

Oral Microbiology Summary Information Sheet

	Suggested forms of evidence	Tell us how you have met this outcome	Where in your portfolio can this evidence be found?	Assessor's rating and comments on evidence (Meets/partially meets/does not meet)
Core Knowledge				
BASIC BIOLOGY	MSF Part 1 FRCPATH			
Explain basic biology (structure, genetics, taxonomy, epidemiology) of major bacterial, viral, fungal and parasitic agents.				
Explain basics of the immune response to infection				
Compare and contrast cellular and humoral immunity				
Explain the basis of how vaccines work.				
Explain the basics of of molecular biology.				
Explain the basis of genetic susceptibility to pathogens and disease.				

LABORATORY SAFETY	MSF			
Explain basic laboratory hazards and precautions against them				
ACDP CLASSIFICATION OF PATHOGENS	MSF FRCPATH			
Explain principles of standard precautions, hazard groups and containment levels.				
HOST PATHOGEN RELATIONSHIP	MSF Part 1 FRCPATH			
Explain the basis of how the immune response protects against infection, and how it may contribute to pathogenesis of infectious diseases				
Explain the basis of different types of host-parasite relationships, e.g. symbiosis, viral latency, quasispecies evolution, etc.				
Explain the types of immunodeficiency and how they affect susceptibility to and control of infectious diseases.				
Explain pathogenic mechanisms involved in infectious diseases and the role of host response in immunopathology.				

STANDARDS OF PRACTICE	MSF Part 1 FRCPATH			
Describe the importance and relevance of standards to good laboratory practice.				
Describe the evidence base behind standard operating procedures (SOPs)/examination procedures (EPs) and the importance of audit and quality control to establish validity.				
BASIC PRINCIPLES OF DIAGNOSTIC MICROBIOLOGY AND VIROLOGY	MSF Part 1 FRCPATH			
Explain the range of tests available, and the circumstances in which they are used. Explain the difference between sterile and contaminated/colonised body sites				
Explain basic techniques for serodiagnosis in infectious diseases				
Explain nucleic acidbased detection system such as polymerase chain reaction (PCR)				
Explain simple antimicrobial and antiviral susceptibility testing and its interpretation				

<p>Explain the basic principles behind drug monitoring and its uses.</p>				
<p>CLINICAL SYNDROMES – ADVICE AND MANAGEMENT</p>	<p>MSF CPD DOP FRCPATH Exams</p>			
<p>Outline the principles of epidemiology, presentation, diagnosis and management of clinical syndromes:</p> <ul style="list-style-type: none"> • genitourinary tract infection including sexually transmitted infections (STIs) and bacterial urinary tract infection • respiratory tract infection • gastrointestinal infections • skin and soft tissue infection • eye infection • post-operative infection • inoculation incident • encephalitis/meningitis • brain abscess • hepatitis including test interpretation • rashes and rash contacts (pregnant and non pregnant) • infections in pregnancy, including methods of diagnosis, and implications of infection for mother and fetus • congenital infection and infection acquired perinatally • infections in the immunocompromised including basic knowledge of how to make the diagnosis of infection and treatment options 				

<ul style="list-style-type: none"> • deep infection (e.g. septicaemia, endocarditis, bone infection) • common nosocomial infection (e.g. device-associated infection) • infection in travellers (e.g. malaria) • community-acquired and nosocomial infections in which environmental factors play a role (eg, food, water, air) 				
TREATMENT AND PREVENTION STRATEGIES	MSF CPD DOP FRCPath Exams			
Explain the range of therapies available for infectious disease, the clinical indications for their use and their side effects.				
Explain the classification of antimicrobial agents.				
Explain in detail the mechanism of action of aciclovir and betalactam antibiotic agents and mechanisms for development of resistance to these agents.				
Explain the basic principles of action and resistance for other antimicrobial agents, their uses and limitations.				

<p>Explain the basic principles of prophylaxis, both with antimicrobials and with immune globulins.</p>				
<p>Describe existing vaccines and the schedules of immunisation.</p>				
<p>INFECTON CONTROL</p>	<p>MSF CPD DOP FRCPATH Exams</p>			
<p>Describe routes of transmission and methods of preventing nosocomial spread of common and important infecting organisms ('alert organisms'), including:</p> <ul style="list-style-type: none"> • meticillin-resistant and – sensitive Staphylococcus aureus • vancomycin-resistant enterococci • varicella zoster virus • enteric infections including viral diarrhoea • respiratory tract infections, including TB • blood-borne viruses • extended-spectrum beta-lactamase-producing organisms (ESBLs) • multiply-resistant Acinetobacter baumannii • Clostridium difficile - associated diarrhoea 				
<p>Describe issues surrounding the isolation of the febrile traveller.</p>				

Describe the principles and practice of surveillance and public health regarding food-borne and vaccine preventable infections and STIs.				
STERILISATION AND DISINFECTION	MSF CPD DOP FRCPATH Exams			
Describe basic terms.				
Describe the basis of the different methods available.				
Describe the importance of removal of pathogenic organisms in the prevention of infection in: <ul style="list-style-type: none"> • pre-operative sterilisation • aseptic technique • decontamination of environmental sources. 				
LABORATORY ASPECTS OF MICROBIOLOGY				
DESCRIPTION OF APPROPRIATE STAINING AND CULTURE TECHNIQUES	DOPS MSF FRCPATH Exams			
Describe microscopy, culture, and identification techniques for common pathogens.				
ANTIMICROBIAL SUSCEPTIBILITY TESTING	DOPS MSF FRCPATH Exams			

Describe current techniques for susceptibility testing including Etest, broth dilution and automated methodologies with appropriate quality control.				
SEROLOGIC AND ANTIGEN-BASED TECHNIQUES	DOPS MSF FRCPATH Exams			
Describe the basis and clinical interpretation of results of latex agglutination, enzyme-linked immunosorbent assay (ELISA), immunofluorescence, complement fixation test (CFT) and the various controls.				
MOLECULAR DIAGNOSTIC TECHNIQUES	DOPS MSF FRCPATH Exams			
Describe the principles current clinically used of nucleic acid based techniques.				
Describe the selection of appropriate tests and their interpretation (advantages and limitations)				
AUTOMATED AND SEMI-AUTOMATED METHODOLOGIES IN MICROBIOLOGY	DOPS MSF FRCPATH Exams			

Describe automated culture and identification methodologies				
POINT-OF-CARE TESTING	DOPS MSF FRCPATH Exams			
Describe the role of, clinical governance issues with and quality assurance of Point-of-Care Testing.				
TYPING METHODS AVAILABLE	DOPS MSF FRCPATH Exams			
Explain the principles, advantages and limitations of various phenotypic and genotypic methods.				
Describe the role of typing in incident/outbreak investigations.				
REFERENCE CENTRES	DOPS MSF FRCPATH Exams			
Describe the indications for referral of specimens to reference facilities.				

Describe regulations for transportation of samples				
Principles of laboratory management External bodies/ Institutions relevant to service and their role				
Describe the indications for referral of specimens to reference facilities				
Describe regulations for transportation of samples				
<ul style="list-style-type: none"> • external quality control including National External Quality Assessment Service (NEQAS) schemes • internal quality control and internal quality assurance • commercially available laboratory computer systems • staff performance management and appraisals • wider organisational issues, e.g. pathology 				
HEALTH AND SAFETY	DOPS MSF FRCP Exams			

<p>Work within and brief others as necessary about the current legislative framework underpinning health and safety (H&S) at work, including:</p> <ul style="list-style-type: none"> • Health and Safety at Work Act (1974) • Reporting of Injuries, Diseases and Dangerous Occurrences Regulations (RIDDOR) • Control of Substance Hazardous to Health (COSHH) Regulations • Genetically Modified Organisms (Contained Use) Regulations (2001) • Management of Health and Safety at Work Regulations (1999) 				
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Clinical microbiology – infection in the community

<p>AETIOLOGY, PATHOPHYSIOLOGY AND PRESENTATION OF INFECTIOUS DISEASES</p>	<p>DOPS MSF CBD FRCP Exams</p>			
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<p>Explain aetiology and clinical presentation of infectious diseases (including those outlined in Section 2 Core Knowledge; Subject Clinical Syndromes; Knowledge domain).</p>				
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<p>Explain pathophysiology of the disease process, with particular reference to common and important infections such as urinary tract infection and respiratory tract disease</p>				
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<p>TREATMENT OF INFECTIONS</p>	<p>DOPS MSF CBD FRCP Exams</p>			
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<p>Explain the optimum treatment of infections and how to access current guidelines</p>				
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SPREAD OF INFECTIOUS DISEASE AND ITS PREVENTIONS	DOPS MSF CBD FRCP Exams			
Explain the epidemiological consequences of different diseases and of the systems available for disease control with reference to: tuberculosis (TB), viral hepatitis, genitourinary disease, immunisation strategies				
Clinical microbiology – hospital-acquired infection and infection control and prevention				
SOURCES AND RISK FACTORS FOR THE ACQUISITION OF HAIs	DOPS MSF CBD FRCPPath Exams			
Describe the reservoirs, sources, routes of transmission and portals of entry of common HAIs				
Describe interactions between the microbe, the patient risk factors and others in the environment, e.g. device and antimicrobial exposure				
Explain importance of the colonised patient and infected or colonised staff				
Describe the epidemiology and control of common and important multi-resistant organisms, e.g. meticillin-resistant <i>Staphylococcus aureus</i> (MRSA), glycopeptide-resistant enterococci (GRE), <i>Clostridium difficile</i>				

<p>PREVENTYION OF HAIs BY STERILISATION AND DISINFECTION</p>	<p>DOPS MSF CBD FRCPATH Exams</p>			
<p>Describe the processes for disinfection and sterilisation in the hospital and primary care settings including their indications advantages and limitations.</p>				
<p>DEFINITION AND PREVENTION OF SPECIALTY-ASSOCIATED HAIs</p>	<p>DOPS MSF CBD FRCPATH Exams</p>			
<p>Describe the definitions of speciality-based HAIs</p>				
<p>Describe the evidence for current recommendations on management in specific clinical situations, eg, particular surgical procedures, device-associated infections, adult and neonatal intensive care units, burns units, oncology and transplant units, cystic fibrosis units.</p>				
<p>Describe the context of in which HAIs occur due to resistant organisms, eg, MRSA, vancomycin-resistant enterococcus (VRE), ESBL producers</p>				
<p>Describe antimicrobial treatment or prophylaxis appropriate above contexts.</p>				

Describe the use of methods of isolation/cohorting to control specific HAIs or resistant organisms in specialities Describe the use of methods of isolation/cohorting to control specific HAIs or resistant organisms in specialities				
PHYSICAL LAYOUT OF WARD, DEPARTMENTS AND OPERATING THEATRES	DOPS MSF CBD FRCPATH Exams			
Describe ward, departmental and operating theatre design & layout relevant to infection prevention and control				
Demonstrate interpretation of regulations relating to hospital design and function.				
VENTILATION	DOPS MSF CBD FRCPATH Exams			
Describe the role of ventilation in operating theatres and suites, isolation rooms and other areas, e.g. pharmacy and laboratory.				
Describe the principles and importance, e.g. in surgical site infection, prevention of spread of TB.				

Describe the principles of operating theatre air sampling, validation of theatre ventilation commissioning tests and the regulations governing theatre ventilation.				
Describe the actions and solutions that may be necessary when ventilation systems do not meet current requirements.				
PATIENT ISOLATION	DOPS MSF CBD FRCPATH Exams			
Describe when patient isolation or cohorting or ward closure, is used to control or prevent the spread of micro-organisms or infections.				
Describe the types of patient isolation, the specific precautions they use and in what circumstance they are used.				
REPORTING HAI's	DOPS MSF CBD FRCPATH Exams			
Describe the requirements and mechanisms for reporting of HAIs within healthcare organisations (eg, root cause analysis), locally and nationally, including mandatory surveillance and 'serious untoward incidents' of infection.				

Describe the role of HAI reporting in total quality management, controls assurance, review body inspections, e.g. CQC				
Clinical microbiology – immunocompromised patients including HIV, transplantation and neutropenia				
PATHOPHYSIOLOGY AND CLINICAL SIGNS AND SYMPTOMS OF INFECTION IN COMPROMISED HOSTS / BIOLOGICAL AND INTROGENIC CAUSES OF IMMUNODEFICIENCY	DOPS MSF CBD FRCPath Exams			
Describe the causes and risk factors of immunocompromise.				
Describe clinical and laboratory manifestations of immunocompromise				
DIAGNOSIS, THERAPY AND PREVENTION OF INFECTION OIN IMMUNOCOMPROMISED HOST	DOPS MSF CBD FRCPath Exams			
Explain available diagnostic techniques and their limitations				
Explain available therapeutic options and preventative measures				

Clinical microbiology – Infection in critical care and sepsis

SEPSIS SYNDROME	DOPS MSF CBD FRCPATH Exams			
Describe the pathophysiology of sepsis syndrom				
Describe the rationale for interventions in sepsis syndrome				
CLINICAL MANAGEMENT OF PATIENTS	DOPS MSF CBD FRCPATH Exams			
Explain the diagnosis and management of common infection problems in the ICU setting, e.g. ventilator-associate pneumonia, line-infections, septicaemia				
Describe outcomes of infection				
Outline evidence-base for diagnosis and management				

Clinical microbiology – outbreaks of infection in hospital and the community

GENERAL PRINCIPLES OF OUTBREAK INVESTIGATION AND PREVENTION AND CONTROL	DOPS MSF CBD FRCPATH Exams			
Describe the use of surveillance to identify incidents/outbreaks.				
Ability to initiate investigation and control measures.				
Describe of the role of others in outbreak management, e.g. CCDC/CHP, RE, Centre for Infections (Cfl) reference laboratories				
LOCAL PROCEDURES FOR THE PREVENTION AND CONTROL OF INFECTIOUS DISEASES	DOPS MSF CBD FRCPATH exams			
Describe the local procedures for the prevention and control of infectious diseases				
SPECIALIST EXPERTISE	DOPS MSF CBD FRCPATH exams			
Describe the availability of expertise, including reference centres				

Outline modelling methods and their limitations.				
Clinical microbiology – infection in the returning traveller				
COMMON CAUSES OF INFECTION IN RETURNING TRAVELLERS	DOPS MSF CBD FRCPATH exams			
Describe the common causes of infection in returning travellers				
COMMON MEASURES FOR PREVENTING INFECTION IN TRAVELLERS	DOPS MSF CBD FRCPATH exams			
Describe common measures for preventing infection in travellers, eg, travel vaccination, malaria prophylaxis, mosquito bite prevention, food and water precautions.				
MALARIA	DOPS MSF CBD FRCPATH exams			
Describe epidemiology, diagnosis, prevention and treatment.				
VIRAL HAEMORRHAGIC FEVER	DOPS MSF CBD FRCPATH exams			

Describe epidemiology, diagnosis, prevention and treatment				
EMERGING TRAVELLERS OR IMPORTED INFECTIONS	DOPS MSF CBD FRCPATH exams			
Outline diagnosis, prevention and treatment of emerging travellers or imported infections, e.g. West Nile virus, other arboviruses				
COMMON TROPICAL INFECTIONS	DOPS MSF CBD FRCPATH exams			
Describe epidemiology and distribution of common tropical infections, e.g. schistosomiasis, onchocerciasis, filariasis, trypanosomiasis, gastrointestinal parasites, dengue, yellow fever, TB, HIV, enteric fever, cholera, dysentery				
Clinical microbiology – food- and water-borne infection				
FOOD AND WATER PATHOGEN	DOPS MSF CBD FRCPATH exams			
Describe the basic biology of the common pathogens involved in food- and water-borne infections and the laboratory methods used to test for them (including the use of indicator organisms)				

FOOD AND WATER MICROBIOLOGY LEGISLATION	DOPS MSF CBD FRCPATH exams			
Outline current legislation and guidelines on the microbiological testing of food and water. (Food includes milk and dairy products; water includes potable and bathing waters)				
ENDOSCOPE WATERDISINFECTOR MICROBIOLOGY	DOPS MSF CBD FRCPATH exams			
Describe the requirements for testing endoscopy rinse water and renal unit water, and the results that should be achieved				
Clinical microbiology – sexually transmitted diseases				
AETIOLOGY, PATHOGENESIS AND PRESENTATION OF STIS	DOPS MSF CBD FRCPATH exams			
Describe the aetiology, pathophysiology and clinical presentation of STIs				
Describe the changing epidemiology of STIs				
DIAGNOSIS OF STIS	DOPS MSF CBD FRCPATH exams			

Describe the available diagnostic tests for STIs and their limitations, including culture, serology, antigen detection and nucleic acid detection.				
Compare and contrast the advantages and disadvantages of different diagnostic methods				
CONGENITAL INFECTIONS	DOPS MSF CBD FRCPATH exams			
Describe the infections that can be transmitted from mother to baby during the antenatal, perinatal and postnatal period				
Explain the role of risk avoidance, therapeutic interventions, immunisation and Caesarian section in the prevention of congenital infections				
MANAGEMENT OF STIS	DOPS MSF CBD FRCPATH exams			
Describe therapeutic options and preventative measures.				
Explain the importance of health education, contact tracing and partner notification in reducing the incidence of STIs				
Clinical microbiology – occupationally acquired disease				

OCCUPATIONALLY ACQUIRED INFECTION	DOPS MSF CBD FRCPPath exams			
Outline the zoonotic infections that may be occupationally acquired				
Discuss the implications of blood-borne viruses (BBVs) for HCWs				
Describe the management of 'inoculation incident' and follow-up for healthcare workers (HCWs), including screening and counselling				
Describe local, national and international guidelines and standards in relation to occupational exposure to infection				
Clinical microbiology – paediatric infection				
PAEDIATRIC INFECTION	DOPS MSF CBD FRCPPath exams			
Describe the pathophysiology, clinical signs and symptoms of infectious diseases in children. Especially those illnesses that are particularly important in or specific to childhood, e.g. neonatal meningitis, group B sepsis, intraventricular shunt infections.				

Describe relevant diagnostic techniques				
Outline the pharmacokinetics of prescribing for children.				
Describe the antimicrobials best avoided in children				
Clinical microbiology – Infection in pregnancy				
PREGNANCY AND THE IMMUNE SYSTEM	DOPS MSF CBD FRCPATH exams			
Describe the effects of pregnancy on the immune system				
PREGNANCY-SPECIFIC INFECTIONS	DOPS MSF CBD FRCPATH exams			
Describe the aetiology, risk factors, clinical presentation and diagnosis of infections specific to pregnancy, e.g. septic abortion, chorioamnionitis and endometritis				
INFECTIONS IMPORTANT IN PREGNANCY	DOPS MSF CBD FRCPATH exams			

Describe the aetiology, risk factors, clinical presentation and diagnosis of infections considered important in pregnancy, including urinary tract infections, sexually transmitted infections, fungal infection including candidosis, parasitic diseases, e.g. toxoplasmosis and malaria in pregnancy				
TREATMENT OF INFECTIONS IN PREGNANT WOMEN	DOPS MSF CBD FRCPPath exams			
Describe the use of antimicrobials in treating infections in pregnancy				
Describe potential teratogenicity when prescribing in pregnancy and the need to avoid certain antimicrobials				
Virology				
PREGNANCY AND VIRAL INFECTION	DOPS MSF CBD FRCPPath exams			
Describe the investigation, intervention and advice for women with, or in contact with, rash/illness in pregnancy.				
Describe the natural history of cytomegalovirus rubella, parvovirus B19, measles, enterovirus, hepatitis B, HIV, hepatitis C in relation to pregnancy				

Describe rates of abnormality and fetal loss in cases complicated by, in comparison to those not complicated by, viral infection				
Describe risk, and absence of evident risk, of viral immunisations.				
BLOOD-BORNE VIRUS INFECTED HEALTHCARE WORKER	DOPS MSF CBD FRCPath exams			
Describe the investigation, intervention and advice following ascertainment of a healthcare worker with a blood-borne viral infection				
Describe the reporting mechanisms of such incidents.				
Explain the relevance of past employment				
Describe role and use of prophylactic measures.				

Outline the role of public notification exercises, helplines, and lookback investigation testing.				
EYE INFECTIONS	DOPS MSF CBD FRCPATH exams			
Describe the aetiology, risk factors, and clinical presentation of eye infections with adenovirus, herpes simplex virus, chlamydia				
PHARYNGITIS	DOPS MSF CBD FRCPATH exams			
Describe the aetiology, risk factors, and clinical presentation of viral causes of pharyngitis and infectious mononucleosis				
VIRAL HEPATITIS	DOPS MSF CBD FRCPATH exams			
Describe the epidemiology and risk factors.				
Describe the management of acute cases, including appropriate information for the management of contacts, ascertainment of risk factors and notification.				

Describe the investigation of individual cases, methods for and significance of virus quantitation.				
ROTAVIRUS NOROVIRUS	DOPS MSF CBD FRCPATH exams			
Describe the epidemiology and risk factors of infections.				
Describe the management of acute cases, including infection prevention and control.				
RESPIRATORY INFECTIONS WITH RSV AND INFLUENZA	DOPS MSF CBD FRCPATH exams			
Describe the epidemiology and risk factors in hospitals and the community of RSV and influenza.				
Describe the use of antivirals in prophylaxis and treatment of risk groups.				

Describe the use of immunisation in prevention.				
Describe infection prevention and control precautions to prevent spread.				
SMALLPOX	DOPS MSF CBD FRCPATH exams			
Describe the identification and investigation of suspected cases.				
Describe the need for liaison reference facilities and public health teams (notification) and infection prevention and control team in investigation and management.				
RABIES	DOPS MSF CBD FRCPATH exams			
Describe the investigation and management of potential contact in returned travellers, of bat associated bites and of suspected clinical cases				
VIRAL HAEMORRHAGIC FEVERS AND DENGUE	DOPS MSF CBD FRCPATH exams			

Describe the epidemiology and risk factors				
Describe the identification, including differential diagnosis, and investigation of suspected cases.				
Describe the need for liaison reference facilities and infection prevention and control team in investigation and management.				
RICKETTSIAL DISEASES	DOPS MSF CBD FRCPPath exams			
Describe the epidemiology and risk factors				
Describe the identification, including differential diagnosis, and investigation of suspected cases.				
Describe the need for liaison reference facilities				
ENCEPHALITIS AND MENINGITIS	DOPS MSF CBD FRCPPath exams			

Describe the clinical presentation, management and investigation of CNS infections due to Herpes simplex virus (including recurrent infection) and enteroviruses				
PSITTACOSIS AND CHLAMYDIA PNEUMONIAE Q FEVER	DOPS MSF CBD FRCPATH exams			
Describe the clinical presentation, management, investigation and notification				
VARICELLA-ZOSTER	DOPS MSF CBD FRCPATH exams			
Chickenpox; describe the management of the acute case in children, management of the acute case in adults, management of the case in pregnant women including obstetric risk factors and counselling, investigation and prevention of secondary cases and infection prevention and control in relation to the immunosuppressed, and neonates and the pregnant				
Zoster: describe risk factors and the management of infection in 'normal' people, pregnancy and the immunocompromised				

CREUTZFELDT-JAKOB DISEASE (CJD) VARIANT CJD	DOPS MSF CBD FRCPATH exams			
Describe the clinical presentation, management, investigation and reporting.				
VIRAL INFECTION OF IMMUNOCOMPROMISED PATIENTS	DOPS MSF CBD FRCPATH exams			
Describe the risk factors for, clinical presentation, management and investigation of infection due to: BK, CMV, EBV, HHV-6, adenovirus				
Outline the treatment of infections.				
Outline the infection prevention and control precautions for these infections				
OCCUPATIONAL HEALTH AND VIRUSES	DOPS MSF CBD FRCPATH exams			

Describe the risk factors for, clinical presentation, management and investigation of infection from: Hepatitis B virus, Hepatitis C virus, HIV, Influenza virus, Varicella-Zoster virus				
Herpes simplex virus.				
Describe precautions required by healthcare workers if infected with these viruses.				

Health Protection and Epidemiology

SURVEILLANCE	DOPS MSF CBD FRCPATH exams			
Demonstrates the principles and practices of surveillance of infectious disease, including the use of routine and enhanced surveillance systems				
INDIVIDUALS RESPONSIBLE FOR HEALTH PROTECTION	DOPS MSF CBD FRCPATH exams			
Describe the role of others in the prevention and control of infection				
IMMUNISATION	DOPS MSF CBD FRCPATH exams			

Describe the general principles involved in immunisation programmes				
Describe methods of vaccine delivery, surveillance of immunisation programmes and evaluation of vaccine efficacy				
OCCUPATIONAL HEALTH AND TRAVEL HEALTH PROCEDURES	DOPS MSF CBD FRCPath exams			
Able to give basic health and travel advice and refer to other sources of information and support.				
AGENTS OF BIOTERRORISM	DOPS MSF CBD FRCPath exams			
Describe the epidemiology, risk factors, clinical presentation of current perceived potential microbiological agents for bioterrorism.				
Outline the potential for abuse of laboratory organisms for bioterrorism and the current relevant legislative framework, including the Prevention of Terrorism Act 2004.				
REFERENCE LABORATORIES	DOPS MSF CBD FRCPath exams			

Describe the role and function of reference laboratories				
MYCOLOGY				
SUPERFICIAL FUNGAL INFECTION	DOPS MSF CBD FRCPATH exams			
Describe the aetiology, risk factors and clinical presentation and treatment of fungal infections of skin, hair, nails and mucous membranes				
SYSTEMIC FUNGAL INFECTION AND ENDEMIC FUNGAL INFECTION	DOPS MSF CBD FRCPATH exams			
Describe the aetiology, risk factors and clinical presentation systemic and endemic mycoses including candidosis, aspergillosis, cryptococcosis, histoplasmosis, coccidioidomycosis, and blastomycosis.				
Describe use of appropriate antifungal agents.				
Describe methods available for susceptibility testing and their limitations.				

Describe the use of chemoprophylaxis and environmental measure to prevent infection in the immunocompromised.				
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Parasitology

EPIDEMIOLOGY OF PARASITIC DISEASE	DOPS MSF CBD FRCPath exams			
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Describe the epidemiology of: <ul style="list-style-type: none"> • Imported parasitic infections with an emphasis on the infections common in European practice: e.g. malaria, intestinal protozoa, intestinal helminths, leishmaniasis, trypanosomiasis, filariasis and schistosomiasis • Endemic parasitic infections including for example toxoplasmosis, toxocariasis, giardiasis, hydatid disease • Parasitic infections associated with severely immunocompromised patients, e.g. microsporidiosis, cryptosporidiosis 				
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Describe the conditions under which infections are acquired so that the risk of infection to patients can be assessed				
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CLINICAL FEATURES AND LABORATORY DIAGNOSIS OF PARASITIC	DOPS MSF CBD FRCPath exams			
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<p>Describe the clinical features and laboratory diagnosis of:</p> <ul style="list-style-type: none"> • Imported parasitic infections (above) • Endemic parasitic (above) 				
<p>Parasitic infections associated with severe immunocompromise (above)</p>				
<p>TREATMENT OF PARASITIC DISEASE</p>	<p>DOPS MSF CBD FRCPPath exams</p>			
<p>Describe the use antiparasitic drugs including antimalarial agents, imidazoles, ivermectin, praziquantel</p>				
<p>Describe in detail the diagnosis and management of toxoplasmosis in the context of pregnancy</p>				
<p>Oral Microbiology</p>				
<p>DENTAL CARIES</p>	<p>DOPS MSF CBD FRCPPath exams</p>			
<p>Describe the normal flora of the oral cavity</p>				
<p>Explain the pathophysiology of, and risk factors for the development of, dental caries.</p>				

Describe the therapy and prevention of dental caries.				
PERIODONTAL DISEASES	DOPS MSF CBD FRCPPath exams			
Describe the normal flora of the oral cavity				
Explain the pathophysiology pathophysiology of, and risk factors for the development of, periodontal diseases				
Describe the therapy and prevention of periodontal diseases				
PURULENT INFECTIONS OF THE HEAD AND NECK REGION, INCLUDING DENTOALVEOLAR INFECTIONS, OSTEOMYELITIS OF THE JAWS AND SALIVARY GLAND INFECTIONS	DOPS MSF CBD FRCPPath exams			
Describe the normal flora of the oro-pharynx.				

Explain the pathophysiology of, and risk factors for the development of, purulent infections of the head and neck region, including dentoalveolar infections, osteomyelitis of the jaws and salivary gland infections.				
FUNGAL INFECTIONS OF THE ORAL CAVITY	DOPS MSF CBD FRCPATH exams			
Describe the normal fungal flora of the oral cavity.				
Explain the pathophysiology of, and risk factors for the development of, fungal infection of the oral cavity				
Describe methods available for antifungal drug susceptibility testing				
VIRAL INFECTIONS OF THE HEAD AND NECK	DOPS MSF CBD FRCPATH exams			
Explain the pathophysiology of, and risk factors for the development of, viral infections of the head and neck region caused by: herpes simplex, herpes zoster, Epstein Barr virus				
ORAL INFECTION IN THE COMPROMISED HOST INCLUDING ORAL MANIFESTATIONS OF HIV INFECTION	DOPS MSF CBD FRCPATH exams			

Describe the role of immunocompromise in the pathophysiology of oral infection				
Describe the clinical manifestations of oral infection in the immunocompromised host				
Describe the manifestations of oral disease in patients with HIV infection				
SYSTEMIC INFECTION CAUSED BY ORAL FLORA	DOPS MSF CBD FRCPATH exams			
Describe the role of the oral flora in systemic infection, eg, endocarditis, neutropenic sepsis and ventilator associated pneumonia				
ANTIBIOTIC PROPHYLAXIS	DOPS MSF CBD FRCPATH exams			
Describe the use of prophylactic use of antimicrobial drugs in dental and oral surgery				

Describe the national guidelines currently applicable.				
Explain the risks and benefits of this prophylaxis.				
INFECTION CONTROL RELEVANT TO DENTAL SURGERY	DOPS MSF CBD FRCPath exams			
Describe current procedures and legislation relevant to infection control in dental surgery.				
Explain recommended procedures involved in instrument decontamination in dentistry				
Discuss the risks of transmission of microorganisms from infected dental health care workers to patients				
Describe the national guidelines on restrictions of working practices of such staff.				