



SURVEILLANCE STANDARD OPERATING
PROCEDURES
FOR
Ebola Virus Disease (EVD)



May, 2021



Acronyms

CDC	Center for Disease Control & Prevention
CFR	Case Fatality Rate
CSO	County Surveillance Officer
DSO	District Surveillance Officer
EVD	Ebola Virus Disease
PCR	Polymerase Chain Reaction
POE	Points/ports of Entry
RDT	Rapid Diagnostic Test
SBCC	
SFP	Surveillance Focal person
SOP	Standard Operating procedure
TG	Technical guideline
VHF	Viral Haemorrhagic Fever
WHO	World Health Organization

Acknowledgement

This document has been developed as the first version of the surveillance Standard Operating Procedure (SOP) for Ebola Virus Disease (EVD) in Liberia by the Division of Infectious Disease and Epidemiology, National Public Health Institute of Liberia with technical guidance from the World Health Organization and US. Centers for Disease Control and Prevention.

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1.2. INTRODUCTION

Ebola virus disease (EVD), formerly known as Ebola haemorrhagic fever, is a rare but severe, often fatal illness in humans. The virus is transmitted to people from wild animals and spreads in the human population through human-to-human transmission. The average EVD case fatality

rate is around 50%. Case fatality rates have varied from 25% to 90% in past outbreaks. Community engagement is key to successfully controlling outbreaks. Good outbreak control relies on applying a package of interventions, namely case management, infection prevention and control practices, surveillance and contact tracing, a good laboratory service, safe and dignified burials and social mobilization. Vaccines to protect against Ebola have been developed and have been used to help control the spread of Ebola outbreaks in Guinea and in the Democratic Republic of the Congo (DRC). Early supportive care with rehydration, symptomatic treatment improves survival. Two monoclonal antibodies (Inmazeb and Ebanga) were approved for the treatment of Zaire ebolavirus (Ebolavirus) infection in adults and children by the US Food and Drug Administration in late 2020. Pregnant and breastfeeding women with Ebola should be offered early supportive care. Likewise, vaccine prevention and experimental treatment should be offered under the same conditions as for non-pregnant population.

The virus family Filoviridae includes three genera: Cuevavirus, Marburgvirus, and Ebolavirus. Within the genus Ebolavirus, six species have been identified: Zaire, Bundibugyo, Sudan, Tai Forest, Reston and Bombali.

The Ebola virus causes an acute, serious illness which is often fatal if untreated. EVD first appeared in 1976 in 2 simultaneous outbreaks, one in what is now Nzara, South Sudan, and the other in Yambuku, DRC. The latter occurred in a village near the Ebola River, from which the disease takes its name.

The 2014–2016 outbreak in West Africa was the largest Ebola outbreak since the virus was first discovered in 1976. The outbreak started in Guinea and then moved across land borders to Sierra Leone and Liberia.

Table: Chronology of previous Ebola virus disease outbreaks

S/N	Year	Country	EVD	Cases	Deaths	Case fatality
1	2021	Guinea	Zaire	18	9	50% ^{1*}
2	2021	Democratic Republic of the Congo	Zaire	11	4	36%*
3	2020	Democratic Republic of the Congo	Zaire	130	55	42%
4	2018-2020	Democratic Republic of the Congo	Zaire	3481	2299	66%
5	2018	Democratic Republic of the Congo	Zaire	54	33	61%
6	2017	Democratic Republic of the Congo	Zaire	8	4	50%
7	2015	Italy	Zaire	1	0	0%
8	2014	Spain	Zaire	1	0	0%
9	2014	UK	Zaire	1	0	0%
10	2014	USA	Zaire	4	1	25%
11	2014	Senegal	Zaire	1	0	0%
12	2014	Mali	Zaire	8	6	75%
13	2014	Nigeria	Zaire	20	8	40%
14	2014-2016	Sierra Leone	Zaire	14124*	3956*	28%
15	2014-2016	Liberia	Zaire	10675*	4809*	45%
16	2014-2016	Guinea	Zaire	3811*	2543*	67%
17	2014	Democratic Republic of the Congo				

1.1. Ebola Situation in Liberia

The 2014–2015 Ebola virus disease (EVD) outbreak across West Africa represented an international tragedy, directly leading to 28,616 cases of **EVD** and 11,310 deaths in total, and 10,675 confirmed, probable, and suspected cases in Liberia, resulting in 4,809 deaths.

¹ *Case Fatality Rate (CFR) as of March, 2021.

In Liberia, Ebola virus disease was first reported from Lofa County on March 30, 2014, a week after cases in Guinea had been reported. Additional cases in May and June heralded the country's severe outbreak. Events in Liberia drew widespread attention to Ebola as a threat to global health security including urbanization of the disease; first-ever infections in expatriate health workers; international spread to Nigeria, the United States, and Spain with secondary transmission; and mathematical model estimates of a future high case load.

February 2021, a new outbreak emerged in neighbouring Guinea. Due to this outbreak, Liberia increased her preparedness efforts with activation of an Incident Management System at the national level with key focus on counties (Nimba, Lofa and Bong) bordering Guinea.

This standard operating procedure (SOP) provides the Disease Specific Surveillance for EVD, and guidance on other epidemic prone diseases in Liberia. This SOP also highlights how to conduct surveillance activities in the field. The goals of Ebola virus disease (EVD) surveillance during response are to promptly detect new suspected EVD cases and deaths so as to trigger appropriate response, including rapid diagnosis, case isolation and management, contact tracing, safe burials, and risk communication.

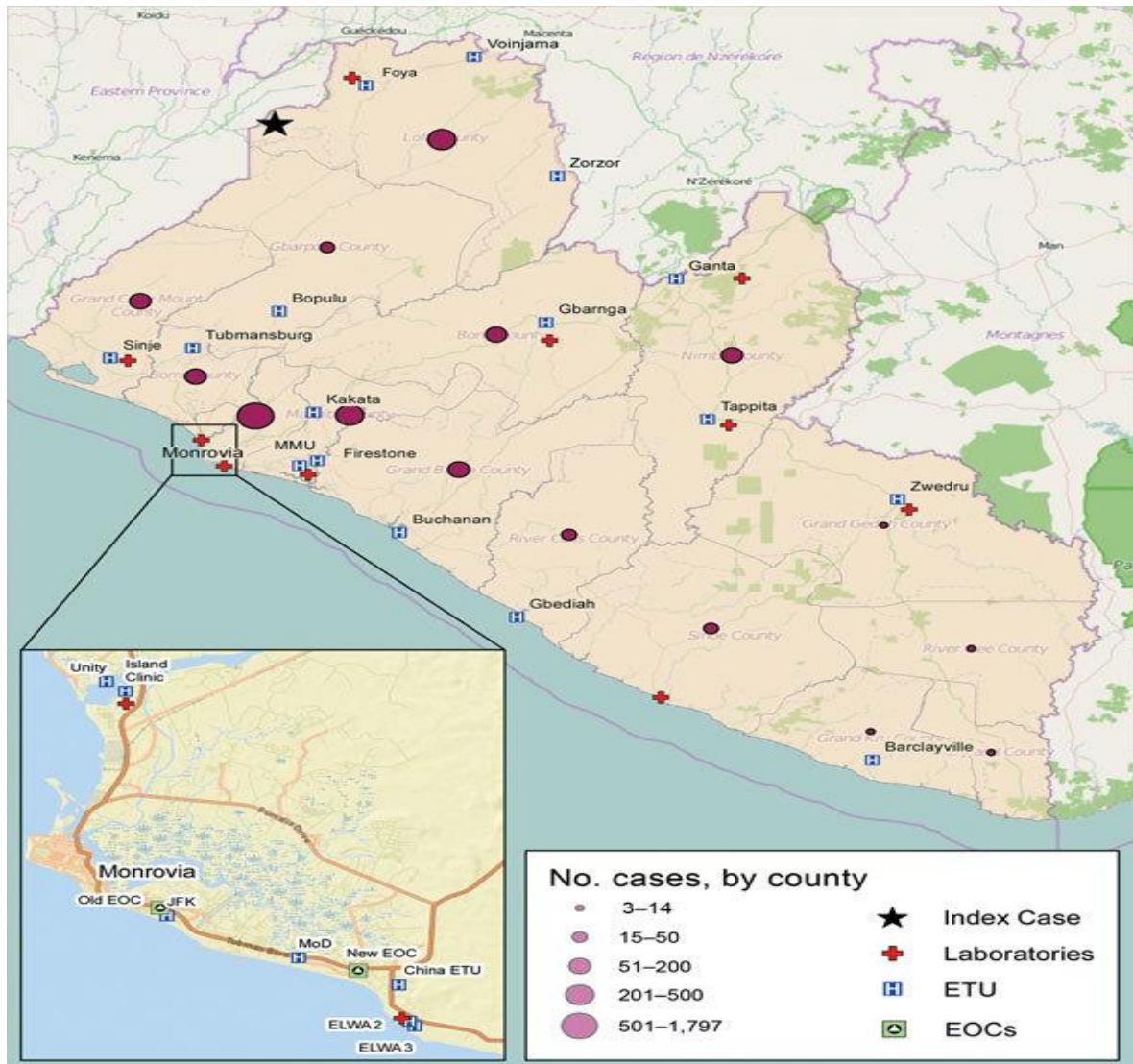
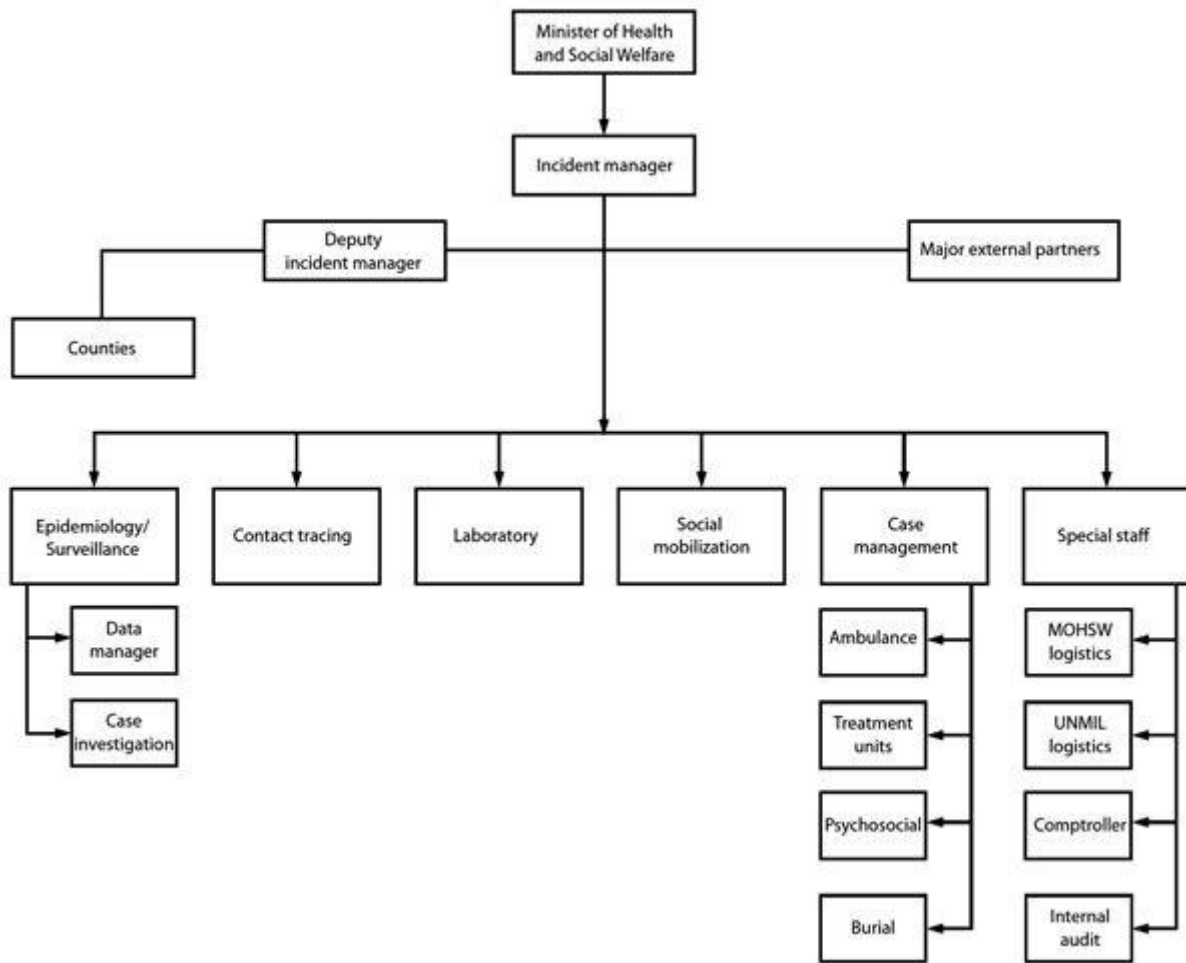


Figure 1: Locations of Ebola case-patients and associated facilities, Liberia, 2014–2015.

in Figure 2: Organizational flowchart for Ebola response Incident Management System, Liberia Ministry of Health and Social Welfare (MOHSW), August 2014. UNMIL, United Nations Mission



Liberia. Source: <http://www.cdc.gov/mmwr/preview/mmwrhtml/mm6341a4.htm>

1.2. Epidemiology of Ebola

High case fatality ratios have been reported during Ebola outbreaks (25% to 90%) and during Marburg outbreaks (25% to 80%). All age groups are susceptible to infection, but most cases have occurred among adults. Persistence of viral particles in breast milk, semen, and the central nervous system in survivors has been documented in EVD but the transmissibility is unclear.

1.4. EVD Surveillance

The goal of surveillance is to have early detection of cases and outbreaks, rapid investigation, and early laboratory verification of all suspected cases, as well as do the following:

- Investigate all suspected cases with contact tracing and safe burial
- Support prevention efforts such as Infection Prevention and Control (IPC), social distancing and vaccination when available.
- Monitor case fatality, assess spread of illness (chains of transmission), and death.
- Guide the support and care of survivor

Upon detection of a possible Ebola virus disease event, the following should be considered:

- Activate rapid response teams (RRT) to investigate, and conduct initial controls, including systematic contact tracing.
- Strengthen detection of EVD at the health-care facilities, especially in hospitals, border crossings with already affected countries, including land crossings, airports and seaports.

1.5. EVD Surveillance at Points of Entry

For the implementation of this SOP, there should be working collaboration between boarding parties (Authorities involved in border management) when administering responsibilities

Procedures of screening for EVD at port of entries must include the following:

- Travelers must form a queue observing 6 feet apart for temperature check and proceed to the hand washing stations
- Incoming travellers must fill the Health Declaration form prescribed by all boarding parties
- Port Health Officers² must ask all travellers questions specific to signs and symptoms of EVD, travel history and provide clearance for travellers to proceed to immigration and Custom Officers.
- POE boarding parties must monitor all vehicles/conveyance from all international and local borders to increase surveillance measure

² In an event where PHO is not the available, LIS assumes responsibilities

- Upon arrival of the vehicle/conveyance, Port Health Officers must collect and verify the health documentation and interview the travellers to determine if there is any sick passenger on board
 - Customs officers must monitor all goods that are on-board the vehicles, while LIS inspects all travelling document with a form provided them.
- Nurse or Port Health Officer³ must contact the officer in charge of the designated health facility to confirm suspicion of EVD (secondary screening) and to transfer the suspected case.

2.0. Case Detection

2.1. At health facility

At the health facility level, use standard case definitions to detect EVD and report suspected case and other priority diseases, conditions and events of public health concern to the next level (DSO).


Notify county diagnostic officer take diagnostic samples (whole blood) and send to national public health reference laboratory to confirm diagnosis. Verify and investigate suspected case and complete first two sections of the case investigation form.

2.2 At the community

At the community level, use community case definitions to detect EVD and refer suspected case to the next level (health facility).

Liberia's EBOLA CASE DEFINITIONS

Community Definition

ALERT CASE	Any person with a hot skin and 2 or more symptoms:	
	• Headache	
	• Vomiting	
	• Loss of appetite	
	• Running stomach	
	• weakness	
		• Stomach pain
		• Body pain

³ LIS can also contact the designated OIC

- Pain in the throat

OR: Bleeding or pupu with blood or pepe with blood

OR: Quick or unexplained death

Standard case definition (Health facility)

SUSPECTED CASE:

Any person, alive or dead, with onset of fever and no response to treatment for the usual causes of fever in the area AND at least one of the following signs: Bloody diarrhea, bleeding from gums, bleeding into skin (purpura), bleeding into eyes or urine OR clinical suspicion for Ebola or Marburg Virus Disease.

PROBABLE CASE:

A suspect case evaluated by a clinician or an epidemiologist

OR: A dead case with an epidemiological link to a confirmed case that can no longer be lab confirmed.

OR: Any suspected case that can no longer benefit from lab confirmation, but which the supervisory subcommittee considers, after evaluation at a case classification meeting, that there is evidence of epidemiological link to a confirmed case.

CONFIRMED CASE:

Any suspect case with a laboratory-confirmed positive result. Laboratory-confirmed cases must be positive either for the virus antigen, viral RNA detected by RT-PCR, or for IgM antibodies directed against Ebola.

NOT A CASE:

Any suspicious case with a negative laboratory result. "Not a cases" are those in which specific antibodies, RNA and specific antigens are not detected.

Definition of a contact

CONTACT OF A HUMAN CASE

Anyone who does not show signs and symptoms of the disease, but who has had physical contact with a case (living or dead) or with the bodily fluids of a case in the past 3 weeks in at least one of the following situations:

Slept in the same home in the month prior to the onset of symptoms

Had direct physical contact with the confirmed case (living or deceased) during his illness

Shared the same means of transport (airplane, boat, vehicle, bicycle, motorcycle, canoe)

Made direct contact with patient's clothes or bedsheets

Was breastfed

Anyone who has come into contact with an animal found dead or sick under at least one of the following conditions:

- Touched
- Manipulated (handling)
- Skinned
- Touched the blood of an animal
- Ate bush meat

The contact person should be followed up for 21 days after exposure. If the contact person is asymptomatic for 21 days after exposure, they can be released to follow-up

Laboratory Contact

Anyone who has been exposed to biological material in a laboratory, less than 21 days before the identification as a contact by surveillance teams, in at least one of the following ways:

Has had direct contact with specimen collected from suspected Ebola patients

Has had contact with specimens collected from suspected Ebola animal cases

2.4. Alert and Action Thresholds

Thresholds	Number of cases	Require action
Alert Threshold	A single suspected case	<ul style="list-style-type: none"> • Report case-based information immediately (phone or text with information from generic case investigation form) to the appropriate levels. • Collect specimen to confirm the case(s). Carefully complete specimen request form and mark containers to warn laboratory of risk. • Suspected cases should be isolated from other patients and strict barrier nursing techniques implemented. Eliminate body fluid exposure and wear VHF appropriate PPE. • Standard precautions should be enhanced throughout the healthcare setting. • Conduct case-contact follow-up (using case investigation form) and active case search for additional cases. Begin contact tracing (see contact tracing forms) • Begin or enhance death reporting and surveillance
Epidemic/Action Threshold	A single confirmed case	<p>Maintain strict VHF infection control practices throughout the outbreak.</p> <ul style="list-style-type: none"> • In the event of an outbreak. Refer to Section 6 of the IDSR technical guidelines as well as the Liberian

		<p>National Epidemic Preparedness and Response Plan for standard operating procedures for infection control, border controls, social distancing, and safe and dignified burial practices.</p> <ul style="list-style-type: none">• Honest reporting of symptoms and contacts in community is essential to contain the outbreak. Therefore, mobilize the community for early detection and care of cases and conduct community education about how the disease is transmitted and how to implement infection control in the home care setting and during funerals. Consider social distancing policies.• Psychosocial support for family, community, and staff.• Begin screening procedures for fever and VHF-like symptoms at the entrances to health care facilities with hand washing <p>Write daily situational report (SitRep) till the outbreak is declared over</p> <ul style="list-style-type: none">• Conduct after action review (AAR) at the end of the outbreak
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2.5. Reporting structure and mechanism

Reporting refers to the process of reporting suspected and confirmed outbreaks. The routine flow of surveillance data is usually from each reporting site to its immediate supervisor (usually the higher level within the health system) as follows:

- Community Health Assistants, Community Health Volunteers, Port Health Officers, Community Animal Health Workers, and Environmental Health Officers report to the Surveillance Focal Point (normally the OIC) at the Health Care Facility
- The Surveillance Focal Point (SFP) at health facilities report to the District Surveillance Officer (DSO)
- The DSO provides district level data to the County Surveillance Officer (CSO) or other identified member of the County Health Team (CHT)
- The CSO/CHT provides County level data to the DIDE/NPHIL.
- DIDE/NPHIL then collates and analyzes all data to show what is happening with morbidity and mortality in Liberia for the reporting period (weekly, monthly, quarterly or annually) and provides evidence for planning and response activities. Feedback should be provided to all sites that report data, or should report data, for their own information and planning purposes. In addition, the CHT should also provide analysis of the situation within the county to the districts and HCFs.

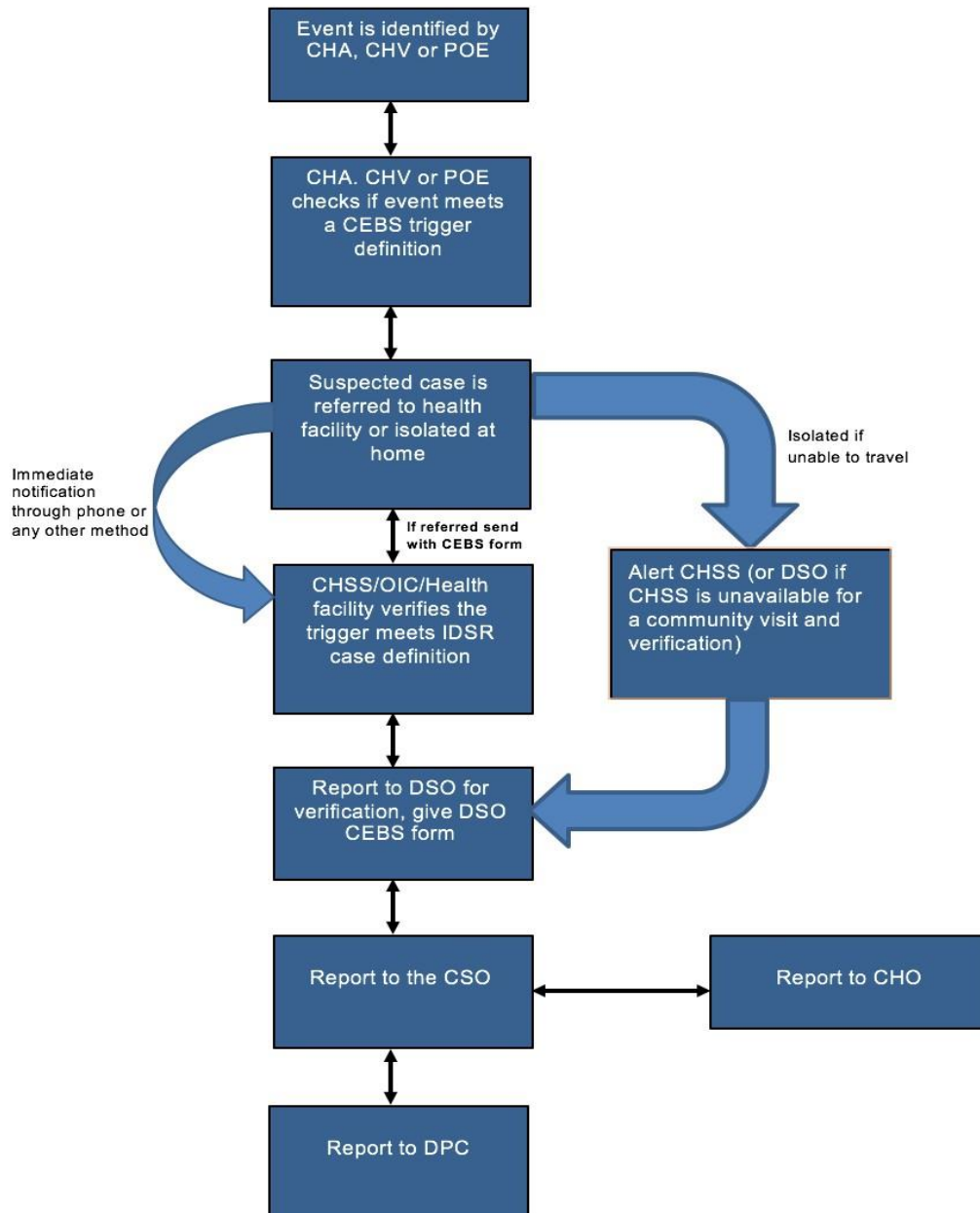


Figure 3: REPORTING AND FEEDBACK STRUCTURE

2.6. Laboratory confirmation of EVD Cases

Diagnostic services for EVD and Marburg Virus Disease (MVD) are not routinely available in all laboratories. See **the National IDSR TGs** which includes a list of reference laboratories that confirm priority diseases. Test results usually take 2 days after the specimen arrives at the laboratory.

Diagnostic test

RT-PCR is gold standard for Ebola virus diagnosis. Other possible diagnostic tests include:

- ELISA for IgM & IgG antibodies against Ebola virus
- Rapid diagnostic tests (RDT) are being introduced into Ebola outbreak management. RDT availability and use will be determined in context. Reactive samples with RDT must be re-tested using RT-PCR.

Specimen to be collected

Whole blood or post-mortem oral swab is required.

When to collect

Collect specimen from all suspected cases, alive or dead, as soon as the case is suspected

How to prepare, store, and transport

- HANDLE AND TRANSPORT SPECIMENS FROM SUSPECTED VHF PATIENTS WITH EXTREME CAUTION.
- WEAR PROTECTIVE CLOTHING AND USE BARRIER PRECAUTIONS. See **National IDSR TGs** for Infection Prevention and Control procedures.

For PCR: Whole blood into an EDTA purple top tube

Post-mortem oral swab placed into viral transport medium

For ELISA: Blood sample into red top tube for serum

For RDT: Post-mortem oral swab tested on-site

Store specimens at refrigerated (4-8°C) temperatures

Package to prevent breakage and leaks

Transport in well-marked container at 4-8°C

3.0. Report EVD case

Surveillance actors are to always immediately (within 24 hrs.) report suspected cases of priority diseases including EVD to the next level. If EVD is suspected, fill out _____ (the VHF triplicate) case-based form and immediately (As Soon As you see it) report to the next level.

3.3. Analysis and Interpretation of Data: Analyze data by person, place and time series.

Person: Implement immediate case-based reporting of cases and deaths. Line list of contacts. Analyze age and sex distribution. Assess risk factors and plan disease control interventions accordingly.

Time: Graph cases and deaths daily/weekly. Construct an epidemic curve during the outbreak.

Place: Map locations of cases' households and their movements during incubation period
Constant analysis of the routine data is a tool for prompt detection of suspected outbreaks of priority diseases. The county should review routine data to identify cases that meet a case definition of a suspected case of a priority disease and any changes in disease trends that may signal an outbreak or public health concern.

3.4. Investigation/Confirmation: As soon as a case is reported, a preliminary investigation is done to identify the possible causes for disease transmission. The county and national level cooperate in obtaining a diagnostic confirmation of the case.

When a case is suspected, case investigation should commence immediately with notification to the next level. A standard EVD case investigation form should be used to guide the investigation of the suspected case (annex 2).

Collect general Information

Results of the investigation will provide:

- General information about the patient (for example, locating information, age and occupation).
- The patient's symptoms and their date of onset.
- Any recent travel the patient may have taken to areas where EVD is endemic or where cases of fever and associated symptoms consistent with EVD have been reported.
- The patient's immunization history noting whether the patient has taken an EVD vaccine.

Patient's information should be obtained from the patient and from available records at the health facility. If the patient is too ill to answer, or has died, ask family members in the patient's

household to provide information about the patient’s symptoms, travel, and immunization history.

3.5. Respond to EVD outbreak

The epidemic preparedness and response teams will coordinate the case response activities. They should define the target population at risk for EVD and select immediate and long-term public health intervention.

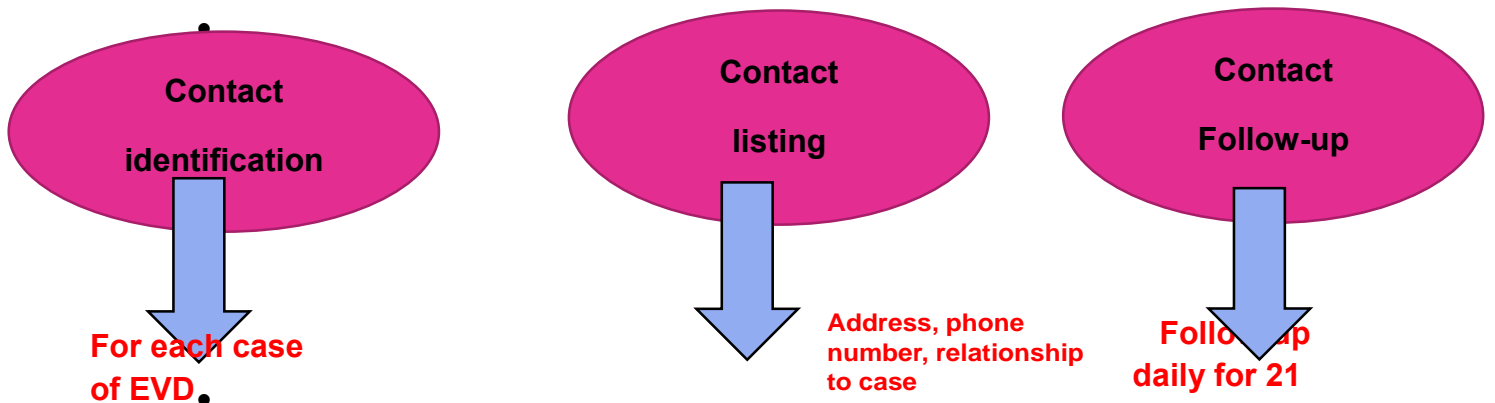
Accurate line listing of information from the case investigation forms should include variables such as:

- the patient’s name and location of the health facility reporting the suspected case,
- the patient’s symptoms and their date of onset,
- the patient’s travel history and immunization status,
- date the laboratory samples were collected, their results and the date they were sent to the district level, and any follow up actions that were taken.

3.6. EVD contacts identification and line listing

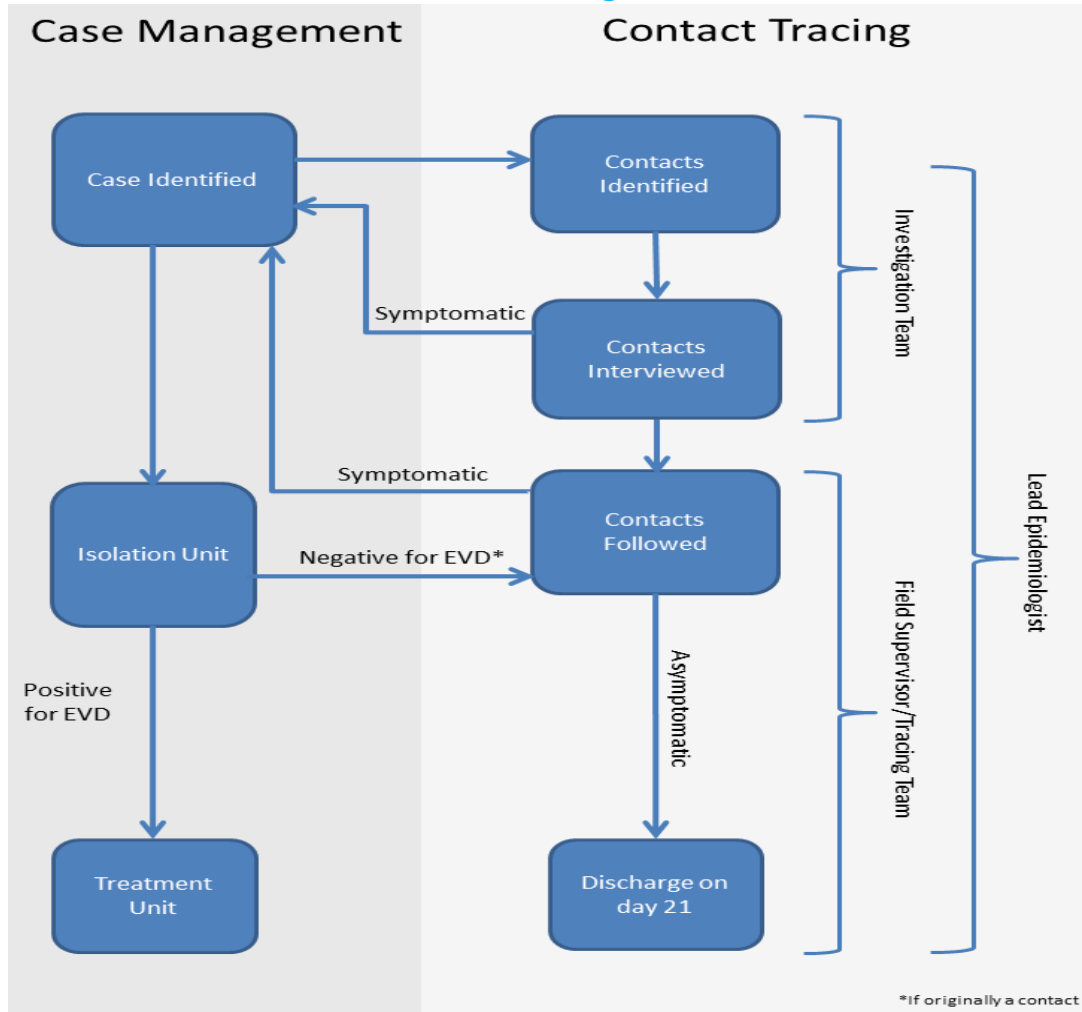
- **The Three Elements of Contact Tracing**

-
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- All healthcare providers who perform surveillance task of EVD surveillance must identify contacts and potential contacts, and line list them for each suspected EVD case identified.

- **Who is Involved in Contact Tracing?**



3.6 Management of EVD Cases

Manage cases and contacts according to standard case management guidelines.

3.6.1 Conduct an emergency immunization activity

Any person who is not immunized against EVD is at risk for the disease. In an outbreak situation, the target population for an emergency immunization activity should consider ring vaccination

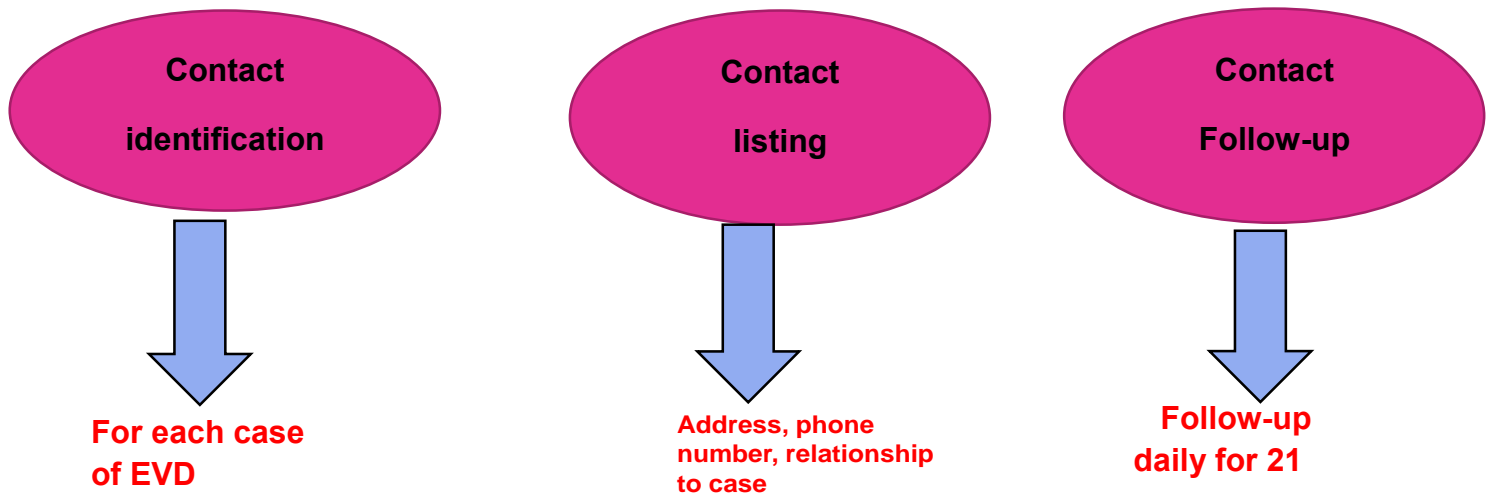
3.7. Risk Communication:

- Alert nearby areas and districts about outbreaks or events.
- Give healthcare facilities regular feedback on surveillance activities, priority events and about routine control and prevention activities.
- Give feedback on surveillance and data quality findings to DHO and CSO.
- Support healthcare facilities to engage communities on surveillance activities.

- Conduct regular district level surveillance review meetings to include key community members and partners
- Conducting advocacy meetings involving stakeholders at all levels
- Conduct community engagement at all levels (County, District and community)
- Conduct media engagement and awareness on EVD at all levels
- Disseminate SBCC materials

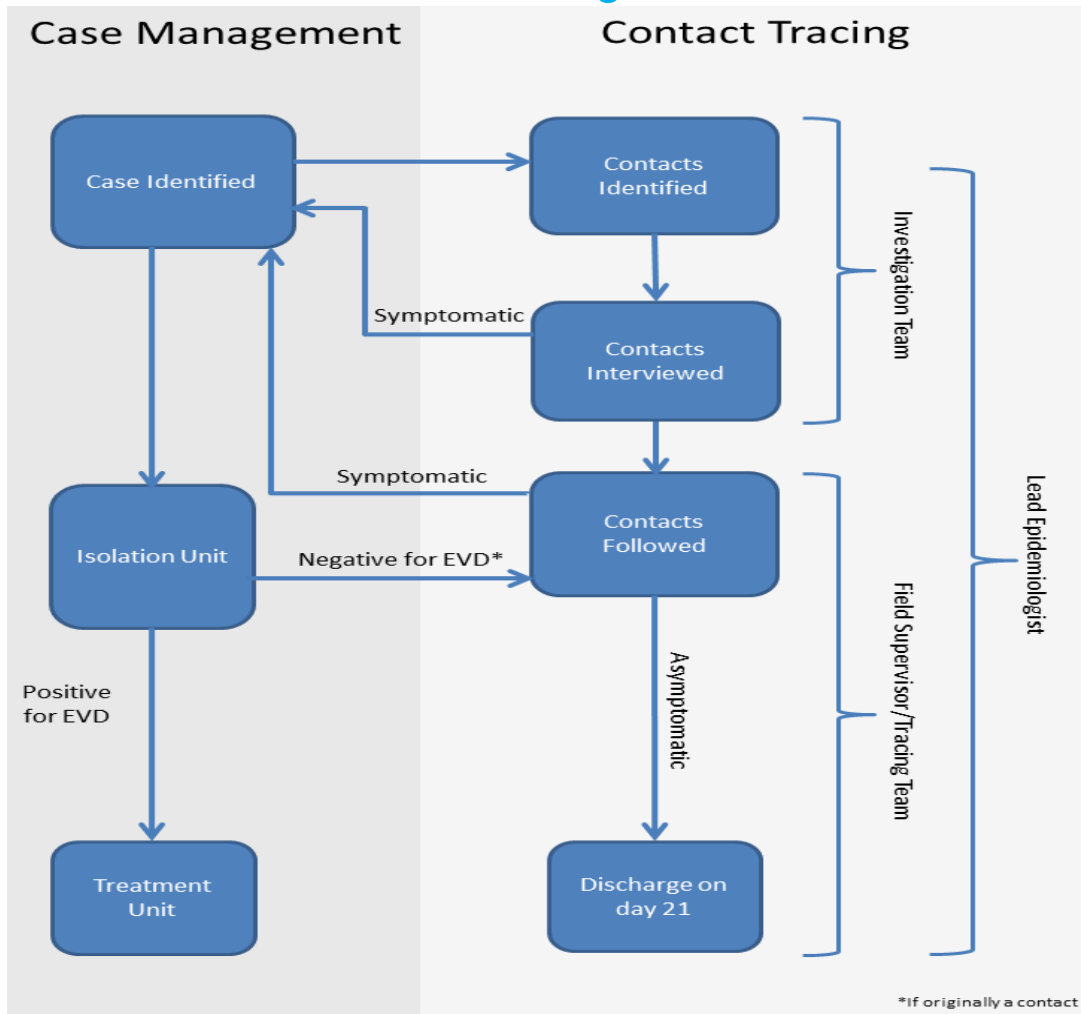
5.0. EVD contacts identification and line listing

The Three Elements of Contact Tracing

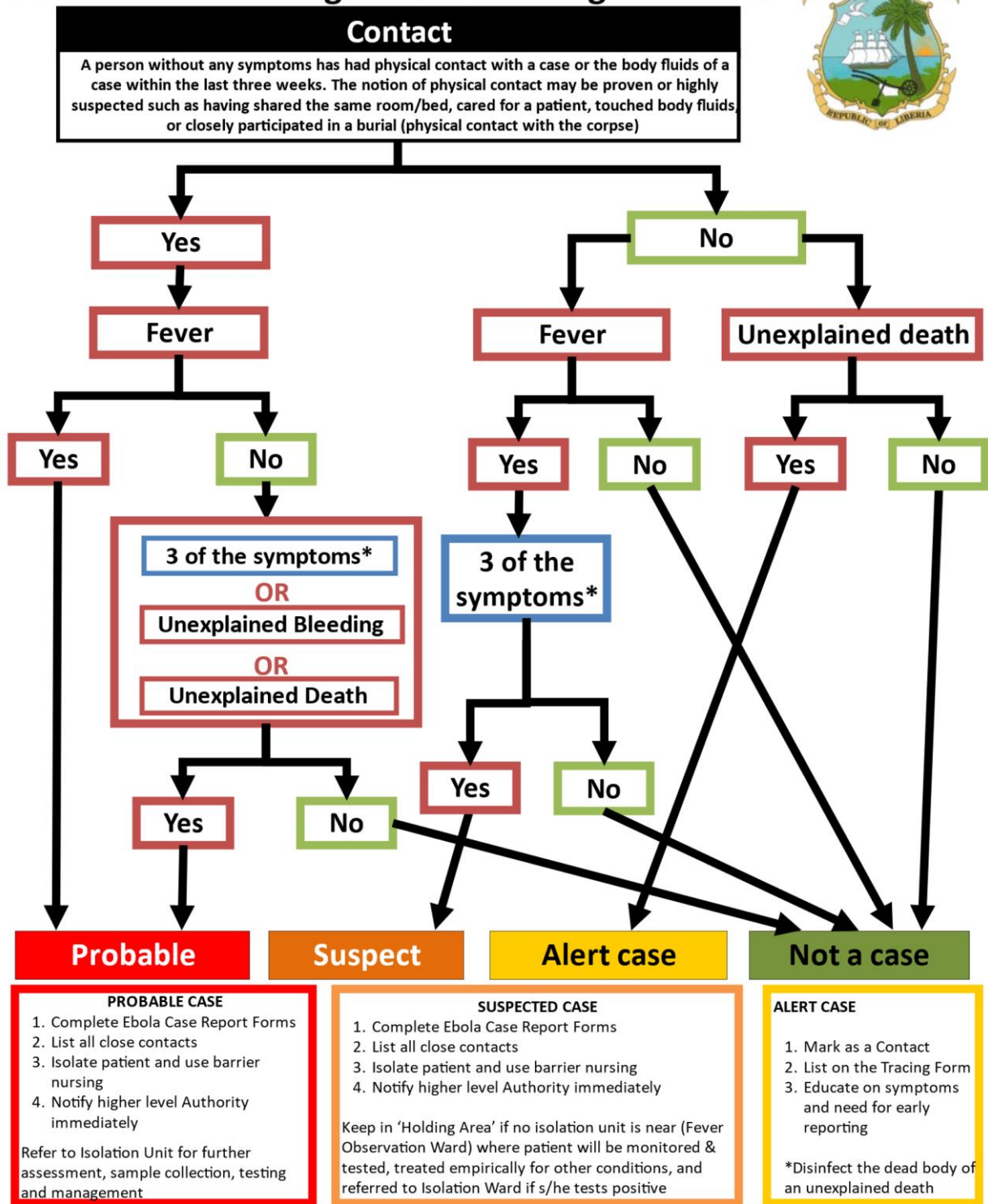


All healthcare providers who perform surveillance task of EVD surveillance must identify contacts and potential contacts, and line list them for each suspected EVD case identified.

Who is Involved in Contact Tracing?



EVD OUTBREAK Triage Decisionmaking Flowchart



***Symptoms include:** headache, vomiting, nausea, loss of appetite, diarrhoea, intense fatigue, abdominal pain, general muscular or articular pain, difficulty in swallowing, difficulty in breathing, hiccoughs

Note: Confirmed cases requires positive laboratory test

Liberia, 2014



INTEGRATED DISEASE SURVEILLANCE AND RESPONSE

Viral Haemorrhagic Fever – Case Investigation Form
(v0.5)

Date of detection of the case ___/___/___ (dd/mm/yyyy)

This Case was notified by (tick off the right answer and specified) Mobile team, #
_ Health Centre

IDSR-ID:

Date of reception:

___/___/___

Hospital

Others:

Form filled by (first name and surname)

Information given by (first name and surname)

Family link with the patient

Identity of the patient

First name: _____ Surname

Nickname _____

For the babies, son/daughter of (name of father):

Birth date: ___/___/___ (dd/mm/yyyy) Age (years) _

Sex M F

Permanent address: Head of Household (first name and surname)

—

Village/Suburb _____ Country_ Nationality:

___ GPS lat _____ long _____ Ethnic group

Profession of the patient (tick off the right answer)

Miner House wife Hunter/trading game meat No profession

Pupil/ Student Farmers Health staff

If profession is health staff:

Name of health care facility: _____

Service

Qualification

Others

Status of the patient

Status of the patient at detection Alive Dead

If dead, please specify date of death: ___/___/

(dd/mm/yyyy)

Place of death: Community, name village

_____ Country_ -

Hospital, name and service _____ Country

Place of the funerals, name village:

_____ Country

History of the disease

Date of onset of symptoms: ___/___/

(dd/mm/yyyy)

Name of the village where the patient got ill

Country

Did the patient travel during illness : Yes No DNK

v1.5 (6/16)

If Yes, specify:

Village _____ Health Centers

Country_

Did the patient have fever? Yes No DNK.

If yes, date of onset for the fever: ___/___/

(dd/mm/yyyy)

IDSR-ID:

Date of reception:

___/___/

Does/did the patient have the following symptoms (tick off when apply)

Headache:	Yes	No	DNK	Skin Rash	Yes	No	DNK
				sites			
Diarrhea	Yes	No	DNK	Bleeding into eyes (red eyes)	Yes	No	DNK
Abdominal Pain	Yes	No	DNK	Blood in vomits	Yes	No	DNK
Muscle or Joint Pain	Yes	No	DNK	Bleeding from nose	Yes	No	DNK
Difficulty swallowing	Yes	No	DNK	Bleeding from vagina	Yes	No	DNK
Difficulty breathing	Yes	No	DNK	Hiccoughs	Yes	No	DNK

Exposure Risks

- Was the patient hospitalized or did he visit anyone in the **hospital** anytime in the three weeks

before becoming ill? Yes No DNK; If Yes, where

(dates) ___/___/___ and ___/___/

between

- Did the patient have visit/consult a **traditional healer** during the three weeks before becoming ill or during illness? Yes No DNK

If Yes, name of the traditional healer _____ Village _____ Country _____;

When and where did the contact take place? Place _____ date: ___/___/

- Did the patient receive traditional medicine? Yes No DNK;

If Yes, explain which kind:

- Did the patient attend **funeral ceremonies** during anytime in the three weeks before becoming ill?

Yes No DNK;

- Did the patient travel anytime in the three weeks before becoming ill? Yes No
DNK

If Yes, where

between (dates) ___/___/___ and ___/___/

- Did the patient have a contact with a **known suspect case** anytime in the three weeks before becoming ill? Yes No DNK;

If Yes, Surname

First name _____ IDSR-ID

- During the contact, the suspect case was Alive Dead date of death ___/___/

Date of last contact with the suspect case ___/___/

- Did the patient have contact with a **wild animal** (non-human primate or others), that was found dead or sick in the bush, or animal behaving abnormally anytime in the three weeks before the illness?

Yes No DNK; If Yes, kind of animal _____ Location _____ Date ___/___/

v1.5 (6/16)

Has a sample been collected? Yes No DNK; If yes, date ___/___/___
Blood sampling Urine Saliva Skin Biopsy

Was the patient sent to a hospital? Yes No

Was the patient admitted in the isolation ward? Yes No

If Yes, name of Hospital

No. of hospital

Hospitalization date ___/___/

Update on the Hospital information

ID Case:

Reception date: ___/___/

Country:

Member of family helping the patient: _____ Name and Surname

Date of discharge ___/___/___ OR Date of death ___/___/___

Laboratory

A specimen was collected	before the death	After the death
Date sample ___/___/___	Date results ___/___/___	IDSR -ID
Sample: blood	blood with anti-coagulants	
skin biopsy	cardiac function	

Results

other: _____

PCR	pos	neg	NA	date	___/___/
Antigen detection	pos	neg	NA	date	___/___/
Antibodies IgM	pos	neg	NA	date	___/___/
Antibodies IgG	pos	neg	NA	date	___/___/
ImmunoHistochemistry	pos	neg	NA	date	___/___/

Outcome (verified 4 weeks after the onset of symptoms)

Alive Dead; If dead, date of death ___/___/

Case Classification

Alert Case Suspect Probable

HEALTH DECLARATION FORM
(FORMULAIRE DE DECLARATION SANITAIRE A L'ENTREE)
Ministry of Health/Liberia/Port Health Unit
(Ministere de la Sante, Service de Sante au Liberia, Unite de Sante Portuaire)
Name/Non:
Sex (Sexe): Male (Home) [<input type="checkbox"/>] Female (Femme) [<input type="checkbox"/>]
Date of Birth (Date de Naissance)(dd/mm/yyyy):
Country of Departure (Pays de Depart):
Nationality (Nationalite):
Country (ies) visited on this trip (Pays visited(s) pendant ce voyage):
Country (ies) visited within the last 14 days (Pays visite(s) au cours des 14 derniers jours):
Passport No. (Numero de Passeport): _____ Expiration date : _____ Place Issued: _____
Flight/Vessel, Bike/Car Plate: No. (Numero de Vol/Vaisseau):
Seat No: .(Numero de siege):
Contact address in Liberia (Location)/ Adresse d'une connaissance au Liberia (Emplacement):
Contact Person's No. in Liberia (Numero de Contact au Liberia):
Have you had close contact with sick person (person with fever, cough and difficulty in breathing) in the past 14 days? (Avez-vous eu des contacts etroits avec une personne malade (fièvre, toux et difficultés respiratoires) au cours des 14 derniers jours?) Yes (Oui) [<input type="checkbox"/>] No (Non) [<input type="checkbox"/>]
Please tick <input checked="" type="checkbox"/> if you have any of the under listed signs and symptoms (Veuillez cocher <input checked="" type="checkbox"/> si vous présentez l'un des Signes et symptômes sous-dessous)
Fever (Fievre) : Yes /Oui [<input type="checkbox"/>] No /Non [<input type="checkbox"/>] Cough (La Toux) Yes /Oui [<input type="checkbox"/>] No /Non [<input type="checkbox"/>] Headache (Maux de Tete) Yes /Oui [<input type="checkbox"/>] No /Non [<input type="checkbox"/>] Bodily Weakness (Faiblesse Corporelle) Yes /Oui [<input type="checkbox"/>] No /Non [<input type="checkbox"/>] Sore throat (Gorge irritee) Yes /Oui [<input type="checkbox"/>] No /Non [<input type="checkbox"/>] Sneezing (Eternuements) Yes /Oui [<input type="checkbox"/>] No /Non [<input type="checkbox"/>] Runny Nose (Ecoulement Nasal) Yes /Oui [<input type="checkbox"/>] No /Non [<input type="checkbox"/>] Others: Signature: Date:/...../.....
Official use only Temperature



Liberia IDSR Case Alert and Lab Submission Form



NOTE: Send a copy of this form to the DSO. A copy of this form should also accompany every lab sample

Reporting Date: / /	IDSR-ID: - -	Patient Record ID:
<small>Day Month Year</small>	<small>County Code Facility Code Case ID</small>	

DISEASE REPORTING

Reporting Health Facility:	Reporting District:	Reporting County:
Disease or condition of alert* (select one):		
<input type="checkbox"/> Acute Bloody Diarrhea (Shigellosis)	<input type="checkbox"/> Meningitis	<input type="checkbox"/> Member of Unexplained Cluster of Death
<input type="checkbox"/> Cholera (AWD)	<input type="checkbox"/> vHF (EVD)	<input type="checkbox"/> Member of Unexplained Cluster of Disease
<input type="checkbox"/> Human Rabies	<input type="checkbox"/> Yellow Fever	<input type="checkbox"/> Other: _____
<input type="checkbox"/> Lassa Fever	<input type="checkbox"/> Maternal Death	<input type="checkbox"/> Specify: _____
<input type="checkbox"/> Measles	<input type="checkbox"/> Neonatal Death	
<small>*Report Acute Flaccid Paralysis (AFP) and Neonatal Tetanus on disease specific forms</small>		
Crossed International Border in last 1 month: <input type="checkbox"/> Yes <input type="checkbox"/> No		
Case detected at community level: <input type="checkbox"/> Yes <input type="checkbox"/> No		

PATIENT DEMOGRAPHICS

Patient First Name:	Patient Last Name:	Patient Sex:	Patient Age:
		<input type="checkbox"/> Male <input type="checkbox"/> Female	<input type="checkbox"/> Years <input type="checkbox"/> Months <input type="checkbox"/> Days
Date of Birth: / /	County of Residence:	District of Residence:	
<small>Day Month Year</small>			
Community of Residence:	Locating information*:		
<small>*If applicable, include head of household, phone number, and name of mother if young</small>			

CLINICAL INFORMATION

Date of onset: / /	Date seen: / /	In/out-Patient: <input type="checkbox"/> Inpatient <input type="checkbox"/> Outpatient	Outcome: <input type="checkbox"/> Alive <input type="checkbox"/> Dead	Classification: <input type="checkbox"/> Probable <input type="checkbox"/> Suspected
<small>Day Month Year</small>	<small>Day Month Year</small>			
Reporting Person Name:	Phone Number:	Comments:		Only for disease of this alert:
				Vaccination History: # Vaccination: <input type="checkbox"/> Yes <input type="checkbox"/> No <input type="checkbox"/> Unknown
Person Collecting Specimen Name:	Phone Number:			Date of Last Vaccination: / /
				<small>Day Month Year</small>
Date of Specimen Collection: / /	Date Specimen sent to Lab: / /	Specimen Type*:		
<small>Day Month Year</small>	<small>Day Month Year</small>	<small>*Throat swab, oral swab, rectal swab, serum, blood, stool, CSF</small>		

FOR LAB ONLY: complete this section, enter into the database, and file.

Laboratory Name:	Date Specimen Received: / /	Specimen Condition: <input type="checkbox"/> Adequate <input type="checkbox"/> Inadequate
	<small>Day Month Year</small>	
Date Specimen Tested: / /	Type of Tests Performed:	Specimen ID:
<small>Day Month Year</small>		
Final Lab Results:	Date Results reported: / /	
	<small>Day Month Year</small>	

References:

1. New York City Department of Health and Mental Hygiene. 2014 Alert #22: Evaluating patients for Ebola virus disease in New York City. Available at https://a816-health29ssl.nyc.gov/sites/nychan/lists/alertupdateadvisorydocuments/nyc%20dohmh%20ebola%20health%20alert__8_11_14%20final.pdf.
2. New York City Department of Health and Mental Hygiene. 2014 Ebola virus disease evaluation algorithm. Available at <http://www.nyc.gov/html/doh/downloads/pdf/cd/ebola-eval-algorithm.pdf>.
3. CDC. Ebola (Ebola virus disease): signs and symptoms. US Department of Health and Human Services, CDC; 2014. Available at <http://www.cdc.gov/vhf/ebola/symptoms/index.html>. [Google Scholar]
4. CDC. 2014 Ebola outbreak in West Africa - outbreak distribution map. US Department of Health and Human Services, CDC; 2014. Available at <http://www.cdc.gov/vhf/ebola/outbreaks/2014-west-africa/distribution-map.html>. [Google Scholar]
5. New York City Department of Health and Mental Hygiene. 2014 Alert #27: Update: Ebola virus disease outbreak in West Africa. Available at https://a816-health29ssl.nyc.gov/sites/nychan/lists/alertupdateadvisorydocuments/nyc%20dohmh%20ebola%20health%20alert__9_3_14%20w%20algorithm.pdf.
6. New York State Department of Health. 2014 Revised NYS NYC laboratory guidelines for handling specimens from cases or suspected cases of Ebola virus disease. Available at <http://www.nyc.gov/html/doh/downloads/pdf/cd/ebola-lab-guidelines.pdf>.
7. CDC. Emerging infectious diseases: detection of notifiable diseases through surveillance for imported plague—New York, September–October 1994. *MMWR*. 1994; 43:805–
7. [PubMed] [Google Scholar]
8. Integrated Disease Surveillance & Response 3rd edition National Guidelines
9. Emergency Preparedness and Response EVD Contingency Plan