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MINISTRY OF PUBLIC HEALTH

GENERAL SECRETARIAT

DEPARTMENT FOR THE CONTROL OF
DISEASE, EPIDEMICS AND PANDEMICS



GUIDELINES FOR COMMUNITY BASED SURVEILLANCE IN CAMEROON



SEPTEMBER 2023

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FOREWORD

The implementation of Community-Based Surveillance is essential for early detection and rapid response to emerging diseases and public health events. Community-Based Surveillance enables community members to systematically capture and report diseases and events of public health importance. This system is based on the capacity of Multipurpose Community Health Workers to identify and report Public Health problems to health authorities. It integrates both Indicator-Based Surveillance (IBS) and Event-Based Surveillance (EBS) methods.

In Cameroon, although there is a community-based surveillance system, most epidemics and/or public health emergencies are not detected early and are not always responded to effectively. It is therefore important to have a solid surveillance system at community level. The concept and practice of Community-Based Surveillance (CBS) is not new in the Integrated Disease Surveillance and Response (IDSR) system, but there were no guidelines clearly defining the implementation of CBS in the country.

Implementation of CBS is based on the collection of information and/or rumors on diseases and Public Health events using community case and/or signal definitions, in order to report them to the local Health Facility (HF), for investigation and response if necessary. Therefore, all stakeholders and surveillance focal points must clearly understand the case and syndrome definitions of priority diseases. This guide is developed to further engage the community in the health system and provide an active surveillance system that operates at a high level of sensitivity for signal detection and reporting. Furthermore, it provides guidance for the implementation of CBS, which benefits both communities and the health system as a whole.

I would personally like to thank all the actors who participated in its development. I hope that this tool will become the essential guide for personnel involved in surveillance.

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ACRONYMS

CBS	Community Based Surveillance
CDA	Chief of Center for Documentation and Archives
CERPLE	Regional Center for Prevention and Control of Epidemics
CHA	Chief of Health Area
CHDS	Chief of Health District Service
CIS	Health Information Unit
CPC	Centre Pasteur, Cameroon
CSSE	Chief of Epidemiological Surveillance Department
CTD	Decentralized Territorial Community
DLMEP	Directorate for the Fight against Disease, Epidemics and Pandemics
DPML	Directorate of Pharmacy, Medicines and Laboratories
DSF	Family Health Department
EPD	Epidemic Prone Diseases
EPI	Expanded Program on Immunization
EWAR	Early Warning and Response
FP	Focal point
HA	Health Area
HD	Health District
HF	Health Facility
IDSR	Integrated Disease Surveillance and Response
IHR	International Health Regulations
IPC	Infection Prevention and Control
LAS	Local Associations
LNSP	National Public Health Laboratory
OBC	Community Based Organization
ONSP	National Public Health Observatory
PCHW	Polyvalent Community Health Worker
PSF	Border Health Posts
RCCE	Risk Communication and Community Engagement
RDPH	Regional Delegation of Public Health
RRT	Rapid Response Team
SDLEP	Sub-Directorate for the Fight against Epidemics and Pandemics
SDMPR	Surveillance of Maternal, Perinatal Deaths and Response
SFP	Surveillance Focal Point
SOP	Standard Operating Procedure
TFP	Technical and Financial Partner
PHEIC	Public Health Emergency of International Concern
VAD	Home visit
WHO	World Health Organization

DEFINITION OF TERMS

Alert: Messages and/or information communicated to communities by health authorities at all levels of the health pyramid, in order to inform them of a Public Health Emergency, prevent its spread or control it. In this document, an alert refers to a Public Health Emergency (confirmed case of a disease with epidemic potential or a signal) which i) has been verified, ii) risk has been assessed and iii) requires an intervention (investigation, response or communication).

Early warning and response: Mechanism organized to detect as soon as possible any abnormal event or any deviation from the generally observed frequency of a phenomenon and to produce the recommendations necessary for its control.

Disaster: Serious disruption in the functioning of a community or society, causing enormous human, material, economic or environmental losses that exceed the ability of the affected community or society to cope with its own resources.

Cohesion: It is the fact of sharing within a group the same vision, common interests and needs with the aim of achieving the same objectives.

Community: Is a group of individuals who live together under specific conditions of organization and social cohesion. These members are linked to varying degrees by common political, economic, social and cultural characteristics as well as common interests and aspirations, including health. Communities vary greatly in size and socio-economic profile, from clusters of isolated rural farms to more structured villages, towns and urban districts.

Community case definition: A set of easily identifiable signs and symptoms used by community members and Community Health Workers to generally describe a specific disease or condition.

Group dynamics: It is a set of psychological and sociocultural factors which participate in the birth, structuring and destruction of a given group. It can be positive or negative, depending on the events to which the group is exposed.

Risk assessment : A systematic and continuous process of examining, analyzing or assessing the threat or level of risk to human health.

Event: The International Health Regulations (IHR) define an event as “[...] a pathological manifestation or an event creating a risk of disease; [...] ” (1) (which may include events of infectious, zoonotic, food, chemical, radiological or nuclear origin, whether transmitted by people, vectors, animals, goods and/or food or through the environment). In the context of Community Based Surveillance, an “event” can also be of unknown origin and relate to a “signal ” that has been “verified”.

Informants : Are individuals with specific knowledge of some aspect of the community, site visited, population or emergency, due to their professional background, leadership responsibilities or personal experience. For example: community leaders, traditional practitioners, teachers, traditional chiefs, etc.

Integration: This is the act of carrying out the interventions of several programs by the same agent or the same group of agents in the same time and space and with the same resources.

Community-directed interventions: One or more health services carried out at the community level and under the aegis of the community itself.

Social mobilization: Any action aimed at encouraging the full participation of communities in the implementation of a health intervention.

Community participation: It is a process by which people, individually or in groups, exercise their right to play an active and direct role in the development of appropriate services, guaranteeing the conditions for sustainable improvement of life and granting communities the power to intervene in overall development.

International Health Regulations (IHR, 2005): International legal instrument which binds 196 countries and in particular all Member States of the World Health Organization (WHO). It aims to help the international community avoid acute public health risks that could spread across borders and pose a threat worldwide, by taking appropriate action.

Response: Any Public Health action triggered by the detection of a risk to Public Health. The nature of the response must be adapted to the nature of the risk to Public Health.

Signal: Data and/or information considered by the early warning and response system to present a potential risk to human health. Once identified, signals must be triaged and verified to determine whether they represent an event or not.

Surveillance: It is the systematic and continuous collection, analysis, interpretation of data on the occurrence of disease and/or Public Health events, and their dissemination, in a timely manner for decision-making.

Community Based Surveillance (CBS) : It is defined as the systematic detection and reporting of events of importance to Public Health in the community by community members.

Event-Based Surveillance (EFS) : This is the organized collection, monitoring, evaluation and interpretation of generally unstructured, ad hoc information concerning health events or health risks likely to represent a significant threat to human health.

Indicator-based Surveillance (IBS): Is the systematic and continuous identification, collection, monitoring, analysis and interpretation of structured data, such as indicators produced by well-identified formal sources, primarily focused on health.

Triage: Is the act of determining that a signal meets at least one of the predefined criteria for early detection purposes (i.e. ensuring that the signal meets at least one of the signal definitions, that it is relevant and eliminates duplicates).

Verification : This is the act of determining whether a signal or case detected in the community is true (i.e. it is not a false alarm or false rumor). A verified signal is transformed into an event.

I. INTRODUCTION

In light of the requirements of the International Health Regulations (IHR), early detection and immediate reporting of priority diseases and other Public Health events is essential for rapid investigation and response [1] . In conflict zones and countries with limited resources like Cameroon, many Public Health events that occur in the community escape the routine surveillance system, hence the establishment of Community Based Surveillance (CBS) which uses both Indicator-Based Surveillance (IBS) and Event-Based Surveillance (EBS), essential for Early Warning and Response (EWAR). The implementation of CBS is essential to strengthen the existing integrated disease surveillance system and thus ensure early detection and effective response.

CBS is defined by the World Health Organization (WHO) as: “the systematic detection and reporting, by community members, of events of public health importance within a community” [2]. This type of surveillance relies on the ability of community members to identify and report Public Health events to the nearest health facility. Over the years, CBS has been used for active case finding during epidemics, to increase the sensitivity of detecting diseases for eradication [3, 4] . More recently, CBS has contributed to containing the COVID-19 pandemic [5, 6] . WHO recommends that CBS be integrated into routine surveillance. It must be implemented in real time with well-defined notification, feedback, monitoring and evaluation mechanisms. Its benefits must be seen by the community [2] .

CBS strategies rely on two approaches to collecting information from the community. The first approach relies on the identification and reporting of events based on agreed indicators (community case definitions). Polyvalent Community Health Workers (PCHW)/key informants are trained in disease identification using community case definitions and follow the standardized reporting system. The second approach is based on the notification of unusual, unexpected events, clusters which may be the first phases of an epidemic and other Public Health events. Alerts can signify a variety of unusual events emerging at the community level and the information they contain may be incomplete and unconfirmed and should be triaged and verified.

In Cameroon, all Health Districts have PCHWs for the implementation of CBS. These use both case definitions and signals to detect and notify Public Health events and emergencies. Furthermore, other initiatives, although vertical, have already been implemented for CBS, notably: the *Partnership to Accelerate COVID-19 Testing (PACT) project*, the *Community*

Epidemic & Pandemic Preparedness Program (CP3) project, the Early Warning and Response System (EWARS) project, the Pregnancy Outcome and Death Surveillance (PODS) project , AVADAR for polio, surveillance through Community Based Organizations (CBOs) for HIV and Malaria etc. Regardless of CBS program/project adopted, the implementation steps include detection, notification, triage, verification, risk assessment and response to the event.

However, activities are carried out in a disparate manner, yet all surveillance models aim for the same goal : early detection of Public Health events and an effective response. The use of a CBS Guidelines and the establishment of a monitoring and evaluation framework are essential for the harmonization of the implementation of CBS activities. This guide is developed to further engage the community in the health system and provide an active surveillance system that operates at a high level of sensitivity for signal detection and reporting. Furthermore, this guide orients the implementation of CBS, which is beneficial for both the communities and the health system as a whole.

II. GOAL AND OBJECTIVES

The aim of this guide is to provide guidance for the implementation of CBS activities by involving community members in the early detection and immediate reporting of diseases and other Public Health events.

The general objective is to strengthen CBS in Cameroon.

The specific objectives of this guide are as follows:

- a)** Strengthen CBS system as well as the capacities of actors to carry out effective surveillance and response activities, in accordance with the recommendations of the Integrated Disease Surveillance and Response (IDSR) strategy;
- b)** Improve the sharing of information on CBS between different actors (health personnel, community, sectors and partners).

III. TARGET AUDIENCE

The information and recommendations in this manual are intended for the following people:

- PCHWs, Community Leaders, Key Informants and Other Community Members;
- Chief of Health Areas
- Chief of Border Health Posts;
- Managers of health facilities (public, private, denominational and secular);
- Laboratory surveillance focal points;
- Health District management team;

- Members of dialogue structures (National Committee for Hygiene and Social Security, Regional Funds for Health Promotion, DHC/DMC, HAHC/MC);
- Members of the Regional Centers for Epidemic Prevention and Control (CERPLE);
- Regional Delegates of Public Health (RDPH);
- Members of the Rapid Intervention and Investigation Teams (RRT);
- Epidemiological surveillance focal points at all levels;
- Program Managers (NMCP, EPI, NACC, NOCP/Blindness, NSCCP, NBUCP, NTBCP, IMCI, etc.);
- Managers of the epidemiological surveillance service of the Ministry of Livestock, Fisheries and Animal Industries (MINEPIA);
- Managers in charge of epidemiological surveillance at the Ministry of Environment, Nature Protection and Sustainable Development (MINEPDED);
- Surveillance Focal points at the Ministry of Forestry and Wildlife (MINFOF);
- Members of the National Program for the Prevention and Control of Emerging and Re-emerging Zoonoses (PNPLZER);
- Managers and Teachers of Training Schools for medical and paramedical personnel;
- Other Public Health experts;
- NGOs and associations;
- Partners in the field of Public Health;
- National IHR Focal Point.

IV. GENERALITIES ON COMMUNITY BASED SURVEILLANCE

To implement CBS effectively, it is essential that surveillance actors understand key terms used in the IDSR strategy such as surveillance, public health risk, integrated disease surveillance and response, notification of priority diseases, conditions and Public Health events.

1. What is Community Based Surveillance?

CBS is a simple, adaptable and low-cost public health initiative managed by communities to protect communities. The latter are mobilized to provide information on potential health risks, such as an unusual event which could indicate a new health risk, or an outbreak of disease whose evolution is the subject of close monitoring. Traditionally, the collection of data relating to disease surveillance is done in health facilities, but with regard to communicable diseases, it is at this stage often too late to prevent other members of the community from contracting a disease, or vulnerable members of the community from dying. Some communities may not have access to health facilities with effective disease surveillance. Communities are always the first to detect unusual phenomena if something goes wrong, and CBS provides a structure for reporting suspicious or unusual events as soon as they occur.

As part of CBS, PCHWs and community members play a key role in early detection and prompt reporting of disease cases/signals to higher levels (health facilities, Health Districts) responsible for triage, verification, risk analysis, investigation, and response. The country adopted the IDSR strategy to achieve its early warning and response system objectives. CBS is an integral part of the IDSR and makes it possible to detect rumors and unusual or unexpected events early when they occur in the community. It uses community case definitions for IBS and signals for EBS.

As part of this surveillance, PCHWs, resource persons, key informants (community leaders, traditional practitioners, teachers, traditional leaders, etc.) are responsible for notifying cases or signals to the Surveillance Focal Point of the health facility closest to the Health Area of the Health District.

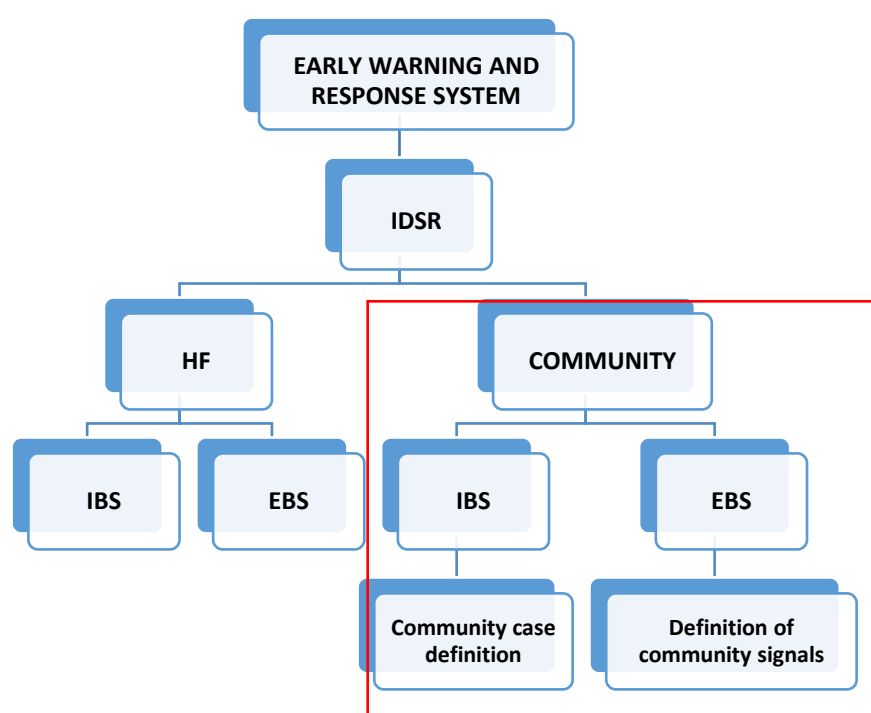


Figure 1 Early Warning and Response (EWAR) strategies

2 . Key Elements of Community-Based Surveillance

The implementation of CBS relies on the availability of community actors, public awareness and the various institutional support activities. Five elements are essential for the implementation of CBS, namely:

i. The activities of CBS must be clearly defined

CBS activities begin with the development of technical guidelines and standard operating procedures that guide the implementation of the activity. At all levels of the health system,

activities for detection, reporting, triage and verification, risk assessment, response, supportive supervision and data management must be clearly defined and the actors responsible for surveillance must be assigned roles and responsibilities.

ii. A formal CBS framework must be defined :

CBS should be implemented in a formal setting where participants know what constitutes an unusual and unexpected type of event to report (e.g. unusual mortality in a village, high absenteeism at school), how and when to report it (for example, through messages or calls from mobile phones). The framework should be supported by a trained structure or specialized staff at district level and should be regularly evaluated.

iii. Any community member can be a member of the surveillance team

Any community member accepted by the community can serve as a focal point for community-based surveillance. Representatives could come from basic services at the village level such as trained birth attendants, PCHWs or villagers, or similar care providers, village authorities (religious, traditional or political) or teachers, veterinarians, health workers, health extension workers, pharmacists and traditional practitioners. Once selected, CBS focal points should receive training and supportive supervision on how to recognize certain priority diseases or conditions with the aim of reporting suspected cases.

iv. Operationalization of CBS by the Chiefs of Health Areas :

The Chief of the Health Area is responsible for implementing CBS in his health area. To this end, he must:

- a) Map the health area and determine the number of CBS PCHWs necessary in accordance with the defined standards;
- b) Identify community members who wish to be PCHWs and to whom the community agrees to play such a role;
- c) Train PCHWs with the support of the Health District on the different intervention modules including CBS;
- d) Define a mechanism for regular feedback and the necessary support for CBS;
- e) Monitor and supervise actors implementing CBS.

All activities to be implemented through CBS must be coordinated by a surveillance focal point or by the Chief of the health area . He or she must:

- a) Use the list of Epidemic Prone Diseases or Priority Conditions to be included in Community-Based Surveillance in accordance with the IDSR Technical Guidelines in Cameroon;

- b) Appropriately share the list of community case/signal definitions to facilitate community case detection and surveillance;
- c) Strengthen the capacities of PCHWs in all aspects of surveillance and response;
- d) Regularly strengthen the skills and practices of CHWs/PCHWs in all appropriate aspects of surveillance and investigations, including data handling and dissemination;
- e) Establish a feedback system. This is an essential measure to ensure that CBS is implemented. Without feedback, community surveillance volunteers will not perceive their performance;
- f) Disseminate posters on community case/signal definitions in identified locations;
- g) Monitor surveillance and response activities, including timeliness and completeness of case reporting;
- i) Identify and map the determinants of health in the area;
- j) provide regular and timely feedback to CBS teams.

v. Community engagement and participation

Community engagement is the process of working together with and through people connected by geographic proximity, common interest, or similar situations to address issues that affect their well-being. It aims to empower communities, by involving them in all stages of the response, for better change through empowerment. Community engagement is at the heart of any Public Health intervention, even more so during health emergencies.

Acceptance and ownership by the community is a major factor in the success of any Public Health intervention and proof that trust is established and maintained between actors. Actions taken by affected communities are essential to control emergencies. Every member of the community has the right to know the risks to their health and well-being. Culturally appropriate information can help make informed decisions to reduce health risks.

Why involve communities?

- Community participation enables collaboration between different stakeholders, which improves the chances of finding the right solutions and resolving problems.
- Solutions developed through community participation prove to be more comprehensive, more accommodating of different points of view and easier to implement, partly in a limited number of inaccessible areas.
- The quality of interventions in response to epidemics or other public health events will depend on the level of involvement and integration of affected communities in said interventions.

Importance of Effective Community Engagement

Effective community engagement enables us to:

- Know the community (its problems and needs);
- Understand existing health beliefs, attitudes and practices;
- Listen attentively to the community;
- Analyze community dynamics;
- Involve the community in all aspects of the response, starting from the planning phase.

3. The functions of CBS

They comply with the essential functions of IDSR, namely:

- Case identification: Use of community case/signal definitions to identify priority diseases, events, conditions or other risks in the community;
- Notification: Notify the nearest health facility regularly and on time, of the occurrence of unexpected or unusual cases of illness or deaths of humans and/or animals, so that they can be verified, and immediately investigated in accordance with the IHR and the IDSR strategy;
- Analysis and interpretation: Involve local leaders in describing disease-related events and trends in the community;
- Case Investigation and Confirmation: Involve Community Health Workers in case or outbreak investigation and contact tracing, participate in verbal autopsies to determine causes of death;
- Preparation: Participate in potential risk mapping, training and simulation exercises;
- Response: Participate in response activities, including home care, raising community awareness for the adoption of behaviors that facilitate epidemic containment;
- Communication: Use the information provided by the SFP to take measures, particularly in terms of health education and coordination of community participation;
- Monitoring-evaluation: Verify that Public Health interventions took place as planned with the participation of the community;
- Inform the community of the results of the outbreak or event assessment.

4. The stages of CBS

CBS is structured around five essential steps (detection of suspected cases and signals, reporting of suspected cases and signals, triage and verification, risk assessment, outbreak investigation and response). These steps are illustrated in Figure 2 and Figure 3.

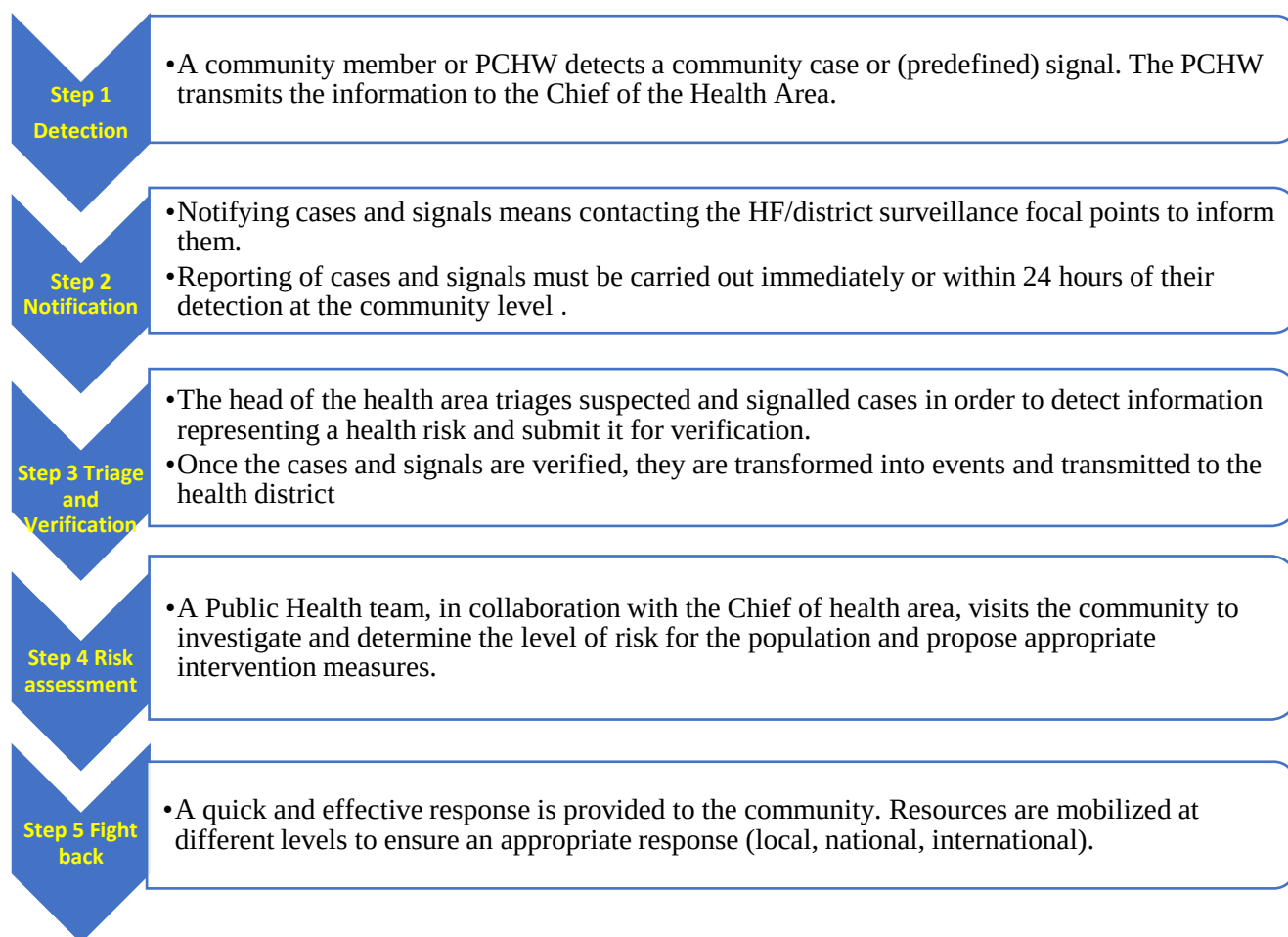


Figure 2 : Community-based surveillance steps

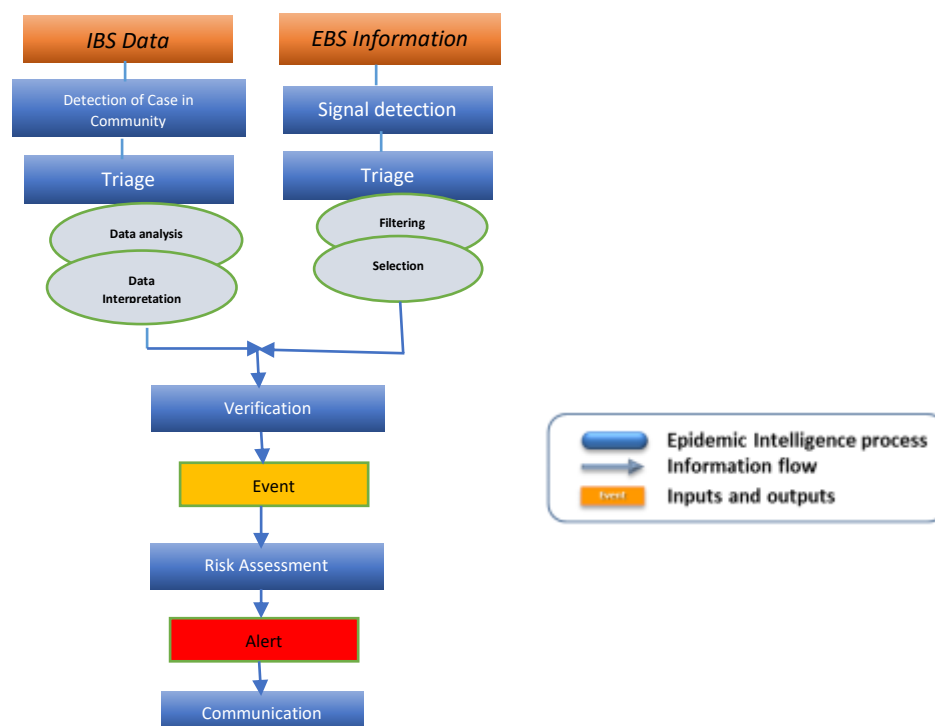


Figure 3 – Epidemic intelligence process

Indicator-based surveillance and event-based surveillance constitute epidemiological intelligence and are an integral part of the early warning and response system.

a. Detection of a community case or signal

Signal detection implies: identifying, capturing or suspecting the occurrence of one of the diseases and/or signals listed in Table 3. Community members and key informants (traditional practitioners, traditional and religious authorities, teachers or traditional birth attendants) should immediately report any signals they identify or hear about to the PCHW. At the community level, signals are most often picked up by PCHWs or key informants because of their connections to the community. PCHWs can improve signal capture in their communities by empowering their key informants to support the identification and reporting of cases and signals. Signal detection uses community case definitions (hospital and community posters, logbook, image boxes and leaflets) and signals as tools.

b. Report cases and signals

Report cases and signals implies communicating with the HF/DS focal point to inform them. Reporting of cases and signals must be carried out immediately or within 24 hours of their detection at the community level. Reporting of cases and signals may vary depending on the location of the information source. Signals or suspicious cases detected at the community level are reported immediately by the PCHW to the Chief of the Health Area. Because they act as the interface between the community and the health care system, PCHWs must immediately report cases or signals to the HA liaison center by telephone call/message or other means. The main tools are community case notification sheets, logbooks, signal registers.

vs. Triage and verification

Triage and verification of signals reported by the community is generally carried out at the HA level. The Chief of the HA receives the information entered in the logbooks (PCHWs and SFP of HF) and records it in the signal register. Due to its high sensitivity, CBS can generate signals which at the end of the verification process are not validated as an event. Therefore, the authenticity of the signals must be established.

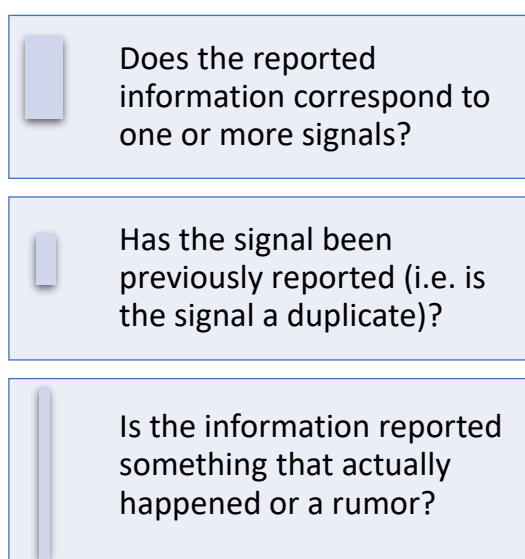


Figure 2: Questions to ask during triage and verification

Triage is the act of determining that a signal meets at least one of the predefined criteria (see Figure 3)

Verification is the act of determining whether a signal is true (i.e. it is not a false alarm or a false rumor), and reliable. In the context of CBS, information from potential sources cannot always be relied upon. Verification criteria include direct observation, asking questions to the PCHWs to ensure they have correctly understood the signal, confirmation of the signal by at least two different sources, or whether or not the signal is reported by a health authority (doctor or clinic).

Figure 4 summarizes the triage and verification process, and explains what the results can be following each of the steps.

The triage and verification process makes it possible to determine whether the signal

represents a threat to Public Health. Once the signal is verified, it becomes an event (see Figure 4). All events must be reported immediately by the HA to the HD. Systematic triage and verification of all signals detected using CBS is essential in order not to overload the HD with false alarms or unreliable information.

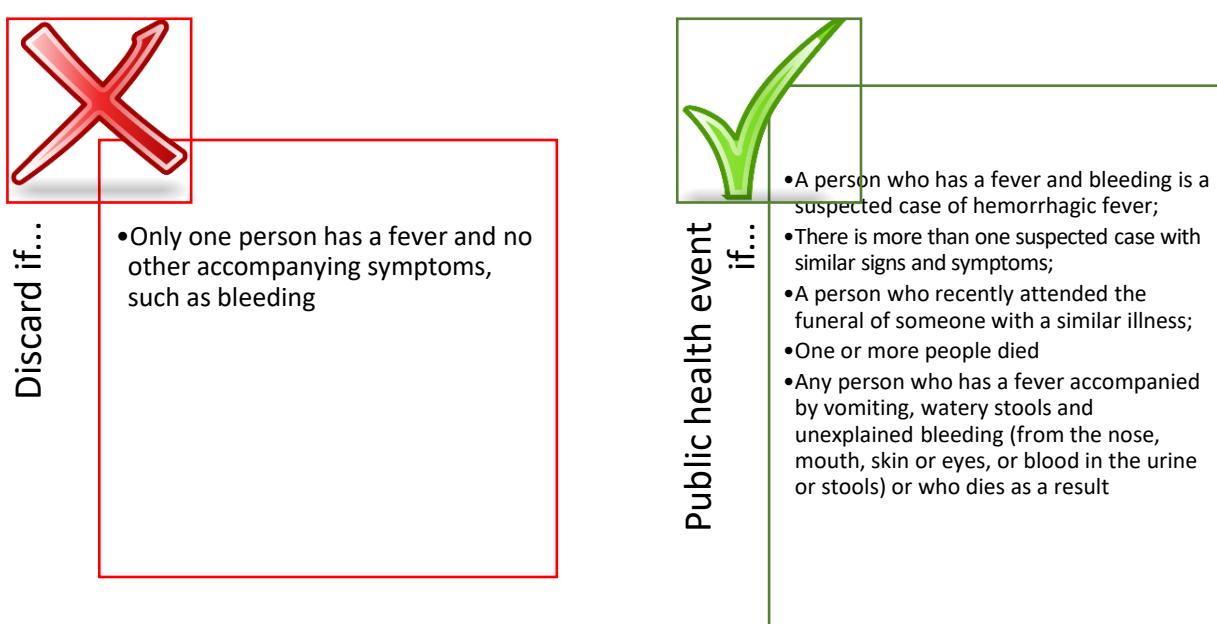


Figure 3: Example guide for verifying a community signal

d. Risk Assessment

Risk assessment is the systematic and continuous process of examining, analyzing or assessing the threat or level of risk to human health. It makes it possible to determine the actions to be taken and the appropriate means to reduce or eliminate the consequences of Public Health events based on the information collected.

Risk assessment must be carried out from the detection of the signal until the moment of response to the event. It involves analyzing all available information, and determining the level of risk that the situation represents to Public Health. As new information about the situation may emerge at any time, continuous and systematic risk assessment will ensure an appropriate response proportional to the level of risk identified.

Regardless of the source of information, a formal risk assessment should be carried out at the district level and where relevant, at the regional and national level as well. This involves collaboration between the Public Health system at the district, regional and national level and the HF at the corresponding level. All information collected during the risk assessment must be recorded systematically.

Table 2 provides an example of questions that may be useful to answer during the risk assessment process. The risk assessment will vary depending on the source of information and the event, but could look like this:

- Contact local health authorities ;
- Contact the original source ;
- Cross-check information with other sources ;
- Collect additional information ;
- Consult official sources of information (WHO, CDC, etc.).

Table 2: Examples of questions to ask when carrying out a risk assessment

Possible Risk Assessment Questions

- Does the event include a suspicion of diseases requiring notification within 24 or 48 hours by the IDSR strategy?
- Does the suspected disease have a high potential for spread (e.g., cholera)?
- Was higher than expected mortality or morbidity reported for the event ?
- Is the event unusual or unexpected in the community?
- If a woman died, was she pregnant or had she recently been pregnant?
- Is there an outbreak of cases with similar symptoms?
- Does the disease have any possible consequences on trade or travel?

Once sufficient information is collected, the HD must determine the outcome of the risk assessment. Figure 5 describes the information collected during the risk assessment that can determine the results. There are three possible outcomes following a risk assessment:

- No further investigation or action required;
- The event must be monitored; Or
- An investigation and a response must be launched.

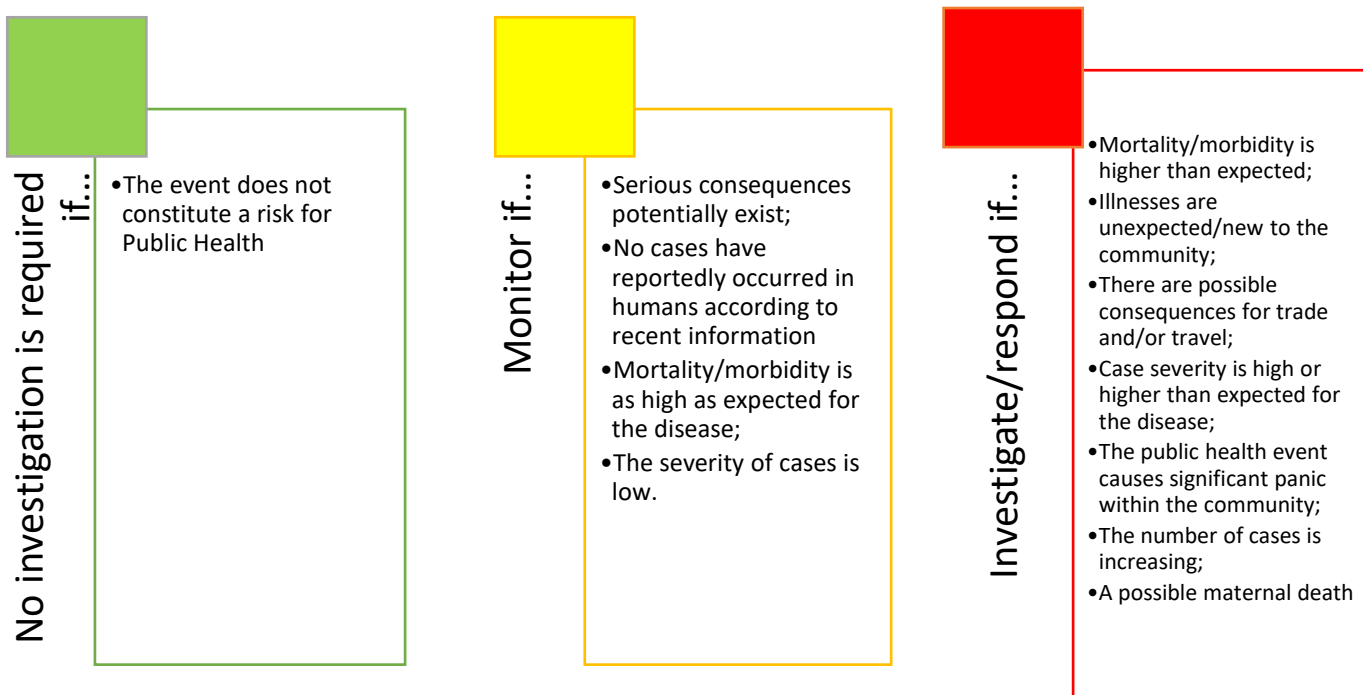


Figure 4: Risk assessment process and possible outcomes

e. Response

Confirmation of a case or outbreak includes the investigation of suspected cases and the laboratory's ability to perform confirmation. Take steps to ensure that the case and contacts, as well as the outbreak or event, are investigated and laboratory confirmed. Case confirmation capacity is strengthened through improved referral systems, networking and partnerships.

Collect evidence on the possible causes of the outbreak or event, including animal health (domestic and wild animals) and environmental sources, and use it to choose appropriate control and prevention strategies.

When an epidemic or Public Health event is detected, an investigation must be carried out to determine the causes and extent of the problem; the results of the investigation should guide the response. An assessment of the situation must be carried out to identify gaps and vulnerabilities, coordinate and mobilize resources in order to implement appropriate Public Health interventions.

Risk communication is an essential element of all surveillance systems, during the preparation and response phases of Public Health events and emergencies. It is the real-time exchange of information, advice and opinions between experts, community leaders or public officials and people at risk. This risk communication facilitates future stakeholder engagement by sharing information at all levels, including the community.

This guide will allow the different actors of the Community-Based Surveillance system to easily ensure better management of cases of diseases, priority conditions and Public Health events, through integration and coordination, will facilitate the “One Health” approach, and will allow strengthening the essential capacities required of the IHR.

V. IMPLEMENTATION OF CBS

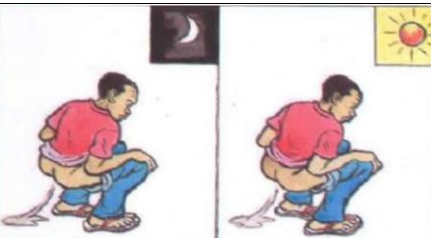
1. Priority diseases for CBS

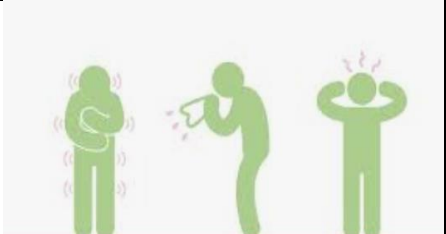
Depending on the local epidemiological profile, Epidemic Prone Diseases (EPDs) and priority conditions (PC) can be selected for CBS, including unusual events and unexplained deaths. CBS Guidelines presents community case definitions (signs and symptoms) see Table 3 below. Diseases or conditions are recommended because they are:

- EPDs that can have serious repercussions on Public Health due to their ability to spread rapidly internationally (cholera, plague, yellow fever, viral hemorrhagic fever, etc.);
- Main causes of morbidity and mortality due to communicable diseases and conditions in the country (malaria, pneumonia, diarrheal diseases, tuberculosis, HIV/AIDS, maternal mortality and trauma, etc.);
- Priority non-communicable diseases or conditions in the African Region (high blood pressure, diabetes, mental health and malnutrition, etc.);
- Effective control and prevention interventions are available to address Public Health problems (onchocerciasis, trypanosomiasis, etc.).

Table 3 below shows examples of community definitions of cases and signals for CBS

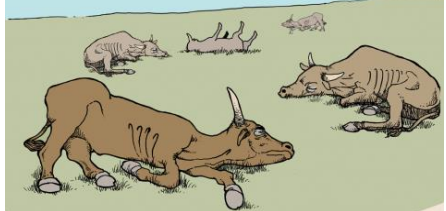
Table 3: Community definitions of cases and signals for CBS

Quelques définitions communautaires des cas et des signaux (Some Community case definitions)	Cas /(Case)	Définition communautaire des cas / Community case definitions	Présentation en images de la maladie/condition
PFA/ AFP	Paralysie flasque aiguë / Acute flaccid paralysis	Tout enfant de moins de 15 ans qui marchait ou rampait normalement et brusquement ne marche plus, ne rampe plus, ou n'arrive plus à bouger normalement au moins un de ses membres (mains ou jambes). Any child under the age of 15 who was walking or crawling normally and suddenly no longer walks, crawls, or can no longer move at least one limb (hands or legs).	
DAA/ AWD	Diarrhée aqueuse aiguë / Acute watery diarrhea	Toute personne présentant trois selles liquides ou plus au cours des dernières 24 heures Anyone with three or more watery stools in the last 24 hours	
FHV/ VHF	Fièvre hémorragique virale / Viral hemorrhagic fever	Toute personne ayant une maladie inexpliquée accompagnée de fièvre et de saignements ou toute personne décédée des suites d'une maladie grave inexpliquée accompagnée de fièvre et des saignements Anyone with an unexplained illness accompanied by fever and bleeding or anyone who died of a serious unexplained illness accompanied by fever and bleeding	
MAPI / AEFI	Manifestation post vaccinale indésirable (MAPI) / Adverse events following immunization	Toute personne présentant de la fièvre ou tout autre symptôme survenu après une vaccination Anyone who presents a fever or other symptoms following an immunization	

DYS / DYS	Diarrhée sanglante (dysenterie)/ Bloody diarrhea (dysentery)	Toute personne faisant une diarrhée accompagnée de douleurs abdominales, avec présence de sang visible dans les selles Anyone with diarrhea accompanied by abdominal pain, with visible blood in the stool	
DRA/ DRA	Maladie du ver de Guinée (dracunculose)/ Guinea worm disease (dracunculiasis)	Toute personne présentant une lésion cutanée et vivant dans une zone endémique ou à risque de la maladie du ver de Guinée, avec l'émergence d'un ver. Anyone with a skin lesion and living in an area endemic or at risk for Guinea worm disease, with the emergence of a worm.	
HEP / HEP	Hépatite / Hepatitis	Toute personne atteinte de fièvre accompagnée d'un jaunissement du blanc de l'œil Anyone with fever accompanied by yellowing of the white part of the eye	
MOR / AB	Morsure d'animaux (rage potentielle)/ Animal bite (potential rabies)	Toute personne mordue par un chien ou un autre mammifère Anyone bitten by a dog or other mammal	
GRI / FLU	Syndrome grippal / Flu syndrome	Toute personne présentant une fièvre accompagnée de toux, de maux de gorge ou d'un rhume Anyone with fever, cough, sore throat or flu/ catarrh	
ROU / MEA	Rougeole / Measles	Toute personne, notamment les jeunes enfants qui a une fièvre et une apparition des boutons sur la peau (éruption) ; souvent, le nez coule, le malade tousse et les yeux deviennent rouges Anyone, especially young children, who have fever and the appearance of pimples on the skin (rash); frequent running nostrils, the patient coughs and the eyes become red	

MEN / MEN	Méningite / Meningitis	Toute personne présentant de la fièvre et une raideur de la nuque Anyone with fever and stiff neck	
DEM / MDE	Décès maternel / Maternal death	Décès d'une femme survenu au cours de la grossesse ou dans un délai de 42 jours après l'accouchement Death of a woman occurring during pregnancy or within 42 days of childbirth	
DNN / NND	Décès néonatal / Neonatal death	Tout décès d'un nouveau-né vivant survenu avant les 28 premiers jours complets de sa vie Any death of a live newborn occurring before the first 28 full days of life	
TNN / NNT	Tétanos néonatal / Neonatal tetanus	Tout nouveau-né qui est normal à la naissance, puis après 2 jours, devient raide et incapable de téter, a des convulsions ou des crises Any newborn who is normal at birth, then after 2 days becomes stiff and unable to suck, has convulsions or crises	
PNE / PNE	Pneumonie / Pneumonia	Tout enfant de moins de cinq ans souffrant de toux et ayant le souffle court ou des difficultés respiratoires Any child under five with a cough and shortness of breath or difficulty breathing	
TUB/ TUB	Tuberculose / Tuberculosis	Toute personne toussant depuis deux semaines ou plus Anyone who has been coughing for two weeks or more	
FTY / TYF	Fièvre typhoïde / Typhoid fever	Toute personne présentant une fièvre persistante depuis au moins trois semaines Anyone with persistent fever for at least three weeks	

FJA / YEF	Fièvre jaune / Yellow fever	Toute personne souffrant de la fièvre et du jaunissement des yeux ou de la peau (plantar des pieds, ongles, paumes des mains, mains) ou décédée des suites d'une maladie grave s'accompagnant de fièvre ou de saignements. Anyone suffering from fever and yellowing of the eyes or skin (soles of the feet, nails, palms of the hands, hands) or who died following a serious illness accompanied by fever or bleeding.	
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Code	Signal (Signal)	Définition communautaire des signaux / Community definition of signals	
SC1	Deux personnes ou plus présentant un ou plusieurs signes/symptômes similaires et issues du même milieu (ménage, lieu de travail, école, rue, par exemple) en l'espace d'une seule semaine ; Two or more people with one or more similar signs/symptoms and from the same environment (e.g. household, workplace, school, street) within a single week;		
SC2	Un ou plusieurs décès inexpliqués d'animaux en l'espace d'une semaine dans la même communauté ; One or more unexplained animal deaths within a week in the same community		
SC3	Tout événement qui présente un risque pour la Santé Publique, notamment des catastrophes (naturelles, provoquées ou technologiques), ou des symptômes rarement observés ; Any event that presents a public health risk, including disasters (natural, man-made or technological), or rarely observed symptoms;		
SC4	Toute personne en provenance d'un autre pays arrivée dans une communauté dans un délai maximum de deux semaines présentant des signes de maladie ; Anyone from another country who arrived in a community within a maximum of two weeks showing signs of illness;		
SC5	Toute personne ou plus qui décèdent en communauté; Anyone or more people who dies in the community;		

SC6	Toute maladie ou mort humaine consécutive à une exposition à des animaux et à des produits d'origine animale, y compris de la volaille (par exemple, la consommation ou la manipulation) ; Any human illness or death resulting from exposure to animals and animal products, including poultry (for example, consumption or handling);	
SC7	Afflux de personnes ou d'animaux observé dans une zone / communauté donnée à un moment donné Influx of people or animals observed in a given area / community at a given time	
SC8	Tout événement dans la communauté qui cause de l'anxiété dans la population. Any event in the community that causes anxiety in the population	

2. Roles and responsibilities of CBS actors

CBS actors are the people who directly participate in the activities of detection, collection, notification, triage, verification, investigation and response to Public Health problems. Immediate notification of suspected cases by community actors reduces the time between the appearance of symptoms, the investigation and the initiation of the intervention itself. The roles and responsibilities of CBS actors by level of the health system are condensed in Table 4.

a) Community Actors

The implementation of CBS relies on the availability of community actors, public awareness and various institutional support activities. At the community level, PCHWs are credible individuals, chosen by the community and trained to capture disease signals and cases from the community (using community case definitions and community signal definitions) for transmission to the competent Public Health authorities.

Community networks are an important resource for CBS. Teachers, pharmacists, religious leaders, traditional healers etc. who reside in the community and interact regularly with other residents should form these networks as key informants. These community networks can act as the “eyes” and “ears” on the ground, assisting PCHWs and significantly increasing the chances of detection of cases and community signals.

CBS creates a feeling of responsibility, ownership, ensures maximum coordination and cooperation. This can be done through awareness meetings, community mobilization meetings, training workshops, on-site supervisions by higher level surveillance actors (HA, HD, RDPH, CL), advocacy campaigns and the use of different Media and outreach channels, including the dissemination of messages on integrated disease surveillance during intervention program activities. Below you will find the package of activities to be carried out by PCHWs as part of community activities.

PCHWS Activity Package

- Collection and transmission of health information: number of cases and signals, home births, community surveillance of EPDs and other Public Health events (maternal/neonatal and infant deaths, etc.);
- Participation in active case finding activities in the community;
- Search for those lost to follow-up (Vaccination, TB, HIV, ANC, malnutrition, etc.);
- Organization of community referrals and counter-referrals;
- Birth registration ;
- Home monitoring of patients, newborns and immediate postpartum babies;
- Participation in training on CBS;
- Raising awareness among the community and its key informants on the detection and reporting of cases and signals;
- Detection of cases and signals and receiving them from the community;
- Record cases and signals;
- Immediate notification of cases and/or signals to the nearest HF or HA and possibly to the nearest zootechnical center;
- Participation in all public health field surveys;
- Support for community investigations;
- Communication for behavioral change;
- Support for community care.

b) Other actors of CBS (HF, DMT, Region and Central level)

Establish a Community-Based Surveillance system and participate in each stage of its implementation.

c) Other Sectors

As part of the “One Health” approach, several actors collaborate with the Ministry of Public Health for the planning, implementation and monitoring-evaluation of CBS, notably the various public and private administrations as well as the Decentralized Territorial Communities (DTC).

d) Technical and Financial Partners (TFP)

Provide technical and financial assistance to the Ministry of Health for planning, monitoring and evaluation of CBS activities. Table 4 below provides a summary of the different roles and responsibilities of CBS actors.

Table 4: Roles and responsibilities of community-based surveillance actors

Level of the health pyramid (Actors)	Roles and responsibilities	Description of tasks	Tools
Community Level			
Community members and key informants (teachers, pharmacists, traditional leaders, traditional practitioners, local associations and traditional birth attendants)	- Detect signals and community cases; - Notify signals to PCHWs; - Refer patients and families to health facilities; - Quickly report suspected cases of illness in the community to the nearest health facility (HF) or PCHWs.	- Community engagement; - Participate in training on CBS, led by Public Health authorities; - Raise awareness on CBS among community residents; - Contribute to community awareness of diseases or Public Health events; - Immediately inform the PCHWs and/or the Chief of HA; - Record the signals in the notebook (if available); - Participate in the response if necessary; - Use community definitions of cases/signals to identify Priority Diseases (PDs) and Public Health events within the community; - Participate in the active search for suspected cases of illness or any other unusual event in the community.	- Community Posters - Hospital posters - Leaflets
Polyvalent Community Health Workers (PCHWs)	- Raise awareness among the community and key informants; - Detect Community cases; - Capture signals; - Report cases and signals.	- Participate in surveillance training; - Raise awareness among key informants on signal detection and reporting; - Raise community awareness in households and in public places; - Detect cases and signals in the community; - Enter signals in the electronic data capture device; - Submit the completed form; - Participate in triaging and verifying detected signals, if applicable; - Participate in risk assessment; - Receive feedback on reported signals from Public Health authorities; - Provide feedback to key informants and community members.	- Community Posters - PCHWs logbook/Image box - SMS template - Leaflets - EWARS app
Health Area			
Health Facility Surveillance Focal Point (SFP HF)	- Detect signals; - Immediately notify the HA surveillance focal point; - Participate in field surveys.	- Participate in surveillance training; - Raise awareness among HF staff/key informants; - Detect signals in health facilities; - Record the signals in the logbook; - Immediately notify the signals to the HA SFP; - Participate in all public health field surveys; - Participate in the risk assessment; - Participate in the response if appropriate.	- Hospital posters; - Log book ; - CBS Guidelines and SOP; - IDSR technical guide; - Image box.
Health Area Surveillance Focal Point (Chief of the health area).	- Identify Community cases; - Sort and verify signals; - Notify cases and events to the SFP of the Health District; - Integrate events into DHIS2; - Participate in investigations/risk assessment.	- Participate in surveillance training; - Brief the HF focal points on CBS; - Help the Chief of Health District Service (CHDS) train PCHWs and raise awareness among hospital staff; - Receive signals and notification of community cases; - Complete the signal register; - Sort and verify reported signals; - Immediately notify events to the DS and integrate into DHIS2; - Participate in Public Health field surveys; - Supervise PCHWs;	- Hospital posters; - Community posters; - DHIS2; - Weekly summary sheets; - HA Signal Register; - CBS Guidelines and SOP; - IDSR technical

		- Develop and transmit to the DS the weekly CBS summary sheet; - Provide feedback to the PCHWs and SFP of the HF; - Participate in the investigation.	- guide; - Image box; - EWARS app; - Community MAR.
Health District			
District Health Management Team (SFP + District Health Service Chief)	Triage and assessment	- Organize the verification of signals transformed into events; - Participate in risk assessment; - Organize preliminary investigations of suspected cases and events	- Community posters; - Hospital posters; - CBS training modules; - DHIS2 ; - Model for risk assessment; - Investigation toolbox; - IDSR supervision grid; - CBS database; - EWARS app; - CBS Guidelines and SOP; - IDSR technical guide.
Regional Level			
Regional Delegation of Public Health (RDPH)	- Receive all reports from the DS; - Risk assessment of events; - Support for risk assessment; - Provide investigative assistance to the DS; - Notify the national level; - Supervise DS.	- Participate in training on CBS; - Receive CBS action plans from the DS and develop that of the Region; - Provide assistance with risk assessment and investigations to the DS if necessary; - Receive all investigation and risk assessment reports sent by the DS; - Report any high-risk event immediately; - Request for additional assistance in the event of a Public Health event; - Carry out integrated supervision of DS; - Provide feedback to the DS SFP.	- DHIS2; - IDSR supervision form; - CBS Guidelines and SOP; - IDSR technical guide; - CBS Database.
Central Level			
Central Level	- Coordinate the activities of CBS; - Notify PHEIC; - Support rapid risk assessment; - Support the investigation and response to events; - Communicate on the activities of CBS; - Supervise the actors; - Provide feedback.	- General monitoring of CBS activities; - Assess the risks of reported events; - Receive information on potential outbreaks and ongoing investigations using the database; - Perform real-time monitoring and visualization of event data; - Deploy the Central Level Rapid Investigation and Intervention team if necessary; - Receive laboratory results and ensure communication with the RDPH; - Coordinate the response of activities in several regions; - Analyze and interpret monitoring data; - Disseminate information; - Summarize and disseminate the results of any Public Health response to events in newsletters sent to the regions; - Assess the impact of CBS on the IDSR; - Mobilize stakeholders and partners and coordinate the response; - Alert surrounding regions about epidemics and health events; - Provide technical assistance to the RDPH; - Provide feedback to the Regional SFP.	- DHIS2; - IDSR supervision guide; - CBS Guidelines and SOP; - IDSR technical guide; - CBS Database.
Other sectors	Collaboration with Ministry of Health as part of the “ One Health ” approach.	- Provide technical, logistical and financial support; - Promote the national “One Health” strategy.	- CBS Guidelines and SOP; - IDSR technical guide.
The Financial and Technical Partners	Provide technical and financial assistance to Ministry of Health for planning, monitoring and evaluation of CBS activities.	- Provide technical and/or financial support to ‘MINSANTE’ for the implementation of CBS; - Support capacity building of communities, CSOs and stakeholders at all levels of the health system; - Support in the area of advocacy;	- IDSR supervision guide; - CBS Guidelines and SOP; - IDSR technical guide.

		• Support for resource mobilization; • Support for financing the implementation of the activities listed in the CBS Guidelines.	
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VI. INFORMATION PATHWAY

1. Information Sources for Community-Based Surveillance

A functioning CBS system must be linked to key sources of information. This includes, but is not limited to, the following sources of information:

- Community members;
- Public and private institutions;
- Traditional healers;
- Alternative, complementary and unconventional medicine;
- The media.

These sources can provide information on health conditions such as clusters of cases, epidemics, unexpected or unusual illnesses and deaths, rumors, new occurrences, and any changes in risk factors for human health.

(a) Community members:

- **All Polyvalent community health workers, traditional birth attendants and school teachers** : they constitute privileged sources of information because of their links with local authorities and their presence on the ground, particularly in remote areas where access to primary health care is difficult.
- **Community, traditional, religious or youth leaders and civil society** : They can provide informal reports on unusual health problems or health risks they witness in their community.
- **Families**: they allow different stakeholders to obtain information on the state of health of household members.

(b) Public and private institutions:

- faith-based organizations and community-based organizations are sources of information about unusual events.

(c) Traditional healers:

A large portion of the population has access to traditional health services for primary health care. These traditional health services are becoming increasingly standardized and are therefore considered key informants for CBS.

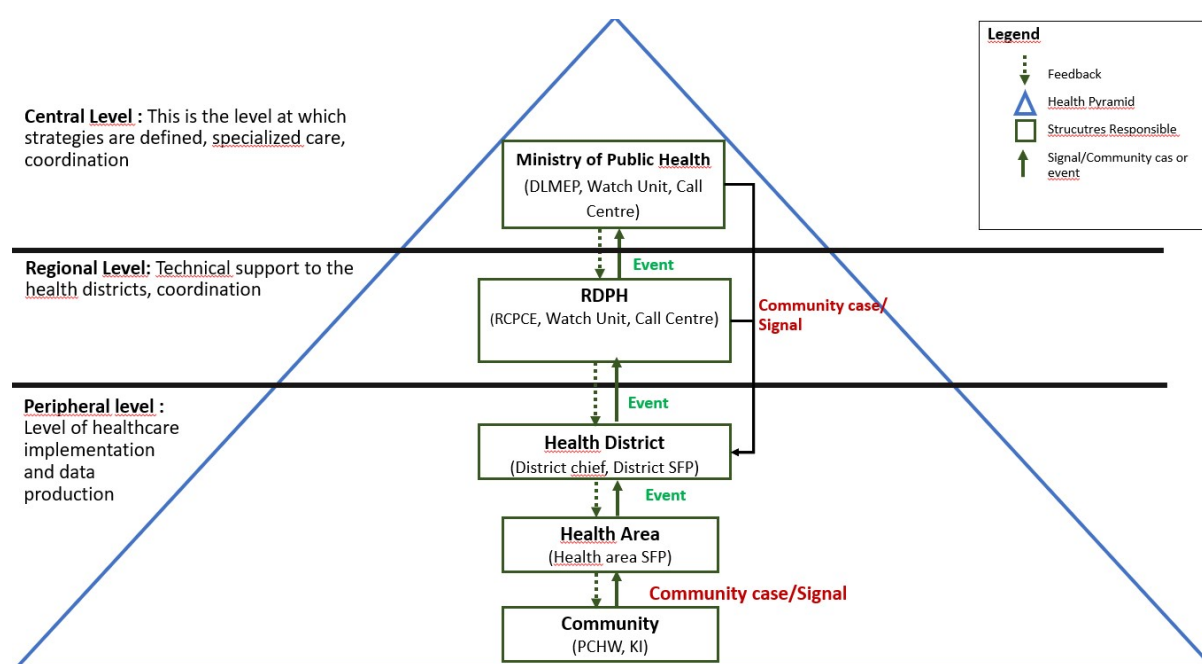
Alternative medicine (chiropractic therapy , mesotherapy, homeopathy, acupuncture for example), complementary medicine and unconventional medicine : these are health care practices that are not part of the country's tradition and which are not integrated into the health system. They are growing in popularity and should be considered as a potential source of health information and contact with them helps encourage safe practices.

(e) The Media:

Local, national and international media are important sources of information for CBS. Print media, radio channels, television, websites and social networks (Facebook, WhatsApp, Twitter, TikTok, Instagram, etc.) may report events such as clusters of human cases, outbreaks or deaths unexpected and unusual prior to detection by local health departments.

2. Data circuit

The information circuit for CBS reporting is integrated with that specified in the IDSR strategy. Training and reporting tools for PCHWs and HF surveillance focal points facilitate the detection of signals and their reporting to the Public Health system.



***RCPCE : Regional Center for the Prevention and Control of Epidemics**

Figure 5 : Information pathway from the community level to higher levels

As shown in Figure 6, at the peripheral level, PCHWs and/or key informants transmit community signals/cases to the HA or DS SFP as appropriate. Each community signal/case will be triaged and verified within 24 hours of capture. When a signal is verified, it becomes an event. The HA is responsible for reporting all events to the district level. At the regional and central level, call centers and surveillance units transmit community signals/cases captured to

the DS SFP. Each DS organizes with the HA the triaging and verification within 24 hours. The DMT is responsible for carrying out the risk assessment. When a community signal/case becomes an event, it is recorded and goes directly into the IDSR. High-risk events must be investigated and responded to within 48 hours of notification. Feedback allows the dissemination of decisions taken and the monitoring of actions at all levels.

VII. MONITORING AND EVALUATION

Performance monitoring and evaluation is an essential part of any health program. They enable those implementing CBS to check progress, guide decisions and corrective actions, and update project plans. Additionally, they contribute to accountability. CBS is designed to track a specific health outcome. Therefore, the analysis process will aim to monitor and evaluate “impact”. It is generally recommended for monitoring and evaluation of CBS to use two complementary approaches.

1. Performance indicators

Performance indicators are useful because they help determine whether CBS is achieving the expected results or whether certain aspects need to be strengthened. The monitoring and evaluation framework defines CBS indicators, calculations and data collection methods. It should be combined with a simple indicator tracking table, which allows those responsible for surveillance to track results and simplifies reporting. Most CBS performance indicators can be calculated based on data from surveillance, combined with documents such as PCHWs records, training reports, plans and implementation reports. Software can be programmed to perform the calculations and report on the indicators weekly, monthly or quarterly, as needed. It is advisable to adopt a realistic approach, especially when setting goals.

2. Community-driven data analytics and monitoring

It may be interesting to help the community carry out their own data analyses. Particularly in the case of EBS, but also in that of IBS, it is useful to see the impact of activities carried out by communities. They can be provided with simple materials to record the types of triggers they reported, the actions that were taken as a result, and outbreaks and events that affected the community but did not result in an alert, so that the triggers can be adjusted. During an epidemic, keeping records at the local level of cases reported to the HF/DS is a way for the community to know whether the number of cases is increasing or decreasing and to encourage the early adoption of preventive measures.

Community-Based Surveillance Indicators

Table 5: Community-Based Surveillance Indicators

Activities/Interventions	Indicators	Goals/ expected results	Formula Elements =		Verification Source
			Denominator	Numerator	
COMMUNITIES					
Detection	Number of signals and community cases detected by PCHWs per week	At least 1 community signal/case detected per week	–	–	PCHW logbook HA Signal Register.
	Number of signals and community cases detected by key informants and community members per week	At least 1 community signal/case detected per week		–	PCHW logbook; HA Signal Register.
Notification	Proportion of signals and community cases notified within 24 hours of detection at the HF/HA level	community cases and signals are notified within 24 hours at the HF/HA level	Number of community cases and reported signals	community cases and signals reported within 24 to 48 hours	PCHW logbook; PCHW Signal Reporting Sheet; HA Signal Register.
	Proportion of signals and community cases notified within 24 hours of detection in Call Centers	community cases and signals are reported within 24 hours at Call Center level	Number of community cases and signals reported	community cases and signals reported within 24 to 48 hours	Signal notification sheets/signal notification registers.
HEALTH AREA					
Triage and verification	Proportion of signals sorted and verified	At least 80% of signals sorted and verified	Number of signals notified	Number of signals sorted and verified	Register for HA signals; PCHW logbook; PCHW Signal Reporting Sheet.
Supervision	Number of PCHWs having been supervised in the last three months	At least 80% of PCHWs have been supervised in the last three months	Total number of PCHWs	Number of PCHWs that have been supervised at least once	Supervision reports
HEALTH DISTRICT					
Risk assessment	Proportion of risk assessments carried out	At least 80% of events benefited from a risk assessment	Total number of events	Number of events evaluated	Risk assessment report
Response	Proportion of events that were responded to within 48 hours after the risk assessment	At least 80% of events received a response	Total number of events	Total number of events responded to	Response Activity Reports
Supervisions	Proportion of HAs supervised in the last three months	At least 80% of HA have been supervised in the last three months	Total number of HAs	Number of HAs that received at least one supervisory visit	Supervision reports
DRSP					
Supervision	Proportion of Health Districts supervised in the last six months	At least 80% of Health Districts have been supervised in the last six months	Total number of Health Districts	Number of Health Districts that received at least one supervision visit	Supervision reports

CENTRAL LEVEL					
Supervision	Proportion of regions supervised in the last six months	At least 80% of regions have been supervised in the last six months	Total number of regions	Number of regions that received at least one supervision visit	Supervision reports

VIII. ANNEXES: CBS TOOLS

TOOL 1: Notification

A. Signal Reporting Sheet (PCHW Logbook Sheet)

INFORMATIONS GENERALES / GENERAL INFORMATION	
CODE de l'Agent de Santé Communautaire Polyvalent : Polyvalent Community Health Worker ID	_____
Numéro de téléphone / Phone number:	_____

INFORMATIONS DU SIGNAL/ SIGNAL INFORMATION	
Date de notification du signal : Signal notification date	/ ____/ ____/ ____/ (jj/mm/aaaa)
Heure de notification du signal : Signal notification time	/ ____/ ____/ (hh/mm)
Date de détection du signal : Signal detection date	/ ____/ ____/ ____/ (jj/mm/aaaa)
Date de survenue du signal: Date of occurrence of the Signal	/ ____/ ____/ ____/ (jj/mm/aaaa)
Type de signal : (se référer aux codes dans la liste des signaux) Type of signal: (refer to the codes in the list of signal)	/ ____/ (4 lettres)
Nombre de personnes/animaux affectés : Number of people affected	_____
S'il s'agit d'une (01) personne, précisez l'âge et le sexe If it is one (01) person, specify the age and sex	Masculin / Male ☐ Féminin / Female ☐ 0-28 jours ☐ Moins de 5 ans ☐ Plus de 5 ans ☐ 0-28 days Less than 5 years old More than 5 years
Village/Quartier : Village/ Quarter	_____
Localisation précise du signal: Precise location of the signal:	_____ _____
Numéro à contacter en cas de besoin : Number to contact in case of need:	_____
Commentaires / Comments:	

TOOL 2: Signal triage and verification

TRIAGE ET VERIFICATION (AIRE DE SANTE)	
Code du signal/cas vérifié (<i>Code Source_Date_Numero Signal</i>)	/...../..... <i>Code de la source.....jj/mm/aaaa _Numéro du Signal</i>
Nom du personnel/ <i>Staff name</i> :	_____
Structure de provenance dans la pyramide sanitaire: <i>Structure of origin in the health pyramid:</i>	_____
Date de vérification du signal/cas communautaire : <i>Signal/community case verification date</i>	/ ____/____/____/ (jj/mm/aaaa)
Heure de vérification du signal/cas communautaire <i>signal/community case verification time</i>	_____ heures _____ minutes
Les informations rapportées correspondent à un ou plusieurs signaux ? <i>Does the information reported correspond to one or more signals?</i>	☐ Oui ☐ Non
Le signal a-t-il déjà été rapporté (c.-à-d. le signal est-il un doublon) ? <i>Has the signal already been reported (i.e. is the signal a duplicate)?</i>	☐ Oui ☐ Non
Les informations rapportées correspondent-elles à quelque chose qui s'est réellement produit ou à une rumeur ? <i>Does the information reported correspond to something that actually happened or to a rumor?</i>	☐ Information vraie ☐ Rumeur
Statut du signal/Cas communautaire : <i>Signal status/Community case :</i>	☐ Pas vérifié ☐ Retenu (<i>Evènement</i>) ☐ Rejeté
Nom de l'évènement retenu : <i>Name of the event:</i>	
Commentaires/ <i>Comments</i> :	

TOOL 3: Event Risk Assessment

RISK ASSESSMENT	
Event code	/...../..... <i>PCHW Code.....dd/mm/yyyy _Signal Number</i>
Name of staff: Structure of origin in the health pyramid :	_____
Description of risk (clinical characteristics, time, place, people)	

Source of risk																																				
Information about the event (Tick the statements corresponding to this event) ☐ <u>The event includes a suspicion of diseases requiring notification within 24 or 48 hours by the IDSR</u> ☐ <u>The suspected disease has a high potential for spread (e.g., cholera)</u> ☐ <u>Higher than expected mortality or morbidity was reported for the event</u> ☐ <u>The event is unusual or unexpected in the community</u> ☐ <u>There is a cluster of cases with similar symptoms</u> ☐ <u>Illness may impact trade or travel</u> ☐ <u>The disease has possible consequences on human health</u> Types of risks ☐ <u>Chemical</u> ☐ <u>Biological</u> ☐ <u>Radionuclear</u> ☐ <u>Other (Specify):</u> _____																																				
Risk severity matrix (Tick the corresponding box) <table border="1" style="width: 100%; border-collapse: collapse; text-align: center;"> <thead> <tr style="background-color: #d3d3d3;"> <th>IMPACT x PROBABILITY</th> <th>NOT SIGNIFICANT</th> <th>MINOR</th> <th>MODERATE</th> <th>MAJOR</th> <th>STRONG</th> </tr> </thead> <tbody> <tr> <td>HIGHLY UNLIKELY</td> <td style="background-color: #008000;"></td> <td style="background-color: #008000;"></td> <td style="background-color: #90EE90;"></td> <td style="background-color: #FFFF00;"></td> <td style="background-color: #FFFF00;"></td> </tr> <tr> <td>UNLIKELY</td> <td style="background-color: #008000;"></td> <td style="background-color: #90EE90;"></td> <td style="background-color: #90EE90;"></td> <td style="background-color: #FFFF00;"></td> <td style="background-color: #FFA500;"></td> </tr> <tr> <td>POSSIBLE</td> <td style="background-color: #008000;"></td> <td style="background-color: #90EE90;"></td> <td style="background-color: #FFFF00;"></td> <td style="background-color: #FFA500;"></td> <td style="background-color: #FFA500;"></td> </tr> <tr> <td>LIKELY</td> <td style="background-color: #008000;"></td> <td style="background-color: #90EE90;"></td> <td style="background-color: #FFFF00;"></td> <td style="background-color: #FFA500;"></td> <td style="background-color: #FF0000;"></td> </tr> <tr> <td>VERY PROBABLE</td> <td style="background-color: #90EE90;"></td> <td style="background-color: #FFFF00;"></td> <td style="background-color: #FFA500;"></td> <td style="background-color: #FF0000;"></td> <td style="background-color: #FF0000;"></td> </tr> </tbody> </table>	IMPACT x PROBABILITY	NOT SIGNIFICANT	MINOR	MODERATE	MAJOR	STRONG	HIGHLY UNLIKELY						UNLIKELY						POSSIBLE						LIKELY						VERY PROBABLE					
IMPACT x PROBABILITY	NOT SIGNIFICANT	MINOR	MODERATE	MAJOR	STRONG																															
HIGHLY UNLIKELY																																				
UNLIKELY																																				
POSSIBLE																																				
LIKELY																																				
VERY PROBABLE																																				
Conclusion of the evaluation ☐ <u>No further investigation or action required</u> ☐ <u>The event must be monitored</u> ☐ <u>An investigation and a response must be launched.</u>																																				

TOOL 4 : SUPERVISION CHECKLIST FOR COMMUNITY-BASED SURVEILLANCE

Level of the health pyramid: ☐1 Community ☐2 Health district ☐3 Region			
ESSENTIAL ELEMENTS/ACTIVITIES	SUPERVISION QUESTIONS	RESPONSE	COMMENT (The cause of the problem)
Implementing Community-Based Surveillance			
The activities of CBS must be clearly defined	Is there at least one physical copy of CBS SOPs? (Check availability)	☐ 1 Yes ☐ 2 No ☐ 3 NA	

	Is there at least one physical copy of CBS Guidelines? (Check availability)	☐ 1 Yes ☐ 2 No ☐ 3 NA	
A formalized CBS framework must be defined	Are there legal and regulatory texts that govern the implementation of CBS?	☐ 1 Yes ☐ 2 No ☐ 3 NA	
	Is there at least one staff trained in CBS at the HF and DS level?	☐ 1 Yes ☐ 2 No ☐ 3 NA	
	If yes, how many people have been trained?	☐ 1 HF____ ☐ 2 DS____	
	By what means?	☐ 1 Workshop ☐ 2 E-Learning ☐ 3 Others (Specify)_____	
	How many trained people have been supervised in the last six months?	☐ 1 HF____ ☐ 2 DS____	
CBS actors	What is the main source of CBS information?	☐ 1 PCHWs ☐ 2 Key informants (to be specified) ☐ 3 Community Members ☐ 4 Media__	
Operationalization of CBS by the Chief of Health Areas	Is the mapping of the Health Area done?	☐ 1 Yes ☐ 2 No ☐ 3 NA	
	Is the number of CBS PCHWs necessary for the Health Area determined?	☐ 1 Yes ☐ 2 No ☐ 3 NA	
	Are the members of the community who wish to be PCHWs and to whom the community gives their consent identified?	☐ 1 Yes ☐ 2 No ☐ 3 NA	
	Has the PCHWs received training on CBS?	☐ 1 Yes ☐ 2 No ☐ 3 NA	
	Has a feedback mechanism been put in place for CBS?	☐ 1 Yes ☐ 2 No ☐ 3 NA	
Monitoring and supervision of actors implementing CBS	Are the actors implementing CBS followed-up over the last six months?	☐ 1 Yes ☐ 2 No ☐ 3 NA	
	Have you been supervised by your superiors during the last six months?	☐ 1 Yes ☐ 2 No ☐ 3 NA	
	If yes, how many times have you been supervised in the last six months?	☐ 1 HF_____ ☐ 2 DS_____ ☐ 3 REGION_____	
Community participation and engagement	Are communities resilient in CBS activities?	☐ 1 Yes ☐ 2 No ☐ 3 NA	
Supervision of CBS activities			
Detection of suspected cases and signals	Are community cases and unusual signals detected by PCHWs within the 7-day interval?	☐ 1 Yes ☐ 2 No ☐ 3 NA	
	Are community cases and unusual signals detected by key informants within 7 days?	☐ 1 Yes ☐ 2 No ☐ 3 NA	
Community cases and signals	Have community signals/ cases been reported in the last six months?	☐ 1 _____	
	Is the notification immediate? (within 24 hours)	☐ 1 Yes ☐ 2 No ☐ 3 NA	

	Were community signals/ cases reported within 24 hours?	☐ 1 _____	
Triage and verification	Has the notified signal already been reported?	☐ 1 Yes ☐ 2 No ☐ 3 NA	
	Does the notified signal come from a reliable source?	☐ 1 Yes ☐ 2 No ☐ 3 NA	
	Have the reported community signals/ cases been transformed into events?	☐ 1 _____	
Risk Assessment	Total number of events in the last six months	☐ 1 _____	
	Number of risk assessments carried out in the last six months	☐ 1 _____	
	Is the declared event one of the notifiable diseases?	☐ 1 Yes ☐ 2 No ☐ 3 NA	
	Do community cases have a high potential for spread?	☐ 1 Yes ☐ 2 No ☐ 3 NA	
	Was higher than expected mortality or morbidity reported for the event?	☐ 1 Yes ☐ 2 No ☐ 3 NA	
	Is the event in the last six months unusual or unexpected in the community?	☐ 1 Yes ☐ 2 No ☐ 3 NA	
	Does the disease have possible consequences on human health?	☐ 1 Yes ☐ 2 No ☐ 3 NA	
Response	Number of events in the last six months that received a response within 48 hours of risk assessment	☐ 1 _____	

TOOL 5 : Standard Operating Procedures

	1. Signal Detection/Community Case
Code: 01 /CBS/2023	

I. Goals
Detect all cases of illness and Public Health events within 24 hours of their appearance in the community.
II. Target audience
This document is aimed at surveillance stakeholders at all levels: Surveillance Focal Points, health personnel, PCHWs, Key Informants, community members.
III. Implementation prerequisites
Know community case definitions and signals
IV. Expected results
All cases of illness and Public Health events are detected within 24 hours of their appearance in the community

V. Reporting Timeline
Daily (within 24 hours)

VI. Resources
Human
• Community members: PCHWs, community leaders, key informants • Health personnel: Surveillance focal points, ‘CERPLE’, district management team • Monitoring unit: call center (telephone operators, medical regulators), media monitoring team
Equipment
• Rolling stock • Protective equipment and hygiene • Communication/awareness materials • Phones • Office equipment
VII. Documents
• Awareness posters for the HF • Leaflets • Community Awareness Posters • Community case definition • Log book • Image box _ • Community-Based Surveillance Guide • Definition of signals

VIII. Procedure
1. Establish a community-based surveillance team composed of PCHWs and other volunteers.
2. Train the team on: • The generalities of CBS and the definition of community cases and signals; • Basic communication skills; • Use of community case definitions and signals for the identification of diseases/Public Health events; • The use of data collection forms and reporting frameworks
3. Assign one or more geographic zone(s) (community) to each PCHW; • Each PCHW must set up its network of key informants who are community leaders (traditional leaders, religious leaders, traditional practitioners, school teachers, etc.) • The PCHW carries out home visits in his/her area of action; • In each household, S/he greets the members according to the cultural practices of the area (respecting barrier measures: avoid shaking hands, social distancing, etc.) • In a courtesy interview with the head of the household or with other responsible people, S/he intelligently finds out if there are: sick people in the household or neighborhood, an animal that has died of a strange illness, a wild animal in the neighborhood or the existence of other unusual situations.

- If there is a sick person in the household or neighborhood, the PCHW immediately notifies the SFP/HF manager.
- The PCHW records the case (signal) in the community notification form/logbook which it will transmit to the SFP/Chief of HF at the end of the day.
- If there are no cases, the PCHW raises awareness in a few minutes on a specific subject and leaves the family and moves on to the next household.
- The PCHW must visit at least 20 households per month;

NB: In addition to home visits, the PCHW must be able to detect cases in areas of mass gatherings: Churches, Markets, Fields, Schools, etc.

- Any member of the community or key informant can detect a situation representing a threat to health (group of people with the same symptoms, unexplained deaths of people occurring during the same week, deaths of groups of animals, unusual situations, etc.) and inform the PCHW or the person in charge of the nearest health facility.



2. Community Case Reporting and Signals

Code: 02 /CBS/2023

I. Objective

Immediately notify the Chief of Health Area/SFP of all cases disease meeting the Community case definition/signal definition.

II. Target audience

This document is aimed at surveillance stakeholders at all levels: Surveillance Focal Points, health personnel, Polyvalent Community Health Workers, Key Informants, community members.

III. Conditions to be met

- Know the community case definitions and definition of signals
- Master the information transmission circuit

IV. Expected results

Any case of illness or signal meeting the community case definition or signal definition is notified to the Chief of Health Area/SFP immediately or within 24 hours of its detection.

V. Reporting Timeline

- Immediate .
- Reporting of cases and signals must be carried out immediately or within 24 hours of their detection at the community level .

VI. Resources		
Human		
- Community member and key informants (teachers, pharmacists, religious leaders, traditional healers, and traditional birth attendants) - Polyvalent Community Health workers (PCHWs)	- Health facility Surveillance focal point (SFP HF) - Health area Surveillance Focal (Chief of Health Area).	
Equipment		
Communication kit	Technical manuals	- Office kit; - Phone; - SMS template;
Software		
Data management software based on health system level		
Documents		
- Community case report forms; - Notification procedure;	- Guide for CBS; - Log book; - Rumor register; - Signal register;	

VII. Procedure	
From the community to the HF	
- Notification of cases and signals must be carried out immediately or within 24 hours of their detection; - Community members and key informants should immediately report cases/signals they receive to PCHWs; - The PCHW completes a notification form and submits the day's summary report at the end of the day to the Chief of Health Area/SFP; - As the interface between the community and the health care system, the PCHW must immediately transmit cases or signals to the HA SFP by telephone call/message or other means.	
From the community to the call center	
- Any member of the community or key informant can transmit information through the ministry of public health's toll-free number 1510. - Any information representing a threat to health (group of people with the same symptoms, unexplained deaths of people occurring during the same week, death of groups of animals, unusual situations, etc.) must immediately be transmitted to the ministry of public health through the toll-free number (1510). The teleoperator receives information by telephone (calls and SMS) from the community and records it in an alert notification form (electronic and physical).	



3. Triage and Verification

Code: 03 /CBS/2023

I. Objective

Determine that a community signal or case meets at least one of the community case or signal definitions and determine whether a signal is true (i.e., not a false alarm or rumor), and reliable.

The triage and verification process makes it possible to determine whether the signal represents a threat to Public Health. Once the signal is verified, it becomes an event.

II. Target audience

This document is addressed to all Health Area Surveillance Focal Points/Chief of Health Area and District health Management team.

III. Conditions to be met

- Be trained in Community-Based Surveillance (master the triage and verification process).

IV. Expected results

All captured signals are sorted and verified.

V. Reporting Timeline

Immediate, within 24 hours.

VI. Resources

Human

- Chief of Health Area;
- District health Management team;
- Monitoring team (call center and media scanning);
- PCHWs.

Equipment

- Communication kit (telephones, internet connection);
- Office kit (computers);
- Transport Logistics (motorcycles, vehicles, etc.).

Documents

• CBS Guidelines; • Telephone and digital directory; • Map.	• Notification sheets; • Signal registers; • Rumor log.	
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VII. Procedure
In the Health Area
• The SFP / Chief of Health Area in charge of triage and verification carries out triage and verification immediately after notification of a signal or community case regardless of the source; • The Chief of Health Area/SFP receives the information by telephone or through the logbook, community notification sheets and records it in a signal/rumor register; • S/he performs triaging by asking the following questions: Does the information reported correspond to one or more signal definitions? Has the signal been previously reported (i.e. is the signal a duplicate)? • Once the triaging has been carried out, a verification follows to determine whether the signal is true (i.e. it is not a false alarm or a false rumor: reliable). Is the information reported something that actually happened or a rumor? • Verification criteria include direct observation, asking questions to the PCHWs to ensure they have correctly understood the signal, confirmation of the signal from at least two different sources, or determining that it was reported by a health authority; • Once the signal is verified, it becomes an event and is entered in the signal register. All events must be reported immediately by the HA to the DS; • The Chief of Health Area/Health Area SFP immediately notifies the event to the DS and integrates it into the DHIS2.
At the Call Center • After receiving the signal, it is triaged by asking the following questions: Does the reported information correspond to one or more definitions of signals or community cases? Has the signal/community case been previously reported (i.e. is the signal a duplicate)? • Once the signal is received, the telephone operator informs the medical regulator and the verification process follows to determine if the signal is true (i.e. it is not a false alarm or a false rumor: reliable) as described below: If the Call center is at central level, • The teleoperator contacts the regional level ('CERPLE' coordinator) who is responsible for contacting the health district concerned for immediate verification and feedback; • Depending on the emergency, the teleoperator can contact the Chief of Health District Service directly and inform the 'CERPLE' coordinator to support the District Health Service during verification and feedback. If the Call Center is at the regional level, • The teleoperator immediately contacts the health district concerned for verification and feedback; • Verification criteria include direct observation and asking questions. Is the information reported something that actually happened or a rumor? • Confirmation of the signal by at least two different sources, or the fact that it is reported by a health authority; • Once the signal is verified, it becomes an event and indicated on the signal register.



4. Risk assessment

Code: 04 /CBS/2023

I. Objective

Determine the level of risk of a Public Health event and the appropriate level of investigation and response.

II. Target audience

This document is aimed at all people involved in epidemiological surveillance from the peripheral to the central level.

III. Conditions to be met

- Be trained on risk assessment of Public Health events;
- Be trained in Community-Based Surveillance

IV. Expected results

Each Public Health event is assessed (risk level) within 48 hours of detection in the community.

V. Reporting Timeline

Within 48 hours following the detection of the health event.

VI. Resources

Human

- Chief of Health District Service;
- Epidemiological surveillance focal points (central level, DS, RDPH);
- PCHWs.

Equipment

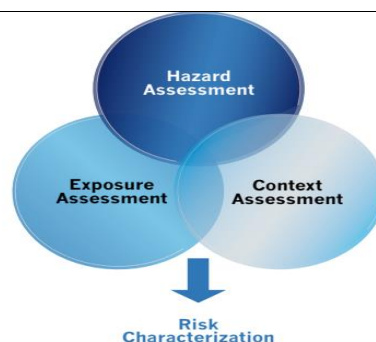
- Assessment tool;
- Office kit;
- Communication kit;
- Transport Logistics.

Documents

- IDSR technical guide;
- Risk assessment tool;
- DHIS2;
- CBS Guidelines;
- CBS training modules.

VII. Procedure

- Risk assessment is carried out after confirmation of an event;
- Whatever the source of information, the evaluation must be carried out at the DS level and, where appropriate, supported by the regional and central levels.
- Implementation is done in three stages :
Step 1 – Frame risk questions
 - Questions help define the scope of the evaluation and prioritize activities;
 - The main question asked during an acute Public Health event is "*what is the Public Health risk presented by the event...*" Examples of questions to ask when carrying out a risk assessment:
 - Does the event include a suspicion of diseases requiring notification within 24 hours by the IDSR strategy?
 - Is the event unusual or unexpected in the community?
- **Step 2 - Undertake a risk assessment (components)**
 - **This involves Hazard assessment:** May include risks (Chemical, Biological, Environmental, Radionuclear) and confirmation by the laboratory, if possible. Evaluate the Hazard: describe in detail (clinical characterization, time, place, person) and list of possible causes. Multisectorality and multidisciplinary must be respected in the risk assessment of an event.
 - Population (or individual) **exposure(s) to the potential Hazard.** To do this, the following questions must be answered: How many people can potentially be exposed to the risk? How many of them are potentially at risk of being infected?
 - **Assess the context** (vulnerabilities and specific threats that increase or decrease risk). Information required:
 - Transmission mode;
 - Degree of infectivity (virulence): Shigella, Cholera
 - Period of contagiousness;
 - Population immunity (vaccination and previous exposure);
 - Presence of vector/host/reservoir.
- **Assignment of a level of risk** (risk characterization): Summarize the information collected, determine the potential severity of the risk - Consequences (impact), determine the probability of its occurrence, calculate (quantitatively) or estimate (qualitatively) the level of risk and determine the level of Confidence in the risk assessment.
- Once sufficient information is collected, the DS must determine the outcome of the risk assessment (step 3)



IMPACT x PROBABILITY	NOT SIGNIFICANT	MINOR	MODERATE	MAJOR	STRONG
HIGHLY UNLIKELY					
UNLIKELY					
POSSIBLE					
LIKELY					
VERY PROBABLE					

Step 3- Prepare the risk assessment report and communicate its conclusions

There are three possible outcomes following a risk assessment:

- **No further investigation or action necessary** when the event does not constitute a risk to public health;
- **The event must be monitored.** This is due to one of the following reasons: Serious consequences potentially exist; no cases have occurred in humans according to recently collected information; mortality/morbidity is as high as expected for the disease, severity of cases is low;
- **An investigation and a response must be launched.** This could be due to one of the following reasons: Mortality/morbidity is higher than expected, diseases are unexpected/new to the community; there are possible consequences for trade and/or travel; the severity of cases is high or higher than expected for the disease; the Public Health event causes significant panic within the community; The number of cases is increasing, maternal death possible.

The report is then developed taking into account the following: Narrative summary of the risk assessment team, level of risk, evidence of the reasons for the decision, perception issues, other recommended actions/interventions and limitations (information/gaps in knowledge, others).

	5. Investigation
Code: 05 /CBS/2023	

I. Objective
Identify cases, risk factors and potential sources of contamination

II. Target audience
This document is aimed at all people involved in Community-Based Surveillance, including Polyvalent Community Health Workers (PCHWs), key informants, Chief of Health area, District Management Teams and all other people involved in CBS.

III. Conditions to be met
• PCHWs must have been selected and trained according to the national guidelines on community-directed interventions. • District management teams (DMTs), the Chiefs of Health Areas , PCHWs must be trained in CBS in general. • PCHWs/key informants should be trained/briefed on the ongoing public health event.

IV. Expected results
All events (Public Health emergency) benefit from an investigation within 48 to 72 hours.
V. Reporting Timeline
48 to 72 hours after confirmation of the event

VI. Resources
Human
• Surveillance actors at all levels • Decision-makers and other sectors
Equipment
• Investigation kit; • Communication kit; • Office kit; • Transport Logistics; • Financial resources; • Support kit.
Documents
• CBS Guidelines; • Maps; • Phonebook. • Security procedures; • Investigation checklist;

VII. Procedure
Chief of District Health Service

- S/he holds advocacy meetings in the presence of the Chief of Health Areas with key informants (community leaders, etc.) and the president of the District Management Committee (DMC) to facilitate the investigation and implementation of response activities;
- S/he organizes with the PCHWS the active search for cases and contact tracing in the community;
- S/he makes data collection tools available to PCHWs;
- S/he facilitates the deployment of Rapid Intervention and Investigation Teams (RRT) in the community;
- Organizes feedback meeting with community leaders to provide results of the investigation and response carried out.

Chief of the Health Area

- Assists the Chief of Health District in organizing advocacy meetings with key informants and the president of the DMC to facilitate the investigation and implementation of response activities;
- Identifies and supervises PCHWs in active case finding and community contact tracing;
- Assists the District Health Service Chief in organizing meetings with community leaders to provide the results of the investigation and response carried out.

PCHWs

- They participate in advocacy meetings;
- They participate in active community case finding;
- They have community case and signal definitions;
- They identify key informants;
- They popularize these case definitions with key informants (briefing);
- They carry out visits to households, gathering points and other sensitive points depending on the current event, to identify suspected cases or signals;
- They raise awareness among suspected cases and those around them of the concerning the visit of the Chief of the Health area or RRTs, and refer them if necessary;
- They accompany the investigation teams during field trips;
- They provide daily information on the data collection tools made available to them;
- They transmit daily reports to the Chief of Health Areas and/or RRT team leaders.

Key informants

- They participate in advocacy meetings;
- They assist PCHWs with active case finding and contact tracing;
- They facilitate the integration of investigation teams into the community;
- They identify community cases and signals in the community and relay the information to the nearest PCHWs or health facilities and possibly refer the cases.

	6. Community case management
Code: 06 /CBS/2023	

VIII. Objective
Describe the stages of community case management by PCHWs.

IX. Target audience
This document is aimed at all people involved in Community-Based Surveillance, including Polyvalent Community Health Workers (PCHWs), key informants, Chief of Health area, District Management Teams and all other people involved in CBS.

X. Conditions to be met
• The PCHWs must have been selected and trained according to the national guidelines for community-directed interventions; • District Management Teams (DMTs), Chiefs of Health Area and PCHWs must be trained in CBS in general; • PCHWs/key informants should be trained/briefed on the current Public Health event.

XI. Expected results
Manage cases identified in the community correctly and early while awaiting referral to the health facility.

XII. Reporting Timeline
Immediately after case identification/detection.

XIII. Resources	
Human	
• PCHWs • Key informants	
Inputs and equipment	
• Support kit • Protection and hygiene kit	• Transport Logistics (motorcycle, ambulance)
Documents	
• CBS Guidelines • Safety Procedures	• Cards • Support algorithms • Phonebook • Data collection tools

XIV. Procedure
District Manager

• Trains/briefs PCHWs on community case management; • Provides equipment and material to the PCHWs; • Provides PCHWs with data collection and case monitoring tools; • Ensures the coordination of the management of community cases in his health district.
Chief of the Health Area
• Ensures local supervision of community case management activities by PCHWs; • Ensures the management of cases referred to the HF by the PCHWs; • Compiles case management data produced by the PCHWs; • Transmits the data to the Health Districts.
PCHWs
• They initiate community care of cases eligible for community care; • They raise awareness and refer cases to the HF; • They participate in contact tracing; • They fill the data collection tools; • They transmit the data to the Chief of the Health Area.
Key informants
• They communicate useful information allowing community cases to be identified by the nearest PCHWs or HF.

	7. Community Infection Prevention and Control
Code: 07 /CBS/2023	

XV. Objective
Describe the stages of community IPC.

XVI. Target audience
This document is aimed at all people involved in Community-Based Surveillance, including Polyvalent Community Health Workers (PCHWs), key informants, Chief of Health area, District Management Teams and all other people involved in CBS.

VII. Conditions to be met
• The PCHWs must have been selected and trained according to the national guidelines on community-directed interventions; • The District Management Teams (DMTs), Chief of Health Areas, PCHWs must be trained in CBS in general; • PCHWs/key informants should be trained/briefed on the current Public Health event.

VIII. Expected results

PCHWs implement community IPC activities.

XIX. Reporting Timeline

Immediately after case identification/detection.
--

XX. Resources

Human

- | |
|---|
| <ul style="list-style-type: none"> • PCHWs • Key informants |
|---|

Inputs and equipment

- | | |
|---|--|
| <ul style="list-style-type: none"> • IPC kit • Protection and hygiene kit | <ul style="list-style-type: none"> • Transport Logistics (motorcycle ambulance) |
|---|--|

Documents

- | | | |
|---|---|--|
| <ul style="list-style-type: none"> • CBS Guidelines • Safety Procedures | <ul style="list-style-type: none"> • Cards • Community IPC Procedures | <ul style="list-style-type: none"> • Phonebook • Data collection tools |
|---|---|--|

XXI. Procedure

Chief of District Health Service

- | |
|---|
| <ul style="list-style-type: none"> • Trains/briefs PCHWs on community IPC; • Provides equipment and material to the PCHWs; • Ensures the coordination of community IPC in his/her Health District. |
|---|

Chief of the Health Area

- | |
|--|
| <ul style="list-style-type: none"> • Ensures supervision of community IPC activities of PCHWs; • Transmits data to the Health Districts. |
|--|

PCHWs

- | |
|--|
| <ul style="list-style-type: none"> • They implement IPC activities (WASH, water purification, etc.) in the community; • They transmit IPC data to the Chief of Health Area. • They participate in safe and dignified burials. |
|--|



8. Risk communication and community engagement

Code: 08 /CBS/2023

XII. Objective

Describe risk communication and community engagement activities.
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XIII. Target audience

This document is aimed at all people involved in Community-Based Surveillance, including Polyvalent Community Health Workers (PCHWs), key informants, Chief of Health area, District Management Teams and all other people involved in CBS.

XIV. Conditions to be met

- PCHWs must have been selected and trained according to the National Guidelines on Community-Directed Interventions;
- The District Management Teams (DMTs), the Chiefs of Health Areas and PCHWs must be trained on CBS in general;
- PCHWs/key informants should be trained/briefed on the ongoing public health event.

XV. Expected results

Community Engagement and Adherence.

XVI. Reporting Timeline

Immediately after case identification/detection.

VII. Resources

Human

- PCHWs
- Key informants (community leaders, etc.)

Material

- | | | |
|-----------------------|--------------------------|-----------------------|
| • Internet connection | • Communication credit | • Image boxes |
| • Mobile phones | • Tam Tam | • Roll-up |
| • Posters | • Whistles | • Vehicles with sound |
| • Leaflets | • Megaphones | • Video projectors |
| | • Chasubles/Vest/T-Shirt | • Collection tools |
| | • Flipchart | • Banners |
| | | • Transport Logistics |

Documents

- | | | |
|--------------------|-----------------------------|------------------------|
| •SOPs | •Frequently Asked Questions | •Data collection tools |
| •Technical manuals | •Web content | •Phonebook |
| •Safety procedures | •Essential messages | •Media checklist |
| •Meeting reports | | |

VIII. Procedure

Chief of District Health Service

- Coordinates the activities carried out by the HA;
- Provides Health Areas with communication elements (topics to develop, communication tools, etc.);
- Regularly transmits activity reports to the RDPH using all the means at his disposal;

• Develops the communication plan for his District, drawing inspiration from the national plan; • Provides periodic feedback on communication activities to the HA using all the means at his/her disposal; • Develops a monitoring plan for RCCE activities, as well as the activity timetable; • The District Management Team strengthens the capacities of Health Area Chiefs and PCHWs.
Chief of the Health Area
• Coordinates the activities carried out by PCHWs/community leaders, by establishing the lists of PCHWs, local associations (LAs), community leaders as well as activities to be carried out; • Holds briefing meetings with PCHWs and community leaders; • Receives and delivers communication materials to PCHWs and health facilities and sends a regular report to the Health District; • Develops an activity monitoring plan, as well as the activity schedule.
PCHWs
• PCHWs display and disseminate communication materials • They carry out local communication (Home Visits, community dialogues, educational talks, etc.) • They fill the data collection form and send the reports to the Health Areas. • Local associations and community leaders develop their social mobilization plans and share them with PCHWs; • Local associations and community leaders participate in a briefing and make a commitment; • Local associations and community leaders mobilize the community in areas of mass gatherings (markets, churches, mosques, associations; • Completion of data collection sheets and transmission to the PCHWs; • Community radio stations are briefed, receive spots and communication microprograms; • The radio stations develop the broadcast plan for the spots, organize interactive broadcasts; • They broadcast the spots, the microprograms, write the broadcast reports and transmit them to the District Communication Focal Points;
Bloggers:
• Attend briefings, receive web content and video capsules; • Develop content while respecting the guidelines given by the Central level;

- Distribute web content and capsules;
- Complete data collection sheets and share reports.



9. Data analysis

Code: 09/CBS/2023

VIII. Objective

Examine community-sourced data to produce useful information for decision-making

IX. Target audience

This document is aimed at all people involved in the management of surveillance data at all levels of the health pyramid

X. Prerequisites for implementation

- Staff trained in data cleaning, transformation and modeling;
- Basic knowledge of using the MS Office software pack;
- Basic knowledge of epidemiology;
- Basic knowledge of using DHIS2 (data entry and analysis).

XI. Expected results

- Information useful for decision-making is available
- Situation report

XII. Reporting Timeline

Continuous

XIII. Resources

Human

- | | |
|---|---------------------------------------|
| • Epidemiological surveillance focal points at all levels | • Data (Districts, regions, national) |
| • Monitoring unit | • 'CERPLE' |

Equipment

- | | |
|--|---|
| • Office kit | • Communication kit (tablet, telephone, internet modem, etc.) |
| • Software (Excell, QGIS, R, KoboCollect, DHIS2) | |

Documents

- IDSR Guide

• CBS Guidelines • Log book • Analysis plan
XIV. Procedure
A. In Health Areas
The SFP of HA /Data manager : • Checks that the data to be transmitted is of good quality (completeness, validity, uniqueness, timeliness, precision, consistency): are they sufficient to draw conclusions? Do they meet the standards, logic and criteria defined? are there any duplicates? is the data available at the right times? are they reliable? are there any missing fields, are there any outliers? are they collected in the same way? • Records signals in logbooks; • Updates the signal summary table: Signals received, signals verified, signals validated (events); • Makesure on a daily basis to keep the source of all data transmitted. Ex: number of signals detected = number of signals verified = number of signals sorted; • Integrates signals into DHIS2; • Asks analysis questions: What is the number of signals transformed into events? What types of signals were transformed into events? • Uses the IDSR guide, to carry out data analyses by time (histogram of the number of signals received per epidemiological week), place (representation of signals according to villages/neighborhoods/zones in a table), person (age pyramid, diagram for gender, pie chart for comparison of signal types, etc.) • Transmits the summary of alerts, daily report to the DS SFP
B. In the Health District
The DS SFP/Data Manager: • Checks the quality (completeness, validity, uniqueness, timeliness, precision, consistency) of the data from the HF: are they sufficient to draw conclusions? Do they meet the standards, logic and criteria defined? are there any duplicates? is the data available at the right time? are they reliable? are there any missing fields, are there any outliers? Are they collected in the same way? • Performs a risk assessment of each signal transformed into an event • Updates the signal summary table: validated signals (events), evaluated events, • Asks analysis questions: What is the number of events evaluated? What types of events are more risky and require rapid response? • Uses the IDSR guide, to analyse data by time (histogram of the number of events evaluated per epidemiological week), place (representation of events by place in a table), person (age pyramid, diagram for gender , pie chart for comparing types of events, DS map to represent the Health Areas most at risk, etc.); • Transmits the summary of events and the daily report to the RDPH SFP; • If necessary, the contact tracing database will also be transmitted to the RDPH SFP.
C. At the RDPH

The 'CERPLE'/Data Manger :

- Checks the quality (completeness, validity, uniqueness, timeliness, precision, consistency) of the data from the HF: are they sufficient to draw conclusions? Do they meet the standards, logic and criteria defined? are there any duplicates? is the data available at the right time? are they reliable? are there any missing fields, are there any outliers? Are they collected in the same way?
- Verifies the quality of the risk assessment carried out by the DS;
- Asks analysis questions: What is the number of events evaluated? What types of events are more risky and require rapid response?
- Updates the regional line list of events in the different Health Districts ;
- Uses the IDSR guide, to perform data analysis by time (histogram of the number of events evaluated per epidemiological week), place (representation of the most risky events according to health district on a map), person (age pyramid, diagram for gender, pie chart for comparison of event types)
- Develops SITREPS and distributes them when validated

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