

POSSIBLE ZONOOSES OF SHEEP AND GOATS

Use of animals from approved vendors and proper use of personal protective equipment makes the risk of transmission of these diseases unlikely.

| Pathogen | Transmission | Animal Disease | Human Disease |
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| Brucellosis (Brucella spp.) | <ul style="list-style-type: none"> • Aerosol • Direct contact urine, semen or by handling fetal membranes • Highly infectious with only a few organisms required to cause infection | <ul style="list-style-type: none"> • Abortions, epididymitis in sheep • Abortions, arthritis, spondylitis, mastitis, orchitis in goats | <ul style="list-style-type: none"> • Fever, chills, sweating, anorexia, constipation, insomnia, headache • Neurologic signs |
| Q-Fever (Coxiella burnetii) | <ul style="list-style-type: none"> • Aerosol • Resistant to most commonly used disinfectants • Highly infectious with only a few organisms required to cause infection | <ul style="list-style-type: none"> • Usually asymptomatic • Abortions in pregnant animals | <ul style="list-style-type: none"> • Fever, chills, anorexia, ocular pain • Pneumonitis, gastroenteritis • Caution especially for those that are pregnant or immunosuppressed, or have a heart valve disease or replacement |
| Contagious ecthyma, "Orf" (Pox virus) | <ul style="list-style-type: none"> • Direct contact of animal or fomites • Virus may remain viable in scabs for months | <ul style="list-style-type: none"> • usually young sheep/goats • opular, vesicular, pustular, crusty lesions on lips mouth nostrils, eyelids, ears, udder, teats | <ul style="list-style-type: none"> • Vesicle or pustule on hands, arms • Axillary (regional) lymphadenopathy • Usually self-limiting, remission in 2-4 weeks |
| Campylobacteriosis (C. jejuni, C. fetus) | <ul style="list-style-type: none"> • Direct contact, contaminated water, or fecal-oral route | <ul style="list-style-type: none"> • Late-term abortions or very weak neonates in sheep • Metritis, placentitis leading to septicemia and death | <ul style="list-style-type: none"> • Acute enteritis, bloody/mucoid diarrhea, abdominal pain, vomiting • Headache, muscle and joint pain |
| Chlamydia | <ul style="list-style-type: none"> • Inhalation, direct contact | <ul style="list-style-type: none"> • Abortions, polyarthritis, conjunctivitis, respiratory disease | <ul style="list-style-type: none"> • Abortions, polyarthritis, conjunctivitis, respiratory disease • Disease can progress to systemic infection and death |
| Colibacillosis | <ul style="list-style-type: none"> • Fecal-oral, direct contact | <ul style="list-style-type: none"> • "White diarrhea" in lambs • Septicemia, neurologic signs, ascites | <ul style="list-style-type: none"> • Profuse, watery/bloody/mucoid diarrhea, abdominal pain, vomiting, dehydration • Urogenital infections |

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| Corynebacteria spp. "Caseous Lymphadenitis" | <ul style="list-style-type: none"> • Fecal-oral, direct contact | <ul style="list-style-type: none"> • Abscessation of regional lymph nodes | <ul style="list-style-type: none"> • Ulcer, lymphadenitis, tonsillitis |
| Cryptosporidium parvum/bovis | <ul style="list-style-type: none"> • Fecal-oral transmission | <ul style="list-style-type: none"> • Diarrhea especially in young or immunosuppressed animals • Can be asymptomatic | <ul style="list-style-type: none"> • Diarrhea • Can be asymptomatic |
| Leptospirosis | <ul style="list-style-type: none"> • Direct contact with urine, contaminated water, aerosol | <ul style="list-style-type: none"> • Fever, anorexia • Jaundice, hemoglobinuria, anemia • Abortion, infertility | <ul style="list-style-type: none"> • Infection may resolve asymptotically or develop severe icterus, fever, headache, conjunctivitis, gastrointestinal signs, gastrointestinal hemorrhage |
| Listeria | <ul style="list-style-type: none"> • Fecal-oral | <ul style="list-style-type: none"> • Encephalitis, septicemia • Depression, paralysis of facial muscles, profuse salivation, strabismus | <ul style="list-style-type: none"> • Meningitis, septicemia, abortions • Very severe in immunocompromised individuals |
| Mannheimia hemolytica (formerly Pasteurella hemolytica) | <ul style="list-style-type: none"> • Inhalation, fecal-oral | <ul style="list-style-type: none"> • "Shipping Fever", secondary infection • Purulent nasal discharge, cough, diarrhea, malaise, hemorrhage | <ul style="list-style-type: none"> • Bronchiectasis, bronchitis, pneumonia |
| Sarcoptes scabiei | <ul style="list-style-type: none"> • Direct contact, fomites | <ul style="list-style-type: none"> • Usually infests face, ears, forelimbs • Vesicle or papule formation, keratinization • Alopecia with intense pruritus | <ul style="list-style-type: none"> • Usually infests face, ears, forelimbs, torso • Vesicle or papule formation, keratinization • Alopecia with intense pruritus |
| Spongiform encephalopathies (Scrapie, bovine - BSE) | <ul style="list-style-type: none"> • Consumption or inoculation of/with infected tissue • Largest amount in the central nervous system • May be present in colostrums, bone marrow, peripheral, and autonomic nervous tissue, and lymphoid tissue (not present in muscle) • Organism is resistant to all commonly use | <ul style="list-style-type: none"> • Long incubation period (years) followed by neurological abnormalities | <ul style="list-style-type: none"> • Scrapie not likely transmissible but extreme caution should be followed when handling infectious tissues. BSE is transmissible. • Long incubation period (years) followed by neurological abnormalities |

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| | disinfectants and to autoclaving | | |
| Vesicular Stomatitis (Rhabdovirus) | <ul style="list-style-type: none"> • Direct contact, insect vectors | <ul style="list-style-type: none"> • Mammary, interdigital, and oral vesicles with fever | <ul style="list-style-type: none"> • Flu-like signs • Vesicles in mouth, hands, feet |
| Tularemia (sheep) (Francisella tularensis) | <ul style="list-style-type: none"> • Direct contact, wound infection, flea/tick vector | <ul style="list-style-type: none"> • Lymphadenopathy of head, neck • Pneumonia • High mortality | <ul style="list-style-type: none"> • Lymphadenopathy, necrotic ulceration • Fever, conjunctivitis, bronchopneumonia |
| Yersinia pseudotuberculosis | <ul style="list-style-type: none"> • Fecal-oral | <ul style="list-style-type: none"> • Abortions, suppurative orchitis, abscessation | <ul style="list-style-type: none"> • Acute abdominal pain, fever, vomiting, diarrhea • Arthritis, iritis, nephritis • Septicemia if immunocompromised |
| Salmonellosis (S. typhimurium, dublin, newport etc) | <ul style="list-style-type: none"> • Fecal-oral • Direct contact • Fomites | <ul style="list-style-type: none"> • Abortion • Acute and chronic enteritis • Septicemia in young animals | <ul style="list-style-type: none"> • Severe diarrhea and debilitation • Increased severity in the very old, the very young, and the immunocompromised. |