

University Occupational Health and Safety Information Sheet

INFECTION FROM ANIMAL SOURCES

The table below provides a non-exhaustive list of sources of infection from animals and potential routes of infection. Specimens of any material in the table should be handled at the appropriate containment level (according to [The Approved List of Biological Agents](#)).

SOURCE OF INFECTION	EXAMPLE ORGANISMS INVOLVED	ROUTE OF TRANSMISSION
Oral discharges	Rabies virus, Actinobacilli, some spirochaetes, B virus.	Bites from infected animals, salivary contamination of eyes or broken skin.
Blood	Simian immunodeficiency virus, Simian T-cell lymphotropic virus, Ebola, Marburg.	Direct contact with mucous membranes or eyes via splashing. Needlestick or other sharps injuries, bites.
Faeces	Salmonella spp and other enterobacteria, some protozoa, Echinococcus spp.	Poor hygiene following contact with faeces or bedding, especially where the animal may be suffering from diarrhoea or when faeces has dried and become dusty.
Urine	Leptospira spp.	Poor hygiene following contact with urine or bedding, especially where the handler has broken skin, exposure to aerosols of urine.
Reproductive tract discharges or contents	Q fever, Chlamydia, Salmonella, B virus.	Contact with reproductive tract discharges or contents, obstetric manipulations.
Milk	Brucella spp, Mycobacterium, Tuberculosis, Leptospira spp.	Milking procedures (in case of Leptospira, exposure to aerosols of urine during milking) and consumption of unpasteurised milk.
Skin/hair	Mycoses, parasite infections (eg sarcoptic mange), pox virus infections.	Direct handling of infected animals, scratches from animals.
Respiratory tract	Chlamydia spp, mycobacteria.	Inhalation of infected aerosols/droplets discharges/aerosols.
Vectors	Borrelia spp, louping ill, some parasitic infections.	Ectoparasites, or other insects and arthropods may be vectors for some diseases from infected animals by bite.

Source: HSE Guidance on '[Working Safely with Research Animals: Management of Infection Risks](#)'