

ZOOBOTIC AGENTS OF CONCERN IN DOGS, CATS AND FERRETS BRED FOR RESEARCH

Zoonotic Disease and Agent	Host	Transmission	Incubation Period (Time from exposure to onset of symptoms).	Signs/Symptoms
Campylobacteriosis (Vibriosis) <i>Campylobacter jejuni</i> <i>Campylobacter fetus</i>	Many animal species	Fecal-oral route.	<i>C. jejuni</i> 1 – 10 days <i>C. fetus</i> unknown	<i>C. jejuni</i> – Watery diarrhea, may be with mucus and blood, abdominal pain, fever and nausea and vomiting, usually brief and self-limiting. <i>C. fetus</i> – Chills, sweats, fever, cough, headache, weight loss and abortion in the latter half of pregnancy.
Cat Scratch Fever <i>Bartonella henselae</i>	Cats, others have been implicated, including the dog	Usually associated with a bite or scratch from a young animal. Fleas can serve as a vector.	3 – 14 days	Several days following exposure, a small, reddened, raised area appears at the site of inoculation, followed by vesicle and scab formation. Within a few days to a week, the lesion resolves. Weeks later regional lymph nodes can enlarge and stay enlarged for months. Fever, anorexia and headache can be present. Severe disease can occur in immunocompromised hosts.
Cryptosporidiosis <i>Cryptosporidium</i> spp.	Many animal species	Fecal-oral route and may involve contaminated air.	3 – 7 days	Characterized by cramping, abdominal pain, profuse watery diarrhea, anorexia, weight loss and generalized weakness. Immunosuppressed people may develop severe disease.
Dermatomycosis (Ringworm) <i>Microsporium canis</i> , <i>Trichophyton</i> spp.	Many animal species	Transmission is by direct skin- to-skin contact with infected animals or indirect contact with contaminated equipment or materials.	4 – 14 days	Dermatophytes grow in keratinized tissue (skin, hair, nails, horns and feathers), characterized by focal, flat, spreading circular lesions that are clear in the center and crusted, scaly and reddened at the periphery. Invasive, systemic infections have been reported in immunocompromised people.
Pastuerellosis <i>Pasteurella</i> spp.	Many animal species	Animal bite or scratch, inhalation, non-intact skin contamination from infected material, and ingestion.	For a wound infection – more than 24 hours. Unknown for other routes.	Wound infection with local redness, swelling, severe pain, occasionally mild fever and regional lymph node swelling. Upper and lower respiratory tract infections and abdominal/pelvic infection are possible with signs related to the area that is affected. Septicemia – infrequent form of infection with fever and generalized signs.
Salmonellosis, <i>Salmonella</i> spp.	Many animal species	Fecal-oral route.	6 – 72 hours, usually 12 – 36 hours	Infection causes a sudden onset of headache, abdominal pain, diarrhea and sometimes vomiting. Focal infections can be localized in any tissue of the body with signs related to the area of infection. Immunosuppressed people are at extra risk.
Tetanus	<i>Please refer to the Tetanus Facts Sheet</i>			
Toxoplasmosis	<i>Please refer to the Toxoplasmosis Facts Sheet</i>			

References:

- Occupational Health and Safety in the Care and Use of Research Animals*, National Research Council, National Academy Press, Washington D.C. 1997.
- Hugh-Jones M.E. et al. 1995. *An Outline of the Zoonoses*. Iowa State University Press, Ames, Iowa.
- Benenson, A.S. 1995. *Control of Communicable Disease in Man*. Am. Public Health Assoc., Washington D.C.