

Guidance for Methods and approaches to risk assessment for Post-disaster Infectious Diseases

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- This assessment uses data from the National Epidemiological Surveillance of Infectious Diseases (NESID) Program and other sources to present the risk of mainly epidemic infectious diseases in disaster affected areas under the jurisdiction of local authorities and in evacuation centers.
- The purpose of this risk assessment is to help prioritize the interventions needed to prevent infectious diseases and reduce the damage caused by infectious diseases to affected population in areas under the jurisdiction of local authorities and in evacuation centers.
- The risk of infection among affected population depends on the prevalence of infectious diseases in affected area and the type and scale of the disaster. In addition, the response (interventions) required for the affected population regarding infectious diseases will vary according to site (municipal jurisdiction, evacuation centers, etc.), which may necessitate a risk assessment at each site level.
- The methodology of this assessment has been used in the Great East Japan Earthquake in 2011 and the Kanto-Tohoku Heavy Rainfall Disaster in 2015.

① Probability of outbreak in affected area/evacuation centers: the probability of outbreak of each disease is classified as 1 (low), 2 (moderate) or 3 (high) based on Opportunities for transmission of infection, Risk situation for transmission of infection(*Epidemic period, group living, cold environment, hygienic environment degradation), and vaccination coverage.

Opportunities for transmission of infection	Risk situation for transmission of infection*	vaccination coverage
Low	Stable	High
Moderate	Partially worsen	High, but partially susceptibility
High	Totally worsen	Unvaccination

② Public health importance: the public health impact of each disease epidemic is classified as 1 (low), 2 (moderate) or 3 (high) in terms of the proportion of incidence and fatalities, and social impact.

Classification	The proportion of incidence/fatalities. social impact
1: Low	Low
2: Moderate	Lower than acceptable level
3: High	High

③ Overall risk: The results of ① and ② are used to assess the overall risk with the following criteria.

Public health importance	3			
	2			
	1			
		1	2	3
Probability of outbreak in affected area/evacuation center				

1. Low risk	
2. Moderate risk	
3. High risk	