



Infection Prevention and Control
**Triage and Quality of Care Improvement
in Facilities Caring for Ebola Patients in
Sierra Leone**

19 September 2015



WHO Sierra Leone/H. Murthi

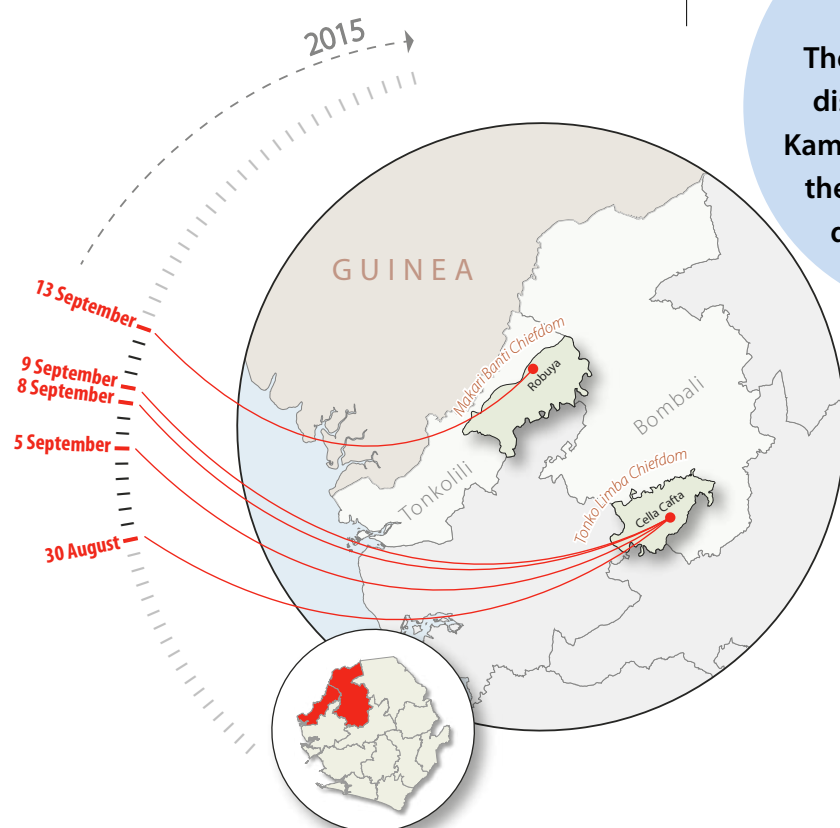
OVERVIEW

Since the outbreak of the Ebola Virus Disease (EVD) in Sierra Leone, a total of 8,704 confirmed cases have been reported countrywide, with over 3,589 recorded deaths (figures as of 19 September 2015).

On 13 September, a new case of EVD was positively identified in Bombali district (*Robuya, Makari Banti Chiefdom*) after almost 170 days of being Ebola-free. In response to this sudden reoccurrence of EVD, WHO and the US Centers for Disease Control and Prevention (CDC) immediately deployed a joint team of partners to conduct assessments and decontamination monitoring within the high-risk zone where the EVD positive patient lived.

This recent event follows six earlier contact transmissions which were reported two weeks earlier in the *Chiefdom of Tonko Limba*, Kambia District (30 August).

These reoccurring threats posed by the 'long tail-end' of the Ebola epidemic continue to present the potential risks of contact associated Ebola transmissions, either as isolated infection events, or as unknown high-risk anomalies in areas which were previously free of EVD.



750
The number of people district authorities in Kambia monitored under the mandatory 21 day quarantine period

EBOLA VACCINE TRIAL
Phase 3 trial of the *rVSV-ZEBOV* vaccine has now been extended to **Sierra Leone** after the EVD transmission event(s) of 30 August. Contacts and contacts-of-contacts associated with new confirmed cases and those who meet the trial's study criteria will be offered the vaccine as part of a secondary test group



WHO Sierra Leone/H. Murthi

THE IPC RING

The purpose of Ring IPC is to provide intensive IPC support to Health Care Facilities (HCFs) in areas of active Ebola transmission. The IPC Ring strategically places a protective ring of intensified IPC attention around persons with known Ebola to help break the chain of transmission. The IPC ring approach also strategically assesses and strengthens the capacity of Ebola response actors (WHO, MoHS and partner agencies) to screen, isolate, and identify suspected Ebola cases in health facilities within the immediate proximity of Ebola transmission hotspots.

IPC Ring – Priority Areas for Strengthening:

- Appropriate use of screening algorithm
- Application of isolation procedures of suspected EVD cases
- Alert notification procedures
- Correct use and removal of PPE supplies
- Hand hygiene

IPC Ring - Bombali

Following the confirmed case of EVD on 13 September in Bombali, the WHO IPC team and partner organizations conducted assessments and supervised the following IPC Ring activities:

- 15 Peripheral Health Units (PHUs) were assessed and the following gaps were identified: isolation facilities were not available in all the PHUs; some PHUs had challenges accessing clean water supply; and general PPE supplies like face shields, scrub suits and gum boots were observed to be in short supply.
- Supervised the decontamination of two high risk contact households and a primary school in Rubuya village.

- IPC best-practice guide charts were distributed coupled with on site mentorship by the team covering screening, isolation and notification.

The team extended the IPC ring to cover both Port Loko and Tonkolili as the closest districts to the index case. In Port Loko the team supported four PHUs at the boarder chiefdom of Bombali and at the same time the Tonkolili supported 11 PHUs at the border Cheifdome of Bombali.

IPC Ring - Kambia

IPC Ring assessments were conducted in 17 PHUs in Kambia following the identification of four positive EVD cases on 30 August. The WHO IPC team coordinated and supervised the following IPC Ring activities:

- On-the spot coaching and monitoring was provided by the IPC partners covering national IPC standard operating protocol (SOP); and

The team supported 12 PHUs at PortLoko in response to the new case in Kambia then extended their support to 38 PHUs with on job training and supply the basic needs and mentorship and Bombali the team supported 6 PHUs at the boarded chiefdom. The aim of supporting the nearby district is to be prepared in case on of the contact was presented symptomatic to those facilities this will enable the staff to rapidly deal with the case and provide proper identification and referral.



Ring IPC mission to Port Loko

WHO Sierra Leone




World Health
Organization
Organisation mondiale de la Santé

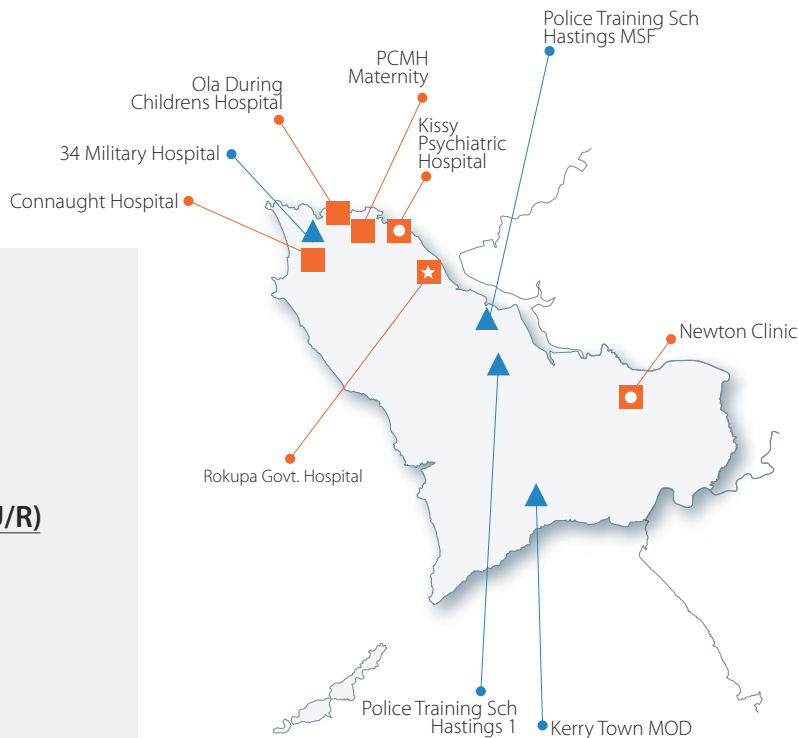
41*
ECFs
operational
as of
September 2015

**As of 19 September 2015*

Distribution of Ebola Care Facilities by District




WESTERN AREA (U/R)
 ETC 4
 EHC 4*



ECF Numbers:

17 facilities closed

*Two EHC currently under decontamination and decommissioning.
 One EHC has re-opened.




PORT LOKO
 ETC 2
 EHC 1*



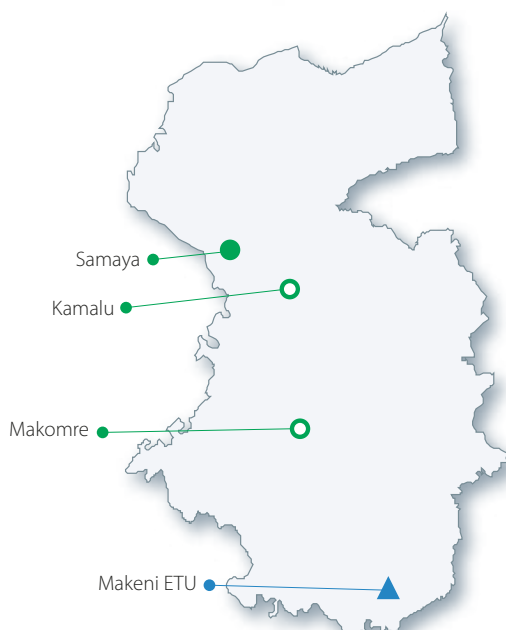
ECF Numbers:

18 facilities closed

**One EHC has re-opened.*









BOMBALI
 ETC 1
 CCC 1



ECF Numbers:

17 facilities closed

Two CCCs currently under decontamination and decommissioning.

-  Ebola Treatment Centre
-  Ebola Holding Centre
-  Community Care Centre
-  Facilities under process of Decontamination and Decommissioning
-  Standby facilities (not currently in use)
-  Facilities re-opened as of 12 September 2015

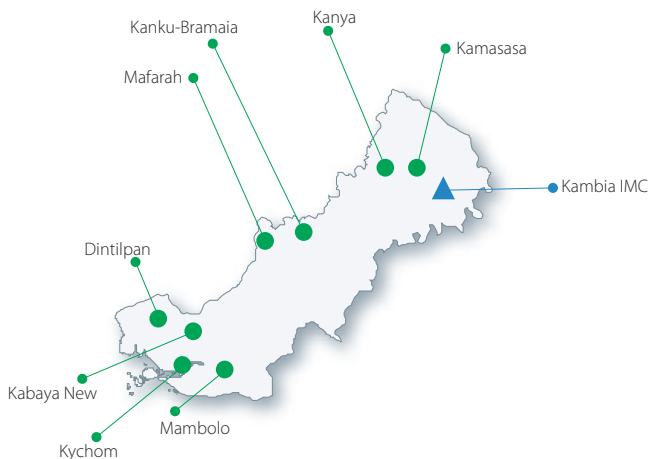
Distribution of Ebola Care Facilities by District



KAMBIA

ETC **1**

CCC **8**



ECF Numbers:

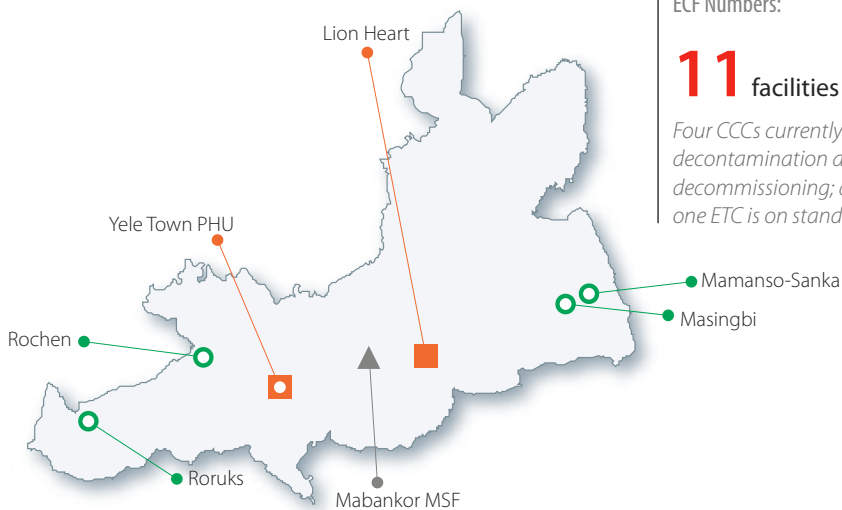
8 facilities closed



TONKOLILI

EHC **1**

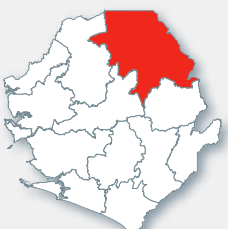
CCC **0**



ECF Numbers:

11 facilities closed

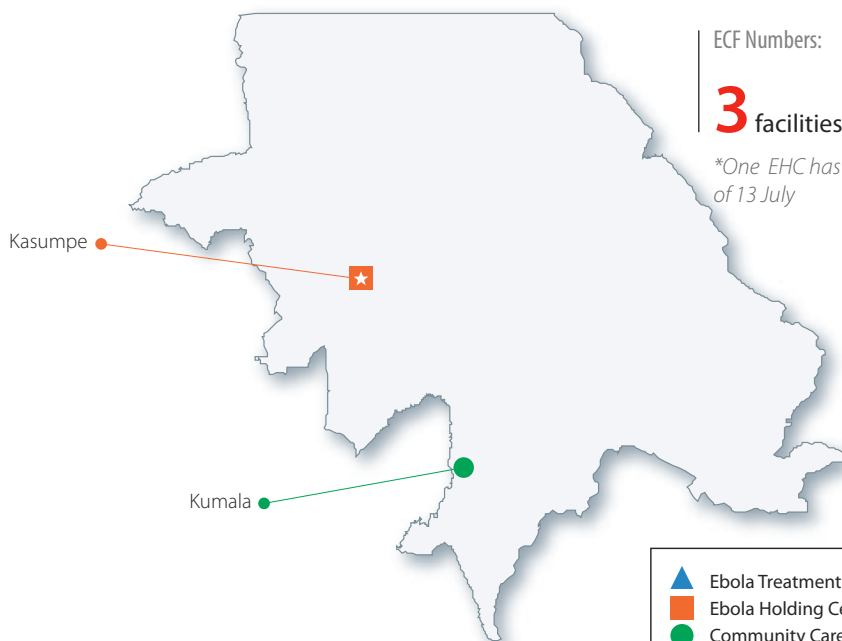
Four CCCs currently under decontamination and decommissioning; and one ETC is on standby.



KOINADUGU

EHC **1***

CCC **1**



ECF Numbers:

3 facilities closed

**One EHC has been re-opened as of 13 July*

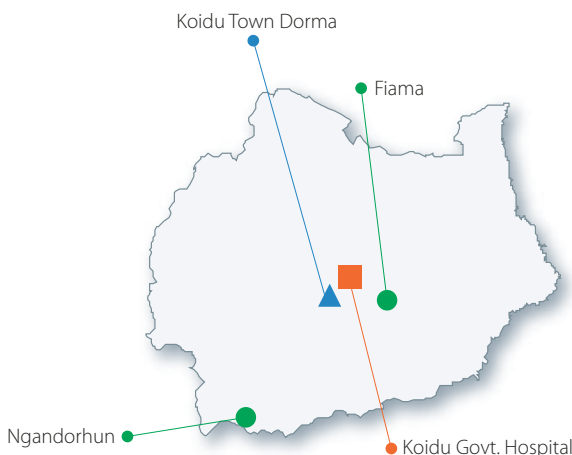
- Ebola Treatment Centre
- Ebola Holding Centre
- Community Care Centre
- Facilities under process of Decontamination and Decommissioning
- Standby facilities (not currently in use)
- Facilities re-opened as of 12 September 2015

Distribution of Ebola Care Facilities by District



KONO

ETC **1**
 EHC **1**
 CCC **2**



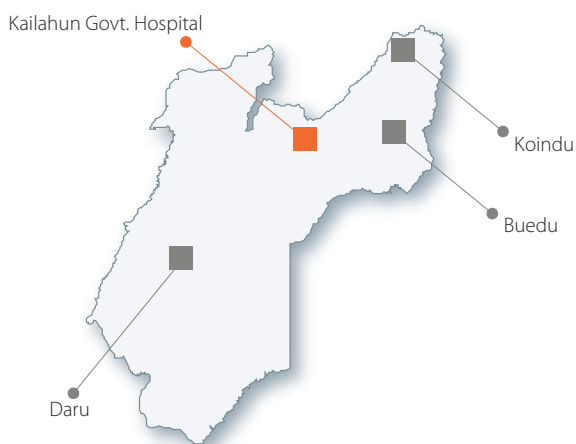
ECF Numbers:

3 facilities closed



KAILAHUN

EHC **1**



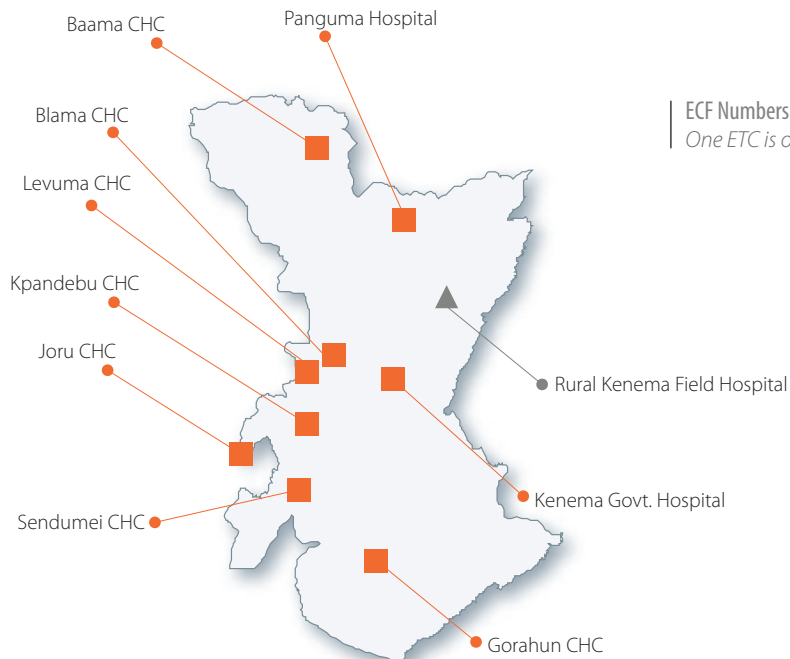
ECF Numbers:

1 facility closed
 Three EHC's are on standby.



KENEMA

EHC **9**



ECF Numbers:

One ETC is on standby.

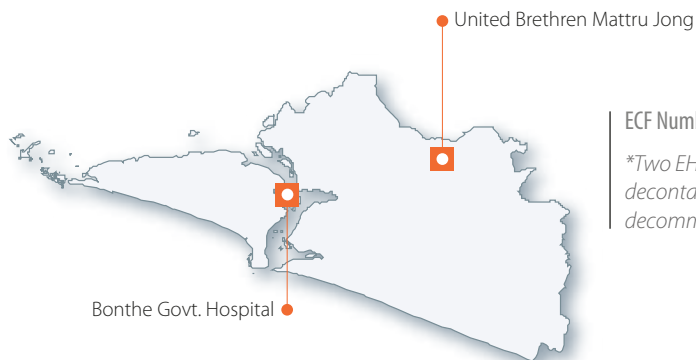
- Ebola Treatment Centre
- Ebola Holding Centre
- Community Care Centre
- Facilities under process of Decontamination and Decommissioning
- Standby facilities (not currently in use)
- Facilities re-opened as of 12 September 2015

Distribution of Ebola Care Facilities by District



BONTHE

EHC 2*



ECF Numbers:

*Two EHCS currently under decontamination and decommissioning



PUJEHUN

EHC 1



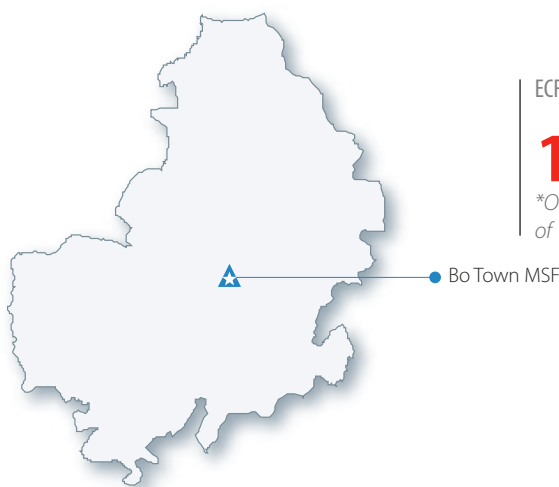
ECF Numbers:

1 facility closed



BO

ETC 1*



ECF Numbers:

1 facility closed

*One ETC has been re-opened as of 1 May 2015



MOYAMBA

ETC 1*




ECF Numbers:

2 facilities closed

*One ETC is on standby.

	Ebola Treatment Centre
	Ebola Holding Centre
	Community Care Centre
	Facilities under process of Decontamination and Decommissioning
	Standby facilities (not currently in use)
	Facilities re-opened as of 12 September 2015

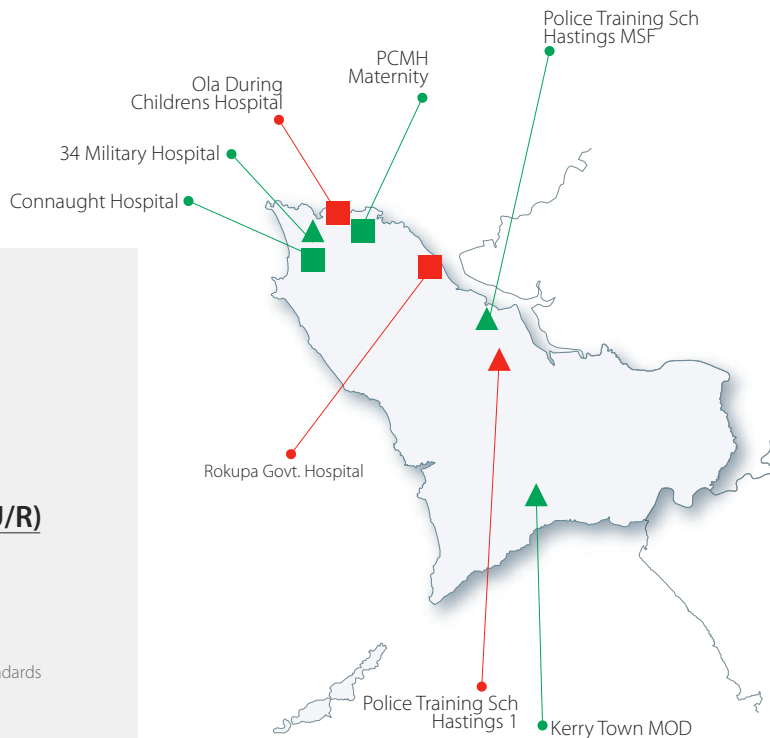

Facilities meeting minimum IPC standards



WESTERN AREA (U/R)

5 Met Minimum Standards

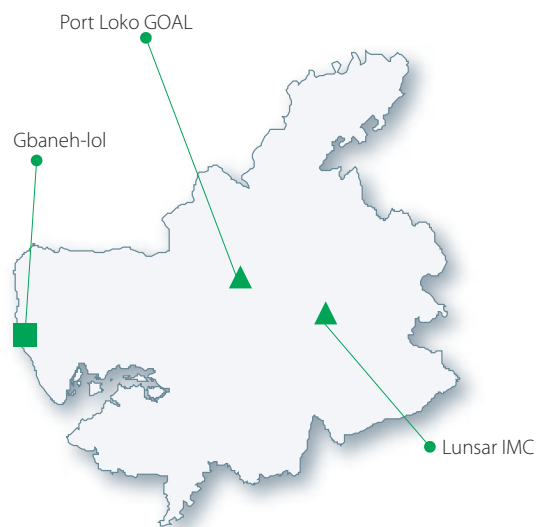

3 Did Not Meet Minimum Standards

PORT LOKO

3 Met Minimum Standards

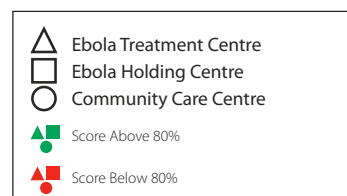
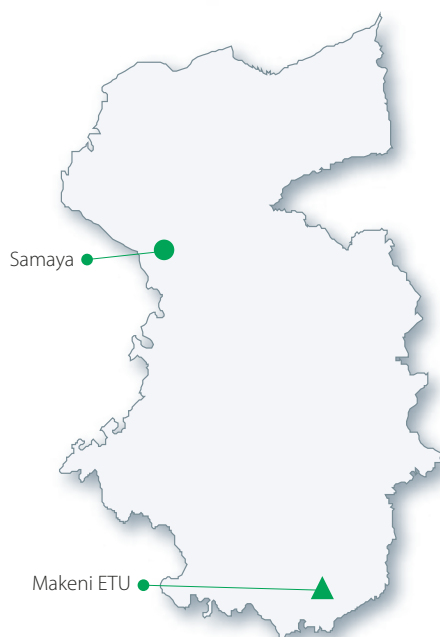
0 Did Not Meet Minimum Standards

BOMBALI

2 Met Minimum Standards

0 Did Not Meet Minimum Standards

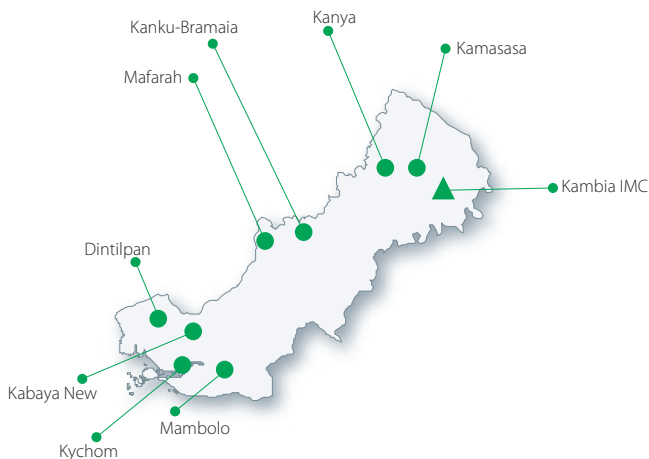


Distribution of Ebola Care Facilities by District



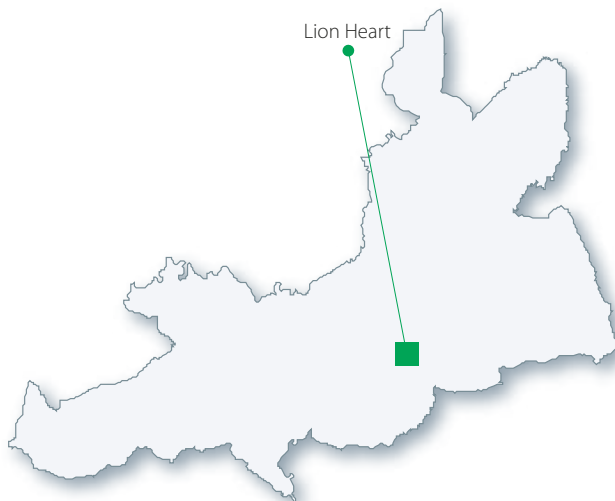
KAMBIA

9 Met Minimum Standards
0 Did Not Meet Minimum Standards



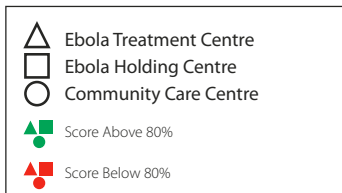
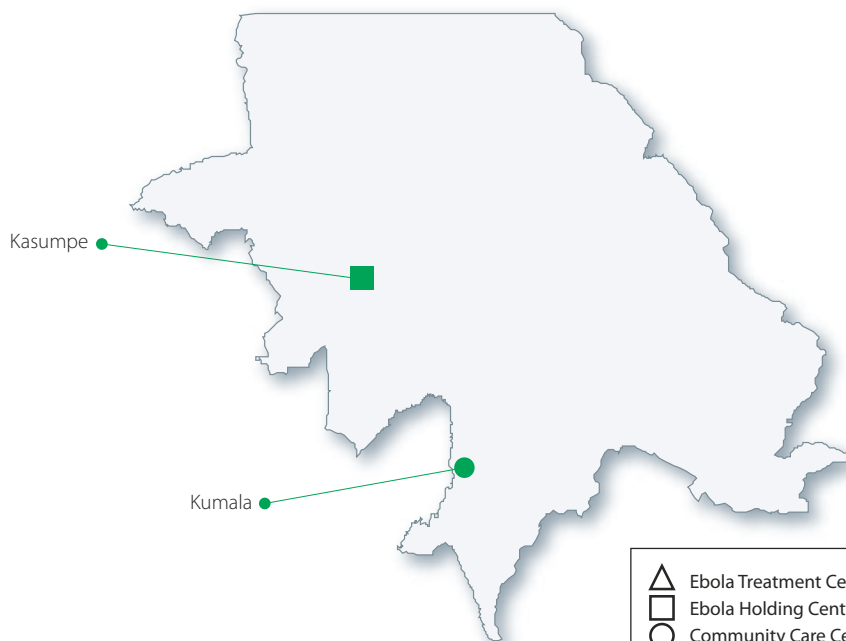
TONKOLILI

1 Met Minimum Standards
0 Did Not Meet Minimum Standards



KOINADUGU

2 Met Minimum Standards
0 Did Not Meet Minimum Standards



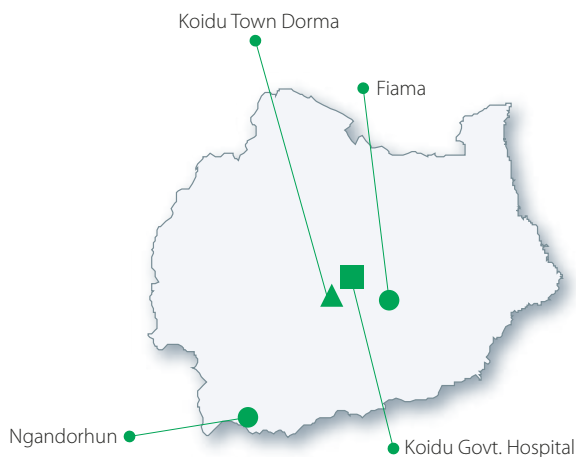
Distribution of Ebola Care Facilities by District



KONO

4 Met Minimum Standards

0 Did Not Meet Minimum Standards



KAILAHUN

0 Met Minimum Standards

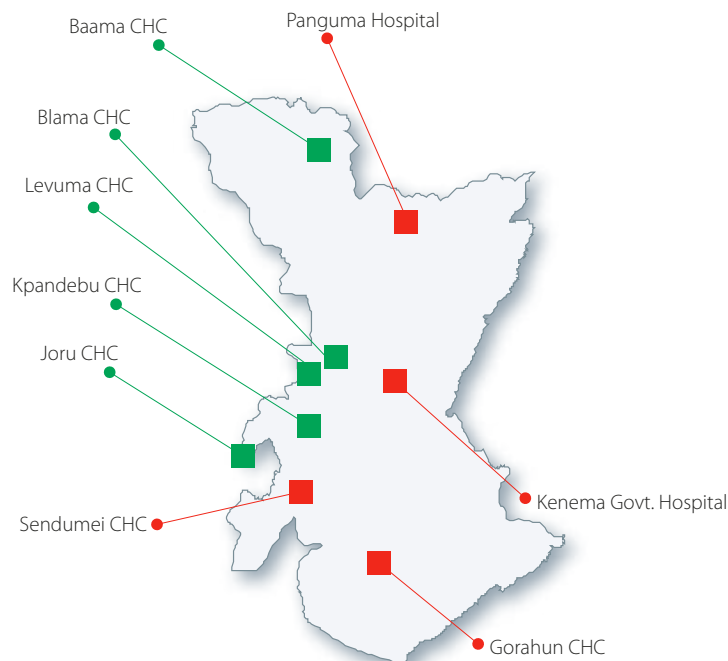
1 Did Not Meet Minimum Standard



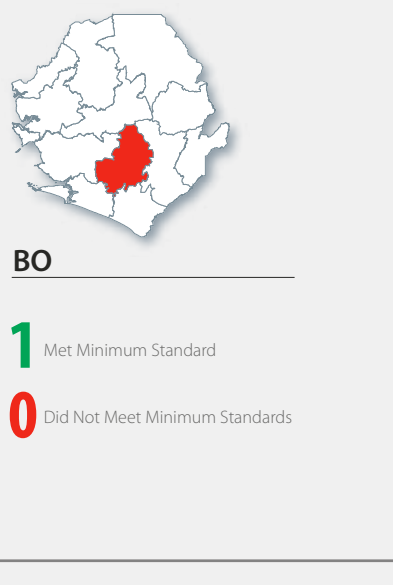
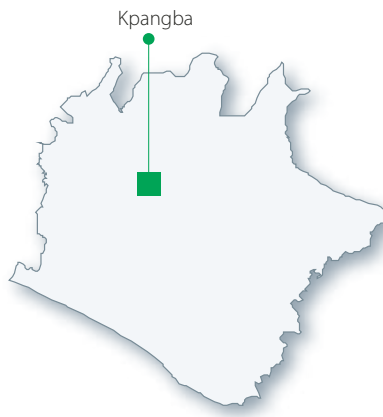
KENEMA

5 Met Minimum Standards

4 Did Not Meet Minimum Standards



Distribution of Ebola Care Facilities by District



ASSESSMENT SCORES

CCC ASSESSMENTS	December	January	February	March	April	May	June	August
Total Score	78	81	82	79	83	87	89	96
IPC guidance and training	50	81	79	58	85	83	80	93
Infrastructure	100	97	98	93	89	97	97	100
PPE use and hand hygiene	90	94	95	92	89	96	99	96
Environmental cleaning, disinfection & waste mgmt	83	90	92	95	95	97	97	100
Equipment and Supplies	93	88	83	81	77	60	77	99
Staff health	63	69	69	70	76	89	93	87
Clinical management	100	63	66	70	77	87	81	100
Observational	44	69	77	75	76	89	89	93

EHC ASSESSMENTS	December	January	February	March	April	May	June	July	August	as of 12 September 2015
Total Score	55	72	71	76	80	88	88	91	86	79
IPC guidance and training	35	63	58	72	77	78	84	75	72	61
Infrastructure	61	83	78	83	80	89	88	97	89	87
PPE use and hand hygiene	75	86	87	90	90	95	94	95	85	90
Environmental cleaning, disinfection & waste mgmt	60	78	79	77	80	93	90	100	97	93
Equipment and Supplies	73	79	82	80	87	91	93	100	95	82
Staff health	53	69	59	58	63	80	85	84	75	64
Clinical management	48	60	62	77	91	94	91	90	85	83
Observational	36	59	63	72	70	83	84	88	88	71

ETC ASSESSMENTS	December	January	February	March	April	May	June	July	August	as of 12 September 2015
Total Score	78	85	86	90	91	93	98	90	92	84
IPC guidance and training	67	85	83	87	90	96	94	85	81	72
Infrastructure	91	94	94	95	96	97	98	91	97	90
PPE use and hand hygiene	86	89	94	93	94	93	100	92	98	90
Environmental cleaning, disinfection & waste mgmt	86	89	91	93	97	97	100	98	99	91
Equipment and Supplies	82	86	91	90	92	92	99	91	96	91
Staff health	72	80	76	76	87	83	97	85	84	79
Clinical management	73	78	86	98	91	97	100	98	94	75
Observational	69	76	71	88	84	86	98	80	91	83



Refresher PPE training for HCWs

TRAINING ACTIVITIES ACROSS SIERRA LEONE

74*

Medical doctors trained

4,968*

Nurses, midwives, lab technicians, community health assistants and nursing aides trained

2,446*

Ebola support staff trained covering burial teams, ambulance teams, swab collectors, contact tracers, surveillance teams, social mobilisers and vehicle decontamination teams

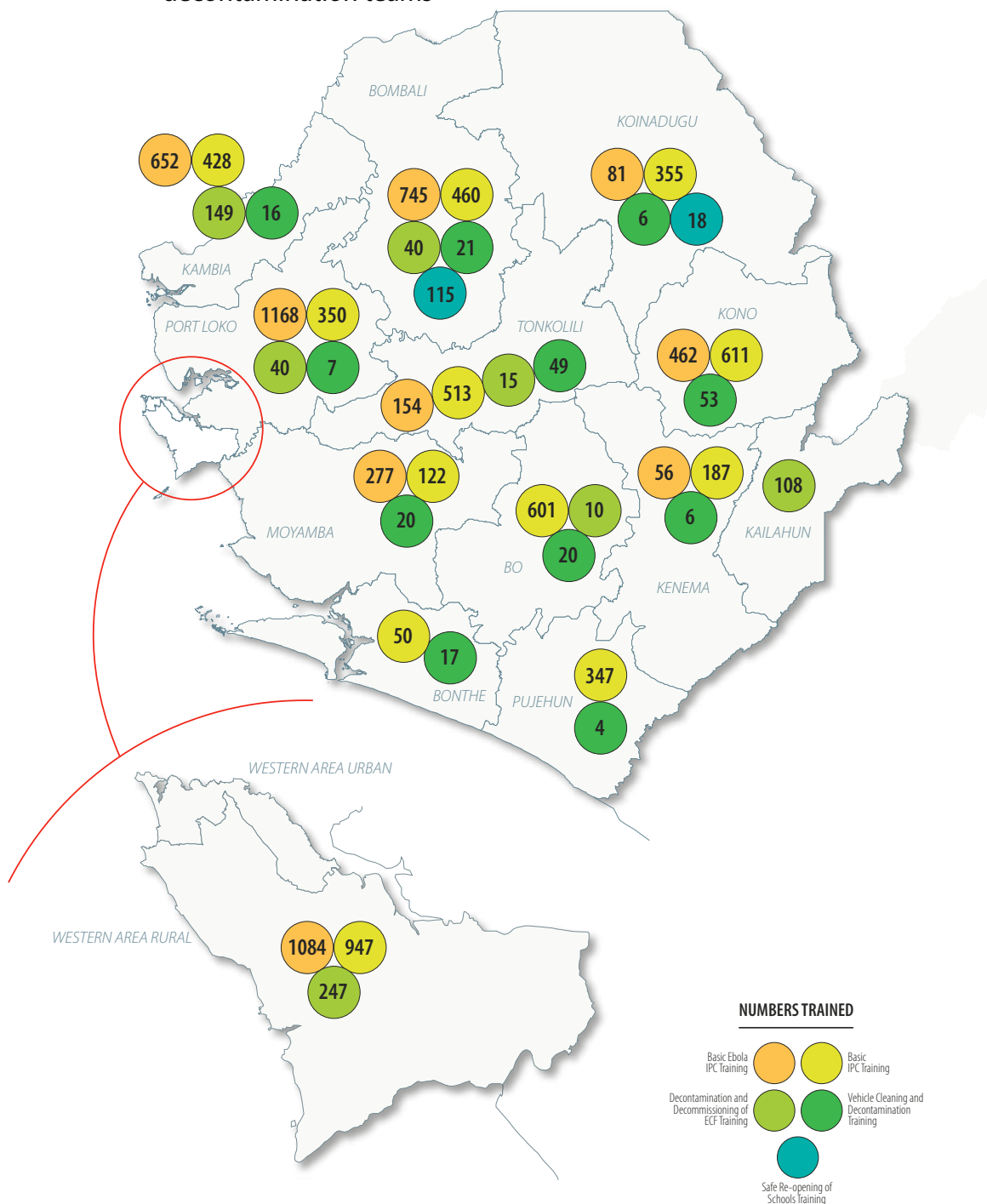
10,611*

Trainings conducted since the start of the outbreak in Sierra Leone

1,428*

Trainings conducted for burial teams, ambulance teams, swab collectors, contact tracers, surveillance officers and vehicle decontamination teams

**Figures from December 2014 - August 2015*



WHO SUPPORT TO THE NATIONAL INFECTION PREVENTION AND CONTROL UNIT TO UNDERTAKE NATIONWIDE HCF ASSESSMENTS

WHO's IPC team continue to closely support the MoHS's National Infection Prevention and Control Unit (NIPCU) to undertake assessment visits to HCFs in silent districts, and so far, the NIPCU team have assessed private and governmental-run health facilities in Freetown, PortLoko and at Bo. The NIPCU team also conducted assessments in Kambia covering the district referral hospital and eight PHUs, four of which were located inside the IPC ring.

The objectives of the visits were to:

- Baseline to assess improvements in IPC interventions
- To assess screening and triaging preparedness
- Assess hand hygiene facilities
- Assess availability of PPEs
- To assess waste management practices in institution

General findings:

- Systems to ensure continuous uninterrupted and adequate supply of PPEs should be put in place
- There is need for proper IPC mentorship in the PHUs
- Staff do not adhere to general IPC protocols
- Waste management system to be put in place
- Hand hygiene practices need to be strengthened and hand hygiene supplies made available
- Limited space leading to overcrowding of patients in some hospitals and PHUs



Refresher PPE training for HCWs

WHO Sierra Leone/H. Raimundo



IPC assessment of an ETC in Western Area

WHO Sierra Leone/H. Raimundo



IPC AND FLOOD

On 16 September heavy rain fall inundated Freetown and severe flooding affected many neighborhoods across Western Area. The IPC team are closely working with partner organizations to make sure that the health care facilities have ample medical supplies to effectively respond and treat injured/sick people. There remains a high risk of waterborne diseases due to water sources being contaminated due flooding.

However, hospitals across Freetown were minimally affected by the heavy rains except for Connaught Hospital Operating Room (OR), which was affected by flood water. The IPC team coordinated with the Connaught Hospital's administration to assess the situation and supervise the decontamination process of the OR. The IPC team are also coordinating with other partner organizations at the Siaka Stevens Stadium to support displaced communities sheltering at the sports complex.



There are currently 5,510 people sheltering at the Siaka Stevens Stadium. Assessment, active surveillance and triage are being intensified to identify and respond to new health needs and address critical healthcare gaps. A further facility-level readiness assessment was carried out by MoHS and WHO, as well as support to the Freetown District Health Management Team was provided in form of transport, communication and preparedness planning.

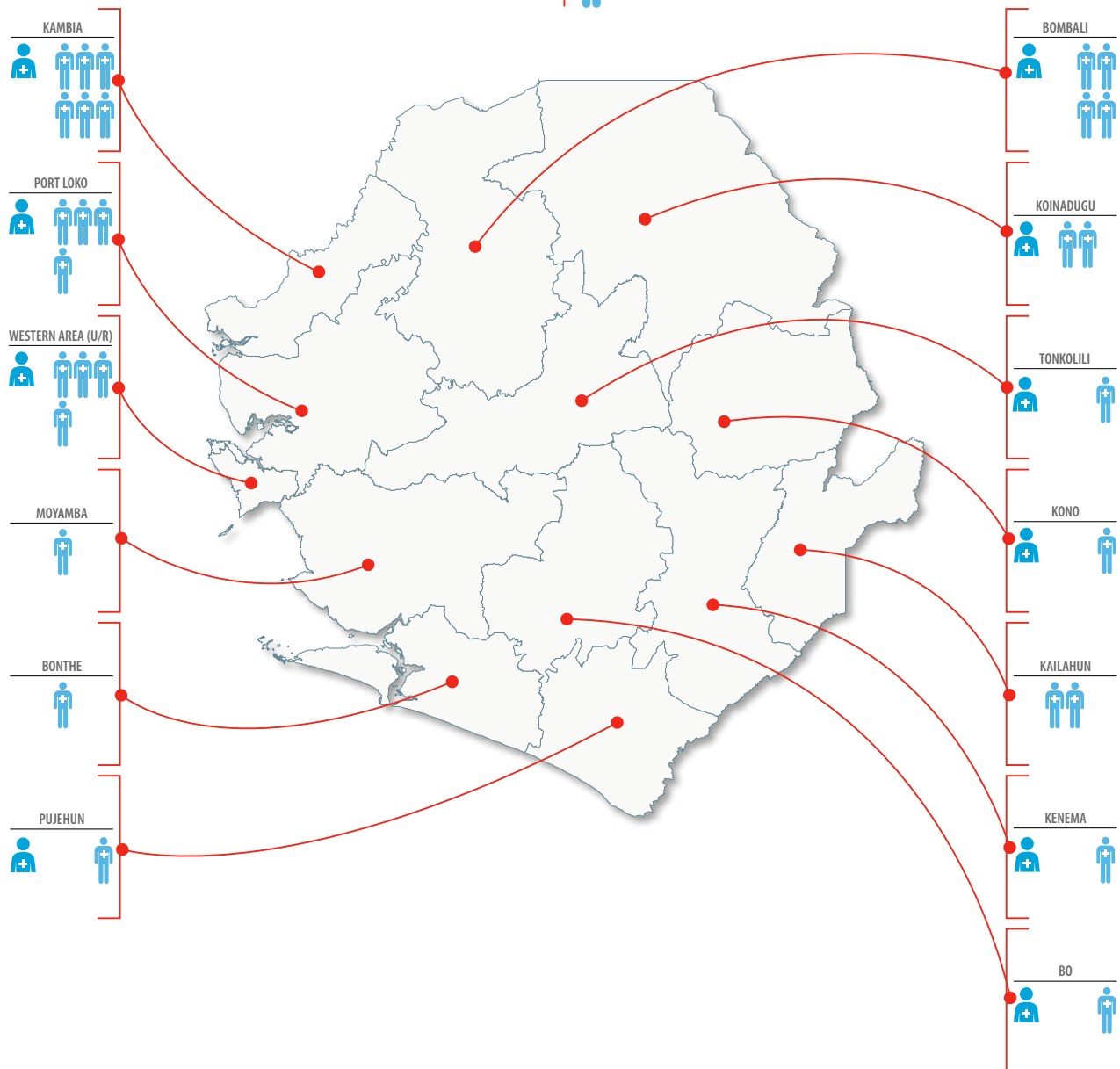
The current level of triage activities at the sports complex have yielded a surge of suspected EVD alert cases which could potentially exceed current diagnostic capacity. WHO has taken the lead in the health pillar at the sports complex to support the MoHS.

IPC DEPLOYMENTS ACROSS SIERRA LEONE

(As of 19 September 2015)

11 | 29

INTERNATIONAL
IPC EXPERTS  NATIONAL
IPC OFFICERS 



WHAT IS NEXT?

During the last week of September, the National IPC Guidelines will be rolled out and training on the standardised IPC Modules will be cascaded to all health care facilities. WHO is working with MoHS to start the local production of alcohol-based hand rub for six Government Hospitals. Production is expected to start in November 2015, after which it will be cascaded to hospitals nationwide.

WHO/UNOPS Collaboration on Construction of Screening and Triage Areas and Waste Management Areas:

22 Hospitals will have screening and triage and also waste management areas constructed. These will meet IPC standards and construction plans are at an advanced stage completion. The MoHS, WHO and UNOPS are scheduled to meet the last week of September to approve the plans and thereafter the construction phase will follow.

