

LÄHDEKIRJALLISUUS

1. EFSA Panel on Biological Hazards (BIOHAZ). Scientific Opinion on the public health hazards to be covered by inspection of meat (poultry). EFSA J. 2012;10:2741.
2. Cosby DE, Cox NA, Harrison MA, Wilson JL, Jeff Buhr R, Fedorka-Cray PJ. Salmonella and antimicrobial resistance in broilers: A review. J Appl Poult Res. 2015;24:408–26.
3. Antunes P, Mourão J, Campos J, Peixe L. Salmonellosis: The role of poultry meat. Clin Microbiol Infect. 2016;22:110–21.
4. European Food Safety Authority, European Centre for Disease Prevention and Control. The European Union summary report on trends and sources of zoonoses, zoonotic agents and food-borne outbreaks in 2017. EFSA J. 2018;16:5500.
5. European Food Safety Authority, European Centre for Disease Prevention and Control. The European Union summary report on trends and sources of zoonoses, zoonotic agents and food-borne outbreaks in 2013. EFSA J. 2015;13:3991.
6. Maa- ja metsätalousministeriön asetus kanojen ja kalkkunoiden salmonellavalvonnasta 1037/2013.
7. Maa- ja metsätalousministeriön asetus salmonellavalvonnasta liha-alan laitoksissa 134/2012.
8. Eviran julkaisuja 3/2018. Elintarviketurvallisuus Suomessa 2017. 2018.
9. Ruokaviraston julkaisuja 3/2019. Elintarviketurvallisuus Suomessa 2018. 2019.
10. Kaakoush NO, Castaño-Rodríguez N, Mitchell HM, Man SM. Global epidemiology of campylobacter infection. Clin Microbiol Rev. 2015;28:687–720.
11. Lackner J, Weiss M, Müller-Graf C, Greiner M. The disease burden associated with *Campylobacter* spp. in Germany, 2014. PLoS One. 2019;14:1–14.
12. EFSA Panel on Biological Hazards (BIOHAZ). Scientific Opinion on Quantification of the risk posed by broiler meat to human campylobacteriosis in the EU. EFSA J. 2010;8:1437.
13. Maa- ja metsätalousministeriön asetus broilereiden kampylobakteerivalvonnasta 10/EEO/2007.
14. Jacoby GA. AmpC β -Lactamases. Clin Microbiol Rev. 2009;22:161–82.
15. Olsen RH, Bisgaard M, Löhren U, Robineau B, Christensen H. Extended-spectrum β -lactamase-producing *Escherichia coli* isolated from poultry: A review of current problems, illustrated with some laboratory findings. Avian Pathol. 2014;43:199–208.
16. Su LH, Chu C, Cloeckaert A, Chiu CH. An epidemic of plasmids? Dissemination of extended-spectrum cephalosporinases among *Salmonella* and other *Enterobacteriaceae*. FEMS Immunol Med Microbiol. 2008;52:155–68.
17. EFSA Panel on Biological Hazards (BIOHAZ). Scientific Opinion on the public health risks of bacterial strains producing extended-spectrum β -lactamases and/or AmpC β -lactamases in food and food-producing animals. EFSA J. 2011;9:2322.
18. European Food Safety Authority, European Centre for Disease Prevention and Control. The European Union summary report on antimicrobial resistance in zoonotic and indicator bacteria from humans, animals and food in 2016. EFSA J. 2018;16:5182.
19. Kluytmans JAJW, Overdeest ITMA, Willemsen I, Kluytmans-Van Den Bergh MFQ, Van Der Zwaluw K, Heck M ym. Extended-spectrum β -lactamase-producing *Escherichia coli* from retail chicken meat and humans: Comparison of strains, plasmids, resistance genes, and virulence factors. Clin Infect Dis. 2013;56:478–87.
20. Leverstein-van Hall MA, Dierikx CM, Cohen Stuart J, Voets GM, van den Munchhof MP, van Essen-Zandbergen A ym. Dutch patients, retail chicken meat and poultry share the same ESBL genes, plasmids and strains. Clin Microbiol Infect. 2011;17:873–80.
21. Pitout JD, Laupland KB. Extended-spectrum β -lactamase-producing *Enterobacteriaceae*: an emerging public-health concern. Lancet Infect Dis. 2008;8:159–66.
22. Karmali MA, Gannon V, Sargeant JM. Verocytotoxin-producing *Escherichia coli* (VTEC). Vet Microbiol. 2010;140:360–70.
23. Matsell DG, White CT. An outbreak of diarrhea-associated childhood hemolytic uremic syndrome: The Walkerton epidemic. Kidney Int. 2009;75:535–7.
24. Buchholz U, Bernard H, Werber D, Böhmer MM, Remschmidt C, Wilking H ym. German outbreak of *Escherichia coli* O104:H4 associated with sprouts. N Engl J Med. 2011;365:1763–70.
25. Rothrock MJ, Davis ML, Locatelli A, Bodie A, McIntosh TG, Donaldson JR ym. *Listeria* occurrence in poultry flocks: Detection and potential implications. Front Vet Sci. 2017;4:125.
26. Castellazzi ML, Marchisio P, Bosis S. *Listeria monocytogenes* meningitis in immunocompetent and healthy children: A case report and a review of the literature. Ital J Pediatr. 29.12.2018;44:152.
27. Segado-Arenas A, Atienza-Cuevas L, Brouillon-Molanes JR, Rodriguez-Gonzalez M, Lubian-Lopez SP, Segado-Arenas A ym. Late stillbirth due to listeriosis. Autops Case Reports. 2018;8:e2018051.
28. Smith B, Kemp M, Ethelberg S, Schiellerup P, Bruun B, Gerner-Smidt P ym. *Listeria monocytogenes*: Maternal-foetal infections in Denmark 1994–2005. Scand J Infect Dis. 2009;41:21–5.
29. Chasseignaux E, Toquin MT, Ragimbeau C, Salvat G, Colin P, Ermel G. Molecular epidemiology of *Listeria monocytogenes* isolates collected from the environment, raw meat and raw products in two poultry- and pork-processing plants. J Appl Microbiol. 2001;91:888–99.
30. Chiarini E, Tyler K, Farber JM, Pagotto F, Destro MT. *Listeria monocytogenes* in two different poultry facilities: Manual and automatic evisceration. Poult Sci. 2009;88:791–7.
31. Rovik LM, Aase B, Alvestad T, Caugant DA. Molecular epidemiological survey of *Listeria monocytogenes* in broilers and poultry products. J Appl Microbiol. 2003;94:633–40.
32. Aury K, Le Bouquin S, Toquin MT, Huneau-Salaün A, Le Nôtre Y, Allain Y ym. Risk factors for *Listeria monocytogenes* contamination in French laying hens and broiler flocks. Prev Vet Med. 2011;98:271–8.
33. Milillo SR, Stout JC, Hanning IB, Clement A, Fortes ED, den Bakker HC ym. *Listeria monocytogenes* and hemolytic *Listeria innocua* in poultry. Poult Sci. 2012;91:2158–63.
34. Crespo R, Garner MM, Hopkins SG, Shah DH. Outbreak of *Listeria monocytogenes* in an urban poultry flock. BMC Vet Res. 2013;9:204.
35. Galindo CL, Rosenzweig JA, Kirtley ML, Chopra AK. Pathogenesis of *Y. enterocolitica* and *Y. pseudotuberculosis* in human yersiniosis. J Pathog. 2011;2011:1–16.
36. European Food Safety Authority. Monitoring and identification of human enteropathogenic *Yersinia* spp. Scientific Opinion of the Panel on Biological Hazards. EFSA J. 2007;595:1–30.
37. Richardson T, Jones M, Akhtar Y, Pollard J. Suspicious *Yersinia* granulomatous enterocolitis mimicking appendicitis. BMJ Case Rep. 2018; doi:10.1136/bcr-2018-224177.
38. Länsi-Kalkkuna Oy, <https://kalkkunaasuomesta.fi/kalkkunat-suomessa/suomalainen-kalkkunaketju/>.
39. Sauvala M, Laaksonen S, Laukkanen-Ninios R, Jalava K, Stephan R, Fredriksson-Ahomaa M. Microbial contamination of moose (*Alces alces*) and white-tailed deer (*Odocoileus virginianus*) carcasses harvested by hunters. Food Microbiol. 2019;78:82–8.
40. Oikarainen PE, Pohjola LK, Pietola ES, Heikinheimo A. Direct vertical transmission of ESBL/pAmpC-producing *Escherichia coli* limited in poultry production pyramid. Vet Microbiol. 2019;231:100–6.
41. Mughini-Gras L, van Pelt W, van der Voort M, Heck M, Friesema I, Franz E. Attribution of human infections with Shiga toxin-producing *Escherichia coli* (STEC) to livestock sources and identification of source-specific risk factors, The Netherlands (2010–2014). Zoonoses Publ Health. 2016;65:e8–22.
42. Beutin L, Geier D, Steinruck H, Zimmermann S, Scheutz F. Prevalence and some properties of verotoxin (shiga-like toxin)-producing *Escherichia coli* in seven different species of healthy domestic animals. J Clin Microbiol. 1993;31:2483–8.
43. Heuvelink AE, Zwartkruis-Nahuis JTM, Van Den Biggelaar FLAM, Van Leeuwen WJ, De Boer E. Isolation and characterization of verocytotoxin-producing *Escherichia coli* O157 from slaughter pigs and poultry. Int J Food Microbiol. 1999;52:67–75.
44. Elder RO, Keen JE, Siragusa GR, Barkocy-Gallagher GA, Koohmaraie M, Laegreid WW. Correlation of enterohemorrhagic *Escherichia coli* O157 prevalence in feces, hides, and carcasses of beef cattle during processing. Proc Natl Acad Sci. 2000;97:2999–3003.
45. Karama M, Maing AO, Cenci-goga BT, Mal M. Molecular profiling and antimicrobial resistance of Shiga toxin-producing *Escherichia coli* O26, O45, O103, O121, O145 and O157 isolates from cattle on cow-calf operations in South Africa. Sci Rep. 2019;9:1–15.
46. EFSA Panel on Biological Hazards (BIOHAZ). Scientific Opinion on VTEC-serovariotype and scientific criteria regarding pathogenicity assessment. EFSA J. 2013;11:3138.
47. Yu J, Kaper JB. Cloning and characterization of the eae gene of enterohaemorrhagic *Escherichia coli* O157:H7. Mol Microbiol. 1992;6:411–7.
48. Dhama K, Verma AK, Rajagunalan S, Kumar A, Tiwari R, Chakraborty S ym. *Listeria monocytogenes* infection in poultry and its public health importance with special reference to food borne zoonoses. Pakistan J Biol Sci. 2013;16:301–8.
49. Fenlon DR, Wilson J, Donachie W. The incidence and level of *Listeria monocytogenes* contamination of food sources at primary production and initial processing. J Appl Bacteriol. 1996;81:641–50.
50. Cox NA, Bailey JS, Berrang ME. The presence of *Listeria monocytogenes* in the integrated poultry industry. J Appl Poult Res. 1997;6:116–9.
51. Kanarat S, Jitnupong W, Sukhapesna J. Prevalence of *Listeria monocytogenes* in chicken production chain in Thailand. 2011;41:155–61.
52. Sasaki Y, Haruna M, Murakami M, Hayashida M, Takahashi N, Urushiyama T ym. Contamination of poultry products with *Listeria monocytogenes* at poultry processing plants. J Vet Med Sci. 2014;76:129–32.
53. Pohjola L, Nykäsenoja S, Kivistö R, Soveri T, Huovilainen A, Hänninen ML ym. Zoonotic public health hazards in backyard chickens. Zoonoses Publ Health. 2016;63:420–30.
54. Ishola OO, Mosugu JI, Adesokan HK. Prevalence and antibiotic susceptibility profiles of *Listeria monocytogenes* contamination of chicken flocks and meat in Oyo State, south-western Nigeria: Public health implications. J Prev Med Hyg. 2016;57:E157–63.
55. Jamali H, Radmehr B, Ismail S. Prevalence and antimicrobial resistance of *Listeria*, *Salmonella*, and *Yersinia* species isolates in ducks and geese. 2014;93:1023–30.

56. Louira CAC, Almeida RCC, Almeida PF. The incidence and level of *Listeria* spp. and *Listeria monocytogenes* contamination in processed poultry at a poultry processing plant. *J Food Saf.* 2005;25:19–29.
57. Petersen L, Madsen M. *Listeria* spp. in broiler flocks: Recovery rates and species distribution investigated by conventional culture and the EiaFoss method. *Int J Food Microbiol.* 2000;58:113–6.
58. Sakaridis I, Soultos N, Iossifidou E, Papa A, Ambrosiadis I, Koidis P. Prevalence and antimicrobial resistance of *Listeria monocytogenes* isolated in chicken slaughterhouses in Northern Greece. *J Food Prot.* 2011;74:1017–21.
59. Perko-Mäkelä P, Perko-Mäkelä P. *Campylobacter jejuni* and *C. coli* in Finnish poultry production [väitöskirja]. Helsinki: Helsingin yliopisto; 2011. 2011.
60. Kashoma IP, Kumar A, Sanad YM, Gebreyes W, Kazwala RR, Garabed R ym. Phenotypic and genotypic diversity of thermophilic *Campylobacter* spp. in commercial turkey flocks: A longitudinal study. *Foodborne Pathog Dis.* 2014;11:850–60.
61. Arsenault J, Letellier A, Quessy S, Normand V, Boulianne M. Prevalence and risk factors for *Salmonella* spp. and *Campylobacter* spp. caecal colonization in broiler chicken and turkey flocks slaughtered in Quebec, Canada. *Prev Vet Med.* 2007;81:250–64.
62. Luangtongkum T, Morishita TY, Ison AJ, Huang S, McDermott PF, Zhang Q. Effect of conventional and organic production practices on the prevalence and antimicrobial resistance of *Campylobacter* spp. in poultry. *Appl Environ Microbiol.* 2006;72:3600–7.
63. Koolman L, Whyte P, Bolton DJ. An investigation of broiler caecal *Campylobacter* counts at first and second thinning. *J Appl Microbiol.* 2014;117:876–81.
64. Smith K, Reimers N, Barnes HJ, Lee BC, Siletzky R, Kathariou S. *Campylobacter* colonization of sibling turkey flocks reared under different management conditions. *J Food Prot.* 2004;67:1463–8.
65. Allen VM, Weaver H, Ridley AM, Harris JA, Sharma M, Emery J ym. Sources and spread of thermophilic *Campylobacter* spp. during partial depopulation of broiler chicken flocks. *J Food Prot.* 2008;71:264–70.
66. Whyte P, Collins JD, McGill K, Monahan C, O'Mahony H. The effect of transportation stress on excretion rates of campylobacters in market-age broilers. *Poult Sci.* 2001;80:817–20.
67. Slader J, Domingue G, Jørgensen F, McAlpine K, Owen RJ, Bolton FJ ym. Impact of transport crate reuse and of catching and processing on *Campylobacter* and *Salmonella* contamination of broiler chickens. *Appl Environ Microbiol.* 2002;68:713–9.
68. Perko-Mäkelä P, Isohanni P, Katzav M, Lund M, Hänninen ML, Lyhs U. A longitudinal study of *Campylobacter* distribution in a turkey production chain. *Acta Vet Scand.* 2009;51:1–10.
69. Hansson I, Vågsholm I, Svensson L, Olsson Engvall E. Correlations between *Campylobacter* spp. prevalence in the environment and broiler flocks. *J Appl Microbiol.* 2007;103:640–9.
70. Gibbens JC, Pascoe SJS, Evans SJ, Davies RH, Sayers AR. A trial of biosecurity as a means to control *Campylobacter* infection of broiler chickens. *Prev Vet Med.* 2001;48:85–99.
71. Sommer HM, Hog BB, Larsen LS, Sorensen AIV, Williams N, Merga JY ym. Analysis of farm specific risk factors for *Campylobacter* colonization of broilers in six European countries. *Microb Risk Anal.* 2016;2–3:16–26.
72. Georgiev M, Beauvais W, Guitian J. Effect of enhanced biosecurity and selected on-farm factors on *Campylobacter* colonization of chicken broilers. *Epidemiol Infect.* 2017;145:553–67.
73. Päivärinta M, Pohjola L, Fredriksson-Ahomaa M, Heikinheimo A. Low occurrence of extended-spectrum β -lactamase-producing *Escherichia coli* in Finnish food-producing animals. *Zoonoses Publ Health.* 2016;63:624–31.
74. Girlich D, Poirel L, Carattoli A, Kempf I, Lartigue MF, Bertini A ym. Extended-spectrum β -lactamase CTX-M-1 in *Escherichia coli* isolates from healthy poultry in France. *Appl Environ Microbiol.* 2007;73:4681–5.
75. Laube H, Friese A, von Salviati C, Guerra B, Käsböhrer A, Kreienbrock L ym. Longitudinal monitoring of extended-spectrum-beta-lactamase/ampC-producing *Escherichia coli* at German broiler chicken fattening farms. *Appl Environ Microbiol.* 2013;79:4815–20.
76. European Food Safety Authority, European Centre for Disease Prevention and Control. The European Union summary report on antimicrobial resistance in zoonotic and indicator bacteria from humans, animals and food in 2016. *EFSA J.* 2018;16.
77. Finnish Food Authority publications 6/2019. FINRES-Vet 2018. Finnish veterinary antimicrobial resistance monitoring and consumption of antimicrobial agents. 2019.
78. Kechagia N, Nicolaou C, Ioannidou V, Kourti E, Ioannidis A, Legakis NJ ym. Detection of chromosomal and plasmid — encoded virulence determinants in *Yersinia enterocolitica* and other *Yersinia* spp. isolated from food animals in Greece. *Int J Food Microbiol.* 2007;118:326–31.
79. Liang J, Duan R, Xia S, Hao Q, Yang J, Xiao Y ym. Ecology and geographic distribution of *Yersinia enterocolitica* among livestock and wildlife in China. *Vet Microbiol.* 2015;178:125–31.
80. Le Guern AS, Martin L, Savin C, Carniel E. Yersiniosis in France: Overview and potential sources of infection. *Int J Infect Dis.* 2016;46:1–7.
81. Bonardi S, Paris A, Bassi L, Salmi F, Bacchi C, Riboldi E ym. Detection, semiquantitative enumeration, and antimicrobial susceptibility of *Yersinia enterocolitica* in pork and chicken meats in Italy. *J Food Prot.* 2010;73:1785–92.
82. Capita R, Alonso-Calleja C, Prieto M, García-Fernández MDC, Moreno B. Incidence and pathogenicity of *Yersinia* spp. isolates from poultry in Spain. *Food Microbiol.* 2002;19:295–301.
83. Momtaz H, Rahimian MD, Dehkordi FS. Identification and characterization of *Yersinia enterocolitica* isolated from raw chicken meat based on molecular and biological techniques. *J Appl Poult Res.* 2013;22:137–45.
84. Eläintaudit Suomessa 2018. *Ruokaviraston julkaisu 4/2019.* 2019.
85. Eläintaudit Suomessa 2016. *Eviran julkaisu 2/2017.* 2017.
86. Eläintaudit Suomessa 2017. *Eviran julkaisu 6/2018.* 2018.
87. Hugas M, Beloeil PA. Controlling salmonella along the food chain in the European Union - Progress over the last ten years. *Eurosurveillance.* 2014;19:1–4.
88. Rostagno MH, Wesley I V., Trampel DW, Hurd HS. Salmonella prevalence in market-age turkeys on-farm and at slaughter. *Poult Sci.* 2006;85:1838–42.