

CURRICULUM VITAE

Kirk E. Smith, D.V.M., M.S., Ph.D.

Address: (Office) Foodborne, Waterborne, Vectorborne, and Zoonotic Diseases Section
Minnesota Department of Health
625 Robert Street North
St. Paul, MN 55155-2538
Phone: (651) 201-5414
kirk.smith@state.mn.us

Education:

1995 Ph.D. (Veterinary Parasitology)
College of Veterinary Medicine, The University of Georgia

1991 M.S. (Veterinary Preventive Medicine)
College of Veterinary Medicine, Iowa State University

1990 D.V.M.
College of Veterinary Medicine, Iowa State University

1986 B.S. (Biology)
University of North Dakota

Professional Experience:

2022 – Present Deputy State Epidemiologist, Minnesota Department of Health

2014 – Present Manager - Foodborne, Waterborne, Vectorborne, and Zoonotic Diseases Section, Infectious Diseases Epidemiology, Prevention, and Control Division, Minnesota Department of Health

1999 – 2014 Supervisor - Foodborne, Vectorborne, and Zoonotic Diseases Unit, Acute Disease Investigation and Control Section, Minnesota Department of Health

2000 – 2003 State Public Health Veterinarian
Minnesota Department of Health

1999 – 2004 Editor - *Disease Control Newsletter*, Division of Infectious Disease Epidemiology, Prevention, and Control, Minnesota Department of Health

1998 – 1999 Infectious Disease Epidemiologist - Foodborne, Vectorborne, and Zoonotic Diseases Unit, Acute Disease Epidemiology Section, Minnesota Department of Health

Professional Experience: (continued)

1996 – 1998	Medical Epidemiologist, Epidemic Intelligence Service, Centers for Disease Control and Prevention and Acute Disease Epidemiology Section, Minnesota Department of Health
1995 – 1996	Wildlife Veterinarian, Southeastern Cooperative Wildlife Disease Study, College of Veterinary Medicine, The University of Georgia
1991 – 1995	Graduate Research Assistant, Southeastern Cooperative Wildlife Disease Study, College of Veterinary Medicine, The University of Georgia
1990 – 1991	Graduate Student Assistant, Department of Microbiology, Immunology, and Preventive Medicine, College of Veterinary Medicine, Iowa State University

Honors/Awards:

2023	Stephen B. Thacker Excellence in Mentoring Award, Epidemic Intelligence Service
2015	Bill Keene Award for Excellence in Epidemiology, Centers for Disease Control and Prevention (CDC) OutbreakNet
2013	Mackel Award Co-Winner, CDC
2013	James M. Nakano Citation Award for Outstanding Scientific Publication Co-Winner, CDC
2013	Star Award, Minnesota Department of Health
2011	Distinguished Service Award, Minnesota Agri-Growth Council (to MDH for distinguished service to Minnesota's food and agriculture industry)
2011	Charles C. Shepard Science Award Co-Winner, CDC
2009	Alexander D. Langmuir Prize Manuscript Co-Winner, CDC
2009	Merit Award, Minnesota Environmental Health Association
2009	Veterinarian of the Year, American Association of Food Hygiene Veterinarians
2008-2009	Community Partner Award, University of Minnesota School of Public Health ("Team Diarrhea")
2002	James H. Steele Veterinary Public Health Award, CDC
1995	Wildlife Disease Association Best Student Presentation Terry Amundson Award
1995	Animal Disease Research Workers in Southern States Best Student Presentation Award
1990	Iowa State University College of Veterinary Medicine Senior Scholastic Award

Professional Organizations:

Minnesota Environmental Health Association
National Association of State Public Health Veterinarians
Council of State and Territorial Epidemiologists

Reviewer:

American Journal of Veterinary Diagnostic Investigation
Clinical Infectious Diseases
Clinical Microbiology Reviews
Epidemiology and Infection
Emerging Infectious Diseases
Foodborne Pathogens and Disease
Journal of Wildlife Diseases
Pediatric Infectious Diseases Journal
PLOS ONE
Red Book, Report of the Committee on Infectious Diseases (2015, 2018, 2020, 2024)
The Journal of Pediatrics
Zoonoses and Public Health

Working groups, Committees, and Centers of Excellence:

2012 – Present	Upper Midwest Agricultural Safety and Health Center (MDH Principal Investigator)
2012 – Present	Minnesota Integrated Food Safety Center of Excellence (Director)
2012 – Present	Integrated Foodborne Outbreak Response and Management Steering Committee
2012 – 2016	CDC Board of Scientific Counselors Antimicrobial Resistance Working Group
2011 – Present	Council to Improve Foodborne Outbreak Response (Co-Chair since 2013)
2008 – 2013	US Food and Drug Administration Partnership for Food Protection Coordinating Committee, and Response Workgroup
2006 – 2016	National Association of State Public Health Veterinarians, Animal Contact Compendium Committee (Co-chair 2010-16)
2007 – Present	Infectious Diseases Planning Committee and Food Safety/Enteric Diseases Sub-committee (Chair since 2011), Council of State and Territorial Epidemiologists
2000 – 2012	Antibiotic Resistance Sub-committee Co-chair (and Chair since 2007), Council of State and Territorial Epidemiologists
2000 – Present	CDC Environmental Health Specialist Network Steering Committee
1999 – Present	CDC/FSIS/FDA Foodborne Diseases Active Surveillance Network (FoodNet) Steering Committee

Working groups, Committees, and Centers of Excellence: (continued)

1999 – Present	Food Safety Center, Minnesota Department of Health
1999 – 2010	Minneapolis Water Works Advisory Committee

Teaching:

2016 – Present	Course Co-Instructor, University of Minnesota School of Public Health Public Health 6100-181. Theory and Practice in Foodborne Disease Outbreak Detection, Investigation and Control
2015, 2018	Course Instructor, University of Minnesota School of Public Health. Public Health 7230-101 – The Petting Zoo Problem: Zoonotic Disease Outbreaks Associated with Animal Contact at Public Venues – Occurrence, Prevention, and Challenges
2015	Course Instructor, University of Minnesota School of Public Health. Public Health 7230-103 – <i>Salmonella</i> , Shiga toxin-producing <i>E. coli</i> , and <i>Listeria</i> : Drivers of Food Safety Policy and Regulatory Change
2009 – Present	Adjunct Assistant Professor, Division of Epidemiology, University of Minnesota School of Public Health
2007, 2010, 2019	Course Co-instructor, University of Minnesota School of Public Health. Public Health 7200 – Epidemiology of Foodborne Pathogens
2006 – Present	Course Instructor, University of Minnesota School of Public Health. Public Health 7231 – Surveillance of Foodborne Diseases in Humans
2004 – 2019	Guest Lecturer, Division of Epidemiology, University of Minnesota School of Public Health. Public Health 6341: Epi Methods I
2004 – Present	Guest Lecturer, Division of Epidemiology, University of Minnesota School of Public Health. Public Health 6336: Advanced Seminar in Infectious Disease
2003 – Present	Adjunct Assistant Professor, Division of Environmental Health Sciences, University of Minnesota School of Public Health
2002 – 2019	Guest Lecturer, Division of Epidemiology, University of Minnesota School of Public Health. Public Health 5345: Epi Methods, Data Collection
2000 – Present	Guest Lecturer, Division of Epidemiology, University of Minnesota School of Public Health. Public Health 5335: Epidemiology and Control of Infectious Diseases
1998 – Present	Adjunct Assistant Professor, Department of Clinical and Population Sciences, College of Veterinary Medicine, University of Minnesota

Teaching: (continued)

1996 – 1997	Guest Lecturer, Department of Clinical and Population Sciences, College of Veterinary Medicine, University of Minnesota. Public Health 5310/Clinical and Population Sciences 8690: Zoonoses and Diseases Common to Humans and Animals
1995 – 1996	Graduate Teaching Assistant, Department of Parasitology, College of Veterinary Medicine, The University of Georgia. Parasitology 520/521: Veterinary Parasitology I and II
1995 – 1996	Guest Lecturer, School of Forest Resources, The University of Georgia. Forest Resources 850/851: Diseases of Wildlife
1994	Guest Lecturer, Department of Microbiology, College of Veterinary Medicine, The University of Georgia

Publications:

1. Smith KE, Zimmerman JJ, Patton S, Beran GW, Hill HT. The epidemiology of toxoplasmosis on Iowa swine farms with an emphasis on the roles of free-living mammals. *Vet Parasitol.* 1992;42:199-211.
2. Smith KE, Zimmerman JJ, Beran GW, Hill HT. A serosurvey of swine and free-living species on Iowa farms for antibodies against encephalomyocarditis virus. *Can Vet J.* 1992;33:645-49.
3. Smith KE, Zimmerman JJ, Bolin CA, Beran GW, Hill HT. A survey of house mice (*us musculus*) from Iowa swine farms for infection with *Leptospira interrogans* serovar *bratislava*. *Can Vet J.* 1992;33:742-44.
4. Hill RE, Smith KE, Beran GW, Beard PD. Further studies on the susceptibility of raccoons (*Procyon lotor*) to a rabies virus of skunk origin and comparative susceptibility of striped skunks (*Mephitis mephitis*). *J Wildlife Dis.* 1993;29:475-77.
5. Zimmerman JJ, Hill RE, Smith KE, et al. Encephalomyocarditis virus infection in raccoons (*Procyon lotor*). *J Zoo Wildlife Med.* 1994;25:233-39.
6. Smith KE, Fischer JR, Dubey JP. Toxoplasmosis in a bobcat (*Felis rufus*). *J Wildlife Dis.* 1995;31:555-57.
7. Smith KE, Stallknecht DE, Nettles VF. Infection of *Culicoides lahillei* (Diptera: Ceratopogonidae) with Epizootic Hemorrhagic Disease Virus Serotype 2. *J Med Ent.* 1995;33:117-22.
8. Smith KE, Stallknecht DE. *Culicoides* (Diptera: Ceratopogonidae) collected during epizootics of hemorrhagic disease among captive white-tailed deer. *J Med Ent.* 1996;33:507-10.
9. Smith KE Stallknecht DE, Sewell CT, Rollor EA, Mullen GR, Anderson RR. Long-term monitoring of *Culicoides* at a site enzootic for hemorrhagic disease in white-tailed deer. *J Wildlife Dis.* 1996;32:627-42.
10. Stallknecht DE, Luttrell MP, Smith KE, Nettles VF. Hemorrhagic disease in white-tailed deer in Texas: A case for enzootic stability. *J Wildlife Dis.* 1996;32:695-700.

Publications: (continued)

11. Smith KE, Quist CF, Crum JM. Clinical illness in a wild turkey with *Laminosioptes cysticola* infestation of the viscera and peripheral nerves. *Avian Dis.* 1997;41:484-89.
12. Dubey JP, Rollor EA, Smith K, Kwok OCH, Thulliez P. Low seroprevalence of *Toxoplasma gondii* in feral pigs from a remote island lacking cats. *J Parasitol.* 1997;83:839-841.
13. Centers for Disease Control and Prevention. Outbreak of cryptosporidiosis associated with a water sprinkler fountain. *MMWR.* 1998;47:856-60.
14. Smith KE, Besser JM, Hedberg CW, Leano FT, Bender JB, Wicklund JH, Johnson BP, Moore KA, Osterholm MT, and the Investigation Team. Quinolone-resistant *Campylobacter jejuni* infections in Minnesota, 1992-1998. *New Eng J Med.* 1999;340:1525-32.
15. Hunt C, Dionne M, Delorme M, Murdock D, Erdrich A, Wolsey D, Groom A, Cheek J, Shireley L, Jacobson J, Cunningham B, Belani K, Kurachek S, Ackerman P, Cameron S, Schlievert P, Pfeiffer J, Johnson S, Boxrud D, Bartkus J, Besser J, Smith K, LeDell K, O'Boyle C, Lynfield R, White K, Osterholm M, Moore K, Danila R, CDC. Four pediatric deaths from community-acquired methicillin-resistant *Staphylococcus aureus*, Minnesota and North Dakota, 1997-1998. *MMWR.* 1999;48(32):707-10.
16. Shallow S, Samuel M, McNees A, Rothrock G, Vugia D, Fiorentino T, Marcus R, Kazi G, Mshar P, Cartter M, Hadler J, Farley M, Desai S, Segler S, Lance-Parker S, Blake P, Karchmer T, Gregg C, Steiner C, Carter M, Henning K, Razeq J, Glenn A, Smith K, Bender J, Besser J, Soderlund D, Moore K, Zansky S, Morse D, Smith P, Cassidy M, McGivern T, Lorber E, Shiferaw B, Cieslak P, Fleming D. Preliminary FoodNet data on the incidence of foodborne illnesses--selected sites, United States, 1999. *MMWR.* 2000;49(10):201-5.
17. Kassenborg H, Danila R, Snippes P, Wiisanen M, Sullivan M, Smith KE, Crouch NJ, Medus C, Weber R, Korlath J, Ristinen T, Lynfield R, Hull HF, Pahlen J, Boldingh T, Elfering K, Hoffman G, Lewis T, Friedlander A, Heine H, Culpepper R, Henchal E, Ludwig G, Rossi C, Teska J, Ezzell J, Eitzen E, US Dept of Agriculture, NCID, CDC. Human ingestion of *Bacillus anthracis*-contaminated meat-Minnesota, August 2000. *MMWR.* 2000; 49(36):813-6.
18. Van Fossan D, Jagoda L, LeSage A, Hartmann R, Johl J, Sharman J, Jay M, Schnurr D, Crawford-Miksza L, Glaser C, Vugia D, Leach R, Cantiello K, Auer P, Jones G, Qian J, Depowski P, Downing P, Trimarchi C, Huang C, Drabkin P, Eidson M, Wallace B, Willsey A, Smith P, Ahadzie L, Katner HP, Rahman M, Muriana OI, Tift JP, Shetty D, Drenzek CL, Lance-Parker S, Cantrell D, Saidla E, Koppanyi Z, Blake P, Boldingh T, Wagstrom L, Danila R, Mariotti J, Smith KE, Neitzel D, Hull HF, Shirley L, Johnson D, Patron R, Scheckler WE, Levin JM, Dominski M, Wolff M, Muhlenbeck B, Turner RC, Kazmierczak J, Proctor M, Davis JP, NCID, CDC. Human rabies-California, Georgia, Minnesota, New York, and Wisconsin, 2000. *MMWR.* 2000; 49(49):1111-5.
19. Shallow S, Samuel M, McNees A, Rothrock G, Vugia D, Fiorentino T, Marcus R, Hurd S, Mshar P, Phan Q, Cartter M, Hadler J, Farley M, Baughman W, Segler S, Lance-Parker S, MacKenzie W, McCombs K, Blake P, Morris JG, Hawkins M, Roche J, Smith K, Besser J, Swanson E, Stenzel S, Medus C, Moore K, Zansky S, Hibbs J, Kohn D, Jones T, Craig A, Moore W. Preliminary FoodNet data on the incidence of foodborne illnesses--selected sites, United States, 2000. *MMWR.* 2001;50(13):241-6.
20. Bender JB, Hedberg CW, Boxrud DJ, Besser JM, Wicklund JH, Smith KE, Osterholm MT. Use of molecular subtyping in surveillance for *Salmonella enterica* serotype Typhimurium. *New Eng J Med.* 2001;344:189-95.

Publications: (continued)

21. Hedberg CW, Smith KE, Besser JM, Boxrud DJ, Hennessy TW, Bender JB, Anderson FA, Osterholm MT. Limitations of pulsed-field gel electrophoresis for the routine surveillance of *Campylobacter* infections. *J Infect Dis.* 2001;184(2):242-4.
22. Ezell H, Tramontin B, Hudson R, Tengelsen L, Hahn C, Smith K, Bender J, Boxrud D, Adams J, Frank R, Culbertson K, Besser T, Rice D, Pullman R, Gautom R, Pallipamu R, Goldoft M, Grendon J, Kobayashi J, Angulo F, Barrett T, Rossiter S, Sivapalasingam S, Wright J. Outbreaks of multidrug-resistant *Salmonella* Typhimurium associated with veterinary facilities-Idaho, Minnesota, and Washington, 1999. *MMWR.* 2001; 50(33):701-4.
23. Centers for Disease Control and Prevention. Malaria deaths following inappropriate malaria chemoprophylaxis. *MMWR.* 2001;50:597-99.
24. Groom A, Wolsey D, Naimi T, Smith K, Johnson S, Boxrud D, Moore K, Cheek J Community-acquired methicillin-resistant *Staphylococcus aureus* in a rural American Indian Community. *J Am Med Assoc.* 2001;286:10.
25. Naimi T, LeDell K, Boxrud D, Groom A, Steward C, Johnson S, Besser J, O'Boyle C, Danila R, Cheek J, Osterholm M, Moore K, Smith K. Epidemiology and clonality of community-acquired methicillin-resistant *Staphylococcus aureus* in Minnesota, 1996-1998. *Clin Infect Dis.* 2001;33:990-96.
26. Vugia D, Hadler J, Blake P, Blythe D, Smith K, Morse D, Cieslak P, Jones T, Shillam P, Chen DW, Garthright B, Charles L, Molbak K, Angulo F, Griffin P, Tauxe R. Preliminary FoodNet data on the incidence of foodborne illnesses--selected sites, United States, 2001. *MMWR.* 2002; 51 (15):325-9.
27. Kravitz, G., K. Smith, and L. Wagstrom. Colonic necrosis and perforation secondary to *Escherichia coli* O157:H7 gastroenteritis in an adult patient without hemolytic uremic syndrome. *Clin Infect Dis.* 2002;35:103-05.
28. Johnson JR, Murray AC, Gajewski A, Sullivan M, Snippes P, Kuskowski MA, Smith KE. Isolation and molecular characterization of nalidixic acid-resistant extraintestinal pathogenic *Escherichia coli* from retail chicken products. *Antimicrob Agents Chemother.* 2003;47:2161-68.
29. Vugia D, Cronquist A, Hadler J, Blake P, Blythe D, Smith K, Morse D, Cieslak P, Jones T, Goldman D, Guzewich J, Angulo F, Griffin P, Tauxe R, Kretsinger K. Preliminary FoodNet data on the incidence of infection with pathogens transmitted commonly through food--selected sites, United States, 2003. *MMWR.* 2004; 53(16):338-43.
30. Gupta A, Nelson JM, Barrett TJ, Tauxe RV, Rossiter SP, Friedman CR, Joyce KW, Smith KE, Jones TF, Hawkins MA, Shiferaw B, Beebe JL, Vugia DJ, Rabatsky-Ehr T, Benson JA, Root TP, Angulo FJ. Antimicrobial resistance among *Campylobacter* strains, United States, 1997-2001. *Emerg Infect Dis.* 2004;10:1102-09.
31. Nelson JM, Smith KE, Vugia DJ, Rabatsky-Ehr T, Segler SD, Kassenborg HD, Zansky SM, Joyce K, Marano N, Hoekstra RM, Angulo FJ. Prolonged diarrhea due to ciprofloxacin-resistant *Campylobacter* infection. *J Infect Dis.* 2004;190:1150-57.
32. Vugia DJ, Samuel M, Farley MM, Marcus R, Shiferaw B, Shallow S, Smith K, Angulo FJ. Invasive *Salmonella* infections in the United States, FoodNet, 1996-1999: incidence, serotype distribution, and outcome. *Clin Infect Dis.* 2004;38 Suppl 3:S149-56.

Publications: (continued)

33. Kassenborg HD, Hedberg CW, Hoekstra M, Evans MC, Chin AE, Marcus R, Vugia DJ, Smith K, Ahuja SD, Slutsker L, Griffin PM. Farm visits and undercooked hamburgers as major risk factors for sporadic *Escherichia coli* O157:H7 infection: data from a case-control study in 5 FoodNet sites. *Clin Infect Dis*. 2004;38 Suppl 3:S271-78.
34. Bender JB, Smith KE, McNees AA, Rabatsky-Ehr TR, Segler SD, Hawkins MA, Spina NL, Keene WE, Kennedy MH, Van Gilder TJ, Hedberg CW. Factors affecting surveillance data on *Escherichia coli* O157 infections collected from FoodNet sites, 1996-1999. *Clin Infect Dis*. 2004;38 Suppl 3:S157-64.
35. Kassenborg HD, Smith KE, Vugia DJ, Rabatsky-Ehr T, Bates MR, Carter MA, Dumas NB, Cassidy MP, Marano N, Tauxe RV, Angulo FJ. Fluoroquinolone-resistant *Campylobacter* infections: eating poultry outside of the home and foreign travel are risk factors. *Clin Infect Dis*. 2004;38 Suppl 3:S279-84.
36. Kennedy M, Villar R, Vugia DJ, Rabatsky-Ehr T, Farley MM, Pass M, Smith K, Smith P, Cieslak PR, Imhoff B, Griffin PM. Hospitalizations and deaths due to *Salmonella* infections, FoodNet, 1996-1999. *Clin Infect Dis*. 2004;38 Suppl 3:S142-48.
37. Smith KE, Stenzel SA, Bender JB, Wagstrom E, Soderlund D, Leano FT, Taylor CM, Belle-Isle PA, Danila R. Outbreaks of Enteric Infections Caused by Multiple Pathogens Associated with Calves at a Farm Day Camp. *Pediatr Infect Dis J*. 2004;23:1098-1104.
38. Vugia D, Cronquist A, Hadler J, Tobin D'Angelo M, Blythe D, Smith K, Thornton K, Morse D, Cieslak P, Jones T, Varghese R, Guzewich J, Angulo F, Griffin P, Tauxe R, Dunn J. Preliminary FoodNet data on the incidence of infection with pathogens transmitted commonly through food--10 sites, United States, 2004. *MMWR*. 2005; 54(14):352-6.
39. Varma JK, Molbak K, Barrett TJ, Beebe JL, Jones TF, Rabatsky-Her T, Smith KE, Vugia DJ, Chang HG, Angulo FJ. Antimicrobial-resistant nontyphoidal *Salmonella* is associated with excess bloodstream infections and hospitalizations. *J Infect Dis*. 2005;191:554-61.
40. Johnson JR, Delavari P, O'Bryan TT, Smith KE, Tatini S. Contamination of retail foods, particularly turkey, from community markets (Minnesota, 1999-2000) with antimicrobial-resistant and extraintestinal pathogenic *Escherichia coli*. *Foodborne Pathogens Dis*. 2005;2:38-49.
41. Johnson JR, Kuskowski MA, Smith K, O'Bryan TT, Tatini S. Antimicrobial-resistant and extraintestinal pathogenic *Escherichia coli* in retail foods. *J Infect Dis*. 2005;191:1040-49.
42. Castor ML, Wagstrom EA, Danila RN, Smith KE, Naimi TS, Besser JM, Peacock KA, Juni BA, Hunt JM, Bartkus JM, Kirkhorn SR, Lynfield R. An outbreak of Pontiac fever with respiratory distress among workers performing high-pressure cleaning at a sugar-beet processing plant. *J Infect Dis*. 2005;191:1530-37.
43. Smith K, Boxrud D., Leano F, Snider C, Braden C, Lockett J, Montgomery S, Swanson S, O'Reilly C. Outbreak of multi-drug resistant *Salmonella* Typhimurium associated with rodents purchased at retail pet stores-United States, December 2003-October 2004. *MMWR*. 2005;54:429-33.

Publications: (continued)

44. Ferguson DD, Scheftel J, Cronquist A, Smith K, Woo-Ming A, Anderson E, Knutsen J, De AK, Gershman K. Temporally distinct *Escherichia coli* O157 outbreaks associated with alfalfa sprouts linked to a common seed source - Colorado and Minnesota, 2003. *Epidemiol Infect.* 2005;133:439-47.
45. Laine ES, Scheftel JM, Boxrud DJ, Vought KJ, Danila RN, Elfering KM, Smith KE. Outbreak of *Escherichia coli* O157:H7 infections associated with nonintact blade-tenderized frozen steaks sold by door-to-door vendors. *J Food Prot.* 2005;68:1198-1202.
46. Smith KE, Anderson F, Medus C, Leano F, Adams J. Outbreaks of salmonellosis at elementary schools associated with dissection of owl pellets. *Vector Borne Zoonotic Dis.* 2005;5:133-36.
47. Devasia RA, Varma JK, Whichard J, Gettner S, Cronquist AB, Hurd S, Segler S, Smith K, Hoefler D, Shiferaw B, Angulo FJ, Jones TF. Antimicrobial use and outcomes in patients with multidrug-resistant and pansusceptible *Salmonella* Newport infections, 2002-2003. *Microb Drug Resist.* Winter 2005; 11(4):371-7.
48. Wright JG, Tengelsen LA, Smith KE, Bender JB, Frank RK, Grendon JH, Rice DH, Thiessen AB, Gilbertson CJ, Sivapalasingam S, Barrett TJ, Hancock DD, Angulo FJ. Multidrug-resistant *Salmonella* Typhimurium in four animal facilities. *Emerg Infect Dis.* 2005;11:1235-41.
49. Wedel SD, Bender JB, Leano FT, Boxrud DJ, Hedberg C, Smith KE. Antimicrobial-drug susceptibility of human and animal *Salmonella* Typhimurium, Minnesota, 1997-2003. *Emerg Infect Dis.* 2005;11:1899-1906.
50. Varma JK, Molbak K, Barrett TJ, Beebe JL, Jones TF, Rabatsky-Her T, Smith KE, Vugia DJ, Chang HG, Angulo FJ. Reply to Cox and Phillips on Antimicrobial-resistant nontyphoidal *Salmonella* is associated with excess bloodstream infections and hospitalizations. *J Infect Dis.* 2005;192:2030-1.
51. Vugia D, Cronquist A, Hadler J, Tobin D'Angelo M, Blythe D, Smith K, Thornton K, Morse D, Cieslak P, Jones T, Holt K, Guzewich J, Henao O, Scallan E, Angulo F, Griffin P, Tauxe R, Barzilay E. Preliminary FoodNet data on the incidence of infection with pathogens transmitted commonly through food--10 States, United States, 2005. *MMWR.* 2006; 55(14):392-5.
52. Kiang KM, Scheftel JM, Leano FT, Taylor CM, Belle-Isle PA, Cebelinski EA, Danila R, Smith KE. Recurrent outbreaks of cryptosporidiosis associated with calves among students at an educational farm programme, Minnesota, 2003. *Epidemiol Infect.* 2006;134:876-86.
53. Lopes VC, Wedel SD, Bender JB, Smith KE, Leano FT, Boxrud DJ, Lauer DC, Velayudhan BT, Nagaraja KV. Emergence of multidrug-resistant *Salmonella enterica* serotype Newport in Minnesota. *Clin Infect Dis.* 2006;43:210-13.
54. Liesener AL, Smith KE, Davis RD, Bender JB, Danila RN, Neitzel DF, Nordquist GE, Forsman SR, Scheftel JM. Circumstances of bat encounters and knowledge of rabies among Minnesota residents submitting bats for rabies testing. *Vector Borne Zoonotic Dis.* 2006;6:208-15.
55. Medus C, Smith KE, Bender JB, Besser JM, Hedberg CW. *Salmonella* outbreaks in restaurants in Minnesota, 1995 through 2003: Evaluation of the role of infected foodworkers. *J Food Prot.* 2006;69:1870-78.

Publications: (continued)

56. Mukherjee A, Cho S, Scheftel J, Jawahir S, Smith K, Diez-Gonzalez F. Soil survival of *Escherichia coli* O157:H7 acquired by a child from garden soil recently fertilized with cattle manure. *J Appl Microbiol.* 2006;101:429-36.
57. Kieke AL, Borchardt MA, Kieke BA, Spencer SK, Vandermause MF, Smith KE, Jawahir SL, Belongia EA. Use of streptogramin growth promoters in poultry and isolation of streptogramin-resistant *Enterococcus faecium* from humans. *J Infect Dis.* 2006;194:1200-08.
58. Swanson SJ, Snider C, Braden CR, Boxrud D, Wunschmann A, Rudroff JA, Lockett J, Smith KE. Multidrug-resistant *Salmonella* Typhimurium associated with pet rodents. *New Engl J Med.* 2007; 356:21-8.
59. Vugia DJ, Cronquist A, Hadler J, Tobin D'Angelo M, Blythe D, Smith K, Lathrop S, Morse D, Cieslak P, Jones T, Holt KG, Guzewich J, Henao OL, Angulo FJ, Griffin PM, Tauxe RV, Greene SK. Preliminary FoodNet data on the incidence of infection with pathogens transmitted commonly through food -10 states, 2006. *MMWR.* 2007; 56(14):336-9.
60. Johnson JR, Sannes MR, Croy C, Johnson B, Clabots C, Kuskowski MA, Bender J, Smith KE, Winokur PL, Belongia EA. Antimicrobial drug-resistant *Escherichia coli* from humans and poultry products, Minnesota and Wisconsin, 2002-2004. *Emerg Infect Dis.* 2007;13:838-46.
61. Bender JB, Blackmore C, Dunn JR, Smith KE, Wright JH. Compendium of measures to prevent disease associated with animals in public settings, 2007: National Association of State Public Health Veterinarians, Inc. (NASPHV). *MMWR.* 2007;56 (RR-5):1-14.
62. Voetsch AC, Kennedy MH, Keene WE, Smith KE, Rabatsky-Ehr T, Zansky S, Thomas SM, Mohle-Boetani J, Sparling PH, McGavern MB, Mead PS. Risk factors for sporadic Shiga toxin-producing *Escherichia coli* O157 infections in Foodnet sites, 1999-2000. *Epidemiol Infect.* 2007;135:993-1000.
63. Sannes MR, Belongia EA, Kieke B, Smith K, Kieke A, Vandermause M, Bender J, Clabots C, Winokur P, Johnson JR. Predictors of antimicrobial-resistant *Escherichia coli* in the feces of vegetarians and newly hospitalized adults in Minnesota and Wisconsin. *J Infect Dis.* 2008;197: 430-34.
64. Yew AH, Merrell RT, Zubkov AY, Aksamit AJ, Hu WT, Manno EM, Scheftel J, DeVries A, Neitzel D, Danila R, Smith KE, Rupprecht CE, Holzbauer S. Human rabies - Minnesota, 2007. *MMWR.* 2008;57:460-2.
65. Vugia D, Cronquist A, Hadler J, Tobin D'Angelo M, Blythe D, Smith K, Lathrop S, Morse D, Cieslak P, Dunn J, White PL, Guzewich JJ, Henao OL, Hoekstra RM, Scallan E, Angulo FJ, Griffin PM, Tauxe RV, Behravesh CB. Preliminary FoodNet data on the incidence of infection with pathogens transmitted commonly through food--10 states, 2007. *MMWR.* 2008;57(14):366-70.
66. Jungk J, Baumbach J, Landen M, Gaul LK, Alaniz L, Dang T, Miller EA, Weiss J, Hedican E, Smith K, Grant F, Beauregard T, Bergmire-Sweat D, Griffin D, Engel J, Cosgrove S, Gossack S, Roanhorse A, Shorty H, Cheek J, Redd J, Vigil I. Outbreak of *Salmonella* serotype Saintpaul infections associated with multiple raw produce item - United States, 2008. *MMWR.* 2008;57:929-34.

Publications: (continued)

67. Fuller CC, Jawahir SL, Leano FT, Bidol SA, Signs K, Davis C, Morgan M, Teltow G, Jones B, Sexton RB, Davis GL, Braden CR, Deasy MP, Smith KE. Multi-state *Salmonella* Typhimurium outbreak associated with frozen vacuum-packed rodents used to feed snakes. *Zoonoses Pub Hlth*. 2008;55:481-7.
68. Smith KE, Medus C, Meyer SD, Boxrud DJ, Leano F, Hedberg CW, Elfering K, Braymen C, Bender JB, Danila RN. Outbreaks of salmonellosis in Minnesota (1998 to 2006) associated with frozen, microwaveable, breaded, stuffed chicken products. *J Food Prot*. 2008;71:2153-60.
69. Townes JM, Deodhar AA, Laine ES, Smith K, Krug HE, Barkhuizen A, Thompson ME, Cieslak PR, Sobel J. Reactive arthritis following culture-confirmed infections with bacterial enteric pathogens in Minnesota and Oregon: A population-based study. *Ann Rheum Dis*. 2008;67(12):1689-96.
70. Hedican E, Smith K, Jawahir S, Scheftel J, Kruger K, Birk R, Goplin JL, Garvey A, Schmitt D, Trampel DW, Perry CA, Sotir MJ, Angulo FJ, Sharapov U, Barton Behravesh C. Multistate outbreaks of *Salmonella* infections associated with live poultry-United States, 2007. *MMWR* 2009;58:25-9.
71. Medus C, Meyer S, Smith K, Jawahir S, Miller B, Viger K, Forstner M, Brandt E, Nowicki S, Salehi E, Phan Q, Kinney A, Cartter M, Flint J, Bancroft J, Adams J, Hyytia-Trees E, Theobald L, Talkington D, Humphrys M, Bopp C, Gerner-Smith P, Barton Behravesh C, Williams IT, Sodha S, Langer A, Schwenson C, Angulo F, Tauxe R, Date K, Cavallaro E, Kim C. Multistate outbreak of *Salmonella* infections associated with peanut butter and peanut butter-containing products - United States, 2008-2009. *MMWR*. 2009;58:85-90.
72. Vugia D, Cronquist A, Cartter M, Tobin D'Angelo M, Blythe D, Smith K, Lathrop S, Morse D, Cieslak P, Dunn J, Holt KG, Henao OL, Hoekstra RM, Angulo FJ, Griffin PM, Tauxe RV, Trivedi KK. Preliminary FoodNet data on the incidence of infection with pathogens transmitted commonly through food-10 states, 2008. *MMWR*. 2009;58(13):333-7.
73. Blackmore C, Dunn JR, Smith KE, Wright JH, Wohrle R, Castrodale L. Compendium of measures to prevent disease associated with animals in public settings, 2009: National Association of State Public Health Veterinarians, Inc. (NASPHV). *MMWR Recomm Rep*. 2009;58(RR-5):1-21.
74. Safraneck T, Leschinsky D, Keyser A, O'Keefe A, Timmons T, Holmes S, Garvey A, Von Stein D, Harris M, Quinlisk P, Bidol SA, Sheline KD, Collins JM, Vorhees R, Stella J, Ostroff S, Marriott C, Sandt C, Chmielecki W, Lando J, Saathof-Huber L, Anderson S, Hedican EM, S., Smith K, Miller B, Rigdon C, Salehi E, Kightlinger L, Schaefer L, Hepper C, Wilson S. Outbreak of *Salmonella* serotype Saintpaul infections associated with eating alfalfa sprouts - United States, 2009. *MMWR*. May 16, 2009;58:500-3.
75. Hedican EB, Medus C, Besser JM, Juni BA, Koziol B, Taylor C, Smith KE. Characteristics of O157 versus non-O157 Shiga toxin-producing *Escherichia coli* infections in Minnesota, 2000-2006. *Clin Infect Dis*. 2009;49:358-64.
76. Lanier WA, Leeper MM, Smith KE, Tillman GE, Holt KG, Gerner-Smith P. Pulsed-field gel electrophoresis subtypes of Shiga toxin-producing *Escherichia coli* O157 isolated from ground beef and humans, United States, 2001-2006. *Foodborne Pathog Dis*. 2009;6:1075-82.
77. Hedican E, Hooker C, Jenkins T, Medus C, Jawahir S, Leano F, Smith K. Restaurant *Salmonella* Enteritidis outbreak associated with an asymptomatic food worker. *J Food Prot*. 2009;72:2332-6.

Publications: (continued)

78. Gould LH, Demma L, Jones TF, Hurd S, Vugia DJ, Smith K, Shiferaw B, Segler S, Palmer A, Zansky S, Griffin PM. Hemolytic uremic syndrome and death in persons with *Escherichia coli* O157:H7 infection, foodborne diseases active surveillance network sites, 2000-2006. *Clin Infect Dis*. 2009;49(10):1480-5.
79. Holzbauer SM, DeVries AS, Sejvar JJ, Lees CH, Adjemian J, MCQuiston JH, Medus C, Lexau CA, Harris JR, Recuenco SE, Belay ED, Howell JF, Buss BF, Hornig M, Gibbins JD, Brueck SE, Smith KE, Danila RN, Lipkin WI, Lachance DH, Dyck PJ, Lynfield R. Epidemiologic investigation of immune-mediated polyradiculoneuropathy among abattoir workers exposed to porcine brain. *PLoS One*. 2010 5:1-10. **Awarded 2009 Langmuir Prize for Best Manuscript. Awarded the 2011 Charles C. Shephard Science Award.**
80. Robinson TJ, Cebelinski EA, Taylor C, Smith KE. Evaluation of the positive predictive value of rapid assays used by clinical laboratories in Minnesota for the diagnosis of cryptosporidiosis. *Clin Infect Dis*. 2010;50:e53-5
81. Matyas B, Cronquist A, Cartter M, Tobin D'Angelo M, Blythe D, Smith K, Lathrop S, Morse D, Cieslak P, Dunn J, Holt KG, Henao OL, Fullerton KE, Mahon BE, Hoekstra RM, Griffin PM, Tauxe RV, Bhattarai A. Preliminary FoodNet data on the incidence of infection with pathogens transmitted commonly through food - 10 states, 2009. *MMWR*. 2010;59:418-22.
82. Hedican E, Miller B, Ziemer B, Lemaster P, Jawahir S, Leano F, Smith K. Salmonellosis outbreak due to chicken contact leading to a foodborne outbreak associated with infected delicatessen workers. *Foodborne Pathog Dis*. 2010;7:995-7.
83. Medus C, Smith KE, Bender JB, Leano F, Hedberg CW. *Salmonella* infections in food workers identified through routine public health surveillance in Minnesota: Impact on outbreak recognition. *J Food Prot*. 2010;11:2053-58.
84. Rounds JM, Hedberg CW, Meyer S, Boxrud DJ, Smith KE. *Salmonella enterica* pulsed-field gel electrophoresis clusters, Minnesota, USA, 2001-2007. *Emerg Infect Dis*. 2010;16:1679-85.
85. Li J, Smith K, Kaehler D, Everstine K, Rounds J, Hedberg C. Evaluation of a statewide foodborne illness complaint surveillance system in Minnesota. *J Food Prot*. 2010;73:2059-64.
86. Li J, Maclehorse R, Smith K, Kaehler D, Hedberg C. Development of a *Salmonella* screening tool for consumer complaint-based foodborne illness surveillance systems. *J Food Prot*. 2011;74:106-10.
87. Barton Behravesh C, Mody R, Jungk J, Gaul L, Redd J, Chen S, Cosgrove S, Hedican E, Bergmire-Sweet D, Chavez-Hauser L, Snow SL, Hanson H, Nguyen T, Sodha SV, Boore AL, Russo E, Mikoleit M, Theobald L, Gerner-Smidt P, Hoekstra RM, Angulo FJ, Swerdlow DL, Tauxe RV, Griffin PM, Williams IT, *Salmonella* Saintpaul Outbreak Investigation Team. National outbreak of *Salmonella* serotype Saintpaul infections associated with raw produce, United States, 2008. *N Engl J Med*. 2011;364:918-27.
88. Lowther SA, Medus C, Scheftel J, Leano F, Jawahir S, Smith K. Outbreak of *Salmonella* Subspecies IV infections associated with contamination from bearded dragons. *Zoonoses Pub Hlth*. 2011;58:560-66.
89. Nelson JM, Griffin PM, Jones TF, Smith KE, Scallan E. Antimicrobial and antimotility agent use in persons with Shiga toxin-producing *Escherichia coli* O157 infection in FoodNet Sites. *Clin Infect Dis*. 2011;52:1130-32.

Publications: (continued)

90. Gillis D, Cronquist A, Cartter M, Tobin-D'Angelo M, Blythe D, Smith K, Lathrop S, Birkhead G, Cieslak P, Dunn J, Holt KG, Guzewich JJ, Henao OL, Mahon B, Griffin P, Tauxe RV, Crim, SM. Vital Signs: Incidence of infection with pathogens transmitted commonly through food— Foodborne diseases active surveillance network, 10 U.S. sites, 1996-2010. *MMWR*. 2011;60:749-55.
91. Dunn JR, Smith KE, Blackmore C, Castrodale L, Wohrle R, Wright JH. Compendium of measures to prevent disease associated with animals in public settings, 2011: National Association of State Public Health Veterinarians, Inc. *MMWR Recomm Rep*. 2011;60(RR-04):1-24.
92. Barton Behravesh C, Jones TF, Vugia DJ, Long C, Marcus R, Smith K, Thomas S, Zansky S, Fullerton KE, Henao OL, Scallan E. Deaths associated with bacterial pathogens transmitted commonly through food: Foodborne diseases active surveillance network (FoodNet), 1996-2005. *J Infect Dis*. 2011;204:263-7.
93. Cantey PT, Roy S, Lee B, Cronquist A, Smith K, Liang J, Beach M. Study of non-outbreak *Giardiasis*: Novel findings and implications for future research. *Am J Med*. 2011;124:e1175-78.
94. Smith KE, Wilker PR, Reiter PL, Hedican EB, Hedberg CW. Antibiotic treatment of *Escherichia coli* O157 infection and the risk of hemolytic uremic syndrome, Minnesota. *Ped Infect Dis J*. 2012;31:37-41.
95. Miller B, Rigdon CE, Ball J, Rounds J, Klos R, Brennan BM, Arends KD, Kennelly P, Hedberg C, Smith KE. Use of trace-back methods to confirm the source of a multi-state *E. coli* O157:H7 outbreak due to in-shell hazelnuts. *J Food Prot*. 2012;75:320-27.
96. Kemble SK, Lynfield R, DeVries AS, Drehner DM, Pomputius WF, Beach MJ, Visvesvara GS, da Silva AJ, Hill VR, Yoder JS, Xiao L, Smith KE, Danila R. Fatal *Naegleria fowleri* infection acquired in Minnesota: Possible expanded range of a deadly thermophilic organism. *Clin Infect Dis*. 2012;54:805-9.
97. Rounds JM, Rigdon CE, Muhl LJ, Forstner M, Danzeisen GT, Koziol BS, Taylor C, Shaw BT, Short GL, Smith KE. Non-O157 Shiga toxin-producing *Escherichia coli* infections associated with venison. *Emerg Infect Dis*. 2012;18:279-82.
98. Swanson SJ, Phares CR, Mamo B, Smith KE, Cetron MS, Stauffer WM. Albendazole therapy and enteric parasites in United States-bound refugees *N Engl J Med*. 2012; 366:1498-507. **James M. Nakano Citation Award for Outstanding Scientific Publication.**
99. Lee LE, Cebelinski EA, Fuller C, Keene W, Smith K, Vinje J, Besser JM. Sapovirus outbreaks in long-term care facilities, Oregon and Minnesota, USA, 2002-2009. *Emerg Infect Dis*. 2012;18:873-6.
100. Hale CR, Scallan E, Cronquist AB, Dunn J, Smith K, Robinson T, Lathrop S, Tobin-D'Angelo M, Clogher P. Estimates of enteric illness attributable to contact with animals and their environments in the United States. *Clin Infect Dis*. 2012;54 (Suppl 5):S472-9.
101. Rounds JM, Boxrud DJ, Jawahir SL, Smith KE. Dynamics of *Escherichia coli* O157:H7 outbreak detection and investigation, Minnesota 2000-2008. *Epidemiol Infect*. 2012;140:1430-8.

Publications: (continued)

102. Barton Behravesh C, Blaney D, Medus C, Bidol SA, Phan Q, Soliva S, Daly ER, Smith K, Miller B, Taylor Jr T, Nguyen T, Perry C, Hill TA, Fogg N, Kleiza A, Moorhead D, Al-Khaldi S, Braden C, Lynch MF. Multistate outbreak of *Salmonella* serotype Typhimurium infections associated with consumption of restaurant tomatoes, United States, 2006: Hypothesis-generation through case exposures in multiple restaurant clusters. *Epidemiol Infect.* 2012;140:2053-61.
103. Fowler HN, Brown P, Rovira A, Shade P, Klammer K, Smith K, Scheftel J. *Streptococcus suis* meningitis in swine worker, Minnesota, USA. *Emerg Infect Dis.* 2013;19:330-1.
104. Lappi V, Archer JR, Cevelinski E, Leano F, Besser JM, Klos RF, Medus C, Smith KE, Fitzgerald C, Davis JP. An outbreak of foodborne illness among attendees of a wedding reception in Wisconsin likely caused by *Arcobacter butzleri*. *Foodborne Pathog Dis.* 2013;10:250-5.
105. Neitzel DF, Lynfield R, Smith K. Powassan virus encephalitis, Minnesota, USA. *Emerg Infect Dis.* 2013;19:686.
106. Miller BD, Rigdon CE, Robinson TJ, Hedberg C, Smith KE. Use of global trade item numbers in the investigation of a *Salmonella* Newport outbreak associated with blueberries in Minnesota, 2010. *J Food Prot.* 2013;76:762-9.
107. Smith KE, Danila R, Scheftel J, Fowler H, Westbrook A, Dobbins G, Choi MJ. Notes from the field: Occupationally acquired *Salmonella* I 4,12:i:1,2 infection in a phlebotomist - Minnesota, January, 2013. *MMWR.* 2013;62:525.
108. Saupe AA, Kaehler D, Cebelinski EA, Nefzger B, Hall AJ, Smith KE. Norovirus surveillance among callers to foodborne illness complaint hotline, Minnesota, USA, 2011-2013. *Emerg Infect Dis.* 2013;19:1293-8.
109. Kemble SK, Westbrook A, Lynfield R, Bogard A, Kocktavy N, Gall K, Lappi V, DeVries AS, Kaplan E, Smith KE. Foodborne outbreak of Group A *Streptococcus* pharyngitis associated with a high school dance team banquet – Minnesota, 2012. *Clin Infect Dis.* 2013;57:648-54.
110. Smith KE, Dunn JR, Castrodale L, Daly R, Wohrle R, Behravesh CB, Beck K, Calico MJ, Hogue A, Hahn C, Hairgrove T, Meehan TP, Stauffer K. Compendium of measures to prevent disease associated with animals in public settings, 2013. National Association of State Public Health Veterinarians Animal Contact Compendium Committee 2013. *J Am Vet Med Assoc.* 2013;243:1270-88.
111. Bogard AK, Fuller CC, Radke V, Selman CA, Smith KE. Ground beef handling and cooking practices in restaurants in eight states. *J Food Prot.* 2013;76:2132-40.
112. Robinson TJ, Scheftel JM, Smith KE. Raw milk consumption among sporadic enteric pathogen case-patients in Minnesota, 2001-2010. *Emerg Inf Dis.* 2014;20:38-44.
113. Cole D, Griffin PM, Fullerton KE, Ayers T, Smith K, Ingram LA, Kissler B, Hoekstra RM. Attributing sporadic and outbreak-associated infections to source: Blending epidemiological data. *Epidemiol Infect.* 2014;142:295-302.
114. Choi MJ, Jackson KA, Medus C, Beal J, Rigdon CE, Cloyd TC, Forstner MJ, Ball J, Bosch S, Bottichio L, Cantu V, Melka DC, Ishow W, Slette S, Irvin K, Wise M, Tarr C, Mahon B, Smith KE, Silk BJ. Multistate outbreak of listeriosis linked to soft-ripened cheese – United States, 2013. *MMWR.* 2014;63:294-5.

Publications: (continued)

115. Crim SM, Iwamoto M, Huang JY, Griffin PM, Gilliss D, Cronquist AB, Cartter M, Tobin-D'Angelo M, Blythe D, Smith K, Lathrop S, Zansky S, Cieslak PR, Dunn J, Holt KG, Lance S, Tauxe R, Henao OL, Centers for Disease Control and Prevention (CDC). Incidence and trends of infection with pathogens transmitted commonly through food—Foodborne Disease Active Surveillance Network, 10 U.S. sites, 2006-2013. *MMWR*. 2014;63:15:328-32.
116. Krueger AL, Greene SA, Barzilay EJ, Henao O, Vugia D, Hanna S, Meyer S, Smith K, Pecic G, Hoefler D, Griffin PM. Clinical outcomes of nalidixic acid, ceftriaxone, and multidrug-resistant nontyphoidal *Salmonella* infections compared with pansusceptible infections in FoodNet sites, 2006-2008. *Foodborne Pathog Dis*. 2014;11:335-41.
117. Mody RK, Meyer S, Trees E, White PL, Nguyen T, Sowadsky R, Henao OL, Lafon PC, Austin J, Azzam I, Griffin PM, Tauxe RV, Smith K, Williams IT. Outbreak of *Salmonella enterica* serotype I 4,5,12:i:- infections: The challenges of hypothesis generation and microwave cooking. *Epidemiol Infect*. 2014;142:1050-60.
118. Klumb C, Saunders S, Smith K. *E. coli* O157:H7 surveillance in agricultural populations in Minnesota. *J Agromed*. 2014;19:221.
119. Choi MJ, Morin CA, Scheftel J, Vetter SM, Smith K, Lynfield R, Variant Influenza Investigation Team. Variant influenza associated with live animal markets, Minnesota. *Zoonoses Pub Hlth*. 2014;62:326-30.
120. Holzbauer S, Agger W, Hall R, Johnson G, Schmitt D, Garvey A, Bishop H, Rivera H, de Almeida M, Hill D, Stromberg B, Lynfield R, Smith K. Outbreak of *Trichinella spiralis* infections associated with consumption of wild boar hunted at a game farm in Iowa. *Clin Infect Dis*. 2014;59:1750-6.
121. Robinson SJ, Neitzel DF, Moen RA, Craft ME, Hamilton KE, Johnson LB, Mulla DJ, Munderloh UG, Redig PT, Smith KE, Turner CL, Umber JK, Pelican KM. Disease risk in a dynamic environment: The spread of tick-borne pathogens in Minnesota, USA. *EcoHealth*. 2015;12:152-63.
122. Crim SM, Griffin PM, Tauxe R, Marder EP, Gilliss D, Cronquist AB, Cartter M, Tobin-D'Angelo M, Blythe D, Smith K, Lathrop S, Zansky S, Cieslak PR, Dunn J, Holt KG, Wolpert B, Henao OL. Preliminary incidence and trends of infection with pathogens transmitted commonly through food — Foodborne Diseases Active Surveillance Network, 10 U.S. Sites, 2006–2014. *MMWR*. 2015;64:495-9.
123. Bowen A, Eikmeier D, Talley P, Siston A, Smith S, Hurd J, Smith K, Leano F, Bicknese A, Corbin Norton J, Campbell D. *Notes from the Field*: Outbreaks of *Shigella sonnei* infection with decreased susceptibility to azithromycin among men who have sex with men — Chicago and Metropolitan Minneapolis-St. Paul, 2014. *MMWR*. 2015;64:597-8.
124. Whitten T, Bender JB, Smith K, Leano F, Scheftel J. Reptile-associated salmonellosis in Minnesota, 1996-2011. *Zoonoses Pub Hlth*. 2015;62:199-208.
125. Hadler JL, Danila RN, Cieslak PR, Meek JI, Schaffner W, Smith KE, et al. Emerging Infections Program—State health department perspective. *Emerg Infect Dis*. 2015;9:1510-5.

Publications: (continued)

126. Choi MJ, Torremorell M, Bender JB, Smith K, Boxrud D, Ertl JR, Yang M, Suwannakarn K, Her D, Nguyen J, Uyeki TM, Levine M, Lindstrom S, Katz JM, Jhung M, Vetter S, Wong KK, Sreevatsan S, Lynfield R. Live animal markets in Minnesota: A potential source for emergence of novel influenza A viruses and interspecies transmission. *Clin Inf Dis*. 2015;61:1355-62.
127. Fowler H, Holzbauer S, Smith K, Scheftel J. Survey of occupational hazards in veterinary medicine, Minnesota. *J Am Vet Med Assoc*. 2016;248:207-18.
128. Medus C, Besser JM, Juni BA, Koziol B, Lappi V, Smith KE, Hedberg CW. Long-term sentinel surveillance for enterotoxigenic *E. coli* and non-O157 Shiga toxin-producing *E. coli* in Minnesota. *Open Forum Infect Dis*. 2016 Jan 18; 3(1):ofw003.
129. Talley P, Holzbauer S, Smith K, Pomputius W. Notes from the Field. Lymphocytic choriomeningitis virus meningoencephalitis from a household rodent infestation — Minnesota, 2015. *MMWR*. 2016;65:248–9.
130. Huang JY, Henao OL, Griffin PM, Vugia DJ, Cronquist AB, Hurd S, Tobin-D'Angelo M, Ryan P, Smith K, Lathrop S, Zansky S, Cieslak PR, Dunn J, Holt KG, Wolpert BJ, Patrick ME. Infection with pathogens transmitted commonly through food and the effect of increasing use of culture-independent diagnostic tests on surveillance — Foodborne Diseases Active Surveillance Network, 10 U.S. sites, 2012–2015. *MMWR*. 2016;65:368–71.
131. Talley P, Snippes-Vagnone P, Smith K. Invasive *Pasteurella multocida* infections - report of five cases at a Minnesota hospital, 2014. *Zoonoses Pub Hlth*. 2016;63:431-5.
132. Fitzgerald C, Patrick M, Gonzalez A, Akin J, Polage C, Wymore K, Gillim-Ross L, Xavier K, Sadlowski J, Monahan J, Hurd S, Dahlberg S, Jerris R, Watson R, Santovenia M, Mitchell D, Harrison C, Tobin-D'Angelo M, DeMartino M, Pentella M, Leonard C, Razaq J, Jung C, Achong-Bowe R, Evans Y, Jain D, Juni B, Leano F, Robinson T, Smith K, Gittelman R, Garrigan C, Nachamkin I, and *Campylobacter* diagnostics study working group. Multicenter evaluation of clinical diagnostic methods for detection and isolation of *Campylobacter* spp. from stool. *J Clin Micro*. 2016;54:1209-15.
133. Whitten T, Bjork J, Neitzel D, Smith K, Sullivan M, Scheftel J. *Francisella tularensis* type B infection following a fish hook injury — Minnesota, 2016. *MMWR*. 2017;7:194.
134. Marder EP, Cieslak PR, Cronquist AB, Dunn J, Lathrop S, Rabatsky-Her T, Ryan P, Smith K, Tobin-D'Angelo M, Vugia DJ, Zansky S, Holt KG, Wolpert BJ, Lynch M, Tauxe R, Geissler AL. Incidence and trends of infections with pathogens transmitted commonly through food and the effect of increasing use of culture-independent diagnostic tests on surveillance — Foodborne Diseases Active Surveillance Network, 10 U.S. sites, 2013–2016. *MMWR*. 2017;66:397–403.
135. Saunders S, Smith K, Schott R, Dobbins G, Scheftel J. Outbreak of campylobacteriosis associated with raccoon contact at a wildlife rehabilitation center, Minnesota, 2013. *Zoonoses Pub Hlth*. 2017;64: 222-7.
136. Hall V, Medus C, Wahl G, Sorenson A, Orth M, Santovenia M, Burdette E, Smith K. *Vibrio cholerae* serogroup O1, serotype Inaba — Minnesota, August 2016. *MMWR*. 2017;66:961–2.
137. Eikmeier D, Medus C, Smith, K. Incubation period for outbreak-associated, non-Typhoidal salmonellosis cases, Minnesota, 2000-2015. *Epidemiol Infect*. 2018;146:423-9.

Publications: (continued)

138. Reses HE, Gargano JW, Liang JL, Cronquist A, Smith K, Collier SA, Roy SL, Vanden Eng J, Bogard A, Lee B, Hlavsa MC, Rosenberg ES, Fullerton KE, Beach MJ, Yoder JS. Risk factors for sporadic *Giardia* infection in the USA: A case-control study in Colorado and Minnesota. *Epid Infect.* 2018;146:1071-8.
139. Gambino-Shirley KJ, Tesfai A, Schwensohn CA, Burnett C, Smith L, Wagner JM, Eikmeier D, Smith K, Stone JP, Updike D, Hines J, Shade LN, Tolar B, Fu T-J, Viazis S, Seelman SL, Blackshear K, Wise ME, Neil KP. Multistate outbreak of *Salmonella* Virchow infections linked to a powdered meal replacement product — United States, 2015–2016. *Clin Inf Dis.* 2018;67:890-6.
140. Marder EP, Griffin PM, Cieslak PR, Dunn J, Hurd S, Jervis R, Lathrop S, Muse A, Ryan P, Smith K, Tobin-D'Angelo M, Vugia DJ, Holt KG, Wolpert BJ, Tauxe R, Geissler AL. Preliminary incidence and trends of infections with pathogens transmitted commonly through food — Foodborne Diseases Active Surveillance Network, 10 U.S. sites, 2006–2017. *MMWR.* 2018;67:324–8.
141. Whitten T, Demontigny C, Bjork J, Foss M, Peterson M, Scheftel J, Neitzel D, Sullivan M, Smith K. Prevalence of *Francisella tularensis* in Minnesota *Dermacentor variabilis* ticks, 2017. *Vector Borne Zoonotic Disease.* 2019;168: 90-4.
142. Beczkiewicz A, Cebelinski E, Decuir M, Lappi M, Wang X, Smith K, Boxrud D, Medus M. High relative frequency of enteroaggregative *Escherichia coli* among patients with reportable enteric pathogens, Minnesota, 2016-2017. *Clin Inf Dis.* 2019;69:473-9.
143. Hall V, Scheftel J, Holzabauer S, Smith K. Gastrointestinal illness among contract construction workers at a chicken processing facility — Minnesota, 2016. *Am J Indust Med.* 2019;62(2):175-9.
144. Taylor J, Holzabauer S, Wanduragala D, Ivaskovic A, Spinosa R, Smith K, Corcoran J, Jensen A. Acute intoxications from consumption of *Amanita muscaria* mushrooms — Minnesota, 2018. *MMWR.* 2019;68(21):483–4.
145. Tack DM, Marder EP, Griffin PM, Cieslak P, Dunn J, Hurd S, Scallon E, Lathrop S, Muse A, Ryan P, Smith K, Tobin-D'Angelo, Vugia DJ, Holt KG, Wolpert BJ, Tauxe R, Geissler AL. Preliminary incidence and trends of infections with pathogens transmitted commonly through food - Foodborne Diseases Active Surveillance Network, 10 U.S. Sites, 2015-2018. *MMWR.* 2019; 68(16):369-73.
146. Eikmeier D, Talley P, Bowen A, Leano F, Dobbins G, Jawahir S, Gross A, Huspeni D, La Pointe A, Mayer S, Smith K. Decreased susceptibility to azithromycin in clinical *Shigella* isolates associated with HIV and sexually transmitted bacterial diseases, Minnesota, USA, 2012–2015. *Emerg Infect Dis.* 2020;26(4):667-74.
147. Ireland M, Klumb C, Smith K, Scheftel J. Blastomycosis in Minnesota, USA, 1999–2018. *Emerg Infect Dis.* 2020; 26(5):866-75.
148. Klumb CA, Scheftel JM, Smith KE. Animal agriculture exposures among Minnesota residents with zoonotic enteric infections, 2012–2016. *Epid Infect.* 2020;148: e55, 1–11. <https://doi.org/10.1017/S0950268819002309>.
149. Firestone M, Eikmeier D, Scher D, Medus C, Hedeem N, Smith K, Hedberg CW. Can aggregated restaurant inspection data help us understand why individual foodborne illness outbreaks occur? *J Food Protect.* 2020; 83(5):788-793.

Publications: (continued)

150. Tack, DM, Ray L, Griffin PM, Cieslak PR, Dunn J, Rissman T, Jervis R, Lathrop S, Muse A, Duwell M, Smith K, Tobin-D'Angelo M, Vugia DJ, Zablotsky Kufel J, Wolpert BJ, Tauxe R, Payne, DC. Preliminary Incidence and Trends of Infections with Pathogens Transmitted Commonly Through Food — Foodborne Diseases Active Surveillance Network, 10 U.S. Sites, 2016–2019. *MMWR*. 2020;69:509–514.
151. Saupe AA, Rounds J, Sorenson A, Hedeem N, Bagstad E, Reinberg E, Wagley AG, Cebelinski E, Smith K. Outbreak of norovirus gastroenteritis associated with ice cream contaminated by frozen raspberries from China; Minnesota, USA, 2016. *Clin Infect Dis*. 2021; e3701-7.
152. Rounds JM, Taylor AJ, Eikmeier D, Nichols MM, Lappi V, Wirth SE, Boxrud DJ, Smith KE, Medus C. Prospective *Salmonella* Enteritidis surveillance and outbreak detection using whole genome sequencing, Minnesota 2015-2017. *Epid Infect*. 2020;148, e254, 1–8.
153. Hedeem N and Smith K. Restaurant practices for cooling foods in Minnesota: an intervention study. *Foodborne Path Dis*. 2020;17:758-63.
154. Buuck S, Smith K, Fowler R, Cebelinski E, Lappi V, Boxrud D, Medus C. Epidemiology of enterotoxigenic *Escherichia coli* infection in Minnesota, 2016-2017. *Epidemiol and Infection*. 2020;148;E206. doi:10.1017/S0950268820001934.
155. Berumen A, Lennon R, Breen-Lyles M, Griffith J, Patel R, Boxrud D, Decuir M, Farrugia G, Smith K, Grover M. Characteristics and risk factors of post-infection irritable bowel syndrome following *Campylobacter* enteritis. *Clinical Gastroenterology Hepatology*. 2020; <https://doi.org/10.1016/j.cgh.2020.07.033> [Epub ahead of print].
156. Firestone MJ, Wienkes H, Garfin J, Wang X, Vilen K, Smith KE, Holzbauer S, Plumb M, Pung K, Medus C, Yao JD, Binnicker MJ, Nelson AC, Yohe S, Ehresmann K, Lynfield R, Danila R. COVID-19 outbreak associated with a 10-day motorcycle rally in a neighboring state — Minnesota, August 2020. *MMWR*. 2020;69:1771-6.
157. Firestone MJ, Lorentz AJ, Meyer S, Wang X, Como-Sabeti K, Vetter S, Smith K, Holzbauer S, Beaudoin A, Garfin J, Ehresmann K, Danila R, Lynfield R. First identified cases of the SARS-CoV-2 variant P.1 in the United States — Minnesota, January 2021. *MMWR*. 2021;70:346-7.
158. Firestone MJ, Lorentz AJ, Wang X, Como-Sabeti K, Vetter S, Smith K, Holzbauer S, Meyer S, Ehresmann K, Danila R, Lynfield R. First identified cases of SARS-CoV-2 variant B.1.1.7 in Minnesota — December 2020–January 2021. *MMWR*. 2021;70:34-7.
159. Decuir M, Fowler RC, Cebelinski E, Smith K, Boxrud D, Medus C. Evidence of false-positivity for *Vibrio* species tested by gastrointestinal multiplex PCR panels, Minnesota, 2016–2018. *Open Forum Infect Dis*. 2021;8(6)ofab247.
160. White AE, Smith KE, Booth H, Medus C, Tauxe RV, Gieraltowski L, Scallan Walter E. Hypothesis generation during foodborne illness outbreak investigations. *Am J Epidemiol*. 2021;40(7):601-5.
161. Peters S, Pascoe B, Wu Z, Bayliss SC, Zeng X, Edwinson/A, Veerabadhran-Gurunathan S, Jawahir S, Calland JK, Mourkas E, Patel R, Wiens T, Decuir M, Boxrud D, Smith K, Parker CT, Farrugia G, Zhang Q, Sheppard SK, Grover M. *Campylobacter jejuni* genotypes are associated with post-infection irritable bowel syndrome in humans. *Communications Biology*. 2021;4(1):1015.

Publications: (continued)

162. Suhs T, Gerlach D, Garfin J, Lorentz A, Firestone M, Sherden M, Hackman K, Gray T, Siebman S, Wienkes H, Vilen K, Wang X, Como-Sabetti K, Danila R, Smith K, Medus C. COVID-19 Outbreak Associated with a Fitness Center - Minnesota, September-November 2020. *Clin Infect Dis*. 202. Jul 23:ciab653. doi: 10.1093/cid/ciab653.
163. Wienkes H, Vilen K, Lorentz A, Gerlach D, Wang X, Saupe A, Danila R, Lynfield R, Smith K, Medus C. Transmission of and infection with COVID-19 among vaccinated and unvaccinated attendees of an indoor wedding reception in Minnesota. *JAMA Network Open*. 2022; 5(2):e220536. doi: 10.1001/jamanetworkopen.2022.0536. PMID: 35212747; PMCID: PMC8881767.
164. Lehnertz NB, Wang S, Garfin J, Taylor J, Zipprich J, VonBank B, Martin K, Eikmeier D, Medus C, Wiedinmyer B, Bernu C, Plumb M, Pung K, Honein MA, Carter R, MacCannell D, Smith KE, Como-Sabetti K, Ehresmann K, Danila R, Lynfield R. Transmission Dynamics of Severe Acute Respiratory Syndrome Coronavirus 2 in High-Density Settings, Minnesota, USA, March–June 2020. *Emerg Infect Dis*. 2021;27(8):2052-2063.
165. Decuir M, Fowler RC, Cebelinski E, Smith K, Boxrud D, Medus C. Evidence of false-positivity for *Vibrio* species tested by gastrointestinal multiplex PCR panels, Minnesota, 2016–2018. *Open Forum Infect Dis*. 2021. ofab247, <https://doi.org/10.1093/ofid/ofab247>.
166. Ray LC, Collins JP, Griffin PM, Shah HJ, Boyle MM, Cieslak PR, Dunn J, Lathrop S, McGuire S, Rissman T, Scallan Walter EJ, Smith K, Tobin-D'Angelo M, Wymore K, Zablotsky Kufel J, Wolpert BJ, Tauxe R, Payne DC. Decreased incidence of infections caused by pathogens transmitted commonly through food during the COVID-19 pandemic – Foodborne Diseases Active Surveillance Network, 10 U.S. sites, 2017-2020. *MMWR*. 2021;70:1332-6.
167. Mody, RK, Hoekstra RM, Scott MK, Dunn J, Smith K, Tobin-D'Angelo M, Shiferaw B, Wymore K, Clogher P, Palmer A, Comstock N, Burzlauff K, Lathrop S, Hurd S, Griffin PM. Risk of hemolytic uremic syndrome related to treatment of *Escherichia coli* O157 infection with different antimicrobial classes. *Microorganisms*. 2021. 9(9):1997. Doi: 10.3390/microorganisms909199.
168. Collins JP, Shah HJ, Lowell Weller D, Ray LC, Smith K, McGuire S, Trevejo RT, Jervis RH, Vugia DJ, Rissman T, Garman KH, Lathrop S, LaClair B, Boyle MM, Harris S, Zablotsky Kufel J, Tauxe RV, Bruce BB, Billig Rose E, Griffin PM, Payne DC. Preliminary incidence and trends of infections caused by pathogens transmitted commonly through food — Foodborne Diseases Active Surveillance Network, 10 U.S. Sites, 2016–2021. *MMWR*. 2022;71(40):1260–4.
169. White AE, Garman KN, Hedberg C, Pennell-Huth P, Smith KE, Sillence E, Baseman J, Scallan Walter E, Integrated Food Safety Centers of Excellence Working Group. Improving foodborne disease surveillance and outbreak detection and response using peer networks—The Integrated Food Safety Centers of Excellence. *J Public Health Manag Prac*. 2022;29(3):287-96.
170. Holzbauer SM, Schrodt CA, Prabhu RM, Asch-Kendrick RJ, Ireland M, Klumb C, Firestone MJ, Liu G, Harry K, Ritter JM, Levine MZ, Orciari LA, Wilkins K, Yager P, Gigante CM, Ellison JA, Zhao H, Niezgodna M, Li Y, Levis R, Scott D, Satheshkumar PS, Petersen BW, Rao AK, Bell WR, Bjerk SM, Forrest S, Gao W, Dasheiff R, Russell K, Pappas M, Kiefer J, Bickler W, Wiseman A, Jurantee J, Reichard RR, Smith KE, Lynfield R, Scheftel J, Wallace RM, Bonwitt J. Fatal human rabies infection with suspected host-mediated failure of post-exposure prophylaxis following a recognized zoonotic exposure—Minnesota, 2021. *Clin Infect Dis*. 2023. DOI: 10.1093/cid/ciad098.

Publications: (continued)

171. Delahoy MJ, Shah HJ, Weller DL, Ray LC, Smith K, McGuire S, Trevejo RT, Scallan Walter E, Wymore K, Rissman T, McMillian M, Lathrop S, LaClair B, Boyle MM, Harris S, Zablotsky-Kufel J, Houck K, Devine CJ, Lau CE, Tauxe RV, Bruce BB, Griffin PM, Payne DC. Preliminary incidence and trends of infections caused by pathogens transmitted commonly through food — Foodborne Diseases Active Surveillance Network, 10 U.S. Sites, 2022. *MMWR Morb Mortal Wkly Rep.* 2023;72:701–706.
172. Ford L, Buuck S, Eisenstein T, Cote A, McCormic ZD, Kremer-Caldwell S, Kissler B, Forstner M, Sorenson A, Wise M, Smith K, Medus C, Griffin PM, Robyn M. Salmonella outbreaks associated with not ready-to-eat breaded, stuffed chicken products in the United States. *MMWR Morb Mortal Wkly Rep.* 2023;72(18);484–7.
173. Firestone MJ, Holzbauer S, Conelea C, Danila R, Smith K, Bitsko RH, Klammer SM, Gingerich S, Lynfield R. Rapid onset of functional tic-like behaviors among adolescent girls — Minnesota, September–November 2021. *Frontiers Neurology.* 2023;13:1063261.
174. Breen-Lyles M, Decuir M, Byale A, Smith K, Grover M. Impact of Rome IV criteria on the prevalence of post-infection irritable bowel syndrome. *Neurogastro Motil.* 2023. <https://doi.org/10.1111/nmo.14532>.
175. White AE, Torok MR, Smith KE, Booth H, Scallan Walter E. Competencies for Public Health Professionals and Epidemiologists Who Detect and Investigate Enteric Disease Outbreaks. *Public Health Reports.* 2023;0(0). doi:10.1177/00333549231186776.
176. Kim TN, Decuir M, Smith K, Medus C Hedberg CW. Use of online consumer complaint forms to enhance complaint-based surveillance for foodborne illness outbreaks in Minnesota. *J Food Protect.* 2023. 86(6):100095. doi: 10.1016/j.jfp.2023.100095. Epub 2023 Apr 25. PMID: 37100390.
177. Firestone MJ, Thorell T, Kollman L, Fess L, Ciessau G, Strain AK, Danila R, Lynfield R, Holzbauer H, and the UNEX surveillance team. Surveillance for unexplained deaths of possible infectious etiologies during the COVID-19 pandemic-Minnesota, 2020-2021. *Public Health Reports.* 2024. 2024;0(0). doi:10.1177/00333549231218283
178. Cash-Goldwasser, Ortbahn D, Narayan M, Fitzgerald C, Maldonado K, Straily A, Sapp S, Bishop H, Watson B, Neja M, Qvarnstrom Y, Berman D, Park S, Smith K, Holzbauer S. Outbreak of human trichinellosis – Arizona, Minnesota, and South Dakota, 2022. 2024. In press for co-publication in *Morbidity and Mortality Weekly Report* and the *Canada Communicable Disease Report*.

Book Chapters:

- Smith KE, Fischer JR, Little SE, Lockhart JM, Stallknecht DE. Diseases with implications for human health. In V. F. Nettles and W. R. Davidson, eds. *Field Manual of Wildlife Diseases in the Southeastern United States*, 2nd ed. Southeastern Cooperative Wildlife Disease Study, Athens, GA, pp. 378-399, 1997.
- Smith KE, Bender JB, Osterholm MT. Antimicrobial resistance in animals and relevance to human infections. In I. Nachamkin and M. Blaser, eds. *Campylobacter*. ASM Press. pp. 483-495. 2000.
- Meyer S, Smith K, Hedberg C. Investigation of foodborne disease outbreaks. In NM M'ikanatha, R Lynfield, CA Van Beneden, and H de Valk, eds. *Infectious Disease Surveillance*. Second Edition; Malden, MA: Blackwell Publishing. pp. 120-128. 2013.

Other (Non-refereed) Publications:

1. Smith KE, Zimmermann JJ, Patton S, Beran GW, Hill HT. *Toxoplasma gondii* infection in swine and free-living mammals on Iowa farms. ISU Swine Research Reports. pp. 121-124. Cooperative Extension Service, Iowa State University, Ames, Iowa 50011. 1991.
2. Smith KE, Zimmerman JJ, Beran GW, Hill HT. The presence of antibodies against encephalomyocarditis virus in swine and free-living species on Iowa swine farms. ISU Swine Research Reports. pp. 118-120. Cooperative Extension Service, Iowa State University, Ames, Iowa 50011. 1991.
3. Smith KE, Zimmerman JJ, Beran GW, Hill HT, Bolin CA. Evidence of *Leptospira interrogans* serovar *bratislava* infection in house mice (*Mus musculus*) captured on Iowa swine farms. ISU Swine Research Reports. pp. 115-117. Cooperative Extension Service, Iowa State University, Ames, Iowa 50011. 1991.
4. Bender JB, Smith KE, Hedberg CW, Osterholm MT. Food-borne disease in the 21st century – What challenges await us? *Postgrad Med* 1999;106:109-19.

Other (Non-refereed) Publications: (continued)

5. Naimi T, Smith KE, Besser J, Lynfield R. Antimicrobial resistance and judicious antimicrobial use in Minnesota and the United States. *Minn Med*. 2001;84:27-31.
6. Whitten T, Bjork J, Neitzel D, Smith K, Sullivan M, Scheftel J. Tularemia in Minnesota: An emerging and underappreciated infection. *Minn Med*. 2017;100:40-3.
7. Taylor J, Snippes-Vagnone P, Smith K, Walters J, Wengenack N, Deml S, Ferrieri P, Lynfield R. Characteristics of clinical extrapulmonary nontuberculous mycobacteria isolates in Minnesota, 2013–2017. *Minn Med*. 2020;May/June:39-43.

Abstracts:

Available upon request