



IMPLEMENTATION OF THE INTERNATIONAL HEALTH REGULATIONS. LESSONS FOR URBAN AREAS

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EPIDEMICS AND URBAN AREAS

Epidemics mean men and women !

The history of epidemics is also an history of the inter-relation between infectious agents and urban areas (plague in Marseille; cholera in London; H1N1 in Mexico...)

In 2003, the SARS epidemic had shown the role of a large urban area (Hong Kong) as an epidemic booster, through its international airport.

It had led to a major revision of the IHR in 2005.

FROM RURAL TO URBAN

The 2014-2015 Ebola epidemic in West Africa was the example of a new relationship between an, until then largely rural, virus and the urban environment.

From a remote rural area in Guinea, through largely porous terrestrial frontiers, the Ebola virus had reached large urban areas, first by road (Monrovia, Conakry, Freetown), then by plane, through the transportation of patients.

URBAN AREAS EXPOSED TO EBOLA VIRUS

The 2014 outbreak in West Africa provided a first example of the penetration of Ebola virus in large urban areas, with different scenarios:

- Monrovia (1-1.5 M Inhab.): 17/06/2014
- Freetown (1.5 M Inhab.): 11/07/2014
- Conakry (1.7 M Inhab.): 30/05/2014
- Lagos (16-17 M Inhab.): 20/07/2014
- Dallas (1.3 M Inhab.) : 30/09/2014

NEGATIVE RISK FACTORS RELATED TO THE PENETRATION OF EBOLA VIRUS IN LARGE URBAN AREAS

- Capacities at points of entry and points of exit ;
- Health system capacity (physicians and nurses; laboratory capacities, infection control measures; medical countermeasures) ;
- Trust of the population in the hospital system ;
- Diffusion of rumors ;
- Civil unrest.

ADVANTAGES OF LARGE URBAN AREAS WITH REGARD TO THE PENETRATION OF EBOLA VIRUS

- Visibility of large urban areas ;
- Easier implication of governmental actors ;
- Easier mobilization of international stakeholders;
- Accessibility of large urban areas ;
- Cultural production capacity (« Ebola in town »).

RECOMMENDATIONS CONCERNING THE ROLE OF THE IHR IN LARGE URBAN AREAS

The Ebola outbreak in West Africa in 2014-2015 led WHO to organize an assessment of the role of the IHR in this outbreak and response.

With regard to the penetration of the Ebola virus in large urban areas, several recommendations concerning the improvement of the IHR were put forward:

- Strengthening IHR core capacities (reinforcement at points of entry and points of exit (mainly airports); epidemiological and laboratory capacity...), particularly in the most vulnerable countries;
- Strengthening the hospital system;
- Development of risk communication;
- Development of cross-government preparedness and response to major health crises.