



# EBOLA

## *A Journey of Perspectives*



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# WHY???

- **Good question!!**
- **It reflects the expanding role of our profession. Context is unique but issues remain the same? You be the judge**





# *The journey - Destination*

Pre-deployment training in Canberra from 26-28 Nov 14. Flights to Sierra Leone from 1300hrs 28 Nov 18

“We are travelling to the worst affected city in the worst affected country in the worst ever recorded epidemic of the most lethal communicable disease described.”

Dr John Gerrard, Director Infectious Diseases,  
Gold Coast Hospital and Health Service





# *Mission*

- To commission and operate a 100 bed Ebola Treatment Centre, at Hastings Airfield, Sierra Leone constructed by UK Govt as part of Australian Govt's response.





# Ebola Situation Report

*11 MAR 15*

Country	Cumulative cases
Guinea	3285
Liberia	9343
Sierra Leone	11619
TOTAL	24247





# Ebola Infected Healthcare Workers (HCW)

11 Mar 15



Country	Cases	Deaths
Guinea	173	90
Liberia	372	180
Sierra Leone	295	221
<b>Total</b>	<b>840</b>	<b>491</b>



# Ebola Virus Disease

## *Two important facts*

1. It is among the most lethal communicable pathogens described (70% mortality)





# Ebola Virus Disease

## *Two important facts*

1. It among the most lethal communicable pathogens described
2. Transmission requires contact with the body fluids of symptomatic patients







*Image for illustrative purposes only*



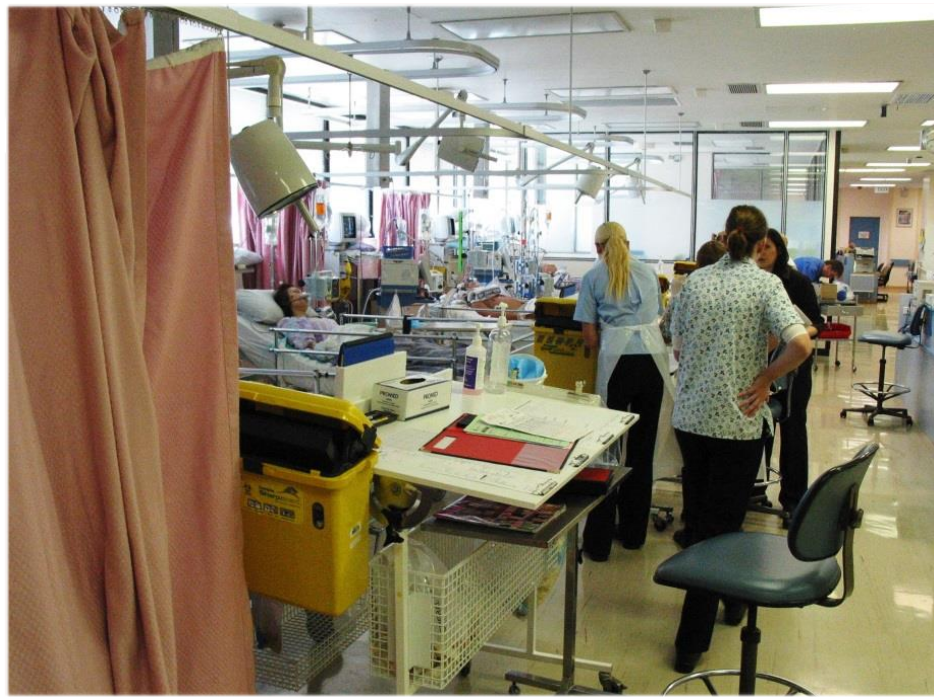


*Freetown, Sierra Leone*











# Intervention Strategies

*In-country training MSF Bo and Kailahun.*

*Contact tracing and quarantining*

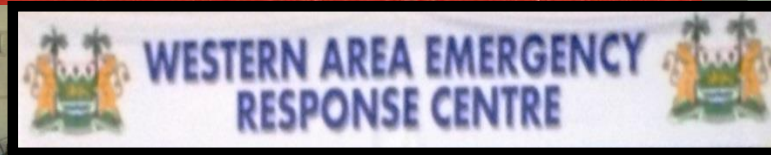
*Hospital case isolation*

*Hygienic burial of hospital and community deaths*

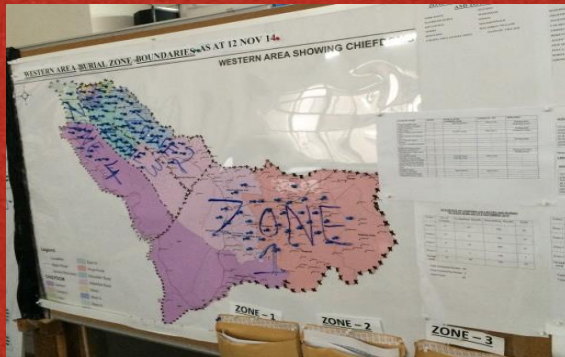




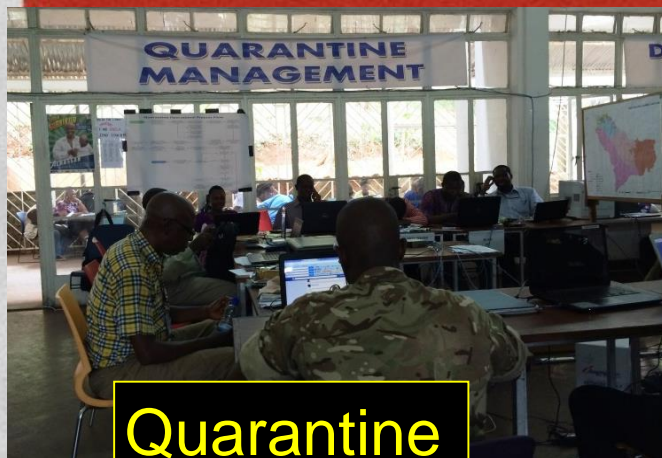
# Surveillance



# LiveCase Management

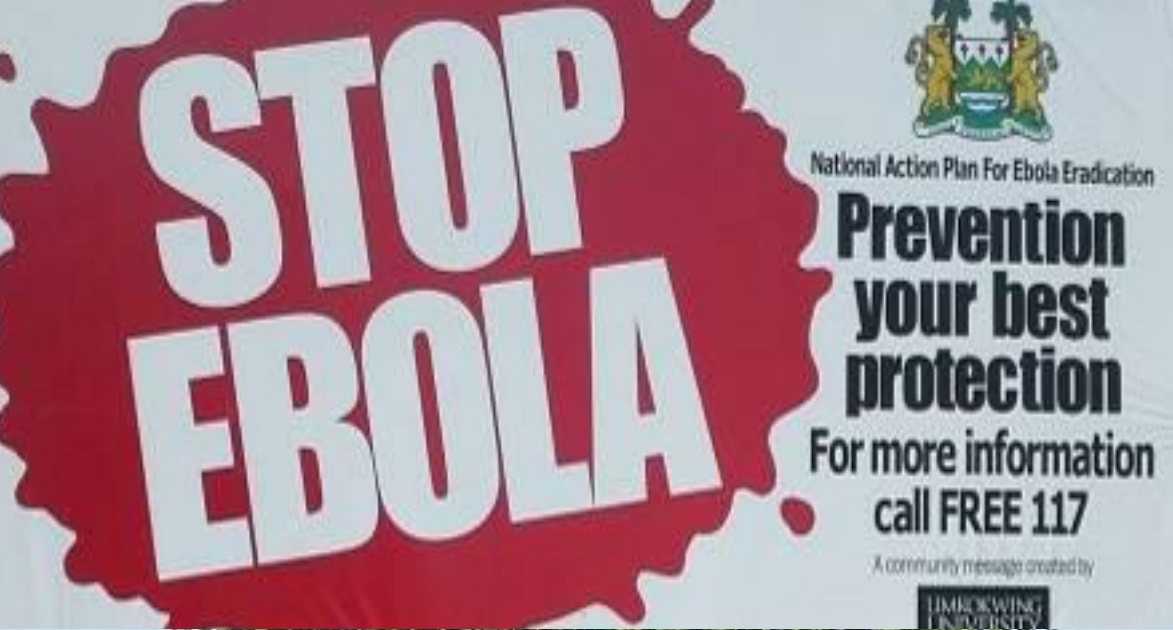


## Dignified Burial



# Quarantine



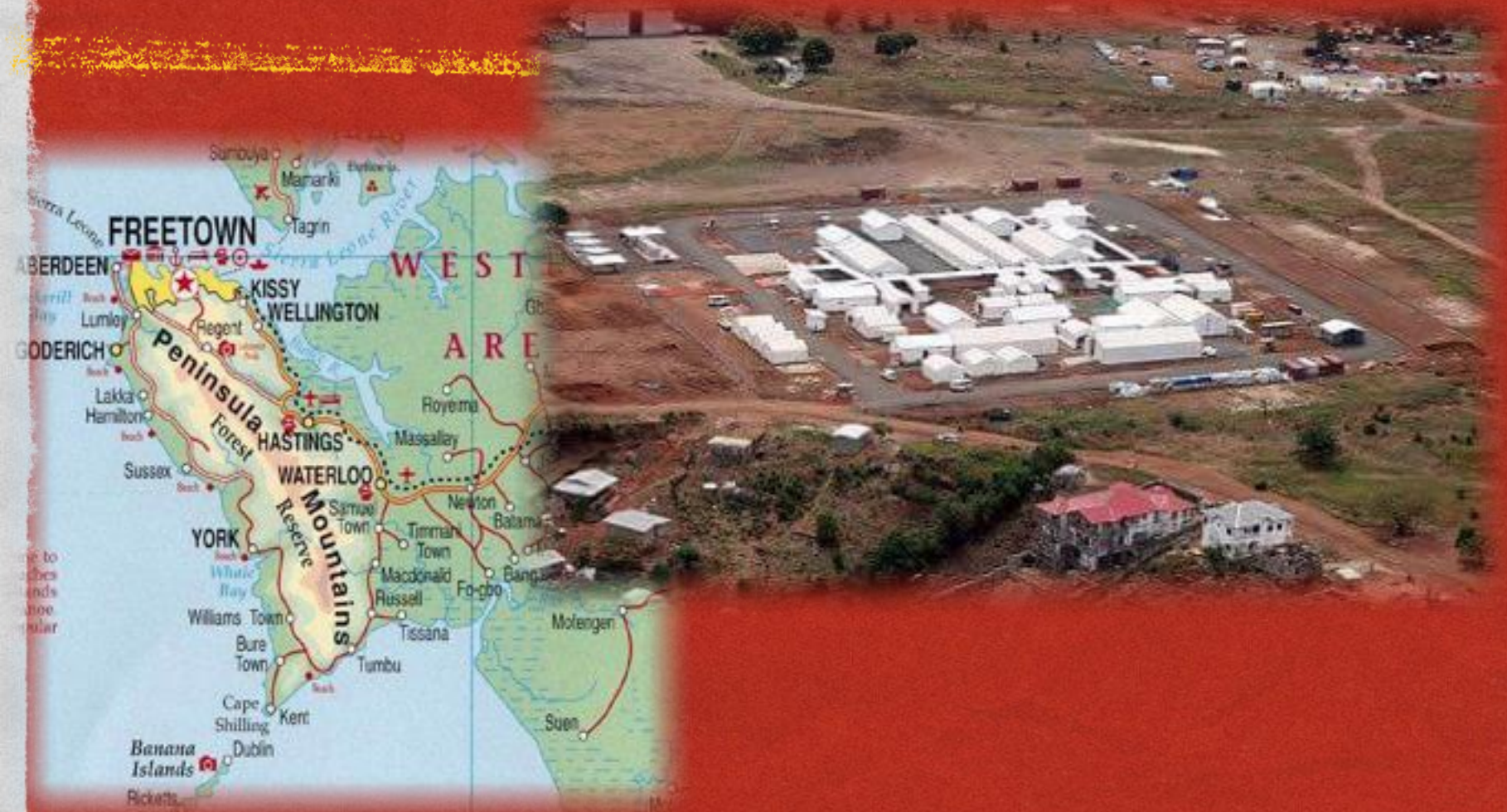








# Hastings Airfield ETC





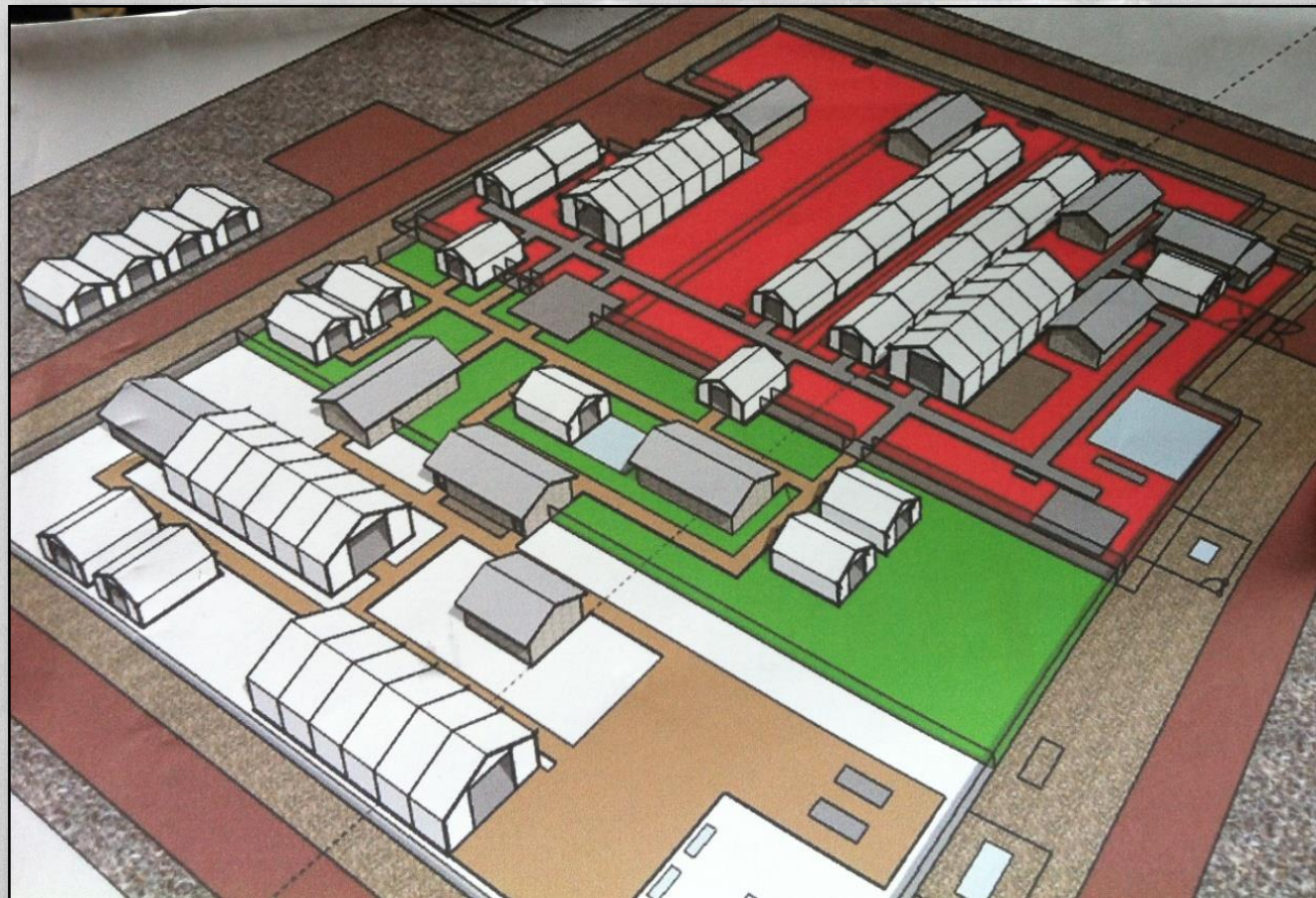
# Entrance to ETC





# The Three zones...

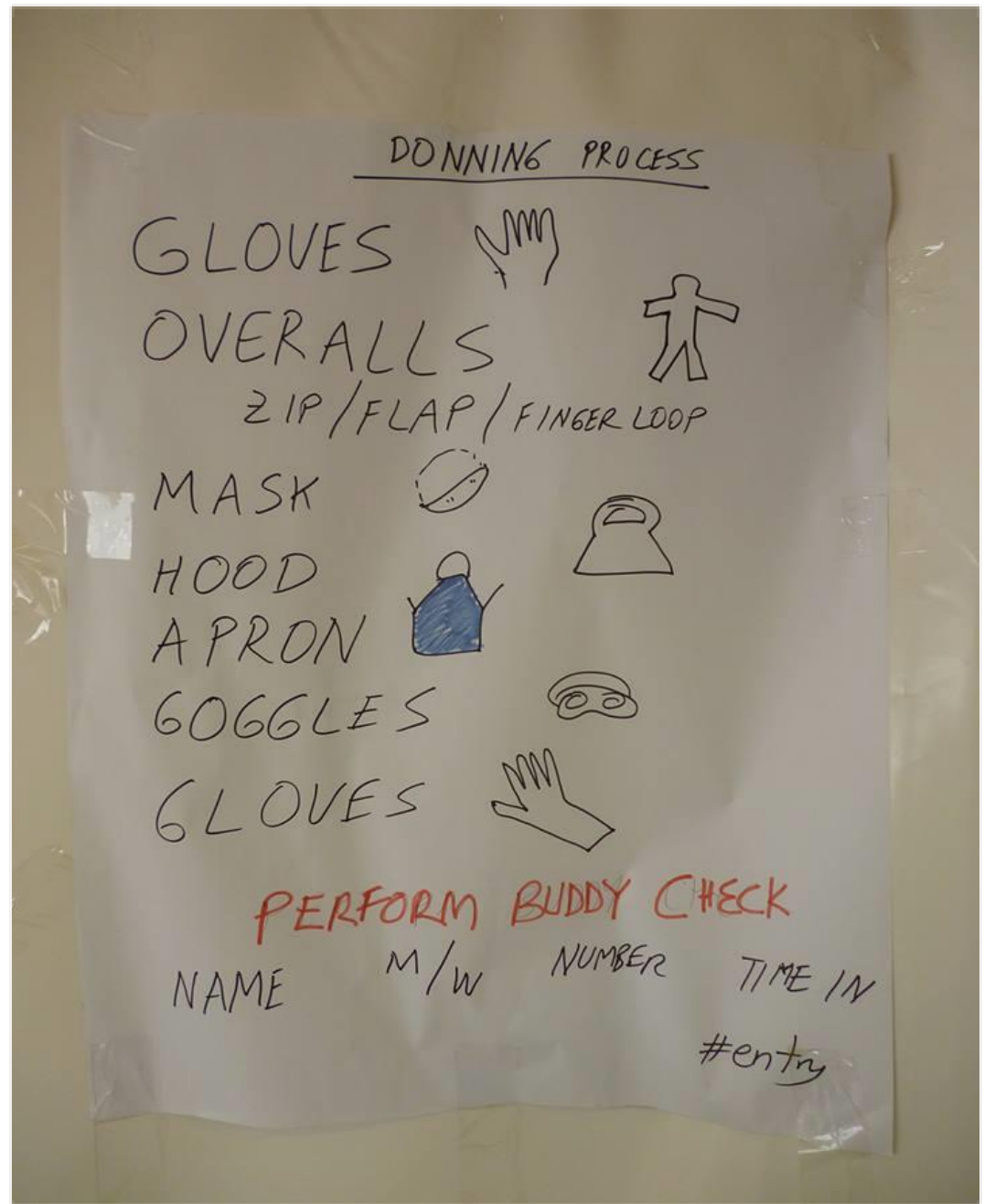
- White: administration and storage
- Green: clinical
- Red: contaminated and patient





# Donning

- Takes about 10 minutes
- With assistance









# Buddy check and timing





# Every entry and task requires a team















0.05%  
chlorine  
(500ppm)

Raw (untreated)  
water

0.5% chlorine  
(5000ppm)








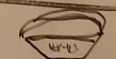




## A photograph showing three individuals standing in a doorway, fully equipped with personal protective equipment (PPE). They are wearing white hooded gowns, blue gloves, blue face shields, and blue respirators. The person on the left has their hands clasped in front of them. The person in the center is holding a white piece of paper. The person on the right is gesturing with their right hand. They are standing on green circular mats. The background shows an outdoor area with a red safety fence and some structures. To the left of the doorway is a yellow trash bin, and to the right is a blue trash bin.







WASH HANDS  
 SPRAY FRONT/BACK  
 REMOVE GLOVES   
 WASH HANDS  
 REMOVE APRON   
 WASH HANDS  
 REMOVE GOGGLES   
 WASH HANDS  
 REMOVE Hood   
 WASH HANDS  
 REMOVE OVERALLS   
 WASH HANDS  
 REMOVE MASK   
 WASH HANDS  
 REMOVE 2nd GLOVE   
 SPRAY BOOTS + MOVE TO GREEN ZONE   
 WASH BARE HANDS 0.05% CHLORINE



# EH Tasks

- Waste management



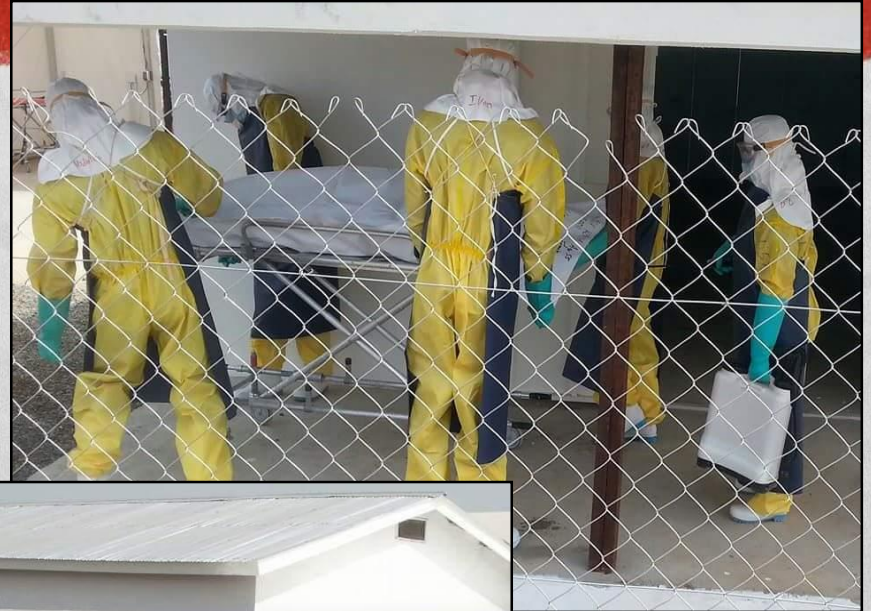


# Infection control



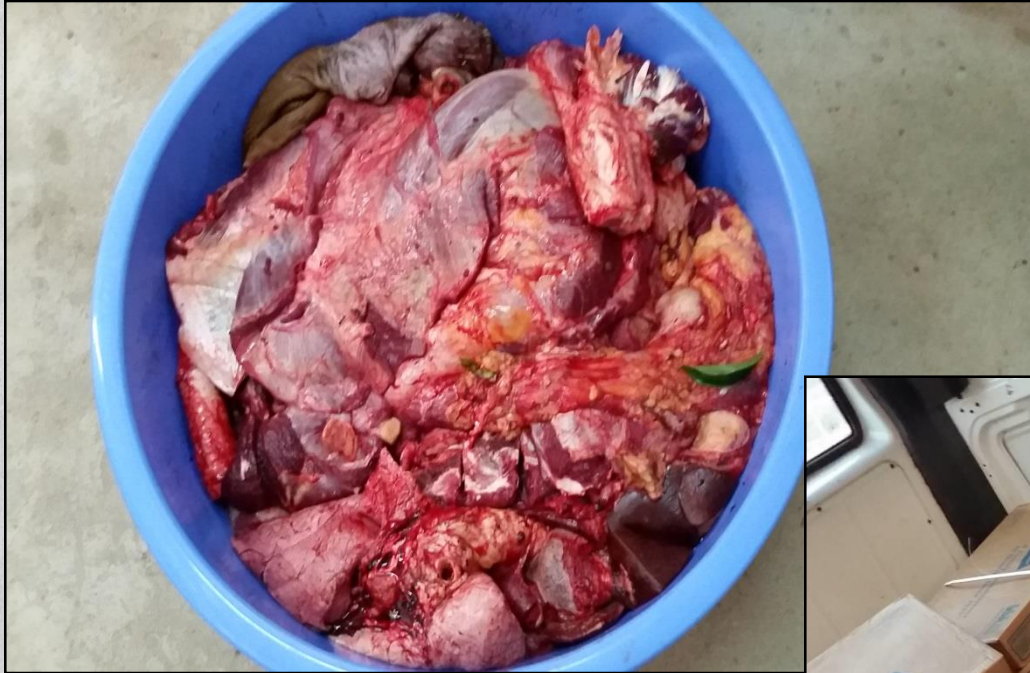


# Body removal assistance

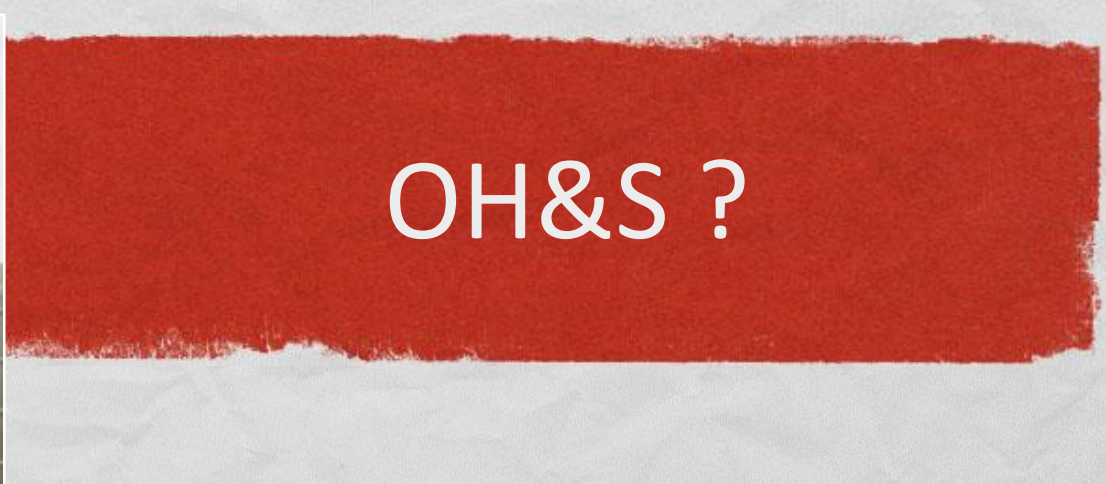




# Food safety ... HACCP









# Training of national staff





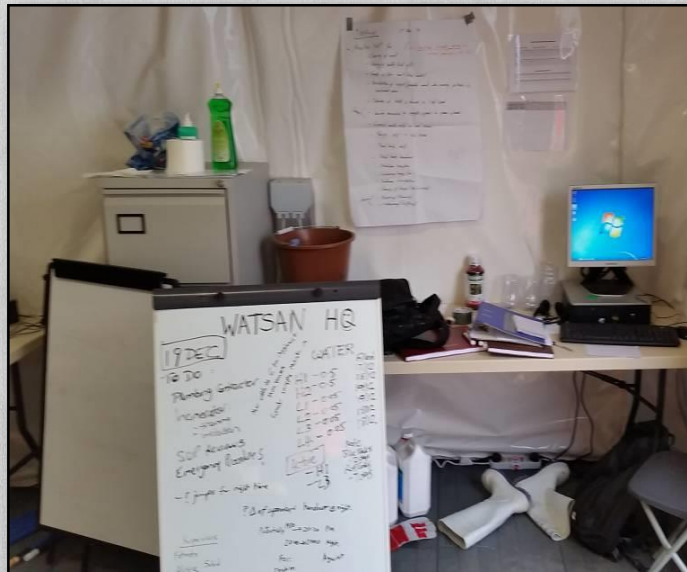
# Training challenges and opportunities

- **173** WASH/WatSan staff and **45** national nurses;
- 5 rotations (Team A, B, C,D and E) 24/7:
- **AM** 0700 – 1330      **PM** 1300 – 1930      **Night** 1900 -0730.
- **CoC** per shift: 1 x EHO, 1 Shift Supervisor (national), 1 x team leader per craft (hygienists, sprayers, dressers, timekeepers, waste management, cleaners, laundry, water).
- SOPs developed for each position. Reviewed regularly by reps from nursing, medical, EHOs and management.



# Training challenges and opportunities

- Varying language & educational levels. Needed clear language.
- Decentralised. Empower decision-making to staff on the ground
- Limited resources. No IT/internet.

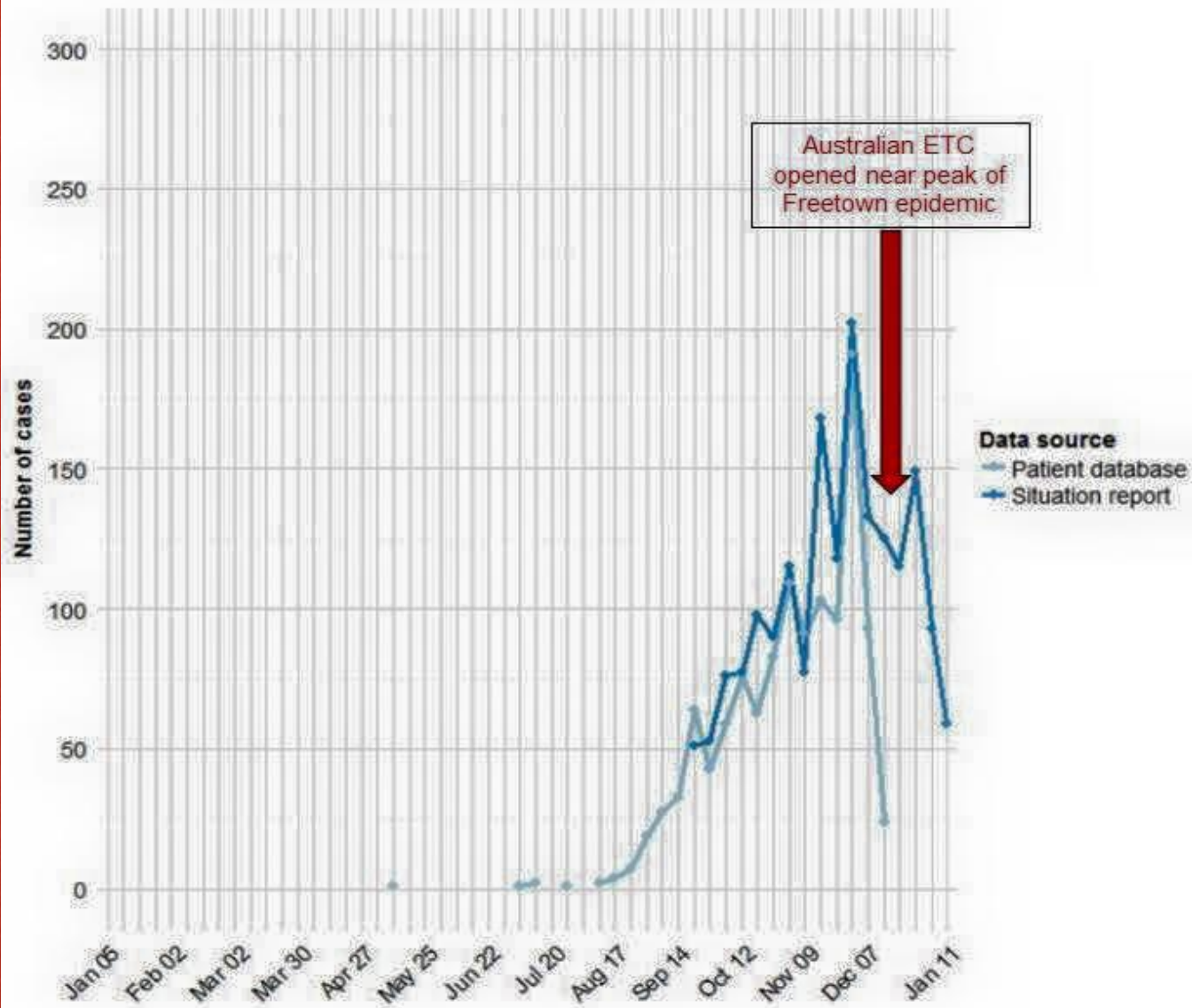




Is the mission a  
success?

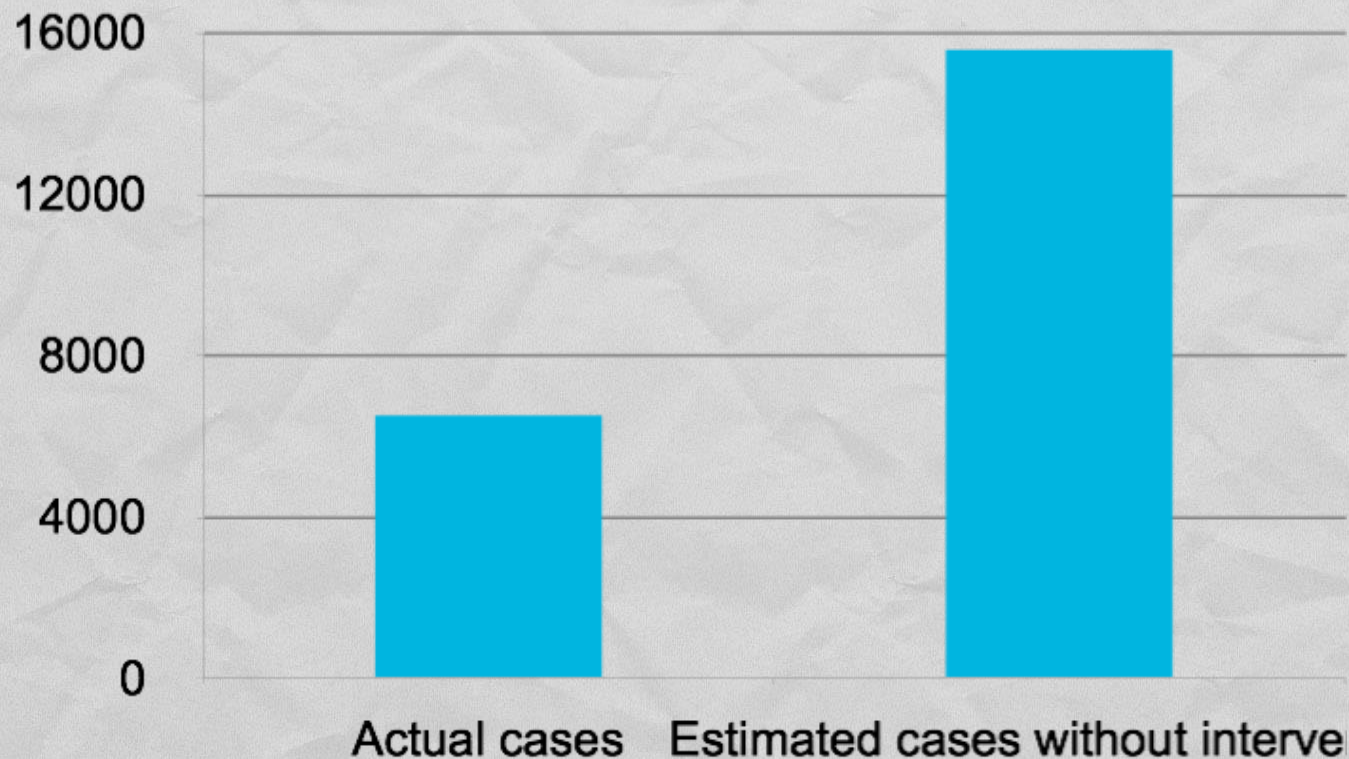


# Freetown Ebola Cases





# Effectiveness of Ebola Treatment Units and Community Care Centers — Liberia, September 23 - October 31, 2014\*



\*MMWR Jan 23 1015







# Summary 14 Dec 14–30 Apr 15

269 patients through the ETC

34 survivors

49 ebola deaths

There were **zero** HCW infections



# Personal reflections summary

- Get back to basics. Simple interventions. Adapt. Be flexible
- Be prepared to be personally and professionally challenged (and be rewarded).
- Believe in the science. Controlled fear keeps you focused.
- Work as a team.
- **Sierra Leone nationals are the heroes**



Any questions?

