EBOLA OPERATIONAL & TECHNICAL SHEETS

December 2015

Objectives

- **Define ACF operational & technical positioning in responding to an Ebola outbreak and its humanitarian short term and long term impact.**
- **Provide guidance and tools to implement the proposed approaches.**

List of sheets

ACRONYMS

ABC	Assisting Behavior Change
ACF	Action Contre la Faim
CCC	Community Care Center
CICR	Comité International de la Croix Rouge
CIF	Case Investigation Form
CTC	Cholera Treatment Center
ETU	Ebola Treatment Unit
ETC	Ebola Treatment Center
EVD	Ebola Virus Disease
FAO	Food and Agriculture Organization
FSL	Food Security and Livelihood
IMAM	Integrated Management of Acute Malnutrition
IMCI	Integrated Management for Childhood Illness
INGO	International Non-Governmental Organization
IPC	Infection Prevention and Control
IPF	In-Patient Facility
HF	Health Facility
HH	Household
HR	Human Resources
HSS	Health System Strengthening
MHCP	Mental Health and Care practices
MOH	Ministry of Health
MSF	Médecins Sans Frontières
MUAC	Mid-Upper Arm Circumference
OPD	Out-Patient Department
ORS	Oral Rehydration Salts
OTP	Outpatient Therapeutic Program
PCR	Polymerase Chain Reaction
PHU	Primary Health Unit
PM	Project Manager
PPE	Personal Protective Equipment
RUTF	Ready to Use Therapeutic Food
SAM	Severe Acute Malnutrition
TFC	Therapeutic Feeding Center
UK	United Kingdom
USA	United States of America
UV	Ultra Violet
VHF	Viral Hemorrhagic Fever
WASH	Water, Sanitation and Hygiene
WFP	World Food Program
WHO	World Health Organization

Sheet 1: Ebola Virus Technical review

Objectives:

- **To understand what Ebola is**
- **To inform ACF teams on preventive measures**

Ebola: Technical Point

In 1976 several people died in South-Sudan and in a bordering region in North Zaire (currently referred to as the Democratic Republic of the Congo) near the river Ebola. The virus identified was given the name Ebola due to its proximity to the river.

- Ebola hemorrhagic fever is an infectious disease, often fatal. The case fatality rate recorded during outbreaks can reach 90%. **On average, the case fatality rate is of 50% (WHO).**
- Outbreaks were initially mainly located in remote villages in central Africa, near tropical rainforests. **The 2014 outbreak was the first occurring in West Africa and the largest one.**
- The virus is transmitted to humans from wild animals and then spreads in populations through human to human transmission.
- It is believed that fruit bats of the Pteropus species are natural hosts of Ebola virus, but antelopes, rats are also likely vector.
- There is no licensed vaccine or specific treatment, whether for humans or animals. Trials are currently ongoing in Guinea, Sierra Leone and Liberia in order to test and approve vaccines and treatments developed through the year of 2014.

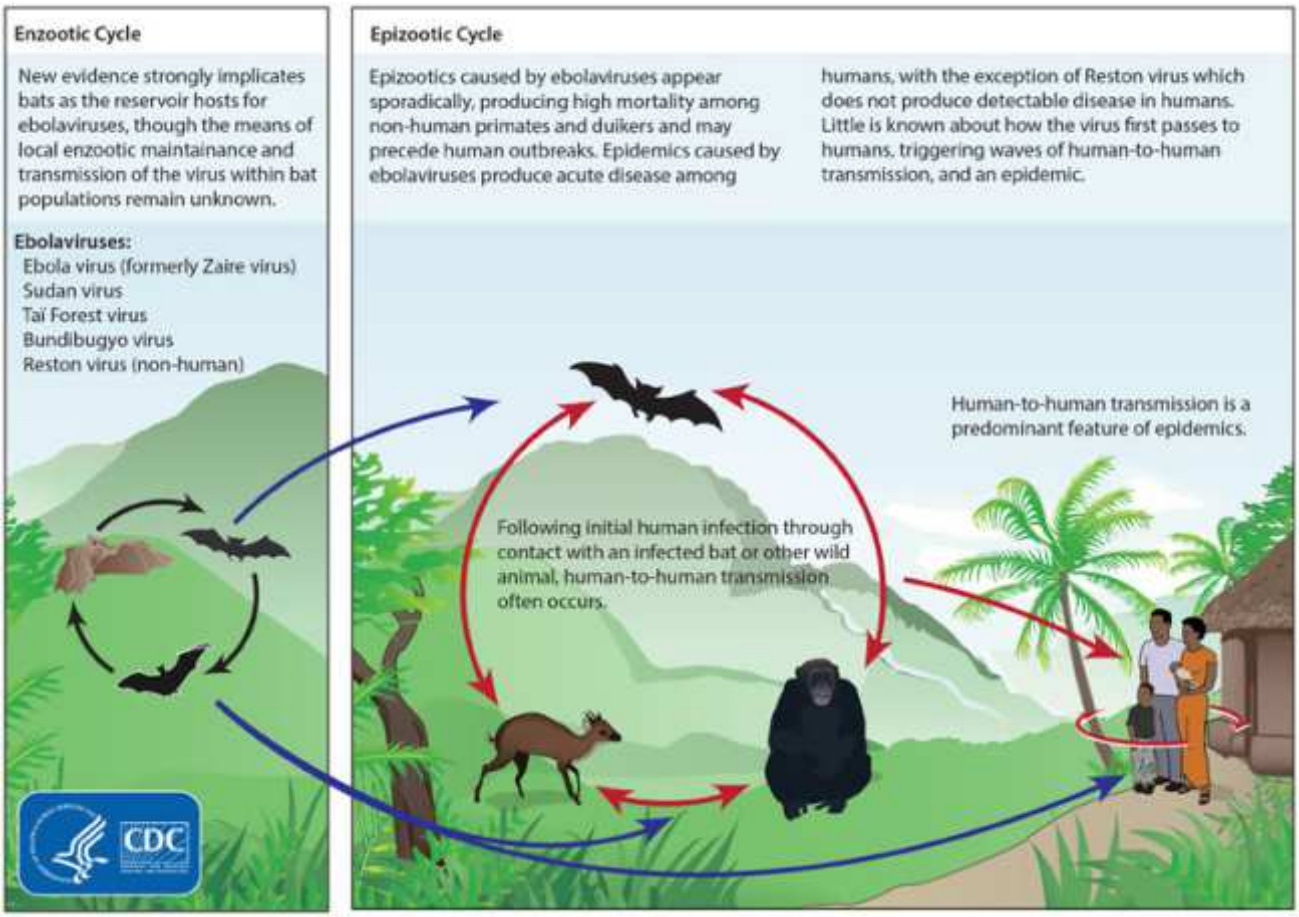
Transmission

The Ebola virus is ***introduced into the human population after close contact with blood, secretions, organs or body fluids of infected animals***.

In Africa, the infection was found after handling chimpanzees, gorillas, fruit bats, monkeys, bongos and porcupine found sick or dead in the rainforest, or ingestion of meat forest.

It then spreads in communities through human to human transmission, as a result of direct contact (injured skin or mucous membranes) with:

- **Blood**
- **Secretions** (feces, sweat, saliva, tears, urine, vomit, mucus, sperm)
- **Bodies organs**
- **Indirect contact via contaminate object.** (Needles, soiled sheets, clothes)
- **Funeral rites in which parents and friends of the deceased are in direct or indirect contact** with the body can also play a role in the transmission of Ebola virus.



Who is most at risk?

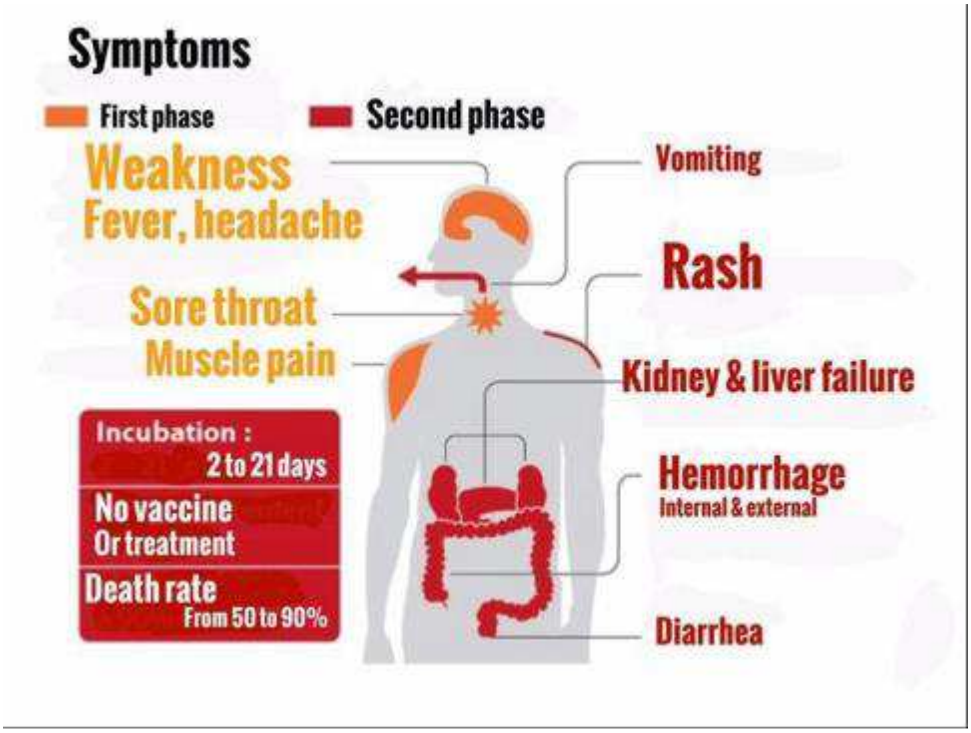
During an outbreak, those at higher risk of infection are:

- **Health workers**; when infection control precautions were not strictly enforced, they are exposed to a significant risk of contamination in the treatment of suspected or confirmed cases of Ebola virus disease.
- **Family members** or others in close contact with infected people;
- **Mourners** who have direct and indirect contact (clothes, bed sheet, bed) with the bodies of the deceased as part of burial ceremonies
- **Hunters** in the rain forest who come into contact with dead animals found lying in the forest.

The application of safety measures in clinics and hospitals, during local gatherings or at home can limit exposure to the virus.

Signs and symptoms

The time between infection and the onset of symptoms (incubation time) varies from 2 to 21 days. **During this incubation period**, i.e before these signs appear, the infected person **is not contagious**
Sudden onset of fever, intense weakness, muscle pain, headache and sore throat are typical signs and symptoms. This is followed by vomiting, diarrhea, rash, impaired kidney and liver function, and in some cases, both internal and external bleeding.



If a person has been in contact with a person known or suspected to have Ebola and begins to have symptoms, He/ she **should be isolated (in quarantine) and receive medical care if symptoms listed above appear.**

Anyone suspected of having the disease should be **isolated and** reported to the nearest health unit without delay. Prompt medical care is essential to improving the rate of survival from the disease. It is also important to control spread of the disease and infection control procedures need to be started immediately.

Ebola Case definition

The ***WHO case definition*** of Ebola is used as a standard but other definitions may exist. Always be careful to check which definitions are being used in the context you are working in.

Ebola suspected case

Any person, alive or dead, suffering or having suffered from a sudden onset of high fever and having had contact with: a suspected, probable or confirmed case; a dead or sick animal

OR

Any person with sudden onset of high fever and at least three of the following symptoms: headache, anorexia, lethargy, aching muscles or joints, breathing difficulties, vomiting, diarrhea, stomach pain, difficulty swallowing, hiccups.

OR

Any person with unexplained bleeding

OR

Any sudden, inexplicable death

Probable Case

Any suspected case evaluated by a clinician

OR
Any deceased suspected case (where it has not been possible to collect specimens for laboratory confirmation) having an epidemiological link with a confirmed case

Confirmed case

Any suspected or probable case with a positive laboratory result

When a person is tested for EVD, he/ she is released as a non EVD case only after testing negative twice with an interval of 48 hours between the 2 tests.

Prevention

You most importantly need to be careful what you touch. Ebola does not fly; it is only ***by touching body fluids - saliva, sweat, blood, urine, feces, and seminal fluid*** - that people risk contamination. It is therefore necessary to disinfect hands, and wash them often with soap and water and avoid being close to sick people.

General advice

- Hand washing is paramount at all times in epidemic context. This is the first and best strategy to prevent human transmission. Use soap (if available or hand sanitizer) that should be available in the ACF vehicles and offices.
- The use of gloves is recommended in the medical field but can transmit the disease if their use is inappropriate: Many people put gloves on but touch everything with these gloves, and they get dirty. It is more efficient to wash often your hands. The use of gloves out of the medical community is not desirable.
- Do not enter in contact with suspected cases. In EVD context, while going to communities, keep a distance of at least 2 meters between you and your interlocutor.
- Do not eat/ hunt bush meat, or touch animals found dead in the bush particularly chimpanzees, monkeys and bats.
- Avoid traveling to high risk areas.
- Avoid taking part in the funeral of a suspected Ebola case **or not** (burial practices involving direct contact with the deceased or his clothes are formally banned).
- Transmission is by direct contact, but the objects, clothes, bed sheet can also be vectors of the virus.
- The use of gloves, a mask and full protective equipment is recommended for people in close contact with patients in health care facilities, especially if the patient is bleeding or when the source of the patient is unknown.

Treatment and vaccine

At the time of writing ***there is no approved vaccine or medicine available for Ebola***.
Symptoms of Ebola and complications are treated as they appear. The following basic interventions, when used early, can significantly improve their chances of survival:

- Providing IV fluids and balancing electrolytes
- Maintaining oxygen status and blood pressure
- Treating other infections if they occur

Experimental vaccines and treatments for Ebola are under development, but they have not yet fully tested for safety or effectiveness. To learn more about research on-going:
http://www.who.int/medicines/emp_ebola_q_as/en/

Recovery from Ebola depends on good supportive care and the patient's immune response. **People who recover from Ebola infection develop antibodies** that last for at least 10 years, possibly longer. It is not known if people who recover are immune for life or if they can become infected with a different species of Ebola. **Some people who have recovered from Ebola have developed long-term complications**, such as joint and vision problem.
Even **after recovery, Ebola might be found in some body fluids, including semen**. The time it takes for Ebola to leave the semen is different for each man. For some men who survived Ebola, the virus left their semen in 3 months. For others, the virus did not leave their semen **for more than 9 months**. Based on the results from limited studies conducted to date, it appears that the amount of virus decreases over time and eventually leaves the semen. (Note that there is no such confirmation on breastmilk and studies are on-going at the time of writing)

Analysis of 2014 WA Ebola outbreak

Since the beginning of the outbreak in December 2013 in Guinea and its spread to Sierra Leone and Liberia, The evolution of the epidemic remains worrisome especially in Guinea and Sierra Leone where the number of cases per week continues to vacillate without any real sustained trend. Liberia has been declared Ebola free since May 9 2015 (see timeline below) Factors explaining the persistence of the spread are:

- Weak health systems (significant gaps in human, financial and material resources compromising their ability to develop an adequate response against the Ebola outbreak). In the presence of a functioning and effective health system the epidemic could not have been so important.
- The high number of infections observed in health workers, reflecting insufficient protection measures practiced in many health institutions.
- Mistrust and reluctance of the population to preventive public health measures recommended (including burial customs). In fact, contacts of patients cared for at home are not identified and participate in the amplification of the outbreak.
- Misconceptions about the epidemic and the Ebola virus are fueling public mistrust.
- Many population movements within the country and cross boarder have participated in the rapid spread of infection in the three countries. Cross border movement complicate contact follow up.
- Lack of complete coverage of the whole territory affected by the epidemic.

These barriers led to an uncontrolled epidemic. This outbreak was the deadliest[1] since the appearance of the virus in 1976 and was described by experts as an unprecedented crisis both in terms of duration and the speed of its transmission, which has led WHO to declare the epidemic: Emergency level 3.

[1] At least 11,300 deaths at the time of writing (December 2015)

Sheet 2: Sensitization and communication at community level

Adapted from Filovirus Hemorrhagic Fever Guideline – MSF 2008

Objectives:

- Present key principles to conduct sensitization and communication activities on EVD in affected countries
- Provide an overview of steps to follow in order to raise awareness about the disease and encourage behavior change

Levels of intervention:

- Outbreak
- Immediate Impact
- Mid and long-term Impact

Health promotion and social, cultural and anthropological issues

In an outbreak situation, analyzing and obtaining a good understanding of social, cultural and anthropological issues can play a huge role in the success or failure of control efforts. E.g. the effect of health promotion messages and behavior change efforts depends greatly on the adaptation of the messages to the socio-, cultural and anthropological context.

Awareness raising messages:

A two-phase approach for health promotion messages should be adopted if the context permits it:

Phase A. An initial rapid dissemination of information to the affected communities

The initial rapid dissemination of information should consist of:

1. Collection of information

The information collected in the 1st phase can be limited to local beliefs and practices related to known risk factors, e.g. activities during burials. Information can be acquired from focus groups and key informants, including health staff, local leaders, religious leaders, traditional healers, birth attendants, patients and patients' families. This information is crucial to identify levers and barriers to behavior change.

2. Check messages given by the MoH and other actors

- Are the messages adequate or misleading?
- How and by whom are the messages disseminated?
- Is there a possibility to collaborate?

Governments in affected countries have developed standardized messages to be used by their representatives as well as local and international NGOs. These messages should be used in order to avoid dissemination of contradicting messages within the population.

3. Distribution of information

It is essential to give the information to the community as quickly as possible. The planning and organization for the distribution of information and messages concerning the disease and the outbreak control intervention should be started on the very first day of the intervention. There will be different target groups e.g. patients and discharged families, the general population, medical staff, etc., and messages should be adapted to each target groups.

There are 2 types of messages to be given:

1. Operational messages

Explanation about what ACF is planning to do in response to the outbreak including work within and "outside" of communities such as Infection Prevention and Control support to health facilities as such activities will significantly alter the manner in which health services are provided, thus impacting the perception of users and with their access to those structures.

Explanation about what MoH and other actors are planning to do to care for patients and to control the outbreak. ACF response teams should know about what other actors are doings, where and how as this will impact ACF's own interventions and the perception of the communities towards NGOs and what they do. For this, an updated mapping of actors must be accessible to the operational and social awareness teams.

2. Disease messages

Keep it simple! Messages should include:

- Confirmation of the existence of the outbreak.
- Basic information on the disease and transmission methods.
- Information on how to protect oneself.
- The availability of medical evaluation and treatment and how and where to obtain them.
- What to do if someone suspects being contaminated.

Phase B. In-depth cultural, social and anthropological information and analysis

The 2nd phase information gathering and messaging should focus on issues that were highlighted during the first phase or that have been identified as being particularly delicate or problematic e.g.:

- Beliefs and knowledge about Ebola
- Beliefs and knowledge about survivors
- Traditional and religious beliefs related to death
- What does a traditional burial look like?
- Beliefs, perceptions and rumors related to medical organizations and the other actors
- Beliefs, perceptions and rumors related to the Ebola wards in health facilities

The regrouping and analysis of this information will permit development of messages and/or interventions adapted to the context.

Changing/Adapting risk behaviors

1. Identify risk behaviors through collection of information during Phase A;
2. Identify high risk groups, people with high-risk occupations (health care workers, nursing staff, burial teams, traditional healers, wildlife officers, etc.); people who need extra support because of their age (children, the elderly), who may have a mental or physical disability, who belong to groups that may be marginalized or be targeted for violence through collection of information during Phase A;
3. Identify and activate ways to reach women e.g. through women's organizations, because women are often the ones in charge of home care or funerals in the affected populations, while taking into consideration the role of men in the sustenance of these habits.
4. Meet with traditional healers to raise awareness about Ebola and promote the use of standard precautions.
5. Meet with other influential leaders to raise awareness about Ebola within their communities.
6. Develop strategy to reduce the chance of spreading the disease by giving adequate information and messages according to risk behaviors identified. Countries most affected by Ebola have developed Ebola awareness message guides that can be used in order to ensure harmonization of the messages shared

by all different actors. Sensitization strategies should also be coordinated with communication and social mobilization pillars for a coordinated and coherent overall response.

7. Assist behavior change through community based methods:

=> Media communication[2]

=> Magnet theatre and theatre for development[3]

=> Household visits

It should be noted that in designing a strategy for raising awareness within a community, the contagious aspect of EVD and its ways of transmissions must be considered. E.g. avoid activities where physical contact between members of the audience will be stimulated or relied upon (large numbers of people attending a play in a small space, sharing of pens or other objects). Always insist on the importance of hand washing.

Monitoring of such activities and continued analysis of the context and its impact on behavior are key as behavior is strongly dependent of the environment and therefore changes with it. The strategy must be able to adapt to a changing environment and a modification of behaviors and practices within communities.

[2] ABC handbook, part 2, page 55

[3] Idem, page 56

Sheet 3: Community Engagement - CLEME

Objectives:

- Define Community Engagement and Social Mobilization
- Present ACF's community engagement approach Community Led Ebola Management and Eradication (CLEME)

Levels of intervention:

- Outbreak
- Immediate Impact

Social mobilization and community engagement

Like awareness and sensitization activities, social mobilization and community engagement interventions have for objective to stimulate behavior change within a group of people for the benefit of all.

WHO[4] defines **social mobilization** as "the process of mobilizing all societal and personal influences with the aim of prompting individual and family action". In this approach, individual and institutional allies are brought together to achieve a common objective. Social mobilization has often been used to raise local resources for a proposed social or health action, such as vaccination or reforming a judicial system. In outbreaks, for example, individuals, households, communities, society and organizations should all consider, promote and maintain a range of control and preventive activities, such as:

- Early recognition of signs and symptoms;
- Rapid search for treatment;
- Compliance with the treatment protocol and
- Prevention actions; and
- Continuous surveillance of other members of the household until the outbreak is over.

Community engagement is the process of working collaboratively with and through groups of people affiliated by geographic proximity, special interest, or similar situations to address issues affecting the well-being of those people. It is a powerful vehicle for bringing about environmental and behavioral changes that will improve the health of the community and its members. It often involves partnerships and coalitions that help mobilize resources and influence systems, change relationships among partners, and serve as catalysts for changing policies, programs, and practices (Fawcett et al., 1995).

Social mobilization and community engagement activities are processes through which knowledge around a specific topic may be improved within a given group of people. Beyond knowledge, community engagement in particular focuses on giving communities an opportunity to analyze their own issues and design solutions that are most acceptable to them, their culture, habits, means, etc.
To encourage the adoption of practices which would prevent further spread of the Ebola virus, ACF developed the **Community Led Ebola Management and Eradication** approach.

[4] Communication for Behavioral Impact (COMBI). WHO, 2012

CLEME

The CLEME approach **aims at triggering the behavioral change needed by the communities to strengthen community resilience to the outbreak and prevent further resurgence by ensuring real and sustainable improvements** through:

1. Providing the communities with the means to conduct their own appraisal and analysis of the Ebola outbreak, their safety regarding the disease and its consequence if nothing is done;
2. Instilling a feeling of urgency in engaging in community actions that will prevent the community experiencing infections;
3. Supporting technically the communities in the implementation of the identified solutions and actions adopted.

The active participation of the communities in the process has been ensured by a methodology that is based on interactive, often visual tools and role plays that enable the participation of all members of the community, regardless of the literacy level.

The CLEME approach responded to the need of effectively engage the community in the Ebola response, by reducing the reluctance to the disease and engaging them in effective behavioural change, only partially experienced during the massive sensitization campaigns organized since the beginning of the outbreak.

ACF CLEME is a process of 5 phases, during which the active participation of the community is ensured by the interactive methodology applied by the facilitators. ACF has implemented the CLEME approach in the districts of Moyamba and Kambia.

1. Selection of the communities: the Pre-Triggering phase

The following criteria may be used for selection of the first communities. After that, the CLEME approach should grow organically to the neighboring communities.

- Target communities close to communities already infected with Ebola.
- Smaller in size and far from towns and main roads
- Had no NGO conducting EBOLA activities in them
- Have serious problems around EBOLA or already interested in EBOLA
- Communities affected by Ebola or neighbouring affected communities.
- Have medium to low denial or low knowledge on Ebola.

Once the community has been identified it is critical to build trust. To do this, visit the community at a convenient time before people leave to their farms. Call a stakeholders meeting and present to them the purpose of your visit. **Do not tell them that you are coming to talk about Ebola but you are coming to learn about the different health situations in their community.**

Meet with women's groups, youth groups, community development organizations, mothers clubs etc. to learn more about the community's health situation. Multiple visits will be required at this stage to ensure you gain a good understanding of the community before attempting the triggering.

Let the community agree on the best time for you to come back. Always let them know you are coming so as many people as possible can be present.

2. Towards the community's own assessment of the Ebola outbreak and dangers: the triggering phase

During this phase the ACF facilitators stimulate the collective sense of danger among the community members. This is facilitated through a set of Participatory Rural Appraisal (PRA) based exercises that allow the community to build up a prioritized picture of their living conditions, and conduct a risk analysis for themselves. The tools applied during the exercise are:

- **Community mapping**
- **Identification of common practices for sick people care**
- **Simulation of traditional burials**
- **Transect Walk through the community**

The key event of the triggering is a discussion around the question "are we safe?"

3. Moving forward increased safety: community action plan design

Communities are subsequently supported in the design of a community action plan (CAP). The role of the CAP is to define specific activities that are to be implemented by the community as a unique entity to limit the risk of EVD infections.
Few of the actions identified by the communities are the construction of community isolation rooms – particularly in those communities that are in hard to reach areas; and the instalment of hand-washing sites. Further, most of the activities included in the CAP are associated with the establishment of community by-laws by the community's chief that encourage the community to practice safe behaviors, monitor strangers' visits and sick people, encourage referral of the sick; and prohibit secrete burials.
Violations of the by-laws can lead towards the payment of fines that can be utilized by the community to reinforce preventive measures (i.e. buying soap, cans for hand-washing stations, material for the isolation room, etc.).
The role of ACF in the CAP designing is minimal. Indeed ACF's facilitators are just supporting the community to ensure all members are involved in the exercise limiting the possibility to encounter episodes of discrimination of dominance by the leaders.

4. Ensuring community's safety in the long term: community support group and their training

In addition to the CAP "community support groups" (CSG) are created in each triggered community.
The main role of the CSG is to support the community implementing and respecting the action plan keeping the community safe from infections.
The group, usually of about 7 to 8 people, includes the community's natural leaders and others selected by the communities on the basis of the specific capacities needed within the CAP. More in details the group consists of: 1 Chairperson in charge of leading the group, 2 Burial Advisers (male and female), 2 Community Health Workers (CHW), male and female, in care of facilitating the reporting and transferring of sick person with limited risk, 1 Community health monitor (surveillance representative), 1 Hygiene promoter or community social mobiliser and 1 Secretary. This committee is essential to the CLEME approach as its role is to lead, monitor and follow the decisions taken to create an enabling environment that will protect them from Ebola.

5. Follow up

The CLEME approach includes follow-up activities with the communities where the triggering was conducted. This is an important step of the methodology as it allows the possibility for ACF to continue the dialogue with the communities; and facilitate the discussion about emerging issues at community level or provide information on the changing environment (epidemiological trend, new activities, new messages, etc.). The follow up visits are also key in monitoring the implementation of the community action plan, measuring the impact of CLEME and in supporting the CSGs in adapting the response to the changes in the context, whether needed. Yet, it also gives the possibility for the communities to provide ACF with key information on the challenges encountered during the implementation of the CAP and on the needs identified at community level.

Further, the visits provide ACF also with the opportunity to receive feedback from the communities on the CLEME methodology ensuring its continuous improvement.

Sheet 4: Psychological and Social support

Objectives:

- Present key principles of psychological and psychosocial support
- Present the guiding points of Psychological First Aid (PFA)
- Describe the different types of mental health interventions linked to an Ebola outbreak

Levels of intervention:

- Outbreak
- Immediate Impact
- Mid-long term Impact

An outbreak like the 2014 Ebola epidemic can cause a variety of emotional reactions and psychological effects. Psychological and social support should be provided for patients, their families, the communities, and the frontline staffs. This support should be offered from the beginning of the intervention and throughout the post emergency phase. To be relevant, the support and the approach have to be tailored to the social and cultural context.
Psychosocial support is vital to ensure the wellbeing of the affected population but also to work on consequences of epidemics' outbreak, such as stigma, stress, fear and misconceptions. Moreover, health staffs, ACF staffs in particular, are working in very stressful conditions and a psychological support is essential for them as well.

Psychological Support Definition: Therapeutic method provided by psychologists or psychiatrists for persons with psychological difficulties.

Psychosocial Definition: The term describes an individual's psychological well-being and development (cognitive, affective and emotional) and his or her interaction in a social environment. In the human sciences there are a variety of approaches in which the psychological and the social converge. One of these is assistance to people during critical events such as disasters. Psychological support –in its original sense- is a process that aims at helping people recovering through a community-based approach, focused on vulnerable groups and needs to identify problems and resources linked to griefs and stigmas. While psychosocial aspects are often affected in the situations where ACF intervenes – which need an analysis of the situation's impact on social and family structure – the term is often broadly (indeed incorrectly) used in humanitarian contexts for any program that in any ways aims at improving the well-being of the population.

What are the specific objectives of Psychosocial Interventions?

- To support affected families by reducing the impact of stress, fear and stigma and facilitate the social reintegration of recovering patients and victims' families into their communities.
- To facilitate the psychological process for families throughout the various stages: identification, hospitalization, notification of death, burial, and bereavement.
- To improve the quality of care for the patient and family together with other team members of ACF sectors.
- To facilitate an understanding of the disease within the community and encourage acceptance of the outbreak control activities.
- To support the staff working in health facilities.

- To support infants' infected mothers in the interruption of breastfeeding to prevent transmission and during separation due to quarantine.
- To contribute to coordination mechanisms for the identification and creation of a referral system for vulnerable patients, especially orphans.
- If feasible, to set up a phone support system to reduce the isolation of hospitalized patients.
- If the area affected by the epidemic is quarantined, to enhance access to communication with absent relatives and friends.
- Once the epidemic is over and assuming the activity is safe and it does not violate infection prevention procedures, to encourage the resumption of social activities that may have been interrupted as part of the effort to curb human-to-human transmission.

Psychosocial interventions

Training on Psychological First Aid[5]

Communities can be severely affected by Ebola disease in many ways.
People are separated from their loved ones, due to illness or death. Those associated with Ebola can be vulnerable to social stigma, worsening their distress and isolation. Health workers need to deal with a high workload and a lot of stress. Communities may experience the fear and suffering that disease outbreaks often cause.
In this situation, people can experience a wide range of reactions. They can feel overwhelmed, confused or very uncertain about what is happening. In general, how someone reacts depends on many factors.
It is important to remember that Ebola influences how we normally provide support to each other (e.g., by not being able to touch people) and how we cope with the death of our loved ones (e.g., by not being able to engage in traditional burials). This can severely worsen people's distress.

Psychological First Aid (PFA) involves humane, supportive and practical assistance for people who are distressed, in ways that respect their dignity, culture and abilities.

PFA training should be provided in order to strength skills of both professionals and non-professionals who are in a position to help affected people: contact tracers, community leaders, health workers, teachers, etc.

Psychological First Aid (P.F.A.) is a humane, supportive response to someone who is suffering and may need support[6]:

- Providing non-intrusive, practical care and support
- Assessing needs and concerns
- Helping people to address basic needs (food and water, information)
- Listening to people, but not pressuring them to talk
- Comforting people and helping them to feel calm
- Helping people connect to information, services and social supports
- Protecting people from further harm

In the case of Ebola disease, information is vital: those providing P.F.A. can help to dispel myths, share clear messages about healthy behavior and improve people's understanding of the disease.

[5] From the manual "Psychological first aid during Ebola outbreaks " , WHO and partners, September 2014
[6] Sphere Project (2011) and IASC (2007)

What P.F.A. is Not:

- It is not something that only professionals can do
- It is not professional counselling or psychological support
- It is not "psychological debriefing" in that PFA does not necessarily involve a detailed discussion of the event that caused the distress.
- It is not asking someone to analyze what happened to them or to put time and events in order.
- Although PFA involves being available to listen to people's stories, it is not about pressuring people to tell you their feelings and reactions to an event.

However, there may be situations when someone needs professional mental health support. When providing PFA during a disease outbreak, it is especially important to help people who have been exposed to the disease and/or have symptoms to access immediate medical and psychological attention.

People who need more than PFA in terms of mental health support include:

- People who are so upset that they cannot care for themselves or their children;
- People at risk of hurting themselves;
- People at risk of hurting others.
- You may also encounter people suffering in other ways as a consequence of the Ebola
- Disease outbreak. You can offer PFA and determine if they may need further specialized support.
- This may include people who have lost multiple family members and loved ones to Ebola, particularly orphans who need extra care and protection.
- PFA may also be useful for people who may be stigmatized by their communities, such as: people who have recovered from Ebola; health care providers treating people with Ebola; frontline workers of Ebola operations (e.g., people involved in dead body management).

a. Beneficiaries of training

PFA is an approach that can be learned by both professionals and non-professionals who are in a position to help people affected by very distressing events, such as an Ebola disease outbreak. They may include staff or volunteers of disaster relief organizations (in health and non-health sectors), health workers, teachers, community members, local government officials and others.
It is not necessary for helpers to have a psychosocial or mental health background in order to be able to provide PFA. Helpers who provide various kinds of relief and assistance during an Ebola disease outbreak may find PFA skills useful in the course of their usual work.

b. Tools available:

Guide: Psychological first aid during Ebola virus disease outbreaks
http://www.unicef.org/cbsc/files/Psychological_First_Aid_Ebola_WHO_SEPT2014.PDF

Facilitation manual: Psychological first aid during Ebola disease outbreaks
http://apps.who.int/iris/bitstream/10665/144725/1/9789241548977_eng.pdf?ua=1&ua=1

c. Recommendations for the training on PFA

Participants have to learn how to provide the first psychological support to elderly people, adults and children in ways that respect their dignity, cultures and abilities.

- Duration: 2-3 days of training
- Group of maximum 20 participants
- Training tools: field guides and role-playing simulations

Mental Health and Psychosocial Support (MHPSS)[7]

Alongside the medical response is needed to support people's social and emotional wellbeing. Psychosocial interventions *have to* be anchored in deep cultural understanding to garner community support for, and participation in ongoing activities, in turn making these activities more effective.

Mental health and psychosocial impact of emergencies is reported in the IASC Guidelines on Mental Health and Psychosocial support in Emergency settings[8]:
"*Emergencies create a wide range of problems experienced at the individual, family, community and societal levels. At every level, emergencies erode normally protective supports, increase the risks of diverse problems and tend to amplify pre-existing problems of social injustice and inequality. Mental health and psychosocial problems in emergencies are highly interconnected, yet may be predominantly social or psychological in nature.*

EVD outbreak can be considered as an emergency having an important impact of individual, family and community level.
As for the emergency created by conflict or natural disaster, in EVD outbreak we have to consider these significant problems of a predominantly social and/or psychological nature:

• *Pre-existing (pre-emergency) social or psychological problems (e.g. extreme poverty; belonging to a group that is discriminated against or marginalized, political oppression, severe mental disorder, alcohol abuse).*
• *Emergency-induced social problems (e.g. family separation, disruption of social networks, destruction of community structures, resources and trust, increased gender-based violence, grief, non-pathological distress; depression and anxiety disorders, including post-traumatic stress disorder (PTSD).*
• *Humanitarian aid-induced social problems (e.g. undermining of community structures or traditional support mechanisms, anxiety due to a lack of information about food distribution).*
• *Thus, mental health and psychosocial problems in emergencies encompass far more than the experience of PTSD."*

a. Psychosocial activities

Psychosocial support can be provided through various activities, such as:

- Individual psychosocial support sessions, aiming at strengthening individual resources and capacity to cope with new situation
- Psychosocial support group sessions, aiming at sharing experiences and strengthening community resources by using social networks and mutual-aid mechanisms
- Psychodrama, storytelling, creative expression activities, relaxation, movements and body sensations
- Community Healing Dialogues, aiming at sensitizing communities to fear, stigma, discrimination and self-help mechanisms.

Prefer short term support approach. Work on increasing internal and external resources as the priority.

b. Psychological support

Psychological support services should be available for the beneficiaries who are facing important psychological difficulties. Psychological support is organized in individual or group sessions, depending on the beneficiaries' needs, the culture and the qualifications and training of the staff.
As this activity requires the intervention of trained psychologists, the first step consists in assessing the availability of appropriate human resources in the emergency context. If no local psychologists are present

[7] For more details :
http://mhinnovation.net/sites/default/files/downloads/resource/ebola_guide_for_planners.pdf
[8] http://www.who.int/mental_health/emergencies/IASC_guidelines.pdf

or available, it is important to organize the presence of expatriate psychologists on the field, together with local translators. The presence of translators is essential and should not be considered as optional.
In any case, the availability of external services providing psychological support should be assessed, in order to explore the possibility to refer the beneficiaries to these services and for coordination purposes (information can be found in the MHPSS group if existing in the country).
Technically, ACF does not favor a single therapeutic approach, but prefers an eclectic approach tailored to the specific issues affecting the population, to the patients and to the program. The aim is to keep a real flexibility in meeting the beneficiaries' needs, encouraging the creation of tools adapted to the context. The use of culturally sensitive tools is encouraged and favored when these exist.

To set up a psychosocial and/or a psychological support intervention, it is important to:

- Specify the inclusion and exit criteria for psychological support
- Specify the exclusion/referral criteria (i.e. chronic mental illnesses such as psychosis or epilepsy)
- Establish a filing system that ensures the confidentiality of data (locked cabinet etc.)
- Establish a monitoring system: identification of needs, appointments, follow-up, home visits, etc.
- Establish a referral system for psychiatric problems, if services are available

c. Beneficiaries and vulnerable group targeted

Psychosocial and psychological support activities have to be organized for EVD directly and indirectly affected people and communities.
Previously experiences showed that in EVD outbreak most affected people are quarantines people, survivors and their families, children, grieving families, frontline health workers. This list is not exhaustive and needs should be evaluated before setting the intervention in a determinate area.

Quarantined people
People in quarantine suffer from stress and stigma. During the days where they are confined at their place, they experience fear and they are anxious about their future and about the health status of loved one in the ETU.
Neighbors in the communities are mistrustful and they can show aggressiveness towards families in quarantine leaving them alone and without support.
During this period it is essential to provide them a specific support according to their main preoccupations and emotional suffering.
Previous experience showed the importance to visit them at least twice per week, and to keep them following even after the quarantine period to be sure that their internal resources have been strengthened enough.

Survivors and their families
Many persons who survived EVD and come back home from ETUs can experience stigma, discrimination and rejection by their communities, but even they can be deserted by their spouses and other family members. Stigmatization is not experienced by individuals only, but by families and whole communities as well, resulting in people losing their jobs and sometimes their homes.

It is important to address the specific needs of persons who have survived EVD in the emergency phase, providing them with specific psychosocial support, involving their families and communities members in order to reduce stigma and to facilitate the reintegration process.

In the long term it will be necessary to incorporate these groups into mainstream services. ACF MHCP department should be in close link with FSL department for more holistic and integrated approach to answers to EVD survivors' needs.

Children

Children are witnesses of people being taken from their communities and not returning; they internalize stress expressed by adults around them; and they can experience reduced physical contact with parents. The combination of these factors contribute to heightened stress and anxiety levels, necessitating an important need to provide targeted psychosocial support adapted to working with children in affected families.
Furthermore the Ebola virus disease has left many children orphans, in need of social and psychological support.

It is crucial to contribute to Child protection, as described below (*from "Mental Health and Psychosocial Support in Ebola Virus Disease Outbreaks. A Guide for Public Health Programme Planners", WHO 2015*):

- Link with social services and community-based protection networks that seek to reduce emergency-induced rights violations, especially those affecting children, such as child labor, early marriage and sexual abuse.
- Collaborate to establish a well-documented referral system for organizations focused on child protection, where mental health referrals may need to be made. Monitor the care offered in observational interim care centers (OICCs) for children and promote the improvement of OICC services when necessary.
- Ensure that the full range of needed physical and mental health services is available in OICCs.
- Establish transitional homes with staff trained to work with children, if needed, for children who need to transit back to their homes from OICCs, ETUs or other environments.
- Ensure that the full range of children's rights are protected and observed in OICCs, ETUs or other facilities, including the need for caregiver/parental consent when media or public information is involved.

Grieving families
Individual and/or family psychological support is provided for children and parent with psychological difficulties regarding the emotional stress that they may sometimes experience as a consequence of losing a family member through EVD.
In EVD outbreak families can be in the situation of not having the possibility to respect the cultural burial rites.
The sudden separation of family members, transported to the ETU, the death occurred away and in isolation, without the possibility to see the loved ones one last time; the imaginary linked to the dead by EVD, very violent and with bodies severely damaged, etc.; all of these factors make the grieving process, very complex.
Family counselling is provided in order to support families in which a family member(s) has been separated either through death. A combination of family counselling and individual counselling sessions to meet the needs of family members experiencing most emotional difficulties is needed to most effectively address family emotional difficulties.
Particular attention to cultural aspects is necessary in choosing the psychosocial approach and technics.

Frontline health workers and burial teams
It is absolutely critical that frontline health workers have the knowledge and skills to offer psychosocial support to individuals in extremely vulnerable moments as well as foster relationships based on empathy and trust. At the same time, it is also important that these workers are able to access support themselves; therefore the focus on providing psychosocial support to suspected and confirmed EVD individuals, their families, community members and frontline health workers.

Workers in ETUs but even burial teams struggled emotionally with the scenes they witnessed.

See below the specific sources of stress for staff related to an Ebola outbreak (*IFRC Briefing paper on psychosocial support during an Ebola outbreak – August 2014*)

- Strict bio security measures that put pressure on the daily work

- Risk of being contaminated
- Fear of being infected when encountering a physical symptom
- High mortality rate amongst health workers
- Rapid deterioration of patients may be shocking
- Stigmatization when working with Ebola patients
- Global consequences of the outbreak for everyone at community level

To address the psychosocial needs of these teams it is appropriate to propose group support sessions. "Group settings" can offer a safe place where they can express how they are feeling and they can share successful coping mechanisms, feeling less alone. Individual support should be offered for those showing great degree of distress.

Support groups (community level)

Social problems may emerge when the population is exposed to the virus and the EVD response: breakdown of community support systems, social stigma and discrimination, strong fear and anxiety, etc.

In order to mitigate the negative effect of EVD on the communities and to strengthen the coping mechanisms at individual and community level, it is necessary to develop community- focused interventions. These interventions should be based on strengthening local resources already existing (when possible) within the community and community leaders have to be engaged since the beginning of EVD outbreak.

Some recommendations included in the Mental Health and Psychosocial Support in Ebola Virus Disease Outbreaks "*A Guide for Public Health Programme Planners " WHO 2015*:

- Community members and leaders should be engaged to understand the sources of stigma and the steps that can be taken to dispel any unnecessary fears and misconceptions. At the same time, it should be recognized that empowerment of those who have survived and are affected by EVD is essential to overcoming stigma, including self- stigma, and discrimination.
- Engage with community leaders and existing structures to develop community- focused interventions. Empower the community to develop and implement their own response plan, as appropriate, including the identification of isolation areas and roles and responsibilities.
- Engage with community members, including religious/traditional leaders, as soon as possible during the outbreak to promote acceptance of the need for safe burials and to reach consensus on how to bury bodies in a manner that is culturally acceptable and safe.

At operational level different psychosocial activities can be proposed, mainly:

- Organization of focus group discussions on the main topic linked to EVD (stigma, fear, acceptance, burial rituals, local mechanisms of help and support etc.)
  Focus group discussions allow working on effects endangered by the EVD. Community members can assess the problems, sharing opinions and try to find effective solutions about identify problems.

- Facilitate the creation of inclusive, community-based self-help support groups.
  As mental health and psychosocial effects tend to last much longer than the acute crisis phase, the development of these self-help groups can represent a long-term perspective focused on establishing a sustainable mechanism of support at community level.

  The objective of this such of group discussion is to provide social / emotional support, sharing of experiences, good practices and problem solving skills to help the individual to develop his/her own

behavioral strategies, and to receive emotional and social support during transitions or difficult periods of life.

Promoting and reinforce IYCF and child care practices

As in any emergency contexts, very young children are vulnerable and the parental capacities to respond to their need are really impacted, leading to a degradation of child care practices. (*for more details see the "chapter 1" in Baby Friendly Spaces manual:* http://www.actioncontrelafaim.org/sites/default/files/publications/fichiers/acf_bfsmanuel_2014_gb.compressed.pdf).
The particular way of EVD transmission has an important impact of the parents-child relationship and on the way to provide care, show affection, and stimulate the children as the corporal interactions should be avoid in order to limit the possibility of transmission.

Recommendations:

- Families should be support through psychosocial activities aiming to restore the relationship and improving others modalities of interactions (example: verbal, visual).
- These interventions can be implemented at community level or in the health units, as in particular in the treatment of sever acute undernourished children.
- The activities can be those proposed by ACF (*see the Baby Friendly Spaces manual or the "Manual of integration of Care Practices in treatment of undernutrition")* aiming at reinforce the parent-child bonding and preventing the negative impact on child development.
- These activities should be adapted to EVD outbreak context, considering the recommendations for limiting the risk of contagious (example: physical distance between the ACF psychosocial workers and mother-child dyad).

Breastfeeding practices
In the Ebola context several concerns have been raised about infant feeding.
In general, breastfeeding is the best way to feed infants less than 6 months and should be continued, with adequate complementary feeding, up to 2 years or beyond.

The Ebola virus is present in breastmilk, but the transmission mechanism (whether via pregnancy and delivery, breastmilk or the close contact with mother with Ebola, which might include contact with other body fluids) is not clear.
In some situations (to make the decision see the *Flow charts 1 and 2 adapted from a figure developed by the Ministry of Health and Social Welfare of Liberia with support from UNICEF, 19th September 2014.*
Use in conjunction with guidance note dated 19th September 2014. http://www.ennonline.net/infantfeedinginthecontextofebola2014) breastfed infants of Ebola infected mothers (where the infant is asymptomatic, the risks of Ebola transmission via breastmilk outweigh the risks associated with replacement feeding it is recommended the infant is separated from the mother and is replacement fed.
A mother, who stops breastfeeding, needs help to produce breastmilk and find alternatives.
Mother and infant abruptly separated need a psychosocial support and a close follow up.
A particular attention should be done to orphans under the age of 24 months which need to be fed with replacement feeding ant to their caregivers in order to support them with tailored solutions.

Teams supervision

ACF staff members should be trained by specialists on psychosocial and psychological skills for providing psychosocial support to people in need (EVD affected individuals and families and front line workers). Continuous training and ongoing supervision are essential to install complex clinical skills.

ACF teams and frontline workers can face very difficult situations and experience extreme psychological stress

In addition to continuous training it is necessary to support teams with emotional supervision, giving them the possibility to have spaces to express their feelings, their stress and difficulties in order to find adapted solution and share with the group.

For those in need of more support, a tailored psychosocial follow-up should be organized.

Coordination & Referral system

- Establish a detailed mapping of actors in order to avoid duplication of efforts in some areas, while other areas are neglected.
- Refer urgent psychiatric and neurological complaints (e.g. psychoses, severe depression) to appropriate services, if available in the area.
- Participate actively to the MHPSS coordination group at the national EVD emergency response management level.
- Attend other sectoral coordination groups (health, protection, etc.) to ensure the integration of MHPSS activities into different sectors.

Sheet 5: Contact tracing

Objectives:

- Define Contact Tracing
- Provide an overview of the contact tracing process

Levels of intervention:

- Outbreak

What is Contact Tracing?

Contact tracing is an integral component of active surveillance during Ebola Virus Disease (EVD) outbreaks. In epidemiology, **contact tracing** is defined as the identification and diagnosis of persons who may have come into contact with an infected person. Early detection and prompt isolation of new EVD cases is requisite for interrupting secondary transmission of Ebola virus in the community. Immediate evacuation of potentially infectious symptomatic individuals from the community prevents high-risk exposures during home-based care, other social activities, and subsequent customary burial procedures. During EVD outbreak contact tracing means that all potential contacts to:

- Suspect,
- Probable,
- and confirmed cases

⇨ Should be systemically identified and put under observation for 21 days (the maximum incubation period of the Ebola virus) from the last day of contact. Contact tracing is therefore one of the most effective outbreak containment measures that must be implemented prudently. On average for each case 10 to 12 contacts need to be followed daily.

Case definitions are specific to each country/context – refer to national document.

Conducting contact tracing has posed serious challenges, due to the wide geographical spread of the ongoing EVD outbreak, limited resources (human, financial and logistics), and to some extent, limited access to affected communities. Because of the numerous resources that must be allocated in order to set up contact tracing activities, it is more efficient at the beginning and end of an epidemic when the number of cases is lower and under control.

Basics of contact tracing

The process of contact tracing is broken down into 3 basic elements:

1. Contact identification

Contact identification is carried out for all cases meeting the standard/surveillance case definitions of Ebola virus disease. These cases are classified as suspect, probable or confirmed through a thorough investigation and Ebola testing. In addition, an epidemiologic investigation is conducted for all deaths, in the community or health facility, attributable to EVD. The process of verifying the cause of death is called verbal autopsy, it is aimed to establish the likely cause of death and identify chains of transmission. The tool for conducting epidemiologic investigations is the Case Investigation Form (CIF). The use of a comprehensive and standardized CIF is therefore recommended. CIFs should be completed for all the EVD cases and deaths meeting the standard/surveillance case definitions.

After completing the case investigation form, the epidemiologist or surveillance officer should systematically identify potential contacts. Contact identification therefore begins from a case. Identification of the contacts is done through questioning the activities of the case/deceased or the activities and roles of the people around the case/deceased since onset of symptoms. While some of the information can be obtained from the case, much of the information will come from the people around the case. It is mandatory for the epidemiologist/surveillance officer to visit the home of the case. The interrogation should identify the following:

a. All persons who lived with the case/deceased in the same households since onset of illness;
b. All persons who visited the case/deceased either at home or in the health facility since onset of illness;
c. All places visited by the case/deceased since onset of illness (e.g. traditional healer, church, relatives, etc). All these places should be visited and contacts identified;
d. All the health facilities visited by the case/deceased since onset of illness and identify all health workers who attended to the case/deceased without appropriate infection prevention and control procedures;
e. All persons who had contact with the corpse from the time of death and during the traditional burial procedures;
f. During home visit, the contact follow-up teams should inquire about persons who might have been exposed to the case/deceased but were not identified and listed as contact through the above process.

Priority should be particularly given to the following high risk categories of contacts, persons who:

- Touched body fluids of the case (blood, vomit, saliva, urine, feces);
- Had direct physical contact with the body of the case or deceased;
- Touched or cleaned the linens or clothes of the case;
- Slept or ate in the same household as the case;
- Health care worker who suffered a needle stick injury from contaminated instrument while attending to a probable or confirmed EVD case;
- Health care worker who had a breach of barrier nursing procedures while attending to a probable or confirmed EVD case.

2. Contact listing

All persons falling under the categories described above should be listed as contacts, using the contact listing form. Efforts should be made to physically identify each and every listed contacts and each contact person informed about their contact status, what it means, the subsequent actions that are going to follow, and the importance of receiving early care in the event of developing symptoms. The process of informing the contacts of their status should be done with tact and empathy since being a contact is usually immediately associated with serious health outcomes. Advise all contacts to adhere to the following:

1. Remain as much as possible at home and restrict close contact with other people;
2. Avoid crowded places, social gatherings, and public transport[9];
3. Report any suspicious symptoms immediately (provide telephone numbers e.g. the Ebola hotline, numbers of the supervisor or the contact follow up team).

[9] First and foremost, messages and advice relayed to contacts must follow national guidelines. In some places, contacts are quarantined and strictly forbidden to leave their house for 21 days. In this case, the advice to give is to avoid touching and stay within the boundaries of their house/courtyard.

3. Contact follow-up

The epidemiologist/surveillance officer responsible for contact tracing should assemble a competent team comprising of community health workers, volunteers and community leaders to follow up all the listed contacts. An efficient contact tracing system depends on a relationship of trust with the community, which in turn fosters optimum cooperation. The communities should have confidence in the intervention for them to cooperate with the contact tracing teams and eventually allow referral of symptomatic contacts to the designated isolation facilities. Involvement of community leaders in contact tracing is therefore critical in cultivating this good relationship, trust and confidence of the community. The community structure for contact follow-up should be closely supervised by trained health workers.
The identified contact tracers and their supervisors should be trained in a one-day orientation workshop. The training package should cover the following:

- Basic facts about Ebola virus disease;
- How Ebola virus disease is spread;
- Preventive measures for Ebola virus disease;
- The roles and procedures for contact tracing / follow up;
- Orientation on the contact follow-up tools, monitoring temperature, reporting, etc;
- Recommended safety precautions for contact tracing teams;
- Psychological First Aid is highly recommended

After conducting the orientation, the contact follow up teams should be equipped with all the necessary tools e.g. thermometer, reporting tools, alcohol based hand rub, hygiene kits and other EVD kits if they are to distribute them, etc.

Contact identification, listing and follow-up should start as soon as a suspected case has been detected. Follow up of contact of suspected cases with negative lab tests for EVD should stop immediately and the contacts discarded from the contact list.

Procedures for conducting contact follow-up

The steps below provide guidance on the actual procedures for conducting contact follow-up:

1. Each morning, the epidemiologist/surveillance officer responsible for contact tracing prepares the list of contacts to be followed that day.
2. The epidemiologist provides the list of contacts to the supervisors in a meeting setting. The grouping of the supervisors should be done rationally, taking into account the routing, number of contacts to be followed in a particular area …
3. The supervisors travel to their areas of work and meet the contact follow-up teams (ideally comprising of a community health worker and a community leader) in a centrally agreed meeting point e.g. nearby health facility, school, church, …); and the teams are assigned the contacts/ households/ homes to visit;
4. After receiving the lists of the contacts, the teams then go to their respective communities for home visits;
5. On arrival to the homestead, the team should observe culturally recommended practice of greeting, except for those that entail direct physical contact like shaking hands or hugging. Explain to the household members that the restrictions have been recommended to contain the spread of EVD;
6. If offered seats, inform the household members that you will not stay long and hence the need to quickly interview the contacts so that the team catches up with the other contacts before the day ends (contact tracers should never enter in the house and sit or touch any object);
7. Interview and assess the contact for symptoms using the contact follow up form, and have their body temperature taken (if recommended);

8. If a contact is not found at home, the team should inform the supervisor immediately while trying to establish the where-about of the contact. The role of the community leader becomes critical for such incidents. A satisfactory explanation should be obtained for the absence of a contact;
9. If a contact develops symptoms, the team should immediately notify the supervisor, who should immediately inform the mobile/ambulance team to conduct assessment and/or evacuation to the treatment center (if necessary);
10. After finishing the interview/assessment, inquire whether there is any other person in the household who is not feeling well (even if the person is not a contact). This serves to identify any sick person in the community, referred to as active case search;
11. The contact follow-up team prepares a report summarizing the findings using the reporting format in Annex 3.
12. On a rotating basis, the supervisor should join the contact follow-up team for home visits. This is to monitor and supervise the contact follow-up team, and ensure that they are doing they work correctly;
13. After completing home visits (the assigned contacts/households), the teams should assemble in the central meeting point to provide feedback to the supervisor;
14. The supervisor collects all the reports of contacts followed up that day and prepares a summary report for the epidemiologist. The report should, in addition, include any other emerging issue encountered during the home visit;
15. The epidemiologist makes a consolidated report of contact follow-up activity, which forms part of the district or county surveillance report that is presented to the task force.

Discharge of contacts

Contacts completing the 21-day follow-up period should be assessed by the team on the last day. In the absence of any symptom, the contacts should be informed that they have been discharged from the follow-up; and can resume normal activities and social interactions. The team should take time with the neighbors and close associates to assure them that the discharged contacts no longer pose any risk of transmitting the disease.

Recommended safety precautions for contact tracing teams

Since cases are more likely to arise from the contacts that are being followed up, it is important for the contact tracing teams to take measures to protect themselves during the follow-up. The teams should abide by the following precautionary measures during the visit:

1. Avoid direct physical contact like shaking hands or hugging;
2. Avoid sitting on chairs offered to you;
3. Avoid touching or leaning against objects that can be “infected”
4. Always have a good breakfast before departing for home visit in the field to resist the temptation of eating or drinking while following contacts in the villages;
5. Do not go for contact tracing while wearing personal protective equipment like masks, gloves, or gowns.

Developing case and contact database

Effective management of contacts can only be achieved using appropriate database or specific software, designed to manage cases and their corresponding contacts, with the following information:

- Registration of cases and cases related data;

- Registration of contacts and contacts related data;
- Production of daily follow up reports;
- Production of predefined summary and detailed reports
- Exporting of data to different formats (txt, xls, xml etc.) for further analysis;
- Summary case and contact mapping (ideally using Health Mapper or GIS software);
- Visualization of chains of transmission.

REFERENCES:

MSF : Filovirus Haemorrhagic Fever Guideline
Contact tracing p 49.
Suggested case definitions p 83. Annex 3B
Contact tracing form p 120. Annex 18.4

WHO :

Ebola and Marburg virus disease epidemics: preparedness, alert, control, and evaluation
Ch. 5 Outbreak Control p 46.
http://www.who.int/csr/disease/ebola/manual_EVD/en/

Contact tracing during an outbreak of Ebola virus disease
http://www.who.int/csr/resources/publications/ebola/contact-tracing/en/

Sheet 6: WASH in health facilities

Objectives:

- Present minimum guidelines for WASH in health facilities including waste management
- Provide instructions on how to make chlorine solutions with the proper concentration

Levels of intervention:

- Outbreak
- Immediate Impact
- Mid and long-term Impact

Minimum requirements and Guidelines for Water, Sanitation and Hygiene services in Health Facilities in an Ebola context

(based on MSF and WHO Guidelines)

Preamble:

Adequate water and sanitation provision is a medical requirement, and is essential for many curative interventions, e.g. water for surgical procedures, maternity, and re-hydration. Water and sanitation provision is also essential for Infection Prevention Control (IPC).

The minimum water and sanitation requirements allow curative actions to be undertaken, and contribute towards reducing nosocomial transmission linked to health structures.

The minimum water and sanitation requirements are applicable to:

- **The smallest health post through to the largest health structure**
- **Acute emergencies through to chronic emergencies and stabilized situations**

They form part of the Standard Precautions and respect the fundamental rule not to harm patients, staff, visitors, and populations surrounding the health structures. **In order to have a functional health structure, the minimum water and sanitation requirements should be reached, or even exceeded.**

Water Supply

Water Quantity

Health structure / activity	Liters / person / day
Center with an Outpatient Department (OPD)	5
Center with an Inpatient Department	40 – 60
Operating theater / Maternity	100 L / intervention
Distribution point for nutrition products (no food preparation) – DRY SFC	0,5L (5L if waiting times are long)
Distribution point for nutrition products (food prepared on site) – WET SFC	15

Therapeutic Nutrition center (TFC)	30
Cholera Treatment center (CTC)	60
Ebola Treatment Center (ETC)[10]	300 – 400 L/person /day
For Ebola Care Units (ECU), context specific national standards are under definition and are ranging from	400 to 1500 L/day for a 8 bed isolation units

Table 1. Adequate quantities of accessible and reliable water in health facilities. Extracted from *Minimum water and sanitation requirements in health structures* - MSF

For an ETC, and any other health structure in an EVD context (although on a smaller scale) water is required for the following:

- Cleaning and Laundry (disinfection and rinsing)
- Hand washing (0.5% and 0.05% solutions) and Foot baths
- Disinfection of PPE, materials, beds, buildings, and surfaces
- Disinfection and preparation of corpses
- Drinking water and preparation of ORS

Water quality

- For drinking water and for the preparation of chlorine solutions the water should be clear and **turbidity should preferably be less than 5 NTU**. If turbidity is higher than 20 NTU, the water should be treated (PUR sachets - Purifier of Water, alumina sulphate or filters should be used).

- All drinking water and water for cooking at the health structure must be treated with chlorine (HTH, Aquatab or other similar chlorinated product). Bleach can be used, but its concentration must first be verified. Drinking water must contain **0,3-0,5 mg/L of Free Residual Chlorine at the water points** (tap, drinking water container).

- Drinking water must contain **0 Ecoli/100mL at the point of use** (taps, and in drinking water containers)
- There is no taste, odour or colour that would discourage consumption or use of the drinking-water.
- Water that is below drinking-water quality is used only for cleaning, laundry and sanitation (as long as it is used with a disinfectant or a detergent) and is labelled as such at every outlet.

Water quality monitoring:

All drinking-water is treated with a residual disinfectant to ensure microbial safety up to the point of consumption or use. Water quality for drinking purpose is to be monitored as described below:

Measurement	Frequency	Location
Free residual chlorine	Daily (epidemic) / Weekly	Tap
E-coli	Monthly	Water supply point, tap
Chemical quality	Yearly	Source

[10] In an ETC, the water consumption depends less on the number of patients than on the number of staff and the size of the Treatment Unit. Approximately 70l of water per day per staff member working in protective clothing should be calculated.

Water Storage

Depending on the reliability of the water supply, an emergency buffer of water should be established (a **2 days consumption buffer** is advisable)

Water Distribution

- Water is required in all areas of the Unit; **install a simple distribution system to supply water throughout the Unit**. Manual transportation of water into the different areas and zones should be avoided.
    - If tap water is not available drinking water must be stored in large closed containers (min 40L), disinfected every week and fitted with a tap and drainage system
- All water containers, distribution pipes, and equipment should be made of plastic to avoid damage when in contact with chlorine solutions.
- Water containers, etc. should be clearly labelled or color coded to avoid confusion with those containing chlorine solutions.
    - Small drinking water containers are cleaned once a week (using a brush, detergent, bleach or a 0.5% chlorinated solution).
    - Larger water tanks (raised, buried) available on-site at the centre are disinfected every 6 months (using 2% chlorinated solution, brushes, protective equipment).
- Clean glasses or other appropriate receptacles must be available at drinking water supply points. They must be washed systematically with an appropriate washing-up product (soap) or chlorinated solution.

Sanitation facilities

Latrines

The Ebola Free ward, the suspect cases ward and the probable/confirmed cases ward in an ETC or isolation unit in a health facility, must have separate latrines.

Minimum number of latrines:

Beneficiaries	Number of latrines	Gender segregated
Ebola Free ward – inpatient	One latrine for 20 inpatient	Preferably separate latrines for male and female.
Ebola Suspect cases – inpatient	One latrine for 20 inpatient	Preferably separate latrines for male and female.
Ebola confirmed – inpatient	One latrine for 20 inpatient	Preferably separate latrines for male and female.
Staff	One latrine for 20 staff	Preferably separate latrines for male and female.
Outpatient	One latrine for 50 outpatient	Preferably separate latrines for male and female.

- At least one latrine per gender must be accessible.
- For the elderly or handicapped: sufficient room for two, bars to assist in sitting down and standing up, squatting is better than sitting for disinfection purposes.
- For Ebola care, if working in an existing structure, the available latrines/toilets may have to be used. However if possible it is advisable to **build temporary, simple pit latrines** for the following reasons:

1. The most convenient number and location of latrines can be arranged according to the number of patients and layout of the Ebola Treatment Unit/Health Facility.
2. The latrines and the excreta are kept within the compound and more control is possible.
3. Pit latrines cannot easily block; absorbent pads are frequently used and mistakenly disposed into flush toilets.
4. After the outbreak, pit latrines can easily be back filled; septic tanks and sewage systems are more difficult to control.

- If flush toilets connected to a sewage system are utilized, they must be thoroughly disinfected and cleaned at the end of the outbreak (For more information see *Protocols for the Safe Collection and Disposal of Ebola Contaminated Sewage*. Liberia Gov – Jan 2015)
- If pit latrines are utilized they should be closed and backfilled at the end of the outbreak and new latrines constructed. If this is not possible due to lack of space, the pit contents should be covered with a 50cm layer of earth and the superstructure thoroughly disinfected and cleaned.
- Pit latrines can be constructed with plastic emergency slabs or concrete pre-cast slabs:
  1. The slab must be easy to clean and disinfect, and should drain into the pit.
  2. The latrine cubicle must be large enough for a patient + an attendant (2.5 m^2).
  3. Pit should not be deeper than 2.5m (due to risk of collapsing). Bottom of pit must be more than 1.5m above groundwater level, to avoid risk of ground water contamination.
  4. Easy access and safe location: there should be between 5m and 30m distance from the building to the latrines and over 30m from any place where food is prepared and/or consumed and from underground water sources. Access to latrines should be obstacle free and well-lit at night for in-patients.
  5. Hand washing stations with soap or 0.05% chlorine solution must be installed adjacent to all latrines.

Bathing Facilities

- The Ebola Free ward, the suspect area and probable/confirmed area in an ETC or isolation unit in a HF, must have separate bathing facilities.
- Gender specific showers and/or areas for bathing are available with a ratio of 1 per 50 users.
- The bathing facility must be easy to clean and disinfect, and are fitted with a fully functional drainage system to prevent water stagnation. They are not accessible to animals.
- The bathing cubicle must be large enough for a large container of water, a patient, and an attendant (2.5 m^2).
- As for the toilets, it is important to build the bathing facilities adapted to weak people, i.e. with possibilities to hold one-self or to sit.

Washing area: laundry and crockery

- The Ebola Free ward and the Ebola high risk zone in an ETC or isolation unit in a HF,_must have separate washing areas.
- Ebola infected bed linen and patients' clothing should not leave the high-risk area. These items should be carefully disinfected and laundered in the high-risk laundry area and air-dried or burned.
- Separate areas are assigned for washing crockery and clothing in each area with a cement slab and basic drainage (ex: grease trap/sedimentation box + soakage pit). Crockery, clothing and linens must be air dried above floor level.

Waste water

- All wastewater must be evacuated via closed drainage systems to an on-site storage and infiltration system (soakage pit, infiltration trench) or off-site via an underground sewerage system.

- All wastewater drainage systems must be covered to avoid the risk of spreading vector-borne diseases and contamination through direct contact.
- Grease box/sedimentation trap must be installed between wastewater outlets and the drainage system (especially soakage pit) to prevent oil, grease and solids from entering into the drainage system. These boxes must be checked and cleaned every week according to specific safety protocols and rules.
- Soakage pit for wastewater must be installed at least 30m away and downhill from underground water sources; the bottom of the pit must be located at least 1.5m above the static level of the water table.
- A basic drainage network (gutter, channels) and natural drainage (slope) ensure evacuation of rainwater and run-off overflow.

Solid Waste management

d. General standards

- As soon as waste is produced in a healthcare or medical structure it must be sorted by type and separated into at least three main categories: non-sharp/non organic waste, organic waste and sharp waste.
- Containers for waste should be made of hard plastic, with colour codes, or stamped with clear signs and symbols according to the type of waste and placed in suitable locations. Cardboard cartons should never be used as waste bins.
- Two sets of containers are provided for each type of waste in all rooms in the centre according to what the room is used for (maternity, appetite testing, waiting room, consultations…) so that at least one is available for use during waste collection, cleaning and drying the containers.
- Waste containers are installed no further than 5m walk from the users.
- A specific area is set aside for disposing of waste where it can be stored and eliminated safely and effectively.

e. Waste disposal area

- The waste disposal area must be walled or fenced in.
- A water supply point with soap or detergent and disinfectant for hand washing and cleaning and disinfecting containers must be made available with drainage via a sump or sewer system installed.
- The waste disposal area must be located at least 30m away from underground water sources.
- Any incinerator that is used must be located on sites that allow for an efficient operation whilst producing a minimum of air pollution for the health centre, neighbouring houses and farms or vegetable gardens.
- The area must be sufficiently large to allow for future expansion if new pits or other installations need to be built.

f. Waste management: waste definitions, collection, transport and disposal

(See table below)

- All waste from the Ebola Treatment Unit or from associated activities is considered highly contaminated.
- Waste must be safely collected, handled, transported to, and disposed of in a secure location.
- Every effort must be made to minimize risk for staff handling the waste, other staff, patients, and the community. Any staff involved in the management of Ebola waste must wear full protective gear.

	Type of Waste	Definition and Examples	Collection	Transport	Disposal
Non-sharp non-organic waste	Burnable Waste	**Dry waste** is all waste that has low moisture content and is therefore easily burnt. **Wet waste** is waste that has high moisture content. In practice, mainly contaminated waste that has been disinfected with chlorine (clothes, mattresses…)	To reduce the risk of leaks, 2 bags, one inside the other, should be used to collect both wet and dry waste. - The bags (black colour) should be supported in a garbage-bag-holder. - When the double bag is ¾ full, collect it and close with a string or tape. - Disinfect the outer bag. - Put new double bags in the bin immediately	The waste worker must promptly transport the bag(s) to the waste area. The bag(s) can be carried in a wheelbarrow to reduce the risk of the bag splitting and possible contamination of the compound.	Bags must be burned without opening them. Assist burning with paraffin or diesel as necessary. - Disposal in emergency situation: Incinerate in a metal barrel and waste pit Ashes and other residue deposited directly in a covered ash pit with a lid - Disposal in sustained emergencies and stabilized situations: De Montfort incinerator (or equivalent)
	Liquid waste	Examples are body fluids: vomit, soft stools, urine, blood, etc). Body fluids can be excreted in two ways: - In a controlled way (into a bucket); - In an uncontrolled way (spills on floor, bed, clothes…)	Controlled waste: - Collect waste in a bucket with 2cm of 0.5% chlorine solution. - When waste has been excreted, add enough 0.5% solution to cover completely the waste - Allow minimum of 15 minutes for chlorine to act. Uncontrolled spills: - Pour 0.5% solution directly on the spill without splashing. - Leave for 15 minutes. - Mop up with an absorptive pad or towel. - Place the waste into a bucket.	Transport the covered bucket to the latrine without splashing or spilling.	Liquid waste can be disposed of into a special liquid waste pit or into a pit latrine. The soaked pads should be disposed of into a pit latrine (never into a flush toilet!), or into the waste pit / burning pit.
	Organic Waste	Organic waste originating from the human body: placentas, body parts, etc. Other organic waste e.g. food leftovers.	Organic waste originating from the human body is a huge biohazard and must be disposed of immediately. - Organic waste can be collected in a double plastic bag or Bucket (Green colour). - Close the bags with a string or tape. - Disinfect the outside of the bag or bucket.	The bags or buckets must be taken immediately to the waste zone.	Organic waste can be disposed of in a specially built organic waste pit or if not available, a pit latrine can be used (only if small volumes of waste). Organic waste must not be burned. Organic waste, including liquid (blood, placenta…) must not be thrown into the wastewater drainage system.
	Sharps	Items that can cause cuts or puncture wounds, including needles, scalpels, knives, infusion sets, saws, broken glass, nails, etc.	Sharps containers (Yellow colour) must be – waterproof, puncture resistant, and clearly marked “SHARPS”. Whilst awaiting final disposal, sharp waste containers must be stored in a secure place inaccessible to either the general public or to patients	Disinfect outside of the sharps container before transporting.	Sharps pit. Ideally, sharp waste (in its containers) is thrown with their container into a pit built for this purpose (Sharp pit) on the center’s premises: sealed concrete pit, or metal drum in the event of extreme emergency or for a small health center or unit

Management of corpses

- A suitably located mortuary of an appropriate size is installed for all structures with a night service; a special mortuary is reserved for isolation units.
- Security is vital when handling corpses; all appropriate and all necessary sanitation and disinfection measures must be taken during the handling and preparation of dead bodies:
    - A dedicated trained team disinfects all corpses and the mortuary
    - A dedicated trained team carries out or supervises burials

Disinfection

- Disinfection can be done in several ways, depending on the availability of disinfectant, disinfection equipment, and systems in place. Chemical disinfection is the easiest and most efficient method for disinfecting large surfaces, protective equipment, waste etc.
- Practical methods to destroy Ebola virus include:
    - Chemicals: Chlorine based products
    - Soap
    - Alcohol and formaldehyde
    - Heat: Steam sterilisation.
    - Ultra Violet (UV): UV from sunlight is active in destroying the virus; laundry can be hung in the sun for drying and extra disinfection.

Chlorine

- Chlorine is the main disinfectant used in Ebola isolation and outbreak control activities. It is the most commonly used disinfectant; it is easy to use, and active against all microorganisms.
- The chlorine content (strength) of each product should be labelled on the product's packaging (and must be known before use) and is expressed:
    - either in % of active chlorine
    - or in chlorometric degrees (°chl)
    - or in parts per million (ppm) or mg of active chlorine/litre.

Reminder

1% chlorine = 10 g/l
1^{o}chl = about 0.3% active chlorine = 3g/l
1ppm = 1 mg/l = 0.0001 % active chlorine

- Chlorine products and solutions are weakened through exposure to air, sunlight and heat.
- The origin, the storage and transportation conditions and the quality of chlorine products must be well identified before use:
    - All forms of sodium hypochlorite (Bleach) are unstable, do not store well and should not be used if they have been stored for more than 3 months since manufactured.
    - Calcium hypochlorite (HTH) stores better: loss of active chlorine is about 2% per year under appropriate storage conditions but under tropical environments, loss is usually much higher and recommended shelf life is maximum 2 years.
    - Sodium dichloro-isocyanurate (NaDCC) is the most stable chlorine generating product.
- Chlorine is a very aggressive and corrosive chemical. Always wear protective clothing (rubber boots, gloves, apron, mask, eye protection) when handling chlorine granules and strong solutions. Prepare chlorine solutions in a well-ventilated area, preferably in open air. Use plastic containers and equipment for preparation and storage of chlorine solutions **(See Annex 1. Handling and storage of HTH)**

a. Formula for chlorine solution preparation (MSF)

$$\text{Quantity of chlorine product (g)} = \left(10 \times \left(\frac{100}{\text{product strength (\%)}}\right)\right) \times \text{solution strength required (\%)} \times \text{volume required (l)}$$

For example, to prepare 120l of 0.5% solution with household bleach at 4% strength.

$$\text{Quantity of household bleach (g)} = \left(10 \times \left(\frac{100}{4\ (\%)}\right)\right) \times 0.5\ (\%) \times 120\ (l)$$

$$\Rightarrow 10 \times 25 \times 0.5 \times 120$$

$$\Rightarrow 15000\text{g or 15 litres of household bleach}$$

b. Characteristics of HTH (65 to 70% Granules) / NaDCC 50 to 70% (Tablets or Granules/ powder)

- In a context of Ebola outbreak, large amounts of chlorine solution are required. HTH **(see Annex 2. Chlorine preparation HTH 70%)** and NaDCC are the most practical and efficient (greater stability and high chlorine content) for preparing the necessary quantities.
- NaDCC is completely soluble (while HTH leaves a deposit of calcium), and is less corrosive.
- HTH is usually cheaper than NaDCC

⚠ However because NaDCC generally comes in small tablets, it is not always practical when large quantities of chlorine solutions are needed

⚠ NaDCC tablets are found with different amounts of active chlorine (read packaging carefully)

c. Household Bleach (Sodium hypochlorite)

- The guideline "Infection Control for VHF in the African Health Care Setting" (CDC/WHO) recommends the use of household bleach products containing 5% active chlorine to prepare chlorine solutions. However, the strength of household bleach products varies dramatically, and can be found in strengths from much less than 3% up to 5% and sometimes as high as 8%.
- Each brand of Bleach has a different percentage of strength, so the preparation must be done accordingly
- Moreover, bleach active chlorine strength deteriorates rapidly depending on age and storage conditions and quality is not guaranteed. MSF recommends the use of HTH or NaDCC.

Chlorine solutions and their use

Chlorine solution	Uses
0,5%	Disinfection of: - Body fluids, excreta, vomit, etc. - Corpses - Toilets and bathrooms - Gloved hands - Floors - Beds & mattress covers - Footbaths
0,05%	Disinfection of: - Bare hands, skin and shoes - Thermometers - Laundry - Plates, cups and eating utensils

d. Use and application methods of chlorine solutions

Situation	Application method	Comments
General disinfection of large areas, surfaces, materials. **Disinfection of aprons, boots, gloved hands, etc.**	12 or 16l Sprayer	Care is required to avoid aerosolisation of infectious material. Not for dense material (stools, vomit). Not for very absorptive material (cotton, fabrics). Sprayers must be corrosion resistant
Disinfection of excreta, vomit etc. in bucket/basin. **Disinfection of high volume spill on floor (e.g. vomit).** **Disinfection of absorptive material (cotton, fabrics, etc)**	Pouring by cup or Bucket and using absorbent pad	Care is required to avoid splashing
Disinfection of hands. **Disinfection of small items.**	Pouring from container with tap	Not for large items
Disinfection of medium sized items.	Submersing	Not for large items (mattresses, etc).
Cleaning of feet at entry/exit of risk zones.	Footbaths	Their main function is to signal that a different risk zone is being entered. However, footbaths can be useful to clean mud from the boots so that subsequent disinfection by spraying is more efficient.

e. Chemical Barriers

Obvious locations for chemical barriers are the changing areas at the entrance and between the risk zones. These chemical barriers serve two purposes:

- Disinfection of potentially contaminated material (protective clothing, material, waste, etc).
- Making staff notice that they are entering an area with a different risk level.

Equipment Required:

- 12-litre chlorine sprayers
  - Contain 0.5% chlorine solution to spray boots, apron, and gloved hands.
- Footbaths
  - Contain 0.5% chlorine solution.
  - Refresh all footbaths at least twice a day, and more frequently if dirty.
- Hand washing station

- Hand washing tap-stands at the sluices contain 0.5% chlorine solution for gloved hands, and/or 0.05% for bare hands. Rinse gloves or hands for at least 10 seconds, and then use solution to rinse the taps. Air dry gloves or hands.
- Refresh the chlorine solutions at least twice a day. Hand washing containers must be refilled as necessary to keep up with consumption.

f. Handwashing facilities

- Facilities for washing hands (taps, buckets or jerry cans with taps) with permanent supplies of chlorine solutions or water and soap should be installed near each latrine and at other key locations, for example, where food is prepared, laboratories, examination rooms, operating theatres, sterilization rooms, kitchen, laundry, showers, waste disposal areas and the mortuary
- Hand washing facilities should be fitted either with a drainage system or with a recipient to collect waste water
- Special attention must be given:
    - to **the use of soap as part of the Standard Precautions** within the hospital and other health structures
        - ⇨ WHO Ebola IPC guidelines recommends to perform **hand hygiene** with an alcohol-based hand-rub solution (20-30 seconds with at least 70% alcohol content) **or soap**, running water and single-use towels (40-60 seconds), applying the correct technique recommended by WHO.
    - to **the use of a 0,05% chlorine solution as part of MSF specific Precautions within an Ebola center instead of soap**
    - Care is required to avoid the mixing of soap and chlorine solutions: the efficiency of both is reduced, and chlorine gas can be released.
        - ⇨ Alcohol and formaldehyde are also effective but are not used by MSF in Ebola context.

REFERENCES:

- MSF: Minimum Water & Sanitation Requirements in Health Structures
Filovirus haemorrhagic fever guideline, Sterck 2008

- CDC/WHO: Infection Control for VHF in the African Health Care Setting, 1998
http://www.cdc.gov/ncidod/dvrd/spb/pdf/african-healthcare-setting-vhf.pdf

- WHO: Essential environmental health standards in health care, 2008
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- Government of Liberia: Protocols for the Safe Collection and Disposal of Ebola Contaminated Sewage, 2015
https://extranet.who.int/ebolafmt/sites/default/files/documents/Protocols%20for%20the%20safe%20collection%20and%20disposal%20of%20Ebola%20%20contaminated%20sewage%20for%20dissemination%202015.pdf

Annex.1 Handing and storage of HTH granule chlorine drum

Precautions

- Handle the dry product with care:
    - Avoid jolts and exposing to high temperatures or flames.
    - Drum containers should not be dropped, rolled or skidded due to risk of fire and explosion
- Don't put product in the sun, it can explode
- Avoid inhaling vapours and dust when opening or handling the containers.
- Always dilute in non-metal containers just prior to use.
- Prepare solution with clean water.
- Do not mix with detergents, bleach or with NaDCC.
- Do not bring the dry product in contact with organic materials (e.g., corpses) due to the risk of explosion or spontaneous combustion.

Handling and Storage

- Personal protection for use of product: respirator, safety glasses, PVC gloves, boots and apron
- Keep drum containers tightly sealed in upright position. Store in a clean, dry well-ventilated area.
- The gas emissions will eventually damage any cartons in the same room; **it is recommended that HTH be stored on its own, in a separate area away from the general stocks.**
- Keep away from sources of heat: temperatures in excess of 52°C for a period of 24 hours or more.
- Keep separated from powdered metals, ammonium compounds, cyanides and hydrogen peroxide.
- Keep away from moisture; never use a wet scoop to remove HTH from a drum. This can cause an explosion resulting in a fire.
- Reacts with acids and evolving chlorine, an irritating corrosive and toxic gas.
- May cause fires when placed in contact with combustible material.
- Corrosive to most metals in the presence of moisture.

First Aid Measures

- EYES: Immediately flush with large amounts of water for at least 15 minutes, occasionally lifting the upper and lower eyelids. Call a physician immediately.
- SKIN: Immediately flush with water for at least 15 minutes. Call a physician. If clothing comes in contact with the product, the clothing should be removed immediately and laundered before re-use.
- INGESTION: Drink large quantities of water, immediately. DO NOT induce vomiting. Call a physician immediately. DO NOT give anything by mouth if the person is unconscious or is having convulsions.
- INHALATION: Move the victim to fresh air. Support respiration if needed. Call a physician.

Fire-fighting measures

- Cool exposed containers with water.
- Do not use dry extinguishers containing ammonium compounds.

Annex.2 Chlorine solution preparation – HTH 70%

SOLUTION	0,05%	0,5%
USES	Desinfection of: - Bare hands, skin and shoes - Thermometers - Laundry - Plates, cups and eating ustensiles	Desinfection of: - Footbaths - Floors - Beds Mattres covers - Body fluids, excreta, vomit,... - Toilets and bathroom - Gloved hands
HTH (70%) DOSAGE For 1 Liter		**half** **table spoon** (15g) in 1 liter of water
CONSERVATION	1/2 to 1 day	1 day
10 liter container	**half table spoon**	**5 table spoon**
20 liter container	**1 table spoon**	**10 table spoon (=150g)**
35 liter container	**1,75 table spoon**	**17,5 table spoon (=265g)**
50 liter container	**2,5 table spoon**	**25 table spoon (=375g)**
100 liter container	**5 table spoon**	**50 table spoon (=750g)**
120 liter container	**6 table spoon**	**60 table spoon (900g)**

Sheet 7: Supporting Health care unit in Ebola context

Objectives:

- Provide technical recommendations to run a Health Care Unit in an Ebola outbreak Context
- Provide a detailed analysis of the constraints and measures to apply accordingly

Levels of intervention:

- Outbreak
- Immediate Impact
- Mid and long-term Impact

This document focuses on how to support the delivery of the basic health package in a health unit (with or without an inpatient facility) in the context of an Ebola outbreak, in addition to the SAM management if already offered in the structure.

The aim of the proposed interventions is to:

1. Prevent the spread of Ebola infections within the health structure: IPC strategy
2. Restore the population's minimal access to primary health care
3. Restore trust and confidence between clients and service providers

 All health staff working in health facilities needs to be trained on Infection Prevention and Control (IPC), triage management, disease management and the new IMAM protocol for facilities providing nutrition services.

IPC

Application of standard hygiene precautions should be normal procedure in all health structures. The implementation of Standard Precautions is the **primary strategy** for achieving nosocomial infection control by **reducing the risk of transmission of any infectious disease between healthcare workers, patients, attendants, visitors, etc.** Standard Precautions are necessary for the care of all patients in health structures regardless of their diagnosis or presumed infection status.

Standard Precautions

Standard Precautions (also called Universal Precautions) are basic infection control measures, and should be a minimum standard in every health structure. Standard precautions require that health care workers assume that the blood and body substances of all patients are potential sources of infection, regardless of the diagnosis, or presumed infectious status.

IPC consists of:

1. **Social Distancing** – No touch policy. Medical personnel should not touch patients without proper protection. A 2m distance should be kept between health workers and patients at the triage point (when patients first come into the health structure)
2. **Hand washing** – Before and after contact with patients, body fluids and surroundings
3. **Screening (triage point)** – *See next section for more details*

4. **Safe use of Personal Protective Equipment (PPE)** – PPE acts as a barrier between health workers, patients and infections. All staff working in health facilities must be equipped and wear proper PPE in accordance to the level of risk of exposure they face.

ALL STAFF WORKING IN HEALTH FACILITIES MUST WEAR LIGHT PPE[11]

Note that full PPE equipment is mandatory in the isolation room

(For more information on PPE see WHO – Interim Infection Prevention and Control Guidance for Care of Patients with Suspected or Confirmed Filovirus Haemorrhagic Fever in Health-Care Settings, with Focus on Ebola)

5. **Cleaning (including waste management)** – Like other viruses and certain bacteria, EVD can survive on surfaces for up to a few hours. Cleaning is a key prevention measure against EVD transmission in health facilities *(see below or refer to the WASH technical sheet for more information on cleaning)*

If IPC in a health structure is not efficient or not implemented, there are only 2 solutions:

1. ACF implements IPC procedures
2. ACF does not work in this health facility and advocates for the implementation of IPC by another partner.

IPC is a prerequisite to any activity in a health facility. As a consequence, if no IPC is implemented at all, the facility should be closed as the risk of nosocomial transmission is too high.

[11] Scrubs, boots, surgical mask, goggles, disposable gloves, gown.

All health facilities have a one way flow for patients (one way in /one way out) in order to prevent cross contamination from one patient to others.

See below an example of a clinic map. The number of rooms depends on the activities ongoing in the center:

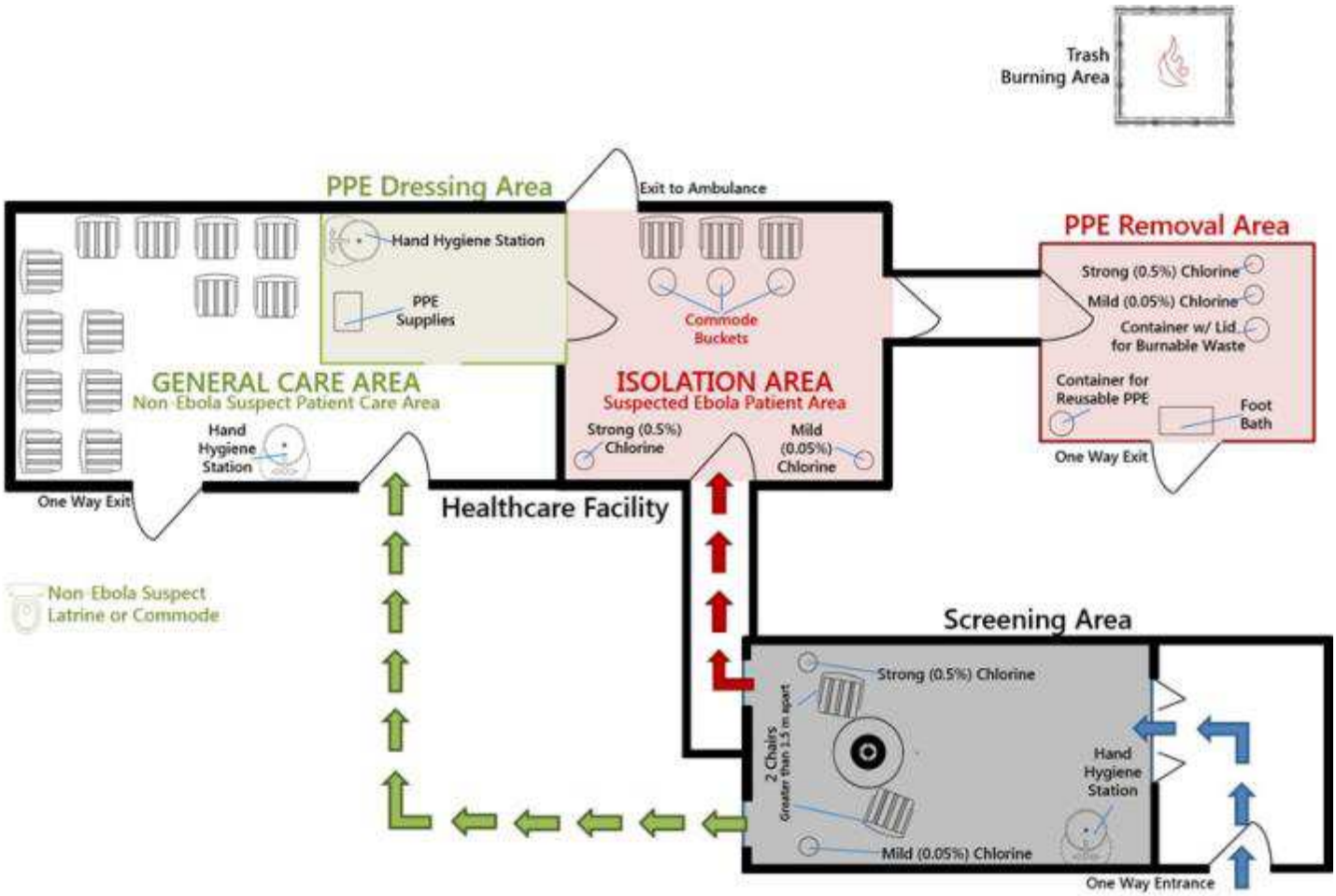


Figure 1. Managing patient flow between triage/screening, isolation and general care – CDC http://www.cdc.gov/vhf/ebola/hcp/international/managing-patient-flow.html

The way we arrange the patient flow in each health center must be consistent with the overall logic of IPC: no touching, no crossing paths between suspect cases and non-cases, no going back on your steps.
Screening of patients, also called triage, is the first stop for patient flow within the health facility.

Triage

TRIAGE is MANDATORY for all types of health facilities (Third, secondary and primary health care centers). It has for objective to detect patients displaying symptoms and/or a history of contact with EVD cases, to isolate them from other patients in order to provide them quickly with appropriate care and testing, and to protect others from exposure to the virus.

WHAT IS BEING DONE IN THE TRIAGE AREA?

- Complete the screening form

- Control of body temperature with Infrared Thermometer Sensor[12]
- Measurement of MUAC[13]
- Registration of patients
- Sorting (Ebola suspect or non-suspect patient) and referral of patients to appropriate health services;

WHERE IS THE TRIAGE DONE?

- At the entrance of the hospital and / or health center
- Provide a sorting station for personnel (table, chairs, register)
- Provide shelter and chairs for patients
- Provide handwashing station

WHO DOES THE TRIAGE?[14]

- 1 nurse
- 1 medical assistant
- 1 officer for waste management and referral of patients
- Or, most of the time, community health workers (volunteers) trained on Ebola screening

Organization of Triage Points:

- Triage points must be open, well ventilated, spacious, and easy to disinfect.
- Fencing the entire health facility may help stream all patients through triage.
- Access to the health facility should be restricted; limit access to identified staff and patients, and limit the number of visitors. If the health facility is an "in patient" facility, **visitors must go through triage each time they are coming**! (at least once a day). Organize guards to control crowds, to guide and control the flow of patients and visitors.
- Organize **if possible** two lines for the triage :
    1. Patients
    2. Visitors (if possible, visitors should not be in the same line as patients in order to reduce the risk of nosocomial infection)
- At Triage, health care workers should **be 2m away from the patients while asking questions to fill the screening form. (WHICH MUST BE THE FIRST PART OF TRIAGE)**
- The screening staff must wear light PPE during triage. (To measure the MUAC and check for edema, the medical staff must be behind the patient: a way to avoid vomiting or other fluids spit by accident on the staff). Mothers may be trained on MUAC measurement on their child, in order to reduce risk to health workers.
- **ONE PERSON (one patient or dyad child/caregiver) AT A TIME in the triage area.**

[12] Make sure the position is « body » (3 positions on the thermometer: surface, atmosphere and body). Calibrate the thermometer before first utilization.

[13] For health centers providing nutrition services

[14] Number of human resources to adapt according to the attendance of the structure and availability of staff

TRIAGE PROTOCOL when the patient is a child:

The first person to be looked at is the caretaker

- Ask if the caretaker is the person who usually takes care of the child If not where is this person? Is she/he sick? **If the usual caretaker is sick or suspected for Ebola, consider the child suspect.**

- If the caretaker is the person who usually takes care of the child : proceed to the triage for the caretaker

- If the caretaker is not suspect after triage: screen the child.

IPC rules to follow between each patient at triage point:

- Thirty minutes before the first patient is assessed every morning, disinfect anthropometric material and equipment surfaces such as infant beam scale, weighing tub, MUAC and height board using 0.5% chlorine and water solution, then wash with soapy water, rinse with clean water and let air dry in direct sunlight.
- Clean medical equipment (MUAC, beam scale, weight tub …) using cotton soaked in 0.05% chlorinated water after each patient. Thermometers with thermos sensor should not touch the patient.
    - If a child vomits or pee pee or poo poo on the infant scale, weighing tub and height board, disinfect using 0.5% chlorine and water solution. Wash with soapy water, rinse with clean water (no splashing) and let air dry before using it again.
    - If the MUAC had body liquid spills from vomit or pee pee or poo poo, discard immediately and use a fresh one.
- Wash hands with gloves with 0.5% chlorine solution
- Remove your gloves and throw them away in the proper waste bin
- Then wash your hands with 0.05% chlorine solution
- Disinfect all the triage area with 0.5% chlorine solution after a suspicious case (floor, chair…)
- The lack of direct contact with the patient can be difficult for the caregiver; but think first about your safety and take time to explain the reason to the patients.

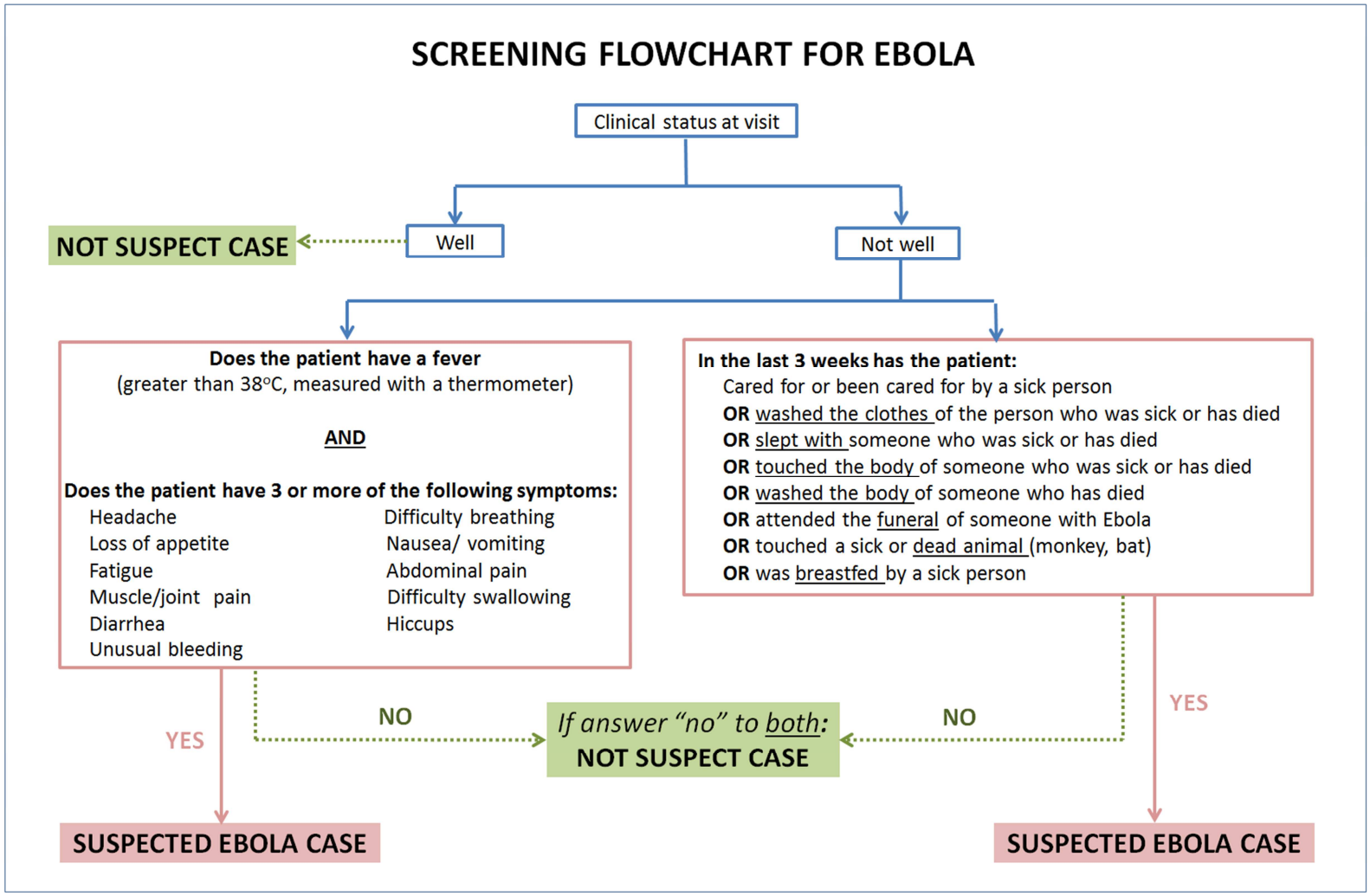
Triage form:

The triage or screening form allows medical personnel to quickly go through the list of symptoms each patient is suffering from, and possible travel and contact history which may have exposed the patient to EVD.

Insist on questioning regarding contact history and travel history:

- Did you take care of someone sick during the last month?
- Did you help someone with Ebola during the last month?
- Did someone die in your family or close circle during the last month?
- Did you touch a dead body within the last month?
- Did you attend funerals in the last month?
- Did you travel in the last month? … If the patient/caretaker has difficulties remembering what is “last month”, try to refer to an event in the local area (like Eïd, Christmas, new year’s, last harvest…)

Below is an example the EVD patient flow chart developed at national level and used in health facilities in SL.



Below is an example of a patient screening form developed by ACF to help medical staff determine how a patient should be managed according to symptoms identified.

Modified EVD screening form

Patient's name: Age: Sex: M□ F□

Address: Phone number:

Symptom questionnaire – see if patient is **over or under-5 years old** and choose the left OR the right column. Then ask **ALL the symptoms listed** below and tick either **"YES " or "NO"**					
Patients UNDER 5 years old			**Patients OLDER THAN 5 years**		
Does the patient have:	**YES**	**NO**	Does the patient have:	**YES**	**NO**
1.Fever (>38.5°C)[15]			1.Fever (>38.5°C[16])		
2.Vomiting			2.Vomiting or nausea		
3.Loss of appetite			3.loss of appetite		
4.Diarrhea or black stool			4.Diarrhea or black stool		
5.Prostration			5.Weakness or severe fatigue		
6.Difficulty breathing			6.Difficulty in breathing or swallowing		
7.Excessive crying			7.Abdominal pain		
8. Bleeding (gums, nose…)			8.Generalized muscular or articular pain		
9.Red eyes and /or rash			9.Headache		
10.SAM (MUAC <115mm and/or bilateral edema)			10. Bleeding (gums, nose…)		
If "YES" to SAM inpatient → ISOLATE and TEST PATIENT FOR EVD			11.Red eyes and/or rash		
If "YES" to fever plus 3 other symptoms→ ISOLATE and TEST PATIENT FOR EVD			**If "YES" to fever plus 3 other symptoms→ ISOLATE and TEST PATIENT FOR EVD**		

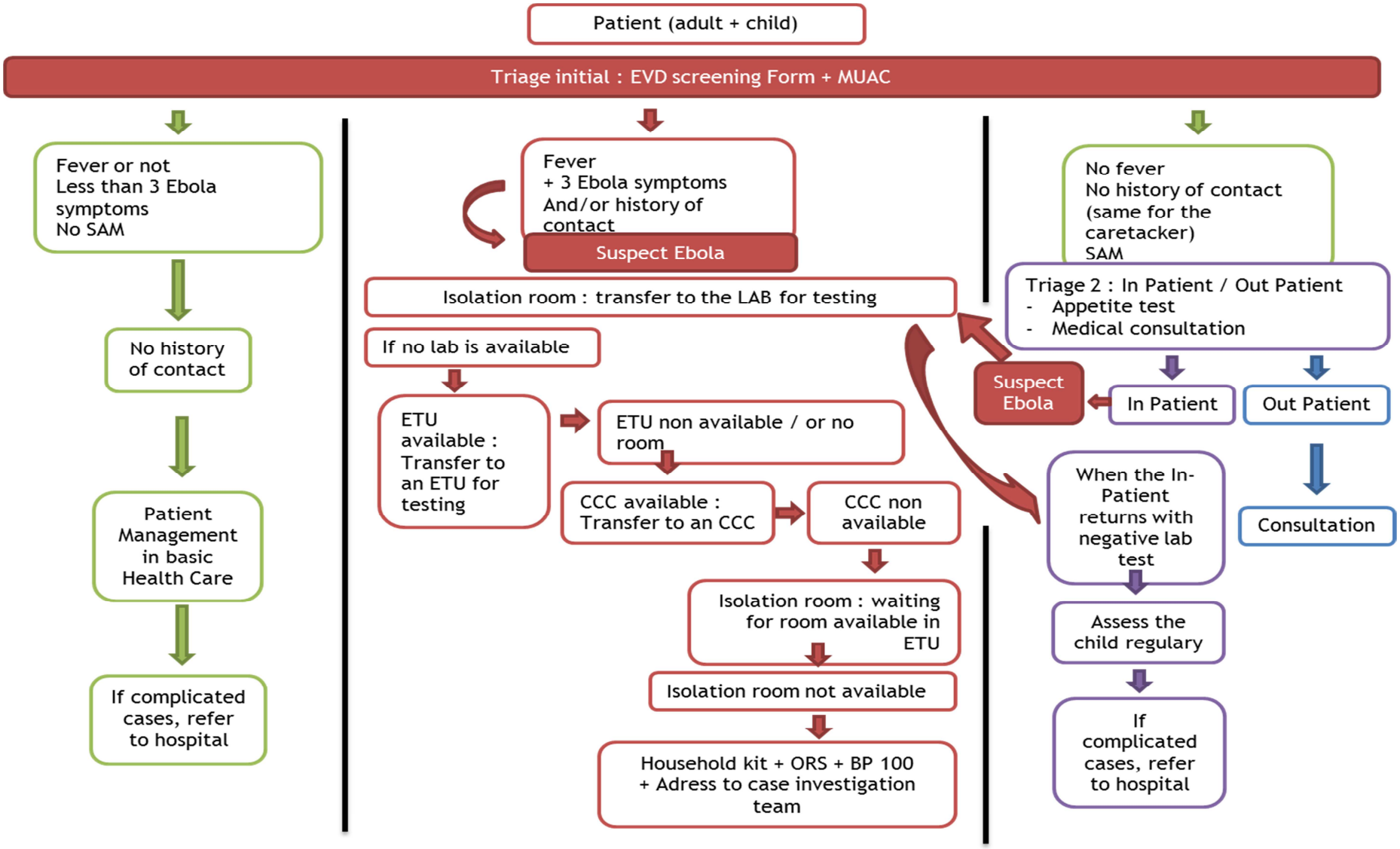
CONTACT HISTORY	**YES**	**NO**
Has the patient had contact with a sick person within the last month?		
Has someone (family, compound) died within the last month?		
If "YES" to either question + FEVER → ISOLATE and TEST PATIENT FOR EVD		

TRAVEL HISTORY	**YES**	**NO**
Does the patient live in one of the EVD-affected regions?		
Has the patient travelled to one of the EVD-affected regions in the last month?		
If "YES" to either question + FEVER → ISOLATE and TEST PATIENT FOR EVD		

[15] Infrared thermometers often give out temperatures below 37°C, it is therefore important to know the calibration very well to determine which temperature corresponds to a real 38.5°C

[16] If Fahrenheit reference us used fever is considered at > 100.4°

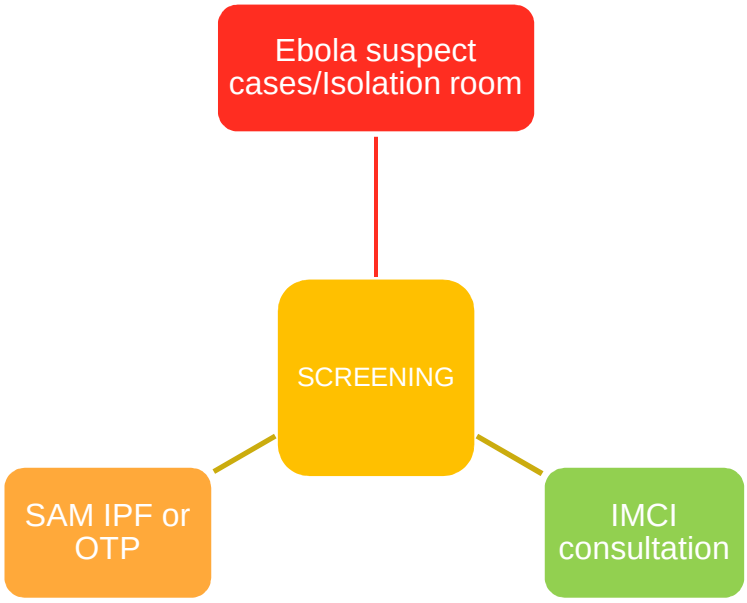
Below is an example of a patient flow chart developed by ACF to help medical staff determine where the patient should be directed according to symptoms identified.



Patient care

Taking SAM in consideration, there are three different outcomes for Ebola screening:

1. Fever (+/-) + Less than 3 Ebola symptoms + No SAM + No history of contact → **IMCI consultation**
2. Fever + 3 or more Ebola symptoms and/or history of contact → **Isolation**
3. SAM → **SAM in-patient or SAM out-patient**



1. If there is "Fever (+/-) + Less than 3 Ebola symptoms + No SAM + No history of contact"

After the "triage/screening", the patient can go meet the nurse or medical doctor for the medical consultation.
Once the patient gets the treatment or prescription and does not need to stay further in the health facility, s/he should leave through the exit (without going back through the triage area).

Care needs to be implemented according to the "patient management in basic health care unit" principles presented below, while applying standard precautions to avoid nosocomial transmissions between patient and health worker. After Triage we propose to have a consultation using Fever and/or Diarrhea as entry point.

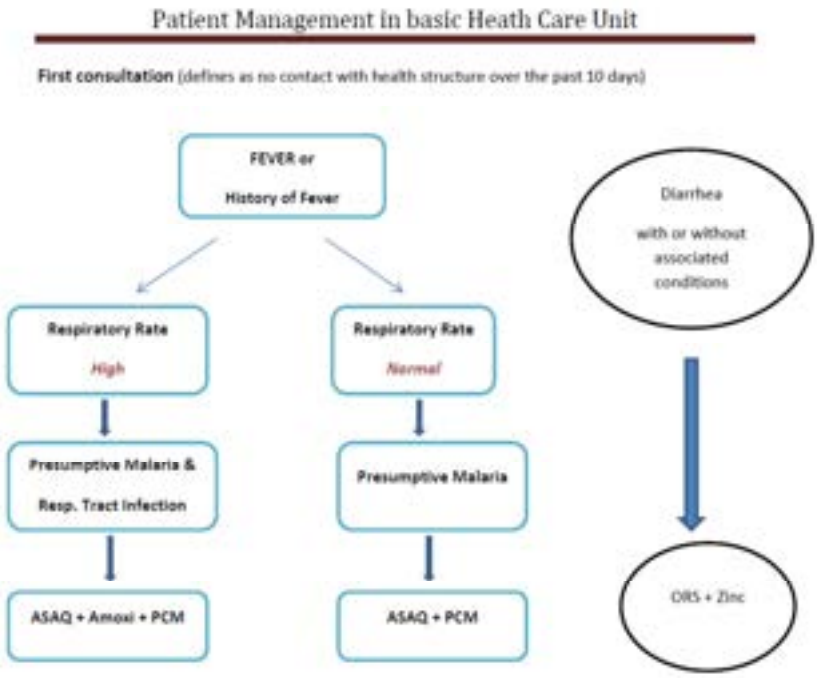
a. Fever

For malaria diagnostic, in settings where the risk of malaria is high, clinical diagnostic should be based on fever or history of fever in the previous 24 hours and/or the presence of anemia, for which pallor of the palms appears to be the most reliable sign in young children[17].

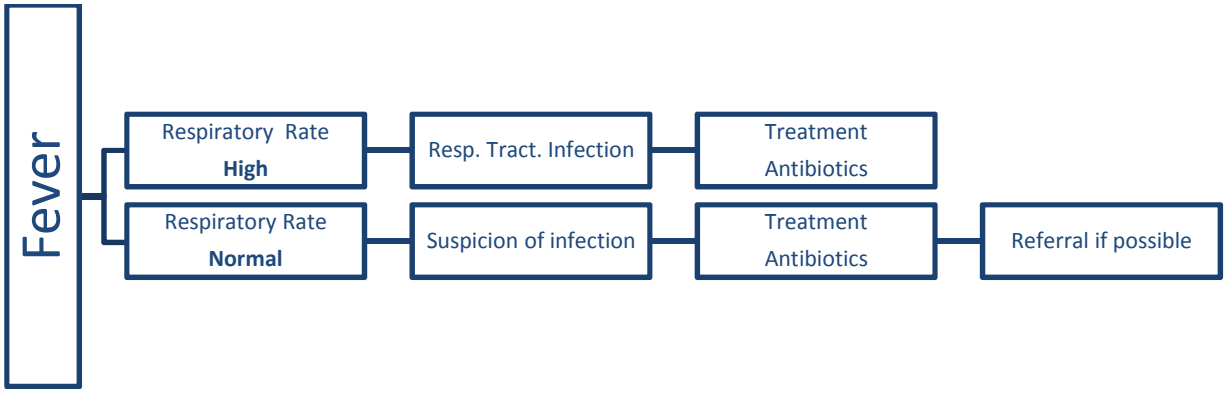
b. Diarrhea

Diarrhea will be treated with ORS and Zinc.

✓ **First consultation:**



✓ **Second consultation:** Patient with history of previous treatment of malaria with ACT



Treatment available : *Cf Annexe 1*.
ASAQ ; Amoxicillin; Zinc; Paracetamol; ORS; Multivitamin (All in tablet, suspension and syrup presentation)

[17] Malaria case management: Operations manual (WHO 2009)

2. If there is "FEVER + 3 symptoms[18] and/or history of contact": ISOLATE the patient and send him/her to ETU in order to take an Ebola test

1. Transfer the patient to the isolation room
2. Call the Ebola hotline number[19] to order an ambulance for transfer to the laboratory or ETU for testing
3. If laboratory and ETU are not available or have no room then transfer to Community Care Center (CCC)
4. If CCC is not available or have no room then :

    - If some room may be available anytime soon in an ETU/CCC: Keep the patient in the isolation room for later transfer.
    - If no room available in ETU and CCC or if no isolation room: send the patient back home with a household kit + ORS + BP100 and give his/her contact to the case investigation team for further follow-up. **(Not for SAM in-patient; if in-patient keep the child in the unit – see paragraph on SAM management).**

The laboratory test that will be used for all patients (SAM included) is the **PCR** (Polymerase Chain Reaction) **because it uses the detection of the virus itself.** There is a specific protocol to send the sample to the lab. PCR test takes 4 to 6 hours to be proceeded. But some areas do not have a laboratory, so the blood sample will be sent to another city. In such instance, there may be a delay of 2 to 3 days before having the results. So we **need to have an isolation room (a different one from the isolation room for the SAM patients if at all possible)** in order to wait for the result of the test and provide minimum care (rehydration with ORS and feeding) during the patient's stay. **The staff will wear full PPE equipment in the isolation room**.

3. If there is "SAM":

PROCEED TO A SECOND TRIAGE:

This second triage is to differentiate the patients between SAM « in patient » and SAM « outpatient ». It consists of:

1. Appetite test, revised according to the age of the patient as presented below.

[18] « SAM » is considered as a symptom.

[19] Phone number in Liberia : **4455** / Phone number in Sierra Leone : **117**

APPETITE TEST				
Class of age (month)	**Paste in sachets** (Proportion of whole sachet 92g)		**Paste in containers** (ml or grams)	
	Fail	Pass	Fail	Pass
Appeared to be small (<5kg) despite being over 6 months	<1/8	>1/8	<15	>15
6 – 11	<1/4	>1/4	<25	>35
12 – 36	<1/3	>1/3	<35	>50
> 36	<1/2	>1/2	<50	>75

Note: for adolescents and adults, follow the >36 months category.

2. MUAC (once again) performed by caretaker
3. Medical consultation - In order to protect health workers and patients, the no touch policy must be respected. IMCI[20] principles should be adapted to take care of patients using an ASK and LOOK method where the health worker guides the caretaker to facilitate examination without touching the patient (e.i. ask the caretaker to lift the patient, count number of respirations by looking at the chest …).

There is no restriction of age to admit a SAM patient

Food Safety and Hygiene during Appetite Test and Preparation of Water-Sugar Solution, F75, F100, and ReSoMal

1) Disinfect all utensils to be used for preparing the food: dip utensils in 0.5% chlorine for 30mn, wash with soapy water, and rinse with clean water. Then dip utensils into a bucket of 0.05 % chlorine solution and let air dry in direct sunlight.
3) Disinfect food preparation surfaces with 0.5% chlorine solution 45mn before feeding schedule. Allow surface to air dry adequately before preparing food.
4) Before preparing the food, cover hair with hair net or hair cap. Wear clean apron.
5) Wash hands with 0.05% chlorine solution. Air dry.
6) Use fresh disposable gloves after hands are washed and dried.
7) Prepare the milk or ReSoMal following IMAM national protocol.
8) Before distributing, require all mothers and caregivers to wash their hands and their baby's hands with 0.05% chlorine solution.
9) Use disinfected food containers for distributing and feeding patients.
10) Collect used and soiled utensils and dishes for disinfection and storage.
11) Discard disposable gloves and wash hands with 0.05% chlorine and water solution.

[20] Developed in "Integrated management of childhood illness: caring for newborns and children in the community" training manual(2011)

a. If the patient is SAM out-patient :

Regarding SAM children in the OUT patient program, we **need to use the revised IMAM national protocol.**

Follow-up visits and RUTF distribution in OTP will take place **every two weeks instead of weekly** in order to reduce the contamination risk of the SAM patients. Only MUAC and edema are checked (criteria unchanged).
All OTP consultations for SAM patients must be done wearing light PPE.

OTP				
Class of age (months)	**RUTF Sachets (92g)**		**BP100®**	
	sachet per **day**	sachet for **2 weeks**	bars per **day**	bars for **2 weeks**
Appeared to be small (<5kg) despite being over 6 months	1	14	2	14
6 – 11	2	28	3	42
12 – 36	3	42	5	70
> 36	4	56	7	98

Note: for adolescents and adults, follow the >36 months category – MUAC<180mm for admission; discharge MUAC >= 185mm.

b. If the patient is SAM in-patient:

All the SAM patients with medical complications and/or poor appetite test need to be tested for EVD. Indeed:

> The **SAM children physiopathology** is special, and most of them are susceptible to **present most of the symptoms of Ebola without having Ebola**: vomiting, loss of appetite, diarrhea, prostration, difficulty breathing, crying, and even bleeding if he has complicated malaria… fever is not relevant either because SAM children are poikilothermic. That means that the child has fever when his environment is warm, and is hypothermic when the temperature is below 28°c.

1. Transfer the patient in the isolation room. (ideally it's a different room than the one Ebola suspected cases – category 2 in the document)
2. Call the Ebola hotline number to order an ambulance for transfer to the laboratory for testing.
3. If laboratory is not available, transfer to ETU for testing.

While waiting for the blood test results, DO NOT provides any invasive care (like drip or IV… or take blood samples) to the patient. Provide minimum care (rehydration with Resomal® or ORS and regular feeding with therapeutic milk).

If an emergency invasive care has to be provided, the medical staff HAS TO WEAR FULL PPE.

- ✓ When the blood test results are negative result for Ebola: proceed to the usual care with light PPE.
- ✓ If the results are positive, organize the transfer of the patient to an ETU or CCC.

Community outreach – Restore trust and confidence between clients and service providers

Health structures can be viewed as very high risk locations by the population when it comes to EVD transmission. Such fears have often been justified as a number of structures were found to be at the center of transmission chains. As a consequence, many have lost trust in local health facilities and stopped seeking care in these structures.

Engaging and communicating with the community on changes being made at the health structure level to better protect patients is key to restoring trust. Different messages and approaches promoted at the national coordination level may be used[21].

It is important to note that isolation wards or units might have a negative image for the community. Therefore it is better to avoid using the term 'isolation' and instead using the term Ebola unit or ward. It is essential that the community accepts the Ebola ward in order for it to be effective as an epidemic control system and to be able to provide patient care. Patients and relatives may be extremely reluctant to accept admission in the Ebola ward. There is a great fear of the disease and people can be reluctant to acknowledge that they may be infected. Also the possible stigmatization of the patients and their families can be a reason to refuse admission in the Ebola ward. Furthermore people may be aware of the low survival chances and the lack of curative treatment and therefore prefer to be cared for and to die at home surrounded by their families and not by strangers in a frightening environment.

Activities to increase community acceptance and collaboration:

Awareness raising activities that reduce the mystery around the Ebola unit can help increase community acceptance.

1. Awareness raising activities and information campaigns about FHF

Raising awareness and providing information through various activities are essential to increase community acceptance and should ideally start from the first day of the intervention.

Explanation needs to be given about:

- The features of the disease.
- The rationale of the Ebola unit and the strict infection control rules which also prevent transmission of other diseases including diarrhea, pneumonia and conjunctivitis, when they are applied appropriately in all health facilities.
- Other outbreak control activities.
- The type of medical care that can be offered to patients.

[21] WHO, *Key messages for social mobilization and community engagement in intense transmission areas*. 2014
SMAC, Consolidated Message Guide for Ebola Communication in Sierra Leone, May 2015

2. Demystification of the Ebola unit

Communities often fear Ebola units. To reduce the fear and the mystification of the ward it is important to:

- Set up the Ebola ward in a transparent way to make the activities visible: e.g. use low or mesh fences so people can see what is happening and create spaces where patients can communicate with their families.
- Provide good supportive medical and nursing care in a proper environment.
- Allow caretakers to visit the patient during visiting hours when adequate infection control is in place and after explaining them the procedures, providing them with protective clothes and accompanying them.
- Invite community leaders and other key people to visit to the Ebola unit so that afterwards they can communicate to their communities about the activities, thereby reducing negative rumors.
- Allow the community to express their feelings and expectations regarding Ebola Treatment Centers and Primary Health Facilities.
- Survivors can work in awareness campaigns to talk about their personal experiences of having being admitted in the Marburg/Ebola ward.

ANNEX 1. Treatments for malaria and diarrhea in basic health care units

Patient Management in basic Heath Care Unit

Amoxicillin (Amoxi, antibiotic)

Age	Weight	125 mg/5 ml susp.	250 mg tablet	500 mg tablet
< 3 months	< 6 kg	1 tsp x 2	½ tab x 2	–
3 to < 24 months	6 to < 12 kg	2 tsp x 2	1 tab x 2	–
2 to < 8 years	12 to < 25 kg	4 tsp x 2	2 tab x 2	1 tab x 2
≥ 8 years and adult	≥ 25 kg	–	4 tab x 2	2 tab x 2

ASAQ (Artesuntate Amodiaquine)

Age	Weight	Tablets	D1	D2	D3
2 to 11 months	4.5 to 8 kg	25 mg AS / 67.5 mg AQ	1 tab	1 tab	1 tab
1 to 5 years	9 to 17 kg	50 mg AS/135 mg AQ	1 tab	1 tab	1 tab
6 to 13 years	18 to 35 kg	100 mg AS/270 mg AQ *blister pack of 3 tab*	1 tab	1 tab	1 tab
> 14 years/adult	> 36 kg	100 mg AS/270 mg AQ *blister pack of 6 tab*	2 tab	2 tab	2 tab

Multivitamin

- Child under 5 years: 1 tab/day
- Child over 5 years: 2 tab/day
- Adult: 3 tab/day

ORS

Age	under 4 months	4 to 11 months	12 to 23 months	2 to 4 years	5 to 14 years	15 years and over
Weight	under 5 kg	5 to 7.9 kg	8 to 10.9 kg	11 to 15.9 kg	16 to 29.9 kg	30 kg and over
ORS in ml	200 to 400	400 to 600	600 to 800	800 to 1200	1200 to 2200	2200 to 4000

Paracetamol

AGE	0	2 months	1 year	5 years	15 years	ADULT
WEIGHT		4 kg	8 kg	15 kg	35 kg	
100 mg tablet		1/2 tab x 3	1/4 to 1/2 tab x 3	1/2 to 3 tab x 3	–	–
500 mg tablet		–	–	1/4 to 1/2 tab x 3	1/2 to 1 1/2 tab x 3	2 tab x 3
120 mg/5 ml oral solution		2 ml x 3	3 to 6 ml x 3	–	–	–

Zinc Sulfate

- Child under 6 months: 10 mg once daily (1/2 tablet or 1/2 teaspoon once daily) for 10 days
- Child from 6 months to 5 years: 20 mg once daily (1 tablet or 1 teaspoon once daily) for 10 days

Place the half-tablet or full tablet in a teaspoon, add a bit of water to dissolve it, and give the entire smoonful to the child.

REFERENCES:

WHO: Ebola and Marburg virus disease epidemics: preparedness, alert, control, and evaluation
http://www.who.int/csr/disease/ebola/manual_EVD/en/

Infection prevention and control guidance for care of patients in health-care settings, with focus on Ebola. 2014
http://www.who.int/csr/resources/publications/ebola/filovirus_infection_control/en/

Advice for individuals and families in Ebola affected countries
http://www.who.int/csr/resources/publications/ebola/guidance-for-general-public/en/

Key messages for social mobilization and community engagement in intense transmission areas. 2014

Ebola Guidance Package
http://www.who.int/csr/resources/publications/ebola/social-mobilization-guidance/en/

Clinical management of patients with viral hemorrhagic fever - A pocket guide for the front-line health worker
http://www.who.int/csr/resources/publications/clinical-management-patients/en/

MSF : Filovirus Haemorrhagic Fever Guideline
http://www.slamviweb.org/es/ebola/fhffinal.pdf

Government of Sierra Leone – Ministry of Health and Sanitation:
Technical note on the integrated management of acute malnutrition for out-patient therapeutic programme (OTP)
http://www.cmamforum.org/Pool/Resources/Sierra-Leone-IMAM-OTP-technical-note-2014.pdf

Sheet 8: Food Security and Livelihoods

Objectives:

- Present the objectives of Food Security and Livelihoods activities during an outbreak(outbreak to mid-long term)
- Present the possible impacts of Ebola outbreak on the mid and long term in FSL, and interventions which may help support the population with food supply and livelihoods

Levels of intervention:

- Immediate Impact
- Mid and long-term Impact

Context

As a result of effective containment measures during the outbreak in 2014 in WA, the transmission of EVD was finally managed. These measures, however, have had serious negative implications on the livelihoods and food security of many of the most vulnerable in already very poor and economically fragile countries, where prior to the EVD outbreak, poverty was pervasive and endemic. This is mostly due to market disruptions caused by the limitation of movement and gatherings leading to:

- Overall slowdown in economic activity and exchanges
- Significant loss of income for some of the poorest and most vulnerable households (among the most affected are those engaged in petty trading, market vending and casual labor)
- Increase of food prices as a result of the EVD outbreak control measures coupled with insufficient income becoming a larger threat to food security
- Increase in the risk of food insecurity for market-dependent households as a result of the general decline in income concomitant with the economic slowdown

Moreover, quarantine and movement restriction impeded farming activities during key periods significantly decreasing harvest volumes.

Finally, in the first few months after the outbreak, food security actors were very slow to react, which did not allow to compensate this global increase of food insecurity.

Different levels of FSL intervention during an Ebola outbreak

Humanitarian crises are often approached/ responded to following a classification of phases representing the evolution of the situation from immediate emergency to recovery. Although this evolution is presented as linear, it may follow a random pattern going back and forth depending of the type of crisis and effectiveness of the response. Different phases may even overlap over a certain geographical zones.

The Ebola outbreak is no exception and may follow rather uneven patterns on the way to recovery. As such, the different levels of intervention presented below should not be considered as stand-alone but used along and adapted to a thorough understanding of a given crisis.

What	Who
Immediate to mid-term response	
Food security *through food distribution*	
To support affected/quarantined HH with food rations from Outbreak To support quarantined communities	WFP–NGOs potentially ACF
Coordination	
To revive / participate in the revival of Cluster mechanisms To participate in coordination meetings and in the set of coordination mechanisms if they are not operational	UN- NGOs – ACF
Assessment	
To collect any documentation on the livelihood before the outbreak To laugh at least an EMMA (or other quick and dirty market analysis)	ACF in intervention zones
Mid to long-term response	
Food security *through cash based intervention*	
To support the most socio-economic vulnerable HH (including HH touched by EVD)	ACF in intervention zones
Coordination	
To participate in coordination meetings	UN- NGOs – ACF
Assessment	
To understand the impact of the disease on FSL at different levels (HH, communities, districts) – outbreak, mid-long term (depend on seasonality)	ACF in intervention zones
Livelihood	
To support rehabilitation/recovery of communities and HH To support reconstruction of communities and HH	ACF in intervention zones

Table 2. Summary table – Objectives of FSL interventions in a context of emergency

Immediate to mid-term response – (Phase One)

Food security through food distribution

First affected populations are households with members who died from the virus, and households living in quarantine areas. Their livelihood and socio-economic environment can be heavily disturbed (lost members of the family, no access to markets, reduced access to production means as farm land, etc…).
First response from WFP: focuses on the medical emergency and supplies food assistance to treatment centers, quarantined households, survivors, and quarantined or hotspot communities.

- Depending on the context/country, it could be that some families do not see receiving food as a positive thing as the distribution is associated to Ebola. It may also be considered as begging and charity is not always welcome for those families.
- There can be social pressures and concerns around food distribution for Ebola affected groups. We should be extremely cautious in getting engaged in such intervention, while food distribution is always sensitive and may create jealousy.
- Be on track with logistic capacities since food is difficult to store (as any perishable), hygiene rules must be respected and appropriate transportation means made available. Foodstuff are pretty heavy to carry (trucks are necessary so make sure that road are all-season practicable).

Coordination

Coordination is the key of an appropriate response in emergency context. ACF has to be proactive in (re)activation of clusters[22] and/or other coordination groups.

- Coordination is time-consuming so avoid multiplication of coordination groups and try to settle on already existing ones.

Assessment

Assessments open the doors to the next phase. First try to collect any documentation existing on livelihood before the crisis (and also any production by other NGOs during the crisis).
As this type of outbreak heavily disrupts the market and lead to serious FSL consequences, an emergency market assessment has to be launched as soon as possible.

- Do not forget to launch the first phase of assessment (a consultant or support from HQ can be recruited)
- Do not, at that point, forget to plan for further analysis (either directly or through consultant).

Mid to long term response – (Phase Two)

Food security through cash based intervention

The main impact of the outbreak has been loss of income/purchasing power, both in rural and urban communities, for population groups that were already the most vulnerable.
Where conditions allow, cash activities may be implemented (either cash or voucher) – see appropriate guidelines for that[23].

Coordination

Continue to participate in key coordination meeting (at least cluster) and if any Cash Based Intervention (CBI) is developed participate in cash coordination meetings if they exist, or be part of their creation/reactivation → try to harmonize ways of working.

Assessment

Assessments/analyses of the situation will depend on the **local context/calendar** (i.e. understanding impact on agricultural season activities for instance).
Understand the 1st impacts (Do this in cooperation with other actors (including civil society and other local actors; strive to be organized within a Cluster/coordination system)

Quantitatively – locally and nationally
Qualitatively – locally

- Do not underestimate the relevance/usefulness of qualitative data it should be part of any analysis
- Request support from Advisor if not sure how to carry out this type of activity, especially in the context of an epidemic.[24]

[22] Note that the cluster mechanism was not activated throughout the 2014 Ebola outbreak

[23] ACF 2007, Cash Based Intervention Guidelines

[24] Including ACF 2010, FSL Assessment Guidelines and ACF 2011 FSL Surveillance Guidelines

Market studies should be planned at national coordination level but may be carried out anyhow if coordination is too slow: Agencies can coordinate to have EMMA specialists work for more than one agency for instance

- Pay particular attention to duplication. (WFP has market studies specialists that could also be contacted directly, and/or through in country WFP office.)
- Be careful not to forget small/local markets – or small, local villages/communities if markets are closed down.
- Moreover, in emergency contexts, cash has become the omnipresent type of activity so we need of market to be able to implement them.

In the medium and longer term, effects of the Ebola crisis will have an impact on the entire country. Sierra Leone and Liberia for instance, are extremely vulnerable countries regarding the rise in food prices.

Livelihood

Based on the season (calendar), plan for agricultural rehabilitation activities early so they can begin within the first months of the crisis.

- Do not forget that activities don't start the day we decide to implement them. Decisions need to be taken by a date that allows start-up of implementation on time → if it takes 8 weeks from decision to implementation, then decisions need to be taken **at least** 8 weeks before the latest appropriate date to start implementation.
- Be thorough in your analysis of the seasonal calendar with regards to implementation of agricultural activities.

Other activities for market and economic recovery can be considered including:

- Income Generating Activities (IGAs) to be reactivated during phase one then new one can be developed through FSL program during phase two[25]
- Village Saving Loans Association (VSLAs) can be reactivated thanks to new investment in their rotating capital
- Cash for work activities for both cash injection and rehabilitation of key infrastructure as market
- Support to traders/carriers to make the re-integration of market quicker
- ….

- Try to use this opportunity to set up comprehensive / holistic nutrition sensitive activities, and not only "pure" agricultural rehabilitation activities whose objective would merely be increased production.

Longer Term

Food security through cash based intervention

Some HH may become even more vulnerable due to the death of a member of the family (especially the one with labor force). If emergency/post-emergency CBI are not sustainable and may create assistantship, safety-net programs can be developed at country level with government follow-up or impulse. If not an implementing partner, ACF can have an advocacy position on that topic.

[25] ACF 2009 Income Generating Activities Guidelines

Coordination

Continue to participate in key coordination meetings and high communication towards beneficiaries and authorities.

Assessment

Impact assessment of the link between epidemiology and food security and livelihood can be planned.
Usual FSL comprehensive assessment as HEA, NCA can be planned at least one year after the end of the outbreak (to make sure that the standard year is not impacted by the outbreak).

Livelihood

Any resilience activities can be settling to improve the practices on economic activities, diversification of income sources, food diversification or any other nutritional security program.

Sheet 9: Safe schools operation in EVD context

Objectives: To guide ACF missions in designing project to support schools safety in Ebola context

Levels of intervention:

- Outbreak
- Immediate Impact

Experience during 2014 WA outbreak

During the EVD outbreak in 2014, Schools were closed in July 2014 in Liberia and Sierra Leone in order to contain the spread of the virus and protect schoolchildren from contracting it. Millions of school-aged children have been affected and this has also lead to increased protection issues and early pregnancy.
In order to contribute in school reopening with a view to prevent possible transmission of Ebola within schools, ACF had plans to provide basic WaSH package comprising WaSH basic infrastructures, IPC, hygiene education (training of teachers, school clubs, etc…)

This document will support ACF teams in designing safe schools support projects during EVD outbreak and is based on Liberia and Sierra Leone experience and protocols (designed by governments and supported partners).

During EVD outbreak, government can take the decision to close or not the schools. If schools were closed, reopening involves many challenges and key interventions needs to be done before the reopening of schools.

Goal of schools safety support during EVD outbreak

The goal is to guarantee the minimum requirements to ensure that every school is safe for all students and staff from a health, water, sanitation and hygiene point of view

Later, intervention can be updated to support early warning and rapid response to new outbreaks, and to maintain good hygiene practices in schools.

Basic principles

A protocol for supporting schools during EVD outbreak can be designed and implemented. ACF can eventually advocate for and support government to design it and implement it. Examples are available in the Ebola toolbox:
Cf. Ebola Tool Box/ Capitalisation/ Liberia or Sierra Leone/ 8. Schools interventions

Recommendations for healthy schools are based on a few main principles:

- Sick students, teachers, and staff should not come to school
- Schools should encourage frequent hand washing and daily disinfection and cleaning of school surfaces
- Schools should discourage physical contact
- Schools should follow national and local Ebola and safe school environment guidance, including separating sick people and telling local health officials if someone appears to be sick with Ebola
- Schools should be a safe place for children

Schools reopening – what needs to be in place before

Governments can decide to close school during a period of time in EVD outbreak. Before reopening schools there are some steps to take:

Cleaning and decontamination of schools before reopening

Cleaning and decontamination is part of a broader approach to preventing infectious diseases like the Ebola in schools by killing germs on surfaces or objects.

Cleaning and waste disposal are high risk activities. Cleaners should wear the best available PPE.

Caution: Never spray chlorine solution directly on spilled body fluid; it can create splashes or make the spill bigger => Use towels wet with chlorine to remove first visible waste.

Example of cleaning and disinfecting procedures (from Liberia, Ministry of Education):

10 Environmental_cleanii

Identifying possible Ebola exposure during school closure

Before school reopen, any possible exposure to Ebola by pupils, teachers and other school personnel during the last 21 days should be identified. **Knowledge of recent contact** will reduce the possibility for anyone to demonstrate possible Ebola symptoms while at school, thus exposing others to Ebola.

➔ ***Coordination with local health authorities is the key.*** Administrator of the school should link to local health authority to cross-check if there are any pupils or teachers in contact tracing lists.

A ***person who is identified as having had contact*** with an Ebola case will not be allowed to go to school until the status of the suspected case has been laboratory confirmed and/ or during 21 days since the "contact".

Providing adequate equipment to schools

The risk of contracting Ebola will lead to specific supplies needs that can contribute to the prevention of Ebola in schools settings. The following list of supplies is the minimum required for the schools running in EVD context:

- Infrared thermometers
- First Aid Kits
- Hygiene Kits (hand washing stations at the entrance and near the latrines , soaps, items for cleaning including chlorine)

Providing necessary mechanisms and physical conditions for Ebola prevention at schools

- ***Entry to school must be controlled by measuring temperatures, checking symptoms and washing hands*** of students, teachers, visitors… every day. A ***small committee can be formed among teachers and parents*** to ensure the daily temperature check and contribute to continuous process of monitoring and improving hygiene practices.

- One of the most important mechanisms that must be in place before the schools open is the ***referral system with the nearby health facility*** and coordination with the local health authority.
- Each school has to identify a ***small physical space that will be used for the temporary isolation*** of students and school personnel with EVD symptoms while waiting the transfer to the health facility.

What needs to be done once schools reopens

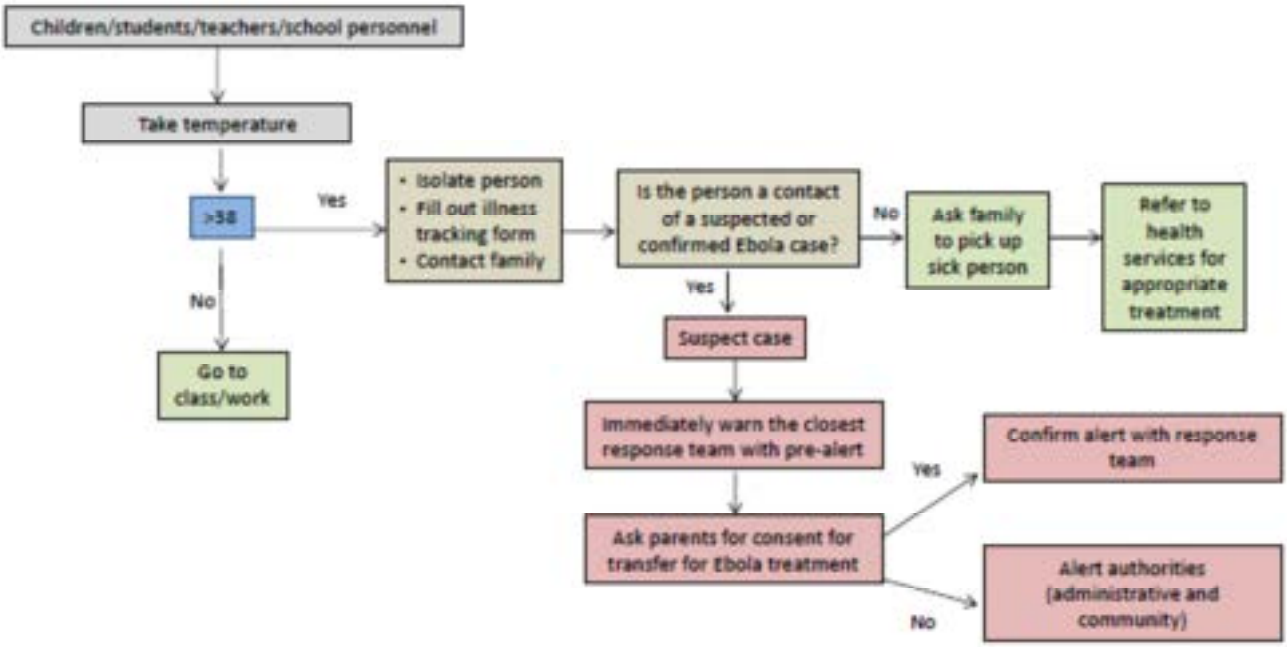
Monitoring daily access to school

Some schools (or some government recommendation and protocols) may choose to screen everybody for fever as they enter the school, either every day, or on a regular schedule. ***Schools should make sure that screening staff know how to take temperature*** accurately and regular refresher training should be provided. While taking temperature, the "fever monitor" will ask everybody at least:

1. If they had contact with a suspected Ebola case, and
2. If they feel sick

The diagram shows one way to use temperature results to determine who should go to class, who should be sent home, and when Ebola response teams should be alerted.

Fever screening example from CDC



Specific procedures when a case is suspected at the entrance of the school or during the day might be developed by national government and will need to be followed. Some specific steps must be followed: It is necessary to contact his/ her family and health authorities. While touching the person ***with Ebola symptom must be avoided to mitigate the risk of being infected, it is important to remember to treat the child/ person with care and affection***. The responsible of managing the suspected case will escort the person ***to isolation area*** keeping a distance of 2 meters and referral system of the country will then be followed.

Safe health and hygiene practices

Washing hands with soap and clean water is one of the most important ways to help everybody stay healthy at school. Handwashing should be regularly included in student schedules and students should be taught the correct way to wash their hands.

Children should always wash their hands:	**Teachers and staff members should always wash their hands:**
- When arriving at school, before entering the classroom - After using the toilet - Before and after eating - After play breaks - After touching tears, snot, spit, blood, sweat, pee, poop, or vomit	- When arriving at school, before beginning to work - Before preparing food, eating, or helping children eat - After using toilet or helping a child to use the toilet - After blowing his or her nose or helping a child blow his or her nose - After contact with any tears, snot, split, sweat, pee, poop, or vomit

Cleaning schools

The school environment, including school furniture, equipment, and toys should be frequently and thoroughly cleaned to avoid the transmission of Ebola.

Washing and disinfection of toilets and hand-washing stations should be done at least once a day with a 0.5% chlorine solution.

Immediately clean up all spillages of blood, faeces, saliva, vomit, nasal and eye discharges with precaution (wearing light PPE with heavy duty gloves).

Eating and drinking at school

School responsible should ensure ***the area where food is prepared or sold is clean*** and prohibit preparation or sale of bush meat.

Food vendors should follow the same procedures for entry when entering school premises and wash hands before starting to prepare and distribute food.

Children should not eat food that has touched the ground. They **should not share the same cup or utensils for eating or drinking**.

Limiting physical contact between children

One of the biggest challenges for the schools in EVD context is to ***minimize the physical contact to mitigate risks of contracting the Ebola virus***. While children need to express and be expressed affections by others, teachers should remind and inform children of hygiene and safety precautions. Schools should ensure that there is enough sitting arrangement for their students.

Providing psychosocial support, reducing stigma and insuring continuity of child care practices

An EVD outbreak and context can have an important psychosocial impact, such as ***emotional reactions, psychological effects, and social and family structures' disruptions***. Panic, fears, stress, grief, as well misconceptions due to cultural beliefs and stigmatization of affected persons are usual observed reactions among adults and children.

A specific attention should be given ***to ALL children (survivors, those with an affected family member, orphans and others), because they have less resources to understand the context, they have less available coping mechanisms and they are exposed to protection issues.*** Schools are an important place for children, where they can feel safe and get some reassurance and explanations. Psychosocial support at school level for children, in link with families in the community (for the continuity of children care practices), is essential to help them to cope better with emotional reactions. This psychosocial support could include ***discussions with children through creative group activities (such as drawing)***, in order to help them to express their feelings, help them to use some resources at home to cope with these feelings (i.e. talking, drawing, praying with parents, …) and to detect the vulnerable one's that should benefit from specialized services (i.e. protection, health, family support).

Psychosocial support and capacity building for teachers must be provided as well, as they are EVD affected as well and have to help children in the same time. Capacity building for teachers should be focused on ***Psychological First Aid, panic and cases management in class, how to prevent inappropriate behaviours*** (like teasing, making fun of, or leaving others out), how to identify cases for referral to specialized services, how to communicate adequately in a simple language with children, what not to do (counselling versus harmful attitude), how to communicate with families, how to reassure, what kind of activities to provide. Interventions with children and teachers should be supervised by trained psychosocial workers, in order to insure an adequate support and child protection.

Communicating with communities and families

Communicating with families and communities, and involving them in efforts to prevent Ebola is critical, to ensure that they become strong advocate and allies in implementing the protocols.
At home, families and communities should act as role models by exercising good hygiene rules, such as:

- Ensuring children wash their hands with clean water and soap before eating, after using the bathroom, and before leaving for school
- Ensuring that children are clean and wear unsoiled clothes to go to school, and that children's clothes are kept away from urine, vomit or blood
- Reminding children before leaving for school in the morning that they should not share food, drinking cups and bottles with their classmates
- Not sending sick children to school
- Encouraging children to tell teachers immediately when they themselves, or a classmate, feel sick.
- Ensure the continuity of care practices for children

What training should teacher receive in Ebola context

Training will depend on the local context and available resources. Schools will want teachers to be able to play their role in Ebola prevention in schools, as well as answer questions from students and provide reassurance. Possible training topics include:

- What is Ebola? How does it spread?

- How to prevent Ebola in schools
- How to detect and manage suspected Ebola cases at school
- How to provide psychosocial support to children
- Referral mechanisms to health and child protection services
- Guidelines from ministry of education concerning Ebola and schools
- The role of teachers and education personnel in the Ebola response
- How to mix chlorine solution for general cleaning
- How to use personal protective equipment, if needed

Example of key messages at school

Key messages for children, teachers, parents and communities (example from Liberia):

FINAL_ Key Messages for Safe Sc

Duration of the measures

Duration of specific measures in EVD context will be defined by countries government. In Liberia and Sierra Leone, it was agreed to at least implement specific protocols until the country is being declared "Ebola Free" (42 days after the last EVD patient has been release from Ebola treatment centre). However, it was also mentioned to continue safety measures (especially hygiene measures) and revise protocols accordingly.

Out of an outbreak and in longer term strategy, it is important to pursue safety support in schools by developing more global WASH in schools projects with care practices and psychosocial component.

To obtain more details on WASH in schools interventions, you can refer to:
http://www.unicef.org/publications/files/CFS_WASH_E_web.pdf
http://www.washinschools.info/

Sheet 10: Kits' distribution in EVD context

Objectives:

- Guide missions in the definition of different types of kits that can be distributed during EVD outbreak

Level of intervention:

- Stop the outbreak
- Mitigate direct impact

During the outbreak in West Africa in 2014, ACF through community mobilization activities distributed different types of WaSH kits. A "Capitalization" document is available in the Ebola Tool Box (*5. Capitalization ACF/ 0. Global and transversal/ 2. WaSH*). Here under is the summary of the different types of kits to have a rapid access to items' needed in case of emergency.

General note: As for any distribution in EVD context, remember to avoid as much as possible large gathering of people in the same place and prefer small different distributions.

Hand-washing Family Kits

The purpose of these kits is to ensure that people would have the means to wash their hands in a proper way, as a prevention measure from the Ebola virus contamination. Usually distributed in communities were EVD transmission is not active.

This kit covers 1 months needs for a family of 5:

Hand washing family kits	Quantity
Plastic bucket 20 L with tap (with Ebola sticker)	**1**
Plastic bucket 20 L without tap (with Ebola sticker)	**1**
Chlorine in a plastic container	**0,5 kg**
Table spoons	**2**
Cakes of soap (110 g)	**4**
Chlorine solution pamphlet	**1**
A4 IEC Ebola guide	**1**

Public hand-washing kits

Hand-washing public kits can be installed in several public spaces: markets, mosques, churches, health centers...

This kit covers 1 month's needs:

Public hand washing kits	Quantity
Plastic barrel 60 L with a tap (with Ebola sticker)	**1**
Plastic bucket 20 L without tap (with Ebola sticker)	**1**
Wooding stool	**1**

Chlorine in a plastic container	**1,5 kg**
Table spoon	**1**
Chlorine solution pamphlet	**1**
Cakes of soap (110 g)	**5**
A4 IEC Ebola guide	**1**
Pair of protective gloves	**1**
Protective face mask	**1**
Pair of goggles	**1**

Hygiene Contact family Kits

Hygiene contact family kits are distributed to quarantined households (contacts of EVD cases)
The main difference compared to the hand-washing family kits is the addition of a ***plastic sprayer and appropriate protection items so that quarantined people can clean their latrines safely.***

This kit covers 21 day's needs (quarantine period)

Hygiene contact family kits	**Quantity**
Plastic bucket 20 L with tap (with Ebola sticker)	**1**
Plastic bucket 20 L without tap (with Ebola sticker)	**1**
Chlorine in a plastic container	**1kg**
Table spoons	**2**
Cakes of soap (110 g)	**5**
Plastic sprayer	**1**
Pairs of protective hand-gloves	**2**
Face masks	**2**
Chlorine solution pamphlet	**1**
A4 Ebola poster	**1**

Home-care Kits

The initial rationale behind the provision of home care kits is linked to:

- Insufficient bed capacity at all levels of the health care system; the lack of available beds in CCC/ETC can force families to care for patients at home, where caregivers are unable to adequately protect themselves from EVD exposure, thereby increasing transmission risk.
- The delayed referral due to lack of adequate and sufficient referral & response and treatment structures.

The objective of the home care kits provision is to increase the survival rate of suspected, probable, and confirmed EVD cases for whom admission to a CCC/ETC is delayed because of lack of bed availability/delays in pick up time.

HOME CARE PROTECTIVE KIT IOM	**Quantity**
Buckets (20L) - with IOM+USAID logo	**1**
Buckets (20L) - no logo	**1**
Plastic aprons	**3**
Black garbage bags	**5**
Chlorine 480g package - with caution sticker and plastic tablespoon	**1**

ORS sachets	**15**
Exam gloves (pairs)	**10**
Soap 85g pieces	**6**
Aquatabs tablets	**15**
IEC Leaflet - color printed, double-sided	**1**

This type of distribution should be launch by government as it should be done only during widespread transmission and where bed capacities are not covering the needs. Note that during EVD outbreak in 2014, the time ACF received the kits, bed capacities of ETC/ CCC increased. Kits had to be then adapted.
Refer to the Capitalization document to obtain more details on discussions about home care kits

Discharge package kits (survivors' kits)

The aim of the discharge package kits is to support EVD survivors returning at home as they can lose most of their personal items (burned because of risk of exposure to EVD). Usually it will be easier to have MoU with ETC/ETU and pre-position the kits directly in the centre to ensure every survivor will receive the kits.

DISCHARGE PACKAGE	Quantity
Mattress (4 inch) single bed	**1**
Water Rubber (20 litres)	**2**
Laundry soap	**5**
Water bucket (20 litres)	**2**
Mosquito net (LLITN)	**2**
Assorted clothes	**1**
Plastic flip flops	**1**
Chlorine solution in a plastic container	**1 Kg**
Condom box	**1**
Sanitary pads	**1**

Sheet 11: National Human Resources management during Ebola Outbreak

Objectives:

- Present key principles and procedures for national HR management during an Ebola Outbreak

General recommendations for HR processes during an Ebola outbreak

- Make sure to ***communicate with the employees to understand their own situation***, fear, needs. In such a situation, we need to have the best people in the field, therefore, they must feel secure, reassured.
- Be ***pro-active and fast in implementing temporary measures (transport, IPC)*** – but think about discontinuing the measures as soon as the need for it disappears -> more flexibility
- ***Forecast large enough teams, avoid overtime, gaps*** : in such a context, tiredness is a big enemy (drop in awareness, drop in vigilance towards IPC measures, more fragile facing common sickness – that may lead to quarantine, …) however in crisis overtime can be difficult to avoid - at times the crisis suddenly increases – leave and breaks should be followed
- ***Provide psychological support in the earliest stages***
- ***Be creative with HR processes*** in order to respond to the emergency in the most efficient way (this might require HR support in the earliest stages)

Introduction:

HR management in an epidemic environment is very sensitive yet critical. One important lesson learned from the Ebola experience is that there is no unique answer and that the best (or least worst) answers have to be thought through with the employees themselves as they are deeply linked to cultural aspects, beliefs, national set up, governmental decisions, etc.

Note:
The recommendations below are guidance mainly based on Liberia and Sierra Leone experience in 2014-2015 and will need to be adapted depending on the context and laws of the country.

IPC: Infection Prevention and Control

IPC at the workplace / IPC at home

IPC is the key to halt the expansion of the epidemic!
These measures need to be implemented rapidly in the working areas (systematic hand washing, temperature checks, spray bottles and hand sanitizers in each vehicle, hand sanitizers in each office). It is also recommended to provide IPC items for our employees to bring home (distribution of soap, chlorine, buckets, thermometer, Ebola preventive booklet) and the Ebola Prevention Standard Operating Procedure (EPSOP) has to be implemented (*cf. example of EPSOP in Ebola Tool box*)

Distribution of Malaria prophylaxis during an Ebola outbreak can be implemented, especially in a context with very high risk and during rainy season. It is important to remember that symptoms of Ebola and Malaria can be associated. This would be good for staff welfare especially if we can get a donation of this medication (E.g. OXFAM gave a kit (thermometers, mosquito net, and malaria pills) to all their staff before they went to the field during the 2014 Ebola Outbreak in West Africa). At the same time it would be relevant to check with the renewal of the medical insurance coverage and try a specific negotiation on malaria prophylaxis. Note that it will be important for ACF to give advices to the staff on health facilities availability and recommendation.

Transportation of staff during state of emergency

a. Pick-up organized by ACF

At the peak of an Ebola outbreak, it can be discussed to organize transportation for all our employees. The purpose is to limit exposure with crowded public transport (buses or taxis) where avoiding physical contacts is impossible. However, such a set-up is only manageable up to a certain point, and up to a certain amount of employees.

Note:
This was implemented in Liberia with a pick up system whereby ACF drivers would go around the city, at different meeting points to pick up everyone and transport them safely.
During this pick-up period, it was decided to maintain the monthly transport allowance so the pick-up would not appear as a choice (employees could not refuse the pick-up to keep their allowance).

In Sierra Leone, this measure was not feasible and transportation allowances were increased instead.

b. Specific incentives

Increase the transport allowance can be implemented so as to enable our employees to travel safely to and from work while being able to afford more expensive and safer means of transportation.

Note: The transport allowance being a legal obligation in SL, we could not really increase it ***temporarily***, therefore, it was decided to implement a one-time relocation/settling allowance (from Jan to Mar 2015) in order to encourage applicants to accept positions in remote places where transportation could be an issue.

Standby of activities and teams

During an Ebola outbreak, and with the increase of Ebola caseload***, it can be decided to put some programs on standby*** (considering the facts that there is no life-saving activities and that the program requests our teams to move around a lot in communities where there are Ebola cases and not yet any Ebola response). Hence, the said team is also put on standby according to the internal rules and CSB or can be allocated to support other programs.

Recruitment

Since it is an emergency, ***ER recruitment procedures have to be followed***.

In the Ebola context, recruitment is a challenge:

- We need very specific skills and competencies that are not “ACF specific”. The first difficulty is to ***acknowledge that we need new profiles*** (especially for managerial positions) such as experts in handling hazardous materials, epidemiologists, doctors, that we do not have the expertise to seek and attract in general. It is important to ensure that job descriptions are well adapted to the

epidemic context (avoid "*Nutrition and Health department*" if you seek for an epidemiologist or a surveillance officer for example). *Please refer to the end of this document for some examples of job descriptions and tests in EVD specific context.*

- Finding skilled employees ready to go in the most remote places (or purely work for a NGO dealing with EVD) of their country where the Ebola caseloads is the highest is a challenge (family resistance, stereotypes, fears, …)
- The influx of NGOs can change the employment market which can become more and more competitive.
- The standby of government activities (schools, hospitals) can also change the market and give an opportunity to have other profiles. However it might be interesting, in such case, to make formal ***written agreement to make sure we have the same level of information and understanding with the government.***

Note:
In Sierra Leone and Liberia, ACF received hundreds of applications from teachers, university professors, nurses, etc. that were temporarily out of work.
Since the initial projects were for a short term (3 months), and there was no visibility whether the governmental structures would reopen in the short term, it was decided that we could hire some government staff, considering the fact that we would release them when hospitals/schools reopened, and that they would have gained additional experience in the meantime.
If a mission is working with some teachers, university professors, governmental nurses, it will be important to anticipate the end of their contract and open the position in order to avoid any gap during an on-going project.

Retention

In an emergency context, retention is always a complicated matter, with all NGOs and international organizations arriving or coming back to the country.

The issue of retention revolved more around the length of the contracts (usually 3-4 months as emergency context) and the difficulties to attract/retain employees. To address this issue, ***secondment policy can be designed*** (possibility for employees to be seconded on another position for a maximum of 6 months) in order to allow our qualified employees, hired on long term projects or support functions, to take on these emergency temporary positions.

Another recommendation could be to ***better advertise our benefit package, training opportunities***, and others.

Note:
In Sierra Leone and Liberia, it seems that we did not "lose" too many competencies to other NGOs. The fact that "we were there before and we will stay after" may have played a part in convincing our employees of the long term perspectives they might have with us.

Cost of living

Cost of living can be one of the impacts of an Ebola outbreak due to a weakened economic system (movement restriction, closure of boarders…)
Special

Therefore, depending on the context of intervention and regarding the cost of living evolution, an ***exceptional cost of living allowance can be provided to ACF team*** for the outbreak period (usually at the peak of the epidemic)

Note:
For the first 6 months, this did not appear to be a problem in Liberia although it became quite quickly a strong request from employees in SL.
The impact was indeed quite strong in SL, and we encountered lots of difficulties attracting employees, especially for our remote bases (seen as more dangerous, with lack of safe medical facilities, etc.). In parallel, the government implemented a risk allowance for their medical employees on the ground, and several NGOs followed.
Therefore, it was decided to implement a temporary cost of living allowance to the entire pool of employees for a 3 month period (500 000SLL = 100€ per employee).
This allowance was paid twice (1 for the Oct – Dec 2014 period, a 2nd one for the Jan – March 2015 period). In March 2015, the epidemic slowed down and the government suspended its risks allowance. In line with this, our cost of living allowance was stopped.

Psychological support

Ebola can bring about significant psychological toll on the population. First, people fear the disease, which lead to stigmatization against the sick, as well as against people working with the Ebola response (medical staff, IPC teams, contact tracers) as they can be perceived as carrying a high risk of contamination, since in direct or indirect contact with EVD patients.
Second, the main IPC measure being the "no touch policy" can bring about a change in the relationship within a society where physical contact is part of the communication pattern.

The recommendation would be **to send a psychological support (dedicated to the teams, for a few months) as soon as possible in order to provide proper support, help them find coping mechanisms, etc.**
If this is not feasible, a support from the Psychologist from HQ can be requested; the goal will be to specifically do group training for every staff member to find self-care coping mechanisms and undertake stress management sessions.

Other general recommendation

It is important to **have a WEEKLY EBOLA UPDATE TO ALL STAFF** first thing in the morning on Mondays with the facts and figures of Ebola: cases, numbers, location of the cases, hotspots, measures taken by government, etc. However note that as this meeting can be stressful it will be relevant to have also some "positive news" about the crisis (number of survivors, number of ambulance donated, a success story…) to try to balance out the bad news

Finally, **understanding of Ebola is KEY, and this is where ACF plays a huge role in taking time to explain it to the staff**, so in turn they can become awareness-raisers themselves, at home, in their communities. Trust of ACF as an employer is very important.

Example of Job description and test

Here under are different job descriptions and tests for specific positions that can be opened during an Ebola Outbreak. Every job descriptions and tests have to be adapted to the context of the mission.

Contact tracing Teams

POSITION	JOB DESCRIPTION's EXAMPLE	TEST's EXAMPLE
T2: Contact Tracing Team Leader	Example T2 Contact Tracing_Team Leader	Recruitment test_CTr Team leader
M2: Contact Tracing Program Manager	M2_Contact tracing PM_VF.doc	

Surveillance Teams (CEBS: Community Event Based Surveillance)

POSITION	JOB DESCRIPTION's EXAMPLE	TEST's EXAMPLE
T1: Community Liaison Officer	Example T1 Community Liaison Of	Recruitment Test_Community Liais
M2: Surveillance Program Manager	Surveillance PM_JD_July 2015.doc	

IPC Teams

POSITION	JOB DESCRIPTION's EXAMPLE	TEST's EXAMPLE
T3: IPC Supervisor	IPC supervisor Montserrado Nov 201	test IPC supervisor Montserrado.doc
M2: IPC Expert	IPC expert.docx	

MHCP Teams

POSITION	JOB DESCRIPTION's EXAMPLE	TEST's EXAMPLE
Social Work +ers	MHCP_PSW_190120 15_FINAL JD.doc	
Program Manager	Deputy PM MHCP 2015.doc	Deputy Exam Octuber 2015.docx

Sheet 12: Expat Human Resources management during Ebola Outbreak or in endemic countries

Objectives:

- Present key principles and procedures for Expat HR management during an Ebola Outbreak

Discussion on HR management during WA outbreak in 2014

Although some ***"rules" can be defined for management of expatriates*** during Ebola outbreak, previous experiences in Sierra Leone and Liberia showed that it cannot be applied all the time for everyone. There are still discussions for specific situation (place of break, other mission at the end of the contract but before the 21 days incubation period, training during the mission…). Finally it was decided ***to have a focal person to take any specific decision*** (usually CD or DRO and ADRO).

Below are the ***main recommendations to guide Expatriate HR management during Ebola outbreak***. It is recommended (especially in case of outbreak with widespread transmission) ***to have a Focal Point for Expatriate HR management*** and to take any specific decision. It can ***be considered to have a HR Ebola focal point at HQ level*** to manage all related issues during a widespread transmission in a country.

Lessons learned on specific rules depending on the level of the outbreak

In November 2015, when Liberia had to face new cases in Monrovia 2 months after being declared Ebola free, ***ACF had to revise some specific rules regarding expatriate***. As the cases where well managed by the MoH and its partners, and because it was in a specific community, the same rules than during a widespread transmission couldn't be used. ***It was decided to adapt the rules regarding the level of the outbreak.***

Out of an Ebola outbreak, if an expatriate is going to a country where Ebola was on-going before (endemic), and regardless of any active transmission in border countries:

E-learning should be proposed at the arrival of the expatriate on the mission. At least the "What is Ebola" module is to be done for every expatriate and the full package for CDs, Field Coordinators and HoDs[26]. If the expatriate is not coming at HQ before departure, the HR HoD will be responsible to ensure that the E-learning is done. Depending on the position of the expatriate and relevancy there will be possibility to undertake other e-learning modules on the mission (IPC, Community awareness and mobilization, Contact Tracing). It is recommended to propose the Ebola e-learning to every new expatriate at least 9 months after a country has been declared Ebola Free. After this period, Ebola e-learning should stay available for every expatriate.

The Regional Operational Human Resources is responsible to inform all HR departments at HQ of any change in Ebola situation

Document to support recruitment and mobility officer in procedures decision depending on situation:

French:

Je prépare le départ d'un expat.docx

English:

I prepare Expat departure.docx

[26] At least until December 2016 and depending on further notice

3 Different levels with adapted procedures for expatriate

Local "hotspot" out of ACF operation areas

a. Before Expatriate departure:

Ebola E-learning module "What is Ebola" to be done for every expatriate and full package for CDs/ Field coordinators and HODs*:** Before being recruited, expatriates should be brief by the ***recruitment and mobility officers on the possibility to be on a mission where Ebola outbreak can occur. When interest for the mission is confirmed, he will have to follow some rules describe in Ebola SOP. *Cf. Technical Sheet 11 SOP in Ebola context*

The recruitment and mobility officer will request for the E-learning to be planed in the departure request and the travel office is responsible on ensuring that the e-learning session is planned in the briefing planning.

Training department will then plan the e-learning session on What is Ebola (30 minutes) and full package for CDs, FCs and HODs, if the expatriate does his briefing at HQ level, the HR HoD will be responsible if planed at mission level.

Ebola Leaflet to be given by the recruitment and mobility officer

French version:

ACF_Brochure Famille_FR_electr.pdf

English version:

ACF_LeafletEbola_GB_electr.pdf

***Pasteur medical check-up*:** Specific vaccinations are recommended (refer to the Pre-departure technical note). Malaria prophylaxis should be brought by expatriate (to have a stock if the situation worsened) but is not compulsory in the current situation.

If the expatriate can't come in Paris he will have to do the medical check-up in his country before departure.

HR_Pre-departure medical note.docx

FAQ on Ebola is to be given by the recruitment and mobility officer

FAQ Ebola Version VF 201511.doc

b. During the mission period

If it is relevant and depending on the position of the expatriate, other e-learning modules can be proposed by the HR department (IPC, Social mobilization, and Contact Tracing)

There might be specific rules for breaks. The mission will share the break reference place that might change because of the EVD outbreak situation. The expatriate will however do the request of break as usual and CD will check that the break place I authorizing visitors from Ebola affected country.

c. End of mission

If at the end of expatriate mission***, the situation regarding Ebola is the same*** (local hotspot) or if there are not anymore active transmission in the country, there are no specific rules to follow. Medical check-up at Pasteur should be organized as usual.

If ***the situation worsened*** (local hotspot within ACF intervention area or widespread transmission), please refer to coming chapters.

Localized active transmission of EVD nearby one of ACF bases

a. Before Expatriate departure:

The recruitment and mobility officer will request for the E-learning to be planed in the departure request and the travel office is responsible on ensuring that the e-learning session is planned in the briefing planning.
Training department will then plan the e-learning session on What is Ebola (30 minutes)and full package for CDs, FCs and HODs if the expatriate does his briefing at HQ level, the HR HoD will be responsible if planed at mission level.

Ebola Leaflet to be given by recruitment and mobility officer
Pasteur medical check-up**:** Specific vaccinations are recommended (refer to the Pre-departure technical note). Malaria prophylaxis should be brought by expatriate (to have a stock if the situation worsened). In this situation, ***malaria prophylaxis is strongly recommended during rainy season***. It is also ***mandatory for any visitors*** (staying for a short period).
If the expatriate can't come in Paris he will have to do the medical check-up in his country before departure.

FAQ on Ebola is to be given by the recruitment and mobility officer

b. During the mission period

There might be specific rules for breaks as mentioned in the previous chapter.
Expatriate will have to follow specific safety measures**.** Please refer to SOP in Ebola Context

c. End of mission

During the 21 days, there is no specific behavior to adopt, except, bearing in mind that the risk still exists. Without symptoms, one can lead a perfectly normal life. However, expatriates must take precautions to limit contacts with the sick persons (cold, flu, gastroenteritis, etc.) that potentially could contaminate them. This will avoid them develop symptoms similar to Ebola, and stress that this can cause.
Upon their return, after a ***visit to Pasteur Institute*** for a medical checkup, it is requested to monitor their temperature for 21 days twice a day. = > This is their personal responsibility to signal any symptoms to the HQ Ebola focal point in case of doubt.

Widespread transmission in country

a. Before Expatriate departure:

During a widespread transmission in the country***, medical check and vaccination as well as full e-learning should be done before departure.***

- ***If the expatriate can pass by HQ in Paris,*** Pasteur Institute will manage vaccination and prophylaxis prescription.
- ***If the expatriate doesn't have Schengen visa and/ or can't pass by Paris, HQ will ensure the referral to the nearest country for medical check and vaccination. E-learning session will be send by email.***

Vaccination should be done at least 1 week before departure (to avoid risk of fever when arriving on the mission)
The recruitment and mobility officer will request for the E-learning to be planed in the departure request and the travel office is responsible on ensuring that the e-learning session is planned in the briefing planning.
Training department will then plan the e-learning session (2 hours and half).

Ebola Leaflet to be given by recruitment and mobility officer

Pasteur medical check-up**:** Specific vaccination to be done (refer to the Pre-departure technical note). Malaria prophylaxis should be brought by expatriate. In this situation, Pasteur institute will strongly advise expatriate to take ***malaria prophylaxis during the entire mission period***.

Note: Malarone as a prophylaxis cannot be taken more than 3 months. In this situation, Doxycycline should be prescribed by Pasteur institute.

FAQ on Ebola is to be given by the recruitment and mobility officer

b. During the mission period

There are some specific rules for breaks as mentioned in the previous chapter.
***Expatriate will have to follow specific safety measures*.** Please refer to SOP in Ebola Context

Insurance and evacuation procedures:

HR_Insurance and Evac.docx

c. End of mission

During the 21 days, there is no specific behavior to adopt, except, bearing in mind that the risk still exists. Without symptoms, one can lead a perfectly normal life. However, expatriates must take precautions to limit contacts with the sick persons (cold, flu, gastroenteritis, etc.) that potentially could contaminate them. This will avoid them develop symptoms similar to Ebola, and stress that this can cause.
Upon their return, after a ***visit to Pasteur Institute*** for a medical checkup, it is requested to monitor their temperature for 21 days twice a day. = > This is their personal responsibility to signal any symptoms to the HQ Ebola focal point in case of doubt.

At the beginning of the outbreak in WA in 2014, and during the peak of the epidemic, ***expatriates had a contract extended for 21 days***. The goal was to ensure insurance coverage when back from Liberia or Sierra Leone mission during the incubation period. It was also to ensure expatriate would be staying in a country able to manage EVD cases. They were still under paid contract from the mission and were supposed to work remotely for the mission during that time. Challenges were:
- Mission had to pay expatriate while they were not anymore on the mission and while replacement were already on the mission.
- Even though expatriate had specific ToR and Action plan for the 21 days, most of them didn't continue to work and didn't produce the different document they had to.

Decision of extended expatriate contract for 21 days should be taken by HQ and the mission concerned. In this case it is important to ensure ToRs are designed and the manager is responsible on following-up the expatriate work.

In 2015, while Sierra Leone didn't have any more active EVD transmission but was undertaking the countdown to arrive to Ebola Free, ***it was decided to stop the 21 days extension contract***. It was discuss to find alternative for expatriate especially for ACF-F contract (not covered by insurance after end of contract). The goal was also to ensure expatriate to be in a country able to manage EVD cases. One of the propositions was to have a list of countries where health facilities are not able to handle Ebola cases and propose to send the expatriate in the break reference place for 10 days (highest period of incubation risk). Finally it was not agreed and MSF insisted on the fact that if there is a risk period it is 21 days and not less. ACF decided at this time to just remove the 21 days.

Sheet 13: National Standard Operating Procedures in Ebola Context

National Standard Operating Procedures Ebola Context

Note:

The National Standard Operating Procedure (NSOP) is a set of written documents that describe in great detail the routine procedures to be followed for a specific operation or action.
This particular NSOP refers to Ebola context adaptations.

Insert content of SOP

Roles and Responsibilities

Country Director

- Maintain overall situational awareness of EVD context, & safety/security status of Mission.
- Provide updates regarding the context to Headquarters (HQ).
- Coordinate and plan for any medical evacuation procedure with support from Logistics Head of Department (HoD), Health and Nutrition HoD, Field Coordinator(s), and HQ.
- Liaise with embassies to declare their nationals, if needed.
- Report relevant information to AIG.

Health and Nutrition HoD

- Serve as **Mission Ebola Focal Point (EFP)** for any EVD-related concerns in the Mission.
- Reports of fever or risky EVD exposures should be reported to Mission EFP via Base EFP; Mission EFP will assist in monitoring the situation and make decisions for appropriate actions and measures.
- Maintain situational awareness for EVD and update the Coordination Team regularly.
- Participate in EVD-related decisions with the Country Director and other key staff, including recommending when to increase measures based on the situation.
- Work with the Logistics HoD to identify local health clinics that can provide care to ACF staff.
- Ensure EVD trainings are done and assist in providing EVD trainings to new staff as well as PPE refresher trainings to Personal Protective Equipment (PPE) Focal Points.
- Communicate with HQ as needed for technical input and to provide updates as needed.
- Liaise with other international NGOs such as MSF as needed to ensure that ACF's protocols are in line with other standard procedures.
- Support Log HoD in the maintaining of SOP.

Logistics HoD

- Monitor overall safety and security situation of the Mission in EVD context, including risk of aggressiveness, and adapt protocols as needed.
- Work with Mission EFP to identify local health clinics that can provide care to ACF staff, as well as potential facilities if EVD is suspected including the nearby Ebola Treatment Units (ETUs).
- Ensure that appropriate supplies are in stock and easily accessible for preventative measures and for the isolation room.

- Ensure that all ACF staffs have up-to-date emergency contact numbers, including those for the National Dispatch (***see Annex 1***).
- Ensure with mission EFP that adapted first aid kit are in place on the mission (offices, guest houses and cars). First Aid kits in Ebola context should always contain at least malaria Paracheck (SD bioline®) and treatment for Malaria (with Artesenuate).

Ebola Focal Points

- Field Coordinators will serve as main **Base Ebola Focal Point (EFP)** for any EVD-related concerns for base staff. A second EFP should be identified as well to back the Field Coordinator in case of absence.
- At Coordination office, the Ebola Focal Point is the Mission EFP (in case of absence, Country Director will be the EFP for the Coordination Office)
- Reports of fever or risky EVD exposures should be reported to the Base EFP immediately by staff. The Base EFP will monitor the situation and consult with the Mission EFP regarding appropriate actions and measures.
- Ensure the appropriate prevention measures are implemented by staff based on the situation.
- Ensure that PPE Focal Points are trained as needed.
- Ensure that an up-to-date **list of PPE FPs is maintained**.
- Follow instructions and communication channels as indicated in ***Annex 2***.
- Share EVD updates with the team on a weekly basis or whenever relevant. **The mission EFP is responsible on communicating with Base EFP** on what update should be done. **If a shift in situation occurs, leading to adjustment of protocol in place, this should also come from Mission EFP (in collaboration with Log HoD and CD).** This communication includes a repetition of the prevention measures and encouraging local staff to share information regarding EVD coming from their communities (disease and security wise).

Personal Protective Equipment (PPE) Team

- Note that this responsibility is on a voluntary basis.
    - A minimum of 5 PPE team members (with inclusion of a low-risk sprayer) per base is recommended for proper coverage and back-up management of potential Ebola case among staff.
    - If staff member no longer wishes to serve in this role, they should inform the Base EFP.
- PPE team member must complete initial and regular refresher trainings for correct donning and doffing and use of PPE for EVD.
- The isolation room will not be activated in Situation A and B, however PPE team should be ready in the event that ACF isolation room is activated in Situation C.

Operational measures and Scenarios

Based on the epidemiological situation for EVD, different operational measures can be implemented and are intended to be flexible in order to be scaled up or down. There are three (3) situations that will be used to base preparedness and response activities upon. For any given situation, **the context should be monitored closely in order to identify escalation and to prepare for transitioning to the next phase.** The mission EFP (in coordination with Log HOD and CD) is responsible on monitoring the change of situation.
Refer to Annex 11, security level table to define security level.

Situation A: Local hotspots identified in country, far from ACF operations

*Security level 1**[27]

Situation B: Identified active transmission of EVD nearby one of ACF operation sites
Security level 2

Situation C: National active epidemic in country
Security level 3 and above

Note: *Although little emphasis will be placed on this, the possibility of EVD occurring even with no transmission ongoing in-country should be kept in mind. If at any point EVD is suspected, see protocols for case management (Annex 2 and 4).*

Aside from outbreak events, ***refresher trainings should be done every 6 months for base EFP and PPE team.***

SITUATION A: LOCAL HOTSPOTS OUT OF ACF OPERATION AREAS

In Situation A, ACF staffs are not directly exposed to the virus. The base shall continue its operational activities while all Base and Mission EFP will keep an eye on Ebola's evolution. There shall be a small time allocated to security information during Base meetings.

In situation A main actions are related to preparedness:

- List of PPE team should be updated and training on both correct use of PPE and the isolation room (***Annexes 7 and 8***) should be done if the last training was done more than 4 months ago.
- An ***isolation room should be established*** and maintained to include limited furnishings and supplies: a bed, chair, buckets, absorbent pads, bed linens, pillow, and a log book and pen. Additional supplies (see ***Annex 6***) should be maintained in stock and easily accessible.
- ACF recommends to its entire staff to attend personal burials only under safe practices conditions.
- In the event that a staff member has a fever and/or 3 or more EVD symptom, refer to situation B ***and annexes 3 and 4.***
- Basic hygiene measure should be followed as usual (regular hand washing for every staff)

SITUATION B: LOCALIZED ACTIVE TRANSMISSION OF EVD NEARBY ONE OF ACF operation sites

In Situation B, the following measures should be put into place to ensure ACF is prepared and taking appropriate precautions. Any transmission in-country requires heightened awareness, but particularly in counties of or bordering operations; these specific measures are detailed below. The measures listed below are considered to be sufficient standards; however, additional precautions or actions may be taken as needed.

Note: In Situation B it is **recommended** for ACF staff to take Malaria prophylaxis during rainy season. However it is **mandatory for visitors.**

Note that while a country is on "countdown to Ebola Free" (42 days starting when the last case is released from ETU) it should stay in Situation B (If the mission was already in Situation B or C).

[27] Security levels as per ACF standards range from 1 to 5. A table was developed to support identifying the security level regarding different criteria (Annex 11)

1. "No Touch" Policy:

- **NOT** set in place during Situation B **BUT Compulsory for any field operations in** communities with ongoing transmission.
- Field Coordinator should convene weekly meetings with all base staff to inform them of the situation and remind them of precautionary measures to employ while working in the community.
- General hygienic practices should be reinforced and implemented (*see IPC below*).
- ACF staff should not attend to or have direct contact with sick persons.
- ACF recommends to its entire staff to attend personal burials only under safe practices conditions.

2. Asymptomatic Staff with a Risky Exposure

- Any possible risky exposure (see ***Annex 3***) should be reported to the ***Base EFP***
- Base EFP will conduct further investigation to gather details regarding the exposure to assess the level of risk, and consult with the Mission EFP.
- All ACF staff should have their personal thermometer with them during active transmission risk. They should be sensitized on the alcohol cleaning of the thermometer if shared with other family members. However, Base EFP should provide staff member with an oral thermometer from stock supply if he/she does not have one.
- If it is determined that **there was a high level of risk**:
    - Staff member should self-monitor for 21 days. This entails staff member to take twice daily temperature, remaining aware of condition and onset of other symptoms, report any change in condition, and be advised to self-isolate immediately if feels ill.
    - The Base EFP should advise the staff member to immediately call if condition worsens.
    - If the staff member develops 2 or more symptoms, related to Ebola, see ***Section 3*** below (***Annex 2***).
- If it is determined that **there was little but not zero level of risk**:
    - The staff member should self-monitor for 21-days. This entails the staff member to take twice daily temperature, remaining aware of condition and onset of other symptoms, report any change in condition, and be advised to self-isolate immediately if feel ill.
    - The Base EFP should advise the staff member to immediately call if condition worsens.
    - If the staff member becomes ill, see ***Section 3*** below.

3. Sick/ill ACF Staff (Cf Annex 4):

- In the event that a staff member has a fever, he/she should immediately report this to Base EFP, regardless of any other symptoms, but should also report additional symptoms.
- The Base EFP should ask the ill staff member about risky exposures (defined as direct contact with a probable or confirmed case; funeral attendance; or direct contact with an ill person in a community with ongoing transmission) within the past 21 days.
- If ill staff member has had a ***risky exposure and any symptoms*** (fever alone or fever + 3 symptoms), the Base EFP should immediately inform the Mission EFP.
    - If the staff member is a national staff:
        - And falls ill at the office**, Base EFP will call an ambulance immediately**
        - And falls ill while at home, the staff member will have to call an ambulance and move from home to the ETU
    - If the staff member is expatriate staff:
        - Base EFP informs CD who will connect with the medical insurance from HQ
        - An ambulance is called by Base EFP for base expatriates, and Mission EFP for coordination office-expatriates. Follow then the recommendation from AIG insurance.
- If ill staff member ***did not have a risky exposure but has any symptoms***, the Base EFP should refer the staff to one of the recommended health clinics (see ***Annex 5***) to seek diagnosis and treatment, and advise the staff to stay at home during their illness.

- Base EFP will check on ill staff member once a day to ask about temperature and other symptoms. This should continue until the staff member recovers and can return to work.
- If at any point ill staff member has fever + 3 symptoms, Base EFP should inform Mission EFP, and the staff member should be instructed to self-isolate and wait for ambulance.

- ***Regardless of risk level, if a staff member has a sudden onset of fever + 3 symptoms*** while in the field, the ill staff should immediately notify Base EFP.
  - Base EFP will notify Mission EFP for further consultation.
  - An ambulance should be called accordingly.
  - While waiting, the staff member:
    - If a clinic with a triage and isolation room is nearby and the staff is able to walk he/she should wait here
    - If no triage and isolation room nearby, self-isolated while waiting for an ambulance

4. ACF Isolation Room

- The isolation room ***may not*** be used during Situation B, however needs to be prepared and activated in prevention of any situation that would require a staff temporary self-isolation in ACF compound while waiting for ambulance.
- Logistics should ensure that the isolation room is ready for use by having minimum furnishings and supplies: a bed, chair, buckets, absorbent pads, bed linens, pillow, chlorine, and a log book and pen. In addition to readily available water, ORS and biscuits.
- Logistics should verify that all additional supplies (see ***Annex 6***) are in stock and easily accessible.
- Base EFP should notify PPE FPs that they may be activated.
- PPE FPs should be familiar with the room and appropriate protocols and supplies; if it has **been longer than 4 months** since the last training, refresher training should be provided on both correct use of PPE and isolation room.

5. Infection Prevention and Control (IPC)

- All staff will use handwashing buckets with soap before entering the office.
- All staff will use hand sanitizer when entering a vehicle.
- All staff, if traveling to the field, must carry and use hand sanitizers regularly (including before entering and leaving the community, etc).
- Staff members that work in the community of active transmission:
  - Should only work here if this in response to the outbreak[28]
  - ***Should follow the "No Touch Policy" while in the community***
  - Should wear closed shoes while going on the field
- Logistics should verify that all guesthouses and cars are equipped with hand sanitizers.
- If the context begins to escalate, Logistics should assess whether increased stock should be procured (i.e. chlorine, buckets, etc) to prepare for Situation C.

6. Vehicles and Drivers

- Logistics will verify that all vehicles are equipped with a basic first aid kit, hand sanitizer, and light PPE.
- Drivers will remind any passenger entering the vehicle to use hand sanitizer.
- ***No community members will be allowed in cars.***
- No sick staff member in the cars unless validated by Base EFP*

[28] This will also depend on activities and positioning

*** EFP will determine whether an ambulance can handle such situation or if we need to adapt with immediate response.**

7. Office Guards

- All guards must enforce the usage of the handwashing buckets with soap by all staff and all visitors entering the compound, including themselves, during rotations.
- All guards should be reminded to check the temperature of everyone entering the premises – including drivers driving on to the premises. ***Training on thermometer management should be ensuring by Logistic department and material should be tested regularly.***
- In the event a thermometer or other medical materials are needed, guards can refer to the office medical kit located in the logistics office (coordination) and admin/log office (base).

SITUATION C: National or wide spread EVD within the Country

Criteria to go from Situation B to Situation C.:
As soon as active transmission is on-going in more than one community AND/ OR as soon as there are at least 2 counties reporting active transmission.

Note: During situation C. it is ***mandatory for ACF staff and visitors to take malaria prophylaxis***.

All requirements indicated above in situation B. will apply to all ACF bases and during inter-bases movements. On top of that:

1. ACF "No Touch" Policy

- **ACTIVATED** during Situation C ***including at the office and at the guesthouse.***
    - The Field Coordinator should convene a meeting with all base staff to inform them of the situation, remind them of precautionary measures, and be advised to employ a 'No Touch' policy (see ***Annex 8***) at all times.
- ACF staff should avoid large gatherings, crowded markets, etc. Logistics should determine no-go areas, curfews, reduce visibility if appropriate.

2. ACF Isolation Room

- The isolation room ***will*** be intended for use during Situation C based on a fever alone or fever + 3 symptoms, regardless of exposure level.
- Logistics should ensure that the isolation room is ready for use by having fully-stocked furnishings and supplies: a bed, chair, 4 buckets, 4 buckets with faucet, absorbent pads, disposable gloves, 3 (120L) waste buckets with heavy duty trash bags, bed linens, pillow, biscuits, drinking water, ORS and a log book and pen.
- Logistics should verify that all additional supplies (see ***Annex 6***) are in stock and easily accessible.
- The Base EFP should notify PPE FPs that they may be activated.
- PPE FPs should be familiar with the room and appropriate protocols and supplies; if it has been longer than **two (2) months** since the last training, refresher training should be provided on both correct use of PPE and the isolation room.
- Needs for additional refresher trainings should continue to be re-assessed, and should be conducted every 2 months during Situation C.
- Mission EFP will need to confirm with MSF their availability to support ACF in decontamination of the isolation room
- Waste management : when the isolation room is activated, it has to be confirmed with an ETU that potential contaminated waste can be brought to the ETU incinerator

3. Vehicles and Drivers

- Only in Situation C, or because of total saturation of ambulances in the area ACF is working, the use of ACF vehicles as "ambulances" may be considered.
- This setup remains exceptional and drivers need to be fully aware of the risks + accepting them beforehand with Base EFP.
- In that case, ***if*** a car is used to transport an ill staff member:
    - A plastic barrier will need to be placed behind the driver
    - Driver remains in the car while ill staff member enters and exits; he will be wearing a face mask to protect himself for prevention
    - Ill staff member takes place in the back of the car
    - The vehicle will need to be sprayed with chlorine water (0,5%) after transporting a sick staff member

Evacuation procedures

Sanitary evacuation (non-Ebola related)

AIG will guarantee medevac.

Sanitary evacuation (Ebola related)

AIG has developed since the beginning of the Ebola outbreak in 2014 means to take care of medical evacuation (medicair planes).
Isolation will be guaranteed locally through national standards.
Treatment will be ensured locally or by medevac (It will be negotiated case by case at mission and HQ level). As back up to the insurance the European Union developed Evacuation protocols that ACF can also use.

Preventive Sanitary evacuation (Ebola related)

In case of suspected contact, it can be decided to evacuate an expatriate within 48 hours. He would stay in hospital observation during the 21 days of incubation. This evacuation is organized by AIG.

Note: for a faster realization of sanitary evacuations, it is recommended for every expatriate to hold a valid Schengen visa. However as this can be difficult, evacuation could be eventually done in the nearest country of residence able to manage potential Ebola case.

Key HQ contacts

Regional Director of Operations	XXX	XXX XXX@actioncontrelafaim.org
Missions Security Officer	Anne-Céline OKONTA	+33 6 82 77 61 31 aokonta@actioncontrelafaim.org
Operation Logistics Adviser	XXX	XXX XXX@actioncontrelafaim.org
HQ Psychologist	Marianne KEDIA	mkedia@actioncontrelafaim.org
HR support	Isabelle LAMBRET	ilambret@actioncontrelafaim.org
Ebola Focal Point	XXX	XXX@actioncontrelafaim.org

ANNEX 1: List of Emergency Phone Numbers

LIST OF EMERGENCY PHONE NUMBERS

Distribute the National Dispatch phone numbers to all staff.

Note: If the ill person has had contact with an EVD case, alert Dispatch Centre that this is a "*Probable case*":

1)	**National Dispatch:**	**XXXXXXXXXX**
2)	**For potential EVD case:**	**XXXX**
3)	**Health facility:**	**XXX**

ANNEX 2: Ebola Focal Point

EBOLA FOCAL POINT
STEPS & INSTRUCTIONS for CASE Management

1/ An ACF staff reports any health symptom:

- I take note: as long as it's not up to the Ebola alert risk, I inform the person to keep a normal life but follow up closely on any future symptoms
- Informs sick staff to closely monitor temperature on daily basis (once to twice)
- Check up on sick regularly, depending on symptoms and potential exposure history
- If more than 3 symptoms, I activate the "Case Management alert"

2/ CASE Management

- Keep minimum health distance with sick person, minimum of 2 meters
- Maintain social communication and psychological care as much as possible with the sick
- Direct him/her toward the Isolation room to access a bed and some rest
- With all following steps; inform the sick about all ongoing steps

3/ Medical steps for patient

If local staff:

- Contact the local medical reference
- Assess the risk of Ebola and medical needs recommended
- Contact the Health facility according to medical advice
- Ensure that 2 ACF staff in PPE kit take care of the sick on regular basis (every 2 hours)
- Coordinate Ambulance movement to pick up ACF staff
- Contact the staff's family

If expatriate:

- Contact AIG medical reference
- Assess the risk of Ebola and medical needs recommended
- Ensure that 2 ACF staff in PPE kit take care of the sick on regular basis (every 2 hours)
- Inform Coordination team (Country Director)
- Coordinate Ambulance movement to pick up ACF staff
- Forward care's responsibility to Coordination/HQ

4/ Cleaning & securing of premises (in coordination with MSF or other medical NGO)

- After any medical alert and Isolation room positioning of staff, whatever the symptoms, the EFP will ensure the cleaning of the room with PPE Kit:
  - 2 staffs within the room
  - 1 staff outside for undressing control
- Destruction of sheets and any exposed linen.
- Establish the contact list of sick person, within ACF premises or his/her family
- Inform the base (all staffs)

5/ Reporting

- For every single Ebola suspected case, fill in the Medical Alert Report
- Share that report systematically with Coordination and HQ

ANNEX 3: Ebola Symptom List and definition of "risky exposure"

EBOLA Symptoms list and risk exposure definition

- Fever (≥38° Celsius)
- Severe headache
- Muscle pain
- Weakness
- Fatigue
- Diarrhea
- Vomiting
- Abdominal (stomach) pain
- Unexplained hemorrhage (bleeding or bruising)
- Loss of appetite/anorexia
- Unusual behaviors/mental state

Symptoms may appear anywhere from 2 to 21 days after exposure to Ebola, but the average is 8 to 10 days.

A sudden onset of (1) fever plus unexplained hemorrhage OR (2) fever plus 3 of the above symptoms constitutes the suspect EVD case definition.

Definition of "Risky Exposure to EVD":
A risky exposure for EVD is defined as any of the following:

- Direct contact with a suspect, probable, or confirmed case
- Direct contact with an ill person in a community with ongoing transmission
- Direct contact with the bodily fluids of a probable or confirmed case
- Direct contact with an ill person in a community with ongoing transmission
- Attending a funeral where unsafe burial practices may have occurred (including directly touching the decedent's body)
- Sharing utensils or household with a probable or confirmed case
- Direct contact with contaminated objects associated with a probable or confirmed case

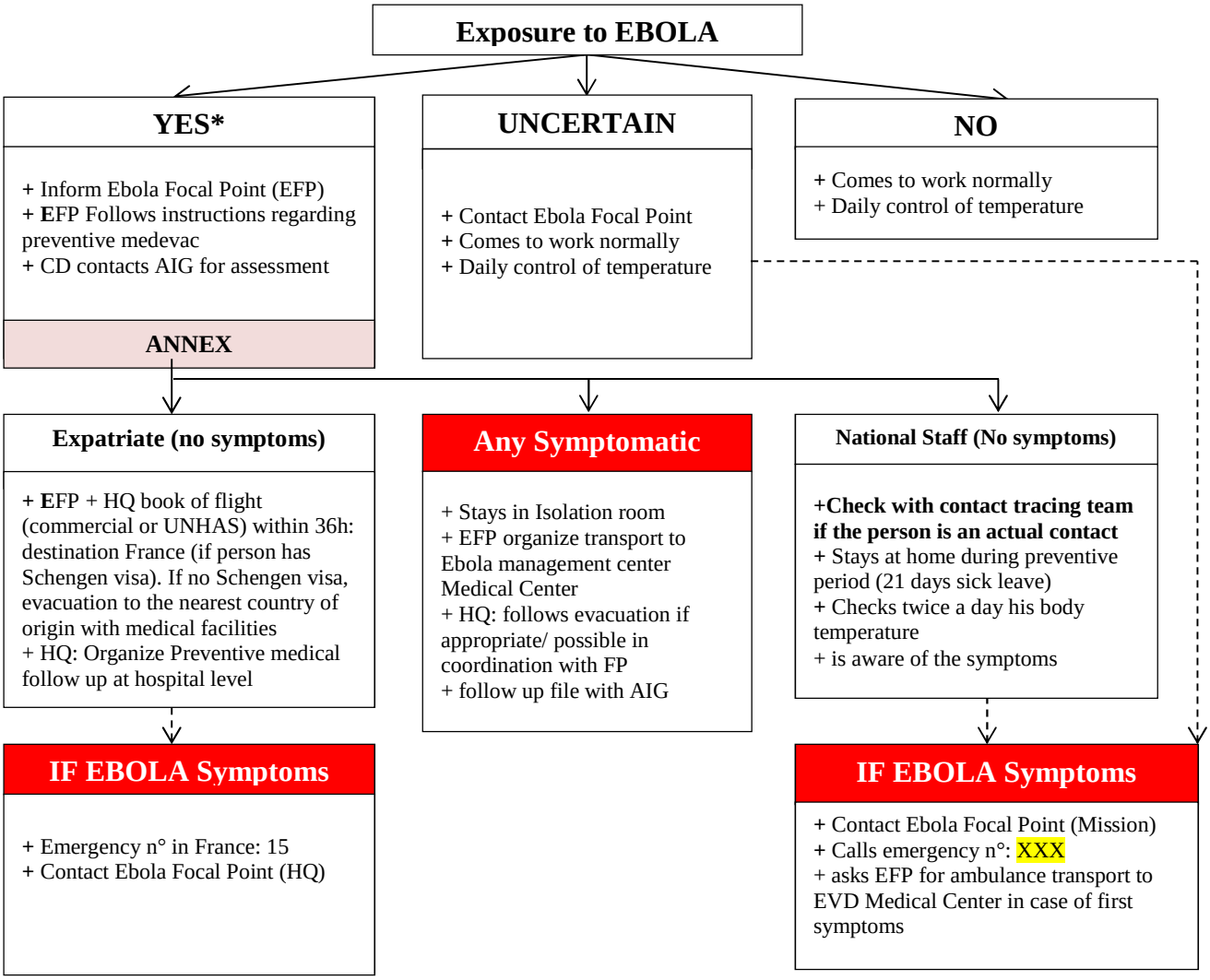
Note that for all of the above risky exposures, a context in which EVD transmission is occurring is important.

Additionally, in a context with no EVD transmission, the following are low but potential risks:

- Unprotected sexual contact with an EVD survivor
- Killing or preparing potentially contaminated bush meat, including bat or monkey/ape

ANNEX 4: Procedure in case of suspect contact

Procedure in case of suspect contact



ANNEX 5: List of Facilities for Referral

List of Facilities for Referral

Name: XXX
Address: XXX
Phone Number: XXX

Name: XXX
Address: XXX
Phone Number: XXX

Name: XXX
Address: XXX
Phone Number: XXX

ANNEX 6: Supply Stock and Material for Isolation Room

Supply Stock and Materials
ISOLATION ROOM

At all times, the following items should be available **in stock**:

a) PPE kits:
    1. Reusable surgical scrub pants
    2. Reusable surgical scrub shirts
    3. PPE Microgard overalls
    4. Rubber boots
    5. PPE reusable aprons
    6. Respiratory protection masks
    7. PPE disposable microgard hoods
    8. Latex examination gloves
    9. Rubber gloves
    10. Goggles
b) Absorbent pads
c) Heavy duty trash bags (120 L)

At all times, the following items should be available **in the isolation room**:

a) Plastic, small, table
b) Cot
c) Absorbent pads
d) 2 buckets for human waste
e) Water, ORS and biscuits for the patient

At all times, the following items should be available **in the doffing area**:

a. 2 buckets with faucet
    i. 1 with 0.5% solution
    ii. 1 with 0.05% solution
b. 2 buckets (to catch water from buckets with faucet)
c. 2 big trash buckets (120 L)
    i. 1 with two trash bags in it

ANNEX 7: DONNING AND DOFFING PPE

Procedure – Dressing in Full PPE

When donning PPE, follow these steps as well as considerations below:

1. Put on first pair of gloves
2. Step into coveralls, leaving shoes or boots on. Roll the hood around the neck if needed. Use loops to secure the sleeves to your hands. There should be no space between the sleeve and the glove.
3. Put on mask/ respirator
4. If using, put on a surgical bonnet.
5. Break a slit in the mask of the hood, and then don it, pulling the respirator through the slit. Tie all ties securely.
6. Put on apron securely, overlapping with the hood
7. Put on goggles – the edges should all overlap with the hood or respirator edges.
8. Put on the second pair of gloves; nitrile gloves for hygienists and surgical gloves for medical staff.
9. Check in a mirror if possible – if no mirror available, the low risk sprayer will verify that the PPE is all intact and no skin is showing, making sure the hood comes down to your shoulders and that it goes over your eyebrows.
10. The low risk sprayer should note the time that the team has donned, in order to monitor the time in the PPE.

Additional Considerations:

- Drink as much fluids beforehand as possible to stay hydrated!
- Always prepare all the material you might need as well as the plan of care (who is your buddy, what are you going to do, where and to whom) before you start dressing up in PPE.
- You should be able to see the 4 corners of the hood inside the goggles.
- Before entering together, check the dressing of your buddy and ask him to check yours.
- Be aware that you might be sweating so much that liquid will collect in your gloves and give you the impression that there is a hole in your glove or that you are bleeding.

How to dress PPE ?

0. Low risk area outfit

- Surgical tunic & pants
- Disposable gloves
- Rubber boots

1. High risk area

Put on :

- Long sleeves disposable coverall
- Secure the fingers in the loops

2.

Put on :

- Respirator

3. Tear the outer mask to allow respirator through

Put on :

- Protective hood

4.

Put on :

- Rubber apron & attach in the back

5. Put on :

- Goggles

6. **Put on :**

- A second pair of gloves (surgical for MED staff)

OR

6' **Put on :**

- A second pair of gloves (rubber for WATSAN staff)

7.

- Make sure all parts of skin are covered
- Peer check before entry

Procedure--Undressing from Full PPE

This procedure should be followed anytime that PPE is removed. The person who is undressing is assisted by the low-risk sprayer, who uses 0.5% chlorine for disinfection. The low-risk sprayer should actively coach the person who is undressing.

1. Approach undressing area.
2. Wash hands thoroughly in 0,5% chlorine solution.
3. Stand with the arms elevated at 90˚, hands above elbows. Spray the front of the body.
4. Turn, and in the same position, spray the back of the body.
5. Wash hands thoroughly in 0,5% chlorine solution.
6. Remove first gloves. Hygiene gloves should be bundled, sprayed, and placed in the container for reusable PPE. Surgical gloves to be thrown into the rubbish bag.
7. Wash hands thoroughly in 0,5% chlorine solution.
8. Remove apron, being careful to bundle it into a compact ball. Spray and then place into the container of reusable PPE.
9. Wash hands thoroughly in 0,5% chlorine solution.
10. Leaning forward, carefully remove goggles away from face, making sure not to catch the elastic band. Spray and place it into the container of reusable PPE.
11. Wash hands thoroughly in 0,5% chlorine solution.
12. Remove hood by tearing the ties and carefully peeling off of the head, leaning forward. If wearing a bonnet, remove at the same time. Throw in the rubbish bag.
13. Wash hands thoroughly in 0,5% chlorine solution.
14. Unzip coverall, being mindful not to touch the inside of the neck with a gloved hand.
15. Wash hands thoroughly in 0,5% chlorine solution.
16. Remove coverall by sliding your washed hand inside the coverall on each side. Once pushed down to the boots, remove from the feet without touching. Push towards the low risk sprayer to be disinfected, then gather into a bundle while touching only the inside parts. Place into rubbish bag and put into the bag.
17. Wash hands thoroughly in 0,5% chlorine solution.
18. Remove respirator by leaning forward and pulling away from face. Place in rubbish bag.
19. Wash hands thoroughly in 0,5% chlorine solution.
20. Remove the final pair of gloves without touching the outside with bare skin. Place in rubbish bag.
21. Wash hands thoroughly in 0,5% chlorine solution.
22. Stand with one aspect of feet facing the sprayer so that the boots may be sprayed. Turn feet so that the other aspect may be sprayed.
23. Turn to spray the bottom of each foot one by one and step carefully off of the plastic sheeting.
24. Wash hands with 0.05% chlorine solution. Rinse or wash with soap and water if desired.
25. Drink water.

How to undress PPE ?

ANNEX 8: ISOLATION ROOM PROTOCOLS & FLOW

Upon notification of ill staff member meeting the criteria to be placed in the isolation room per above specifications, the following steps must be followed:

Preparation upon Notification:

1. Base EFP notifies staff as needed and opens isolation room building
2. PPE FPs ensure bed and buckets are ready for patient in isolation room
3. PPE FPs don PPE in specified area and perform buddy checks
4. Low risk sprayer dons light PPE
5. Low risk sprayer prepares 0.5% and 0.05% chlorine solutions and waste containers
6. PPE FPs wash gloved hands with 0.05% chlorine solution before entering isolation room

In Isolation Room:

1. 2 PPE FPs provide only supportive care for patient
2. Follow precautionary measures, including:
    a. Standing at least one arm length away from buddy and always keep an eye on him/her;
    b. Paying attention to signs of overheating and do not run; and
    c. Disinfecting gloved hands with 0.5% chlorine solution after touching patient and each time you touch something that might be contaminated
3. If any accidental exposures occur, follow the instructions in ***Annex 9***
4. Provide updates to patient on status of ambulance
5. PPE FPs can rotate in/out as needed, but after no more than 30 minutes in the room, to check in on patient while waiting for the ambulance
6. Each time the 2 PPE FPs leave the room, they should doff PPE using the appropriate measures

Upon arrival of Ambulance:

1. The last PPE FPs will need to decontaminate the room wearing full PPE and a sprayer for cleaning a recently-emptied room
2. Upon decontamination of the isolation room, the remaining PPE FPs will leave the room and doff PPE using the appropriate measures
3. All waste should be disposed of appropriately

ANNEX 9: ACCIDENTAL EXPOSURES WHILE IN ISOLATION ROOM

While working in the isolation room, PPE FPs should take the following steps in the event of an accidental exposure. An accidental exposure includes the following:

- Any puncture, laceration or abrasion caused by a potentially contaminated object
- Unprotected contact with patient's body or body fluids, or other potentially contaminated material

Do not panic. Try to remain calm and follow these steps:

A. Any puncture, laceration or abrasion injury caused by sharp, potentially contaminated object

- Immediately immerse the exposed site in 0.5 % chlorine solution for 3 minutes
- Leave the high risk area with respecting the undressing rules (a new pair of gloves should be put on* before undressing in case exposure took place at the gloved hands. Otherwise after disinfection the wound may come in contact with contaminated PPE when undressing!)
- If another pair of gloves needs to be put on, follow these steps at the undressing station:
    - Wash hands with 0.5% chlorine solution
    - Take off outer pair of gloves
    - Wash hands with 0.5 % chlorine solution
    - Remove the elastic band around fingers
    - Wash hands with 0.5 % chlorine solution
    - Put on a new pair of inner gloves (to be given by sprayer) over the broken gloves
    - Wash hands with 0.5 % chlorine solution and continue undressing following the normal procedure
    - In the final step – when removing the gloves – both gloves (new and old broken pair) are removed
- Thoroughly wash affected area with soap and clean water
- Flush with clean running water for 30 seconds
- Apply dressing if required outside the high-risk area
- ***Report it to the Base EFP***

B. Unprotected contact with Ebola patient's body or body fluids, or other contaminated material

- Contact with the eyes
    - Immediately flush the affected eye with copious amounts of non-chlorinated clean water, ringer lactate or sodium fluid
- Contact with the mouth or nose
    - Immediately rinse the mouth or nose with 0.05 % chlorine solution for three minutes. Do not swallow the chlorine solution
    - Rinse mouth or nose thoroughly with clean water
- Contact with broken skin
    - Rinse the affected area with 0.5 % solution
    - Thoroughly was the affected area with soap and clean water

ANNEX 10: DECONTAMINATION PROTOCOL

After the patient has left the isolation room, the room will need to be decontaminated

Materials needed:

- Sprayer 0.5%,
- black garbage bags,
- absorbent pads (min 3)
- cup/jar
- bucket with 0.5%

1. The team should consist of two people: one sprayer and one assistant
2. The sprayer does not touch anything in the room and is solely responsible for spraying
3. Any personal belongings of the patient that are left behind should be places in a plastic bag and burned: **ABSOLUTELY NO EXCEPTIONS!**
4. The bed sheet should go in a heavy duty trash bag for burning.
5. Inspect mattress: spray and let dry in the sun.
6. Disinfect the bed, bring outside to dry in the sun.

a. Bed and mattress are left outside for 24 hours. After that, they should be placed back into the room.

7. Spray the bed, windows, walls, and the whole floor with 0.5% chlorine solution.
8. Spray the bathroom if used by the patient
9. Exiting the isolation room is done by spraying the floor walking backward on the path towards the front of the building, including walls and floor in the hall
10. The rubbish bag is sprayed over and closed.

Cleaning up spilled bodily fluids:

Procedure:

1. Pour gently around and on top of the spill with 0.5% chlorine solution using cup
2. Place absorbent pads on top of spill wait 15 minutes (meanwhile see if there are more things to be done)
3. Spray the area where you plan to place garbage bag and place the garbage bag
4. Remove the soaked absorbing pad and dispose in the garbage bag
5. Wash/spray your hands
6. Repeat placing absorbing pad and removing till the floor is free from any organic matter (in each step wash your hands)
7. Spray over the garbage bag
8. Wash/spray your hands and close the garbage bag
9. Wash/spray your hands, pick the closed bag and spray around.
10. Transport to waste zone
11. Spray the cleaned surface with fine layer of 0.5% chlorine solution
12. Waste materials should be bagged heavy duty bag and transported to the waste zone at the nearest ETU (after agreement) for incineration

ANNEX 11: SECURITY LEVEL TABLE

	1	2	3	4	5
WHO level	*Level 1*	*Level 2*	*Level 3*	*Level 4*	*Level 5-6*
Number of cluster	*1*	*1*	*2*	*More than 2*	*More than 2*
Proximity of clusters	*Border / forest*	*Rural areas*	*Regional urban centres*	*Capitale*	*Generalised*
Cases tracing	*Done and contained*	*Done and contained*	*Done with difficulties: people refuse quarantine, hide bodies…*	*Done with difficulties: aggressiveness against health workers*	*Out of control*
Borders control	*No restrictions*	*Ground borders closed*	*+ checking at airports*	*+ decrease of number of companies flying to the country*	*Quarantine*
Market price / products availability	*Everything normal*	*Some products not available*	*Increase of prices on basic items*	*Increase of prices and shortage of basic items*	*Markets closed, impossible to get basic items*
Security	*Situation quiet*	*Some localised tensions due to Ebola fear*	*Localised violence mostly against state representations*	*Aggressiveness against health center and NGOs*	*Riots*
Internal movements within the operational areas	*No restrictions*	*No restrictions*	*Control of movements : check points*	*Some areas are closed for movements; NGOs circulate with difficulties or restrictions.*	*No movements allowed*

ANNEX 12: Medical Alert Report

Medical Alert Report

Mission XXX

Report Prepared by	Name:	Position:	
	CD name: XXX	Ebola focal point: name: XXX	
Contact number in the mission:			
Attention	DRO:	XX	XXX@actioncontrelafaim.org
	RLO:	XX	XXX@actioncontrelafaim.org
	Security adviser:	Anne-Céline Okonta	aokonta@actioncontrelafaim.org
	Psychological support	Marianne Kedia	mkedia@actioncontrelafaim.org
	Technical Ebola referent:	XX	XXX@actioncontrelafaim.org
	Other		
Date of the alert: ___/___/___		Time:_____	

Expatriate No EVD Symptoms ☐ National employee No EVD Symptoms ☐
Expatriate With EVD Symptoms ☐ National employee With EVD Symptoms ☐

Description……
……..
……..

Confirmed exposure ☐ Uncertain exposure ☐ No exposure ☐

Level of risk of transmission evaluation done by:
Time:

☐ Mission contacted AIG for assessment
☐ Mission alerted the HQ (DRO, Security advisor, psychological support)

Remove non relevant parts

1- Preventive international evacuation

☐ Movement of the expatriate to the capital. Date…… Mean ……..
☐ International flight Day and Time …… Company…..……...Destination…….
☐ Preventive medical follow up at hospital level at destination
Place……..
Description……
……..

2- Medical observation on the mission

☐ Stayed at home during preventive period of ….. days in paid leave/ non paid leave
☐ Came to work normally
☐ Stayed in Isolation room from ……. To …….
Description of the interaction with the person and evolution of symptoms ……
……
…….

Checked his body temperature:
☐ twice a day
☐ daily

☐ Contact with local medical referent……done by ……..
Summary of discussions and conclusions……
……..

☐ Transported to EVD Medical Center ……..
Time…….. Means of transportation…….

3- International medical evacuation

☐ International EVD evacuation organised by HQ in coordination with mission
Description ……
……
……..
……
……

☐ International non-EVD evacuation organised by HQ in coordination with mission
Description ……
……
……..
……
……

Missions reactions and measures following the alert:
☐ Programs:
☐ External communication:
☐ Internal communication:
☐ HR measures:
☐ Security measures:
☐ Others:

Alert follow up
☐ Desinfection of isolation room done by ……..
☐ Desinfection of car done by ……
☐ Other…….

Analysis and lesson learnt……
……
……..