O3 Infectious and endemic diseases

Learning Hubs will be asked to define the most common/ debilitating or clinically important infectious/ endemic diseases that pertain to their service or local population. Assessment of this module should use the generic competencies listed below with particular emphasis on the chosen diseases.

Assessment of these competencies is via Mini-CEX, CbD (formative or summative) or ACAT-EM and a reflective log.

Potential presentations / common infectious diseases that could be chosen by local Hub as priority for this module

- Meningitis, acute encephalitis syndrome/ Japanese Encephalitis
- TB
- Malaria
- Influenza
- Diarrhoeal diseases and food poisoning
- Hep B, Hep C, Hep E- acute and chronic
- HIV/AIDS
- Rabies
- Syphilis
- Ascariasis
- Leishmaniasis
- Tetanus
- Viral haemorrhagic fever, Kyasanur forest disease virus and Dengue
- Measles, Mumps, Rubella
- Vaccine preventable diseases e.g. polio, bacterial disease in children
- Schistosomiasis
- Food-bourne trematodes, nematodes

Trainees are expected to achieve EPA level 2 (Direct active – full supervision by senior clinician, with prompting/ verbal and actual guidance and help throughout) in these competencies.

Knowledge/ Skill/ Behaviour	**Detail of competency**
Knowledge	Can outline the natural history of the common infectious diseases for the local population
	Can outline the common presentations and pathogenesis of infectious diseases that impact on mortality in your region, including meningitis, malaria, TB, HIV/AIDS, Hepatitis, genitourinary infections, schistosomiasis, leishmaniasis, Influenza
	Can outline the pathogenesis of food-bourne diseases, food poisoning and acute diarrhoeal diseases
	Can outline the different typical/ atypical infective presentations common to local area

Knowledge/ Skill/ Behaviour	Detail of competency
	Can outline the pathological causes of typical/ atypical infective presentations, and treatments
	Can outline those infections requiring notification to authorities and the process for doing notification
Skills- History	Is able to obtain a detailed history and understand the importance of even generic symptoms e.g. fever with no identifiable cause
	Is able to identify risk factors for development of an infectious disease, including contacts, travel, animal contact and sexual history
Skills - Examination	Is able to identify signs of severe infection including change to LOC, metabolic acidosis, severe anaemia, hypoglycaemia, acute renal impairment, acute pulmonary oedema
	Is able to identify signs of acute encephalitis and those patients with cardiorespiratory impairment requiring rapid resuscitation
Skills- investigation and treatment	Identifies appropriate investigations and treatment, based on the differential diagnosis, clinical presentation, age and presence of pregnancy
	Is able to start empirical treatment for the most likely causes of encephalitis / meningitis presentations and instigate supportive treatment- glycaemic control, hydration, oxygenation
Skills- Clinical decision making and judgement *(in addition to CC1)*	Has a low index of suspicion for common presentations to local area in any patient with fever and no obvious septic loci
	Is able to identify patients at particular risk from seasonal influenza and advise on vaccination
	Is able to identify those patients at greater risk from infectious disease e.g. immunocompromised, elderly, very young, pregnancy
Behaviour- Communication & professionalism *(In addition to CC7 & CC8)*	Is able to advise patients and family members, when prophylaxis is required for an infectious disease e.g. young children and pulmonary TB, pregnant women in endemic malaria areas
Paediatric	Understands the risk diarrhoeal disease presents to those less than 5 years of age and can instigate safe and effective oral rehydration therapy, zinc supplementation and provide advice on breast feeding during acute episodes
	Can outline presentations and pathogenesis of common childhood infections e.g. measles, mumps, rubella
	Can outline the role of prevention in infectious diseases and be able to provide families with advice on contact tracing, prophylactic treatment, vaccinations