## POH 102: IMPACT OF PANDEMICS ON SOCIO-ECONOMIC SECTORS

**Module Overview**

Identification of various economic sectors driving and affected by pandemics; trade, agriculture, tourism, migration, wildlife: definition of terms, and concepts; international trade and migration, globalization and its associated processes (crowding, poor sanitation, travel and trade, intensive food production practices, and ecologic change) increase in the threat of pathogen emergence; mechanisms by which ecologic change drives processes of pathogenic emergence, facilitates zoonotic transfers, induces mutation, and permits the globalization of antimicrobial drug resistance; negative economic impact of infectious disease. Movement of goods/trade policy and regulatory environment; the WTO SPS agreement; EAC SPS protocol.

Infectious disease spread by international trade; the SPS measures to reduce disease spread; Role of port health, immigration and customs; the impact of disease on trade; trade embargoes; trade-related aspects of intellectual property rights of the World Trade Organization (WTO); Global pathogen surveillance, diagnostic, and response networks; International politics and international relations and public health; Promotion of safe trade; Port health; Border control and quarantine. PESTEL (Political, economic, social, technological, ecological and legal).

Globalization and spread of epidemics; Massive movement from rural areas to cities and poverty in peri-urban areas and epidemics. Global climate change and the spread of malaria, dengue fever and yellow fever. International regulations on trade, trade and movements, infections and aircraft and travelers as an integral part of the global surveillance network for emerging infections.

Tourism and Wildlife: Spread of infectious pathogens; impact on tourism. Zoonosis; Wildlife exchange of pathogens, emerging and re-emerging diseases, wildlife, human, and livestock interaction. Agriculture: Impact on the agriculture workforce; food and nutrition security.

**Mode of Delivery**

This includes lectures: problem-based learning using interactive tutorials, small group discussions and written assignments, plenary presentations; case studies, experiential learning through independent/reflective study and field visits and placements and online peer discussions using video clips and conferencing, case study and case series, tabletop exercises, field work.

**Instructional Materials**

*Materials:* Lecture notes and slides, video clips, handouts, case studies, reference materials (text-books, journals, policy document-guidelines), institutional placements and field visits

*Equipment:* LCD projectors, laptops, white board, markers and flipcharts, LCD, printers, internet access for e-resources, PDAs, mobile phones.

**Core Reference Materials**

1. Price-Smith A. (2008). Risky Trade: Infectious Disease in the Era of Global Trade. *Emerging Infectious Diseases*, *14*(10), 1678–1679. <https://doi.org/10.3201/eid1410.080835>
2. WHO Global Influenza Programme & World Health Organization. (‎2009) ‎. Pandemic influenza preparedness and response: a WHO guidance document. World Health Organization. <https://apps.who.int/iris/handle/10665/44123>
3. Blake, Adam & Sinclair, M.Thea. (2003). Tourism Crisis Management: US Response to September 11. Annals of Tourism Research. 30. 813-832. 10.1016/S0160-7383(03)00056-2.
4. Breugelmans, J. G., Zucs, P., Porten, K., Broll, S., Niedrig, M., Ammon, A., & Krause, G. (2004). SARS transmission and commercial aircraft. *Emerging infectious diseases*, *10*(8), 1502.
5. Brownstein, J. S., Wolfe, C. J., & Mandl, K. D. (2006). Empirical evidence for the effect of airline travel on inter-regional influenza spread in the United States. *PLoS medicine*, *3*(10), e401.
6. Charrel RN, de Lamballerie X, Raoult D. Chikungunya outbreaks--the globalization of vectorborne diseases. N Engl J Med. 2007 Feb 22;356(8):769-71. doi: 10.1056/NEJMp078013. PMID: 17314335.
7. Correia, J. D., Shafer, R. T., Patel, V., & Kain, K. C. (2001). Blood and body fluid exposure as a health risk for international travelers. *Journal of travel medicine*, *8*(5), 263.
8. International Organization for Migration (IOM) 2021 -Health, Border & Mobility Management Framework: A Framework for Empowering Governments and Communities to Prevent, Detect and Respond to Health Threats Along the Mobility Continuum. Health
9. African Centre for Migration & Society,University of the Witwatersrand and Samuel Hall. (2018). Free and Safe Movement in East Africa; Research to promote people’s safe and unencumbered movement across international borders. Cape Town: African Minds.

**Recommended Reference Materials**

1. Daszak, P., Cunningham, A. A., & Hyatt, A. D. (2000). Emerging infectious diseases of wildlife--threats to biodiversity and human health. *science*, *287*(5452), 443-449.
2. Dimanche, F., & Lepetic, A. (1999). New Orleans tourism and crime: A case study. *Journal of travel research*, *38*(1), 19-23.