

Preparing a workforce for Ebola Treatment Units: IPC and PPE training in Freetown, Sierra Leone

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Disclosure of Interest

The training program was funded by the Department for International Development (UK).

No pharmaceutical grants were received to support the training.



Population: ~ 6 million
Gross National Income per capita: \$1
Total expenditure on health per capita: \$228
Life expectancy: 46 years
Physicians: 0.022/1000 (~132)
Nurses: 0.1666/1000 (~1,000)





BREAKING NEWS

Cruise ships at Melbourne pier evacuated after sniffer dogs smell 'something suspicious'

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Ebola crisis: WHO declares international public health emergency, to consider use of experimental medicines

By Europe correspondent [Barbara Miller](#), wires

Updated 9 Aug 2014, 12:26pm

West Africa's raging epidemic of the Ebola virus has been declared an international public health emergency by the World Health Organisation (WHO).

Holding an emergency meeting, the Geneva-based UN health agency said the possible consequences of further spread are "particularly serious" given the virulence of the virus.

WHO chief Margaret Chan has described the outbreak as an extraordinary event and a risk to other countries, and said a coordinated international response was required.

"I am declaring the current outbreak of Ebola virus ... a public health emergency of international concern," she said.

"The committee's decision was unanimous. It's advice to me acknowledges the serious and unusual nature of the outbreak and the potential for further international spread."

It is expected that WHO will be meet again next week to consider the ethics of using experimental medicines to deal with the outbreak.

The death count has now climbed to almost 1,000 people, in Guinea, Sierra Leone and Liberia.

WHO's emergency declaration comes as the United States orders the families of embassy staff in Liberia to return home, as West Africa struggles to cope with the world's biggest ever outbreak of Ebola.



PHOTO: Health workers - like this one from the Liberian capital Monrovia - form part of the front line in treating those infected with Ebola. (AFP: Zoom Dosso)

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MAP: [Guinea](#)

EBOLA VIRUS OUTBREAK



[Donate to Ebola fight](#)



[Explained: Australia's plan to tackle Ebola](#)

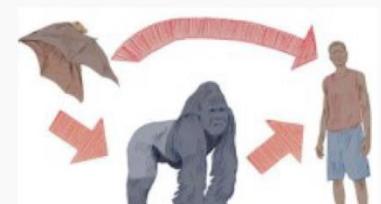
You can't get Ebola through food



You can't get Ebola through air



[How you can and can't get Ebola](#)



[Ebola: what is it and how does it spread?](#)

Some definitions

Suspect case – fever plus three other symptoms

Probable case – suspect case plus epi link

Confirmed case – positive laboratory test

Holding centre – suspect & probable cases only

Ebola Treatment Unit (ETU) – confirmed cases only



Training of HCW

Three day program based on IPC and PPE training and social mobilisation; 30+ participants per room with 2-3 trainers; multiple rooms simultaneously. Participants arranged by MOHS, plus additions.

EDIP Principle:

Explanation – presentation and discussion

Demonstration – one person getting into/out of PPE

Imitation – working in pairs under trainer guidance

Practice – repeat donning and doffing

Explanation

What are Going to Be Your Achievements at the End of Today

Learn about the facility & the team you will be working with

Learn the FACTS about Ebola (transmission & disease)

How to work safely where there is Ebola disease

How to safely wear and remove Personal Protective Equipment

To gain knowledge and confidence to work at the treatment center



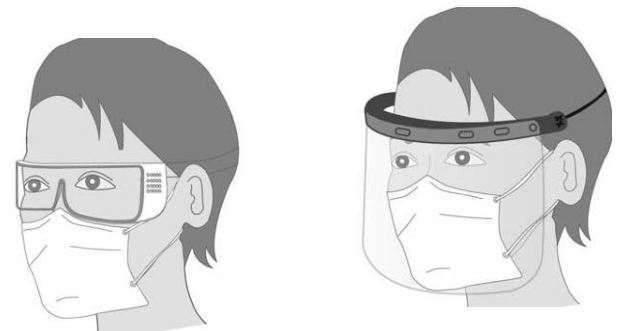
The Steps to Putting on PPE

7 Put on face protection:

7a Put on a medical mask & then



7b Put on goggles or a face shield.



“What is Ebola?”

“How does a person get Ebola?”

“Have you heard of other ways people are saying you can get Ebola?”

“Is Ebola the result of a spell or a curse?”

“What happens when you get Ebola?”

“Can you catch Ebola by touching a dead body?”

“When a person survives Ebola and returns to the community can you catch it from that person?”

“Now that Ebola is in the community, what do you do when there is a sick friend, relative or family member?”

**Adapted for
Sierra Leone
For the 2014
outbreak**



**World Health
Organization**

Demonstration



Imitation



Practice



...and more practice



Mock ETU



Outcomes

A total of 849 health care workers trained in the first six weeks

Mostly MOHS staff from a variety of facilities (Connaught, Ola During, Jui)

Not just Freetown – included people who travelled e.g. from Kenema, Kambia, Bo, Kailuhun etc

Also other staff: Such as Oxfam, Cap Anamur German Emergency Doctors, UK Military, as well as village chiefs and religious leaders

Handover to UK MOD for continuation and upscale

Ebola beds prevented 40,000 deaths

By Michelle Roberts
Health editor, BBC News online

🕒 13 October 2015 | [Health](#)



The global response to the Ebola crisis in Sierra Leone helped avert 40,000 deaths but if aid had been offered sooner, thousands more lives there might have been saved, say researchers.

Britain's donations of more than £100m in the summer of 2014 helped to set up nearly 3,000 hospital beds.

This vital provision, researchers estimate, prevented 56,000 Ebola cases.

Ebola crisis

How Ebola changed the world

The hunters breaking an Ebola ban on bushmeat

Why Ebola is so dangerous

Ebola: Mapping the

“From September 2014 onwards, more than 2,700 treatment beds were introduced in Ebola holding centres, CCCs and ETUs...in Sierra Leone.

Outcomes – HCW infections

	SEPT	OCT	NOV
Number of cases lab confirmed	1513	2849 (1.88X)	5056 (1.77X)
HCW confirmed EVD cases	71 with 30 deaths	125 (1.76X) with 91 deaths	132 (1.06X) with 104 deaths
No. of beds & ETUs (% demand)	165 beds in 1 ETU (25%)	346 beds in 9 ETUs (29%)	356 beds in 9 ETUs with 853 additional beds to open in next weeks

No infections to our knowledge in trainees

Challenges

Demand – high demand, limited number of trainers

Language – importance of partnering with local trainers

Stigma – not just for survivors but also for HCWs

Ongoing on the job assessments for compliance

PPE – variable; teach principles of piecing kit together to achieve outcome

Thank you, and also thanks to the MOHS senior nurse trainers without whom the training would not have been possible

