



GOVERNMENT OF UGANDA



MINISTRY OF HEALTH

'IPC steps done when an Ebola Virus Disease (EVD) patient has been identified in an area'

Orientation of healthcare workers



Outbreak Summary as of 17th November 2022 at 22:00 HRS



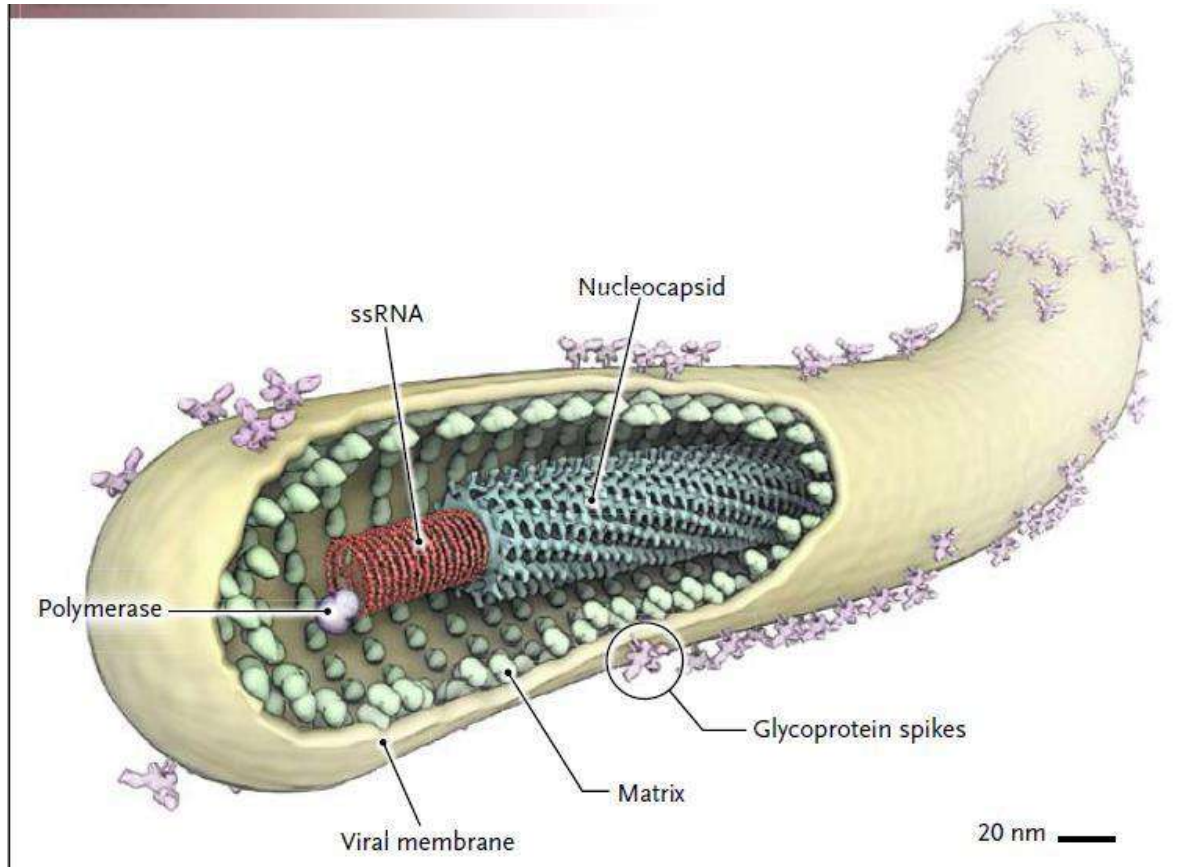
Summary of Cases as of 17th November 2022 at 22:00 HRS

	Last 24 Hours									
	MUB	KYE	KAS	KAG	MSK	WAK	JJA	KLA	BUN	Total
Confirmed Cases	00	00	00	00	00	00	00	00	00	00
Confirmed Deaths	00	00	00	00	00	00	00	00	00	00
Recoveries	00	00	00	00	00	01	00	00	00	01
	Cumulative									
	MUB	KYE	KAS	KAG	MSK	WAK	JJA	KLA	BUN	Total
Confirmed Cases	64	04	48	01	01	03	01	18	01	141
Deaths										
Confirmed	29	01	20	01	01	00	01	02	00	55
Probable	19	00	02	00	00	00	01	00	00	22
Days since last confirmed case	05	21	07	51	17	12	06	04	48	
Recoveries	34	03	21	00	00	03	00	15	01	77
Confirmed HCW										
Confirmed	14	00	01	01	00	00	00	02	01	19
Probable	6	00	00	01	00	00	00	00	00	07

Table Acronyms: MUB=Mubende, KYE=Kyegegwa, KAS=Kassanda, KAG=Kagadi, WAK = Wakiso, KLA = Kampala, MSK = Masaka, JJA = Jinja, BUN=Bunyangabu, HCW=Healthcare Worker



Ebola Virus Structure



- lipid envelope
- **easily destroyed by soap, chlorine, and open environment**

How is EVD Transmitted?



It is believed that fruit bats of the Pteropodidae family are the natural hosts of the Ebola virus

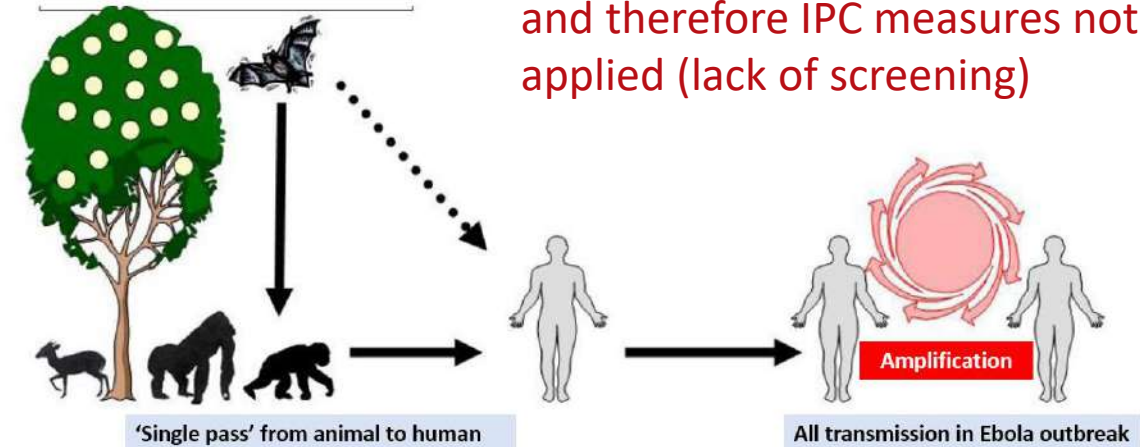
Introduced into the human population through close contact with infected animals,

- blood,
- secretions,
- organs or
- biological fluids

Interhuman transmission

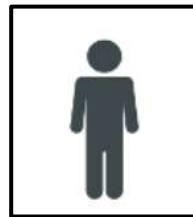
- Direct contact with the blood or secretions of an infected person
- Mother-to-child transmission
- Exposure to objects contaminated with infected secretions (such as needles, surfaces...)

Most HW infections occur because EVD was not suspected and therefore IPC measures not applied (lack of screening)



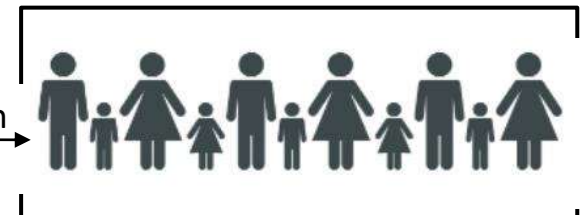
Unknown natural host reservoir

Contact with infected animals



Transmission host

Direct human-human contact or contact with body fluids or vomit



Outbreak



Key components of Ebola disease control



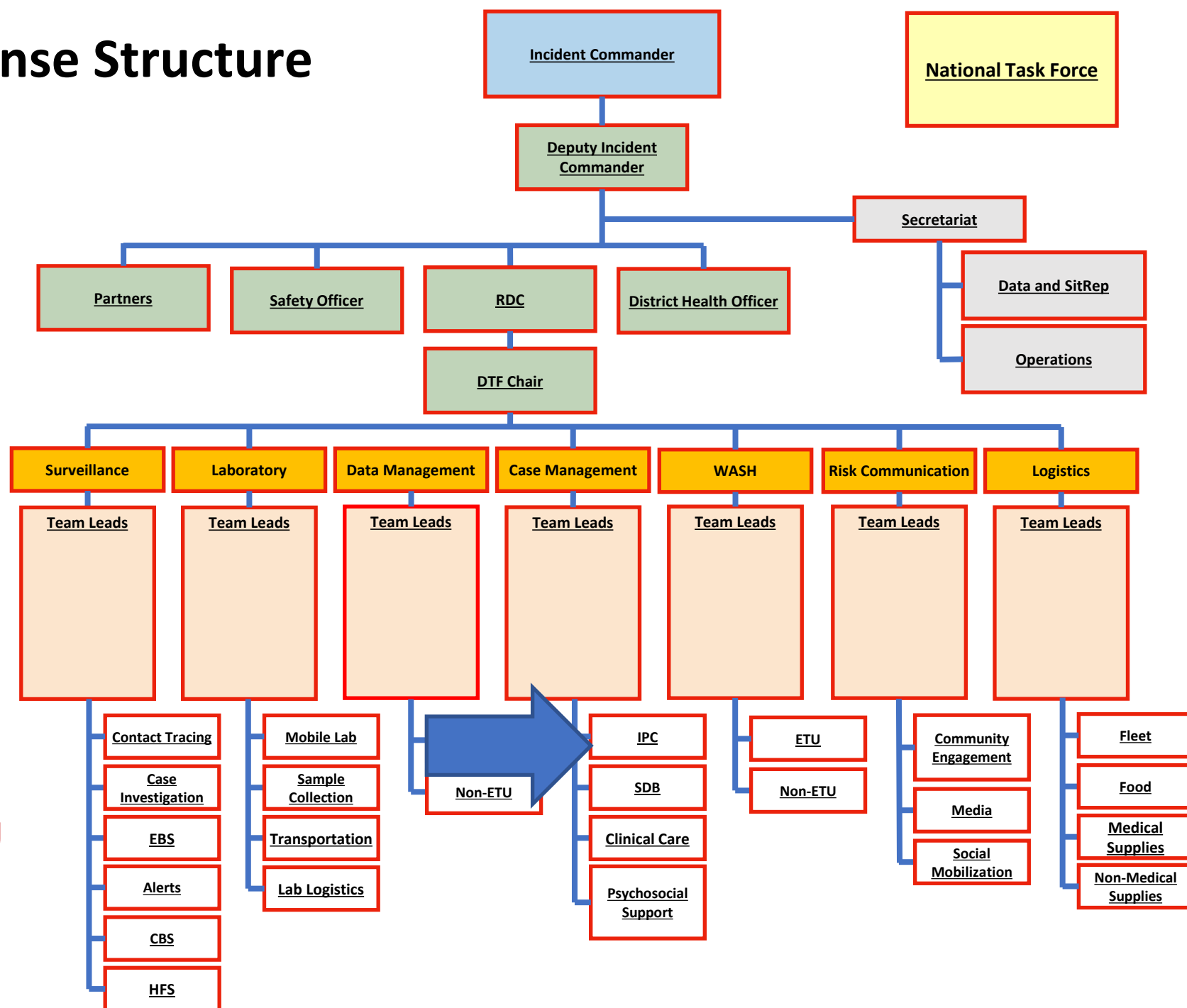
Case investigation

Care for sick people

Leadership

Preventive measures in communities
and health care settings

EVD Response Structure



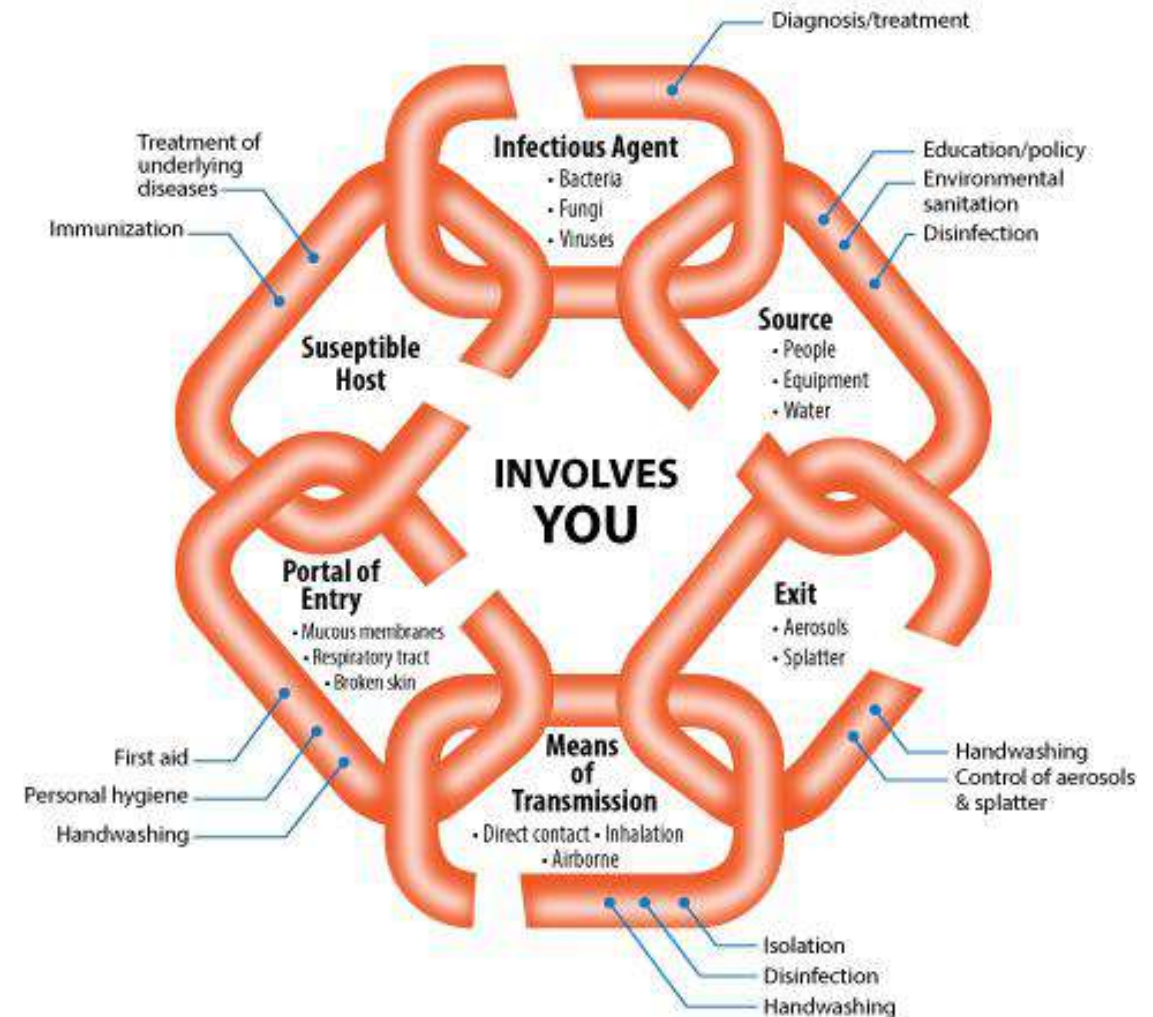
Successful EVD outbreak control relies on applying a package of interventions



Role of Infection Prevention and Control



- IPC-evidence-based practices and procedures, which, when consistently applied in health care situations
- Can prevent transmission or reduce the risk of transmission of micro-organisms to health care providers, patients, residents and visitors



IPC Response Components

1. Coordination

2. Ring IPC

3. IPC in ETUs, Isolation Units, and
Quarantine Sites

4. IPC in Healthcare Facilities (non-ETU)

5. IPC in the community

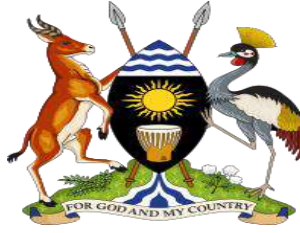
6. Cross-pillar IPC support





Coordination

District Taskforce IPC Pillar Priorities



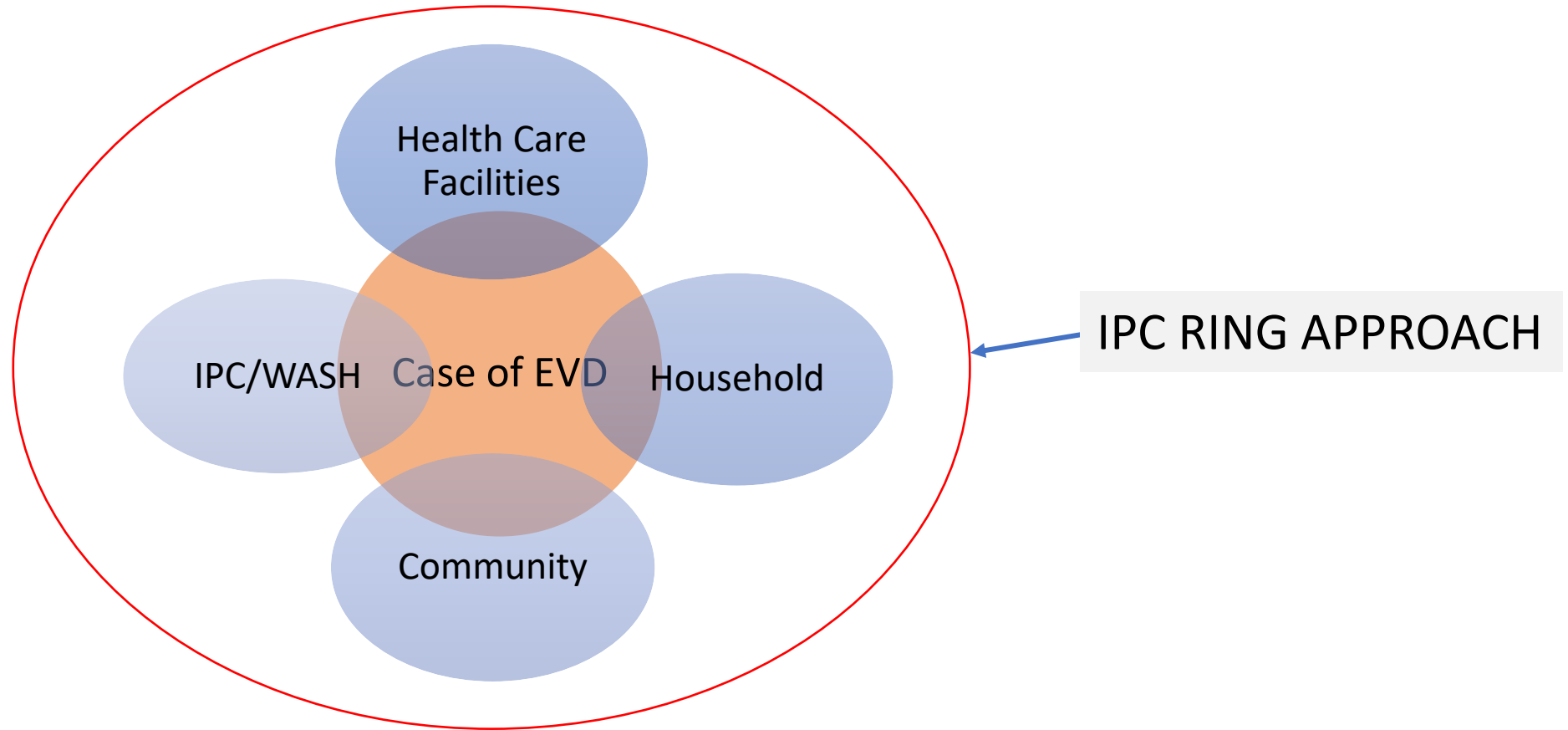
- Coordination with National IPC Sub-Pillar through pillar coordination meeting
- Coordination of partners to ensure harmonized delivery of IPC activities across IPC response components.
- Implementation of MoH-approved Standard Operating Procedures for IPC
- Training of healthcare cadres using standardized, harmonized, MoH-approved materials
- Performing standardized IPC assessments for healthcare facilities and ETUs/Isolation Units
- Reporting data up to National level and sharing feedback reports with facilities and partners



Ring IPC



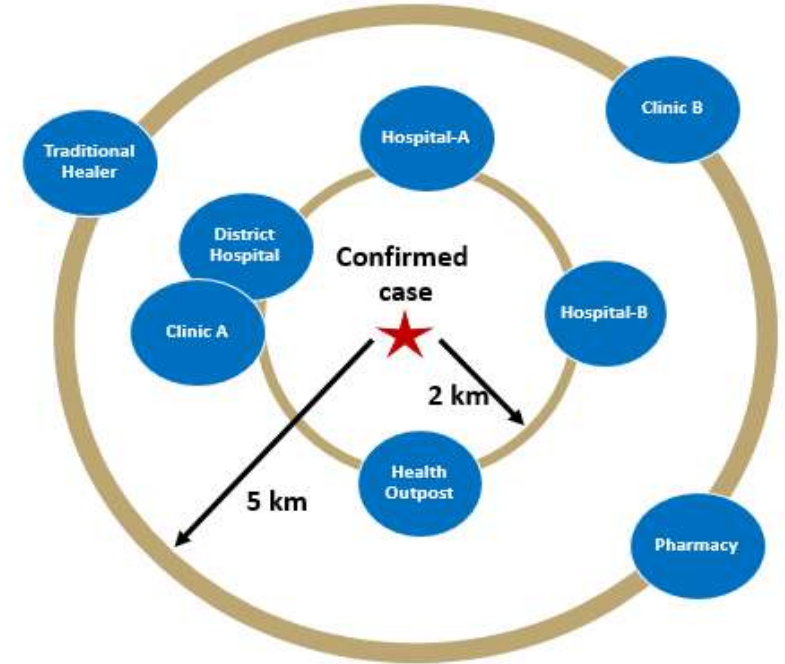
What is the IPC Ring Approach?



Definition: The IPC ring approach rapidly mobilizes teams to assist affected health facilities and the community in implementing IPC measures to reduce Ebola transmission in a predetermined risk area whenever a case is identified



- Response activity that focuses limited resources on highest-risk healthcare facilities, affected households, and community settings in response to active SVD cases in the surrounding community.
- Ring IPC is an intensive, targeted approach to:
 1. Decontaminate health facilities, affected households, and community settings to limit further transmission
 2. Increase detection of SVD through screening and triage
 3. Manage healthcare worker occupational risk exposures and management
 4. Rapidly isolate suspect SVD patients, and quickly notify public health authorities
 5. Reinforce use of Standard Precautions during patient care
- Supported by supervision (i.e., capacity enhanced) to ensure effective implementation of Screening, Isolation, and Notification.



Example of an IPC ring; distances can vary (rural vs. urban, number of facilities, etc.)



IPC ring approach



The IPC Ring Approach in response to confirmed cases of Ebola Virus Disease (EVD) job aide

Section 1: Preparatory Phase

Step 1: Define IPC ring perimeters	<ul style="list-style-type: none"> Once a confirmed case has been identified, define a minimum perimeter of 500 metres in urban areas and up to 1 km in rural areas. This perimeter is defined either from the home of the case or around the health facilities where the case was treated. The perimeter is not a predetermined distance. When defining the perimeter, consider the following points: <ul style="list-style-type: none"> Rural or urban setting Socio-economic status Community perceptions of the care provided by health facilities and how this influences their health care seeking behaviour and accessibility to health care facilities Availability of transport Road conditions 	<input type="checkbox"/>
Step 2: Identification of health facilities, households and public places	<ul style="list-style-type: none"> Identify all health facilities in the area (private and public hospitals, health centres and clinics, pharmacies and traditional healers), households, schools, churches, car parks (hot spot). <u>Prioritise</u> health facilities according to their proximity to the index case and other factors. 	<input type="checkbox"/>
Step 3: Activate team	<ul style="list-style-type: none"> Each integrated team may consist of (this varies according to context): <ul style="list-style-type: none"> An IPC supervisor/mentor Three hygienists A supervisor A communicologist (RCCE) A psychosocial professional 	<input type="checkbox"/>
Step 4: Logistics	<ul style="list-style-type: none"> Coordinate with logistics and security teams for the transportation and delivery of IPC supplies to the facilities. Ensure the availability of all replacement materials before the start of the intervention. 	<input type="checkbox"/>

Key Points:

- An IPC ring is a defined area surrounding either the home of a case or the HCF where the case was treated
- Specific interventions are recommended for facilities within the ring:
 - Health care facilities (HCF)
 - HCF of confirmed case
 - HCF where confirmed case was not present
 - Households
 - Other public places (schools, churches, etc)



Steps of the IPC Ring Approach for EVD



Part 1

PREPARATORY
PHASE

Part 2

HEALTH-CARE
FACILITY
INTERVENTION
PHASE

Part 3

HOUSEHOLD
INTERVENTION
PHASE

Part 4

INTERVENTION
PHASE IN PUBLIC
PLACES
INCLUDED IN
THE RING AREA



IPC in ETUs, Isolation Units and Quarantine Sites

IPC Priorities in ETUs, Isolation Units and Quarantine Sites



- Dedicated IPC Focal Persons for each ETU/Isolation Unit
- Supporting design, layout, IPC assessment, and action planning at ETU/Isolation units
- Ensuring appropriate waste management plan/procedures
- Conducting pre-deployment training and ongoing refresher training
- Supporting HCW monitoring and any HCW infection investigations
- Ensuring compliance to standards and SOPs
- Availability of adequate IPC supplies



IPC in non-ETU/Isolation Unit Healthcare Facility

IPC Priorities in Healthcare Facilities (non-ETUs)



- Performing IPC assessments with MoH IPC Scorecard and ensuring follow up visits as required to fill the gaps
- Establishing functional screening areas (for all healthcare workers and visitors) and inpatient screening and holding areas
- Ensuring notification and referral processes for suspected SVD are in place
- Ensuring use of Standard Precautions for care of all patients at all times
- Availability and utilization of IPC SOPs and IEC materials at all health facilities

IPC Priorities in Healthcare Facilities (non-ETUs), cont.



- Training (capacity enhancement) healthcare staff, IPC Focal Persons, and IPC supervisors
- Appointing and/ functionalising IPC Focal Person and/or IPC Committee within healthcare facility
- Supporting procurement and availability of needed IPC supplies (e.g., hand hygiene stations, PPE, etc.)
- Coordinating WASH improvements as required



Health facility EVD IPC/WASH readiness assessment



EVD Standard Operating Procedure Job Aides



IPC Scorecard job aide

Score determines the frequency of monitoring:

- Red (0 - 49%) = Visit daily and re-assess after 2 weeks
- Yellow (50 - 79%) = Visit 2-3 times per week and re-assess after 3 weeks
- Green (80-100%) = Visit once per week and re-assess after 4 weeks

Components	Scoring	Audit Criteria	Evaluation method
IPC leadership	Each criterion is assessed as yes or no, 1 or 0 respectively.	1. The facility has an IPC Committee, or an IPC focal person. 2. The facility has EVD-specific SOPs related to IPC. 3. During the last 2 weeks, the facility has held at least one EVD IPC meeting.	Direct observation Document review
Staff training	Criterion 1 is assessed as a yes or no question, 1 or 0. Criterion 2 is assessed as 1 if all parameters are checked, otherwise 0	1. All health workers have been trained on IPC practices within the last 6 months. 2. Health workers have been trained on the following IPC practices related to Ebola: <ul style="list-style-type: none">• Screening• Isolation• Hand Washing• PPE• Injection Safety• Environmental Cleaning and disinfection• Waste management	Survey Document review
Screening	Each criterion is assessed as yes or no, 1 or 0 respectively.	1. The health facility has a screening station at each open entry point into the health facility. 2. There is a distance of at least one meter between patient/visitor and screener. 3. A functional <u>thermoflash</u> is available at screening points. 4. Temperature is correctly verified at screening points. 5. Suspected cases are referred to a holding/isolation area.	Direct observation Survey Document review

Key Points:

- 15 IPC components audited
- Each indicator has verification criteria which can be:
 - 1. Processes 2. Practices and/or 3. Materials / supplies
- Score assigned for each component
- Overall scores and actions
 - **Red (0-49%):** Visit daily and re-assess after 2 weeks
 - **Yellow (50-79%):** Visit 2-3 times per week and re-assess after 3 weeks
 - **Green (80-100%):** Visit once per week and re-assess after 4 weeks



Community IPC

IPC Priorities in Community



- Distribution of hand hygiene kits (hand washing stations and soap)
- Establishing hand hygiene kits at congregate settings (e.g., schools, churches, markets, etc.) and encouraging appropriate use
- Raising awareness through communication materials
- Establishing screening points at congregate settings



Cross-pillar IPC Support

Cross-pillar IPC Priorities



- Training high-risk frontline responders (EMS teams, Safe and Dignified Burial teams, Mental health psychosocial teams, border health and contact tracers)
- Training other cadres of staff as needed/required
- Providing support for other non-community or healthcare institutions, as requested (e.g., civil societies, religious organizations)

Standard precautions

Space

Hand hygiene

Respiratory hygiene

Appropriate PPE according to risk assessment

Safe waste management and Injection safety practices/
sharps safety

Proper linens, environmental cleaning and sterilization of
patient-care equipment





Screening, Triaging, Isolation and Notification during an EVD outbreak

Screening, Triage, and Isolation



Screening

- Observing patient, taking non-contact temperature, and asking questions
- Key outcome: determine **if** patient is suspected EVD case
- Does not require close or physical contact



Screening, Triage, and Isolation

Screening

- Observing patient, taking non-contact temperature, and asking questions
- Key outcome: determine **if** patient is suspected EVD case
- Does not require close or physical contact

Triage

- Assessment of patient to determine severity of illness and prioritize care
- Key outcome: determine **how sick** is the suspected EVD case
- Likely requires close or physical contact



Screening, Triage, and Isolation

Screening

- Observing patient, taking non-contact temperature, and asking questions
- Key outcome: determine **if** patient is suspected EVD case
- Does not require close or physical contact

Triage

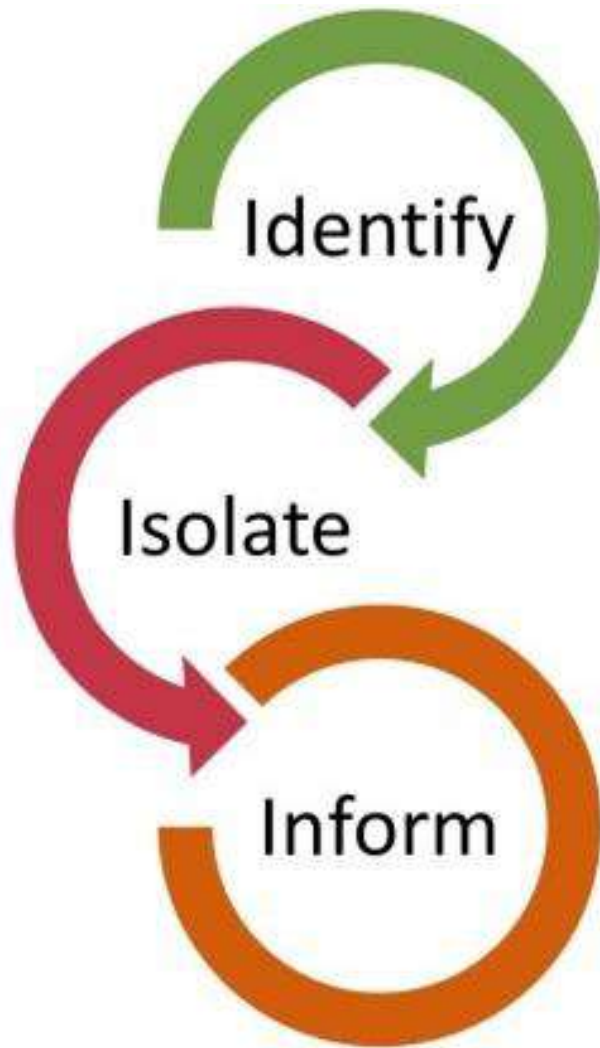
- Assessment of patient to determine severity of illness and prioritize care
- Key outcome: determine **how sick** is the suspected EVD case
- Likely requires close or physical contact

Isolation

- Separation of patient from others (to reduce risk of contact/spread)
- Key outcome: patient is transferred for testing and further care
- Patient care in isolation area likely requires close or physical contact



Screening



Screening



What is it?

- Identifies individuals that meet suspect case definition for Ebola Sudan Virus (or other VHF)

Where should it be done?

- **Before entrance** into a healthcare facility

What is process?

- Assessing for **symptoms** (including fever) **and exposures**

Who should be screened?

- **Everyone** entering the facility (including patients and health workers)





Why do we do EVD screening?

Quickly identify patients with suspected EVD



Immediate isolation



Prevent nosocomial
transmission



Prevent community
transmission



Referred for case
management



Health workers

Patients

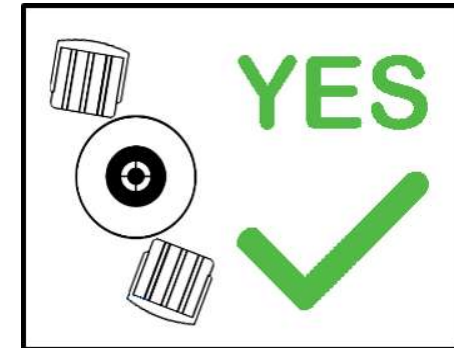
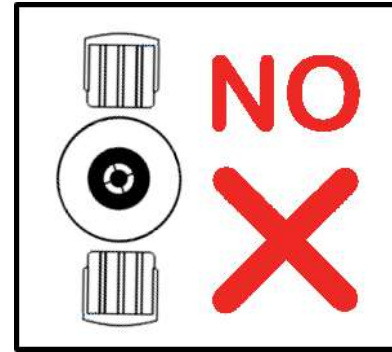
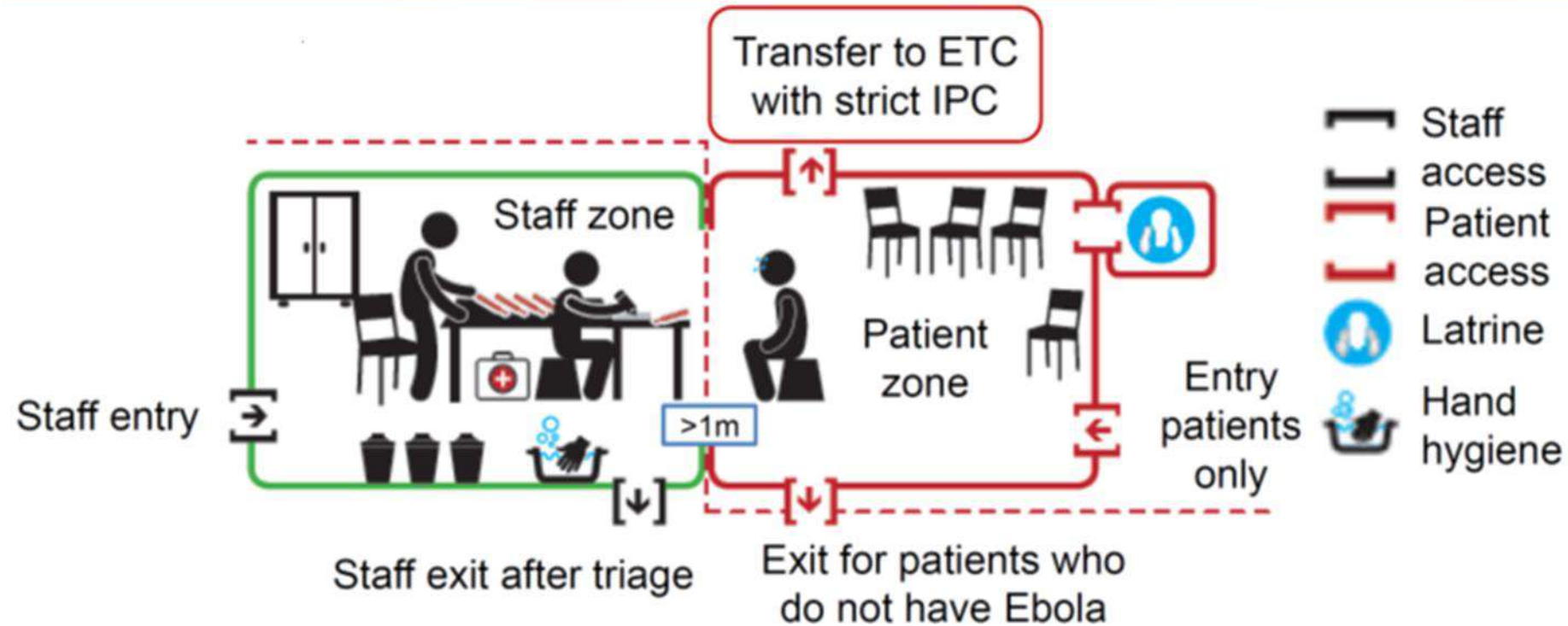


Family



Improves survival

Screening setup



- Maintain at least 1 meter and a physical barrier (table or desk) between staff and individuals requiring screening
- Provide waiting area with adequate space
- Provide access to a dedicated toilet (if feasible)





Using an infrared thermometer



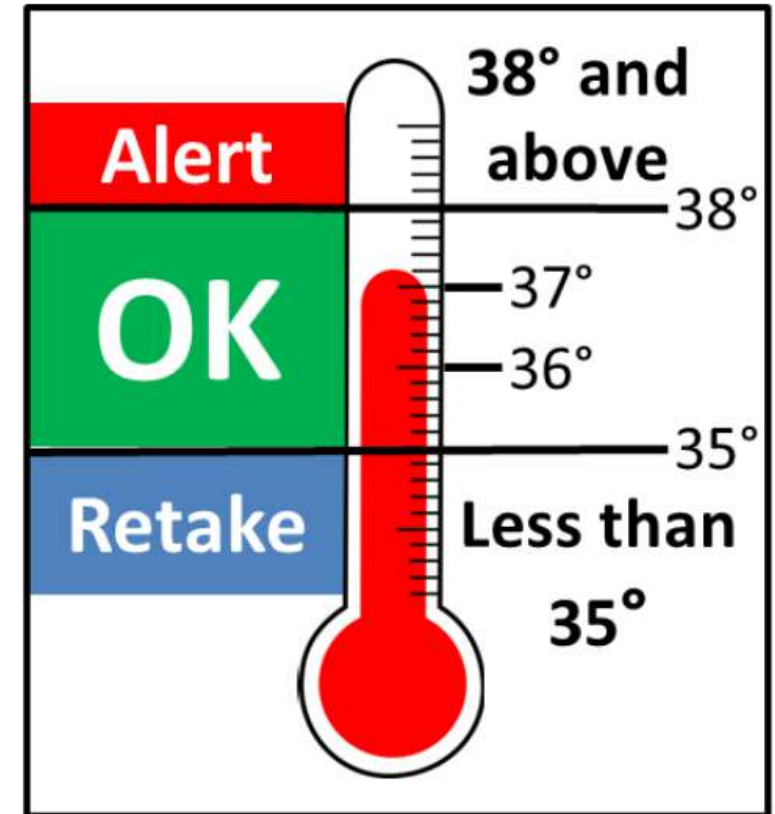
Read thermometer screen

- If less than 35°C, take again
- If 38°C or higher, fever indicated



If symptom (e.g., fever) and exposure criteria met:

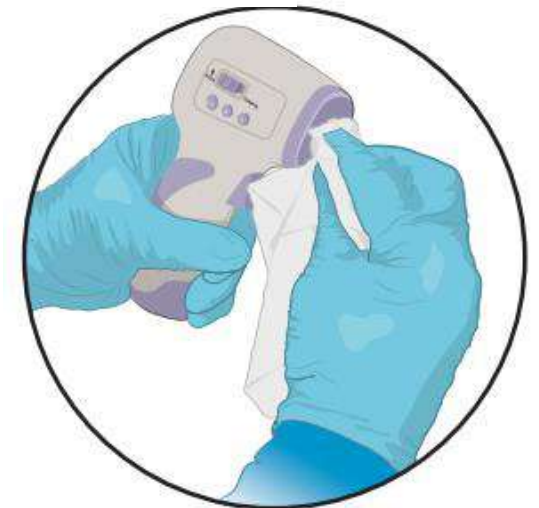
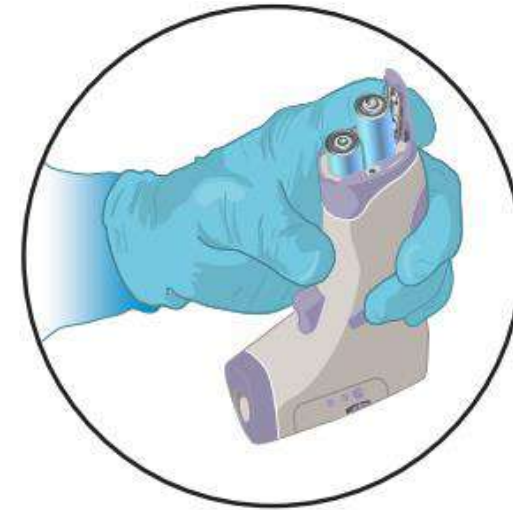
- **Notify supervisor**
- **Escort patient to the isolation area**



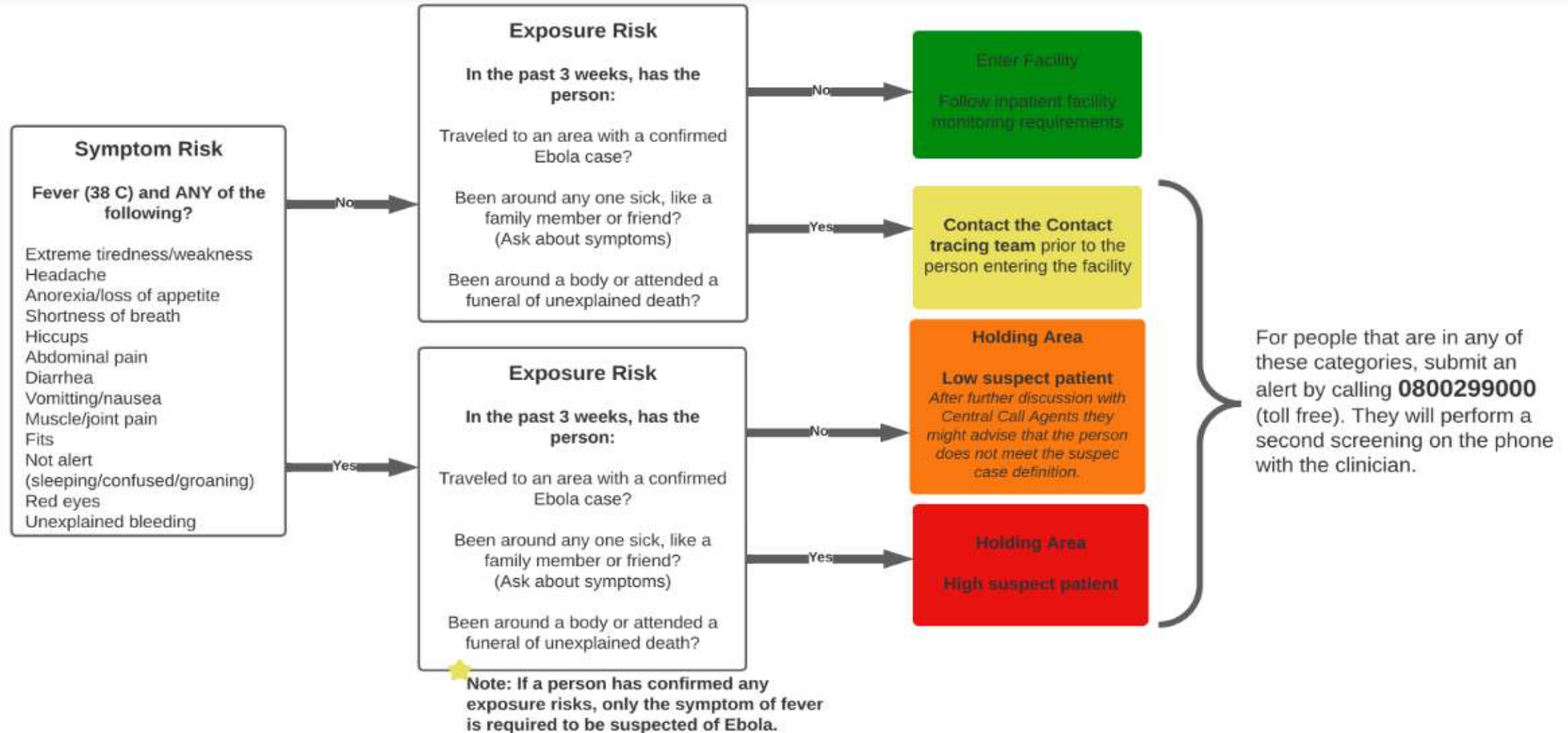


Infrared thermometer maintenance

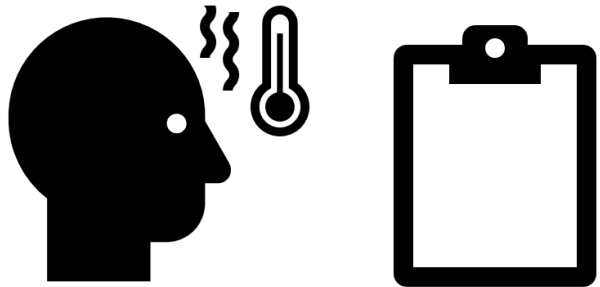
- Change batteries
 - Check what type of batteries are needed
- Clean the lens regularly
 - Most delicate part of the thermometer
 - Needs to be kept free of dirt, dust, moisture, debris
 - Use a soft cloth or cotton swab with 70% alcohol (e.g., rubbing alcohol) and allow lens to dry
- Read instructions for calibration



Screening Algorithm/Job Aid



How to use the screening algorithm/job aid

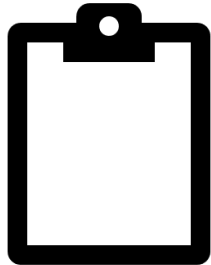
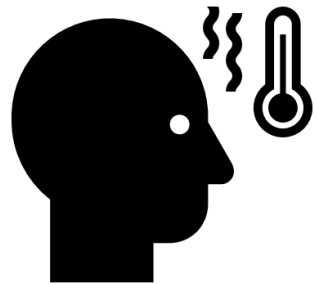


Temperature?

Any possible exposure/contact?

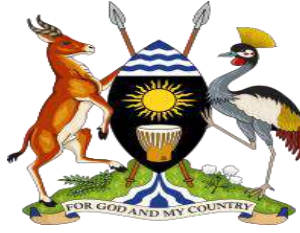


How to use the screening algorithm/job aid

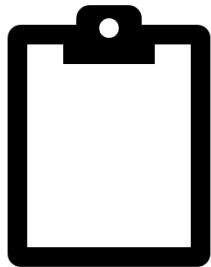
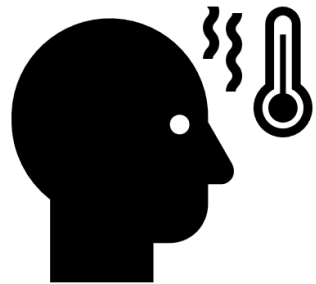


NO symptoms, **NO** exposures

**Continue into the healthcare
facility**



How to use the screening algorithm/job aid



NO symptoms, **NO** exposures

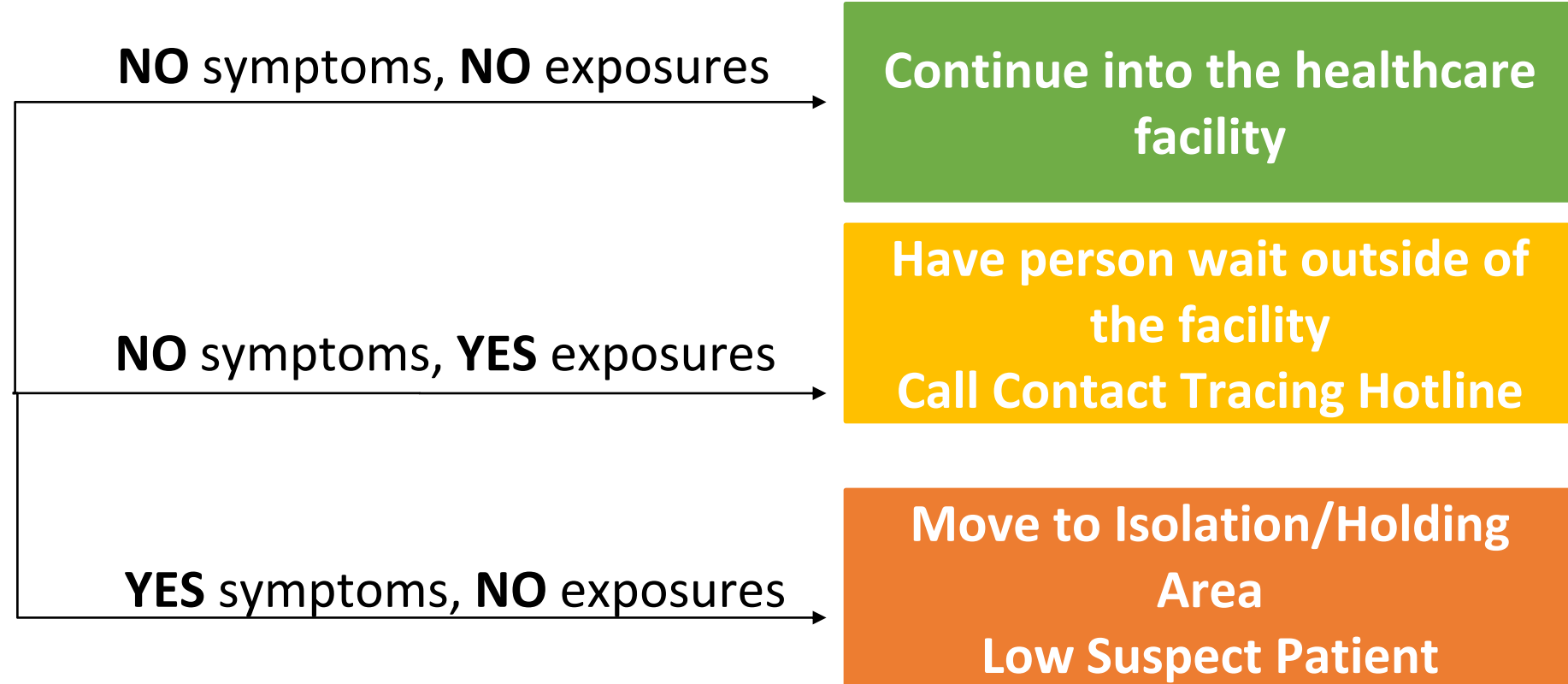
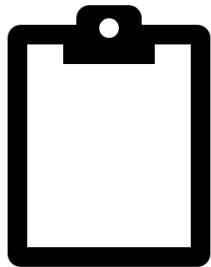
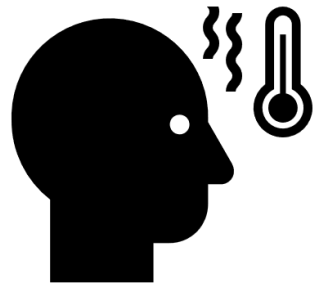
Continue into the healthcare facility

NO symptoms, **YES** exposures

Have person wait outside of the facility
Call Contact Tracing Hotline

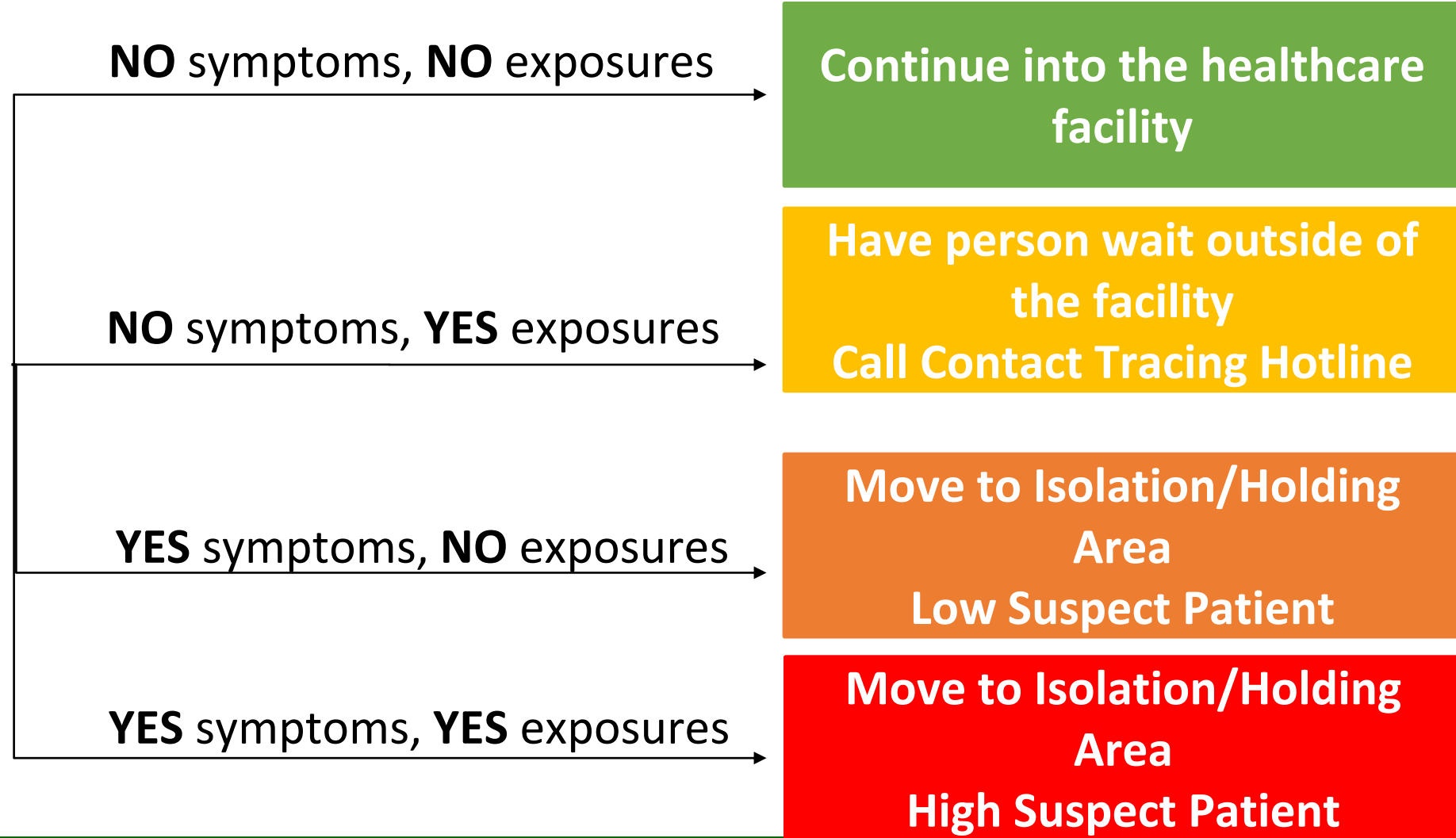
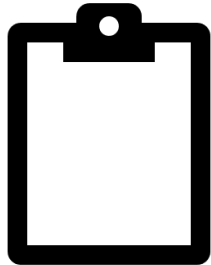
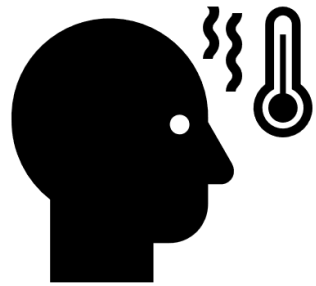


How to use the screening algorithm/job aid





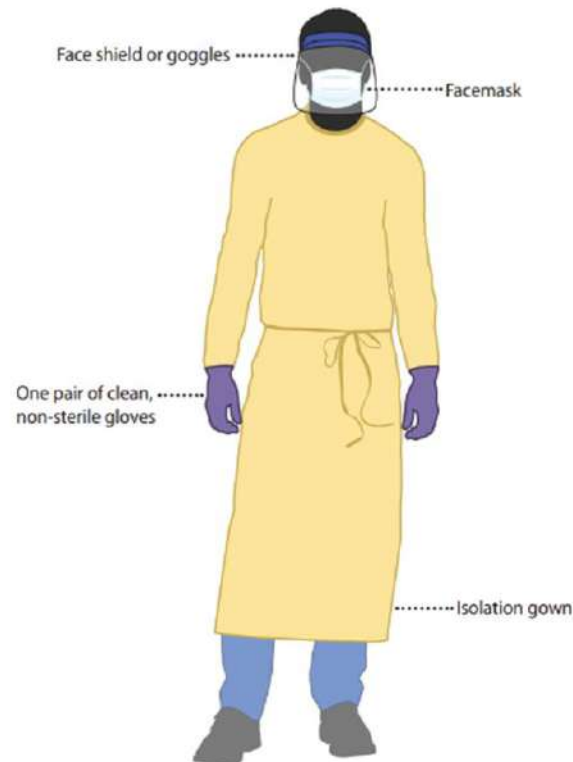
How to use the screening algorithm/job aid





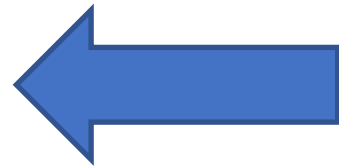
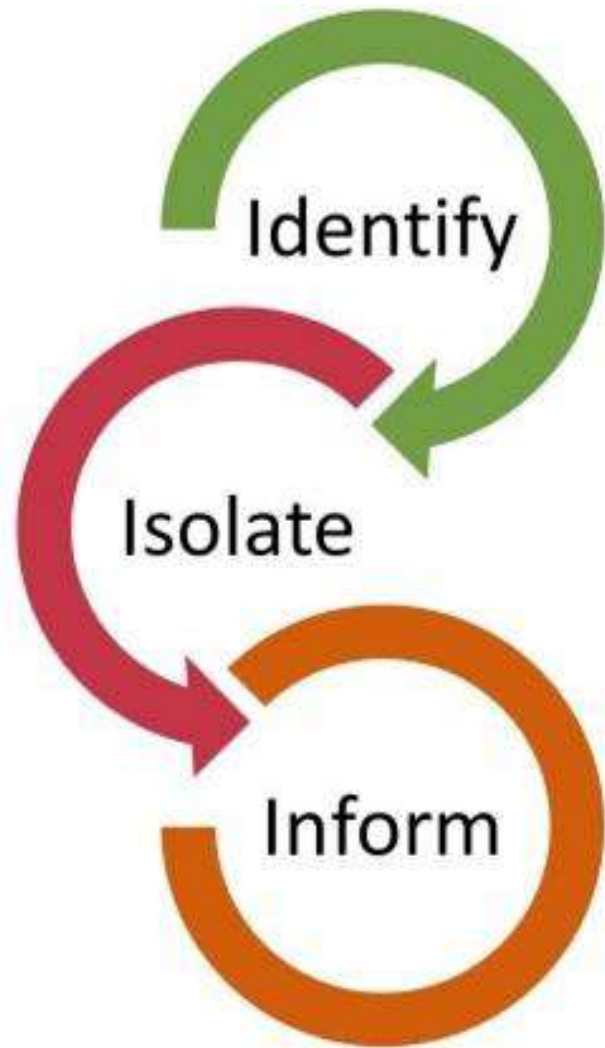
PPE use during screening

- If the screener **cannot maintain distance** (for example, needs to assist the patient), then PPE is put on to protect from risk of exposure to blood or other body fluids



(Gloves, medical mask, eye protection and gown)

Refer to Job Aid 5b for more on PPE use during screening



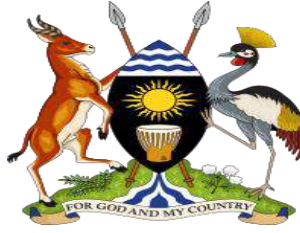
Healthcare Facility
EVD Holding/Isolation

Isolation Area setup



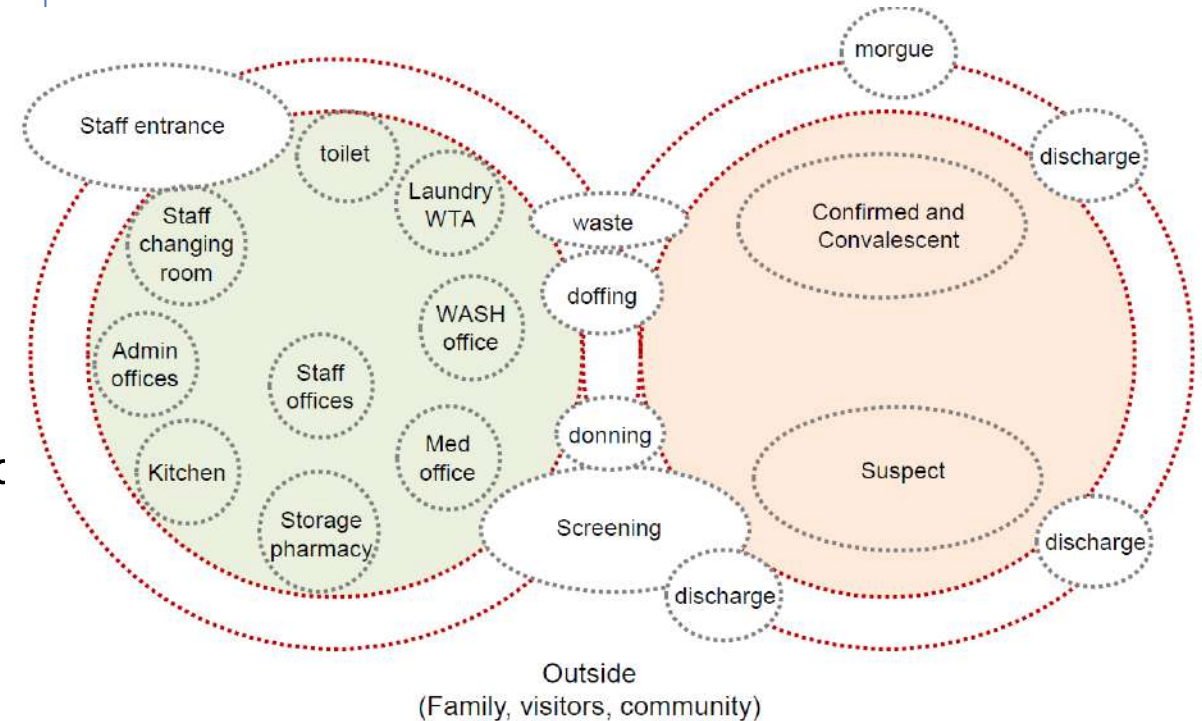
- ***Separated from patients and healthcare workers at facility***
 - Clearly demarcated with a barrier and signage
 - Chairs/beds between individuals kept at least 1m apart
 - Dedicated toileting (e.g., latrine, commode), ideally private
 - Separate entrance and exit (away from other patient care areas)
- ***ONLY for suspected Ebola patients***
 - Restrict access (except for designated Ebola response team members)
 - Assign someone to monitor individuals (including staff) entering isolation area
- ***Equipment designated to the isolation area (not shared with other parts of the facility)***

Setting up isolation



Built environment

- Indicate high and low risk zones before starting patient admission
- Use barriers/scaffolding to guide movement in outdoor spaces or large wards
- Prioritize using areas with a solid walls and ability to restrict access (doors or gates)
- Patient care areas should have adequate natural ventilation and natural light

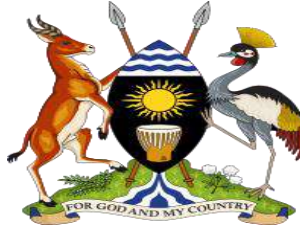


Isolation Area: Examples



- Existing facilities can be modified to serve as isolation areas
 - Outdoor areas
 - Empty wards
 - Temporary tents
- Isolation area is for **temporary use** until transfer can be arranged for testing and further evaluation/care





Isolation Area Supplies

For patients

- Chairs or beds
- Access to toilet facilities
- Food and water
- Hand hygiene station

Patient care

- Designated equipment for isolation area
- PPE for healthcare workers
- Hand hygiene stations for healthcare workers

Cleaning and disinfection

- 0.5% chlorine solution (for disinfection) or other disinfectant
- Soap and water
- Cleaning equipment (buckets, cloths, mop)

Waste

- Biohazard waste bins
- Inside isolation area
- PPE doffing area

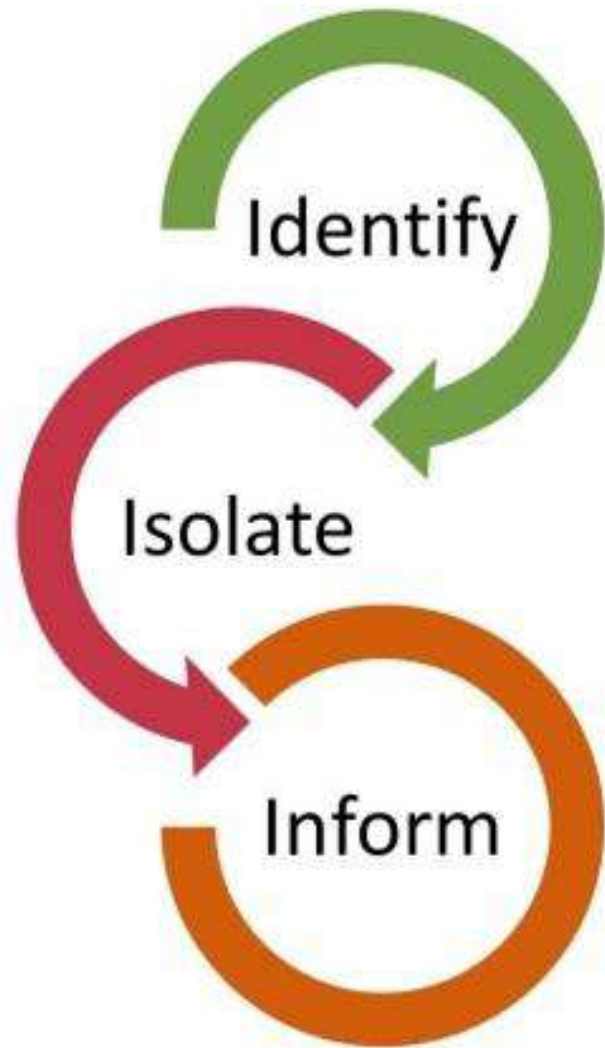


PPE use in Isolation Area

- HCW puts on PPE for patient care activities in the isolation area



Refer to Job Aid 5a for more on PPE use in the isolation area



Notification

Who to notify?



- **Always call call center: Toll free**
- Will perform second screening on the phone with the clinician
- **Notify supervisor**
 - For awareness and coordination
- **Notify district surveillance point of contact**
 - District rapid response team and surveillance officers will provide support

PPE for EVD



Risk stratification	PPE items
Physical contact with patients with suspected or confirmed EVD, their body fluids or objects contaminated by their body fluids	<ul style="list-style-type: none">• Examination gloves (double gloves)• Eye protection (Face shield/goggles)• Medical mask• Coverall or gown with hood• Disposable aprons• Gumboots
For dead body management and cleaning/decontamination	On top to the items above, heavy duty gloves and heavy-duty aprons are recommended.
*Mixing disinfectants	Gloves, respirator, apron/disposable gown, goggles/face shield

Personal Protective Equipment use Principles













- PPE is the least effective safety control. Its success is dependent on availability of an enabling environment and guidance for appropriate risk assessment
- Proper PPE use is a motor skill. You must do it to learn it.
- Safety considerations
 - never touch your face while wearing PPE
 - Change PPE immediately if it becomes contaminated or damaged
 - PPE should not be adjusted during patient care
 - if there is concern and/or breach of these practices, leave the patient care area when safe to do so and properly remove and change the PPE
 - Always remove carefully to avoid self-contamination








STAFF MUST UNDERGO SPECIAL TRAINING TO ENSURE THEY CAN SAFELY PUT ON AND TAKE OFF PPE



EVD Standard Operating Procedure Job Aides







Putting on and taking off PPE in the context of Ebola Virus Disease (EVD) job aide for COVERALLS		
1	Remove all personal items (jewelry, watches, phones, pens, etc.)	
2	Put on the scrub suit and rubber boots	
3	Perform Hand Hygiene	
4	Put on first pair of gloves (inner gloves) – Examination, nitrile gloves	
5	Put on coverall	
6	Put on face mask	
7	Put on face shield OR goggles	
8	Put on head and neck covering OR head attached to coverall	
9	Put on waterproof apron (if possible or heavy duty)	
10	Put on a second pair of gloves (outer gloves) over the cuff of the coverall. Do not use adhesive tape to attach the gloves.	

Taking off PPE (Coveralls)		
Points to remember when removing PPE <ul style="list-style-type: none">Always remove PPE under the direction and supervision of a trained observer (colleague)Make sure the outside of the PPE does NOT touch your skin or any part of your body.Contaminated hands (bars and glove hands) are the most common way to transfer contaminated material to the eyes, nose and mouth.Remove the outermost PPE first; this is likely to be the most contaminated PPE.Remember to close your eyes when removing the PPE over your head.Keep gloved hands clean so that they can remove PPE without contaminating the skin.Dispose of disposable PPE in the medical waste bin. Place reusable PPE (thick rubber gloves, aprons, goggles, some face shields) in a designated bucket.		
1	Perform hand hygiene on gloved hands	<input type="checkbox"/>
2	Remove the apron – by bending forward and taking care to avoid contaminating your hands	
3	Perform hand hygiene on gloved hands	<input type="checkbox"/>
4	Remove head and neck covering or hood – starting from the bottom of the hood on the back and rolling from back to front and from inside to outside	
5	Perform hand hygiene on gloved hands	<input type="checkbox"/>
6	Remove coverall and outer pair of gloves – In front of a mirror, tilt head back to reach zipper, unzip completely without touching any skin or scrubs, and start removing coverall from top to bottom. After freeing the shoulder, remove the outer gloves while pulling the arms out of the sleeves. With inner gloves roll the coverall from the waist down and from the inside of the coverall, down to the top of the boots. Use one boot to pull off coverall from the other boot and close zippers, then step away from the coverall	<input type="checkbox"/>
7	Perform hand hygiene on gloved hands	
8	Remove eye protection – by pulling the string from behind the head (keep eyes closed)	
9	Perform hand hygiene on gloved hands	<input type="checkbox"/>
10	Remove face mask – remove from behind the head (keep eyes closed), by first untying the bottom string above the head and leaving it hanging in front and then the top string next, from behind the head	
11	Perform hand hygiene on gloved hands	<input type="checkbox"/>
12	Remove rubber boots without touching them (or overshoes if applicable), if the same boots are to be used outside the area, keep them clean, but clean and decontaminate them properly before leaving the area where you are undressing	
13	Perform hand hygiene on gloved hands	<input type="checkbox"/>
14	Remove the inner pair of gloves	

EVD Standard Operating Procedure Job Aides



PPE for screening and triage in the context of Ebola Virus Disease (EVD) job aide	
Screening <ul style="list-style-type: none">Screening is a sorting process encompassing observation of the patient, taking the patient's temperature with an infra-red thermometer, and asking the patient questions (symptoms and potential EVD contact history).The key outcome of screening is to determine if the patient is a suspected EVD case.Screening does not require close or physical contact with the patient. It is recommended that screening is conducted using a no touch technique maintaining a distance of at least 1m.<ul style="list-style-type: none">When a no touch technique and distance of at least 1m can be maintained – additional PPE is not recommended (note staff should wear a medical mask for COVID protection and ensure hand hygiene).When a no touch technique or distance of at least 1m cannot be maintained – staff are advised to wear the following PPE:<ul style="list-style-type: none">Medical maskEye protection (protective goggles or face shield)GownExamination gloves	
Triage <ul style="list-style-type: none">Triage involves assessment of patients using validated tools to determine the severity of illness and prioritise care.The key outcome of triage is to determine how sick the suspected EVD case is.Triage is likely to require close or physical contact with the patient for assessment.Triage can take place in different locations depending on facility size and layout. If triage occurs at the point of screening, the following PPE is recommended:<ul style="list-style-type: none">Medical maskEye protection (protective goggles or face shield)GownExamination glovesIf triage occurs within the isolation area, separate from screening, the following PPE is recommended:<ul style="list-style-type: none">Medical maskEye protection (protective goggles or face shield)Coverall or gownWaterproof apronExamination gloves (2 pairs)	




Putting on PPE (Procedure for gown)		
1	Remove all personal items (jewelry, watches, phones, pens, etc.)	
2	Put on the scrub suit and rubber boots	
3	Perform Hand Hygiene	
4	Put on gown	



EVD Standard Operating Procedure Job Aides



6	Put on face shield OR goggles		<input type="checkbox"/>
7	Put on a pair of gloves over the cuff. Do not use adhesive tape to attach the gloves.		<input type="checkbox"/>
8	Self-check in mirror and with buddy to ensure proper fit and no breaches.		<input type="checkbox"/>

Taking off PPE (procedure for gown)		
1	Perform hand hygiene on gloved hands	<input type="checkbox"/>
2	Remove gown and gloves – untying the knot first, then pulling from the back to front, rolling it from inside to outside	 <input type="checkbox"/>
3	Perform hand hygiene	<input type="checkbox"/>
4	Remove eye protection – by pulling the string from behind the head (keep eyes closed)	 <input type="checkbox"/>
5	Perform hand hygiene	<input type="checkbox"/>
Remove face mask If overhead straps – remove from behind the head (keep eyes closed), by first untying the bottom string above the head and leaving it hanging in front and then the top string next, from behind the head If ear loops – hold and unhook both ear loops and gently lift the mask away from your face		
		<input type="checkbox"/>
6	Perform hand hygiene	<input type="checkbox"/>

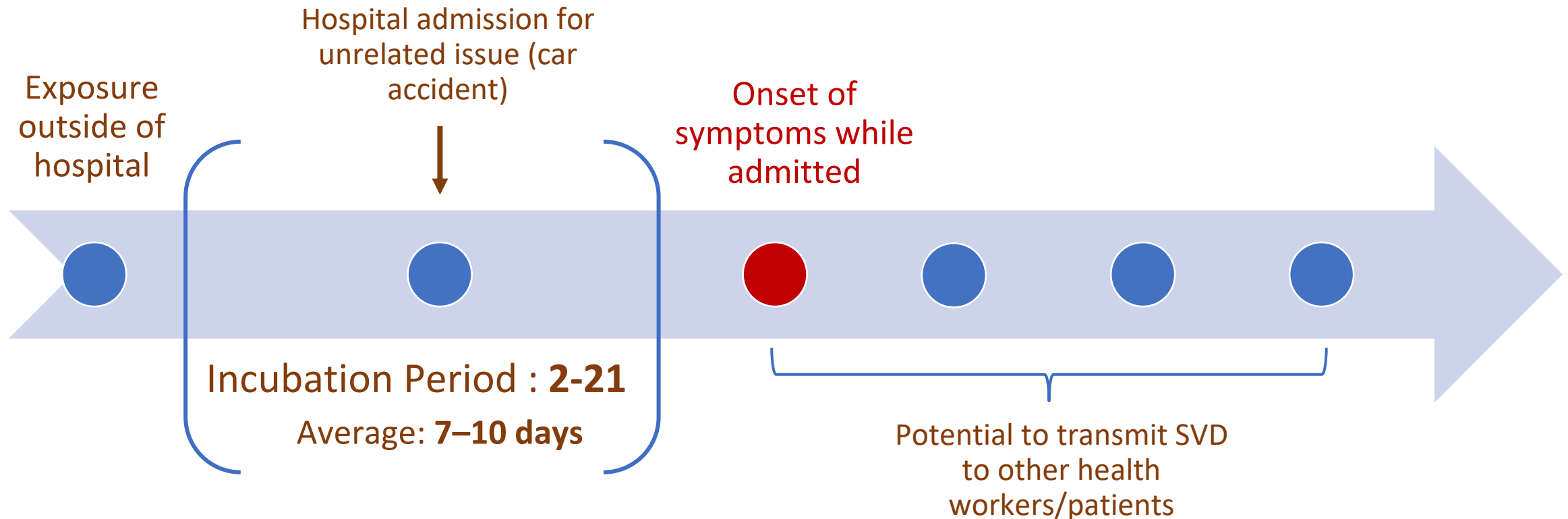


Inpatient Surveillance during an EVD outbreak



Why perform inpatient Surveillance?

To detect SVD patients who may have been asymptomatic at time of admission but develop symptoms during their hospital stay



Screening Process



- Apply standard precautions for all patients.
- Take temperature at least **twice** a day for all inpatients
- Assess the patient at least once a day or immediately in the presence of high fever ($> 38^{\circ}\text{C}$), according to the definition of a suspected or probable case (per case definition)
- Complete the screening register.



Example Screening register

[illegible]

Surveillance for EVD signs/symptoms in inpatients must be flexible

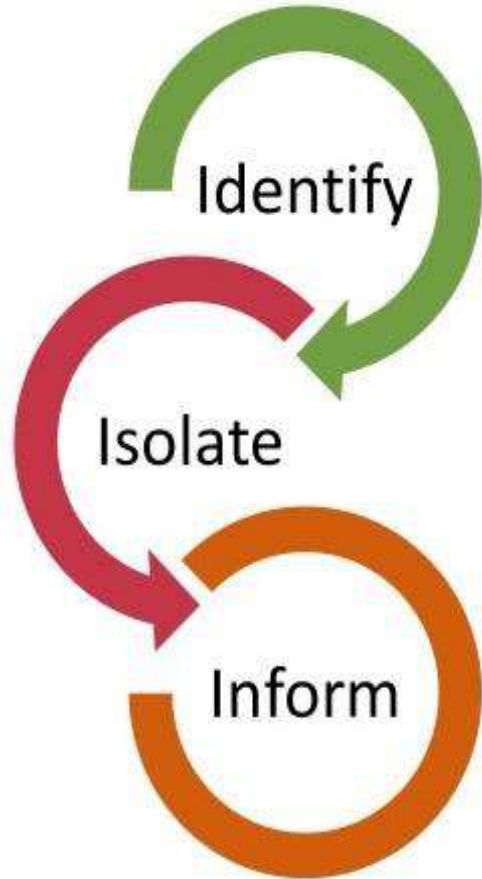


- Different hospitals/overnight clinics will have different procedures on how and when they take vital signs on patients and assess their physical condition.
- Different hospitals/overnight clinics will have different amounts of human resources to perform surveillance.
- Thus facilities will have to adapt the principles as recommended in this document to their unique circumstances.



If a patient reports symptoms:

Immediately apply suspect case definition:



**Illness with onset of fever and no response to treatment for usual causes of fever
AND at least three of the following signs:**

- Headache, vomiting, diarrhoea, anorexia/loss of appetite, lethargy, stomach pain, aching muscles or joints, difficulty swallowing, breathing difficulties, or hiccups, convulsions

OR

**Illness with onset of fever and no response to treatment for usual causes of fever
AND at least one of the following signs**

- Bleeding: Gums, skin (purpura), eyes, urine, stool, nose

OR

any person with a history of fever ($\geq 38^{\circ}\text{C}$) and at least one of the following:

- History of contact with a suspect, probable or confirmed Ebola case · History of travel to an area with a confirmed outbreak of Ebola

OR:

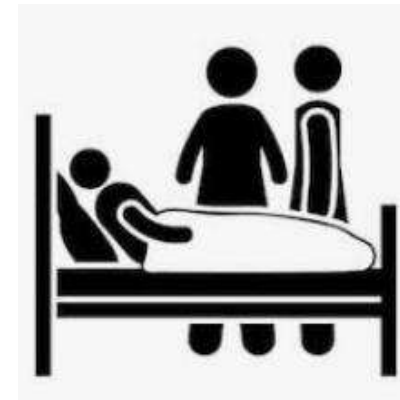
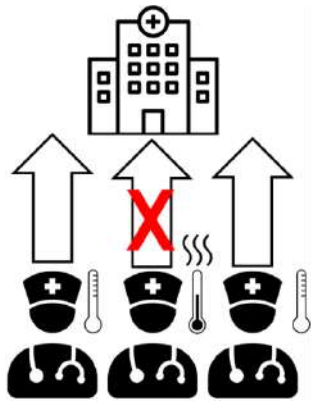
sudden/unexplained death

The emblem of the Government of Karnataka features a central shield with a sun and a conch shell. To the left is a bull and to the right is a galloping horse. The motto 'FOR GOD AND MY COUNTRY' is inscribed at the bottom.

[illegible]



Enhanced surveillance at Health facilities



- All health facilities
 - Set up screening stations outside the facility
 - Monitor all healthcare workers

- Facilities with admission capability
 - Active screening of all admitted patients
 - Screening of caregivers



OBSTETRIC DEPARTMENT (01)

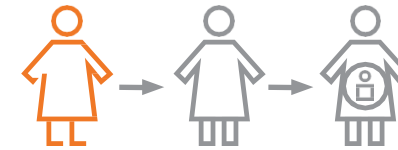


Re-screening in the obstetrics department is indicated. Use the following PPE based on patient assessment.

STANDARD PPE for deliveries

1. Face shield, or surgical mask and goggles
2. Long-sleeved gown
3. Long gloves to the elbows
4. Rubber boots or closed shoes with overshoes

EVD survivor who becomes pregnant after recovery



All other pregnant women not in the risk group for EVD transmission during pregnancy





OBSTETRIC DEPARTMENT (02)

FULL PPE

For deliveries **with risk of EVD transmission**

1. Headgear
2. Surgical mask
3. Goggles or face shield
4. Long-sleeved coverall or gown
5. Apron
6. Double pairs of gloves including long gloves to the elbows, outside
7. rubber boots

Pregnant woman with EVD



Pregnant woman who survives EVD
(with an ongoing pregnancy)



Pregnant woman in contact with an EVD case
(for 21 days, monitoring period)





Providing safe and dignified burials

- Provides details on how to perform a safe and dignified burial
- Team composition
- PPE needed
- Other materials needed
- Step by step guidance
- Key points
 - Burial team wear full PPE
 - Carefully place body in body bag, the body should not be sprayed, washed or embalmed
 - Close bag and wipe the outside side of the bag with 0.5% chlorine
- Refer to SOP for more detailed guidance and steps

EVD Standard Operating Procedure Job Aides



Providing Safe and Dignified Burials during outbreaks of Ebola Virus Disease (EVD) cases job aide

This document is a summary step-by-step procedure for safe burial of a person who as died from confirmed, or probable EVD.

Step 1: Prepare the team	One team should comprise of: <ul style="list-style-type: none">• 4 members, wearing full PPE for field situation. If possible, a female member should be available for assisting with burial of females.• 1 technical supervisor, not wearing PPE• 1 communicator, a person who interact with family and community, not wearing PPE• 1 religious representative, not wearing PPE	
Step 2: Equipment	PPE for burial teams: <ul style="list-style-type: none">• Scrub suit• Protective glasses or face shield• Mask• Hair net/Headgear/ Protective hood• Gloves• Heavy duty gloves• A coverall• Rubber boots OR if not available, shoes with puncture-resistant soles and disposable overshoes	Materials needed: <ul style="list-style-type: none">• Soap and drinking/clean water (for the soap solution)• Strong chlorine solution (0.5%, labelled)• Weak chlorine solution (0.05%, labelled)• 4 buckets (1 = soapy water, 2 = clean water and 1 = 0.5% chlorinated water)• Cleaning cloth (rags or towels)• Squeegees with handles - <i>not mops</i>• Biosafety box (if required)• Infectious waste bag• Body bag
Step 3: Arrival of the burial team	Prepare burial with family and evaluate risks: <ul style="list-style-type: none">• Team leader must brief the burial team about how to conduct a dignified burial in this particular religious and social context.• On arrival the staff should not be wearing PPE upon arrival. Greet the family and offer your condolences before unloading the necessary material from the vehicles. Request respectfully for a family representative.• The communicator should contact a local faith representative at the request of the family members to arrange to meet at the place of collection for the burial of the deceased.• The communicator and the faith representative should work together with the family witness, to make sure that the burial is carried out in a dignified manner.• The Burial team leader should ensure that the family witness and other family members have understood these procedures. Obtain the formal agreement of the family's representative before proceeding.• Identify the family members who will be participating in the burial rituals. If the family has prepared a coffin, identify 4 family members to carry the coffin.• Verify that the grave is dug. If this is not the case, send selected people to dig the grave at the cemetery or at the area identified by the family. This site should be agreed upon by the local authorities and neighbours.• Propose to one or two family members to witness the preparation activities of the body of the deceased patient on behalf of the other family members.• Ask the family witness if there are any specific requests from the family or community, for example, about the personal effects of the deceased. The family should decide what to do with the personal effects of the deceased (burn, bury in the grave or disinfect).• Allow the family witness, family members to take pictures of the preparation and burial.• Refer to full SOP for details of the procedures for a Christian and Muslim burial.	



Screen. Isolate. Notify.



1. Screening

- Do not touch patient
- Stay at least 2 meters from patient
- Take temperature
- Screen all patients using case definition algorithm



2. Isolate

- Avoid contact with patient/body fluid ($\geq 2\text{m}$)
- Explain to patient/family
- Transfer patient to isolation area



3. Notify

- SMS 'ALERT' to 6767
- AND
- Notify district surveillance person _____
- Surveillance officers and district rapid response team will provide support



4. Minimal Care

- Provide no/minimal touch care
- Wear extended PPE when entering isolation area
- Encourage patient to drink and eat



Clean and Dispose of Waste

- Wear PPE for cleaning
- Clean screening area after suspect patient using strong (0.5%) chlorine
- Clean isolation area and materials appropriately after patient is transferred to ETU
- Sequester solid and liquid Ebola waste from non-Ebola waste and dispose of appropriately

5. Transfer to ETU

- Ambulance will arrive to transport case
- District rapid response team will assist



Take home



- Implementation of IPC measures in health care
 - Screening and isolation protocols
 - hand hygiene
 - adequate personal protective equipment (PPE) supplies and rational use (risk assessment)
 - Proper waste management
 - Environmental cleaning
 - Disinfection
- Training of healthcare workers including support staff
- Ongoing monitoring and supervision for implementation to reduce risks of health care facilities amplifying the outbreak
- Ensuring the provision of safe and dignified burials
- Supporting IPC in community settings
 - Adequate WASH facilities, hand hygiene capacity and safe waste management
 - Community engagement and social mobilization to prevent and mitigate ongoing transmission



Key Resources

Uganda MOH IPC EVD SOPs

- Job aide 01 – IPC ring approach checklist
- Job aide 02 – Health facility cleaning and disinfection procedures during EVD
- Job aide 03 – Household cleaning and decontamination procedures during EVD
- Job aide 04 – IPC scorecard
- Job aide 05a – Putting on and removing PPE for EVD Coveralls
- Job aide 05b – PPE for screening and triage
- Job Aide 06a – Screening, triage and isolation during EVD
- Job aide 06b – How to use an infra-red thermometer
- Job aide 07 – Injection safety in the context of EVD
- Job aide 08 – Inpatient surveillance during EVD
- Job aide 09 – Sterilisation using an autoclave
- Job aide 10 – Healthcare waste management
- Job aide 11 - Ambulance decontamination
- Job aide 12 – Decontamination of patient mobile phones discharged from ETUs
- Job aide 13 – Management of HCWs with occupation exposures to EVD
- Job aide 14 – Providing safe and dignified burials during EVD
- Job aide 15 – Management of linen in the context of EVD
- EVD Screening tool



Link to the Job Aides



<https://drive.google.com/drive/folders/1anJfenooVj4AnUpkmFBqRgxcgcE1bIGn?usp=sharing>



Thank You
Any Questions?