Early Detection. Early Response.

Many outbreaks begin with a cluster of unwell people, or sudden deaths in a community, that are not detected early enough by traditional surveillance systems. Often the community is aware of the health threat, but the people who can mobilize response resources receive this information too late to limit the spread of a disease. Establishing a community-based disease surveillance (CBS) system can be a key step to improving the early detection and assessment of outbreaks.

Early detection and response

CBS is a simplified and low-cost way of using available mobile technology to monitor ‘unusual events’ at the community level, and acts as a proxy for formal community health surveillance. Mobile technology can result in lower costs, real-time reporting and a more timely response. CBS builds on Red Cross Red Crescent expertise with Rapid Mobile Phone (RAMP) based activities and complements many existing programmes, such as the Community Early Warning Systems (CEWS), Community Based Heath and First Aid (CBHFA) and Epidemic Control for Volunteers (ECV).

Giving a voice to existing local knowledge

One of the key advantages of CBS is that it is a sensitive and scalable form of community surveillance that makes it possible to expand the range of preparedness activities that Red Cross Red Crescent volunteers can offer to benefit their communities. For example, the use of CBS in emergency operations works best with integrated pre-emergency CBS planning, so that the tools can be rapidly set up under conditions of pressing needs and time constraints. It is also possible to continue CBS during recovery operations to monitor the health needs of recovering communities.

Importantly, CBS activities and outcomes empower the community to identify the risks they see and hear about, and provide a reliable ‘real-time’ communication structure to alert others, giving a voice to existing local knowledge to identify public health crises as early as possible. Community participation and engagement, and a reliable response network are therefore key features of an effective CBS.

CBS and low-resource settings

National surveillance systems are often severely tested in low-resource settings, remote communities and during humanitarian emergencies, resulting in a delayed awareness of the needs of an affected community. CBS is therefore especially useful in these settings as it can temporarily replace a non-functioning surveillance system, or it can strengthen an existing national disease surveillance system to ensure early detection and response.

Working with health authorities

Many countries have existing national disease surveillance and response systems that monitor activities within health facilities, and detect diseases with high epidemic risk or that are of public health concern. Nevertheless, a community public health surveillance gap exists in many countries. The IFRC and its National Red Cross Red Crescent Societies, uniquely placed within communities, can work with health authorities to develop and strengthen existing CBSs, in accordance with the International Health Regulation’s surveillance requirements.

Community-based surveillance features

- CBS aims to extend the coverage of existing surveillance to the most vulnerable populations in times of greatest need.
- Utilising mobile technology, CBS is a cost effective and scalable activity, concerned with community epidemic and pandemic preparedness.
- With 190 National Societies and 17 million volunteers, the Red Cross is uniquely placed to implement CBS in collaboration with local Ministries of Health and partners to ensure the early detection of public health threats.
- Taking an all-hazard approach to health threats, CBS supports the early detection of human, animal and environmental changes that could impact health outcomes.

FOR MORE INFORMATION

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