

Module: One Health in Emergent Diseases and in Special Situations

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Module outline

The biology, epidemiology, pathology, diagnosis and control mechanisms of the exotic and emergent diseases and the zoonoses in special situations like immunosuppressed populations, emergency situations or health system precariousness will be presented in monographic sessions or round tables. A One Health vision of the topics will be implemented and the particularities of tropical and subtropical ecosystems will be studied with special emphasis in the endemic zoonotic microorganisms' lifecycles and the importance of vectors.

Topics

Introduction and risk assessment in exotic and emergent zoonoses: effect of climatic change in vectors and diseases; entomology; surveillance systems and control of vectors; arbovirosis and other zoonoses.

Passenger transit and import of new viruses: risk assessment of arbovirosis from animal health and human health approaches; WN surveillance system in Catalonia; new emergent viruses in tropical or sub-tropical countries; ebola outbreak in Madrid; hepatitis E.

Passenger transit and import of new parasites: epidemiology, clinics, diagnose and treatment of malaria; helminths; neurocysticercosis; trypanosomiasis.

Transit of animals, plants and derivatives: CITES and endangered species trade; PIF

Zoonoses in situations of Public Health Alerts or Bio threats: management of epidemics and public health crisis; risk communication in emergencies; CDC categories, risk assessment and protocols.

Zoonoses in immunosuppressed populations: VIH; pets and companion animals, a real risk?; microsporidiosis and other mycosis in immunosupressed populations; challenges of antimicrobial treatment in immunosuppressed patients; zoonoses and xenotransplantation.

Control and management of zoonoses in low/income countries: public health, risk evaluation and communication in developing countries; water control, hygiene and sanitation strategies in developing countries; strategies for controlling tropical diseases in developing countries; pharmacy management in low/income countries; development of new cost-effective tools to control leishmaniasis; VIH in low/income countries; the role of veterinarians in low/income countries.

Learning : 9 ECTS

Lectures: 25h

Seminars: 30h

Practices: 5h

Independent work: 165h

Assessment

50% Scientific report on the management of a recent zoonotic outbreak

50% Elaboration of contingency or prevention protocol for a health warning.