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MODULE 6

STORMS



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Storms



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About This Module

You cannot stop a storm, but you can prepare for one. Storms bring high winds, heavy rain, snow, hail and sometimes thunder and lightning. They can damage buildings, bring down trees and power lines, and disrupt electricity, water and telecommunications.

Rural and isolated communities, especially those on overhead power lines, often wait longest for repairs. In January 2025, Storm Éowyn left over one million Irish homes without power, some for more than two weeks.

This module is built around Ireland's experience, but severe windstorms affect the whole of Northern and Western Europe.

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Learning Outcomes

By the end of this module, you will have learned:



- Describe the main types of storm, and why rural areas are often affected longest
- Read and act on an official storm warning
- Identify who in your household and community may need extra support
- Prepare practical actions for before, during and after a storm, built around a 72-hour goal
- Recognise the specific dangers: fallen power lines, carbon monoxide, going outdoors in high winds
- Take part in community recovery, and commit to one household and one community action

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02 Preparedness

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01

Understanding the Risk

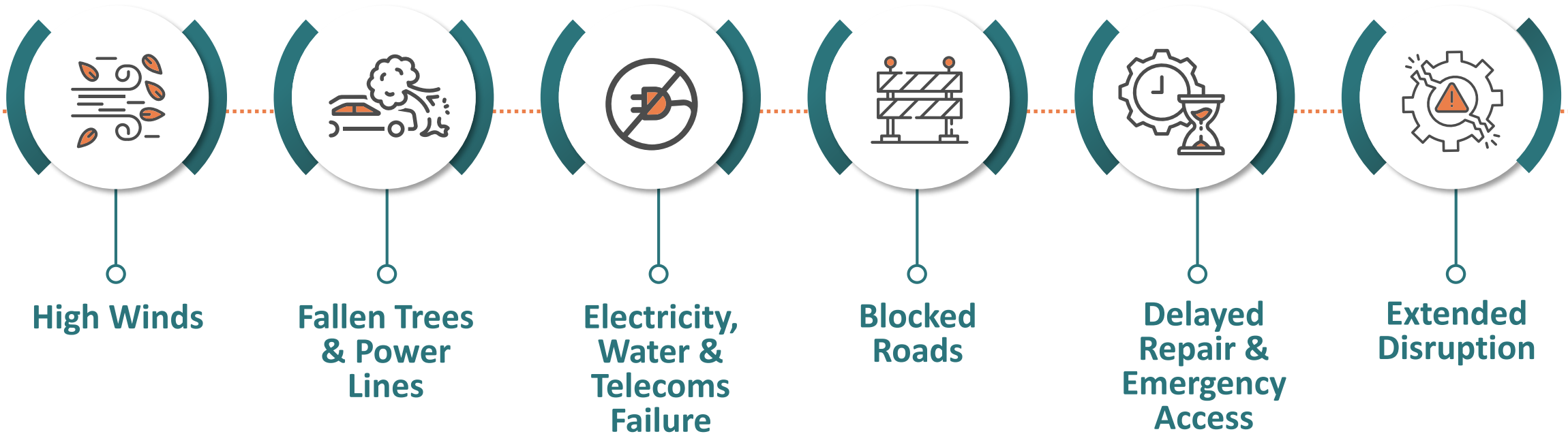
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Types of Storms

Many storms fit more than one category, and can bring flooding too — see Module 2.

- **Windstorms**
Powerful Atlantic systems bringing destructive winds, fallen trees and power lines
- **Snow & Cold-Wave Storms**
Heavy snow, ice and blizzard conditions that isolate communities.
- **Thunderstorms**
Fast-developing, with hail, lightning and flash flooding.
- **Coastal Storms**
Strong winds plus high tides create a storm surge, flooding coastal areas.
- **Mediterranean Storms**
Intense rainfall and wind, including regional systems like the lodos.

A Possible Chain of Impacts





A Possible Chain of Impacts

One problem quickly leads to another:

Heavy rain causes worse flooding when the ground is already saturated, and fallen trees slow down the emergency response itself.

This is why the effects that follow a storm can be harder to manage than the weather itself.



**AVERAGE ANNUAL STORM AND
WEATHER-RELATED LOSSES IN EUROPE
ROSE FROM €8.5 BILLION IN THE 1980s
TO €44.5 BILLION IN 2020–2023**

European Environment Agency, 2024

Ireland

Storm Éowyn, January 2025

- 184 km/h record gust at Mace Head, a record broken since 1945
- 1,000,000+ homes and businesses lost power - the largest outage in Irish history
- Up to 3 weeks to restore power in isolated rural areas
- GAA clubs, pubs and hotels opened as charging and welfare hubs; farmers cleared blocked roads.



*“The largest power outage in Irish history
— and neighbours filled the gap.”*

Ireland

Storm Emma, 2018

- 69 cm of snow at Glenmacnass — Ireland's first-ever nationwide Red snow warning
- Around 95 deaths linked to the wider cold spell across Britain and Ireland
- Volunteers with 4x4s ferried nurses, doctors and dialysis and maternity patients to hospital.



“When ambulances couldn't get through, farmers with tractors did.”

Ukraine

A light gray map of Europe is shown in the background. Ukraine is highlighted in a dark teal color. A small black box is drawn over the northern part of Ukraine, and a line connects it to the text 'Points of Invincibility' in the list.

November 2023 Black Sea Storm

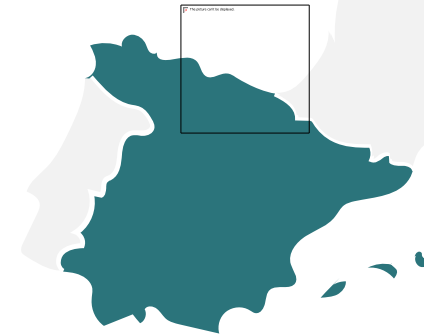
- 400+ settlements lost power across 11 regions
- 2,500+ people rescued in the Odesa region alone
- Built on two years of blackout habits — neighbours checking on each other, sharing generators
- ‘Points of Invincibility’ (heated shelters built since 2022) doubled as refuges during the storm.

“Ukraine recovered not because the storm was mild, but because resilience had been built in advance.”

Spain

Storm Filomena, January 2021

- 50–60 cm of snow in 30 hours in Madrid — the heaviest in decades
- €1.8 billion in damage; the city was locked down for close to two weeks
- Residents cleared pavements, reached disabled neighbours, and freed trapped ambulances.



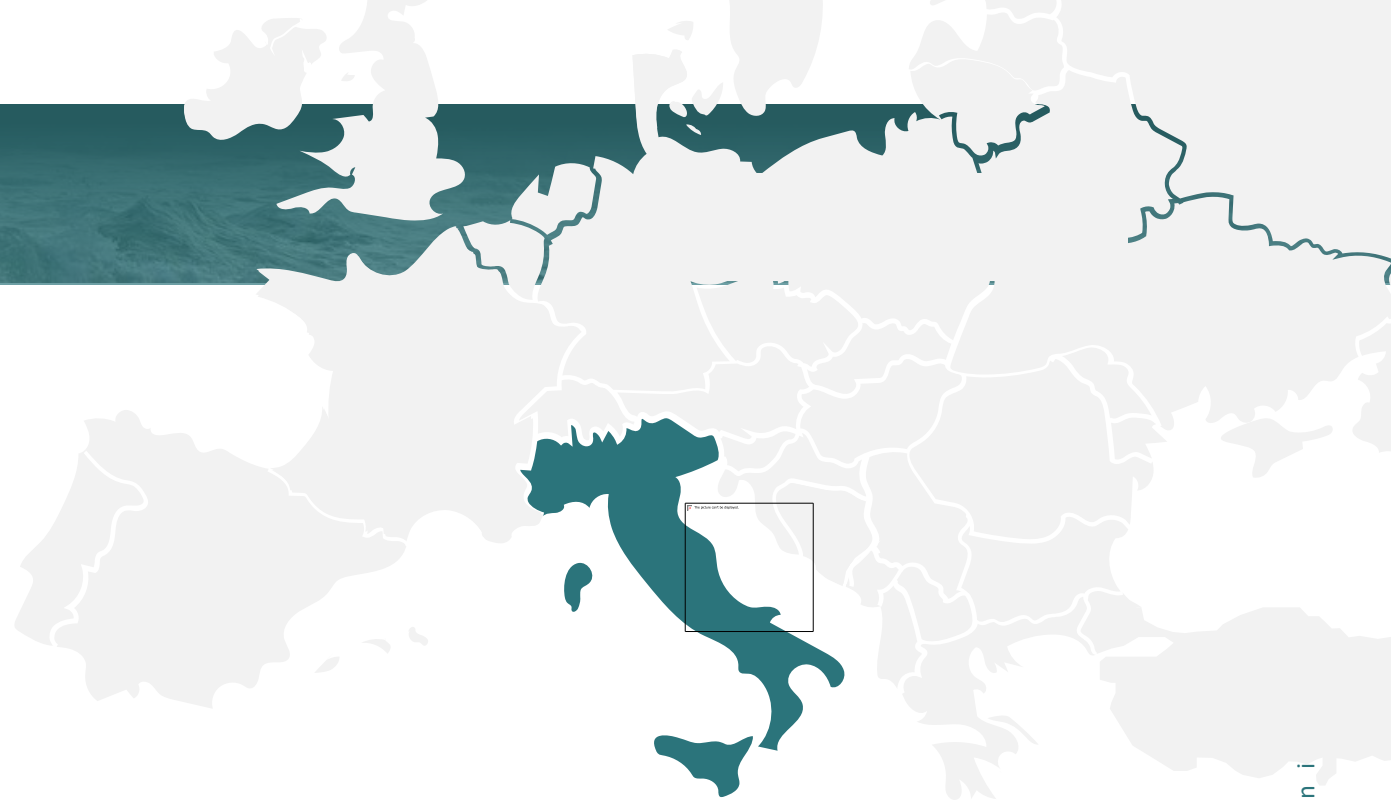
“The warning was clear. The city wasn't ready for what came after.”

Italy

Storm Vaia, October 2018

- 200+ km/h gusts flattened 42,500 hectares of Alpine forest — around 15 million trees
- €140,000 crowdfunded to recover the prized resonance spruce for instrument makers
- Communities like Asiago replanted with hardier, mixed species rather than what the wind toppled.

“A decade-long recovery — and one of Europe's strongest stories of community rebuilding.”



Understanding Your Storm Exposure

- Is my home exposed to high winds, on a hill, near the coast, or surrounded by tall trees?
- Are there trees, branches or loose structures near the house that could fall?
- Is my electricity carried on overhead lines that a storm could bring down?
- Would a power cut also stop my water, for example a private well with an electric pump?
- Does anyone in my home depend on electrically powered medical equipment?
- Do I have only one road in and out that could be blocked by fallen trees?
- How would I receive warnings and information if the power and mobile network failed?
- Is there a person near me I should check on during a storm?
- Where is my nearest community hub or safe building?



The Situation in Ireland

Ireland sits in the path of Atlantic windstorms, most often between October and March, and the west and north-west are the most exposed.

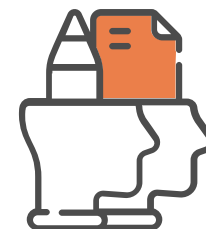
Much of the rural electricity network is carried on overhead lines through wooded and open country, so high winds bring down trees and poles, and repair crews reach scattered rural homes last.

Many rural households also rely on a private well with an electric pump, which means a power cut is often a water cut as well.

This is why rural areas lose power and water first and get them back last: after Storm Éowyn, urban areas were largely restored within days while some rural communities waited close to three weeks.

Reading a Storm Warning

- **Every country uses a colour-coded warning system.** Colours are not standardised across Europe — always read the instruction attached, not just the colour.
- **Red generally means a threat to life:** take protective action and do not travel.
- **Warnings travel by website, app, radio, TV,** and increasingly cell broadcast: a message pushed to every phone in the affected area.
- **Spain's ES-Alert system already does this.** Ireland's own cell-broadcast system is expected around 2027.



Exercise: Quick Self-Check

- **One wind or debris risk.** Name one thing near you that could fall or fail in high winds.
- **One outage risk.** Name what you would lose first if the power went out for several days.
- **One person.** Name one person who may need a call, a visit or transport.
- **One official source.** Write down where you will get warnings and outage updates.
- **Community action.** Compare your answers with a neighbour, and check whether either of you overlooked someone who may need support.

Exercise:

The 6:30am Alert

The alert: “MET ÉIREANN,
STATUS RED WIND
WARNING.

Violent, destructive gusts.
Danger to life. In effect until
14:00. Do not travel.” It's
06:30. Choose the safest
action for each situation.

Answers:
1-b, 2-b, 3-b, 4-c.

1. Loose bins and a trampoline are in the garden.

- a) Go out now and tie them down.
- b) Bring in what you can safely reach, and leave the rest.
- c) Wait for a lull and dash out.

2. The power fails; your phone is at 40%.

- a) Keep checking social media.
- b) Save the battery for calls; use a radio or official alerts.
- c) Drive somewhere with power.

Exercise:

The 6:30am Alert

The alert: “MET ÉIREANN,
STATUS RED WIND
WARNING.

Violent, destructive gusts.
Danger to life. In effect until
14:00. Do not travel.” It's
06:30. Choose the safest
action for each situation.

Answers:
1-b, 2-b, 3-b, 4-c.

3. A power line is down across your driveway.
 - a) Move it with a dry brush handle.
 - b) Stay well back and report it to ESB Networks (1800 372 999) or 999.
 - c) Photograph it up close.

-
4. An unofficial page says the warning is ‘lifted,’ but the Met Éireann app still shows Red.
 - a) Trust the local page.
 - b) Make one short trip.
 - c) Follow Met Éireann — it's over only when the official source says

02

Preparedness

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A woman with brown hair and glasses, wearing an orange safety vest over a dark top, is looking down and writing on a clipboard with a pen. The background is slightly blurred, showing some greenery.

01

Build Your Kit

- 3 litres water/person/day + 72 hours of food
- Medicines, first aid kit, torch, battery radio
- Power bank, documents, cash, warm clothing

02

Communication Plan

- Save numbers for family, neighbours, utilities
- Agree a meeting point and check-in method
- Decide who checks on vulnerable relatives

03

Distance Monitor Forecasts

- Follow your national weather service
- Learn what the warning colours mean
- Treat a warning as your signal to act



Prepare Your Home for High Winds

- Secure or bring in garden furniture, bins and loose materials
- Check and repair loose roof tiles, chimneys and aerals before the season
- Cut back weak or overhanging trees and branches near the house and power lines
- Clear gutters and drains so heavy rain can run off
- Park vehicles away from trees, walls and the coast
- Know where your electricity, water and gas shut-offs are

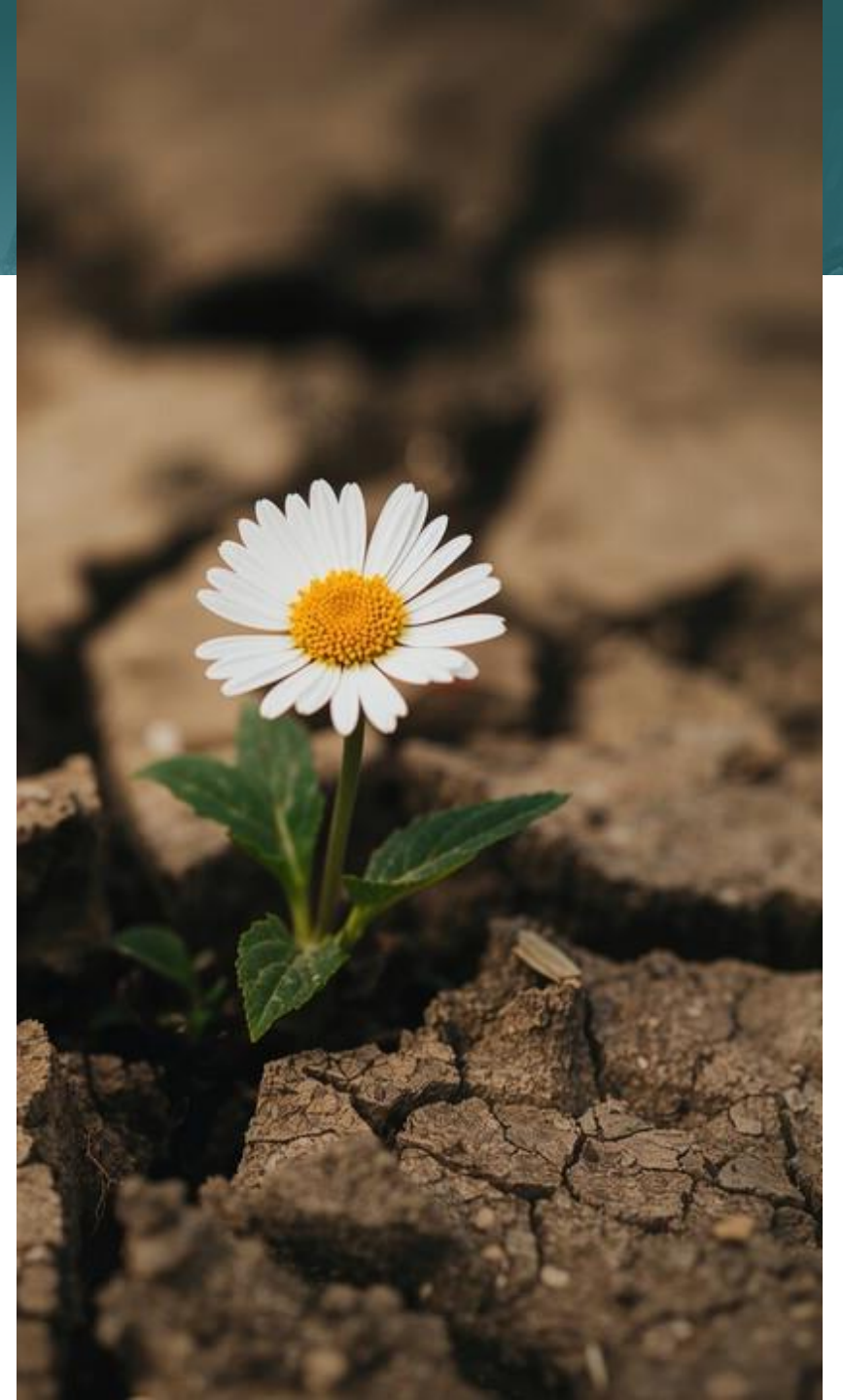


Prepare for a Power or Water Outage

- Agree a backup plan if anyone depends on powered medical equipment
- Know how long your fridge and freezer keep food safe, and keep them closed
- A private well with an electric pump stops the moment power fails
 - store extra water
- **Never** run a generator, barbecue or gas heater indoors: carbon monoxide risk.
- When wind and flooding come together: know your flood risk (Module 2), and never drive or walk through floodwater.

At Community Level

- **Set up a contact list** — a group message or phone tree for when networks are down
- **Agree a community hub** — a GAA club, parish hall or hotel that could open as a charging point
- **Keep a shared list of who needs help** — with consent, from Module 1, Section 1.2
- **Map local resources** — who has a generator, chainsaw, 4x4 or first aid training
- **Agree roles in advance** — coordinator, welfare checks, supplies, liaison
- **Link with official responders** — your local authority's emergency plan, Civil Defence
- **Talk it through before you need it** — one agenda item at a residents' meeting is enough



Ireland's National Guidance

- Ireland's national severe-weather guidance is the Be Winter Ready campaign, coordinated by the Office of Emergency Planning, expanded after Storm Éowyn into an “all hazards” approach covering the loss of electricity, water and communications.
- Several Irish councils have turned this into practical household booklets: Tipperary County Council's Community and Personal Resilience Handbook, and Monaghan County Council's Personal and Community Resilience Booklet (with the HSE and An Garda Síochána, published in English and Irish).
- Each RISE country has its own national guidance and public-warning body: Spain's Protección Civil and ES-Alert; Italy's Dipartimento della Protezione Civile and IT-alert; Türkiye's AFAD; Ukraine's State Emergency Service (DSNS) and its ‘Points of Invincibility’ network.

Key Actions

- **Charge one thing today**

Charge a power bank or a battery radio fully, today. Keep it in the same place every time, so you know exactly where it is the moment a warning is issued.

- **Community level**

Find out where your nearest community hall or hub is, and whether it has a plan to open as a charging and welfare point during a long outage.

Put Up a Storm Action Card

PHASE	DO THIS
Before	Charge your phone and power bank. Put the torch and battery radio where you can find them. Bring in or tie down loose objects. Check trees near the house. Fill some water containers. Know which building is your local hub.
During	Stay indoors, away from windows. Do not travel in an Orange or Red warning. Keep your phone for calls, not browsing. Report a power cut through ESB Networks PowerCheck or 1800 372 999, and follow Met Éireann for updates.
After	Treat every fallen power line as live and report it to ESB Networks. Check on your neighbours once it is safe. Clear debris carefully. Start any insurance claim early, and check whether an Emergency Response Payment applies.
Who to call	Emergency 112 or 999. ESB Networks (power / fallen lines) 1800 372 999. Uisce Éireann (water) 1800 278 278. Gas Networks Ireland 1800 20 50 50. ALONE (older people) 0818 222 024.

Exercise: My Storm Plan

TRIGGER	MY ACTION	COMMUNITY ACTION
An Orange or Red wind warning is issued		
The power goes out for more than a few hours		
My water supply stops		
Roads are blocked by fallen trees		

03

During the Storm

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Who May Need Extra Support

- Older people who live alone, particularly rurally
- People who depend on powered medical equipment
- People with disabilities or reduced mobility
- Households with a private well and electric pump
- People without a car, or with only one access road
- People new to the area, or with language barriers
- Households with babies or young children

Staying Safe During the Storm



High Winds

Stay indoors, away from windows.
Do not travel in an orange or red warning.



A fallen power line:

Treat every line as live. Stay well back.
Report it — never touch it.



Power or water outage:

Conserve your phone battery, use a battery radio,
keep the fridge closed.

Staying Safe During the Storm



- **If you have to shelter or leave:**

Follow official instructions on whether to stay or go. If you leave, take documents, medicines and a charged phone, and tell someone where you're going. If you cannot leave, move to an interior room away from windows.



- **Danger to Life:**

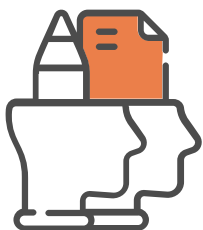
Call 112 or 999 for falling debris, live wires, or carbon monoxide symptoms.

What Not to Do

- Do not approach or touch a fallen power line or damaged pole
- Do not drive through floodwater
- Do not go to the coast, cliffs or piers to watch the storm
- Do not run a generator, barbecue or gas heater indoors
- Do not go outdoors at all during a Red warning
- Do not spread misinformation

Exercise:

What Would You Do?



Scenario 1

A neighbour who uses a home oxygen machine loses power during the storm. What is your first action? Who do you contact? What could have been arranged in advance?

Scenario 2

You see a power line down across the road near a school. What do you do, who do you call, and what do you keep others from doing?

Scenario 3

A social media post says power will be back in an hour, with no source. Do you share it? How do you check it? Where do you get reliable information?

Scenario 4

An instruction to shelter arrives while you are checking on a neighbour who cannot leave. How do you avoid putting yourself at risk, and who do you notify about the neighbour?

04

After the Storm

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After the Storm

- **Coordination and Communication**

Coordination and communication. Agree who does what before the power goes. This is a shared job, not an individual one — community charging points turned Éowyn preparedness into real support.

- **Digital Tools and Misinformation.**

Rely on official outage maps (like ESB Networks PowerCheck) for restoration times, not social media estimates.

- **Psychological Dimension**

Check on isolated neighbours directly — an extended outage takes a mental toll, not just a physical one.

After the Storm

○ Short-Term Actions

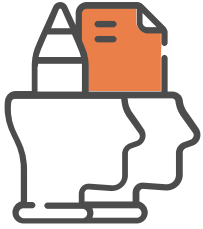
Clear debris safely and start any insurance claim early, since both take longer than expected. The Health and Safety Authority urges a “safety first” approach — chainsaws and unstable fallen trees cause serious injury every storm season.

○ Long-Term and Sustaining Solutions

Push for grid resilience and plan shared community generators or charging hubs now. After Éowyn, ESB Networks published a Winter 2025 Grid Resilience Plan — proof that pressure and planning after one storm build a stronger system for the next.

Roles in a Crisis

- The civilian roles from Module 1, Section 1.3 apply directly to storms:
- The helper at home
- The neighbourhood organiser who checks doors and holds the list of who needs help
- The logistics and supplies organiser running a charging point
- The trained first aider
- The information helper who shares verified updates and counters rumours
- The younger volunteer clearing debris and setting up charging



Exercise: The Shared Community Review

As a group, picture a severe storm that has just passed, and agree one improvement for each:

- Did the warnings reach everybody, and was it clear what to do?
- Who lost power, water or transport, and for how long?
- Did the community hub work as a charging and welfare point?
- Were vulnerable residents contacted, and by whom?
- Did volunteers stay within their role and stay safe?
- What must change before the next storm season?

Capture the answers on one sheet. That sheet is the first draft of a community storm plan you can build on after every event.

Storm Contacts and Support: Ireland

SERVICE	WHAT FOR	CONTACT
Emergency services	Garda, fire, ambulance, Coast Guard	112 or 999
Met Éireann	Weather warnings	met.ie
ESB Networks	Power faults / outages	1800 372 999 / PowerCheck
Uisce Éireann	Water supply	1800 278 278 / water.ie
Local authority	Council storm response	gov.ie/local-authorities
Civil Defence	Statutory volunteer service	civildefence.ie
ALONE support line	Older people (8am to 8pm)	0818 222 024 / alone.ie
Samaritans	Emotional support (24hr)	116 123 / samaritans.org/ireland

Storm-Specific NGO List: Ireland

ORGANISATION	WHAT THEY DO	HOW TO GET INVOLVED
Irish Red Cross	First aid and welfare in emergencies	redcross.ie
Order of Malta Ireland	Volunteer first aid and ambulance corps	orderofmaltaireland.org
St Vincent de Paul	Welfare and hardship support	svp.ie
Community First Responders Ireland	Volunteer medical first response	cfr.ie
ALONE	Welfare checks for older people	alone.ie
Muintir na Tíre, Community Alert	Rural neighbour and text-alert networks	muintir.ie/community-alert
Mountain Rescue Ireland / Irish Coast Guard	Search and rescue in remote/coastal areas	mountainrescue.ie
Local GAA clubs, Tidy Towns, parish groups	Local mutual aid and welfare hubs	gaa.ie , tidytowns.ie



**YOU CANNOT STOP A STORM, BUT
YOU CAN DECIDE HOW READY
YOUR COMMUNITY IS TO MEET IT**

Module 6, Closing Reflection



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