

Salmonella Mbandaka

Background: *Salmonella enterica* subsp. *enterica* serovar Mbandaka (antigenic formula 6,7,14:z10:e,n,z15) is a serovar of the O:7(C₁) serogroup. This serovar has been frequently isolated from poultry production environments. *Salmonella* ser. Mbandaka can be classified into two major groups. However, clustering of these groups and their subgroups were not associated with any patterns based on the host or geographical origin. A study found that all isolates contained a uniform virulence gene repertoire. This serovar is multi-drug resistant.

Animal reservoir: Serovar Mbandaka was primarily found in poultry. It has been reported from other animals (pigs, cattle, fish, wild birds, and canine).

Geographical distribution: Serovar Mbandaka has been found around world.

Outbreaks: Numerous outbreaks in different countries have been linked to *Salmonella enterica* subsp. *enterica* serovar Mbandaka, imported spices have been associated with several of these outbreaks.

Year	Location	Associated source	Number of cases
2018	US-multistate	Honey Smack Cereal	135
2017	US-multistate	Tahini	8
2013	US-multistate	Tahini	16
2013	US-multistate	Live Poultry	61

Border Rejections:

Year	Location	Associated Source	Number of Cases
2023	Germany	Onion powder from Hungary	NA

Relevant links and references:

1. <http://www.foodsafetynews.com/2013/05/salmonella-linked-to-tahini-sickens-8-across-country/#.WVvXMPnyuUI>
2. <https://www.cdc.gov/salmonella/montevideo-tahini-05-13/>
3. <http://www.foodsafetynews.com/2013/05/two-multistate-salmonella-outbreaks-linked-to-live-poultry-expand/#.WVvYSfnyuUk>
4. <https://webgate.ec.europa.eu/rasff-window/screen/notification/604602>
5. <https://pubmed.ncbi.nlm.nih.gov/36853053/>
6. <https://pubmed.ncbi.nlm.nih.gov/36586112/>
7. <https://pubmed.ncbi.nlm.nih.gov/35722838/>
8. <https://pubmed.ncbi.nlm.nih.gov/35255093/>
9. https://www.cdc.gov/mmwr/volumes/70/wr/mm7033a1.htm?s_cid=mm7033a1_w
10. <https://bmcbgenomics.biomedcentral.com/articles/10.1186/1471-2164-14-365>
11. <https://www.hindawi.com/journals/cr/2013/543147/>
12. https://www.liebertpub.com/doi/10.1089/fpd.2021.0018?url_ver=Z39.88-2003&rfr_id=ori%3Arid%3Acrossref.org&rfr_dat=cr_pub++0pubmed
13. <https://www.ncbi.nlm.nih.gov/pmc/articles/PMC7653644/>