

Some Outbreaks Due to Pasteurized Milk

- 1976—1 outbreak *Y. enterocolitica* in **36** children, 16 of whom had appendectomies, due to pasteurized chocolate milk¹
- 1982—Over **17,000** cases *Y. enterocolitica* in several states from milk produced in Memphis, TN²
- 1983—1 outbreak, **49** cases, **14 deaths** from *L. monocytogenes* in MA²
- 1984-85—3 outbreaks of antimicrobial-resistant *S. typhimurium*, at plant in Melrose Park IL. The third wave had **16,284** confirmed cases; surveys indicated as many as 197,581 persons may have been affected²
- 1985—**1,500+** cases, *Salmonella* culture confirmed, in Northern IL²
- 1993-94—1 outbreak, **2014** cases/**142** confirmed *S. enteritidis* due to pasteurized ice cream in MN, SD, WI⁶
- 1995—Outbreak of *Yersinia enterocolitica* in **10 children**, 3 hospitalized due to post-pasteurization contamination⁷
- 2000—1 outbreak, **98** cases/**38** confirmed *S. typhimurim* in PA and NJ⁷
- 2005—1 outbreak, **200** cases *C. jejuni* in CO prison⁹
- 2006—1 outbreak, **1592** cases/**52** confirmed *C. jejuni* infections in CA¹⁰
- 2007—1 outbreak, **3 deaths** from *L. monocytogenes* in MA.¹¹

Citations:

- **Full Citations:**
- 1. (1976) Black, R.E.; Jackson, R.J.; et al; "Epidemic *Yersinia enterocolitica* infection due to contaminated chocolate milk," *New England Journal of Medicine*, January 12, 1978; 298(2):76-79. Milk was purchased in school cafeterias; investigation suggested that the bacterium was introduced at the dairy during the mixing by hand of chocolate syrup with previously pasteurized milk.
- 2. (1982) Segal, Marian; "Invisible villains; tiny microbes are biggest food hazard," *FDA Consumer*, JUL-AUG 1988.
- 3. (1983) Fleming, D.W.; Cochi, S.L.; et al; "Pasteurized milk as a vehicle of infection in an outbreak of listeriosis," *New England Journal of Medicine*, 1985 FEB 14; 312(7):404-407.
- 4. (1984-1985) Ryan, C. A.; Nickels, M. K.; et al; "Massive outbreak of antimicrobial-resistant salmonellosis traced to pasteurized milk," *Journal of the American Medical Association*, 1987;258:3269-74. Two surveys to determine the number of persons who were actually affected yielded estimates of 168,791 and 197,581 persons, making this the largest outbreak of salmonellosis ever identified in the United States.
 - Details of three outbreaks:
 - 1984-AUG, 1 outbreak of *S. typhimurium*, ~200 cases
 - 1984-NOV, 1 outbreak *S. typhimurium*,
 - 1985-MAR, 1 outbreak *S. typhimurium*, 16,284 confirmed cases
- 5. (1985) Centers for Disease Control and Prevention, "Milk-Borne Salmonellosis—Illinois," *Morbidity & Mortality Weekly Report*, 1985 APR 12; 34(14):200. <http://www.cdc.gov/MMWR/preview/mmwrhtml/00000520.htm>
- 6. (1993-1994) Centers for Disease Control and Prevention, "Outbreak of *Salmonella enteritidis* Associated with Nationally Distributed Ice Cream Products--Minnesota, South Dakota, and Wisconsin, 1994," *Morbidity & Mortality Weekly Report*, 1994 OCT 14; 43(40). <http://vm.cfsan.fda.gov/~mow/salice.html>; accessed 28 May 2007
- 7. (1995) New Zealand PDF: <http://www.nzfsa.govt.nz/science/data-sheets/yersinia-enterocolitica.pdf> which mentions "10 cases, 3 hospitalised, 1 appendectomy. Control measure failure: post pasteurisation contamination." US reference is Robbins-Browne, R. (1997) *Yersinia enterocolitica*. In *Food Microbiology: fundamentals and frontiers*, (Eds) Doyle, M.P., Beuchat, L.R. and Montville, T.D. pp192-215. ASM Press, Washington, D.C., USA.
- 8. (2000) Olsen, Sonja J.; Ying, Michelle; et al; "Multidrug-resistant *Salmonella* Typhimurium infection from milk contaminated after pasteurization," *Emerging Infectious Diseases* [serial on the Internet], 2004 MAY; available at <http://www.cdc.gov/ncidod/EID/vol10no5/03-0484.htm>, accessed 28-May-2007.
- 9. CDC 2005 Summary Statistics, http://www.cdc.gov/foodborneoutbreaks/us_outb/fbo2005/2005_Linelist.pdf. Also mentioned briefly in State of Colorado Laboratory Services Division 2005-2006 Annual Report, page 17, http://www.cdc.gov/foodborneoutbreaks/us_outb/fbo2005/2005_Linelist.pdf ("The Environmental Microbiology Laboratory recovered *Campylobacter* from milk samples in the Colorado prison system.")
- 10. (2006) Yuan, Jean W.; Jay, M.T.; et al, "Campylobacteriosis Outbreak Associated with Pasteurized Milk — California, May 2006," Epidemic Intelligence Service Conference 2007 (CDC), 2007 APR 16; page 62. Available at http://www.cdc.gov/eis/conference/archives/EIS_program%20indd.pdf, accessed 28-May-2007. This was a paper presented at a conference.
- 11. Associated Press, January 8, 2008