

**APPENDIX A
EXPOSURE RISKS BY SPECIES**

SPECIES:	MOUSE, RAT, HAMSTER	RABBIT	AMPHIBIAN & REPTILES	FISH	BAT
Route	Bites, Scratches, Aerosols/Respiratory, Accidental Ingestion, Contact (Direct or Indirect)	Bites, Scratches, Bruises, Aerosols/Respiratory, Accidental Ingestion, Contact with Blood or Tissues, Other Contact (Direct or Indirect)	Bites, Scratches, Envenomation (Bite, Direct Contact) Contact (Direct or Indirect): Water	Bites, Scratches, Wound Infections, Insect Bites, Accidental Ingestion, Inhalation of Aerosolized Materials, Contact (Direct or Indirect)	Bites/Punctures, Scratches, Wound Infections, Mucous Membranes, Inhalation of Aerosolized Materials (esp. guano), Accidental Ingestion, Contact (Direct or Indirect)
RISKS/EXPOSURES					
Allergen Source	Hair, Dander, Urine, Feed/Dust, Bedding, Serum Proteins	Hair, Dander, Saliva, Urine, Feed/Dust, Bedding	Water, Animal Skin, Mouth or Nails, Venom	Water, Animal Skin, Mouth or Nails, Venom	Saliva, Blood/Tissues, Aerosol, Urine, Guano
Infectious/Zoonotic	Rat Bite Fever/Haverhill Fever (Streptobacillus + Spirillum), Salmonella, Campylobacter, E. coli, Shigella	Listeria, Pasteurella, Mycobacterium, Cryptosporidium, Salmonella, Campylobacter, E. coli, Shigella, ADDITIONALLY, WITH WILD RABBITS: Brucella, Tularemia, Plague, Q-Fever, Ringworm species (fungal infection), External Parasites (mites, lice)	Salmonella, Leptospira, Cryptosporidium	Mycobacterium, Erysipelothrix, Campylobacter, Aeromonas, Vibrio, Pseudomonas, Enterobacter, Clostridium, Edwardsiella, Escherichia, Salmonella, Klebsiella, Streptococcus sp., Parasites (Cestodes, Trematodes, Nematodes), Cryptosporidium, NoroVirus	Rabies, Histoplasma, Cryptococcus, Blastomycosis, Salmonella, Shigella, Yersinia and External Parasites (with concomitant Bartonella, Ehrlichia, Borrelia, etc.) IF IMPORTED: Nipah, Hendra, Ebola, SARS, etc. Trypanosoma, Toxoplasma, Coccidia, Leishmania
REACTIONS					
Immune	Allergic Reaction, Asthma, Conjunctivitis, Rhinitis, Cross-reactivity, Anaphylaxis/Death	Allergic Reaction, Asthma, Conjunctivitis, Rhinitis, Cross-reactivity, Anaphylaxis/Death	Contact Allergy, Potentially Life-Threatening Venom Toxicity Reactions	Contact Allergy, Potentially Life-Threatening Venom Toxicity Reactions	Allergic Dermatitis (from ectoparasites)
Clinical Signs / Symptoms In Humans	DEPENDING ON DISEASE: Fever, Vomiting, Headache, Muscle Pain, Abdominal Cramps, Diarrhea +/-Blood Loss, Dehydration, Arthritis/Joint Pain & Swelling, Rash, Pneumonia, Septicemia, Hepatitis, Nephritis, Meningitis, Heart Inflammations, Lymphadenopathies, Death (if untreated)	LISTERIA: Fever, Muscle Aches, Headache, Stiff Neck, Confusion, Loss of Balance, Convulsions/Seizures, Nausea, Diarrhea, IF PREGNANT: Difficulty Breathing, Miscarriage, Stillbirth, Premature Birth, Fatal Infection after Birth, Septicemia, Meningitis, TULAREMIA: Ulcers, Lymphadenopathy, Pneumonia-like Illness, Sore Throat, Abdominal Pain, Diarrhea & Vomiting, MYCOBACTERIUM: Lymphadenitis, Pulmonary Disease (similar to Tuberculosis) PASTURELLA: Bite Wound Swelling, Cellulitis, Abscessation, Lymphadenopathy, Arthritic Changes, RINGWORM: Focal/Multifocal Skin Lesions OTHERS: Primary GI Signs/Symptoms	DEPENDING ON DISEASE: Rashes/Skin Irritation, Skin Ulcers & Nodules, Fever, Abdominal Cramps, Diarrhea +/-Blood Loss, Arthritic Changes, Pneumonia, Septicemia, Death	DEPENDING ON DISEASE: Vomit, Diarrhea, Skin Ulcers & Nodules, Lymphadenitis, Pulmonary Disease (similar to Tuberculosis), Severe Systemic Disease, Cellulitis, Arthritis, Endocarditis, Meningitis, Septicemia, or Death	DEPENDING ON DISEASE: Depression, Anorexia, Diarrhea, Vomit, Abdominal Cramps, (high) Fever and Chills, Headache, Malaise, Lymphadenopathy, Cough, Neurologic Deficits/Changes in Behavior, Hygrophobia, Seizures/Coma, Severe Disease, Death
Persons with specific medical conditions such as a chronic illness, immunodeficiency, and/or pregnancy may be at higher risk of developing disease or complications from a zoonotic disease and should consult with their physician before working with animals.					