explicit accountability and institutional memory.

unique pairs.

Why everyone-tells-everyone stops scaling

[zomb.fig.5]

How quickly do possible pairwise communication channels grow as a group grows?

LOOK CLOSER / MAP · EVIDENCE · DIAGRAM

People in group (log scale)	Possible pairwise channels (log scale)
2	1
3	3
5	10
10	45
20	190
50	1,225
100	4,950

What to notice:

Pairwise channels grow quadratically, so larger groups need named roles, shared logs, and scheduled briefing routes.

Limit:

Possible channels are not the same as actual messages, trust, hierarchy, or organisational performance.

The arithmetic is exact. Organizational thresholds derived from it are not: no particular head count makes a shared log necessary. The real lesson is that “everyone tells everyone” grows expensive and fragile, so shared logs, briefings, and explicit handoffs replace it when direct conversation stops being reliable.

Dunbar numbers — descriptive research, not a crisis zoning code

Research on social network layers describes relationships as roughly nested circles of different sizes. These are interesting observations about human social organization, not thresholds for deciding when your block needs a minister of batteries.

What survives as practical advice:

nobody can maintain every relationship equally;

smaller working groups execute; larger groups keep records;

a community is not failing merely because it contains subgroups.

Prisoner’s dilemma — one model among better ones

Repeated-game models illustrate one reason cooperation can be stable: people expect to meet again, can observe behaviour, and have ways to respond to breaches and restore cooperation. It is a tidy story and it is not the main one. Real disaster cooperation runs on shared identity, common fate, norms, material conditions, and institutions — which is why the operational advice in this book cites emergency research rather than game theory.⁹¹⁰

Pareto principle — useful attention, not a literal law

The 80/20 rule is a heuristic, not an emergency equation. A few actions often produce most of the immediate benefit:

leave the active hazard;

call for help;

protect air and temperature;

secure water, medication, and essential care;

establish reliable information and roles.

BE 5.1.2

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Priority pyramid for disrupted infrastructure

[zomb.fig.4]

Which continuity needs should be stabilized before later comforts?

LOOK CLOSER / MAP · EVIDENCE · DIAGRAM

DISRUPTION PRIORITIES

VERIFY HAZARD · FOLLOW OFFICIAL INSTRUCTIONS

SAFE AIR · FIRE / CO / CHEMICAL CONTROL

WATER · MEDICATION · ESSENTIAL CARE

SHELTER · TEMPERATURE · HYGIENE

FOOD · POWER · INFORMATION

ROLES · REST · RECORDS · NEIGHBOURS

Orange owns the live environmental hazard. Red owns immediate first aid. Blue owns relocation when the current place cannot support a person. Indigo owns the professional system. Olive owns the continuity queue once the next safe action is known.

FIELD NOTE 04

Water — priority zero after air and immediate safety

[zomb.1.4]

Current BBK guidance is that an adult needs at least **1.5 litres of fluids per day**, and that if you plan to cook you should allow about **0.5 litres of water per day on top**.² Adding those gives this guide its deliberately simple planning estimate:

$$W_{plan} = 2nd \text{ litres}$$

for n people over d days. That is a stock-planning convention of ours, not a physiological law, and not a number BBK publishes.

Household drinking and cooking water

[zomb.fig.7]

How much drinking and cooking water does the BBK planning value imply for one to six people over three and ten days?

LOOK CLOSER / MAP · EVIDENCE · DIAGRAM

People in household	Start: 3 days (L)	Build toward: ... (L)
1	6	20
2	12	40
3	18	60
4	24	80
5	30	100
6	36	120

What to notice:

At two litres per person per day, household stock scales linearly with both people and days.

Limit:

Heat, illness, pregnancy, breastfeeding, work, pets, and hygiene can require more; local do-not-use notices override household calculation.

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BBK suggests managing for **ten days** where practical, while saying plainly that a stock for **at least three days already helps a great deal** and can be built up gradually.² At the two-litre planning value, one person has 6 L for three days or 20 L for ten; a four-person household, 24 L or 80 L. Containers, weight, storage space, and rotation are part of the equation even when algebra would prefer not to carry bottles upstairs.

Add pet needs. Heat, illness, pregnancy, breastfeeding, medication, and physical work can all increase requirements.

- Store potable water in clean food-safe containers.
- Rotate stock according to product and container guidance.
- Follow local boil-water or **do-not-use** notices exactly.
- Filtering cloudy water through cloth removes particles, not dissolved chemicals or all microorganisms.
- Boiling does not remove fuel, solvents, pesticides, salt, or radioactive contamination.
- Do not use generic bleach-drop recipes: products and concentrations differ.
- Separate drinking-water containers from washing and waste containers.

Finding and evaluating water

In a genuine emergency, official distribution points and sealed household supplies beat improvised natural sources. Surface water can carry microorganisms, sewage, agricultural runoff, or chemicals even when it looks clear.

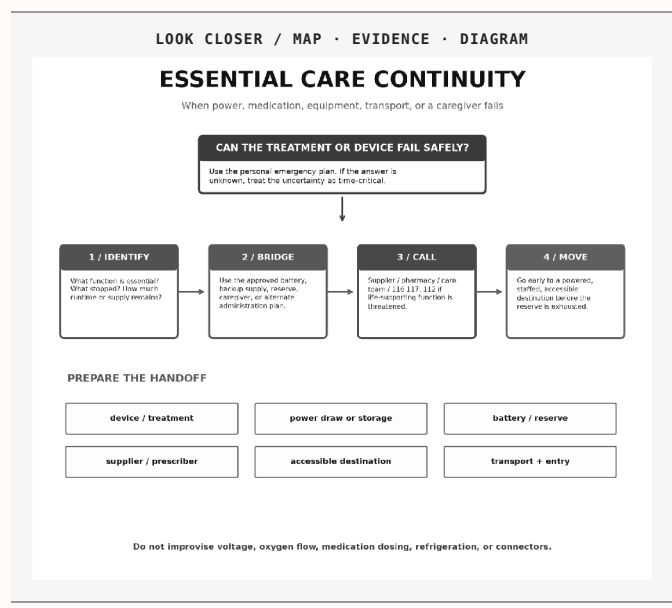
If no safe source exists, contact the responsible local authority for current instructions, and emergency services when there is an actual emergency. A four-line universal purification recipe would be comforting, compact, and dishonest.

FIELD NOTE 05

Essential medication and powered-device continuity [zomb.1.5]

Essential treatment and powered-device continuity map [dis.fig.1]

What treatment or powered-device dependencies require an early backup route?



An outage becomes a medical route when a treatment, device, storage condition, caregiver, or accessible transport cannot be safely bridged. Do not wait for the last battery bar to become emotionally persuasive.

1. **Identify the function.** Which treatment or device is essential? What failed? How much approved battery runtime, medication, oxygen, cooling, or caregiver coverage remains?

FIELD NOTE 23

Optional reading — models that are not prerequisites for action [zomb.1.23]

If air, water, medical care, shelter, or a safe destination is failing, go back to the operational sections. These are kept because they explain useful ideas, not because a crisis owes you time to finish the maths.

Survival probability — valid mathematics, unusable prophecy

A standard survival function can be written as

$$S(t) = \exp\left(-\int_0^t h(u) du\right)$$

where $h(u)$ is a hazard rate. Without measured hazards it predicts nothing whatsoever about your personal future. Its practical lesson is simpler: reduce known hazards — smoke, unsafe water, cold, heat, isolation, untreated illness — instead of inventing a percentage for survival.

Heat balance — explanatory, not a bathroom calculation

A conceptual heat balance:

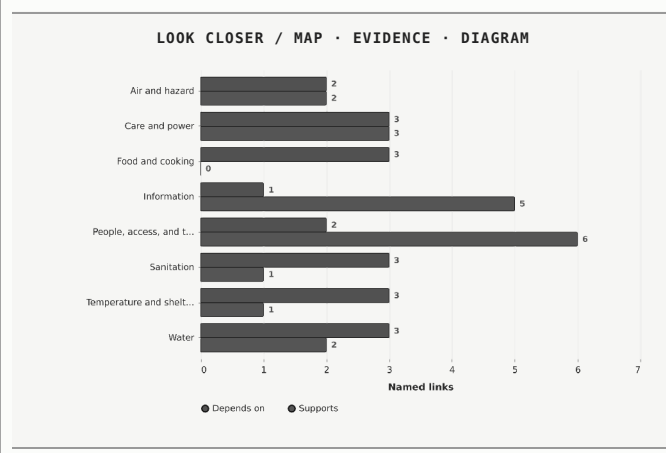
$$\Delta H = M - (C + K + R + E)$$

where M is metabolic heat and the remaining terms are convection, conduction, radiation, and evaporation. It explains why wind, wet clothing, ground contact, shade, airflow, and exertion matter. It is not a home calculator for declaring somebody safe.

Architecture audit — which functions are coupled?

Continuity systems are coupled [zomb.fig.6]

Which household-continuity systems name the most dependencies and support the most other systems in the current guide model?



What to notice: Information, water, care/power, and access appear repeatedly across other functions, so a narrow failure can propagate through the plan.

Limit: Link counts describe this guide's planning model, not hazard probability, causal strength, or a universal ranking of household needs.

This is an audit of this guide's own model, not a hazard score.

Depends on counts prerequisites named by one system; **supports** counts how many other systems name it. A high count means "expect handoffs and cascading effects," not "this will fail first."

Pairwise channels — exact arithmetic, qualitative lesson

A fully connected group of n people has

$$C(n) = \frac{n(n-1)}{2}$$

1. avoid and leave when it is safely possible;
2. create barriers, distance, light, witnesses, and communication;
3. contact police or emergency services;
4. protect vulnerable people without creating another casualty;
5. if immediate defence becomes unavoidable, use only what is necessary to stop the attack that is happening now;
6. obtain medical and qualified legal help afterward.

This guide does not teach weapons, traps, combat, vigilantism, or property violence. German self-defence law is fact-specific: §32 StGB defines Notwehr as the defence *necessary* to avert a present unlawful attack on oneself or another.¹² Every word in that sentence has done years of litigation. Blue and Indigo own the safety and legal-routing detail.

FIELD NOTE 21

Evacuation pocket list

[zomb.1.21]

Take what is immediately useful without delaying an urgent evacuation:

- phone and power bank;
- medication and medication list;
- ID, keys, payment method, essential documents;
- water and simple food;
- weather layer and sturdy shoes;
- small first-aid kit;
- glasses, hearing aids, mobility and communication supplies;
- infant, disability, menstrual, and pet supplies;
- radio or warning access;
- written destination, meeting point, and contact.

Leave weapons, looting fantasies, and twelve kilograms of philosophical literature unless the authorities have specifically requested an ethics seminar.

FIELD NOTE 22

Preparedness checklist — before anything happens

[zomb.1.22]

AREA	READY?	NEXT ACTION
official warning apps / radio	☐	
water and familiar food	☐	
medication and care supplies	☐	
lights, batteries, charging	☐	
documents and contacts	☐	
household evacuation plan	☐	
support plan for dependants	☐	
fire/CO safety	☐	
hygiene and toilet failure plan	☐	
neighbour / mutual-aid contact	☐	

BBK maintains the fuller national checklist and keeps it current, which is a better place for the details than a book printed once.¹³

Preparedness is not a personality or a bunker aesthetic. It is the quiet removal of tomorrow's stupidest problems.

2. **Use the approved bridge.** Switch only to a battery, reserve, alternate administration method, backup caregiver, or powered destination already specified by the care team or manufacturer.
3. **Call early.** Contact the supplier, pharmacy, prescriber, care service, or **116 117** while a safe bridge still exists. The medical on-call service is reachable around the clock for urgent problems that are not life-threatening; life-threatening emergencies belong to **112**.³
4. **Move before exhaustion.** Go to a known staffed, powered, accessible place. Tell them the device, treatment, remaining runtime, power need, mobility and communication needs, and transport constraints.

Call **112** when a life-supporting function is interrupted, breathing or consciousness changes, or serious harm is imminent because the bridge or transfer will fail before help arrives.

Do not improvise voltage, connectors, oxygen flow, refrigeration temperature, medication dose, or fuel use. A technically creative adapter is not improved by being attached to someone's breathing.

Record these before an outage:

FIELD	HOUSEHOLD VALUE
essential device or treatment	
power draw / battery runtime / storage range	
approved backup and where it is	
supplier, pharmacy, prescriber, care service	
accessible powered destination	
transport and who can help	
112 escalation condition	

FIELD NOTE 06

Shelter and temperature

[zomb.1.6]

Exposure can become urgent long before hunger.

Use the available building or location only if it is safer than the hazard. Hazard-specific movement belongs to Orange and to current official instructions:

- **flood:** move away from flowing water; follow evacuation or shelter orders;
- **fire/smoke:** leave by a safe route; never choose smoke as shelter;
- **chemical release:** follow official indoor-shelter or evacuation guidance;
- **cold/wind/rain:** stay dry, block wind, insulate from the ground, add layers;
- **heat:** seek shade or a cooler space, reduce exertion, drink normally when safe, check vulnerable people;
- **storm:** avoid windows, loose objects, trees, and exposed structures.

For outdoor temporary shelter, insulation below the body matters as much as material above it. Use dry clothing, mats, cardboard, blankets, or vegetation only when safe and permitted. Do not choose flood channels, unstable slopes, rockfall zones, dead trees, or a charming patch directly beneath lightning.

| Cold

If you suspect **hypothermia** rather than ordinary cold, call **112**. Current DRK first-aid guidance routes hypothermia to emergency services at both stages it describes — this is not a judgement call about whether it has become “significant” yet.⁴

While waiting, and while the person is still shivering and fully awake:

- get them out of wind and wet, into a warm place;
- remove wet clothing and wrap them in dry blankets;

- warm them **slowly**;
- if they are fully conscious, warm sweet drinks such as tea are fine — never alcohol;
- no rubbing, no hot water bottle, no intense direct heat.**

If shivering stops and they become drowsy, stiff, or hard to rouse, that is the more serious stage: **stop trying to warm them**, keep them covered and still, and wait for the ambulance. If they are unconscious but breathing normally, use the recovery position. If they are not breathing normally, start CPR.

Note that one instruction does not change between the stages: no rubbing and no direct heat, ever. Cover, do not scrub.

Heat

- move to shade or a cooler place;
- reduce exertion and excess clothing;
- drink normally when safe;
- cool the skin with water and airflow;
- check infants, older adults, chronically ill people, pregnant people, and anyone unable to communicate or move independently;
- call **112** for confusion, collapse, seizure, markedly altered consciousness, or another severe heat illness.⁵

FIELD NOTE 07

Air, fire, and carbon monoxide [zomb.1.7]

Never operate a **generator, charcoal grill, or any other appliance meant for outdoor use** inside a home, garage, cellar, tent, or bathroom. BBK’s own outage guidance is blunt about the grill: not in the flat, not in the house, because of the suffocation risk.⁶ Fire-service guidance is the same for generators and charcoal, and notes that an open door or window does not make an enclosed space safe.⁷

The test is not the fuel, it is the approval. If an appliance is not specifically intended and installed for indoor use, treat it as outdoor-only. For equipment that is intended for indoors — an installed gas heater, for instance — follow its ventilation and manufacturer requirements exactly; BBK recommends professional advice for alternative heating, safety devices such as oxygen-deficiency and flame-failure cut-offs, and a carbon-monoxide detector.⁶

Carbon monoxide is colourless and odourless. Move to fresh air and call **112** if poisoning is suspected.

An unknown gas or chemical smell means no matches and no electrical switches. Follow Orange’s source-location rule and current official instructions; for a suspected gas release, leave by a safe route and call from outside.

FIELD NOTE 08

Food [zomb.1.8]

- Use refrigerated perishables first while they remain safe.
- Keep fridge and freezer doors closed during outages.
- Follow official discard guidance after prolonged outages or flooding.
- Smell and appearance cannot detect every pathogen or toxin.
- Store familiar foods household members can actually eat and prepare with the water and energy available.
- Include infant, allergy, disability, cultural, and pet needs.
- Do not forage from a bathroom guide. Plant identification by vibes has a poor safety record.

FIELD NOTE 09

Medication [zomb.1.9]

- Keep an up-to-date medication and allergy list.

SYSTEM	MINIMUM CONTROLS
water	source, treatment status, storage, allocation, contamination report
food	inventory, allergies, refrigeration status, cooking fuel
energy	priority loads, charging schedule, fuel safety, shutdown authority
sanitation	toilet plan, handwashing, waste route, cleaning responsibility
health	medication, first aid, vulnerable-person checks, referral route
information	official source, update time, rumour correction, meeting point

FIELD NOTE 19

If the disruption lasts — shared rules without emergency cosplay [zomb.1.19]

Do not invent a government in the first ten minutes. But if several households are managing shared resources for days or longer, resource rules and accountability stop being politics and become continuity infrastructure.

Improvised group governance does not override evacuation orders, emergency services, clinical plans, public-health instructions, or an authority already responsible for the incident.

Nobody needs to hold a participatory vote on whether the fire brigade’s evacuation order has sufficient democratic legitimacy.

Forms of self-administration

MODEL	STRENGTH	RISK	GOOD USE
coordinator	fast	dependency or unchecked power	immediate short crisis
majority vote	clear decision	minority needs ignored	bounded choices
consensus	broad support	slow or blocked	small trusted group
consent	proceed unless reasoned objection	requires facilitation	operational teams
delegated teams	expertise and speed	silos	larger, multi-team work
rotating roles	distributes power and fatigue	continuity loss	ongoing work

Use different models for different decisions. Nobody needs consensus on calling 112. Everyone affected should have a meaningful voice in long-term rationing rules.

Ostrom’s commons principles — useful later, not emergency scripture

Long-lived self-governed commons often include:¹¹

- clear boundaries around resource and users;
- rules fitted to local conditions;
- participation by affected users in changing rules;
- monitoring accountable to the group;
- graduated responses to rule violations;
- accessible conflict resolution;
- recognition of the group’s right to organize;
- nested layers for larger systems.

The bathroom translation: define the water, define the users, write the rule, record use, and resolve conflict before somebody declares themselves Hydration Chancellor.

FIELD NOTE 20

Self-defence is not a continuity strategy [zomb.1.20]

Priority order:

we move the charging schedule forward” is an assignment.

Confidence is not a credential. Build a route for dissent: a second check, written uncertainty, or a person who can stop a plan when they see a hazard.

FIELD NOTE 16

Communication as the group grows

[zomb.1.16]

Do not derive a constitution from a head count. The practical pattern is qualitative:

GROUP CONDITION	WHAT STARTS BREAKING	ADD NEXT
very small, everyone talks directly	unstated assumptions, absent backups	explicit roles and check-ins
growing	missed tasks, the same conversation repeated	task board, shared briefing, backups
several teams	contradictory updates, information silos	shared log, representatives, handoffs
large or long-lived	informal authority, fatigue, lost memory	review, rotation, complaints, onboarding, nested teams

Every time coordination gets harder, communication and accountability have to grow with it. Adding people without adding structure is not community scaling; it is a larger argument.

Useful channels: a bulletin, a radio channel, a shared log, a scheduled briefing, clearly named coordinators. The aim is not maximum communication. It is getting the same important fact to the people who need it without making every person relay every message.

FIELD NOTE 17

Cooperation and collective resilience

[zomb.1.17]

Groups under threat can show rumour, conformity pressure, conflict, exhaustion, and in-group/out-group thinking. They also, repeatedly and measurably, show rapid mutual aid and strong solidarity — crowds in real emergencies are not the selfish stampede of disaster films.⁹ Shared identity and observed support are associated with collective efficacy and well-being during recovery, not merely during the dramatic hour.¹⁰

Treat cooperation as a capacity to support, not a miracle to assume or a myth to dismiss.

- publish confirmed facts and uncertainty separately;
- correct rumours without humiliating the person;
- begin cooperatively where it is reasonably safe;
- make expectations and resource rules visible;
- respond to exploitation proportionately;
- allow repair after a breach where safety permits;
- record shared-resource decisions;
- avoid humiliating punishment, which only creates future conflict inventory;
- rotate exhausting or powerful roles;
- create complaint and appeal routes;
- include affected minorities and people with access or care needs;
- schedule rest, and keep ordinary rituals such as meals and check-ins.

Game theory is not permission to call your neighbour “Player B” while taking his batteries.

FIELD NOTE 18

Water, energy, and hygiene at group scale

[zomb.1.18]

At group scale, assign named roles and logs:

- Maintain a reasonable reserve agreed with prescriber or pharmacy.
- Plan refrigeration, power, administration equipment, and replacement routes.
- Keep medicines dry, labelled, and away from children.
- Do not ration or substitute prescription medicines without professional advice unless an emergency plan specifically instructs it.

FIELD NOTE 19

Energy

[zomb.1.19]

Use energy in this order unless the actual situation changes it:

1. life-supporting medical devices and emergency communication;
2. lighting and information;
3. refrigeration where medically or food-safety critical;
4. cooking and thermal comfort;
5. everything else.

- Charge devices while power exists.
- Use power banks and batteries safely.
- Keep flame-based lighting away from gas, oxygen, children, and combustibles; battery lights are preferable.
- Never back-feed household wiring with an improvised generator connection.
- Follow manufacturer guidance for every appliance and fuel source.

Do not spend the first hour colour-coding canned beans while smoke enters the stairwell.

FIELD NOTE 11

Hygiene and toilet failure

[zomb.1.11]

Reserve clean water for drinking and essential food preparation. Keep hands clean after toilet use and before handling food. Separate clean and dirty zones. If toilets fail, follow municipal sanitation guidance and keep waste away from food, living areas, and water sources.⁸

Useful supplies: soap, sanitizer where appropriate, toilet paper, menstrual products, nappies, waste bags, gloves, disinfectant used according to label, and personal care supplies.

FIELD NOTE 12

Reading traces and observing the environment

[zomb.1.12]

“Reading traces” means situational awareness, not wilderness detective theatre:

- note water level, smoke direction, wind, damaged power lines, unstable walls, blocked exits, animal behaviour, traffic, and official markings;
- compare changes over time;
- photograph conditions when safe;
- mark hazards for others when useful;
- never enter a dangerous area merely to obtain better evidence.

Observation serves decisions. It does not make the observer invulnerable.

FIELD NOTE 13

Mini collapsing-society guide — or, more often, several bad days with broken infrastructure

[zomb.1.13]

The phrase is deliberately dramatic. Most real events are temporary service failures, local disasters, evacuations, or strained institutions.

Behave in a way that still makes sense when the power returns and everyone remembers your name.

Account before acquiring

1. inventory before acquiring more;
2. record owners and shared stock;
3. prioritize water, medication, food safety, warmth and cooling, communication, care supplies, and sanitation;
4. avoid dangerous or illegal entry;
5. distribute shared resources by need and agreed rules;
6. keep a visible reserve rather than hiding every uncertainty in one cupboard.

RESOURCE	QUANTITY	DAILY USE	OWNER/SHARED	REORDER/ESCALATION
water				
medication				
food				
batteries				
hygiene				

Capability inventory

Supplies are only one kind of capacity. Record the human and infrastructural capabilities too:

CAPABILITY	PERSON / PLACE	AVAILABLE UNTIL	BACKUP
first aid or clinical knowledge			
medication, device, or care knowledge			
translation or communication access			
repair, electrical, plumbing, or building knowledge			
transport, lifting, or accessible transfer			
cooking, sanitation, childcare, or animal care			
radio, printing, mapping, or record keeping			

Do not turn a skilled person into an inexhaustible public utility. Name relief, backup, and a handoff route for them as well.

Check people whose continuity may fail sooner

Check people who may have difficulty receiving warnings, evacuating, obtaining supplies, regulating temperature, or communicating:

- children;
- older adults;
- disabled and chronically ill people;
- pregnant and postpartum people;
- isolated neighbours;
- people dependent on electricity, refrigeration, oxygen, medication, or care;
- people exposed to violence or homelessness;
- animals.

Ask what support is wanted. Do not convert vulnerability into permission to remove autonomy.

FIELD NOTE 14

Several households — coordinating without inventing a tiny dictatorship

[zomb.1.14]

When several people share infrastructure, individual continuity becomes a coordination problem. That does not mean panic and

selfishness. Research on real emergencies repeatedly finds mutual aid, solidarity, and support, particularly where people experience a sense of common fate or shared identity.⁹¹⁰

The first meeting

Keep it short:

1. What happened, and what is confirmed?
2. Is anyone missing, injured, unsafe, or without essential care?
3. Which continuity systems are okay, limited, failed, or unknown?
4. What must happen in the next two hours?
5. Who owns each task, and who is backup?
6. When is the next briefing?
7. How can a person raise an urgent concern or a disagreement?

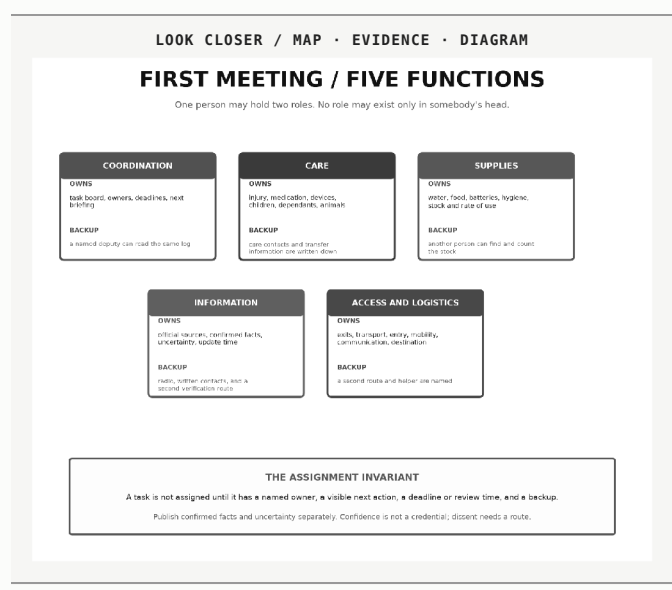
Minutes should record decisions, owners, backups, and review times — not every sentence spoken while the biscuits were still available.

Five functions for the first meeting

Five operational functions for a short crisis meeting

[zomb.fig.1]

Which five functions should a short crisis meeting assign?



FUNCTION	OWNS
coordination	task board, owners, deadlines, next briefing
care	injury, medication, devices, children, dependants, animals
supplies	water, food, batteries, hygiene, stock and use rate
information	official sources, confirmed facts, uncertainty, update time
access and logistics	exits, transport, entry, mobility, communication, destination

One person may hold two functions in a small household. No function may exist only in somebody's memory. Every role needs a visible log or handoff another person can understand.

FIELD NOTE 15

The assignment invariant

[zomb.1.15]

A task is not assigned until it has:

1. a named owner;
2. a visible next physical action;
3. a deadline or review time;
4. a named backup or failure route.

"Someone check the batteries" is a wish. "Sam counts charged batteries by 19:00; Lee records the result; no lighting reserve means