ZIMBABWE EBOLA VIRUS DISEASE PREPAREDNESS AND RESPONSE PLAN









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MINISTRY OF HEALTH AND CHILD CARE 2014



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Foreword

The Ebola Virus Disease (EVD) which was first reported in West Africa in March, 2014, has seen cases and deaths increasing, with a cumulative figure of 6553 cases and 3083 deaths (CFR 47%) as of 23 September, 2014. Nigeria has had an outbreak caused by an imported case, and this has led to 20 cases and 8 deaths being reported, and Senegal with 1 case and no death. There is also another outbreak in Congo DRC which is not linked to the current outbreak in West Africa.

This outbreak is threatening regional and global security. Despite the great effort being made by individual countries and various agencies, including WHO, the outbreak has continued to spread unabated, posing a threat to neighboring countries and to the region as a whole. This has prompted Zimbabwe to respond by putting in place this National Ebola Virus Disease (EVD) Preparedness and Response Plan.

The development of this plan by my Ministry is critical to the country's preparedness given the global threat of the current situation in West Africa. Zimbabwe has never experienced any Viral Hemorrhagic Fever (VHF) outbreak in the past and is not yet affected by the current EVD outbreak raging in West Africa. This plan will prepare and guide the country in the event that we experience cases of EDV.

This plan is targeted at all levels of the health delivery system including partners and the community. It spells out what needs to be done at each level from the community to national, which resources are required and how they will be mobilised and utilised. There is need to strengthen coordination mechanisms and put in place procedures, institutional capacities including budgets, skilled personnel, communication strategies that can reduce the risks of the introduction and spread of EVD in Zimbabwe.

This plan focuses on the following thematic areas: surveillance and case detection including port health and laboratory confirmation, case management, infection prevention and control, social mobilization, coordination and logistics. This document is dynamic in that its focus may be adapted according to the prevailing situation at that particular moment. It will be operational for a period of between 6 to 9 months starting from September 2014.

I am confident that my Ministry with the support of partners and stakeholders will achieve the objectives of this plan.

Brigadier General (Dr) Gerald Gwinji

Secretary for Health and Child Care

Promulgation

Approved

Brigadier General Dr. G. Gwinji

Secretary for Health and Child Care

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EBOLA VIRUS DISEASE PREPAREDNESS AND RESPONSE PLAN 7

Executive Summary

The Ebola virus Disease (EVD) which was first reported in West Africa in March, 2014, has seen cases and deaths increasing, with a cumulative figure of 6553 cases and 3083 deaths (CFR 47%) as of 23 September, 2013. Nigeria has had an outbreak caused by an imported case, and this has led to 20 cases and 8 deaths being reported, and Senegal with 1 case and no death. There is also another outbreak in Congo DRC which is not linked to the current outbreak in West Africa.

This outbreak is threatening regional and global security. Despite the great effort being made by individual countries and various agencies, including WHO, the outbreak has continued to spread unabated, posing a threat to neighboring countries and to the region as a whole. This has prompted Zimbabwe to respond by putting in place this National Ebola virus disease (EVD) Preparedness and Response Plan.

The Zimbabwe national Ebola virus disease (EVD) Preparedness plan focuses on the following thematic areas: case management; surveillance; port health; laboratory confirmation; health promotion; infection control; coordination and logistics. The International Health Regulations (IHR) 2005 is critical in how international travel will be controlled. In this regard, this Ebola EPR plan will be guided by the IHR (2005) framework, particularly in areas relating to surveillance, screening of travellers, quarantine, reporting, notification, verification, response and collaboration.

At the time this preparedness plan was developed, MOHCC had already embarked on various activities in preparing various institutions, health workers and stakeholders on how to respond in the event of the introduction of any possible suspected EVD cases into Zimbabwe. Sensitization and orientation of health workers in the major health institutions was already ongoing. The national Rapid Response Team was conducting orientation sessions for port health officers and stakeholders at points of entry. Three institutions were designated as isolation and treatment centres in the country (Wilkins Infectious Diseases Hospital in Harare, Thorngrove Infectious Diseases Hospital in Bulawayo and Gweru Infectious Diseases Hospital). PPEs were distributed at strategic places, although a lot more need to be purchased. A gap analysis had already been carried out, and the strengths identified in the country were: a robust surveillance system; a good and effective coordination mechanism; adequate health staff; a good communication system. Gaps included lack of expertise and capacity among health staff and facilities in dealing with an Ebola outbreak situation as the country has not experienced any outbreak in the past; inadequate port health officers, including capacity and equipment; logistics and financial resources.

Coordination of preparedness and response activities would be through the Inter Agency Coordination Committee on Health (IACCH). The Directorate of Epidemiology and Disease Control in the Ministry of Health and Child Care (MOHCC) chairs the meetings, and WHO is the secretariat. The National Rapid Response Team (NRRT) will lead the response activities and carry out the task of capacity building. The National Health Emergency Operation Centre (NHEOC) was established in the Department of Epidemiology and Disease Control, and is responsible for providing real time health information for action during disease outbreaks. The RRTs will be replicated at provincial and district levels. The main partners will include local authorities, local NGOs, the private sector, local communities, other government departments, WHO and other UN Agencies. The Civil Protection Department will activate Civil Protection Committees at all levels.

Samples for the confirmation of Ebola cases will be sent to the NICD Laboratory in South Africa as it is a level 4 laboratory mandated by WHO with required capacity to deal with biohazards samples. Triple packaging will be used to package and transport the laboratory samples. Laboratory scientists and other health workers will be trained on infection control.. Transportation has been arranged with the World Courier. This plan will be effective for a period of 6-9 months (September, 2014 to April, 2015.

List of Acronyms

AEFI Adverse Effects Following Immunization

BDBV Bundibugyo Ebola Virus

CAAZ Civil Aviation Authority of Zimbabwe

CFR Case fatality Rate

CMED Central Mechanical Equipment Department

DHE District Health Executive

DHIS District Health Information System
DPS Director of Pharmacy Services
DRC Democratic Republic of Congo

EBOV Zaire Ebola Virus

EDTA Ethylenediaminetetraacetic acid
ELISA Enzyme-linked Immunosorbent Assay

EVD Ebola Virus Disease

GoZ Government of Zimbabwe

HW Health Worker

IACCH Inter-Agency Coordination Committee on Health

IATA International Air Travel Association
IEC Information Education Communication
KABP Knowledge Attitude behaviour Practice

LA Local Authority
MOF Ministry of Finance

MoHCC Ministry of Health and Child Care

MolGNH Ministry of Local Government and National Housing

NHEOC National Health Emergency Operation Centre
NICD National Institute for Communicable Diseases
NMRL National Microbiology Reference Laboratory

OPD Out Patient Department
PHE Provincial Health Executive
PPE Personal Protection Equipment
RDNS Rapid Disease Notification System

RESTV Reston Ebola Virus

SADC Southern African Development Community

SOP Standard Operating Procedure

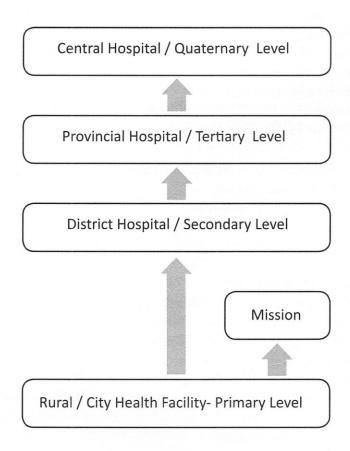
SUDV Sudan Ebola Virus
TAFV Tai Forest Ebola Virus
TAT Turn Around Time
UN United nations

ZDF Zimbabwe Defence Forces
ZPS Zimbabwe Prison Services
ZRP Zimbabwe Republic Police

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1. Background Information

Zimbabwe is a landlocked country bordered by Mozambique on the east, South Africa to the south, Botswana to the west and Zambia to the north and northwest. The 2007 population of Zimbabwe is estimated at 13.1 million people. The country has experienced varying emergencies and disasters in the past which ranged from natural to man-made disasters and disease outbreaks. The country has 8 rural provinces, 2 city provinces and 63 administrative districts. Health delivery system is administered at 4 levels i.e. health facility, district and provincial hospital as well as central hospital level. The table below illustrates these levels of care:



1.1 Existing Surveillance System

Zimbabwe has an integrated disease surveillance system with information flow from the community and health facility transmitted to the district, province and national levels using the District Health Information System (DHIS). The table below shows activities done at each level

1.2 The Information Cycle Diagram

The Data Handling Process in the Information Cycle

- Data set based on indicator
- Standard definitions (Manuals availability)
- Data sources & tools (simple tools & accurate transfer of data from source documents)
- Timeliness follow set guidelines
- Transmission guidelines availability



DATA FLOW

- Interpret information
- Comparisons
- Trends
- Decisions based on information
- Actions



- Data quality checks (Completeness, Correctness, Consistency, timeliness)
- · Support and supervision
- Data analysis; Indicators



The following are priority Diseases, Conditions and Events of Public Heath Importance in Zimbabwe which require immediate reporting:

- Acute haemorrhagic fever syndrome (Ebola Virus Disease, Marburg Fever, RVF)
 Acute Flaccid Paralysis (AFP)
- Adverse Events Following Immunization (AEFI)
 - Anthrax
 - Typhoid fever
 - Diarrhoea with blood (Shigella dysenteria)
 - Hepatitis A
 - Human Influenza due to new subtype
 - Maternal death
 - Measles
 - Meningococcal meningitis
 - Neonatal tetanus
 - Plague
 - Rabies (confirmed cases)
 - SARI
 - SARS

- Smallpox
- Cholera
- Yellow fever
- Any other public health event of international concern
- Infectious
 - zoonotic diseases
 - · food borne, chemical
 - radio nuclear or due to an unknown conditions

2. Definition of ebola virus disease

2.1 Introduction

Ebola virus disease (EVD), formerly known as Ebola hemorrhagic fever is a severe acute viral illness, often fatal in humans. EVD is caused by the Ebola virus, which belongs to the family of viruses called Filoviridae (Filovirus). EVD outbreaks occur primarily in very remote villages in Central Africa, near tropical rainforests.

There are 5 distinct species of Ebola virus of which 4 of the strains can cause severe illness in humans and animals. These are:

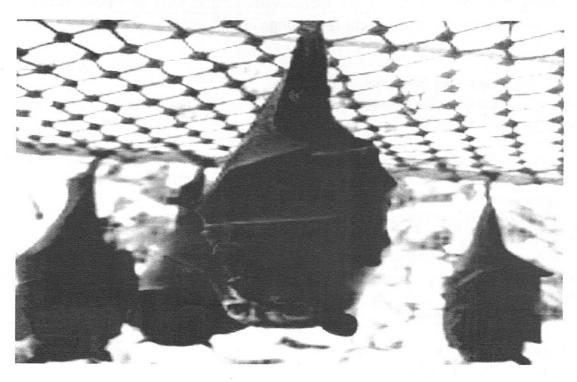
- Zaire Ebola virus (EBOV)
- Bundibugyo Ebola virus (BDBV)
- Sudan Ebola virus (SUDV),
- Taï Forest Ebola virus (TAFV)
- Reston Ebola virus (RESTV) which causes diseases in animals but no cases in humans.

2.2 Historical Perspectives of Ebola Virus Disease

The first human outbreaks were first reported simultaneously, in Northern Zaire at a place known Yambuku (now DRC) and in Sudan, at a place named Nzara in 1976. The virus is named after the Ebola River, where the virus was first isolated in the DRC.

2.3 Natural Hosts

EVD is a zoonotic disease which means a disease transmitted from animals to humans. Fruit bats, particularly species of the genus Hypsignathus monstrosus, Epomops franqueti and Myonycteris torquata, are considered possible natural hosts for Ebola virus. As a result, the geographic distribution of Ebola viruses may overlap with the range of the fruit bats. Humans can be infected by other humans if they come in contact with body fluids from an infected person or contaminated objects from infected persons or when "butchering" wild animals.

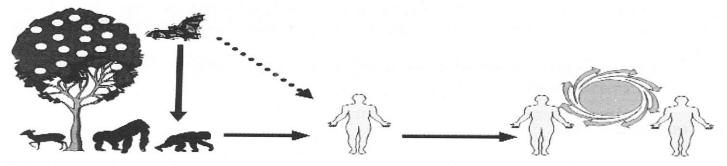


Fruit bat natural host of Ebola virus.

The illustration below explains the hypothesis of Ebola virus transmission at the human animal-interface

1. Virus Reservoir: Fruit Bats

The virus maintains itself in fruit bats. The bats spread the virus during migration



2. Epizootic in primates

3. Primary human infection

4. Epizootic in primates

Infected fruit bats enter in direct or Humans are infected either through Secondary human - to - human gorillas, chimpanzees and other (more frequent) monkeys or mammals (e.g forest antelopes).

indirect contact with other animals direct contact with infected bats (rare transmission occurs through direct and pass on the infection, sometimes event), or through handling infected contact with the blood. secretions, causing large scale epidemics in dead or sick animals found in the forest organs or other body fluids of infected

persons. High transmission when providing direct patient care or handling dead bodies (funerals).

2.4 Past Outbreaks

Several Ebola outbreaks have happened in the past, which have resulted in extremely high case fatality (deaths) of up 90% of infected individuals. The table below shows the year, country, the type of Ebola virus species involved, number of people affected and deaths from these outbreak.

Year	Country	Ebola virus species	Cases	Deaths	Case fatality
2012	Democratic Republic of Congo	Bundibugyo	57	29	51%
2012	Uganda	Sudan	7	4	57%
2012	Uganda	Sudan	24	17	71%
2011	Uganda	Sudan	1	1	100%
2008	Democratic Republic of Congo	Zaire	32	14	44%
2007	Uganda	Bundibugyo	149	37	25%
2007	Democratic Republic of Congo	Zaire	264	187	71%
2005	Congo	Zaire	12	10	83%
2004	Sudan	Sudan	17	7	41%
2003 (Nov-Dec)	Congo	Zaire	35	29	83%
2003 (Jan-Apr)	Congo	Zaire	143	128	90%
2001-2002	Congo	Zaire	59	44	75%
2001-2002	Gabon	Zaire	65	53	82%
2000	Uganda	Sudan	425	224	53%
1996	South Africa (ex-Gabon)	Zaire	1	1	100%
1996 (Jul-Dec)	Gabon	Zaire	60	45	75%
1996 (Jan-Apr)	Gabon	Zaire	31	21	68%
1995	Democratic Republic of Congo	Zaire	315	254	81%
1994	Cote d'Ivoire	Taï Forest	1	0	0%
1994	Gabon	Zaire	52	31	60%
1979	Sudan	Sudan	34	22	65%
1977	Democratic Republic of Congo	Zaire	1	1	100%
1976	Sudan	Sudan	284	151	53%
1976	Democratic Republic of Congo	Zaire	318	280	88%

2.5 Common Clinical and Laboratory Features of Ebola Virus Diesease (EVD)

The Ebola virus Disease affects multiple organ systems in the body. Most symptoms can appear between 2 to 21 days after infection, which is the incubation period for the disease. Early symptoms include sudden onset of fever ≥38°c, body weakness, muscle pain, headaches and a sore throat. These symptoms mimic many other diseases including malaria, typhoid fever, meningitis, Influenza and many others. Some patients develop rash, red eyes, hiccups, chest pains and difficulty in breathing and swallowing. In the advanced stage patients develop vomiting, diarrhea, impaired kidney and liver function and ultimately internal and external bleeding from all the orifices.

The laboratory features of the disease include: leucopenia early in the early stages, thrombocytopenia, elevated amylase and transaminases and signs of DIC.

2.6 Treatment of EVD

There is no cure for Ebola Virus Disease (EVD) or a vaccine. In the past EVD outbreaks up to 90% of cases that had contracted the disease have resulted in death. The current outbreak in West Africa a case fatality of close to 55% has been recorded probably due to early treatment seeking. Treatment of EVD patients hinges on isolation of the affected people so that they don't transmit the disease to others. Most care of the patient is limited to supportive therapy through balancing the patient's fluids and electrolytes, maintaining their oxygen status, maintaining normal blood pressure, transfusion to those who need it and treating any complicating bacterial infections.

2.7 Transmission of EVD

The Ebola filovirus is extremely infectious but moderately contagious. Infectious, because a small amount can cause disease, moderately contagious, because the virus is not transmitted through air droplets. Persons can only transmit the disease when they start to exhibit the symptoms of the disease. The viral load and infectiousness of their body fluids (i.e. blood, vomits, and excreta) increases as their health condition deteriorates. Women are more at risk as they often care for the sick at home.

Ebola virus is introduced into the human population through close contact with the blood, secretions, or other bodily fluids and organs of infected animals such as chimpanzees, gorillas, fruit bats, monkeys, forest antelope and porcupines found ill or dead in the rainforest. Ebola then spreads in the community through human-to-human transmission, with infection resulting from direct contact (through broken skin or mucous membranes with blood) the blood, secretions, or other bodily fluids and organs of infected people.

2.8 Most Common Transmission Settings

2.8.1 Health-care setting

Most health care workers get infected while caring for EVD patients or due to close contact with patients when infection control precautions are not strictly adhered to. Health care workers get infected while doffing (removing) the personal protective equipment (PPE).

2.8.2 Family settings

Family members who care for sick relatives especially women who are at high risk of contracting the EBV disease. There is also a possibility of sexual transmission as convalescent men can still transmit the virus through their semen for up to 7 weeks after recovery from the illness.

2.8.3 Burial Ceremonies

Some cultural and religious practices in some communities in which mourners and burial undertakers have direct contact with the body of the deceased through the washing and handling of the corpse can lead to them contracting the disease. In some traditions and beliefs in some tribes in Africa, widows of deceased individuals are required to kiss or lie beside the deceased putting them at high risk of contracting the disease.

2.9 Prevention and Control of EVD

Several ways and settings can be applied in the prevention and control of Ebola. Effective prevention and control hinges on early diagnosis and reporting of suspect cases. This calls for increased awareness among the community and high index of suspicion among health care workers, effective epidemiological surveillance and contact identification and follow up as well as early referral for treatment and laboratory testing.

2.9.1 Controlling EVD infection in health-care settings

Health care workers need to use appropriate infection control precautions and procedures when handling any suspected EVD patients. They need to have a high index of suspicion for early diagnosis; use appropriate personal protective equipment (PPE) in attending to EVD cases and specimen taken from the cases should be handled with relevant care.

2.9.2 Reducing the risk of EVD infection in the Community

There is need to reduce wild life to human interface by avoiding hunting and consumption of bush meat, reduce human to human transmission in the community and avoid risky cultural and religious practices that enhance viral transmission e.g. care for sick, dead and unsafe funeral practices.

2.9.3 Current Ebola Outbreak in West Africa

WHO notified Ebola Virus Disease (EVD) in Guinea on 13 March 2014 then Liberia on 31 March 2014 and Sierra Leone on 26 May 2014. It is believed that the first EVD cases started in early December in Guinea. A case has since been reported in Nigeria and Senegal. The cases and deaths have been increasing, with a cumulative figure of 6553 cases and 3083 deaths (CFR 47%) as of 23 September, 2014. Nigeria has had an outbreak caused by an imported case through air travel, and this has led to 20 cases and 8 deaths being reported, while in Senegal 1 case and no death have been reported.

There is an EVD outbreak in Democratic Republic of Congo (DRC) in Equator Province which is not linked to the current outbreak in West Africa.

For the first time 3 countries in West Africa were affected at the same time affecting people in towns and cities, in densely populated areas. There has been cross border transmission in the 3 countries as they share common borders, areas of conflict and political instability in the recent past, in poor marginalized and traumatized communities with women and children being most affected.

The 3 countries affected have an inefficient healthcare system with poor level of health workers training. It's the first occurrence of Ebola in West Africa so there is no institutional memory on how to manage the disease. There is a high level of resistance to the Ebola outbreak response in some affected communities with strong traditional practice of care for the dead involving direct contact with corpse during burials. All these factors have made it difficult to effectively control the outbreak.

Drastic measures have been taken to avoid further spread of the disease in West Africa. These include closing of borders, restricting movement of people with quarantine of entire communities in some affected countries and declaration of the state of emergency in the affected countries. WHO declared EVD a Public Health Emergency on International Concern (PHEIC).

3. Zimbabwe Ebola Virus Disease Preparedness and Response Plan

3.1 The problem Statement

Zimbabwe recognizes that there is a risk, though still low at the moment that there could be a case/cases of Ebola Virus Disease occurring in the country due to the rapid movement and displacement of people globally. The EVD outbreak unfolding in the West African countries has been increasing in cases and deaths with no sign of abating. It would therefore, be prudent that Zimbabwe puts in place a preparedness and response plan.

3.2 Situation Analysis

3.2.1 Capacity Assessment within MOHCC and other Departments

A capacity assessment done for Zimbabwe as a country showed that there is the following as strengths:

- Port Health services are established at all major points of entry
- PPEs have been prepositioned at several points of entry and isolation facilities
- Well-established and efficient surveillance system is in place at National, Provincial, District and Health facility level
- Human resources are available at all levels
- More isolation facilities have been identified throughout the country
- Good coordination mechanism is in place through the IACCH
- Communities in Zimbabwe are generally literate to grasp health education

3.4 Gaps noted within the MOHCC and other Departments

- Lack of technical capacity and expertise among health staff for EVD in health facilities and points of entry in areas of EVD surveillance and response, case management and infection control
- Inadequate financial resources for EVD preparedness and response
- Lack of awareness among the stakeholders including the community for EVD

3.5 Activities done so far

- 1. The National Rapid Response Team (RRT) was activated and is coordinating EVD activities in the country through the Inter Agency Coordination Committee on Health (IACCH).
- The NHEOC is obtaining real time information on EVD.
- 3. An inter- ministerial taskforce on Ebla was activated.
- 4. The assessment of the country's capacity to deal with EVD in the event that we have a case was done.
- 5. Sensitization, orientation and training of health workers and other stakeholders is ongoing.
- 6. Isolation facilities have been identified.
- Resource mobilization for Ebola Virus Disease from government is ongoing.
- 8. Pre positioning of PPEs at major airports, ground ports of entry and other isolation facilities has been done.
- 9. Drills of EVD and practice in donning and doffing of PPEs is being practised.

4. Aim of the plan

4.1 Introduction

The EVD plan endeavors to provide a framework for preparedness and response to the threat of Ebola virus disease in Zimbabwe. The procedures outlined are geared towards minimizing the number of cases and deaths from the disease.

The International Health Regulations (2005)

The Ebola outbreaks in West Africa provide a strong opportunity for Zimbabwe as a country to put more effort towards building core capacities towards implementation of the International Health Regulations (2005).

The purpose and scope of the IHR (2005) are "to prevent, protect against, control and provide a public health response to the international spread of disease in ways that are commensurate with and restricted to public health risks, and which avoid unnecessary interference with international traffic and trade." In this regard, this Ebola EPR plan will be guided by the IHR (2005) framework, particularly in areas relating to surveillance, screening of travellers, quarantine, reporting, notification, verification, response and collaboration.

On the 5th of September, 2014, SADC ministers of health held a special summit on Ebola in Victoria Falls, and the need to implement the IHR International Health Regulations (2005) was one of the major recommendations that the ministers agreed on. The ministers came up with a communiqué where they adopted a common Regional Position on travel of persons and trucks / commercial vehicle from EBOLA affected countries. See Annex 1

4.2 Broad objective

The broad objective of this plan is to provide a guideline on EVD preparedness and response in the event that cases of EVD are introduced in Zimbabwe.

4.2.1 Plan objectives

- To put in place an EVD alert and preparedness plan in the country
- To outline the interventions for the detection, prevention and control of Ebola virus disease in Zimbabwe
- To strengthen Ebola virus disease surveillance at community, health facility and major points of entry in Zimbabwe
- To put in place infection prevention and control (IPC) protocols in order to prevent the spread of the disease to health care workers
- To outline logistical requirements for EVD preparedness and response

5. Scope of the EVD plan

The plan covers the following 7 thematic areas: Public Health Surveillance and Case Detection, laboratory surveillance and diagnosis, infection control and prevention, case management, social mobilization, logistics and supplies and coordination

5.1 Public Health Surveillance and case detection

The objective of surveillance is for early detection of cases. Travelers from the affected countries are screened and monitored for a period of 21 days while still residing in Zimbabwe. On arrival every traveler shall complete a medical surveillance form. All suspected cases shall be isolated at designated isolation facility at the point of entry pending transfer to a treatment centre.

5.2 The travellers from the affected countries

The travelers are monitored on a daily basis to see if they develop signs and symptoms of the disease for a period of up to 21 days. This follow up is done by trained health workers and among other things; thermometers will be used to monitor their body temperature. The travelers shall be educated on the signs and symptoms of the disease, and will be provided with contact phone numbers of focal persons in their areas to call in the event of them developing symptoms.

5.3 Cases or Suspected cases of EVD

Cases or Suspected cases of EVD shall be isolated to appropriately designated isolation facilities at or near the points of their detection. The cases or suspected cases are reported through the rapid disease notification system (RDNS) to the higher office immediately. All rumours reported by the public shall be investigated immediately by Rapid Response Teams at that level and shall inform the higher level using the reporting system.

5.3.1 The composition of Rapid Response Team

The rapid response team for EVD disease investigation shall consists of an epidemiologist or team leader, clinician, laboratory scientist/technician, health promotion officer, infection control officer, environmental health officer/technician, veterinary officer data manager, logistician and others that can be co-opted to suite the local settings.

The duties of this team is to investigate any rumors or reports of EVD and institute initial control measures at that level.

Refer to SOP on Ebola document

6. EVD laboratory surveillance and Diagnosis

6.1 The role of laboratory in EVD surveillance and diagnosis

The role of the laboratory is to timeously collect the appropriate sample from a suspected EVD for confirmation. The laboratory personnel are to ensure that an appropriate specimen has been collected and transported to the designated reference laboratory in NICD in South Africa. Results will be transmitted back to the National level of the Ministry of Health and Child Care authorities.

7. Logistics and Supplies for EVD

Medicines and medical supplies needed to manage a total of 100 initial patients are to be stored at the designated treatment centers. The bulk of the stocks will be kept at NatPharm Harare and Bulawayo regional stores and each of the treatment facilities will order as and when required.

8. Case Management

The EVD cases will be treated in properly designated treatment centers in Harare, Gweru, Bulawayo, Hwange, and Beitbridge. Each point of entry in the country will have isolation facilities where patients will be held pending referral to the treatment centers using properly designed ambulances.

output and outcome indicators expected, the cost of activities, what the responsible organization is, the time frame for achieving that objective as well as the The following matrix gives the various thematic areas, and each thematic area has objectives, the activities to be carried out, target group, the inputs required, means of verification that the objective and its activities have been met.

(A) SURVEILLANCE GOAL AND OBJECTIVES

we	rame Means of Verification	7 T
n Zimbak	Time Frame	September 2014 to May 2015
'D) outbreak i	Responsible Organization	Монсс
ıs Disease (EV	Cost	\$90768.00°
an Ebola Viru	Outcome Indicator	EVD Outbreak detected
response to	Output Indicator	233 port health staff trained 10 PHES trained 15 DHE trained
detection and	Input	Port Health Staff, Training materials PHEs and DHES Stationery Allowances, Fuel Conferencing
ngthen early	Target Audience	
Surveillance Goal: To strengthen early detection and response to an Ebola Virus Disease (EVD) outbreak in Zimbabwe	Activities	Capacity building of Port Health Staff in Outbreak detection
Surveillance	Specific Objective	To prevent the introduction of EVD from other countries

'Training Covers 233 officers @ \$75.00 per person per day by 3days. Fuel and transport \$7575, Conferencing-\$23368 and Stationery-\$2000.00. facilitators 6 facilitators covering 3 training sessions for 4 days for each session@ \$75 per day.

Means of Verification	Sensitization reports	Screening reports
Time Frame	September 2014 to May 2015	September 2014 to May 2015
Responsible Organization	Монсс	Монсс
Cost	\$15,000,00°	\$36,500.00°
Outcome Indicator	Informed Stakeholders at Ports of Entry	Suspect EVD cases detected % of clients placed on medical surveillance
Output Indicator	400 stakeholders Informed sensitized Stakehold Ports of Er	100% travelers entering Zimbabwe screened
Input	Training materials Allowances, Fuel	Infrared thermo-scanners and thermometers. Airtime, Communication Devises, Surveillance forms
Target Audience	Border agencies Stakeholders at points of entry	Port Health Staff
Activities	Sensitization of stakeholders at Points of Entry on medical screening of passengers	Screening and documentation of travelers at ports of entry
Specific Objective	To prevent the introduction of EVD from other countries	

² This will covers allowances for a team of 10 people for 15days, fuels and transports to Ports of Entry and materials used in the sensitization. ³ This covers 100 IR thermometers 44 laptops

Means of Verification	Medical Surveillance reports	Posts Filled	Completed surveillance forms
Time Frame	September 2014 to May 2015	January 2014	
Responsible Organization	Монсс	Монсс	Монсс
Cost	\$120,000.00	\$1,212.000.00	\$10,000.00
Outcome Indicator	% of travelersfrom EVD affected areas medically monitored for 21 days	No of posts filled	Proper documentation of surveillance activities
Output Indicator	Number of travellers from EDV affected countries placed on medical surveillance	Number of posts created	Data collection Tools developed
Input	6000 Digital thermometers, Airtime, Fuel for medical surveillance, internet services at points of entry. Allowances for health and community teams	202 posts created	Stationery
Target Audience	Travelers from EVD 6000 Digital affected areas Airtime, Fue medical surveillance internet sero points of en Allowances health and community	Health workers	РНЕ/ОНЕ/ НЕ
Activities	Medical Surveillance of travelers from EVD affected areas for 21 days	Create additional 202 post for Port Health Officer	Adaption and distribution of data collection tools
Specific Objective	To prevent the introduction of EVD from other countries		To strengthen existing disease surveillance systems (continued)

5 This covers stationery, allowances for 89 RR Teams at provincial, district and armed forces levels. 56 IR thermometers for mobile teams are also included. When districts train they are urged ⁴ In case of a fully fledge outbreak of EVD. The district RRTs will be transformed in to Mobile Epidemiologic Teams that will investigate cases, do active case finding among others. to include uniformed forces in their areas of jurisdiction as well.

6 Training will be done on site by DHES and hospital executives- case definitions to be posted in all OPDs and consultation rooms

Input
Weekly 90 Health surveillance forms, Information Internet
Community Disease Community surveillance tools set up³
2 hot lines National Call centers set up and 2 at each Province Human resources
Training materials 210 hotline operators trained

Total Surveillance = \$1,921.808.00

.7 On the job training by DHEs

9 The community response teams will be trained by DHEs Uniformed forces and Local Authorities. These will be community members. The target is to have at least a critical mass of trained 8 The teams will be trained on EDV recognition, follow up f cases, education of community on EDV, reporting cases to RRT and Health Centre. Training to be done by HC staff with DHE community members in high-risk areas. These will be activated when there is need

10 This will cover training of 50 teams in high-risk areas and allowances for their community activities @\$3.00 per day for 90 days.

¹¹ Two day trainings in the 2 regions....No of sessions to be decided later.

(B) CASE MANAGEMENT

- 1									
Activities	ies	Target Audience	Input	Output Indicator	Outcome Indicator	Cost	Responsible Organization	Time Frame	Means of Verification
To establish 100 Identification and case management setting up of Case teams in management Zimbabwe by teams members 30 October 2014	ion and of Case ent mbers	Central, Provincial Case management & District modules Hospitals, Local Authorities ZRP, ZDF ZPS		100 case teams ¹² set up	Quality care management provided to EVD patients	\$400,000.00 ¹³	MoHCW ZDF ZPS ZRP LA	31 October (National team on study by.)	Lists of Case management teams
Case managen drills at health institutions	nagement ns	Case management Central, Provincial PPE drills at health & District Procinctions Hospitals, Local Tran Authorities Facil ZRP, ZDF ZPS Air t	edure Manuals sport litators ime	1872 Case management drills done in 6 months	Cases properly and efficiently managed	\$50,000.003	DHES LA ZPS ZRP ZDF	October-April	Drill Reports

12 Each team will have 10 members (Nurses, Doc, Caterers, EHOs, Nurse Aides, Cleaners etc)

¹³ The country will be divided into 2 regions North and South. There will be 2 teams of trainers who will train teams in the 2 regions. The training will be of 5 days duration covering EVD ¹⁴ Cost covers 3 sets of PPE for drills and \$500 per institutions for the 6 months outbreak management, case management RRT Surveillance etc.

Responsible Time Frame Means of Organization
\$112.000.00 ¹⁵ MoHCC
Develop Institution Standardized way \$112.C Specific SOP on of EDV PPE, Burial and management
Sta
Objective

¹⁶ Each team will have 3 crew members. Target is to train a team for each district, defences forces units and local authorities.
¹⁷ Three day training of 294 cadres plus trainers @\$175 per day. 15 Each Unit to be allocated \$2000.00 to develop SOPs.

(C) INFECTION CONTROL

	Means of Verification	Training Reports	Training Reports
	Time Frame	29 September 7th October 2014	
- 1	Responsible Organization	MOHCC (National) and Partners	Монсс
ts	Cost	\$180,030.00	\$32,000.00
cers and clien	Outcome Indicator	180 trainers trained	8000 Health Cadres trained ²³
ng health wor	Output Indicator	Conduct 6 training sessions of 3 days duration	Conduct 56 training sessions
nfection amor	Input	200 trainers of trainers (ToT) Equipment IES Material Handbooks	200 trainers Equipment IES Material Handbooks
prevention in	Target Audience	Health Workers (All Categories)	Grass root Health 200 trainers Equipment IES Material Handbooks
Infection Control Goal: To prevention infection among health workers and clients	Activities	Training of trainers Health Workers (All Categories)	Training of operative health workers
Infection Co	Specific Objective	To train 5 trainers in 10 provinces and 6 central hospitals, 8 provincial hospitals is partners, Uniformed Forces ¹⁹ and 8 major councils ²⁰ in EVD Infection control.	To cascade training to grassroots level

18 Central & Provincial Hospital and : Medical Nursing (Infection Control) Administration, Health Promotion, Public Relations, Domestic Services

19 ZDF, ZPCS, CIO ZRP

20 Major Councils - Harare Bulawayo Mutare, Bindura, Kadoma ,Chinhoyi, Gweru and Kwe-kwe- (5 people each)

²¹ Provincial level- 5 Cadres (Nursing, Medical, Environment, Administration, Health Promotion, Laboratory)

²² Trainers- Infection Specialist, Case Management, Environmental Health, Logistic and Supplies, Epidemiologist (5 for each group)

²³ District Uniformed 100 cadres per brigade (500) ZRP= 100 ZPS= 100 Councils- 800

²⁴ Sets to be distributed as follows 300 sets per Isolation Unit, 100 sets for laboratory 9kits each for Ports of Entry among others

25 Each team to have 8 people 4 burial persons 2 to disinfect 1 security and 1 driver. Provincial teams trained first and will cascade the training.

ر		
Means of Verification	Distribution	
Time Frame	To be done by 7th October 2014	
Responsible Organization	MoHCC and Partners	
Cost	\$249,989.00	
Outcome Indicator	2834 PPE sets prepositioned at 50 sites	
Output Indicator	Distribute PPE to 50 sites	
Input	PPE Setss	
Target Audience	Head Office -1000 10 provinces and 6 central hospitals, 8 provincial hospitals, partners, Uniformed Forces and 8 major councils	
Activities	834²⁴	
Specific Objective	To ensure 50 sites Purchase and have adequate Pre position 2 and appropriate sets Personal PPE for EDV Protective management by Equipment at 7th October 2014 sites.	

	Input	Output Indicato		Outcome Indicator	Cost	Responsible Organization	Time Frame	Means of Verification
To prevent EDV Promotion of Councils Directive from I transmission due Community Traditional leaders Ministers Burial to burial practices Infection (Prevent Private Cemetery Space by local Transmission of EVD in Communities)	_		Directive issued to councils Burial space availed by councils	5 grave reserves by each local authority	\$56.000.00	MoLGNH MoLGNH Councils	By 3rd of October	Burial space availed
Training of Funeral parlors, PPE Training, 11 community burial Churches, Body bags, bu groups Red Cross, Grave Disinfectants, up yard Attendants Loose tools Knapsack		1 p	11025 Community burial groups set up and trained	Burial done with dignity	\$137,200.0026	MOHCW and partners	By 17 October	Reports

(D)) LABORATORY CONFIRMATION

	e Means of Verification	o Training Reports Lab. Reports	0	0	0	0	0	0.
39	Time Frame	September to May 2015	September to May 2015	September to May 2015	September to May 2015	September to May 2015	September to May 2015	September to May 2015
	Responsible Organization	Монсс	Монсс	Монсс	Монсс	Монсс	Монсс	Монсс
	Cost	\$40,000.00	\$30, 000.00	\$1, 000 000. 00	\$50,000.00	\$120,000.00	\$2.800,000.00	\$8 000.00
	Outcome Indicator	Evidence based patient management	Number of samples submitted to NICD	Results of samples provided		7		Competent Lab
	Output Indicator	Laboratory scientists and clinicians capacitated	Number of samples received at NMRL	Number of samples tested				
pected EVD	Input	Conferencing Accommodation Allowances Fuel	Fuel, Servicing, accommodation and allowances	Testing of samples to South Africa		Procure a chemistry analyzer		
gnosis of sus	Target Audience	Laboratory scientists and clinicians	Treatment Centres Fuel, Servicing, accommodation and allowances	NMRL	NMRL	NMRL		
Laboratory: To confirm diagnosis of suspected EVD	Activities	Training on collection, storage and transportation of samples	Transportation of Samples to NMRL	Transportation of Samples to NICD	Purchase of Lab Reagents	Purchase Chemistry Analyser	Renovation and Refurbishing of level 3 laboratory to identify Ebola Virus	Training of 4 Lab Staff in testing infectious material
Laboratory:	Specific Objective	To confirm diagnosis of suspected EVD						

Subtotal cost =\$4,048.000.00

(E) HEALTH PROMOTION AND SOCIAL MOBILIZATION

2	Means of Verification	Reports	Productions Available	Community mobilization reports	Report of media sensitization	20 c c c
	Time Frame	29 September 7th October 2014	29 September 7th October 2014	29 September 7th October 2014		29 September 7th October 2014
	Responsible Organization	Монсс	МоНСС	Монсс	Монсс	Монсс
	Cost	\$416, 000.00 ²⁷	\$54, 600.00 ²³	\$116, 600.00³º	\$20, 000.00 ³¹	\$30,000.003
	Outcome Indicator	Improved knowledge on EVD	Increased awareness and Adoption of prevention behaviors and practices	Increased awareness Improve knowledge, behaviors and practices	Improved media reporting on Ebola Virus Disease	Change in attitudes, behaviours and practice Improved knowledge
	Output Indicator	80 Number of meetings held, 80 Number of orientation meetings held	Availability of IEC material, Number of IEC material produced and distributed	Percentage of community mobilized	2 media houses and journalists sensitized, Number of press articles presented	Increased level of knowledge and awareness
ion	Input	Human, financial, material resources, Transport, Stationery	Human, financial, material resources, Transport, Stationery	Human, financial, material resources, Transport, Stationary	Human, financial, material resources, Transport, Stationary	Human, financial, material resources, Transport, Stationary
ial Mobilizati	Target Audience	Government departments Private Sector, National, Provincia and District Civil Protection Committees,	Partners Health workers, Other sectors, General population	Community (rural, peri-urban and urban), General population	Media houses, Journalists	Community Health workers, Media, Other stakeholders
otion and Soc	Activities	80 Orientation meetings 80 Sensitization meetings	Produce and distribute IEC material Produce and Radio, TV Shows, Produce job aids for health workers	Road shows, SMSs Distribution of posters, flyers, billboards & other IEC materials, Perceptions Beliefs assessment, Dramas	Provide updates to media, Press conferences, Press release, Breakfast meetings	Communication Coordination Documentation KAPB assessment
Health Promotion and Social Mobilization	Specific Objective	To sensitize and orient stakeholders on the prevention and control of Ebola Virus Disease	To produce and disseminate IEC materials for healthcare workers and the general population on Ebola Virus Disease	To mobilize communities for the prevention and control of Ebola Virus Disease	To orient and sensitize media on Ebola Virus Disease prevention and control	Monitoring and Evaluation of interventions

28 lrTo include case definition, patients management charts etc.

 $^{^{31}}$ 2 media workshops Venue + refreshments for press conferences and press briefings 32 Follow- up meetings and documentation:\$30 000

Means of Verification	Minutes of meetings
Means of Verificatio	M M ee
Time Frame	September 2014 to May 2015
Responsible Organization	Монсс
Cost	\$ 34,475.00³³
Outcome Indicator	Well informed agencies, sectors, ministries, NGOs Well-coordinated activities
Output Indicator	Number of agencies, sectors, ministries, NGOs involved in the collaboration. Number of taskforce meetings held zoonotic sub-committee meetings held
Input	Transport, Refreshments, Stationery, Communication (phone / cell phone calls)
Target Audience	MOHCC, Other Ministries, UN Agencies, Non- Governmental Organizations, Civil Protection
Activities	Hold 12 IACCH meetings, 6 National Civil Protection Committee Meetings (Department of Civil Protection) 12 National Taskforce meetings (monthly), 4 Zoonotic sub-committee meetings (monthly) Establish National Health Emergency Operation Centre (NHEOC)
Specific Objective	To promote collaboration and coordination activities for preparedness of Ebola Virus Disease

Subtotal= \$671,675.00

(F) LOGISTICS AND SUPPLIES

Subtotal = \$3,100.000.00 Total Budget = \$9,601,045.00 34 Not Clear how this figure was arrived at!!!

Zimbabwe Government Contribution to the Preparedness and Response Plan

As has been mentioned in this plan, MOHCC and WHO had already started conducting activities through orientation of health staff, port health officers and stakeholders in Ebola Preparedness and Response. The orientation was done for major health institutions and Points of Entry (Airports and ground crossing). There are adequate human resources in the health sector, although there is need for capacity building in case management, infection control and surveillance. Some of the logistics like ambulance services are also available.

Budget Summary

Thematic Areas and Activities	Cost (USD)
SURVEILLANCE	
Capacity building for port health staff	\$ 90 768.00
Sensitization of stakeholders at points of entry	\$ 15 000.00
Screening and documentation of travelers at points of entry	\$ 36 500.00
Medical surveillance of travelers from EVD affected countries	\$ 120 000.00
Adaptation and distribution of data collection tools	\$ 10 000.00
Orientation of Rapid Response Teams at all levels	\$ 110 000.00
Training of Health Care staff on case definitions and recognition of EVD cases	\$ 32 000.00
Weekly collection and transmission of surveillance data	\$ 32 940.00
Creation of 202 posts for Port Health Staff	\$ 1 212 000.00
Establishment of community surveillance systems at grass root level	\$ 150 000.00
Establishing a hotline	\$ 50 000.00
SUB -TOTAL	\$ 1,921 808.00
CASE MANAGEMENT	
Setting up of case management teams	\$ 400 000.00
EVD emergency drills/ Case management	\$ 50 000.00
Designation and equipping of isolation facilities at POEs	\$ 50 000
Identify and equip EVD treatments units	\$ 300 000.00
Capacitate uniformed forces	\$ 100 000.00
Standardize EVD management	\$ 112 000.00
Provide expertise and equipment for mobile clinics	\$ 100 000.00
Equip and adequately train ambulance crews	\$ 173 250.00
SUB -TOTAL	\$ 1 185 250.00
COORDINATION	
Holding IACCH, National Taskforce, Zoonotic sub-committee and Civil	4044==00
Protection meetings at all levels.	\$ 34 475.00
HEALTH PROMOTION	
Orientation and sensitization meetings	\$ 416 000.00
Production and distribution of materials	\$ 54 600.00
Road shows, drama, radio messages	\$ 116 600.00
Media updates, press conferences, breakfast meetings	\$ 20 000.00
Communication, documentation, KAPB, Assessments.	\$ 30 000.00
SUB-TOTAL	\$ 637 200.00

\$ 11 572 952.00

INFECTION CONTROL Training of trainers in infection control (TOT) in infection control Cascade training to lower levels Purchasing and prepositioning of PPEs Designation of burial places Training of burial groups	\$ 180 030.00 \$ 32 000.00 \$ 240 989.00 \$ 56 000.00 \$ 137 200.00
SUB-TOTAL	\$ 646 219.00
Purchase of laboratory commodities – Triple packaging, outer packaging UN2841 boxes Training on collection, storage and transportation of EVD samples Purchase of laboratory reagents Refurbishment of National Microbiology Reference Laboratory (NMRL) Costing per test at NICD SA (US\$2 000/test x 500 tests) Purchasing of chemistry analyzer for initial monitoring of EVD	\$ 40 000.00 \$ 30 000.00 \$ 50 000.00 \$ 2 8000 000.00 \$ 1 000 000.00 \$ 120 000.00
SUB TOTAL	\$ 4 048 000.00
Procurement of 25 service vehicles and ambulances Provision of allowance for health care workers Procurement of disinfectants and medical supplies Procurement of communication equipment	\$ 1 000 000.00 \$ 1 600 000.00 \$ 450 000.00 \$ 50 000.00
SUB TOTAL	\$ 3 100 00.00

GRAND TOTAL



SUMMARY EBOLA PREPAREDNESS AND RESPONSE PLAN



MINISTRY OF HEALTH AND CHILD CARE SEPTEMBER 2014



The Aim of the Ebola Virus Disease (EVD) Preparedness and Response Plan

The EVD plan endeavors to provide a framework for preparedness and response to the threat of Ebola virus disease in Zimbabwe. The procedures outlined are geared towards minimizing the number of cases and deaths from the disease

The Broad Objective of the Ebola Virus Disease (EVD) Preparedness and Response Plan

The broad objective of this EVD plan is to provide a guideline on preparedness and response in the event that cases of EVD are introduced in the country

The purpose of this Ebola Virus Disease (EVD) Preparedness and Response Plan is to guide the country

The purpose of this Ebola Virus Disease (EVD) preparedness and response plan is to guide the country in terms of resource mobilization, stakeholders' involvement, health workers' response in the event of an EVD outbreak in Zimbabwe

The Scope of the plan

The Scope of the EVD plan covers the following main areas:

- surveillance
- case detection,
- laboratory services,
- infection control and prevention,
- case management,
- social mobilization,
- logistics and supplies and
- coordination

Thematic area 1: Ebola Viral Disease Surveillance and Case detection Total Budget - \$1,897.868.00
Objectives for thematic area 1

To prevent the introduction of EVD into the country

- The objective aims at building capacities of Port Health Staff at the point of entry, provincial and district level, clinicians at all 4 levels of care and the community surveillance teams in disease and outbreak detection. Resources are required for drafting guidelines, modules, training materials, stationery, allowances, fuel, and conferences venue at an estimated budget of \$85,368.00. If achieved, this objective will strengthen early detection of EVD cases and avert its introduction into country.
- Four Hundred (400) stakeholders at Points of Entry are sensitized on medical screening of travelers/passengers in the initial stage of the plan. Material resources required are training materials, allowances and Fuel at an estimated cost of \$15,000.00. This will result in informed Stakeholders at Ports of Entry.
- Port health staff and clinicians are to be equipped with surveillance gadgets for screening and documentation
 of travelers passing through points of entry. Resources required are infra-red thermo scanners and
 thermometers, airtime, communication devices, surveillance forms at an estimated cost of \$36,500.00.

Medical Surveillance and monitoring of each and every traveller from the EVD affected areas will be
monitored for 21 days. Resources required include allowances for health and community teams, fuel for
surveillance vehicles, 6000 disposable digital thermometers, airtime, and internet services at port of entry.
The estimated budget is \$120, 000. If implemented, travellers from EVD affected areas will be medically
monitored for 21 days.

To strengthen existing disease surveillance systems

- This objective endeavours to adapt and distribute data collection tools by all levels of health care. Data
 collection Tools need to be developed to ensure proper documentation of surveillance activities. A budget
 of \$10 000.00 is required.
- Orientation of Rapid response Teams on EVD at all levels will be targeted. Training modules will be developed
 and heath workers at the provincial, district, local authority and the Uniformed Forces will be orientated at
 a total cost of \$110,000.00.
- 3,200 OPD staff from selected primary health centres and referral hospitals will be targeted for training on
 case detection and recognition at an estimated cost of \$32,000.00. This cost will cover the allowances for
 trainers, the cost of hiring the venue, fuel, bus fares for the participants and lunch allowances. This will result
 in correct diagnosis of EVD.
- 90 Health information officers from all the provinces will be orientated on collection, compilation, analysis and transmission of surveillance data. For this a budget of \$32,940.00 is needed. This cost will cover conference facility, fuel, busfare and allowances.
- Creation of additional 202 Posts of Port Health Staff (Environmental practitioners including an establishment
 of supporting clinicians/nurses at all points of entry). Presently, the establishment for Port Health Staff is 33.
 Need to lobby for these posts. Cost will depend on posts created.\$1,212.000.00

To establish community surveillance systems at grassroots level

The aim is to establish and train community disease surveillance teams from among community leaders, village health workers and school health coordinators. This will strengthen case Investigation and reporting of rumors (whistle blowing). Disease surveillance tools will be developed and trainings will be done. A budget is \$150, 000.00 is required.

To establish immediate lines of reporting for suspected cases

 Two hotlines (Toll free) at national level and 2 at each province total of lines 22lines: Total budget of \$50,000.00 is needed.

Thematic area 2: Case Management Total Cost \$1,185,250.00 Objectives for thematic area 2

To establish case management teams in Zimbabwe by December 2014

This objective aims at Identification and setting up of Case management teams at Central, Provincial and
District Hospitals as well as at the points of entry, Local Authorities and uniformed forces. Case management
modules will be required to provide standardized training's. A budget of \$400,000.00 is required.

To enhance the competency of HW on EVD case management

The objective focuses on conducting EVD drills and simulations at health institutions at Central, Provincial and
District Hospitals, Local Authorities and in the uniformed forces health facilities. PPEs, Procedure Manuals,
Transport, Facilitators and Air time will be needed so that cases will be properly and efficiently managed. A
budget of \$50,000.00 is required.

To identify and equip EVD Isolation Units at Ports of entry

• This objective intends to designate 11 isolation facilities at points of entry and hospitals. Port Health Authority and Local authorities will require Beds, Bedding Materials, Disinfectants, medicines and thermo detectors. A budget of \$50,000.00.

To identify and equip EVD Treatment Units

• The objective focuses on establishing 4 static Isolation Units at Wilkins Infectious Diseases Hospital in Harare, Thorngrove in Bulawayo, in Gweru and Mutare. This will guarantee that cases are well managed. Repairs, maintenance and purchasing of 4 incinerators amounting to \$300,000.00 is needed to ensure the 4 Static treatment centres are set up.

To capacitate provinces and Uniformed forces in the deployment in mobile treatment units

Focus is on the 10 Provinces and ZDF to be equipped to set up field treatment units. There is need for provision
of expertise and materials to set up mobile treatment centers. Training materials, tents and equipment is
required for setting up treatment centers by Provincial Medical Directorates and ZDF Medical Corps at a cost
of \$100 000.00. This will ensure cases are well managed.

To standardize EVD management

Emphasis is on developing Institution Specific SOP on:-PPE, Patient Flow, Burial and Corpse Management,
Disinfection, Case Management. Central, Provincial & District Hospitals, Local Authorities, ZRP, ZDF and ZPS
will be used to develop standardized SOPs on EDV management. A budget of \$112 000.00 is needed.

To equip and adequately train ambulance teams to transport EVD cases

 Ambulance at central provincial and district hospitals to adequately transport suspected EVD to referral facilities. A total budget of \$173,250.00 is required.

Thematic area 3: Infection Control Total Cost - \$640,220.00
Objectives for thematic area 3

To put in place procedures on EVD infection prevention and control (IPC)

Personal Protective Equipment (PPE), IEC Material, and Handbooks will be mobilized at a budget of \$180 030.00 to enable each health facility to have IPC procedures and expertise in place. Over 500 health workers will be targeted.

To cascade IPC to grassroots level

 All provinces have infection control training teams to cascade the training to their health facilities. A total of 8000 health workers in all the country's hospitals will be trained in infection control and prevention at an estimated cost of \$32.00.00.00 which will cover the provincial and districts trainings of trainers.

To ensure 50 sites have adequate and appropriate PPE for EDV management

• 2340 sets of Personal Protective Equipment will be purchased and Pre-position at 50 sites distributed at all levels of care. A total budget of **\$240,890.00** is estimated.

To prevent EDV transmission in burial settings

Burial Space for EDV victims will be purchased and reserved throughout the country. A budget of \$56.000.00 is required.

To Prevent Transmission of EVD in Communities

 Training and equipping 110 community burial groups. The objective targets Funeral parlors, Churches, NGOs, Grave yard Attendants and sprayers. Inputs include PPE, Training, Body bags, disinfectants and tools. A total budget of \$137 200.00 is needed.

Thematic area 4: Laboratory Confirmation Estimated Cost - \$4,048,000.00 Objectives of thematic area 4

To confirm diagnosis of suspected EVD

- Purchase of laboratory commodities, that includes triple packaging, laboratory reagents, carry out renovations of level 3 laboratory at NMRL, pay costs for to have tests at NICD in SA (US\$2 000/test x 500 tests) Training of 4 laboratory scientists in testing infectious material.
- Health care workers will be trained in collection, storage and transportation of Ebola virus samples. This training will capacitate laboratory scientists and clinicians.
- Upgrading of laboratory to level for Ebola Virus confirmation
- A total of \$4,048.000.00

Thematic area 5: Health Promotion and Social Mobilization including communication strategy\
Total Cost - \$637 200
Objectives of thematic area 5

To sensitize and orient stakeholders on the prevention and control of Ebola Virus Disease

 This objective seeks to have 80 orientation and sensitization meetings conducted to Government departments, Private Sector, National, Provincial and District Civil Protection Committees and Partners. Resources required include Human, financial, material resources Transport, conferences and Stationery. A total cost of \$416,000.00 is required.

To produce and disseminate IEC materials for healthcare workers and the general population on Ebola Virus

The Ministry would like to produce and distribute IEC materials, job aids for health workers, Radio and TV Shows. This activity will target health workers, other sectors and the general population. The aim is to have an increased awareness and adoption of prevention behaviors/ practices Human and financial, material resources, transport, and stationery will be required at an estimated cost of \$54,600.00.

To mobilize communities for the prevention and control of Ebola Virus Disease

 This objective seeks to increased awareness Improve knowledge, behaviors and practices, among Community (rural, peri-urban and urban) and general population through road shows SMSs, distribution of posters, flyers, billboards and other IEC materials, perceptions Beliefs assessment and dramas. A total estimated budget of \$116 600.00 is required.

To orient and sensitize media on Ebola Virus Disease prevention and control

• The country seeks to improve media reporting on Ebola Virus Disease through involvement of media houses and journalists by providing updates to media, press conferences, press release, and breakfast meetings. Human, Financial, Material resources and Stationery will be required at an estimated cost of \$20,000.00

To monitor and evaluate EVD interventions

 The objective endeavors to Increase level of knowledge and awareness on EVD among community health workers, media, and stakeholders. This will in turn achieve Change in attitudes, behaviours and practice improved in EVD preparedness. Resources required include Human, Financial, Material resources, Transport and Stationery. An estimated budget of \$30,000.00 is required.

Thematic area 6: Coordination Total Cost \$34,475.00 Objectives of thematic area 6

To promote collaboration and coordination activities for preparedness of Ebola Virus Disease

This objective targets to have agencies, other sectors, ministries and NGOs well informed on EVD. Activities planned include holding of 12 IACCH meetings, 6 National Civil Protection Committee Meetings (Department of Civil Protection), 12 National Taskforce meetings (monthly), four Zoonotic sub-committee meetings (quarterly), and establish National Health Emergency Operation Centre (NHEOC). Resources required include Transport, Refreshments, Stationery, and Communication (phone/cell phone calls) at an estimated cost of \$34.475.00

Thematic area 7: Logistics and Supplies Objectives of thematic area 7 Total Cost - \$3,100.000.00

To ensure availability of adequate resources for preparedness and response to a possible outbreak/ outbreak of Ebola

 Medicines and supplies for EVD will need to be procured and proportioned to the provinces and points entry in the event that we have cases.

- To procure ambulances and services vehicles
- A total of \$1,000. 000.00 is needed for procurement of 25 vehicles for field operations and ambulances. 11 vehicles are planned for PoE, 2 Vehicles for EDC, 2 for Port Health operations at national level, 2 for laboratory services, 3 ambulances and 5 for local authorities.
- To provide allowances for health workers in Ebola Treatment Centers (ETC)
- In the event that a case of Ebola is introduced into the country and estimating that about 10 more cases will emanate from that case a total of \$1,600,000.00 will be required for staff allowance in Ebola treatment centers and for contact tracing.

To procure medicines and supplies for EVD

- A total of \$450.000.00 is required for the procurement of medicines and supplies for EVD
- To procure communication equipment
- There is need to procure communication equipment for National Emergency Operation Centre, Port Health Authorities and the ETC such as computers, laptops, tablets, mobile handsets and internet service for PoE's. A total of \$50.000.00 is required.

Budget Summary

Thematic Areas and Activities SURVEILLANCE	Cost (USD)
Capacity building for port health staff Sensitization of stakeholders at points of entry Screening and documentation of travelers at points of entry Medical surveillance of travelers from EVD affected countries Adaptation and distribution of data collection tools Orientation of Rapid Response Teams at all levels Training of Health Care staff on case definitions and recognition of EVD cases Weekly collection and transmission of surveillance data Creation of 202 posts for Port Health Staff Establishment of community surveillance systems at grass root level Establishing a hotline	\$ 90 768.00 \$ 15,000.00 \$ 36,50000 \$ 120,000.00 \$ 10,000.00 \$ 110,000.00 \$ 32,000.00 \$ 32,940.00 \$ 1, 212.000.00 \$ 150,000.00 \$ 50,000.00
SUB-TOTAL	\$ 1, 921.808.00

CASE MANAGEMENT

SUB-TOTAL

Setting up of case management teams	\$ 400,000.00
EVD emergency drills/ Case management	\$ 50,000.00
Designation and equipping of isolation facilities at POEs	\$ 50, 000
Identify and equip EVD treatments units	\$ 300,000.00
Capacitate uniformed forces	\$ 100,000.00
Standardize EVD management	\$ 112,000.00
Provide expertise and equipment for mobile clinics	\$ 100,000.00
Equip and adequately train ambulance crews	\$ 173,250.00

\$ 1,185.250.00

COORDINATION

COORDINATION	
Holding IACCH, National Taskforce, Zoonotic sub-committee and Civil Protection meetings at all levels.	\$ 34,475.00
HEALTH PROMOTION	
Orientation and sensitization meetings Production and distribution of materials Road shows, drama, radio messages Media updates, press conferences, breakfast meetings Communication, documentation, KAPB, Assessments.	\$ 416,000.00 \$ 54,600.00 \$ 116,600.00 \$ 20,000.00 \$ 30,000.00
SUB-TOTAL	\$ 637,200.00
INFECTION CONTROL	
INFECTION CONTROL	
Training of trainers in infection control (TOT) in infection control Cascade training to lower levels Purchasing and prepositioning of PPEs Designation of burial places Training of burial groups	\$ 180,030.00 \$ 32,000.00 \$ 240,989.00 \$ 56,000.00 \$ 137,200.00
SUB-TOTAL	\$ 646,219.00
SUB-TOTAL	\$ 646,219.00
LABORATORY	\$ 646,219.00
	\$ 646,219.00 \$ 40,000.00
LABORATORY Purchase of laboratory commodities — Triple packaging, outer packaging UN2841	
LABORATORY Purchase of laboratory commodities — Triple packaging, outer packaging UN2841 boxes Training on collection, storage and transportation of EVD samples Purchase of laboratory reagents	\$ 40,000.00 \$ 8,000.00 \$ 50,000.00
LABORATORY Purchase of laboratory commodities — Triple packaging, outer packaging UN2841 boxes Training on collection, storage and transportation of EVD samples Purchase of laboratory reagents Refurbishment of National Microbiology Reference Laboratory (NMRL) (level 3)	\$ 40,000.00 \$ 8,000.00
LABORATORY Purchase of laboratory commodities – Triple packaging, outer packaging UN2841 boxes Training on collection, storage and transportation of EVD samples Purchase of laboratory reagents Refurbishment of National Microbiology Reference Laboratory (NMRL) (level 3 to elements of level 4 for EVD confirmation)	\$ 40,000.00 \$ 8,000.00 \$ 50,000.00 \$ 2,800,000.00
LABORATORY Purchase of laboratory commodities — Triple packaging, outer packaging UN2841 boxes Training on collection, storage and transportation of EVD samples Purchase of laboratory reagents Refurbishment of National Microbiology Reference Laboratory (NMRL) (level 3)	\$ 40,000.00 \$ 8,000.00 \$ 50,000.00
Purchase of laboratory commodities — Triple packaging, outer packaging UN2841 boxes Training on collection, storage and transportation of EVD samples Purchase of laboratory reagents Refurbishment of National Microbiology Reference Laboratory (NMRL) (level 3 to elements of level 4 for EVD confirmation) Costing per test at NICD SA (US\$2 000/test x 500 tests)	\$ 40,000.00 \$ 8,000.00 \$ 50,000.00 \$ 2,800,000.00 \$ 1,000,000.00
Purchase of laboratory commodities — Triple packaging, outer packaging UN2841 boxes Training on collection, storage and transportation of EVD samples Purchase of laboratory reagents Refurbishment of National Microbiology Reference Laboratory (NMRL) (level 3 to elements of level 4 for EVD confirmation) Costing per test at NICD SA (US\$2 000/test x 500 tests) Purchasing of chemistry analyzer for initial monitoring of EVD	\$ 40,000.00 \$ 8,000.00 \$ 50,000.00 \$ 2,800,000.00 \$ 1,000,000.00 \$ 120.000.00
Purchase of laboratory commodities — Triple packaging, outer packaging UN2841 boxes Training on collection, storage and transportation of EVD samples Purchase of laboratory reagents Refurbishment of National Microbiology Reference Laboratory (NMRL) (level 3 to elements of level 4 for EVD confirmation) Costing per test at NICD SA (US\$2 000/test x 500 tests) Purchasing of chemistry analyzer for initial monitoring of EVD SUB TOTAL	\$ 40,000.00 \$ 8,000.00 \$ 50,000.00 \$ 2,800,000.00 \$ 1,000,000.00 \$ 120.000.00
Purchase of laboratory commodities — Triple packaging, outer packaging UN2841 boxes Training on collection, storage and transportation of EVD samples Purchase of laboratory reagents Refurbishment of National Microbiology Reference Laboratory (NMRL) (level 3 to elements of level 4 for EVD confirmation) Costing per test at NICD SA (US\$2 000/test x 500 tests) Purchasing of chemistry analyzer for initial monitoring of EVD SUB TOTAL LOGISTICS Procurement of 25 service vehicles and ambulances Provision of allowance for health care workers Procurement of disinfectants and medical supplies	\$ 40,000.00 \$ 8,000.00 \$ 50,000.00 \$ 2,800,000.00 \$ 1,000,000.00 \$ 120.000.00 \$ 4,048,000.00 \$ 1,600.000.00 \$ 450.000.00

\$ 11,572,952.00

GRAND TOTAL