

Southeast Asia

Climate and Health Responder Course

SESSION 3: INFECTIOUS DISEASE AND CLIMATE CHANGE

TUESDAY, 13 JUNE (90 MINUTES), 6:00-7:30 AM EST/6:00-7:30 PM PHT

Session 3 Learning Objectives:

Participants will be able to:

- Explain the environmental processes changing as result of climate change and how they impact the prevalence, incidence, and distribution of vector-borne, food- and water-borne, and zoonotic disease
- Explore what actions health professionals can take to protect patients vulnerable to these climate-sensitive infectious diseases
- Define steps the health sector can take to become prepared to address shifting geographic burdens of climate-sensitive infectious disease, including increasing surveillance and early-warning systems

Recommended Readings and Resources:

Mora, C., McKenzie, T., Gaw, I.M. *et al.* Over half of known human pathogenic diseases can be aggravated by climate change. *Nat. Clim. Chang.* 12, 869–875 (2022).

<https://doi.org/10.1038/s41558-022-01426-1>

Kurane I. The effect of global warming on infectious diseases. *Osong Public Health Res Perspect.* 2010 Dec;1(1):4-9. doi: 10.1016/j.phrp.2010.12.004. Epub 2010 Dec 7. PMID: 24159433; PMCID: PMC3766891.

<https://www.ncbi.nlm.nih.gov/pmc/articles/PMC3766891/>

Sethi Y, Kaka N, Patel N, Roy D, Chopra H, Emran TB. Environmental correlates of infectious diseases in South-East Asia: A perspective on the missed link. *New Microbes New Infect.* 2023 Mar 30;53:101118.

doi: [10.1016/j.nmni.2023.101118](https://doi.org/10.1016/j.nmni.2023.101118). PMID: 37090951; PMCID: PMC10119951.

Semenza JC, Rocklöv J, Ebi KL. Climate Change and Cascading Risks from Infectious Disease. *Infect Dis Ther.* 2022 Aug;11(4):1371-1390. doi: [10.1007/s40121-022-00647-3](https://doi.org/10.1007/s40121-022-00647-3). Epub 2022 May 19. PMID: 35585385; PMCID: PMC9334478.

SESSION 4: NON-COMMUNICABLE DISEASES AND NUTRITION

THURSDAY, 15 JUNE (90 MINUTES), 6:00-7:30 AM EST/6:00-7:30 PM PHT

Session 4 Learning Objectives:

Participants will be able to:

- Discuss how climate change and variability impacts key underlying causes of noncommunicable diseases, such as cardiorespiratory disease due to air pollution, heat-related illness, and undernutrition due to food insecurity
- Define steps the health sector can take to address the growing burden of noncommunicable diseases in the era of a warming planet

Recommended Readings and Resources:

[Annual Review of Public Health Global Environmental Change and Noncommunicable Disease Risks](#)

[Our Climate, Our Health. NCDs & CLIMATE CHANGE SHARED OPPORTUNITIES FOR ACTION](#)