jrhsupport

COMMON OCCUPATIONAL INFECTIONS

Common infections and their sources

	Source of infection			
	Blood, body fluids and body parts	**Waste, eg faeces, urine and vomit**	**Significant skin contact**	**Infectious aerosols, eg coughs and sneezes, dusts, water droplets**
People	Hepatitis B and C, HIV	Haemorrhagic colitis/ haemolytic uraemic syndrome, Viral gastroenteritis, Shigellosis, Salmonellosis, Hepatitis A	Ringworm	Tuberculosis COVID-19
Animals – domestic/pets				
Cats		Toxoplasmosis	Ringworm	
Dogs		Toxocariasis, Leptospirosis	Ringworm	
Parrots etc	Chlamydiosis (Psittacosis)			
Animals – wild/exotic				
Rats		Leptospirosis		
Pigeons and other birds	Chlamydiosis	Salmonellosis		Chlamydiosis
Reptiles and amphibians eg terrapins		Salmonellosis		

Environmental micro-organisms

	Tetanus (soil)
	Legionellosis (natural and artificial water systems)
	Fungi and moulds
	Lyme disease (ticks found on animals and vegetation

Key infections: Summary statements

Hepatitis A	
Causative agent	Hepatitis A virus
Natural hosts	Humans
Disease in humans	Depends on age – more severe in adult, common symptoms include fever, headache, jaundice, loss of appetite, vomiting and abdominal pain.
Transmission	Hand to mouth contact with faeces or contaminated objects
Hepatitis B	
Causative agent	Hepatitis B virus
Natural hosts	Humans
Disease in humans	Infection may cause acute inflammation of the liver (hepatitis) which may be life-threatening. A person showing no symptoms may still carry the infection.
Transmission	Contact with blood (and other body fluids which may be contaminated with blood) via a skin-penetrating injury or via broken skin. Through splashes of blood (and other body fluids which may be contaminated with blood) to eyes, nose and mouth.
Hepatitis C	
Causative agent	Hepatitis C virus
Natural hosts	Humans
Disease in humans	Acute infection may be without symptoms or mild. If disease progresses, most common complaint is fatigue. At least 50% of those with acute infection develop chronic hepatitis.
Transmission	Contact with blood (and other body fluids which may be contaminated with blood) via a skin-penetrating injury or via broken skin. Through splashes of blood (and other body fluids which may be contaminated with blood) to eyes, nose and mouth.
HIV (AIDS)	
Causative agent	Human immunodeficiency virus
Natural hosts	Humans
Disease in humans	Acquired immune deficiency disease and related conditions affecting the immune system
Transmission	Contact with blood (and other body fluids which may be contaminated with blood) via a skin-penetrating injury or via broken skin. Through splashes of blood (and other body fluids which may be contaminated with blood) to eyes, nose and mouth.
Legionellosis	
Causative agent	*Legionella pneumophila* (bacterium)

Natural hosts	Humans – but found naturally occurring in the aquatic environment.
Disease in humans	Ranges in severity from mild flu-like illness to the more severe pneumonic form, Legionnaires' disease.
Transmission	Breathing in contaminated water droplets, eg from cooling towers, showers, spa baths.

Lyme disease	
Causative agent	*Borrelia burgdorferi* (bacterium)
Natural hosts	Ticks
Disease in humans	Begins with skin rash, often associated with flu-like illness. Later cardiac, arthritic and/or neurological diseases may develop.
Transmission	Via the bite of infected ticks which are often found on the tips of vegetation waithing for a host to pass.
Leptospirosis	
Causative agent	*Leptospira icterohaemorrhagiae, L. hardjo* (bacterium)
Natural hosts	Rodents (*L. icterohaemorrhagiae*) Cattle (*L. hardjo*)
Disease in humans	Rodents – Weil's disease – fever, headache, vomiting, muscle pain, can lead to jaundice, meningitis and kidney failure – can be fatal. Cattle – cattle-associated leptospirosis – flu-like illness of short duration, often with headache.
Transmission	Rats – direct contact through breaks in the skin with infected urine or water contaminated with urine. Cattle – splashing of urine during milking and other close contact
Campylobacteriosis	
Causative agent	Most human illness is caused by *campylobacter jejuni* (bacterium)
Natural hosts	Farm animals, chickens, wild birds and household pets
Disease in humans	Abdominal pain, fever and nausea
Transmission	Hand-to-mouth contact with faeces or contaminated objects, handling of raw poultry during processing (contaminated with faeces)
Chlamydiosis	
Causative agent	Chlamydia psittaci (bacterium)
Natural hosts	Birds – caged, wild exotic birds, also poultry and pigeons. Sheep and goats
Disease in humans	Two forms of the disease: Birds – causes ornithosis/psittacosis – flu-like illness which may lead to pneumonia and in severe cases, endocarditis, hepatitis and death Sheep – causes ovine chlamydiosis – may cause abortion; flu-like illness
Transmission	Birds – breathing in infected respiratory discharges from infected birds or

	breathing in dust contaminated with faeces and/or respiratory discharges Sheep – contact with products of gestation, eg placentae, amniotic fluid or contaminated objects, eg bedding
Fungi and Moulds	
Causative agent	Various species – likely to be found contaminating damp areas or naturally occurring in soil, eg *Aspergillus*
Natural hosts	Found widely in the environment
Disease in humans	Can cause infectionand allergy
Transmission	Breathing in spores, for example in dust liberated when sweeping or handling mouldy hay, also when carrying out building work
Ringworm	
Causative agent	Trichophyton – various species of the fungus
Natural hosts	Humans, cows (and some other farm animals)
Disease in humans	Causes inflamed, swollen, crusty skin lesions mainly on hands, forearms, head and neck
Transmission	Direct skin contact with infected animal – spores enter through breaks in the skin.
Shigellosis	
Causative agent	Various species of the bacterium *Shigella*
Natural hosts	Humans
Disease in humans	Bloody diarrhoea – disease severity depends on infecting species
Transmission	Hand to mouth contact with faeces or contaminating objects.
Tetanus	
Causative agent	*Clostridium tetani* (bacterium)
Natural hosts	Humans and animals, but spores of the micro-organisms occur widely in the environment eg soil
Disease in humans	Exaggerated reflexes, muscle rigidity and uncontrolled muscle spasms – lockjaw
Transmission	Organism enters via breaks in skin.
Tuberculosis	
Causative agent	*Mycobacterium tuberculosis* (bacterium)
Natural hosts	Humans
Disease in humans	Disease develops slowly, usually takes several months for symptoms to appear, symptoms include fever and night sweats coughing, losing weight and blood in phlegm and spit.
Transmission	Breathing in infectious respiratory discharges

Viral gastroenteritus	
Causative agent	Mostly commonly small round structured viruses – Norwalk-like viruses
Natural hosts	Humans
Disease in humans	Vomiting, diarrhoea, fever
Transmission	Hand-to-mouth contact with faeces or contaminated objects, also from breathing in aerosols of projectile vomit – this can lead to environmental contamination, especially of toilets