

## This information sheet is for the care and use of cats



**Potential Injury & Zoonotic Diseases:** Cats are generally social animals and respond well to frequent, gentle human contact, however, any cat can become agitated when being restrained for procedures. Due to the penetrating nature of their bites, cats can inflict serious bite wounds and prompt first-aid is particularly important when dealing with such injuries. Cat bites should always be reported to the supervisor and EH&S via the online incident form <https://www.ehs.uci.edu/apps/hr/index.jsp>. Scratches are also a hazard when dealing with cats. It is essential that training be provided to all employees who handle cats in order to avoid injury. The following is a list of potential zoonotic diseases associated with cats.

**Cat Scratch Disease:** Caused by the bite, scratch, or lick of a cat. Causal agent of the disease is not clearly defined. The disease is benign and heals spontaneously (from 7 to 20) days after symptoms appear and is characterized by regional lymphadenopathy (swollen glands) along with signs of a mild systemic infection consisting of fever, chills, generalized pain, and malaise.

**Toxoplasmosis:** A protozoan, *Toxoplasma gondii* has its complete life cycle only in cats, which are the only source of infective oocysts. Other mammals (including people) may become intermediate hosts. It takes at least 24 hours for oocysts shed in the feces to become infective, so removal of fresh feces daily reduces the risk of acquiring infection. Toxoplasmosis in people resembles mild flu-like symptoms unless immune suppressed (in some individuals it may cause ocular and neurological disease). **Infection in a previously uninfected pregnant woman can result in prenatal infection of the developing fetus, which can cause in birth defects.** Should an accidental mucosal or needle stick exposure occur, medical services should be obtained through [Workers Compensation](#) by calling (949) 824-9152 or visiting their [website](#). For treatment locations <http://www.ehs.uci.edu/MedEmergPoster.pdf>

**Ringworm:** Dermatophyte infection (most commonly *Microsporum* spp. and *Trichophyton* spp.) is commonly known as ringworm because of the characteristic circular lesion often associated with it. Dermatophytes are classified as fungi and may not be readily apparent. Disease in people is from direct contact with an infected animal. Ringworm is usually self-limiting and appears as circular, reddened, rough skin. It is responsive to prescription topical therapy.

**Pasteurella multocida:** This bacterium resides in the oral cavity or upper respiratory tract of cats. Human infection is generally associated with a bite or scratch. Human infection generally appears as local inflammation around the bite or scratch, possibly leading to abscess formation with systemic symptoms.

**Rabies:** Rabies virus (rhabdovirus) can infect almost any mammal. The source of infection to people is an infected animal. The virus is shed in saliva 1-14 days before clinical symptoms develop. Any random-source (animal with an unknown clinical history) or wild animal exhibiting central nervous system signs that are progressive should be considered suspect for rabies. Transmission is through direct contact with saliva, mucus membranes, or blood, e.g. bite, or saliva on an open wound. The

incubation period is from 2 to 8 weeks, possibly longer. Symptoms are pain at the site of the bite followed by numbness. The skin becomes quite sensitive to temperature changes and laryngeal spasms are present. Muscle spasms, extreme excitability, and convulsions occur. Rabies in unvaccinated people is almost invariably fatal. Rabies vaccine is available through Occupational Health Services for laboratory workers who may be repeatedly exposed to the rabies virus. Please contact the Occupational Health Coordinator at 949-824-3757.

**Other Diseases:** There are several other diseases that can be possibly spread through working with cats. *Cryptosporidia*, *Giardia*, and *Campylobacter* are transmitted via the fecal/oral route. These diseases in people are exhibited by acute gastrointestinal illness; diarrhea, nausea, vomiting, abdominal pain and fever. Clinical signs are generally brief and self-limiting.

### **Allergic Reactions to Cats**

Allergies to cat fur and dander are well documented. The major allergen in a cat is a protein that is produced in the sebaceous glands of the skin, which coats the hair shafts. This protein is also found in the saliva of cats. If you have symptoms you are strongly advised to contact the Occupational Health Coordinator at 949-824-3757 to discuss this issue and arrange for follow-up with an occupational health physician.

**Tell your physician you work with cats.** Whenever you are ill, even if you're not certain that the illness is work-related, always mention to your physician that you work with cats. Many zoonotic diseases have flu-like symptoms and would not normally be suspected. Your physician needs this information to make an accurate diagnosis. Questions regarding personal human health should be answered by your physician.

### **References:**

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SPECIES	BIOLOGICAL HAZARD/PATHOGEN	ROUTE OF TRANSMISSION	CLINICAL SYMPTOMS	PREVENTION/PROPHYLAXIS	MEDICAL SURVEILLANCE REQUIRED	RISKS FOR EXPOSURE AT UCI	Reference
Cats	Afipia felis	Scratch, bite or licking	Localized lymph gland swelling, Fever, chills, anorexia, malaise, generalized pain, vomiting, stomach cramps	Avoid cat scratches and bites, cut cat's nails, wash and disinfect any scratch or bite, wash hands after petting or handling a cat	No	Yes	J Clin Microbiol. 1998 Sep;36(9):249-502
Cats	Bartonella (Rochalimaea) henselae- Cat Scratch Fever	Fleas, bite, scratch	Fever, weight loss, nausea, diarrhea, abdominal pain, lymphadenopathy, muscle and joint pains, headache, meningism, photophobia	Control cat fleas, treat infected cats with antibiotics, any wound inflicted by cat should be promptly washed with soap/water. Seek medical care for all bites	No	Yes	PAHO zoonoses
Cats	Bergeyella (Weeksella) zoohelcum	Bite	Cellulitis	PPE	No	Yes	J Clin Microbiol. 2004 Jan;42(1):290-3.
Cats	Brucella suis	Contact with animal and newborn animal, ingestion of animal products, inhalation of airborne agents, contaminated food and water	Fever, chills, profuse sweating, weakness, insomnia, sexual impotence, constipation, anorexia, headache, arthralgia, general malaise, irritation, nervousness, depression	Personal hygiene, use of protective clothes, and disinfectants	No	No	PAHO zoonoses 42-43; also negative PubMed central
Cats	Campylobacteriosis	Fecal, contaminated food and water	Diarrhea, vomiting, fever, abdominal pain, visible or occult blood, headache, muscle and joint pain	Personal hygiene, PPE	No	Yes	
Cats	Capnocytophaga canimorsus	Bite	Meningitis, endocarditis, septic arthritis, gangrene, disseminated intravascular coagulation, keratitis	Irrigation with water, clean with soap and water. Medically treat all bites	No	No	
Cats	Chlamydia psittaci (feline strain)	Inhalation of airborne agent; humans and wild animals contract infection through birds	Fever, chills, sweating, myalgia, loss of appetite, headaches, weakness, coughing, enlargement of liver and spleen, vomiting, diarrhea, constipation, insomnia, disorientation, mental depression, delirium	Use of PPE	No	No	

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Cats	Cowpox	Scratch, bite	Lesions occur on hands, sometimes face and arms. Fever, local edema, lymphadenitis	Avoid contact with sick animal, vaccinia MVA strain	No	No	
Cats	Cutaneous larva migrans	Contact with contaminated soil	Intense pruritis, lesions to skin exposed to contaminated soil	Regular treatment of animal, removal of feces twice a week reduces contamination. Areas susceptible to contamination should be kept dry, clean, and free of vegetation	No	Yes	
Cats	Dermatophytosis	Contact with animal, spores contained in the hair dermal scales	Acute inflammatory lesions	Avoid contact with sick animal, isolate animal and treat with topical antimycotics or griseofulvin administered orally. Remains of hairs and scales should be burned and rooms, stables, and all utensils should be disinfected	No	Yes	
Cats	Dipylidium caninum	Ingestion of flea	Diarrhea, colic, irritability, erratic appetite, insomnia	Eliminate fleas and cestodes from animal	No	No	
Cats	Leptospirosis	Skin abrasions and the nasal, oral, and conjunctival mucosa, contaminated water and foods	Fever, headache, myalgias, conjunctivitis, nausea, vomiting, diarrhea or constipation, prostration, petechiae on the skin, hemorrhages in the gastrointestinal tract, proteinuria, hepatomegaly and jaundice, renal insufficiency with marked oliguria or anuria, azotemia, electrolyte imbalance, stiffness of neck	Personal hygiene, use of protective clothes	No	Yes	
Cats	Pasteurella multocida	Scratch, bite	Diseases of respiratory system, localized infections in different organs and tissues	Measures to reduce likelihood of bites. Medical treatment for all bites	No	Yes	

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Cats	Plague	Flea bite, skin abrasions or bites	Fever, chills, cephalalgia, nausea, generalized pain, diarrhea, constipation, toxemia, shock, arterial hypotension, rapid pulse, anxiety, staggering gait, slurred speech, mental confusion, prostration	Flea and rodent control, inactivated vaccine	No	No	
Cats	Q-fever	Aerosols from birthing by-products, dust, leather, wool, tick bite	Fever, chills, profuse sweating, malaise, anorexia, myalgia, nausea, vomiting, cephalalgia, retroorbital pain, slight cough, mild expectoration, chest pain	Vaccine (Not available in USA)	Q-fever titer	Yes	
Cats	Rabies	Bite, contact with infected tissue or body fluids	Fever, headache, agitation, confusion, excessive salivation	Avoid contact with wild animal, use appropriate PPE	Rabies vaccine	Known in wild animals, none in Lab animals	
Cats	Salmonellosis	Fecal/Oral, contaminated food and water	Diarrhea, vomiting, low grade fever	Personal hygiene	No	Yes	
Cats	Scabies	Close contact	Irritation, pruritis, itching	Wear protective clothing, gloves and high boots of a material that mites cannot penetrate	No	Yes	
Cats	Sporothrix schenckii	Contact through a cutaneous lesion, inhalation of fungi	Nodule or pustule at point where broken skin allowed inoculation, cough, expectoration, dyspnea, pleuritic pain, hemoptysis, weight loss, fatigue, slight rise in body temperature	Wear protective clothing, use gloves to handle animal with cutaneous lesions	No	Yes	
Cats	Toxoplasmosis	Ingestion of oocysts from hands, or food or water contaminated with feces of infected animal	Mild fever, persistent lymphadenopathy in one or more lymph nodes, asthenia, cephalalgia, lethargy, facial paralysis, hemiplegia, coma, weakness. Potential birth defects	Personal hygiene, PPE. Use respirator or avoid cleaning litter boxes if pregnant	No	Yes fecal material; lab procedures	
Cats	Visceral larva migrans	Ingestion of larva from contaminated hands, or food or water	Eosinophilia, fever, asthenia, digestive symptoms, abdominal pain	Personal hygiene, PPE	No	Fecal/oral ingestion	

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Cats	Yersinia pseudotuberculosis	Fecal/Oral, contaminated food and water	Mesenteric adenitis or pseudoappendicitis, acute abdominal pain in the right iliac fossa, fever, vomiting, diarrhea, pyrexia, rashes, nausea	Personal hygiene, PPE	No	No	

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