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“We have come together as a community now. We have our plan, we each have a role and we practice what to do when the floods and pests and human diseases come to our village.”

Red Cross Volunteer in Malawi



Early Warning Early Action

Early Warning Early Action (EWEA) helps communities to be ready for a crisis or emergency when it happens. Prepared communities and households can prevent or deal with emergencies better. Depending on your location, you can prepare for many types of events (also called ‘hazards’ or ‘shocks’), such as floods, droughts, cyclones, volcanic eruptions, disease and pest outbreaks, oil spills, fires, heatwaves etc. The activities in this section encourage communities to think about the most likely hazards and understand what they can do to help themselves. This may be spreading weather warnings and crisis alerts or it may be taking other preparedness actions before the impact of the event. This should help communities to protect their lives, homes and livelihoods and help them withstand shocks and crisis better in the future and build community resilience.

What does the activity look like?

When a crisis affects people’s health or damage people’s homes, belongings or livelihood equipment or assets (seeds, animals, fishing nets, sewing machines etc.), it destroys the ability of people to access food or earn a living. Early Warning Early Action helps households and communities to identify potential hazards and prepare for the impacts of the hazards on people and their livelihoods. The activities here involve bringing people together to understand the shocks their community might face and to discuss how to prepare. It involves monitoring and spreading weather forecasts and other warning signs and helping community members to take preparedness actions before the impact of the hazard. The activities involve assigning responsibilities, practicing actions and, in the event of a shock or crisis, making sure everyone can do their part to help each other.



Photo: Nepal © Danish Red Cross

Photo: 2019 © CAR Red Cross



What are the main benefits?



Allows people to understand the shocks and risks facing their own families and communities and develop ways to avoid or address the impacts of these shocks and risks.



Helps people to understand and develop ways of coping with changes in the environment, such as erosion, unpredictable weather and climate change.



Learn about different people's strengths and vulnerabilities and how to manage these to help each other as a group.



Understand the importance of monitoring weather forecasts and other signs of crisis that the community identifies.



Gain experience, skills and confidence to deal with shocks and risks.



Practice working together to manage shocks and risks.

Preparations

Timing tips

Early Warning Early Action can be a short activity to start with. It should then be practiced regularly. If an alert or warning is issued, then the plans and preparations are put into place. If the shock does not happen, the community should continue to review the plans and practice the actions!

Early Warning Early Action starts EARLY – when there is no disaster or crisis. It is best to start this activity at a time of year when people are not very busy. This could be weeks or months ahead of the typical high-risk times, for example well before the rainy season, cyclone season, or lean season.

Different types of hazard will require different planning at different times. This will depend on local warning systems that are already in place, and how long the actual event or crisis may last for. At the end of the section is a table called ‘Sample Timings for Early Warning Early Action’. This table provides some examples of how different hazards require preparation at different times.

What does the volunteer need to do before the activity can start?

1. **Find out if any preparedness activities already exist** - Always try to support existing preparedness and planning activities rather than establishing new ones. Establishing early warning systems is often part of larger programmes called Community Based Disaster Risk Management as well as Disaster Risk Reduction or Resilience. Where there are such programmes in a community, the Early Warning Early Action activities should try to support these existing programmes and be an important part of delivering them.

However, in some cases there may be specific things that still need to be done, like helping a particularly vulnerable group of people to prepare or setting up a preparation or response system. Try to find out what you can do to add to and improve existing activities or to expand these activities to include the entire community and the most vulnerable groups.



Photo: Mozambique, 2010 © Damien Schumann/IFRC

Start the activity early and keep people motivated.



- 2. Find out about the main risks** - Do some research in the community on the environment and the hazards and shocks the community experiences.
- 3. Understand what people do to earn a living** and how these livelihoods have or may be affected by a shock or hazard. Get to know what people have done in the past when a shock affected their ability to earn, and what worked or didn't work so well.
- 4. Find out about sources of warning information** - Contact and make connections with organisations that can provide information about weather forecasts and warnings (for instance the hydro-meteorological department and the local disaster management department), or agricultural pests (agricultural department) or epidemics (health department). Find out what their warning systems are and register with them to receive information.

Follow the 'Essential Guidance' in the 'Introduction' of this handbook on how to organise meetings and groups, so that you can bring community members together and gain their trust and commitment. A good way to do this could be to present what you have found out from your research, ask the community what they think, and ask them to explain more and add more hazards that they know about.

How to avoid risks

Be aware of people's concerns and how to respond to them. Some of these concerns might include:

- **Concern that the information in early warnings is wrong** - Check the sources of information and cross-check this information with other information sources to make sure that it is correct.
- **Concerns that people's reactions to warnings that may cause them to panic** - Evidence shows that if people are prepared, they are less likely to panic because they know what to do if a disaster happens.
- **Predicting hazards is uncertain** - If a shock does NOT happen, people can become careless and even distrustful of warnings, leading them to stop preparing for a shock. When issuing an early warning it is important to communicate clearly any uncertainty in the warning. If a warning was issued but the hazard did not occur, organise a meeting to understand the reason and make suggestions to improve the warning system for the future.



Cross-check information about risks and warnings with community members.

Photo: Sierra Leone, 2017 © British Red Cross

Keeping people motivated is important and very valuable! It is better to be safe than sorry!



How to implement the activity?

- Step 1** Research – ask key people about local risks
- Step 2** Motivate – call a meeting to motivate people in the community to get prepared for shocks and stresses
- Step 3** Understand risk – call a meeting to discuss the local risks
- Step 4** Access or set up early warning systems
- Step 5** Prepare a plan – call meetings to draw up plans with the community
- Step 6** Inform everyone about the plans
- Step 7** Practice and get ready – prepare to act and build response capacity
- Step 8** Continually update and modify plans and keep them in a safe place
- Step 9** Monitor – stay informed by checking early warning information
- Step 10** Communicate warnings
- Step 11** Act early





Step 1: Research – ask key people about local risks

Volunteers talk to knowledgeable people and organisations to find out about existing preparedness plans and what types of shocks and stresses occur in the area, and when these shocks and stresses happen. .

- Talk to people, like elders, NGOs, Red Cross and Red Crescent branch office or government staff who have experience of crisis management.
- Find out about as many of the local shocks and stresses as you can and educate yourself about them. This includes past events as well as new potential shocks due to climate change or other changes in the area.
- Connect other agencies or systems for Early Warning Early Action and discuss how you could link and collaborate with them.



Photo: Malawi 2019 © Eskil Meinhardt Hansen/ Danish Red Cross

Assessing risk based on past events.

Step 2: Motivate – call a meeting to motivate people in the community to get prepared for shocks and stresses

It is advisable to invite other people with experience of managing and dealing with hazards (e.g. government, Red Cross and Red Crescent staff, or non-government organisations).

Aim to cover these topics in the meeting:

- **What is Early Warning Early Action and what are the benefits?** Use the information at the start of this section as guidance.
- **Ask if a preparedness group already exists.** If there is an existing group, find out if there are any vulnerable groups who are not included and help to start a small group that addresses their specific needs. For instance, people with disabilities or elderly people may have particular needs during a crisis, but they can also make important contributions to Early Warning Early Action work!
- **Present your research information** on the types of shocks and hazards facing the community. Make sure you let people know that you want to hear their views on what shocks and hazards they face.
- **Ask people if they are interested in forming a group to prepare for shocks.**

Step 3: Understand risk – call a meeting to discuss the local risks

- **Ask many different people from the community to be present** - Different types of people face different shocks and hazards and will be affected differently and can respond differently. Elderly people, people with disabilities, the chronically sick, children, young people, men, women, farmers, fisher families, livestock owners, traders, city or village people, different religious or ethnic groups, or people who are poor or better off, will all be affected and be able to respond differently.
- **Ask people to identify the different shocks and hazards they face** - When these shocks occur, who do they affect and how are these people affected? You can find different exercises to help you with the discussion online in the IFRC Enhanced Vulnerability and Capacity Assessment toolbox: www.ifrcvca.org. One suggestion is to **draw a 'hazard map'**. This is where the community are asked to mark on a map (on paper or on the ground) approximately where hazards and other shocks and stresses have occurred in the past in the community. What areas could be exposed to hazards, where do more vulnerable people live, where are key infrastructure or resources located (transport, communication, water, sewerage, power supplies etc) that people can use in a crisis? This helps you to identify where the people live who will require early warnings and may need help to take early action. You can try to do this by drawing a map on the ground or sand or on paper, like this:

Photo: 2013 © Aristedes Kahsula/ The Jane Goodall Institute



Try mapping hazards on the ground but keep a record on paper too.



Photo: © Indian Red Cross Society

Hazard map of vulnerable people and places.



- **Don't rush** – You may need more than one meeting to understand all the local risks and hazards, when they occur and who is most vulnerable in the community, as well as what resources and skills exist to respond to the risks. You may decide to talk to some quieter people or vulnerable groups separately to learn more.

What is affecting us?	Where is it affecting us?	Who is affected most and why?	What resources do we have to face it?	How does it affect us?	What should we do about it?
Hazard	Exposure	Vulnerability	Capacity	Risk	Action

Don't rush! You will have a lot to find out.

Step 4: Access or set up early warning systems

Based on your research on available sources of warning information, discuss and decide with the community what would be needed to improve their access to better early warnings.

- **Link to national early warning systems** - If your community is in a country that already has a national and regional or local Early Warning System (EWS), focus on connecting your community to the system. This might require setting up communication channels to: spread the warnings to people in the community that might otherwise not receive warnings on time; improve people's understanding of what the forecasts and warnings mean; provide actionable messages and advice with the warning; and feed local weather or other observations back to the national system to improve its accuracy. Try to ensure that the early warning system covers all different sorts of hazards.
- **Set up community warning systems if needed** - If the community is located in an area which is not being monitored by any existing early warning systems or the system is not accurate enough at the local level, the community can choose to improve the existing system or set up their own system. Ask 'What are the signs a hazard is coming? What indicators could we monitor and watch to prepare for a threat or a disaster?' For example, the community could check river levels for flood warnings, or set up a watch group for wildfires during the dry season.
- Try to link the community early warning and early action activity to any national system. The community can monitor conditions in their location and send this information to be included in national information gathering. This can improve the accuracy of national forecast and warning systems.
- **Top tips for communicating early warnings:**
 - ? **WHEN** to alert? Know the danger levels! Monitor hazard indicators and weather forecasts and know when things become dangerous. The earlier the warning, the better we can prepare.
 - ? **WHO** needs to hear?
 - ? **HOW?** Establish communication channels and assign roles and responsibilities.
 - ? **WHAT?** Clear messages combined with advice that is easy to act on and tailored to different lead times (weeks, days, hours) and people (e.g. for leaders, for volunteers, for community).
 - ? **WHICH?** Start with the most important hazards first but then move on to including all the other types of hazards that are important to your community.

Step 5: Prepare a plan – call meetings to draw up plans with the community

- **Select and focus on the most important hazard** - It is best not to try to do too much at first, so you are advised to ask the community to select a hazard to work on. The information on 'Community Action Planning' in 'Essential guidance' in the Introduction has useful ideas.
- **Decide step by step plans for what actions to take before the hazard happens** – One year before, three months before, one month before, one week before, one day before, one hour before (see the table on Sample Timings for Early Warning Early Action at the end of this section).
- **Make plans for what actions to take when the hazard strikes** - During and after the disaster, at the individual household level and at the community level.
- **Identify who should be responsible for different actions** before, during and after a disaster. Have a backup plan: if someone is away from the community, hurt, or injured, make sure someone else has been prepared to take on their role.

Step 6: Inform everyone about the plans

Make sure that as many people as possible are aware of the plans, including those in the household, in your community, in neighbouring communities and the authorities. You should also:

- **Enlist people to help** with monitoring, gathering information, following-up, communicating about plans, warnings and instructions, and supporting any of the preparedness and response actions!



Photo: Mozambique, 2010 © Damien Schumann/IFRC

A megaphone is useful but not essential. Any loud noise will attract people's attention.



Step 7: Practice and get ready – prepare to act and build response capacity

- **Test the alarm** - alerting everyone before you test that there is not a real threat. Send out an alarm and test message and then check that everyone has heard it.
- **Practice emergency action drills** - You could carry out a practice evacuation where people are told it is not real, but that they should go to the safe evacuation place taking only what they would absolutely need. Ask them if they were able to find what they needed quickly. Did they take important documents? How could they plan so that they are ready more quickly?
- **Discuss preparation plans** - Check that everyone has prepared what they said they would prepare. This could be keeping a store of extra food or water, harvesting water, clearing drainage, saving money, storing their documents in a safe and water-proof place, or applying different farming methods to protect their crops (see links to other activities in the handbook).
- **Prioritise** by discussing what needs to happen first, second and so forth. Saving lives must be a priority – property and other assets can be replaced but lives cannot! Discuss what to do to protect properties and fields and assets such as vehicles and tools.
- **Build up your resources** and capacity– Secure safe places, keep a stockpile of materials and food, build emergency shelters, put up signs to show people where to go if there is an emergency, gather communications equipment (including pen and paper) and store it in a safe place where people can get to. Request Red Cross and Red Crescent volunteers, lead farmers or other organisations to provide trainings on skills that are useful in emergency situations such as first aid, hygiene, or improved farming methods etc.
- **Check in with people who have agreed to take on specific tasks or responsibilities.** Ask them if they are still happy to do this. Ask them to recite/explain any emergency procedures that have been agreed in the plan. Check that they have what they need (e.g. a mobile phone and spare charged battery, any keys to access safe spaces etc.).



Early action: securing shelters before a storm.

Photo: Bangladesh, 2019 © Brad Zerivitz/American Red Cross

Step 8: Continually update and modify plans and keep them in a safe place

As everyone gathers more information and skills, they will become more experienced and plans may need to change. Make sure people agree with changes and keep records of changes. Remember to communicate these changes to the community and to any other agencies which you have been in contact with. Keep the plans in a safe place!

Step 9: Monitor – stay informed by checking early warning information

There is usually a lot of early warning information available. Try looking for:

- **Weather information and forecasts from:** noticeboards, weather stations, radio or television reports, newspapers, mobile phone apps, websites, or connect with government offices and extension workers who may know about how to receive information or warnings by text message on mobile phones or other means. The ‘Further Resources’ at the end of this section lists reliable early warning information websites and resources.

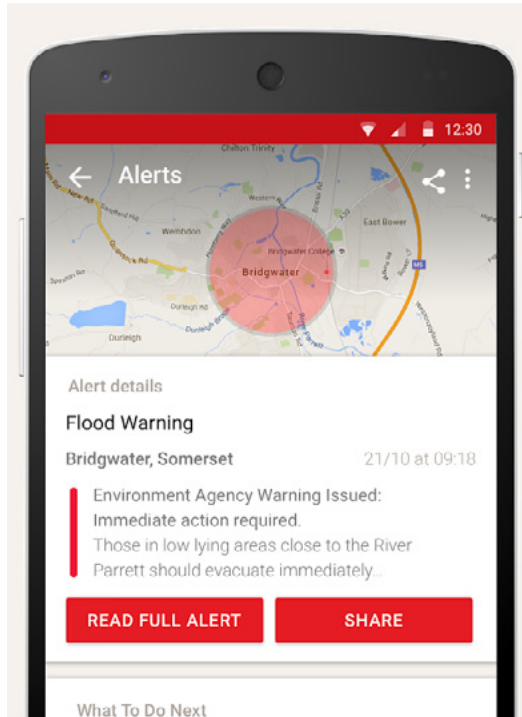


Photo: © British Red Cross

Mobile weather alert.

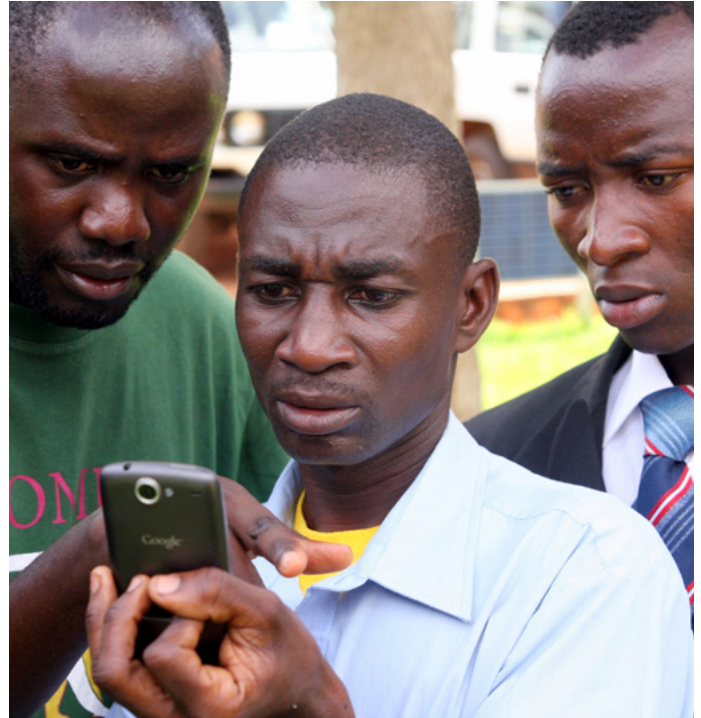


Photo: © Lilian Pintea/The Jane Goodall Institute

Get early warnings by phone or set up text or WhatsApp groups to send warnings to people quickly.

- **Health information** in bulletins or from health workers.
- **Agricultural or livestock related forecasts** from government agricultural or livestock offices, the United Nations Food and Agriculture Organisation (FAO), Non-Governmental Organisations (NGOs) or agricultural and livestock related businesses like seed merchants or Agro-Vet shops.
- If you have set up your own community early warning system, ensure that someone is always assigned during high risk times to monitor the agreed indicators
- **Always check and confirm the information that you hear** – Rumours create unnecessary panic!
- **Stay connected** - If you have a computer or smartphone, find websites that have reliable information and sign-up for early warning information or apps.

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“Local people save lives. They are the first to respond when disaster strikes. Well-informed communities save more lives. They are trained in early warning and know what danger signs to monitor and who to notify.”



Step 10: Communicate warnings

- **Use lots of different ways of communicating** such as alarm bells or sirens, megaphones, local radio, mobile phone messages, house to house runners, etc. Agree on a 'communication tree' that describes who will communicate with a fixed number of people, and then those people in turn will pass on the message to another fixed number of people, who will do the same, and so on, until everyone has received the message. Link with other volunteers in neighbouring communities by mobile phone to share information and warnings. Volunteers can set up their own SMS or WhatsApp groups to share warnings and information about hazards like heavy rainfall or rising river levels. SMS or WhatsApp groups can also be used to send requests for help to local, regional or national authorities.



Photo: © IFRC

This community painted their hazard map onto a community building to remind people regularly.

- **Communicate clearly** - Forecasts and technical information are often communicated in scientific language, graphs or maps. They may contain data or percentages that people are not very used to reading. Try to slowly familiarise people in the Early Warning Early Action group with these kinds of information and explain the information in simple, clear and easy to follow messages and instructions so that people can make sensible decisions on how to respond.
- **Repeat** warnings as people often don't always act on the first warning. Update warnings as soon as you get additional information or the situation changes.

Step 11: Act early

Communicate clearly and calmly. Mobilise families and communities as early as possible depending on the closeness of threat. Carry out the step by step plan you have agreed with the community:

- Inform the right people
- Get them to start preparing
- Don't panic or let others panic!
- Respond
- When it is safe, contact relevant authorities and your Red Cross and Red Crescent contacts to establish communication and report on what has happened
- Help key people who have agreed to do specific tasks (rescue, clean up, distributions etc.) to carry out these jobs – if you planned well, then everyone should have a job to do, and every person should have a backup person to take over the job if that person is away or injured.

Things to watch out for

- ⚠️ Support existing planning and preparedness activities rather than setting up new ones.
- ⚠️ Stockpile immediate basic needs and supplies at the household and community level to ensure survival for up to a week. Keep checking if supplies are going out of date.
- ⚠️ New people may join the activity at any time. You will need to re-cap and explain the plans so they are up to date and ready to respond.
- ⚠️ Think about vulnerability! People with different needs are affected differently by hazards. Plan for these differences. For instance, ensure that households with elderly, pregnant women, or people with mobility problems or other disabilities have special plans.
- ⚠️ Think about livelihoods! Prepare steps to help people protect their livelihood assets and recover their livelihoods if these are damaged by a disaster. Encourage savings which will help people manage the bad times (see Section 12 'Savings and Loans Associations').
- ⚠️ Think about plastics! Plastic is a very useful material that can provide cover, waterproofing and containers for anything that needs to be kept dry, like important documents. But plastics can also cause problems - when thrown away carelessly, plastics can block drains and prevent water run-off and cause flooding, or be eaten by livestock and kill them. Encourage people to dispose of waste safely.

Photo: Mozambique, 2019 © Denis Onyodi/IFRC, Danish Red Cross, Climate Centre



Volunteers communicate cyclone warnings to vulnerable households before Cyclone Idai in Mozambique.



Top tips

- ✓ Develop one central place for understanding, discussing and planning for all the hazards facing a community.
- ✓ Link the community with experienced people and organisations from outside of the community such as the Red Cross and Red Crescent branch, government departments, NGOs, national information sources etc.
- ✓ Make sure that the Early Warning group is action based and combines raising awareness with planning and practicing actual actions.
- ✓ Consider hazards across seasons – ask ‘What crisis or stresses occur in which seasons?’.
- ✓ In flood areas keeping things dry is important – encourage people to store valuables, documents or assets (seeds, poultry, livestock, fishing nets or sewing machines etc.) in places above the usual flood levels, or have a waterproof container called a ‘dry bag’ or a ‘grab bag’ for storing valuables, clothes and important documents.
- ✓ With droughts it can take a long time before the full impact is felt – monitor rainfall and the impacts of dry spells carefully and begin to take measures to protect the most vulnerable people and assets early. Many of the activities in Sections 1, 2, 3, 5 and 7 are useful in drought prone areas.
- ✓ Share early action ideas - share your ideas, action plans and examples of the benefits of Early Warning Early Action with neighbouring communities. This can help neighbouring communities know how to help each other before and after a crisis. Through sharing, communities also learn about each other and can help each other in the event of a crisis.

Key questions to ask:



- ? Do warnings reach all those at risk and most vulnerable including the most remote areas?
- ? Are the risks and warnings understood?
- ? Is the warning information clear and useable?
- ? Is there enough time between the warning and the disaster to take early actions?

Links to other sections in this handbook

- **'Savings and Loan Associations'** (Section 12) encourages people to set aside money to help them through the bad times after shocks and hazards occur.
- **'Safe Water, Sanitation and Hygiene'** (Section 8) will be especially important after floods or health hazards.
- **Other activities** in this handbook offer advice on reducing the stresses related to erratic weather and climate change such as; Section 1 'Gardens'; Section 2 'Compost'; Section 3 'Shaded Seedling Nurseries'; Section 5 'Improving Farming Practices- Identifying ways to overcome crop losses from drought, flood and other hazards'; Section 7 'Rainwater Harvesting and Conservation'; Section 10 'Reducing Fuel Needed for Cooking'.
- The communication systems and equipment used for disseminating early warnings can also be useful for spreading important messages about **health and nutrition (Sections 8 & 9)**. This includes things like noticeboards, loudspeakers, texting and phone groups for making announcements about events or meetings.



Section 1
Gardens



Section 2
Compost



Section 3
Shaded Seedling Nurseries



Section 5
Improving Farming Practices



Section 7
Water Harvesting and Conservation



Section 8
Safe Water, Sanitation and Hygiene



Section 9
Nutrition Awareness



Section 10
Reducing Fuel for Cooking



Section 12
Savings and Loans Associations

Resources and skills needed



What resources are needed to run the activity?

Volunteers will need access to the types of resources that are used for mobilising communities:

- A place to meet and ways to record decisions such as notebooks, poster paper and pens and writing up the plan.
- Ways to spread messages by themselves or by organising people into groups to spread messages faster (see image below). This can be word of mouth, house to house, noticeboards, e-mail or texting, radio announcements etc. Some early warning systems require an alarm method, such as flags, loudspeakers, bells, drums. Set up as many different ways of communicating as possible, to reduce the risk of one system failing.

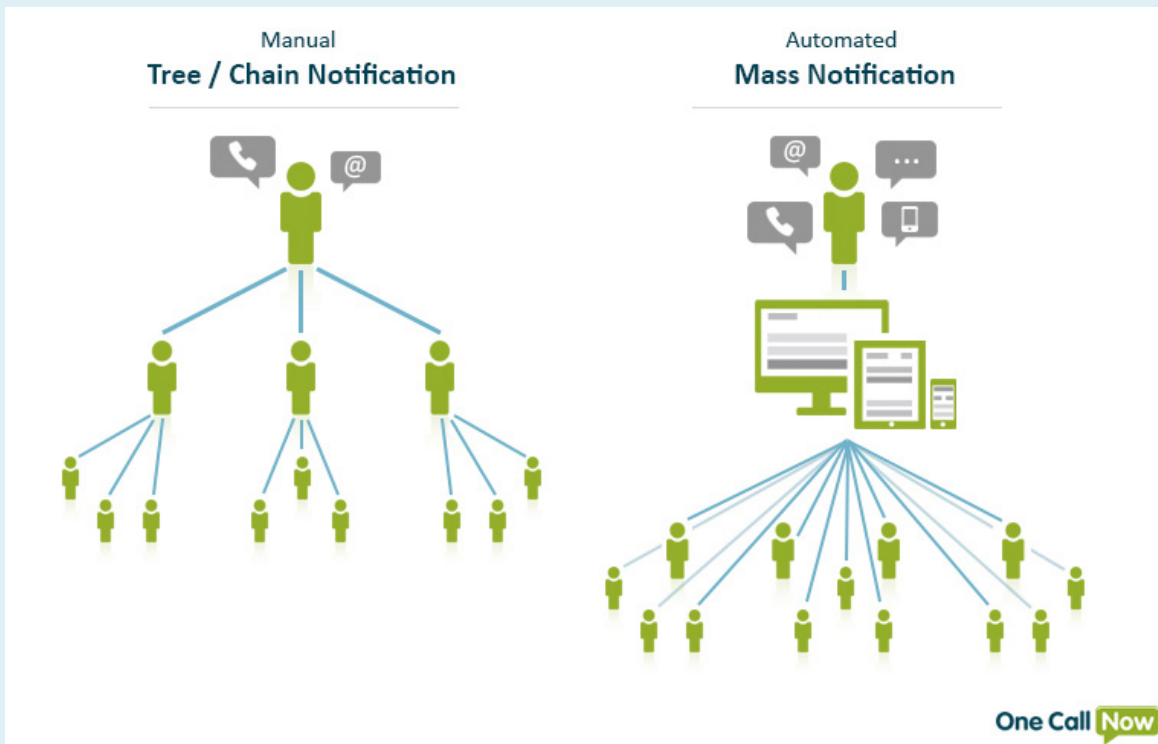


Photo: 2020 © One Call Now/onecallnow.com

Communication tree.

- Safe places to post the preparedness and early action plans and to keep the plan dry, legible and ready for when it needs to be referred to or used. It can be worth making more than one copy to keep in two separate places.
- Access to good forecasting information and links to reliable sources of information, such as the meteorological services or the Red Cross and Red Crescent. It is important to have reliable information in order gain people's trust. However, it is important to let people know that forecasts are based on probability and never 100% perfect and that no one knows exactly what the future will bring.



Are there any resources that are critical?

- Access to information such as forecasts and existing Early Warning Early Action initiatives is useful but you can still achieve a lot through good preparedness and being well organised.
- Forming a good group with strong leaders helps and linking the group to existing groups such as farmers groups or savings and loans associations helps to add stability.
- Good communications and coordination within the community and with local authorities.



Approximate costs

You do not need to spend money to help raise people's awareness about how they can work together to reduce and respond to risks. Just talk to people! You might need some small expenses for paper and pens for recording decisions and plans.

Additional costs might be mainly for disseminating the early warning. Try to use existing communication channels rather than trying to set up expensive new equipment.

Other costs depend on the types of preparations that the community chooses to do such as stockpiling, and could be supported by different types of community activities, such as income generation activities, group savings or food storage schemes etc. Local organisations, NGOs or government schemes may be able to help with costs.



What skills or knowledge do volunteers need?

Volunteers will use their organising, communicating and facilitating skills to bring people together, facilitate discussions and connect with the different types of organisations that will help create an effective Early Warning Early Action system.

Where volunteers have computers or smartphones and access to the internet, this is extremely useful for monitoring forecasting websites and communicating with other agencies – however this is not essential to start early warning early action activities.



What skills do participants need?

No prior skills required.

Make the most of different people's skills: Different people will bring different skills and knowledge to an Early Warning Early Action group and working with everyone to encourage participation according to their abilities is more important than defining specific roles at the beginning. What is important is that specific roles are identified and people agree to do them.

Train backups: It is always good to have more than one person trained and ready to do a task, in case people are away or injured during the crisis. So, if a person is no longer able or willing to do the role, have the backup person take the job, and you can start to train a replacement for the backup person.



What needs to be monitored or followed-up?

- The main monitoring required is the ongoing checking of forecasts and weather information to see when a hazard is becoming more likely to happen.
- Where local monitoring systems have been set up, it is important to monitor these regularly to check that they are still working and to use them to monitor any changes, such as the level of water in a river.
- During practice activities, it is useful to have a de-brief session to discuss how things went. Gather people's ideas about how the practice can be improved next time and test and act upon these ideas.



Photo: Sierra Leone, 2017 © British Red Cross

Assessing risk based on past events.



Further Resources

This section lists useful websites for different hazard types. Check out relevant sources of early warning information:

- Weather forecasting services exist at regional and national levels. The IFRC and IRI Columbia University have set up a service that maps and provides information about weather events globally and regionally. The service includes tips on what communities can do in certain locations: <http://iridl.ideo.columbia.edu/maproom/IFRC/FIC/>
- Famine Early Warning Systems information: <https://fews.net/>
- Increasingly information is available via mobile phones, smart-phones / apps as well as computers. For example, anyone with a mobile phone can dial 3-2-1 and receive free updates in Madagascar and Mozambique on current weather information in local languages. The service also provides information about health, water, sanitation and hygiene, women's and other issues, and it is being extended being extended to other countries soon.
- 'Citizen science' or 'indigenous data gathering' activities: communities and people can be powerful information or 'data gathering' sources that can gather local knowledge and create forecasts for droughts, floods, pest or disease hazards or other crises. Communities can use this data to track trends and changes for themselves.
- Risks exist in the surrounding environment and can be addressed through simple preventative steps such as cleaning up waste, repairing and securing water storage areas or building up natural barriers such as hedges or mangroves that provide windbreaks. See the 'Flash Environmental Assessment Tool'.
https://www.unocha.org/sites/dms/Documents/FEAT_pocket_final.pdf



Sample Timings for Early Warning and Early Action

Type of Hazard	1 Year or more before	Months before	Weeks / Days before	Hours before
Floods	<ul style="list-style-type: none"> - Monitor global forecasts (El Niño/ La Niña) and climate change predictions (e.g. sea level rise) - If needed set up local rain and water level measuring devices (gauges) - Identify / update risks maps of potential impacts - Identify vulnerable groups and connect to other volunteers / groups - Identify safe evacuation routes - Prepare / stockpile supplies - Reduce risks e.g. planting trees, elevate and improving housing structures and storage, dig drainage, or barriers etc. 	<ul style="list-style-type: none"> - Monitor regional & national seasonal forecasts - Revisit contingency plans - Re-stock food / water treatment - Inform communities about possible risk and what to do if the risk happens - Recruit additional volunteers to monitor - Test communication channels for early warnings - If you have livestock or large animals that cannot be transported, create a raised area that animals can reach so that the animals can move to higher ground 	<ul style="list-style-type: none"> - Monitor national forecasts and local rain or river water level gauges - Alert community members - Alert Red Cross/Red Crescent Branch office or other agencies / external authorities - Follow agreed steps in action plans - Put up signs with warnings - Clear drains! - Construct barriers to prevent floodwater from entering buildings and storage - Prepare evacuation, mobilise volunteers - Move vulnerable people to safe locations - Consider early harvest of crops - Keep important papers, equipment, feedstock and other valuables above potential flood levels, using waterproof containers - Prepare 'dry-bag' with essentials to take in case of evacuation - Fill plastic bottles with clean water for drinking - Keep hazardous chemicals above expected flood level 	<ul style="list-style-type: none"> - Evacuate - Regular communications with trusted external sources - Unplug electrical appliances and disconnect heating and cooking or gas tanks
Storms/ Cyclone	<ul style="list-style-type: none"> - Raise awareness on cyclone/storm risk in the community and changes due to climate change - Update risk maps - Reduce risks e.g. improve housing/shelters structures and roofs, - Organise and train community for disaster response, - Identify vulnerable groups and connect to other volunteers / groups - Establish early warning communication system - Identify safe shelters 	<ul style="list-style-type: none"> - Monitor seasonal forecasts - Revisit contingency plans, - Re-stock food and water and other essential stocks, - Communicate increased risk - Test contingency plans with simulations and drills - Inspect and repair roofs, trim trees and bushes - Refresh first aid skills 	<ul style="list-style-type: none"> - Monitor national forecasts and alert systems - Alert RC National Society - Prepare evacuation, mobilise volunteers, - Warn the community and give instructions - Close storm shutters or board up windows from the outside, add hurricane straps to secure the roof, add sandbags on top to increase stability, clear rain gutters - Prepare/check emergency kits with batteries, torch, food supplies, radio etc. - Fill bottles with drinking water, and bathtubs and any large containers with water for sanitation - See flood actions above 	<ul style="list-style-type: none"> - Evacuate to storm shelters - Wait for all clear before supporting with first aid

Section 11: Early Warning Early Action

<p>Health risk (malaria, cholera etc.)</p>	<ul style="list-style-type: none"> - Identify vulnerable groups and connect to other volunteers / groups - Set up communication with neighbouring communities - Messaging on risk and prevention - Coordinate with government health department 	<ul style="list-style-type: none"> - Observation of risks (mosquito / dirty water etc.) - Coordinate with government health department - Update plans - Prepare health care facilities - Sensitise communities about risk, prevention, treatment e.g. use of bednets, handwashing, sanitation etc. 	<ul style="list-style-type: none"> - Facilitate access to treatment - Continue messaging on risk, prevention and treatment
<p>Drought</p>	<ul style="list-style-type: none"> - Monitor global forecasts (El Niño/ La Niña) and climate change prediction and local environmental degradation - Prepare community contingency plans - Prepare community resources - Set up savings / storage systems for food - Connect with external agencies to get training on conservation agriculture practices - Identify vulnerable groups - Reduce risk e.g. set up water harvesting and conservation systems, plant trees, plant backyard gardens, manage grazing land, set up seed banks, crop diversification, etc. 	<ul style="list-style-type: none"> - Monitor regional & national seasonal and monthly forecasts and local rain gauges and ground water levels - Prepare community resources - Secure savings / supplies - Connect with external agencies - Plant more drought tolerant crops and short cycle crops, use mulch - Plant keyhole gardens - Prepare fodder, or consider destocking - Identify water sources and harvest and conserve water - Monitor & record water availability / environmental factors 	<ul style="list-style-type: none"> - Monitor crop status and production, livestock wellbeing, food prices and ground water levels - Water conservation measures and simple drip irrigation - Shade crops and use mulch and organic compost to keep soil moist - Recycle household grey water for toilet, and for irrigation and keyhole home gardens - Connect with external agencies - Identify vulnerable groups - Identify sources of support / food. Preserve and store dry food - Plan de-stocking of animals before the crisis affects them seriously and use fodder and veterinary services to sustain the most important animals. - Support households in finding emergency funds / loans - Sensitise communities to prevent disease/epidemic outbreak through key messages on clean water and water purification, hygiene practices, nutrition etc. - Cover windows and doors to keep heat outside, create natural ventilation flows, drink plenty of water. - Monitor increased wildfire risks
<p>Wildfires</p>	<ul style="list-style-type: none"> - Prepare community contingency plans - Educate community members and children about fire hazards - Reduce risk, e.g. plant shrubs and plants less likely to catch fire around houses to reduce fuel for a wildfire, install and maintain a lightning rod, keep enough distance between buildings, use fire-resistant building materials whenever possible, ensure electrical lines and cookstoves are installed safely, etc. 	<ul style="list-style-type: none"> - Monitor temperatures and dryness of forest and bushes - Inspect for local hazards, such as exposed firewood, leaf and brush clutter and dead and overhanging branches. - Clear a firewall around community boundary and key crop fields (remove dead wood, dry leaves, needles, dense vegetation, prune trees and shrubs) - Check that all fire escape routes are clear. 	<ul style="list-style-type: none"> - Avoid slash and burn agriculture and ensure all fires are controlled - Set up community watch groups to protect houses while everyone else is out in the fields - Prepare tools and material to control or put out the fire (buckets of sands, water, blankets, rake or shovel, ladder etc.) - Never discard cigarette butts on the ground, clear outdoor areas of glass bottles and broken glass since this can reflect sunlight and start a fire.



Wildlife	<ul style="list-style-type: none"> - Identify any dangerous areas (rivers / lakes) - Identify dangerous times of year - Coordinate with rangers / national parks - Lobby / advocate for enclosures / safe areas for animals 	<ul style="list-style-type: none"> - Set up watch rotas on exposed fields and common wildlife routes/ habitat - Map the hazards - Train people in safe wildlife management - Communicate about wildlife dangers and how to respond - Set up barriers (fencing, scare-crows etc.) 	<ul style="list-style-type: none"> - Report sightings of tracks, droppings, other signs of dangerous wildlife to authorities / rangers - Warn communities / homes of any dangerous wildlife - Ensure people do not go to dangerous areas, particularly at high risk times - Evacuate in case of an emergency!
Farm Pests	<ul style="list-style-type: none"> - Set up links with agriculture department(s), agric. stores - Know about hazards and monitoring signs - Prepare crop treatment / pest control plans 	<ul style="list-style-type: none"> - Report any observed pests / hazards to agriculture department - Carry out good planting practices that reduce risks - Stock up on pesticides / prevention measures 	<ul style="list-style-type: none"> - Report any crop damage - Put barriers in place - Follow instructions of agricultural extension workers / NGOs

Reproduced from IFRC 2008 *Early Warning. Early Action*; IFRC 2019. *Public Awareness and Public Education for Disaster Risk Reduction*; and *Cooperazione Internazionale Malawi. Early Warning Toolkit. A guide for practitioners in Mangochi and Salima districts.*



Awareness session.

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