

POH 100: INTRODUCTION TO PANDEMIC PREPAREDNESS AND ONE HEALTH

Module Overview

Common terms and concepts: Epidemic, epizootic, outbreak, pandemic, panoptic, zoonosis, endemic, enzootic, mode of transmission, incubation period, morbidity, mortality, surveillance, environment, ecosystem, planetary health.

Emerging and re-emerging pandemic threats: Drivers and impacts of pandemics, emergence, re-emergence, spread and response to pandemics threats.

One Health Concept and Practices: History of OH, OH approach, One Health and its application, barriers to success and prospects of One Health, requirements for optimal application of One Health,

Drivers of Pandemics: human population /movement, animal farming, movement, imports and exports and environmental (climate change, pollution, reforestation); social factors (inequality, politics); cultural factors (beliefs, access to antibiotics, development);

Barriers to One Health: communication, coordination, early warning systems or lack of them, in-country capacity (including human resources and labs, culture, finance and funding, leadership).

Mode of Delivery

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

Instructional Materials

Materials: lecture notes and slides, video clips, hand-outs, case studies, reference materials (textbooks, 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. Ibrahim S. (2020). The Pandemic Century: A History of Global Contagion from the Spanish Flu to COVID-19. *Malaysian Orthopaedic Journal*, 14(3), 209

2. Deem, S. L., Lane-deGraaf, K. E., & Rayhel, E. A. (2019). *Introduction to one health: An interdisciplinary approach to planetary health*. John Wiley & Sons.
3. World Health Organization. (2023). *One Health*. Retrieved from <https://www.who.int/news-room/questions-and-answers/item/one-health>
4. Semenza, J. C., Lindgren, E., Balkanyi, L., Espinosa, L., Almqvist, M. S., Penttinen, P., & Rocklöv, J. (2016). Determinants and Drivers of Infectious Disease Threat Events in Europe. *Emerging infectious diseases*, 22(4), 581–589. <https://doi.org/10.3201/eid2204>

Recommended Reference Materials

1. World Health Organization. *Health Topics*. Retrieved from <https://www.who.int/health-topics>