



The National Emergency Medical Service Role During the COVID-19 Pandemic in Sierra Leone

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**Civil War
(1991–2002)**



**Ebola Epidemic
(2014)**

- During the Ebola response, the Ministry of Health and Sanitation (MOHS) procured approximately **200** ambulances.
- With seed funding from the World Bank, the MOHS is desirous to establish a **National Emergency Medical Service (NEMS)** system in the country.





NEMS

National Emergency
Medical Service



**MEDICI
CON L'AFRICA
CUAMM**

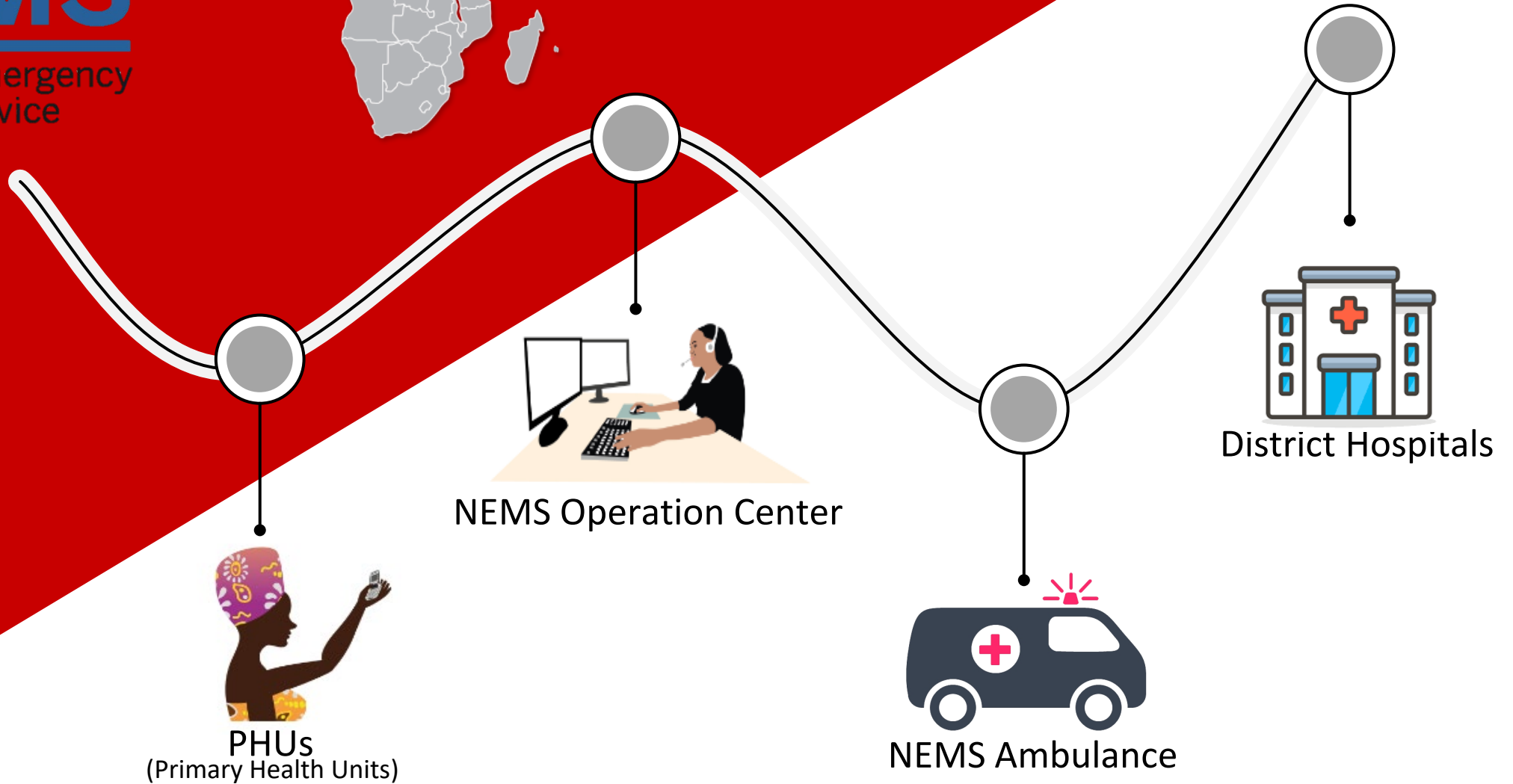


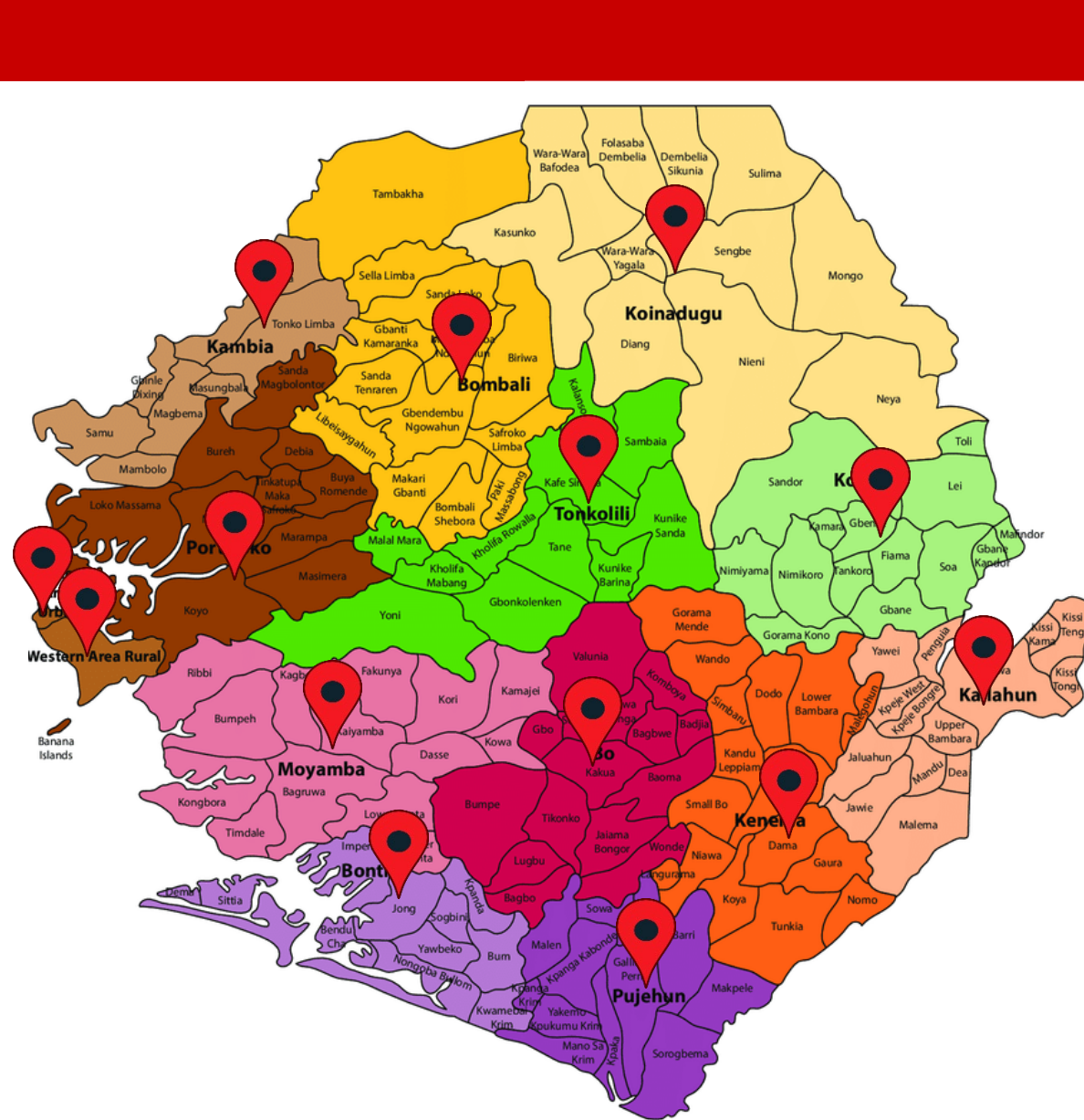
REGIONE DEL VENETO



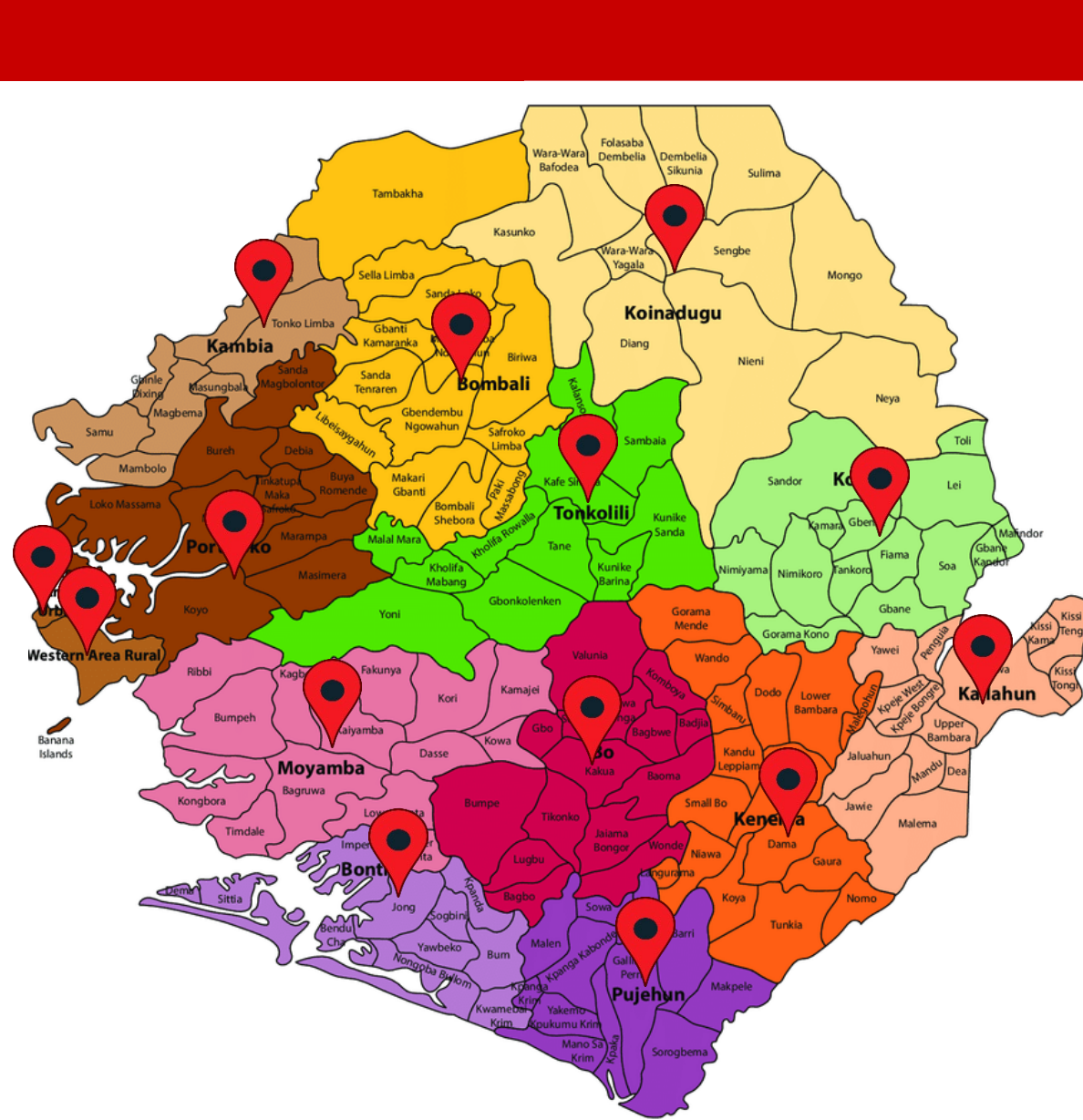
NEMS

National Emergency
Medical Service





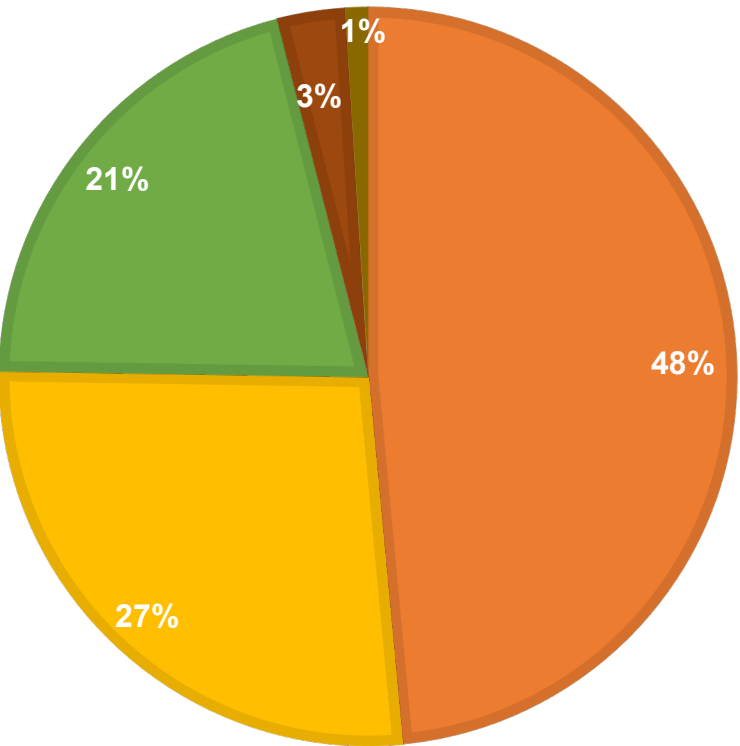
- Training: October 2018 – April 2019;
- 27 May 2019: NEMS is operative at national level;



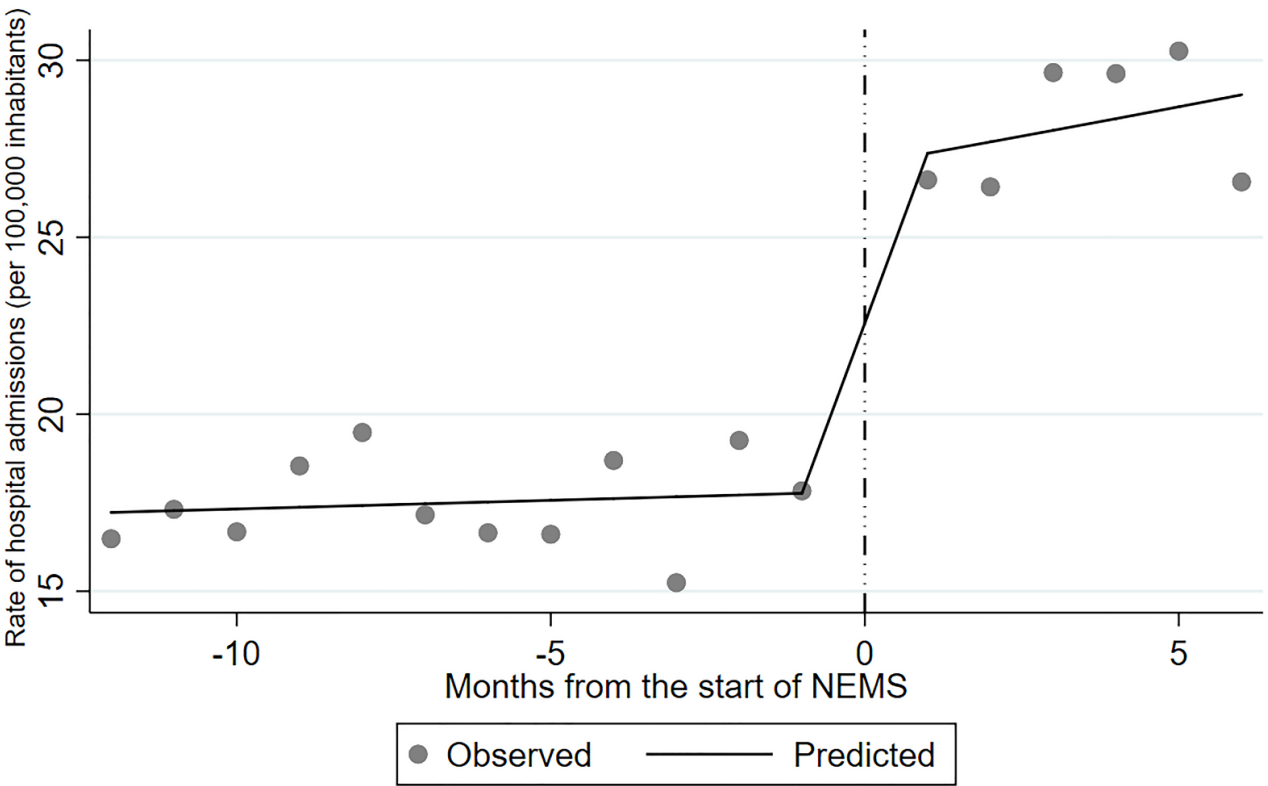
- Training: October 2018 – April 2019;
- 27 May 2019: NEMS is operative at national level;
- Handover to MOHS: September 2020

From 15th of October 2018 up to the 31st of September 2020, NEMS has managed:

- **54,555 emergency calls**
- **52,631 missions**
- **45,348 referrals**



Obstetric Pediatric Other Covid Samples



Observed and predicted hospital admission rates in **Sierra Leone** before and after the introduction of NEMS.

Covid-19

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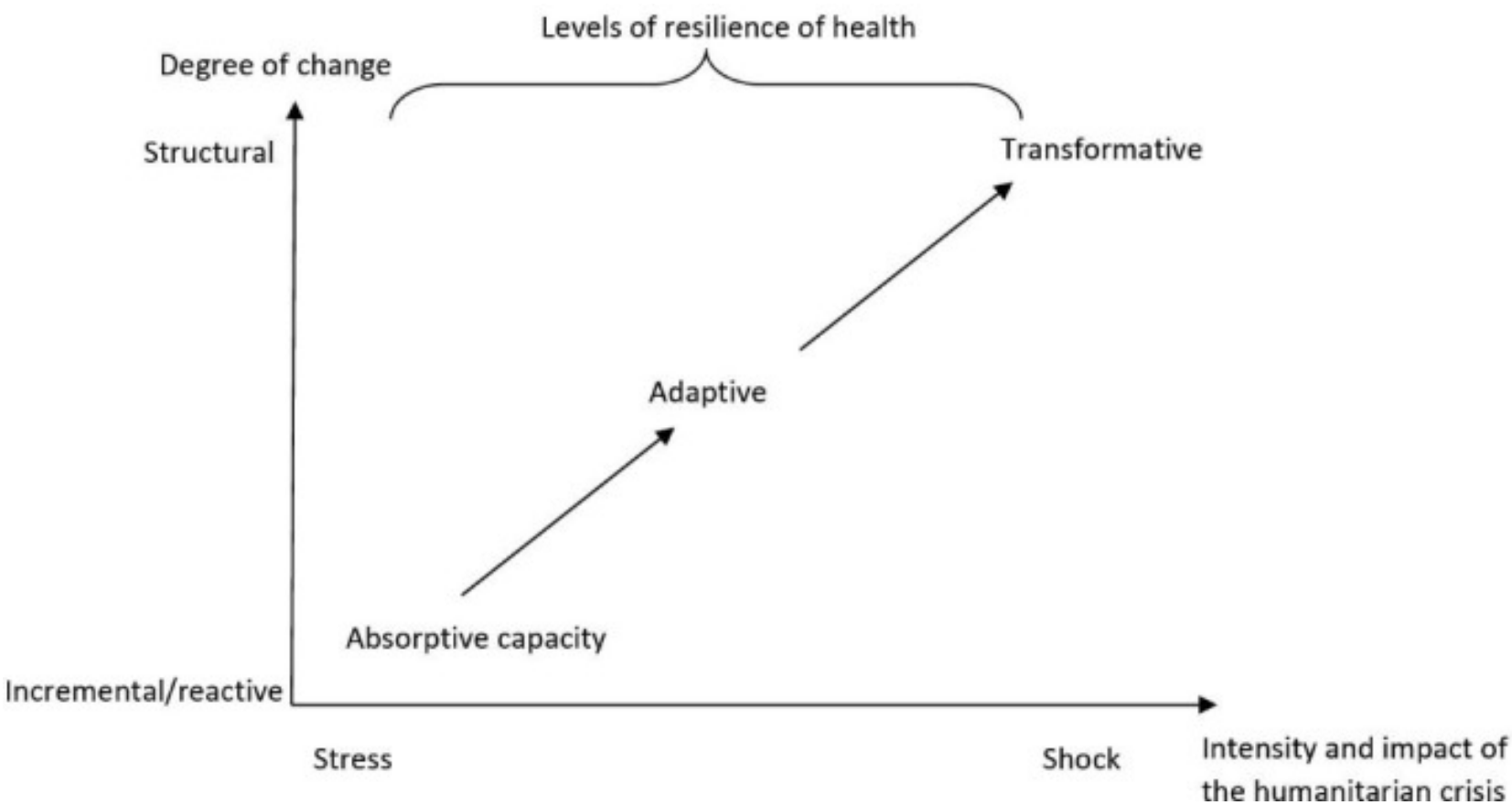
M.Caviglia, R. Buson, S. Pini, A. Jambai, MJ Vandy, F. Venturini, P. Rosi, F. Barone-Adesi, F. Della Corte, L. Ragazzoni, G. Putoto. *Prehospital and Disaster Medicine*, 35(6), 693-697.

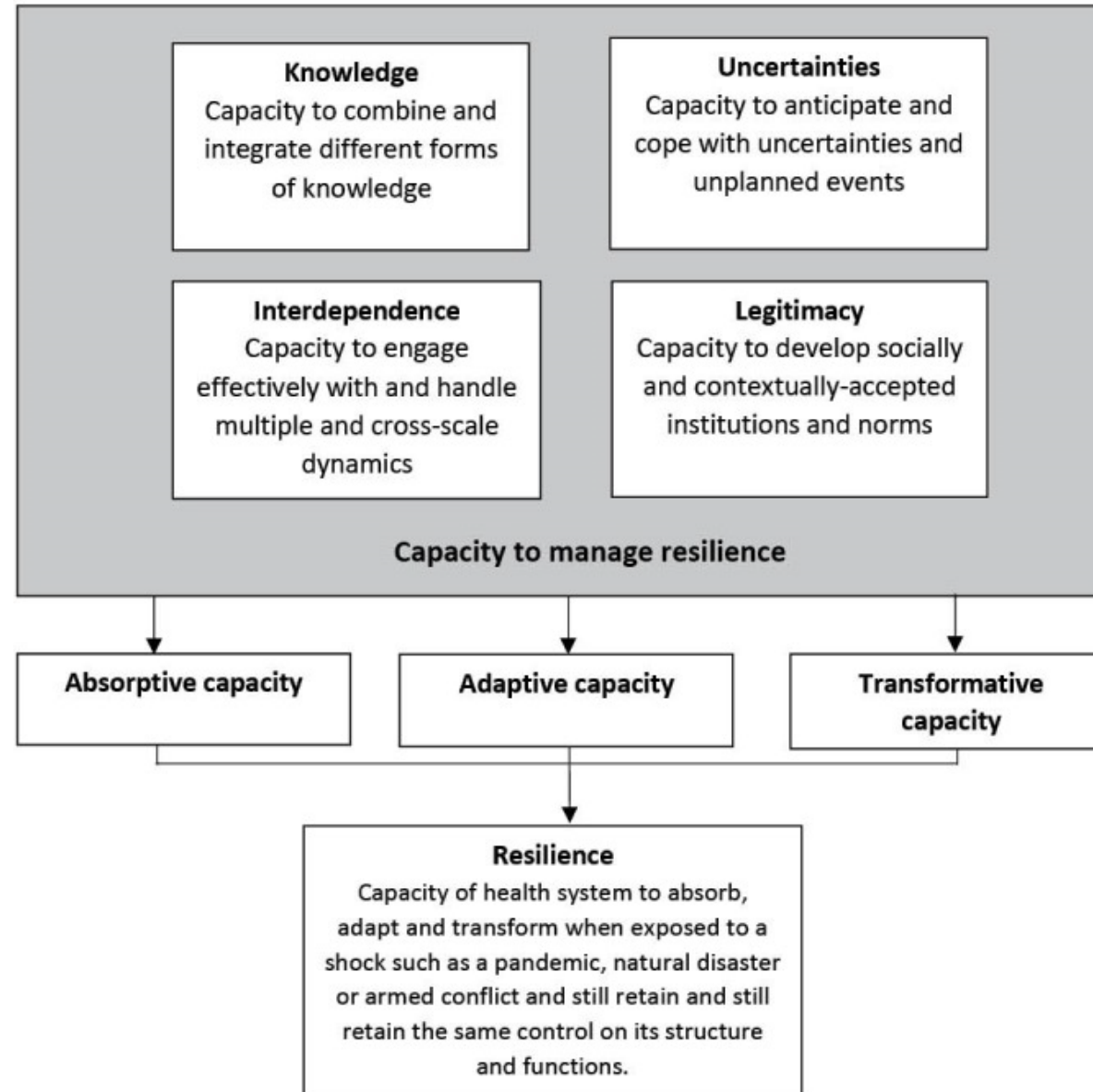
First Covid-19 case in Sierra Leone: **31st of March 2020**

NEMS has been actively engaged in the national preparedness response plan to:

- 1) ensure a **resilient referral system** for routine services
- 2) manage the **sudden demands** of referral of COVID-19-related cases

The Levels of Resilience of Health Systems by Intensity of the Humanitarian Crisis and Degree of Change (adapted from OCHA)



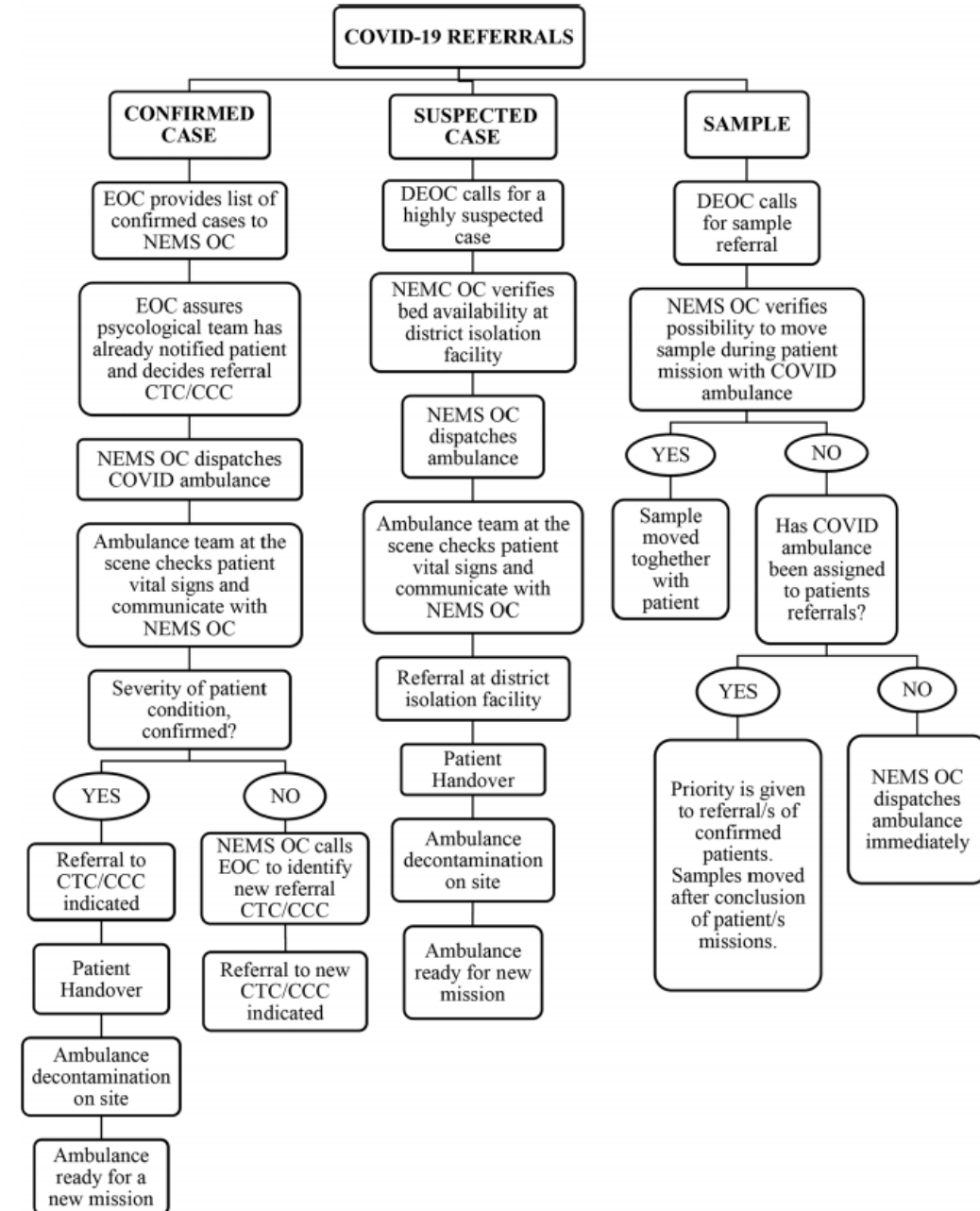


NEMS response to COVID-19

Ambulance redistribution



15 out of 81 dedicated to referrals of confirmed/suspected cases and samples



COVID-19 special training

- How to assist suspected/confirmed COVID-19 cases
- PPE and IPC Procedures
- Cleaning and Waste Management



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SPECIAL EDITION: CORONAVIRUS(COVID-19)

THE OUTBREAK OF CORONAVIRUS

COVID-19 is the infectious disease caused by the most recently discovered (novel) coronavirus. This virus was first detected in Wuhan City, China. The first infections were linked to a live animal market, but the virus is now spreading from person-to-person. Up to now, the infection is present in at least 123 Countries and Territories around the world. On the 11th of March, the coronavirus outbreak has been labelled "pandemic" by the World Health Organization (WHO) advising all the countries to take actions to avoid the spread of the disease.

Updates from Sierra Leone

Up to now, no cases have been reported in the country. The MoHS is currently monitoring the situations and a case management team has been identified to put in place precautionary measures and define the new protocols and procedures in case of the outbreak in the country. As NEMS we are part of the case management team and we are playing a key role in the emergency sector in the country.

SYMPTOMS OF CORONAVIRUS

The following symptoms may appear 2-14 days after exposure

FEVER **COUGH** **SHORTNESS OF BREATH**

- The symptoms might evolve causing severe pneumonia which requiring mechanical ventilation in Intensive Care.
- High risk categories of patient are aged people, diabetic, immunosuppressed (e.g. RVS+).
- Case fatality varies significantly by country location and intensity of transmission, around 3%.

CASE DEFINITION 'SUSPECTED CASE'

- A patient presenting with acute respiratory infection* (whether mild or severe) who in the 14 days prior to onset of symptoms:
 - Has had close contact** with a confirmed or probable case of COVID-19 infection OR
 - Has visited/stayed in a country with community transmission of COVID-19. OR
- A patient with severe acute respiratory infection AND requiring hospitalization AND with no other aetiology that fully explains the clinical presentation

*Clinical criteria for the acute respiratory infection: Fever or history of fever (≥38°C), shortness of breath, cough or sore throat.
** to be define with the surveillance team

PREVENTION

1. Wash often your hands with soap and water
2. Cover your coughs and sneeze
3. Avoid close contact with people who are sick
4. Stay home if sick, except to get medical care
5. Avoid touching your eyes, nose and mouth
6. Clean and disinfect frequently touched objects and surface.

Wash your hands often with soap and water for at least 20 seconds.

Cover your cough or sneeze with a tissue. Then throw the tissue in the trash.

Avoid close contact with people who are sick.

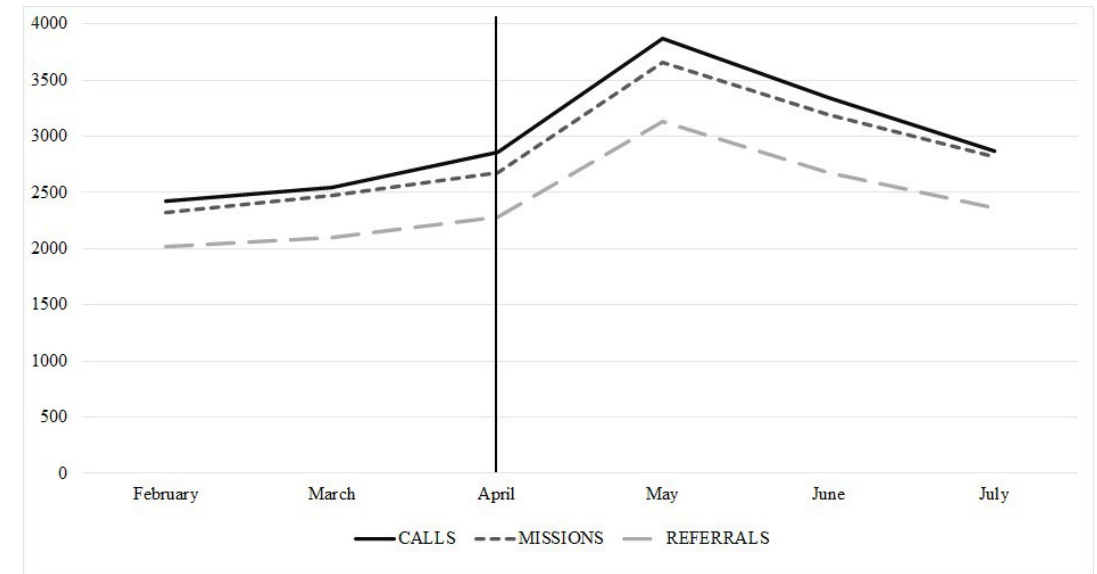
Stay home when you are sick, except to get medical care.

Avoid touching your eyes, nose, and mouth.

Clean and disinfect frequently touched objects and surfaces.

Challenges

- Upward trend in NEMS activities
- Financial impact: PPEs, decontamination kits, digital thermometers
- Reduction on ambulance fleet by 15
- Supplementary training sessions



Upward Trend in NEMS Activities, determined by the COVID-19 Outbreak.

Challenges

Stigma towards ambulances



Challenges

Stigma towards ambulances



involvement of psychological team
to inform patients and relatives
about their condition and the need
of isolation



Disaster Medicine in SL after Covid19

- November 2020: launch of the National Disaster Management Agency (NDMA)
- July 2021: DM courses for NEMS personnel



5th November 2021: Wellington PMD Junction Fire MCI

- Collision between a fuel tanker and a truck carrying granite stones
- 92 casualties and 98 deaths





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