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# The role of *S. Enteritidis* in the structure of microbiological monitoring in epidemiological surveillance system

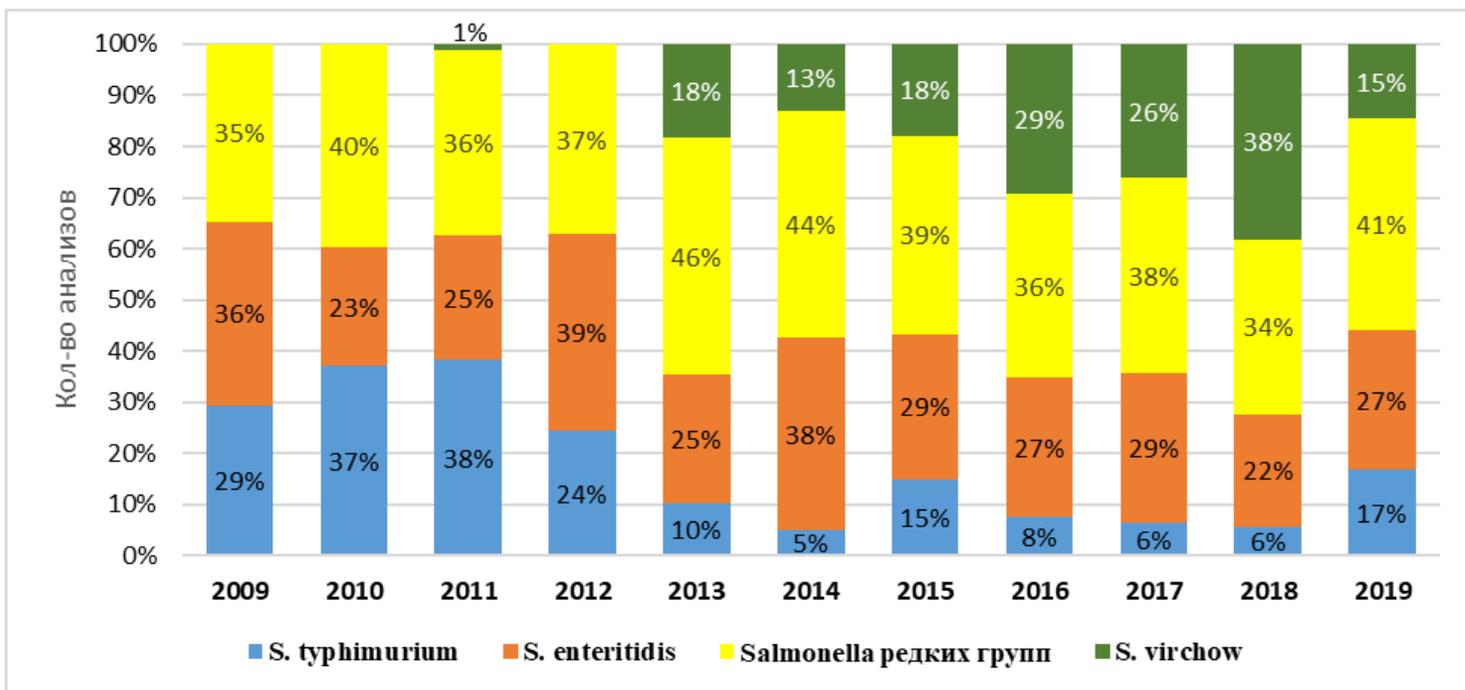
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# Summary

- **Background.** Salmonellosis is one of the most common zoonosis in the world, most often registered in the children's population aged 17 years. The prevalence of *Salmonella enteritidis* has been widely discussed in the specialized literature for many years, and in many regions their own characteristics in the spectrum of salmonellosis pathogens have been noted.
- **Aim.** To evaluate the frequency of bacteriological isolation of *S. enteritidis* as an etiological pathogen of salmonellosis over an 11-year period among children.
- **Methods.** The study was conducted by analysing the annual statistical reporting forms of the bacteriological laboratory of the “City Children's Infectious Diseases Hospital” No. 1 in Almaty within the period from 2000 to 2019.

# Research Results

- **Study Period: 2009 – 2019 year**



- S. enteritidis took the first place only in 18.1%, being registered only in 2009 – 36% and in 2012 – 39%, which can be interpreted as a regional feature.
- In comparison, isolates of S. typhimurium, from the same group D, were notable only in 2011 - 38%, and S. Virchow for the analyzed eleven - year period were leaders only in 2019 – 41%.

# Research Results

Since the most common in the dynamic study among 4 types of salmonella, Salmonella of other groups were found quite often, amounting to 63.6%, which were recorded for 7 years: with 2010 – 40%, 2013 – 46%, 2014 – 44%, 2015 – 39%, 2016 – 36%, 2017 – 38% and 2019 – 41%.

# Conclusion

## Sporadic

Microbiological monitoring showed periodic rises in the excretion, which we interpreted as sporadic cases of infection, excluding cyclicity with an unambiguous determination of the tendency to change the pathogens-leaders, due to Salmonella other categories.

## S. Enteritidis

According to the results of microbiological monitoring of the etiological structure of salmonellosis pathogens detected from stool samples of sick children, the established proportion of S. Enteritidis was 18.2%.