

# COMMUNITY-BASED SURVEILLANCE



The COVID-19 pandemic and other large outbreaks such as Ebola and cholera, have brought global attention to the importance of early detection and early action for such public health risks. Habitat destruction, climate change, and the increasing interaction between human and animal populations are critical drivers of the risk of emergence and re-emergence of diseases with epidemic potential and are part of the global trend of these types of events happening more frequently. Outbreaks however do not start as pandemics, they begin with a cluster of sick people, or sudden deaths in a community that may not be noticed at first by traditional facility-based surveillance systems. While community members may be aware of the event, the information reaches authorities too late to limit the spread of a disease, and limiting the actions that can be taken immediately by community members themselves.

Community-based surveillance (CBS) – ***"the systematic detection and reporting of events of public health significance within a community by community members"***- can be key to improving early detection of outbreaks\*.

**CBS aims to complement the coverage of existing public health surveillance** to the most vulnerable populations in times of greatest need when there is a gap which would otherwise be missed by traditional surveillance systems. Red Cross and Red Crescent volunteers are in an ideal position to conduct CBS as they form a wide network of community members who volunteer within their own communities to support public health.

## Taking a One Health Approach

Taking an all-hazard One Health approach to community epidemic and pandemic preparedness, CBS grows from the building blocks that fosters health promotion, risk reduction, and preparation for rapid epidemic response. Given that 60% of known, and 75% of emerging infectious diseases have zoonotic (animal) origins, CBS allows Red Cross and Red Crescent National Societies to integrate environmental and animal health risks in addition to traditional human health risks. In preparedness activities, CBS offers an opportunity for trained volunteers to recognize these health risks or unusual events using broad descriptions or “community case definitions” and report possible alerts (often through real-time mobile reporting) while carrying out everyday health and WASH promotion activities in their communities.

Red Cross and Red Crescent Volunteers include a wide network of community members often based within their own communities who are committed to supporting their communities for well-being and resilience. Following their training, they motivate local community members through participatory health and WASH sensitization and activities to improve health and disease prevention practices.

## From Preparedness to Outbreak response

Outbreaks begin and end in communities. By building capacity for preparedness and early detection of epidemic-prone diseases through CBS, volunteers are skilled and ready to mobilise for community action and response during a crisis. When the government or designated authority have declared an outbreak, Red Cross and Red Crescent volunteers can be mobilised for daily active detection and immediate reporting to facilitate outbreak response efforts. After the epidemic or emergency is resolved, CBS volunteers may return to more routine CBS and passive reporting through their regular health promotion activities.

## Real-time alerts that are low-cost, low-resource, adaptable

The Red Cross and Red Crescent CBS system can apply mobile phone technology for real-time data flow which can be deployed with limited infrastructure under a wide range of conditions. Volunteers submit reports by Short Message Service (SMS) or forms which upload to a computer system for automated data processing. Reports can be designed for very basic analogue phones or modern touch phones and used by people with no experience and minimal literacy with a well-designed training approach. The key advantage is faster, real-time reporting of potential events directly from the community for earlier investigation, response and control.

## Together with health authorities, partners and communities

Each CBS program collaborates closely with Ministry of Health, health care workers, sectors for animal health, agriculture and environment, development partners, civil society, and the communities themselves. Integration of CBS with the country's existing National Disease Surveillance System is a core element of the design, and the system is tailored to detect human public health, animal (zoonoses or epizoonoses) and environmental risks specific to each area. The volunteers' CBS reports are communicated to the local authorities for validation, investigation, and response management.

## CBS features

- CBS supports the early detection of human, animal and environmental health risks with the hope to prevent or minimize devastating health and social outcomes.
- CBS extends and complements the coverage of existing public health surveillance systems to the most vulnerable populations in times of greatest need or where there may be a gap.
- Using mobile technology, CBS is a cost effective and scalable activity.
- More information can be found at [www.cbsrc.org](http://www.cbsrc.org)

