Salmonella Infantis

Background: Salmonella enterica subsp. enterica serovar Infantis (antigenic formula 6,7,14:r:1,5) is a serovar of the O:7 (C₁) serogroup. S. Infantis is commonly found in chickens and broiler flocks. In addition, outbreaks caused by S. Infantis have been associated with pet food and treats. In European countries, a multidrug-resistant (MDR) strain of S. Infantis was disseminated; this strain emerged from broilers in Hungary (Hungarian clone of S. Infantis). Resistant pattern of this Hungarian clone included resistance to: nalidixic acid, streptomycin, sulphonamide, and tetracycline. In Italy, an MDR strain of S. Infantis that showed resistance to ampicillin, chloramphenicol, streptomycin, sulphonamide, tetracycline, kanamycin and trimethoprim/sulfamethoxazole emerged in 2005-06.

Animal reservoir: The main animal reservoirs of serovar Infantis are poultry and swine. In Europe, layer and broiler farms are the major sources of S. Infantis.

<u>Geographical distribution:</u> S. Infantis is widely distributed and a common serovar in a number of countries. In the U.S. and Europe, it ranks among the top ten serovars. S. Infantis has been reported in North America (U.S. and Canada), South America (Argentina, Brazil), Oceania (Australia and New Zealand), Europe (The Netherlands, Finland, Hungary, and Russia), and Asia (Japan).

Outbreaks: Outbreaks linked to poultry and pet food have been reported in the U.S. and Canada.

Year	Location	Associated source	Number of cases
2024	US-multistate	Backyard poultry	409 ^a
2019	US-multistate	Raw chicken	129
2017	US-multistate	Papaya	4*
2013	US-multistate	Live poultry	125
2012	US-multistate	Dry dog food	49
2012	US-multistate	Live poultry	195
1999	Canada	Pig ear dog treats	35

^{*}This outbreak included multiple serovars

Border Rejections and Recalls:

Year	Exporting Country (if applicable)	Country Issuing Recall/Rejection	Food
2019	Poland	Lithuania	Chicken Wings

Relevant links and references:

- 1. http://www.cdc.gov/salmonella/dog-food-05-12/
- 2. http://www.cdc.gov/salmonella/live-poultry-04-13/index.html
- 3. http://lohmann-information.com/content/l_i_45_artikel15.pdf
- 4. http://www.ncbi.nlm.nih.gov/pubmed/22564450
- 5. http://www.ncbi.nlm.nih.gov/pubmed/21821397
- 6. http://analytics.foodtrack.net/cgi-bin/read?rid=MjAxOTAyMjExMzQ0Rk9PRFRSQ0tCVUxMRVRTXzAyMjExOUw0MjY=&style=html&source=email
- 7. https://www.cdc.gov/salmonella/backyardpoultry-05-24/index.html

^a Multiple serovars, including *Salmonella* Altona, Cerro, Enteritidis, Indiana, Infantis, Johannesburg, Mbandaka, and Typhimurium, were linked to this outbreak. The case number represents the total number of cases associated with the outbreak and does not specifically indicate the number of people infected by *Salmonella* Infantis.