**COMMON PRESENTATIONS AND CONDITIONS**

Basic Trainees will require a sufficient depth of knowledge of these presentations and conditions.

- Anaphylaxis following administration of medications
- Antibiotic use in patients with anaphylaxis
- Bacteraemia
- Line and prosthetic infections
- Cellulitis
- Conjunctivitis
- Diarrhoeal illness
- Encephalitis
- Febrile neutropenia
- Fever of unknown origin
- Infective endocarditis
- Immunisation
- Lipoatrophy
- Meningitis
- Necrotising fasciitis
- Pneumonia and lower respiratory tract infections
- Septic arthritis
- Septic shock
- Septicaemia
- Upper respiratory tract infections, including otitis media and tonsillitis
- Urinary tract infections

For all common presentations, Basic Trainees will need to **know how to**:

**Synthesise**
- incorporate epidemiology, pathophysiology and clinical science
- recognise the clinical presentation
- take a relevant clinical history
- conduct an appropriate examination
- establish a differential diagnosis
- plan and arrange appropriate investigations

**Manage**
- provide initial, evidence-based management
- discuss the principles of ongoing management
- apply quality use of medicines
- recognise potential complications of the disease and its management, and initiate preventative strategies
- refer appropriately

**Consider other factors**
- identify broader considerations and their impact on diagnosis and management

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**LESS COMMON OR MORE COMPLEX PRESENTATIONS AND CONDITIONS**

Basic Trainees will need to have an awareness of, and an understanding of appropriate resources that should be used to help manage patients with these presentations and conditions.

- Acutely unwell immunocompromised HIV patient
- Common STIs
  - anogenital herpes
  - anogenital ulcers
  - anogenital warts
  - bacterial vaginosis
  - candidiasis
  - first episode genital herpes
  - epididymo-orchitis
  - pelvic inflammatory disease
  - pubic lice
  - scabies
  - sexually acquired reactive arthritis (SARA)
  - syphilis
  - trichomoniasis
  - uncomplicated genitourinary infections

For all less common and more complex presentations, Basic Trainees will need to **know how to**:

**Synthesise**
- incorporate epidemiology, pathophysiology and clinical science
- recognise the clinical presentation
- take a relevant clinical history
- conduct an appropriate examination
- establish a provisional diagnosis
- plan and arrange appropriate initial investigations

**Manage**
- initiate therapy in consultation
- discuss broad therapeutic options
Infectious Diseases

- chlamydia
- gonorrhea
- mycoplasma genitalium

- DNA viruses:
  - cytomegalovirus (CMV)
  - Epstein–Barr virus (EBV)
  - toxoplasmosis

- Fever in the returning traveller, including malaria, dengue fever, and parasitic infections
- Hepatitis viruses
- HIV
- Infections in the immunocompromised host
- Liver and brain abscess
- Meningococcaemia
- Osteomyelitis
- Other sexual health-related conditions:
  - females presenting with acute lower abdominal pain
  - females presenting with vaginal symptoms
  - males presenting with acute testicular pain and swelling
  - males presenting with symptoms of acute urethritis
  - patients presenting with acute rectal pain (with or without tenesmus or discharge)
  - patients presenting following recent sexual assault

Consider other factors
- recognise potential complications
- refer appropriately

EPIDEMIOLOGY, PATHOPHYSIOLOGY AND CLINICAL SCIENCE

Basic Trainees will be able to describe the principles of the foundational sciences.

- Advantages and limitations of the different diagnostic tests available to diagnose the common sexually transmissible infections (STIs)
- Aims and components of antimicrobial stewardship
- Antimicrobial resistance and strategies for prevention
- Biology of common and important pathogens
- High risk groups for the different STIs
- Host response to infection
- Modes and sites of transmission, incubation periods, symptoms, and possible complications of the common STIs
- Occupational exposure-related infections
- Pathophysiology of HIV; awareness of the different groups of antiretroviral medication as well as the common side effects
- Pharmacology of major antimicrobial (bacterial, fungal, and viral) drug classes used
- Principles of infection control
- Principles of passive and active immunisation
- Principles underlying laboratory testing for infectious diseases
- Role of immunisation in preventing infectious diseases
INVESTIGATIONS AND PROCEDURES

Basic Trainees will know how to select and interpret the results of these investigations and procedures.

- Vaccines available to prevent STIs, such as hepatitis A and hepatitis B vaccines and human papillomavirus (HPV) vaccines
- Blood, urine, cerebrospinal fluid (CSF), pus, sputum culture, and joint aspirate (synovial fluid)
- Basic imaging:
  - Chest X-ray (CXR)
  - X-ray of bone and joints
  - CT of the head
  - CT of the abdomen and pelvis
  - MRI
  - Nuclear scans
- Faecal parasite detection
- Initiate empiric antibiotic therapy based on national or local guidelines
- Initiate investigation of common conditions including community and hospital acquired pneumonia, central nervous system (CNS) infections, febrile neutropenia, surgical site infections, blood stream infections, and bone and joint sepsis
- Invasive fungal infection detection
- Investigations for the common STIs, such as chlamydia, gonorrhoea, trichomoniasis, herpes, syphilis, and HIV, including culture, nucleic acid amplification tests (NAAT), and serology as appropriate
- Laboratory tests:
  - full blood count (FBC)
  - inflammatory markers
  - microbiology
  - serology
  - virology
- Malaria detection
- Mycobacterium tuberculosis detection
- Nuclear medicine scanning
- Pregnancy test
- Respiratory and gastrointestinal polymerase chain reactions (PCR)
- Serologic testing for hepatitis viral infection, cytomegalovirus (CMV), Epstein-Barr virus (EBV), HIV, syphilis
- Skin biopsy
- STI culture and polymerase chain reactions (PCR)s
- Ultrasound scan
- Viral load assessment for:
  - cytomegalovirus (CMV)
  - hepatitis viruses
  - HIV

IMPORTANT SPECIFIC ISSUES

Basic Trainees will be able to identify important specialty-specific issues and their impact on diagnosis and management.

- The importance of infection control including hand hygiene, aseptic technique, and procedures for donning and doffing personal protective equipment (PPE)
- Syphilis remains the great “mimic” with various conditions and to consider it in the differential diagnosis
- Confidentiality issues related to infectious diseases
- The importance of contact tracing and partner notification with STIs
- The cultural beliefs of communities and the implications this has on the
management of contact tracing
- The importance of a multidisciplinary approach to the management of HIV and co-morbidities
- The importance of appropriate follow-up and retesting
- The significance of, and appropriate actions in response to reports of, complex investigations – nuclear medicine scanning, ultrasound scan
- Consideration that an acute abdomen in females could be STI related (in addition to the other causes of abdominal pain)
- Consideration that acute rectal symptoms could be STI related
- Assessment of potential routes of infection, routes of transmission, and secondary sites of infection
- Identification of high risk groups for common infectious diseases and STIs
- Issues related to pregnancy for the management of the different STIs
- Issues of consent, confidentiality, and limitations of confidentiality with respect to young people
- STIs (gonorrhoea or chlamydial infection) as a likely cause for a monoarthritis in a sexually active person
- The principles of immunisation in the immunocompromised host
- The principles of investigating infections, and initiating and monitoring treatment response in immunocompromised patients, including patients with diabetes mellitus and patients receiving immunosuppressive treatments for conditions such as inflammatory rheumatic diseases, vasculitis, systemic lupus erythematosus (SLE), and haematological and solid organ malignancies
- The principles of investigating and treating prosthetic joint and artificial heart valve and pacemaker infections in normal and immunocompromised patients
- Line infections and principles of treatment
- Opportunistic infections in a patient with HIV who is immunocompromised and presenting as acutely unwell
- Emergency contraception, assessment for and provision of Post exposure prophylaxis for HIV in emergency situations

LEARNING METHODS
Suggested opportunities, activities, and resources to assist with learning.

- Clinical experience with Infectious Diseases patients in a range of settings
- Clinical rotations in sexual health clinics and services with assessment and supervision by sexual health physicians
- Immunisation Handbooks in Australia and New Zealand
- Hospital, state and national infection control guidelines including PPE donning/doffing routines and hand hygiene
- Local and state guidelines for post-exposure prophylaxis and public health notification
- Case-based Discussion about an infected patient
- National Antimicrobial Stewardship Guidelines
- Therapeutic Guidelines: Antibiotics
- The Sanford Guide to antimicrobial therapy www.sanfordguide.com