

Ovine Actinobacillosis

JUNE 2015	
Cause	Actinobacillus spp. bacteria
Risk of Exposure in Illinois	Rare
Risk of Transmission to exposed people	Unknown
Mode of Transmission	Bite wound; direct contact
Incubation Period	Human: Variable Animal: Resident bacteria of oropharynx
Clinical Signs- Human	Wound infections with abscess formation on hands and forearms; septicemia ("blood poisoning")
Clinical Signs- Animal	None
Control and Prevention	Good personal hygiene
Comments	None
Additional Information	http://www.phac-aspc.gc.ca/lab-bio/res/psds- ftss/actinobacillus-eng.php http://www.merckmanuals.com/vet/generalized_conditions/a ctinobacillosis/overview_of_actinobacillosis.html?qt=actinoba cillosis&alt=sh



Ovine Anthrax

Ingestion or inhalation of spores; handling contaminated carcass,

Cutaneous form accounts for most human cases-red, raised

Pulmonary form- fever; vague sense of ill-being; muscle pain;

Acute form- sudden fever; incoordination; tremors; respiratory

Vaccinate livestock in endemic areas; vaccinate individuals in high

Gastrointestinal form- fever; vomiting; bloody diarrhea; general

JUNE 2015 Cause

Bacillus anthracis bacteria

Human: Cutaneous form: 3-10 days

Inhalation form: 1-5 days

Gastrointestinal form: 2-5 days Animal: 3-7 days with a range of 1-20 days

cough; respiratory distress; sweating; shock; death

distress; blood tinged diarrhea; blood in urine and milk;

Low

High

wool, hide or hair

lesion: blister

convulsions and *death

Peracute form- *sudden death

*Failure to achieve rigor mortis after death

risk occupations; deep burial/burn infected carcass

ill-being

Exposure in Illinois

Risk of

Risk of Transmission to exposed people

Mode of Transmission

Incubation Period

Clinical Signs-Human

Clinical Signs-

Animal

Control and Prevention

Comments

Additional Information perform a necropsy; potential bioterrorist agent <u>http://emergency.cdc.gov/agent/anthrax/index.asp</u> <u>http://www.cfsph.iastate.edu/DiseaseInfo/disease.php?name</u>

Reportable disease in Illinois; if anthrax is suspected, do **NOT**

=anthrax&lang=en



Ovine Brucellosis

JUNE 2015	
Cause	Brucella melitensis, Brucella ovis bacteria
Risk of Exposure in Illinois	Low (Illinois is currently Brucellosis free)
Risk of Transmission to exposed people	High
Mode of Transmission	Contact with infected animals especially aborted fetuses, uterine fluids or membranes, and urine; inhalation or ingestion; contact with objects capable of harboring bacteria
Incubation Period	Human: 1 week-several months after infection Animal: Variable
Clinical Signs- Human	Fever; headache; chills; generalized weakness; nausea; weight loss; enlarged spleen and lymph nodes; Asymptomatic infections can occur. Symptoms may persist for years either intermittently or continuously.
Clinical Signs- Animal	Abortion (late in gestation); retained placenta; placentitis; impaired fertility in rams; inflammation of the testis or epididymis
Control and Prevention	Wear protective clothing around suspect animals; avoid undercooked meat.
Comments	Reportable disease in Illinois; potential bioterrorist agent
Additional Information	http://www.cfsph.iastate.edu/FastFacts/pdfs/brucellosis_F.pdf
	http://www.cdc.gov/brucellosis/
	http://coloradodisasterhelp.colostate.edu/prefair/disease/dz/ Brucellosis.html



Ovine Vibriosis

JUNE 2015

OVINE CAMPYLOBACTERIOSIS

Campylobacter spp. bacteria Cause Risk of Exposure in Moderate Illinois Risk of Transmission High to exposed people Mode of Ingestion (contaminated food/water, fecal-oral); direct Transmission contact Incubation Human: 1-11 days (3-5 days most common) Animal: 3-25 days (although most cases are asymptomatic) Period Systemic form (C. fetus)-chills; sweats; fever; cough; **Clinical Signs**weight loss; anorexia; vomiting; diarrhea; late term abortion Human Intestinal form (C. jejuni)-acute diarrhea +/- blood; abdominal pain; vomiting; headache; vague sense of ill-being **Clinical Signs-**Late term abortions; stillbirths; weak lambs; enteritis; infections in sheep are occasionally followed by metritis and Animal death. Control and Dispose of aborted fetuses and placentas promptly; good Prevention personal hygiene Comments Person to person transmission has been observed. http://www.cfsph.iastate.edu/FastFacts/pdfs/campylobacterosis_F.pdf Additional Information http://www.cdc.gov/nczved/divisions/dfbmd/diseases/campylob acter/ http://coloradodisasterhelp.colostate.edu/prefair/disease/dz/ Campylobacteriosis.html



Ovine Chlamydiosis

OVINE EAE-ENZOOTIC ABORTION OF EWES **JUNE 2015** Chlamydia spp. bacteria Cause Risk of Exposure in Moderate Illinois Risk of Transmission High to exposed people Mode of Ingestion (fecal-oral); inhalation; direct contact with birthing Transmission tissues Incubation Human: Unknown Animal: Variable Period **Clinical Signs-**Fever; headache; vomiting; abortion; pelvic inflammatory disease; septicemia ("blood poisoning"); kidney dysfunction Human **Clinical Signs-**Late term abortion often with no previous clinical signs; Animal stillbirths; low birth weight or premature offspring; metritis and retained placenta are uncommon Wear protective clothing and gloves when working with Control and suspect animals; good personal hygiene Prevention Person to person transmission has been observed. Comments Additional http://www.cfsph.iastate.edu/FastFacts/pdfs/chlamydiosis_F.pdf Information http://www.cfsph.iastate.edu/Factsheets/pdfs/chlamydiosis.pdf



Ovine Cryptococcosis

JUNE 2015	
Cause	Fungal
Risk of Exposure in Illinois	Low
Risk of Transmission to exposed people	Low
Mode of Transmission	Inhalation of dry pigeon droppings or spores from the environment; <i>C. neoformans</i> is ubiquitous in the soil
Incubation Period	Humans: Unknown Animal: Unknown
Clinical Signs- Humans	Most cases are asymptomatic; fever; general ill-being; cough; chest pain; headache; weight loss; immunocompromised patients at higher risk
Clinical Signs- Animals	Pulmonary disease; mastitis
Control and Prevention	Pigeon control
Comments	Person to person transmission extremely rare.
Additional Information	http://www.cfsph.iastate.edu/Factsheets/pdfs/cryptococcosis. pdf
	<u>http://www.cdc.gov/fungal/diseases/cryptococcosis-</u> neoformans/index.html



Ovine Cryptosporidiosis

JUNE 2015	OVINE CRYPTO
Cause	Cryptosporidium spp. protozoa parasite
Risk of Exposure in Illinois	Unknown
Risk of Transmission to exposed people	High
Mode of Transmission	Fecal-oral route; waterborne; airborne; foodborne
Incubation Period	Human: 1-12 days (average is 7 days) Animal: 4-9 days; oocysts shed for up to 10 days
Clinical Signs- Human	Cramping; abdominal pain; profuse watery diarrhea; anorexia, weight loss; vomiting; headache; immunosuppressed patients exhibit more severe illness
Clinical Signs- Animal	Loss of appetite; mild to severe watery diarrhea; debilitation; feces may contain blood and/or mucus; dehydration; loss of body fat; symptoms most common in young lambs and not affected by conventional antimicrobial therapy; many infections asymptomatic
Control and Prevention	Good personal hygiene, avoid contact with lambs with diarrhea; proper fecal waste disposal
Comments	Person to person transmission has been observed.
	http://www.cdc.gov/parasites/crypto/disease.html
Additional	http://www.cfsph.iastate.edu/FastFacts/pdfs/cryptosporidiosis_F.pdf
Information	http://www.health.state.ny.us/nysdoh/communicable_diseases/en/crypto. htm



Ovine Ringworm

OVINE DERMATOPHYTOSIS JUNE 2015 *Trichophyton* spp.; *Microsporum* spp. fungi Cause Risk of Exposure in Moderate Illinois Risk of Transmission High to exposed people Mode of Direct contact with infected animal, or indirect contact with Transmission contaminated object capable of harboring fungi Human: 7-14 days (can last from several days to few weeks) Incubation Animal: 2-4 weeks Period **Clinical Signs-**Fungi generally grow in keratinized tissue such as hair, nails and outer layer of skin; mucous membranes not affected. Human Itching; "ringworm" lesion; hair loss; inflammation **Clinical Signs-**Common in show lambs; circular, alopecic (hair loss) areas Animal with thick scabs on head and face; self-limiting in healthy lambs Control and Sanitation; good personal hygiene; wear gloves when handling suspect animals or contaminated objects capable of Prevention harboring fungi Comments Person to person transmission has been observed. http://www.cdc.gov/healthypets/diseases/ringworm.html Additional http://www.cfsph.iastate.edu/FastFacts/pdfs/dermatophytosis_F.pdf Information http://coloradodisasterhelp.colostate.edu/prefair/disease/dz/ Ringworm.html



Ovine Giardiasis

OVINE GIARDIA JUNE 2015 Cause Giardia spp. protozoa parasite Risk of Exposure in Low/Moderate Illinois Risk of Transmission High to exposed people Mode of Ingestion (contaminated water, fecal-oral) Transmission Incubation Human: 1-25 days Animal: 5-14 days Period **Clinical Signs-**Sudden onset of diarrhea with foul-smelling stools; abdominal Human cramps; bloating; flatulence; nausea; fatigue; dehydration; chronic infections may occur. **Clinical Signs-**Animals may be asymptomatic; lambs-diarrhea or soft stools; Animal poor hair coat; flatulence; weight loss or failure to gain weight Control and Good personal hygiene; thoroughly cook food; boil Prevention contaminated water; chlorine will not kill cysts. Comments Person to person transmission has been observed. http://www.cdc.gov/parasites/giardia/ Additional http://www.cfsph.iastate.edu/FastFacts/pdfs/giardiasis_F.pdf Information http://coloradodisasterhelp.colostate.edu/prefair/disease/dz/ Giardiasis.html



Ovine Leptospirosis

Leptospira spp. bacterial spirochete
Moderate
High
Ingestion of contaminated water; inhalation; direct contact with urine or through skin lesions; walking barefoot
Human: 2 days-4 weeks Animal: 3-7 days (variable)
Fever; headache; chills; cough; difficult breathing; severe muscle pain or tenderness; reddening of the eyes; jaundice; meningitis; acute kidney failure; abortion
Usually asymptomatic; weakness; anorexia; fever; abortion; stillbirth; weak lambs; infertility; weight loss; blood in urine; jaundice; death
Good pasture drainage; protect water supply from animal contamination; wear protective clothing.
Person to person transmission has been observed.
http://www.cfsph.iastate.edu/FastFacts/pdfs/leptospirosis_F.pdf http://www.cdc.gov/leptospirosis/index.html http://coloradodisasterhelp.colostate.edu/prefair/disease/dz/ Leptospriosis.html



Ovine Listeriosis

JUNE 2015

OVINE CIRCLING DISEASE, LEUKOCYTOSIS

Cause

Risk of

Exposure in Illinois

Risk of

Transmission to exposed people

Mode of

Transmission

Incubation

Period

Control and

Prevention

Additional

Information

Listeria monocytogenes bacteria

Moderate

Low (unless foodborne)

Ingestion; direct contact; aerosol

Human: Uncertain but considered to range from 3-70 days Animal: 10 days to 3 weeks

Clinical Signs-Human Flu-like symptoms: fever, diarrhea, headache, muscle aches, and stiff neck; abortion, premature birth or sick newborn; meningitis; asymptomatic fecal carriers common; pregnant women, elderly and immunosuppressed individuals at increased risk

Clinical Signs-Animals Encephalitis (circling, head pressing, head tilt, incoordination, excessive salivation); abortion late in gestation; septicemia (blood poisoning); sick neonate; depression; anorexia; ocular inflammation; death

Use only good quality silage; control rodents; cook meat; good sanitation

Comments Person to person transmission has been observed.

http://www.cfsph.iastate.edu/FastFacts/pdfs/listeriosis_F.PDF

http://www.cdc.gov/listeria/index.html

http://coloradodisasterhelp.colostate.edu/prefair/disease/dz/ Listeriosis.html



Ovine Johne's Disease

JUNE 2015

Cause

Risk of Exposure in

Illinois

Risk of

Transmission to exposed people

Mode of

Transmission

Incubation Period

Animal

Control and

Prevention

Comments

PARATUBERCULOSIS

Mycobacterium avium (paratuberculosis) bacteria

Moderate

Low (uncertain if zoonotic transmission occurs)

Direct contact; ingestion (routes of transmission not proven)

Human: Uncertain Animal: 1.5-5 years or longer

Clinical Signs-It has been suggested that Johne's disease is linked to Human Crohn's disease in humans, which causes chronic inflammatory intestinal disease and diarrhea

Clinical Signs-Sheep often develop symptoms at a younger age than cattle and rarely show clinical signs other than emaciation. May have chronic diarrhea unresponsive to deworming and antibiotics

Good personal hygiene

Reportable disease in Illinois

http://www.aphis.usda.gov/wps/portal/footer/topicsofinterest /applyingforpermit?1dmy&urile=wcm%3apath%3a%2Faphis content_library%2Fsa_our_focus%2Fsa_animal_health%2Fsa_ Additional animal disease information%2Fsa cattle health%2Fsa ioh Information nes%2Fct johnes disease http://www.cfsph.iastate.edu/Factsheets/pdfs/paratuberculos is.pdf#search=%22johnes%22



Ovine Sore Mouth

JUNE 2015

OVINE CONTAGOUS ECTHYMA

JUNE 2015	OVINE CONTAGOUS ECTHYMA
Cause	Pox virus
Risk of Exposure in Illinois	Moderate
Risk of Transmission to exposed people	High (disease is called Orf in humans)
Mode of Transmission	Direct contact with lesion or mucous membranes of infected animals; fomites (objects capable of harboring virus)
Incubation Period	Human: 3-7 days Animal: 2-3 days
Clinical Signs- Human	Small, firm papule at site of inoculation progressing to a weeping (can be painful) nodule that develops into a thick crust; low-grade fever; mildly enlarged lymph nodes
Clinical Signs- Animal	Papules, pustules, and vesicles that develop into thick crusts on lips, nose, ears, eyelids, occasionally feet, perineal region, inside mouth; anorexia; lameness; ewes nursing infected lambs may develop lesions on teats and udder
Control and Prevention	Good personal hygiene; wear gloves if lesions are seen.
Comments	None
Additional Information	http://www.cfsph.iastate.edu/FastFacts/pdfs/contagious_ecthyma_F.pdf



Ovine Pasteurellosis

JUNE 2015	
Cause	Pasteurella spp. bacteria
Risk of Exposure in Illinois	High
Risk of Transmission to exposed people	Low
Mode of Transmission	Wound contamination; inhalation; ingestion
Incubation Period	Human: Via wound-less than 24 hours (up to 14 days) Animal: Approx. 1-3 weeks after being introduced to stressful situation
Clinical Signs- Human	Local redness; swelling; skin infection and abscess; less commonly chronic pneumonia, meningitis and generalized illness
Clinical Signs- Animal	Symptoms start out vague with slight depression, anorexia and fever; labored breathing and cough may be present; thick nasal discharge; generalized illness
Control and Prevention	Vaccinate livestock; minimize stress; good personal hygiene; avoid bites/scratches
Comments	None
Additional Information	http://www.zoonosis.ac.uk/about-zoonoses/fact- sheets/pasteurellosis/ http://c.ymcdn.com/sites/www.aazv.org/resource/resmgr/ID M/IDM_Pasteurellosis_2013.pdf



Ovine Q-Fever

JUNE 2015	
Cause	Coxiella burnetti rickettsial bacteria
Risk of Exposure in Illinois	Moderate
Risk of Transmission to exposed people	High
Mode of Transmission	Inhalation (aerosol); ingestion; direct contact- organism is shed in placenta, vaginal secretions, urine, feces, milk; can be spread by ticks
Incubation Period	Human: 2-5 weeks Animal: Variable
Clinical Signs- Human	Most cases are asymptomatic; sudden onset of fever; chills; frontal headache; weakness; muscle spasms; profuse sweating. Less commonly hepatitis, endocarditis (inflammation of the innermost covering of the heart), premature birth, stillbirth, abortion; nonproductive cough or chest pain
Clinical Signs- Animal	Most infections are asymptomatic; reproductive failure may be the only symptom; abortions late in pregnancy; stillbirths; retained placenta; uterine infection; infertility
Control and Prevention	Wear protective clothing/gloves when assisting with lambing if infection is suspected in herd; appropriately dispose of placenta and birthing tissues; good personal hygiene
Comments	Reportable disease in Illinois; potential bioterrorist agent
Additional Information	http://www.cfsph.iastate.edu/FastFacts/pdfs/qfever_F.pdf



Ovine Rabies

Rhabdovirus
Low
High
Direct contact with infected saliva into break in skin or mucous membranes; animal bite
Human: 10 days-3 months (up to years; depends on location of bite/exposure) Animal: 10 days-6 months
Headache; fever; general ill-being; abnormal behavior; weakness or paralysis; difficulty swallowing; delirium; convulsions; death
Restlessness; anorexia or increased appetite; any abnormal behavior or neurological signs (ataxia, incoordination, aggression, paralysis, etc.) fever; death
Wear gloves when handling suspect animals; vaccination program for animals and individuals at high risk
Reportable disease in Illinois; seek medical attention immediately if exposure is suspected; person to person transmission has been observed. <u>http://www.cfsph.iastate.edu/FastFacts/pdfs/rabies_F.pdf</u>
http://www.cfsph.iastate.edu/Factsheets/pdfs/rabies.pdf http://www.health.state.ny.us/diseases/communicable/zoonoses/r abies/index.htm http://www.cdc.gov/rabies/



Ovine Salmonellosis

SALMONELLA **JUNE 2015** Salmonella spp. bacteria Cause Risk of Exposure in Moderate Illinois Risk of Transmission Moderate to exposed people Mode of Ingestion (fecal-oral); contaminated food and water; Transmission direct contact Incubation Human: 12 hours-3 days Animal: Highly variable; often symptoms do not appear until Period the animal is stressed; common 1-5 days Varies from self-limiting gastroenteritis to generalized illness; **Clinical Signs-**Human vomiting; watery diarrhea; low grade fever; abdominal pain **Clinical Signs-**Dehydration and generalized illness which may lead to death; Animal persistent soft feces or diarrhea; weight loss; mild fever; inappetence; asymptomatic infections common Control and Wash hands after contact with animal feces; wear protective clothing when working with diarrheic lambs; cook meat Prevention thoroughly. Comments Person to person transmission has been observed. http://www.cfsph.iastate.edu/Factsheets/pdfs/nontyphoidal_s almonellosis.pdf Additional http://www.health.state.ny.us/nysdoh/communicable_diseases/en/ Information salmon.htm http://www.cdc.gov/salmonella/



Ovine Tetanus

JUNE 2015 Clostridium tetani bacteria Cause Risk of Exposure in Low Illinois Risk of Transmission High if open wounds on skin to exposed people Mode of Direct contact; penetrating wound Transmission Human: 8 days (ranges from 3 days-21 days) Incubation Animal: Variable (3 days-3 weeks) Period **Clinical Signs-**Headache; muscle stiffness in jaw (lock jaw) followed by stiffness in neck; difficulty swallowing; rigidity of abdominal Human and back muscles; spasms; sweating; fever; death **Clinical Signs-**Muscle stiffness; lack of coordination; inability to eat or drink; Animal bloat: death Control and Immunization; appropriate treatment of wounds; wear gloves Prevention when working with affected animals. Tetanus vaccination recommended for farm workers Comments http://wwwnc.cdc.gov/travel/yellowbook/2010/chapter-Additional 2/tetanus.aspx Information http://www.health.state.ny.us/nysdoh/communicable_diseases/en/ tetanus.htm



Ovine Toxoplasmosis

JUNE 2015	
Cause	Toxoplasma gondii protozoa parasite
Risk of Exposure in Illinois	Not transmitted from sheep to humans except in meat; exposure to feces of definitive host is high on livestock farms.
Risk of Transmission to exposed people	High
Mode of Transmission	Ingestion of undercooked meat; fecal-oral transmission from cats on farm
Incubation Period	Human: 5-23 days Animal: Suspect similar to humans
Clinical Signs- Human	Infection is common but clinical illness is low; flu-like symptoms: fever, headache, weakness; fetal death; congenital abnormalities; encephalitis; immunocompromised patients are at high risk.
Clinical Signs- Animal	Adult sheep usually asymptomatic; infection during pregnancy: abortion, stillbirths, mummification or resorption of fetus; Lambs: fever, dyspnea, incoordinated, weak, unable to nurse
Control and Prevention	Cook meat thoroughly; good personal hygiene; avoid contact with cat feces, esp. if pregnant.
Comments	Person to person transmission only in utero
Additional	http://www.cfsph.iastate.edu/FastFacts/pdfs/toxoplasmosis_F.pdf
Information	http://www.cdc.gov/toxoplasmosis/



Ovine Scrapie

JUNE 2015	OVINE TSE
Cause	Prion
Risk of Exposure in Illinois	Low
Risk of Transmission to exposed people	Negligible
Mode of Transmission	Ingestion
Incubation Period	Human: Several years (for transmissible spongiform encephalopathies) Animal: 3-8 years
Clinical Signs- Human	Confusion; personality changes; behavioral changes; weakness; muscle spasms; changes in vision; death
Clinical Signs- Animal	Behavioral disturbances; isolation; hyperexcitability; high- stepping or hopping gait; fixed stare; ataxia followed by wasting and paralysis; excessive scratching and chewing; most animals die 2-6 weeks after onset of symptoms
Control and Prevention	Necropsy sheep with neurological signs.
Comments	Reportable disease in Illinois; potential bioterrorist agent; person to person transmission has been observed
Additional Information	http://www.cfsph.iastate.edu/Factsheets/pdfs/transmissible_spong iform_encephalopathy.pdf#search=%22scrapie%22
	http://coloradodisasterhelp.colostate.edu/prefair/disease/dz/Scrapi e.html
	http://www.mad-cow.org/~tom/scrapie_human.html#Sheet



Ovine Tuberculosis

JUNE 2015	
Cause	Mycobacterium spp. bacteria
Risk of Exposure in Illinois	Low (Illinois is currently TB free.)
Risk of Transmission to exposed people	High
Mode of Transmission	Ingestion (unpasteurized milk or dairy products); inhalation; aerosol; direct injury to skin/mucous membranes
Incubation Period	Human: 4-6 weeks Animal: Variable
Clinical Signs- Human	Clinical signs depend on route of infection and may be asymptomatic; cough; cervical adenitis (inflammation of lymph node or gland in neck); genitourinary infection (organs of reproduction and urination); lesions in bones and joints; meningitis; pneumonia; may be severe in immunosuppressed patients.
Clinical Signs- Animal	Chronic condition; may be asymptomatic; weakness; anorexia; weight loss; enlarged lymph nodes; bronchopneumonia; difficulty breathing; diarrhea; death
Control and Prevention	Depopulate positive herds; test/treat human cases
Comments	Reportable disease in Illinois
Additional Information	http://www.cfsph.iastate.edu/DiseaseInfo/notes/BovineTuber culosis.pdf http://www.cfsph.iastate.edu/FastFacts/pdfs/bovine_tuberculosis_F .pdf http://www.cdc.gov/tb/



Ovine Yersiniosis

JUNE 2015 Cause Yersinia spp. bacteria Risk of Exposure in Unknown Illinois Risk of Transmission to Unknown exposed people Mode of Ingestion of food or water contaminated by feces of carriers; Transmission infection of rodents transmitted to humans by bite of infected fleas; direct contact with infected blood or tissues Incubation Human: 2-8 days Period Animal: Uncertain Clinical Signs-Mimics clinical signs similar to appendicitis; fever; abdominal tenderness; anorexia; vomiting; enteritis with diarrhea; Human respiratory illness Clinical Signs-Acute septicemia; enteritis with diarrhea; fever; abortion; Animal may be fatal; asymptomatic carriers possible Control and Prevent fecal contamination of food and drinking water; good Prevention personal hygiene Comments Potential bioterrorist agent; Person to person transmission has been observed http://www.cdc.gov/nczved/divisions/dfbmd/diseases/yersinia/ Additional http://www.health.state.ny.us/nysdoh/communicable_diseas Information es/en/yersin.htm