










Select Zoonotic Diseases of Companion Animals






Human Impact	 Person-to-Person  Vector-Transmitted	Routes of Transmission	● = Potential System Affected						Incubation Period	Prominent Clinical Signs and Symptoms
			Septicemia	Respiratory	Intestinal	Cutaneous	Ocular	Neurological		
Disease										
BACTERIA										
Campylobacteriosis <i>Campylobacter jejuni</i> , <i>C. fetus</i> , <i>C. coli</i>		ingestion (contaminated food, fecal-oral)			●				1-10 days	Diarrhea with or without blood; fever; nausea; vomiting; abdominal pain; headache; muscle pain
Canine Brucellosis <i>Brucella canis</i>		direct contact (infected animal tissue); ingestion; fomites	●					●	2 weeks to 3 months	Asymptomatic; flu-like signs (fever, chills, headache, malaise, aches); night sweats. chronic: arthritis, chronic fatigue, orchitis
Cat Scratch Fever <i>Bartonella henselae</i>		direct contact (scratch or bite of cat)				●			3-20 days	Self-limiting; mild to severe skin rash at site of inoculation; lymphadenopathy; fever; malaise; fatigue; complications or atypical signs for 5-16% of cases
Ehrlichiosis <i>Ehrlichia</i> , <i>Neorickettsia</i> , <i>Anaplasma</i>		ticks		●	●	●	●	●	7-10 days	Headache; fever; chills; myalgia; vomiting; diarrhea; conjunctivitis; cough; confusion; children may develop a rash; severe in immunosuppressed patients
Leptospirosis <i>Leptospira species</i>		ingestion (contaminated water); inhalation; direct contact (urine)		●				●	7-12 days	Biphasic illness; fever; headache; chills; severe leg myalgia; conjunctival injection; jaundice; aseptic meningitis; cough; dyspnea; acute renal failure; abortion
Lyme Disease <i>Borrelia burgdorferi</i>		ticks				●			7-14 days	"Bulls-eye" rash with central clearing; malaise; fatigue; fever; headache; stiff neck; myalgia; arthralgia; lymphadenopathy; chronic recurring arthritis
Methicillin-Resistant Staphylococcus aureus (MRSA) <i>Staphylococcus aureus</i>		direct contact, fomites, aerosol	●			●			variable; 4-10 days	Skin and soft tissue infection - impetigo, folliculitis, furunculosis, cellulitis, abscesses; invasive infection - pneumonia, endocarditis, septic arthritis, osteomyelitis, meningitis, and septicemia
Mycobacteriosis <i>Mycobacterium marinum</i>		direct contact				●			2-4 weeks	Papules (single or cluster) develop into granulomas, abscesses or ulcers; spreads along line of lymphatics or invade deeper tissues
Plague <i>Yersinia pestis</i>	 	direct contact (infected animal); fleas; inhalation	●	●					1-6 days	Flu-like signs; enlarged tender lymph nodes – "buboes"; rapid pneumonia; respiratory failure; toxemia; shock; death
Psittacosis <i>Chlamydia psittaci</i>		inhalation (infected bird dander, droppings, secretions)		●		●		●	7-28 days	Flu-like signs; rash; extensive pneumonia; endocarditis; myocarditis; encephalitis
Rat Bite Fever <i>Streptobacillus moniliformis</i> <i>Spirillum minus</i>		direct contact (bite or scratch), aerosol, ingestion	●			●				polyarthrits, endocarditis, hepatitis, nephritis, meningitis, pneumonia, sepsis, focal organ abscesses; death if untreated
Rocky Mountain Spotted Fever <i>Rickettsia rickettsii</i>		ticks			●	●	●	●	2-14 days	Fever; chills; malaise; headache; myalgia; vomiting; diarrhea; edema of the face or extremities; conjunctivitis; non-pruritic macular rash, may involve palms of hands or soles of feet; coma
Salmonellosis <i>Salmonella species</i>		ingestion (fecal-oral)	●		●			●	12 hours to 18 days	Acute enterocolitis; headache; abdominal pain; fever; diarrhea; nausea; septicemia; meningitis. May be severe in the very young, elderly, or immunosuppressed
Tularemia <i>Francisella tularensis</i>		arthropods (ticks, deer flies, mosquitoes); direct contact; inhalation; ingestion	●	●	●	●	●		1-14 days	Flu-like signs; exhaustion; ulcerative lesion; enlarged painful lymph nodes; painful purulent conjunctivitis; abdominal pain; diarrhea; vomiting; chest pain; respiratory distress; pneumonia; sepsis; death

Note: The information provided in this chart should not take the place of advice provided by a physician or veterinarian.

© 2013

Technical disease information is available at <http://www.cfsph.iastate.edu>.

Select Zoonotic Diseases of Companion Animals, continued

Human Impact	Person-to-Person		● = Potential System Affected					Incubation Period	Prominent Clinical Signs and Symptoms	
	Vector-Transmitted	Routes of Transmission	Septicemia	Respiratory	Intestinal	Cutaneous	Ocular			Neurological
Disease										
FUNGI										
Cryptococcosis <i>Cryptococcus neoformans</i>		inhalation (infected pigeon droppings)		●				●	unknown	Most asymptomatic; fever; malaise; cough; chest pain; dyspnea; headache; encephalitis in immunosuppressed patients; death
Dermatophytosis <i>Microsporum species, Trichophyton species</i>		direct contact (infected animal)				●			7-14 days	"Ringworm"; raised, inflamed, pruritic, circular lesion with central clearing; alopecia; thick, discolored nails; may disseminate in immunosuppressed patients
Sporotrichosis <i>Sporothrix schenckii</i>		Direct contact (cat, plant material); inhalation		●		●			3-12 weeks	Nodule or pustule at inoculation site; progresses to slow-healing ulcerations; followed by infection of lymphatic vessels; pulmonary and disseminated form possible but rare
PARASITES										
Acariasis (Mange) <i>Numerous species of mites</i>		direct contact (infected animal)				●			1-4 days	Severe pruritus on arms, chest, abdomen, thighs; macules, papules, pustules; possible severe painful dermatitis with allergic reactions and chronic lesions
Baylisascariasis <i>Baylisascaris procyonis</i>		ingestion (fecal-oral)		●				●	7-30 days	Symptoms vary with number and location of larvae; fever; nausea; lethargy; hepatomegaly; pneumonitis; neurological signs; brain damage; blindness; death
Chagas Disease <i>Trypanosoma cruzi</i>		vector - Triatome insects ("kissing bugs"); blood transfusion	●						5-14 days	Asymptomatic; flu-like signs (fever, headache, body and joint pain), lymphadenopathy, edema of face and/or extremities; chronic infection leads to heart failure; congenital infections
Echinococcosis <i>Echinococcus granulosus, E. multilocularis</i>		ingestion (fecal-oral)		●	●			●	months to years	Asymptomatic; signs associated with mass lesion; liver and lungs most common; abdominal pain; vomiting; jaundice; liver failure; cough; chest pain; blindness; seizures
Larva Migrans (cutaneous) <i>Ancylostoma species</i>		direct contact (larvae)				●			7-14 days	Pruritus; winding threadlike cutaneous lesion with erythema and swelling
Larva Migrans (visceral, ocular) <i>Toxocara species</i>		ingestion (fecal-oral)		●	●			●	weeks to months	Fever; cough; hepatomegaly; pneumonia; ocular invasion; vomiting; weakness; anorexia; arthralgia; myalgia; lymphadenopathy
Leishmaniasis <i>Leishmania species</i>		sand flies				●			7 days to years	Cutaneous: papule; ulcer; may be chronic; Visceral: prolonged undulant fever; splenomegaly; hepatomegaly; fatal if untreated
Toxoplasmosis <i>Toxoplasma gondii</i>		ingestion (fecal-oral, under cooked meat)						●	5-23 days	Flu-like signs; fetal death; congenital defects (hydrocephaly, microcephaly); severe in immunocompromised patients; encephalitis
Trichuriasis <i>Trichuris suis, T. trichiura, T. vulpis</i>		ingestion (fecal-oral)			●				variable	Asymptomatic; chronic diarrhea; abdominal pain; nausea; vomiting; flatulence; headache; weight loss; anemia; rectal prolapse in children
VIRUSES										
Influenza <i>Influenzavirus</i>		inhalation; direct contact (nasal secretions)		●	●				1-4 days	Fever; chills; anorexia; headache; myalgia; weakness; sneezing; rhinitis; sore throat; cough; pneumonia; nausea, vomiting, otitis media in children; death
Lymphocytic Choriomeningitis <i>Arenavirus</i>		aerosol, direct contact (abraded skin or mucous membranes); fomites							5-21 days	Asymptomatic; flu-like illness (fever, fatigue, headache, sore throat, body aches); meningitis, abortions, fetal deformities
Monkeypox <i>Orthopoxvirus</i>		direct contact (bites, body tissues), aerosols,				●			7-17 days	Flu-like signs (fever, chills, headache, sore throat, body aches); swollen lymph nodes; skin lesions (vesicles and pustules)
Rabies <i>Lyssavirus</i>		direct contact; organ transplant						●	1-3 months	Headache; fever; malaise; abnormal behavior; paresis or paralysis; difficulty swallowing; delirium; convulsions; death

www.cfsph.iastate.edu

Note: The information provided in this chart should not take the place of advice provided by a physician or veterinarian. © 2013

Technical disease information is available at <http://www.cfsph.iastate.edu>.

Select Zoonotic Diseases of Companion Animals

Animal Impact		● = Species with Zoonotic Potential							Incubation Period	Prominent Clinical Signs
Disease	Dogs	Cats	Birds	Ferrets	Rabbits	Rodents	Other			
BACTERIA										
Campylobacteriosis <i>Campylobacter jejuni, C. fetus, C. coli</i>	●	●	●	●		●	cattle, goats, mink, pigs non-human primates, sheep	3-25 days	Mucoid, watery, or blood-flecked diarrhea in many species; Cattle, Sheep, Goats: abortion; Hamsters: "wet tail"; may be fatal in newly hatched chicks; asymptomatic carriers common	
Canine Brucellosis <i>Brucella canis</i>	●								Abortions; stillborn or weak newborns; retained placentas; placentitis; orchitis; epididymitis; arthritis; lameness	
Cat Scratch Fever <i>Bartonella henselae</i>		●					bobcats, cheetahs, cougars, panthers	2-16 days	No natural occurring disease reported; research studies have reported fever; lethargy; anorexia; myalgia; lymphadenopathy; transient behavioral and neurological dysfunction	
Ehrlichiosis <i>Ehrlichia, Neorickettsia, Anaplasma</i>	●					●	cattle, sheep, horses, llamas, foxes, coyotes, non-human primates, wild ruminants	1-20 days	Dogs, Horses: fever; lethargy; anorexia; petechiae; lameness; edema in hind legs; Dogs: may develop bleeding disorders; Cattle, Sheep: abortions	
Leptospirosis <i>Leptospira species</i>	●					●	cattle, goats, horses, pigs, sea lions, seals, sheep	4-12 days	Cattle, Goats, Pigs Sheep: abortions; decreased fertility; Calves, Piglets: fever; diarrhea; meningitis; Dogs: variable; hemorrhagic syndromes; kidney disease; Horses: ocular lesions	
Lyme Disease <i>Borrelia burgdorferi</i>	●					●	deer, horses, opossums, raccoons	2-5 months	Dogs: lameness; arthritis; Horses: lameness; arthritis; encephalitis; uveitis; dermatitis; edema of the limbs; abortion	
Methicillin-Resistant Staphylococcus aureus (MRSA) <i>Staphylococcus aureus</i>	●	●	●		●	●	pigs, cattle, sheep, turtles	variable	Asymptomatic; skin and wound infections (abscesses, dermatitis, pyoderma, fistulas); pneumonia, rhinitis, sinusitis, otitis, septic arthritis, osteomyelitis, urinary tract infections	
Mycobacteriosis <i>Mycobacterium marinum</i>							All species of fish, some reptiles	variable (usually years)	Asymptomatic; anorexia, emaciation, lethargy; nodular skin lesions, ulcerations, hemorrhages; exophthalmos (bulging eyes), abdominal distention, skeletal deformities	
Plague <i>Yersinia pestis</i>	●	●				●	prairie dogs, rock and ground squirrels	1-6 days	High fever; extremely swollen lymph nodes – "buboes"; severe pneumonia; septicemia	
Psittacosis <i>Chlamydophila psittaci</i>			●			●	love birds, parakeets, parrots	3-10 days	Nasal and ocular discharges; conjunctivitis; yellow-green droppings; inactivity; ruffled feathers; inappetence; weight loss	
Rat Bite Fever <i>Streptobacillus moniliformis Spirillum minus</i>	●	●		●		●	carnivores that eat rodents		Asymptomatic; arthritis, abscesses, septicemia; conjunctivitis, photophobia, cyanosis,	
Rocky Mountain Spotted Fever <i>Rickettsia rickettsii</i>	●				●	●	opossums, rabbits, rodents	2-14 days	Fever; anorexia; depression; lymphadenopathy; dyspnea; diarrhea; vomiting; joint or muscle pain; edema of the face or extremities; petechiae of oral or ocular membranes; ataxia; paraparesis; seizures; renal failure; coma	
Salmonellosis <i>Salmonella species</i>	●	●	●			●	reptiles (turtles, lizards, snakes); amphibians (frogs); hedgehogs; livestock species (poultry, horses, cattle)	variable	Clinical disease uncommon; may develop septicemia; anorexia; listlessness; osteomyelitis; osteoarthritis; subcutaneous abscesses; death	
Tularemia <i>Francisella tularensis</i>	●	●			●	●	aquatic animals, horses, pigs, sheep	1-10 days	Sudden high fever with lethargy and anorexia; stiffness; reduced mobility; tachycardia; tachypnea; prostration and death; military white necrotic foci of liver, spleen or lymph node	

Select Zoonotic Diseases of Companion Animals, continued

Animal Impact Disease	● = Species with Zoonotic Potential							Incubation Period	Prominent Clinical Signs
	Dogs	Cats	Birds	Ferrets	Rabbits	Rodents	Other		
www.cfsph.iastate.edu									
FUNGI									
Cryptococcosis <i>Cryptococcus neoformans</i>	●	●		●		●	cattle, sheep, goats, horses, llamas, foxes, mink, non-human primates	unknown	Cats: chronic rhinitis; sinusitis; lymphadenopathy; non-pruritic nodules on face; CNS disease; ocular lesions; osteomyelitis; Cattle, Sheep, Goats: mastitis; Dogs: neurologic disease; Horses: obstructive growths in the nasal cavity
Dermatophytosis <i>Microsporum species, Trichophyton species</i>	●	●	●	●	●	●	cattle, goats, horses, pigs, sheep	2-4 weeks	Young animals most susceptible; adults may be asymptomatic; small circular areas of alopecia; flaky skin; most species non-pruritic; Pigs: wrinkled lesion with thin brown, easily removed scab
Sporotrichosis <i>Sporothrix schenckii</i>	●	●					horses, donkeys, mules	1 month	Cutaneous form most common; disseminated form rare; Horses, Cats: nodules develop into slow-healing ulcers; suppurative lymphadenitis; Dogs: nodules may or may not be ulcerated
PARASITES									
Acariasis (Mange) <i>Numerous species of mites</i>	●	●	●	●	●	●	bats, cattle, felids, fox, goats, horses, pigs, sheep, raccoons	10-60 days	Pruritic; secondary pyoderma; depression; anorexia; chronic infection may lead to hyperkeratotic lesions; fatal infestations may be seen in wild animals; Ferrets: pododermatitis; self-mutilation
Baylisascariasis <i>Baylisascaris procyonis</i>	●		●		●	●	raccoons, kinkajous *Birds highly susceptible, but do not transmit to people	10-20 days	Dogs, Raccoons: usually asymptomatic; Rodents, Rabbits: neurological signs; circling; torticollis; ataxia; head tremors; progressive weakness; dysphagia; death
Chagas Disease <i>Trypanosomiasis</i>	●	●			●	●	pigs, goats, marsupials, bats, opossums, xenarthra (anteaters, armadillos), non-human primates	5-42 days	Fever, anorexia, lethargy, lymphadenopathy, ascites, palpebral edema, heart dysfunction, sudden death.
Echinococcosis (hydatid disease) <i>Echinococcus granulosus, E. multilocularis</i>	●	●				●	cattle, sheep, goats, horses, pigs, non-human primates	unknown	Carnivores: asymptomatic; incidental finding of cysts at necropsy; Herbivores: can affect liver, abdominal cavity; ascites; hepatomegaly; dyspnea; diarrhea; vomiting; weight loss; Rodents: fatal within weeks
Hookworms <i>Ancylostoma species</i>	●	●						7-20 days	Disease will vary with parasite burden and age of the animal; severe in puppies; diarrhea; anorexia; emaciation; weakness; poor hair coat; anemia; interdigital dermatitis, death
Leishmaniasis <i>Leishmania species</i>	●	●				●	canids, horses, marsupials, non-human primates	3 months to years	Cats, Horses: cutaneous form; non-pruritic exfoliative dermatitis around eyes, ears; Dogs: Foxhounds most commonly affected; cutaneous lesions; fever; anemia; lymphadenopathy; weight loss; anorexia; ocular lesions; splenomegaly
Roundworms <i>Toxocara species</i>	●	●						30 days	Severe in puppies and kittens; lack of growth; loss of condition; "potbellied"; parasites in vomit and feces; pneumonia; diarrhea
Toxoplasmosis <i>Toxoplasma gondii</i>		●			●	●	goats, horses, non-human primates, pigs, sheep	unknown	Most infections asymptomatic; Goats, Sheep, Pigs: abortions; stillbirths; Lambs: weak; high mortality rate; Cats: lethargy; persistent fever; anorexia; incoordination; paralysis; retinal detachment; death; Dogs: most asymptomatic
Trichuriasis <i>Trichuris suis, T. trichiura, T. vulpis</i>	●						non-human primates, pigs	10-12 days	Most cases asymptomatic; mucoid or hemorrhagic diarrhea; weight loss; unthriftiness; anemia; death may occur in piglets
VIRUSES									
Influenza <i>Influenzavirus</i>	●	●	●	●			pigs, horses	1-7 days	Fever, respiratory illness (cough; labored breathing; nasal discharge; lethargy, inappetence
Lymphocytic Choriomeningitis <i>Arenavirus</i>						●	wild mice, rats, hamsters, non-human primates	5-6 days	Asymptomatic to acute death; varies with animal's resistance and age at infection
Monkeypox <i>Orthopoxvirus</i>						●	non-human primates	4-12 days	Self-limiting rash and cutaneous lesions (papules, pustules, vesicles, ulcerations), fever, respiratory signs (cough, nasal discharge), lymphadenopathy
Rabies <i>Lyssavirus</i>	●	●		●	●	●	any mammal	10 days to 6 months	Restlessness; anorexia or increased appetite; vomiting; fever; ataxia; incoordination; ascending paralysis; increased aggression; death

Note: The information provided in this chart should not take the place of advice provided by a physician or veterinarian. © 2013

Technical disease information is available at <http://www.cfsph.iastate.edu>.