Ebola Virus Disease (EVD) management in the Paraná State

(Clinical Management & Public Health Protection)

July - October 2014

Map and general characteristics









Emergency strategy developed after World Health Organization (WHO) declared Ebola a Public Health Emergency of International Concern:

Appointment of interinstitutional technical staff responsible for developing a plan for health professionals to recognize and respond, safely and effectively, to the early stages of the disease: State Health Secretariat of Paraná - SESA (emergency services planners and health surveillance), State Civil Defense and Fire Department.







Staff Mission:

- Meep sentinel surveillance (alert) 24 hours a day to monitor the worldwide epidemiological situation with the objective of an early detection of suspected cases and a scientific update on the disease, pathogenicity and transmission methods;
- 2 Development of a technical-scientific guide for health professionals (health protection team and health care professional):
 - To detect suspicion cases
 - To assist suspicion cases in the main emergency departments of the State;
 - To monitor contacts
- 3 Identification of the State standard PPE (Personal Protective Equipment) and urgent equipment acquisition;
- 4 Provide distribution, training preparedness and management in the use of PPE (placement and removal) as established in the Protocol.





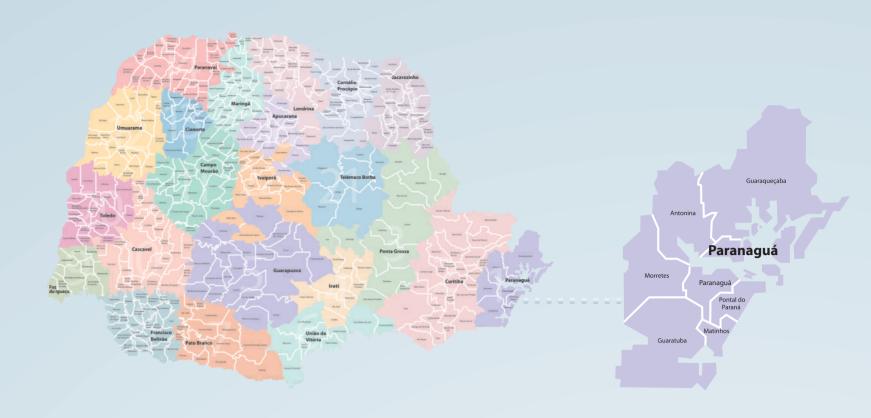
Main challenges for the mission fulfilment:

1 To face divergences:

Referring to different technical-scientific approach on pathogenicity and disease transmission mode between the main references (WHO, Robert Koch-Institutes, Center for Disease Control (CDC), Health Ministry of Brazil etc.) during the epidemic;

About standardization of PPE: the technical team set higher standard PPE protection for the State of Paraná, different from the standard reference of the Health Ministry of Brazil;

- 2 How to work with low budgets (emergency action out of budget planning) and bureaucratic administrative problems;
- 3 Difficulty in receiving the supplier's equipment: unavailable equipment, delay in delivery, non-conforming material with the standards etc.;
- 4 Training of instructors staff to teach PPE management guide (put on and remove PPE);



- **5** Ensure training and guidance application for strategic health services across the State;
- 6 Implement the Plan in the Paranaguá Port and in Foz do Iguaçu city:
 - Refusal of the harbour pilots to access ships with suspect cases;
 - Land border control;
 - Fragility of Chemical, Biological, Radiological and Nuclear (CBRN) action plans;
 - Difficulty to access the responsible agencies to manage the Plan;
- 7 Resistance of health care professionals (doctors and nurses) to provide assistance to suspicion cases;
- 8 Difficulty to prepare and implement the Contingency Plan for Emergency Medical services in hospitals (lack of equipment, of physical space, shortage and professionals turnover).

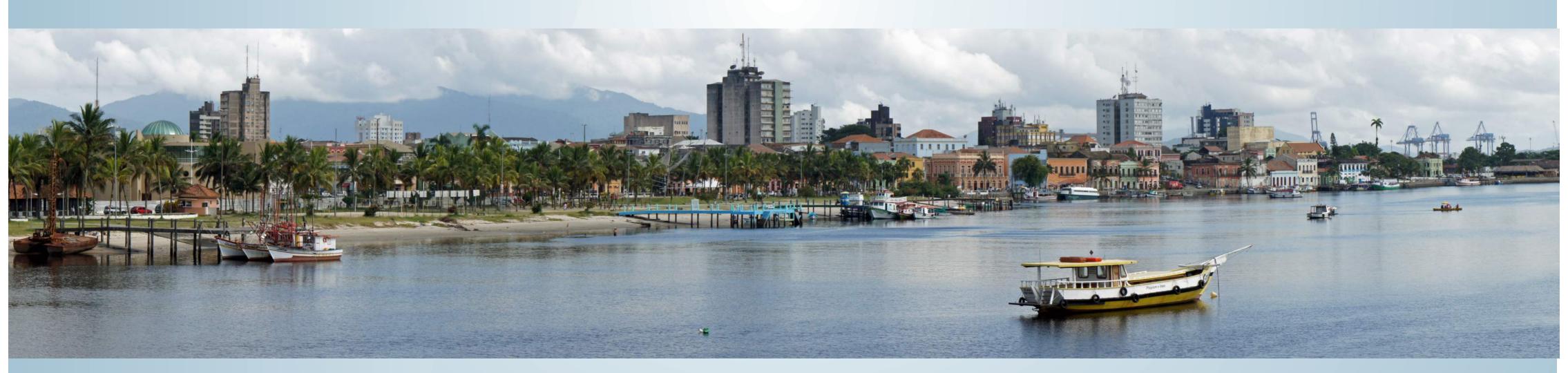






Tangible result – legacies

- 1 Technical Sentinel Surveillance Staff highly specialized and on alert to respond to any threat of CBRN;
- 2 Inter-operational integration: Health + Fire Department + Civil Defense + health services;
- 3 Partnership with German teams that contributed with agility and technical information;
- 4 Knowledge development to fight Biological Incident;
- 5 Some strategic hospitals with emergency plan deployed;
- 6 Development of high-level technical and operational guide based on international standards.







Learned Lessons:

- 1 Work on an early planning (before a concrete transmission threat). Ensure specific resources to deal with public health emergencies;
- 2 Importance of the integration among multiple agencies to ensure the success of the operations;
- 3 Developing work on actions to fight against CBRN threats at the international airports of Paraná and Paranaguá Port.











Questions to share:

- 1 How to optimize the use of high cost equipment with short expiry date. Expensive equipment with short useful life;
- **2** Face the challenge to operationalize the surveillance of contacts and actions to block the disease transmission.





