



Poultry Campylobacter

JUNE 2015

Cause

Campylobacter spp. bacteria

Risk of Exposure in Illinois

Moderate

Risk of Transmission to Exposed People

Campylobacter is one of the most common causes of diarrhea in the U.S.

Mode of Transmission

Ingestion (contaminated food/water, fecal-oral); direct contact; insect vectors; contact with objects capable of harboring bacteria

Incubation Period

Human: 1-11 days most common (3-5 days most common)
Animal: Short; possibly less than 72 hours

Clinical Signs-Human

Acute diarrhea +/- blood; vomiting; abdominal pain; fever; headache; general sense of ill-being; immunocompromised patients are extremely susceptible

Clinical Signs-Animal

Newly hatched chicks can have acute enteritis with rapid onset of diarrhea and death. Infections are clinically innocuous in older chickens, turkeys and waterfowl.

Control and Prevention

Good personal hygiene; cook poultry thoroughly.

Comments

Person to person transmission has been observed.

Additional Information

http://www.cfsph.iastate.edu/FastFacts/pdfs/campylobacterosis_F.pdf
<http://www.cdc.gov/nczved/divisions/dfbmd/diseases/campylobacter/>
http://www.health.state.ny.us/nysdoh/communicable_diseases/en/campylo.htm



Poultry Colibacillosis

JUNE 2015

E. COLI

Cause	<i>E. coli</i> bacteria
Risk of Exposure in Illinois	Moderate
Risk of Transmission to Exposed People	Moderate/High for antibiotic resistant <i>E. coli</i>
Mode of Transmission	Fecal-oral; food/water borne; direct contact
Incubation Period	Human: 12 hours- 5 days (12-72 hours most common) Animal: 3-5 days
Clinical Signs-Human	Diarrhea which may be complicated by other syndromes
Clinical Signs-Animal	Septicemia; chronic respiratory disease/air sacculitis; synovitis; pericarditis; salpingitis (inflammation of the oviduct); listless; ruffled feathers; omphalitis (inflammation of the navel/umbilicus)
Control and Prevention	Good sanitation; good personal hygiene especially when handling eggs
Comments	None
Additional Information	<p>http://www.cdc.gov/ecoli/</p> <p>http://edis.ifas.ufl.edu/fs127</p>



Poultry Cryptococcus

JUNE 2015

Cause	<i>Cryptococcus</i> spp. bacteria
Risk of Exposure in Illinois	Low
Risk of Transmission to Exposed People	Moderate
Mode of Transmission	Inhalation; ingestion; soil reservoir; can be found in pigeon droppings
Incubation Period	Human: Unknown Animal: Unknown
Clinical Signs-Human	Most infections asymptomatic; intermittent headache; vertigo; respiratory disease; vomiting; cough; blood tinged sputum; fever; immunocompromised patients at more serious risk
Clinical Signs-Animal	Infections are rare in birds; inflammation of sinuses
Control and Prevention	Pigeon control; avoid soil abundant with bird droppings.
Comments	Person to person transmission has been observed.
Additional Information	<p>http://www.cdc.gov/fungal/diseases/cryptococcosis-neoformans/index.html</p> <p>http://www.cfsph.iastate.edu/Factsheets/pdfs/cryptococcosis.pdf</p>



Poultry Cryptosporidiosis

JUNE 2015

Cause	<i>Cryptosporidium spp.</i> protozoa parasite
Risk of Exposure in Illinois	Moderate
Risk of Transmission to Exposed People	Low
Mode of Transmission	Fecal-Oral route; waterborne; airborne; foodborne; insects (flies) can serve as vectors
Incubation Period	Human: 1-12 days (average is 7 days) Animal: Unknown
Clinical Signs-Human	Cramping; abdominal pain; profuse watery diarrhea; anorexia; weight loss; vomiting; headache; fever; immunosuppressed patients exhibit more severe illness.
Clinical Signs-Animal	Respiratory symptoms; infection of cloaca and bursa of Fabricius which can result in diarrhea
Control and Prevention	Good personal hygiene, avoid contact with poults with diarrhea; proper fecal waste disposal
Comments	Person to person transmission has been observed
Additional Information	<p>http://www.cfsph.iastate.edu/FastFacts/pdfs/cryptosporidiosis_F.pdf</p> <p>http://www.cfsph.iastate.edu/Factsheets/pdfs/cryptosporidiosis.pdf</p> <p>http://www.health.state.ny.us/nysdoh/communicable_diseases/en/crypto.htm</p>



Poultry Erysipelas

JUNE 2015

Cause	<i>Erysipelothrix spp.</i> bacteria
Risk of Exposure in Illinois	Low; considered occupational disease
Risk of Transmission to Exposed People	Moderate
Mode of Transmission	Direct contact with pharyngeal or intestinal lymphoid tissue or feces or carrier animals; through lesions on skin; or soil
Incubation Period	Human: 1-7 days Animal: Variable
Clinical Signs-Human	Most infections are localized on the skin- slightly raised, nonpitting dark reddened zone; severe burning pain; intense itching; generalized-fever, weakness, muscle aches and headache
Clinical Signs-Animal	Blue comb (cyanosis); widespread hemorrhages in males; loss of appetite; weakness; swollen leg joints; decreased fertility in males; death
Control and Prevention	Protect skin wounds; wear gloves when handling; control rodents; control animal movement; immunize turkeys
Comments	Sheep, pigs and rodents may be carriers
Additional Information	http://www.vetmed.wisc.edu/pbs/zoonoses/Erysipelas/erysipelasindex.html http://www.merckmanuals.com/vet/poultry/erysipelas/overview_of_erysipelas_in_poultry.html



Poultry Histoplasmosis

JUNE 2015

Cause	Fungus
Risk of Exposure in Illinois	Moderate
Risk of Transmission to Exposed People	Moderate
Mode of Transmission	Inhalation or ingestion of spores in dust from soil contaminated with bird feces
Incubation Period	Human: 7-14 days Animal: Birds not susceptible; other animals unknown
Clinical Signs-Human	Most people remain asymptomatic; chills, mild, flu-like respiratory signs; fever; chest pain; cough; loss of appetite; joint/muscle pain; immunosuppressed patients at higher risk.
Clinical Signs-Animal	Does not cause clinical disease in birds
Control and Prevention	Avoid areas with high density of bird feces
Comments	Reportable disease in Florida.
Additional Information	<p>http://www.cdc.gov/niosh/docs/97-146/</p> <p>http://www.cdc.gov/niosh/nas/RDRP/appendices/chapter6/a6-133.pdf</p>



Poultry Influenza

JUNE 2015

Cause	H5N1 Virus
Risk of Exposure in Illinois	Low
Risk of Transmission to Exposed People	Rare
Mode of Transmission	In birds, avian influenza viruses are shed in feces, saliva, nasal secretions; fecal-oral; wild waterfowl can serve as reservoir
Incubation Period	Human: 3-7 days (can be as short as 1-4 days) Animal: Variable; suspected few hours to 2 weeks
Clinical Signs-Human	Typical flu-like symptoms (fever, cough, sore throat, muscle aches) eye infection; pneumonia
Clinical Signs-Animal	Ranges from asymptomatic to severe disease; sinusitis, excessive lacrimation; edema or cyanosis of head, comb, wattle; coughing; sneezing; rales; rattles; decreased egg production; depression; ruffled feathers; sudden death
Control and Prevention	Good personal hygiene
Comments	Reportable disease in Illinois; migratory water fowl often cause of spread of virus http://www.cfsph.iastate.edu/FastFacts/pdfs/influenza_F.pdf
Additional Information	http://www.cfsph.iastate.edu/Factsheets/pdfs/influenza.pdf http://www.cdc.gov/flu/avian/gen-info/facts.htm http://www.flu.gov/about_the_flu/h5n1/#



Poultry Listeriosis

JUNE 2015

Cause	<i>Listeria monocytogenes</i> bacteria
Risk of Exposure in Illinois	Unknown
Risk of Transmission to Exposed People	Low (unless foodborne)
Mode of Transmission	Ingestion; direct contact; aerosol
Incubation Period	Human: Uncertain but considered to range from 3-70 days Animal: 16 hours-52 days in turkeys
Clinical Signs-Human	Flu-like symptoms: fever; diarrhea; headache; muscle aches; stiff neck; abortion, premature birth or sick newborn; meningitis; asymptomatic fecal carriers common; pregnant women, elderly, and immunosuppressed individuals at increased risk
Clinical Signs-Animal	Often asymptomatic with most cases occurring in young birds; septicemia (blood poisoning); depression; listlessness; emaciation; diarrhea
Control and Prevention	Control rodents; cook meat; good sanitation
Comments	Person to person transmission has been observed http://www.cfsph.iastate.edu/FastFacts/pdfs/listeriosis_F.PDF
Additional Information	http://www.cfsph.iastate.edu/Factsheets/pdfs/listeriosis.pdf http://www.cdc.gov/listeria/index.html



Poultry Newcastle Disease

JUNE 2015

VVND

Cause	Virus; (previously known as Velogenic Viscerotropic Newcastle Disease VVND)
Risk of Exposure in Illinois	Low
Risk of Transmission to Exposed People	Low
Mode of Transmission	Direct contact with secretions, feces and objects capable of harboring virus; ingestion
Incubation Period	Human: 1-2 days Animal: 2-15 days (average is 5-6 days)
Clinical Signs-Human	Typically limited to conjunctivitis which often resolves quickly
Clinical Signs-Animal	Sudden onset of severe respiratory disease: sneezing, gasping for air, and nasal discharge; depression; droopy wings; circling; drop in egg production; soft shelled eggs; death
Control and Prevention	Vaccinate flock
Comments	Reportable disease in Illinois. Person to person transmission rare.
Additional Information	<p>http://www.cfsph.iastate.edu/Factsheets/pdfs/newcastle_disease.pdf</p> <p>http://www.cfsph.iastate.edu/FastFacts/pdfs/newcastle_F.pdf</p>



Poultry Psittacosis

JUNE 2015

ORNITHOSIS/CHLAMYDIOSIS

Cause	<i>Chlamydia psitticii</i> bacteria
Risk of Exposure in Illinois	Low
Risk of Transmission to Exposed People	Low
Mode of Transmission	Inhalation; direct contact; bite
Incubation Period	Human: 7-28 days; may extend to 3 months Animal: Unknown; caged birds 3 days-several weeks
Clinical Signs-Human	Mild flu-like symptoms such as sudden onset of chills; cough; headache; muscle/joint pain; loss of appetite; chest pain; fever; and rarely endocarditis, myocarditis, kidney complications
Clinical Signs-Animal	Often asymptomatic; diarrhea; nasal/ocular discharge; anorexia; depression; ruffled feathers; weight loss; weakness; decreased egg production; high mortality if untreated
Control and Prevention	Sanitation; good ventilation
Comments	Reportable disease in Illinois; human to human transmission via aerosol possible; reported human case from cat; potential bioterrorist agent
Additional Information	http://www.cfsph.iastate.edu/Factsheets/pdfs/psittacosis.pdf http://www.cfsph.iastate.edu/FastFacts/pdfs/psittacosis_F.pdf http://www.cdc.gov/pneumonia/atypical/psittacosis.html



Poultry Ringworm

JUNE 2015

CHICKEN FAVUS

Cause	<i>Trichophyton gallinae</i>
Risk of Exposure in Illinois	Low
Risk of Transmission to Exposed People	Low
Mode of Transmission	Direct contact with infected animal, or indirect contact with contaminated object capable of harboring fungi
Incubation Period	Human: 7-14 days Animal: 2-4 weeks
Clinical Signs-Human	Fungi generally grow in keratinized tissue such as hair, nails and outer layer of skin; mucous membranes not affected. Itching; "ringworm" lesion; hair loss; inflammation
Clinical Signs-Animal	Loss of feathers (alopecia) on the face and neck, scaling, self mutilation and feather plucking. Some of the lesions may be ring shaped and reddened.
Control and Prevention	Good sanitation; good personal hygiene; wear gloves when handling suspect animals or contaminated objects capable of harboring the fungi.
Comments	Person to person transmission has been observed. http://www.cdc.gov/fungal/diseases/ringworm/index.html
Additional Information	http://www.cfsph.iastate.edu/FastFacts/pdfs/dermatophytosis_F.pdf http://coloradodisasterhelp.colostate.edu/prefair/disease/dz/Ringworm.html



Poultry Salmonellosis

JUNE 2015

Cause	<i>Salmonella</i> spp. bacteria
Risk of Exposure in Illinois	High
Risk of Transmission to Exposed People	Moderate
Mode of Transmission	Ingestion (fecal-oral); contaminated food and water; direct contact
Incubation Period	Human: 12 hours-3 days Animal: Highly variable; often symptoms do not appear until the animal is stressed; commonly 1-5 days
Clinical Signs-Human	Varies from self-limiting gastroenteritis to generalized illness; vomiting; watery diarrhea; low grade fever; abdominal pain
Clinical Signs-Animal	Most cases seen in young birds; anorexia; diarrhea
Control and Prevention	Vaccinate flock; wash hands after contact with animal feces; wear protective clothing when working with diarrheic birds; cook meat thoroughly
Comments	Thoroughly cook food; immunosuppressed individuals are at greater risk
Additional Information	<p>http://www.cdc.gov/salmonella/</p> <p>http://www.cfsph.iastate.edu/Factsheets/pdfs/nontyphoidal_salmonellosis.pdf</p>



Poultry Tetanus

JUNE 2015

Cause	<i>Clostridium tetani</i> bacteria
Risk of Exposure in Illinois	Low
Risk of Transmission to Exposed People	High if open wounds
Mode of Transmission	Direct contact; penetrating wound
Incubation Period	Human: 8 days (ranges from 3 days-21 days) Animal: Variable
Clinical Signs-Human	Headache; muscle stiffness in jaw (lock jaw) followed by stiffness in neck; difficulty swallowing; rigidity of abdominal muscles; spasms; sweating; fever; death
Clinical Signs-Animal	Muscle stiffness; lack of coordination; inability to eat or drink; bloat; death
Control and Prevention	Immunization; appropriate treatment of wounds; wear gloves when working with affected animals
Comments	Tetanus vaccination recommended for farm workers.
Additional Information	http://www.health.state.ny.us/nysdoh/communicable_diseases/en/tetanus.htm http://www.cdc.gov/vaccines/pubs/pinkbook/downloads/tetanus.pdf



Poultry Tuberculosis

JUNE 2015

Cause	<i>Mycobacterium spp.</i> bacteria
Risk of Exposure in Illinois	Low (Illinois is currently TB free.)
Risk of Transmission to Exposed People	High
Mode of Transmission	Inhalation; ingestion; wound contamination; 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	High morbidity/mortality; weight loss; anorexia; pale comb; lame; drop in egg production.
Control and Prevention	Good personal hygiene; test/treat human cases
Comments	Reportable disease in Illinois
Additional Information	<p>http://www.cdc.gov/tb/</p> <p>http://www.mckinley.uiuc.edu/Handouts/tuberculosis.html</p> <p>http://www.ruleworks.co.uk/poultry/Avian-Tuberculosis.htm</p>