

Whether people prepare for natural disasters depends on how the message is sent

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Coastal areas are at the frontline of natural hazards—a fact now thrown into sharp relief as flooding devastates parts of southeastern Australia.

Providing information is one of the most important ways governments can help communities cope with these events. Such information aims to encourage people to make more informed decisions about the risks they face and act accordingly.

But as our [new research](#) shows, simply providing information is not enough. We found when authorities deliver generic information about [natural hazards](#) via passive means, such as radio ads and brochures, most households did not change their behavior.

To ensure our communities remain resilient in the face of worsening natural disasters, governments must find better ways to deliver important messages.

Barriers to being prepared

Numerous studies have suggested providing the public with information can overcome knowledge gaps, overcome inertia and prompt people to change their behavior.

But even if a person is informed about the risks of natural hazards, other factors can influence their willingness to prepare for them.

For example, financial constraints might mean a person cannot stock up on food supplies before a storm hits.

Some people may simply not consider themselves to be at risk. Others may have competing priorities such as work or child care.

That means we need to better understand what types of information best lead to [behavior change](#) and how barriers to action can be overcome.

Does passive information work?

Information can be categorized into three types:

- passive (seeks to reach a wide audience through, for example, online communication, pamphlets or radio ads)
- interactive (information derived through interactions with other people)
- experiential (information gleaned from personal life experiences).

Information provided by governments to coastal households is predominantly passive. For example, households are often encouraged to access information on natural hazards such as [floods](#), and how to [prepare](#) for [climate change](#).

We set out to test the effectiveness of this passive approach to delivering information.

What we found

Our study focused on two Australian coastal communities: Mandurah in Western Australia and Moreton Bay in Queensland.

We surveyed households and conducted interviews with locals. We explored the types of information that shape responses to three hazard scenarios: a heatwave, a severe storm and sea-level rise.

People who wanted more information about their exposure to future climate risks were more likely to:

- perceive their local area as vulnerable to environmental hazards

- consider local environmental health important to their households' wellbeing.

Likewise, people who wanted information on preparing for climate hazards believed:

- households were very capable of managing the impacts
- their local council was capable of preventing harm.

However, passive information rarely informed a person's response to natural hazards. Instead, people tended to believe in the power of "common sense," especially when dealing with short-term impacts of hazards.

For example, one interviewee said no response to a heatwave was required, but "if you do have to go out you don't go out for very long."

Household action was also informed by past experience. One Mandurah resident told us: "We did have a scenario here [...] we had a pretty severe storm and were out of power. So I have lots of candles and you just get by."

Conversely, a Moreton Bay resident drew on their past exposure to a storm to justify the limited need for action: "The area has never been affected by those sort of floods [...] it hasn't stopped us from doing the day-to-day things like getting kids to school."

But as extreme weather worsens under climate change, basing decisions on past experiences may not be sufficient.

When it came to responding to hazards, most people adopted short-term coping strategies, such as securing loose items in their yard.

Other more proactive actions, such as installing window protection, were limited. There was also a lack of collective actions such as joining local recovery or conservation efforts.

Where to from here?

Prior exposure to a climate hazard appears to drive some people to adapt. But most households generally employ coping strategies, informed by perceptions of common sense.

So what type of information best promotes the transition from short-term coping with natural hazards to longer-term adaptation?

The answer may lie in promoting adaptation well before natural disasters hit as a "common sense" response to the climate threat.

Passive information rarely contains targeted information that can capture the interest of all households. So there's value in moving beyond this approach.

Two-way communication tools such as workshops, demonstrations, community events and harnessing opinion leaders offer promise. They enable collective discussion where participants can share experiences, beliefs and values, building trust and collaboration.

Some households value passive information. But if resilience to climate hazards is indeed the objective, communication promoting household response must change.

Whether information resonates with a household depends on various factors, including their capacity to respond. So improving people's confidence in their capability to act may also trigger better adaptation.

But households should not be seen solely as individual units acting to reduce their personal risk. They are also part of a broader system and can contribute to social change through collective action.

This might include collectively lobbying politicians, sharing experiences and strategies, and helping each other during times of crisis.

As climate change threatens to bring more severe and frequent [natural disasters](#), more research is needed into [information](#) that encourages people to cope and adapt—both individually and together.

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