THE LANCET Infectious Diseases

Supplementary webappendix

This webappendix formed part of the original submission and has been peer reviewed. We post it as supplied by the authors.

Supplement to: Durrheim DN, Gostin LO, Moodley K. When does a major outbreak become a Public Health Emergency of International Concern? *Lancet Infect Dis* 2020; published online May 19. https://doi.org/10.1016/S1473-3099(20)30401-1.

Supplementary material for "When does a major outbreak become a Public Health Emergency of International Concern?" by DN Durrheim DN, LO Gostin, K Moodley

Category	Factors	Weighting
Is the event unusual or	 The event is caused by an unknown agent or the source, vehicle, route of transmission is unusual or unknown 	5
unexpected?	 The evolution of cases is more severe than expected (including morbidity or case-fatality) or with unusual symptoms 	5
	 The occurrence of the event itself is unusual for the area, season or population 	5
	 The event is caused by disease/agent that had already been eliminated or eradicated from the country or not previously reported 	5
Is the public health impact of the event	 The number of cases and or number of deaths for this type of event is large for this given time or population 	2
serious?	 The event is caused by a pathogen with high potential to cause an epidemic (infectiousness of the agent, high case fatality, multiple transmission routes or healthy carrier) 	2
	 There is indication of medical intervention failure (e.g. of existing treatment or vaccine) or there is lack of intervention (new or emerging antibiotic resistance, vaccine failure, antidote resistance or failure) 	2
	 There are cases reported among health staff 	2
	 The population at risk is especially vulnerable (refugees, low level of immunisation, children, elderly, low immunity, undernourished etc.) 	2
	 There are concomitant factors that may hinder or delay the public health response (natural catastrophes, armed conflicts, unfavourable weather conditions, multiple foci in the state party) 	2
	\circ The event is occurring in an area with high population density	2
	\circ The national health system is significantly impacted by the current response efforts	2
	 There is spread of toxic, infectious or otherwise hazardous materials that may be occurring naturally or otherwise that has contaminated, or has the potential to contaminate, a large population and/or geographical area 	2

Is there significant risk of international spread?	 There is evidence of an epidemiological link to similar events in other countries/territories There is an imminent risk of global spread (excluding medevac or other similar situations) There are factors that should alert us to the potential for imminent cross border regional movement of the agent, vehicle or host 	7 7 7
Is there a need for a coordinated international response?	 A functional national response is lacking (national leadership, other IHR relevant core capacities) Functional regional cross-border coordination is lacking A functional global response is lacking Information/data is not being shared in a timely manner and/or impeding the WHO's capacity to evaluate the risk 	5 5 5 5
Have similar events in the past posed a significant risk to international travel or trade restrictions?	 Similar events in the past have resulted in international restrictions on trade and/or travel The source is suspected or known to be a food product, water or any other goods that might be contaminated, that has been exported/imported from other countries (taking into account existent practice with FAO and OIE) The event occurs in association with an international mass gathering or in an area of intense international tourism The event causes significantly increased requests for more information by foreign officials or international media 	5 5 5 5