

# Salmonella Java

**Background:** *Salmonella enterica* subsp. *enterica* serovar Java (antigenic formula: 1,4,5,12:b:-) is also known as Paratyphi B variant L(+) tartrate(+). *Salmonella* Paratyphi B and Java are biovars of common serotype 1,4,[5],12:b:1,2 causing human paratyphoid fever and gastroenteritis, respectively. Different from 'classical' *S. Paratyphi B*, *S. Java* has an animal reservoir and leads to substantive outbreaks as a result of the contamination of food products.

**Animal reservoir:** In particular, *Salmonella* Java is commonly found in poultry, especially chickens and ducks. It can be found in snakes and fish as well.

**Geographical distribution:** Serovar Java has been found in Europe, the UK, Australia, and America.

**Outbreaks:** Outbreaks have been associated with *S. Java*.

Year	Location	Associated Source	Number of Cases
1966	US: NJ	Smoked whitefish	12
1999	Canada	Alfalfa sprouts	51
2003	France	Goat's milk cheese	273
2007	Multinational	Baby spinach	354
2010	US: OK	Not identified	17
2015	US: Multi-state	Nut butters	13
2015	US: Multi-state	Raw Tuna	62
2017	US: Multi-state	Ball python exposure	5
2018	US: Multi-state	Kratom	199*

\*This outbreak included infections from several types of *Salmonella*: *Salmonella* Java, *Salmonella* Heidelberg, *Salmonella* Javiana, *Salmonella* Okatie, *Salmonella* Weltevreden, and *Salmonella* Thompson.

## Relevant links and references:

1. [https://about-salmonella.com/salmonella\\_outbreaks/salmonella-java-outbreak-oklahoma-iowa-nebraska](https://about-salmonella.com/salmonella_outbreaks/salmonella-java-outbreak-oklahoma-iowa-nebraska)
2. <https://www.foodsafetynews.com/2015/12/cdc-multistate-salmonella-outbreak-may-be-linked-to-recalled-nut-butters/>
3. <https://www.foodsafetynews.com/2015/07/frozen-raw-tuna-likely-source-of-60-salmonella-infections-in-11-states/#.VI-QE2QrJFY>
4. <https://www.cdc.gov/mmwr/volumes/67/wr/mm6719a7.htm>
5. <https://ajph.aphapublications.org/doi/pdf/10.2105/AJPH.58.1.114>
6. <https://www.eurosurveillance.org/content/10.2807/esw.12.51.03332-en>
7. <https://www.foodsafetynews.com/files/2016/02/Sprout-associated-outbreaks-2-24-16-1.pdf>
8. <https://www.cdc.gov/salmonella/paratyphi-b-12-15/index.html>
9. <https://www.ncbi.nlm.nih.gov/pmc/articles/PMC3294332/>
10. <https://www.ncbi.nlm.nih.gov/pmc/articles/PMC7258445/>
11. <https://www.cdc.gov/salmonella/kratom-02-18/index.html#:~:text=This%20outbreak%20was%20detected%20when,to%20test%20for%20Salmonella%20contamination.>