

THE REGULARITY OF SALMONELLA SPP IN KHARKIV RESIDENTS DEPENDING BY SEASON

Dotsenko R.*, Tishchenko I.*, Hirna T.***, Geyderikh O.*, Filimonova N.*

* Kharkiv National University of Pharmacy, Kharkiv, Ukraine

** Communal enterprise "Sanepidservis", Kharkiv, Ukraine

Introduction. Salmonellosis is a serious medical and social problem. This is due, first of all, to its wide spread, often severe course, especially in young children and the elderly, the possibility of process chronization. Salmonellosis can provoke the emergence or exacerbation of other chronic diseases. The epidemiological situation of salmonellosis in most countries of the world and in Ukraine is estimated today as unfavorable with a tendency for further deterioration.

Salmonellae, mainly *S. typhimurium*, cause nosocomial diseases. In addition to the damage of digestive organs, salmonella can cause the development of sepsis, especially in the presence of congenital or acquired immunodeficiency (salmonellosis sepsis is attributed to HIV-related diseases), with the formation of foci of inflammation in various organs and tissues.

The aim of the study was to investigate the regularity of the release of *Salmonella spp.* from Kharkov residents, depending on the 2015 season.

Materials and Methods. The study of feces and vomiting was carried out for diagnostic and prophylactic purposes with the help of microbiological research methods, in accordance with the orders and methodical instructions of the Health Ministry of Ukraine. Sampling was carried out with further microbiological examination, and internal filler documentation was analyzed on the basis of the communal enterprise "Sanepidservis". Laboratory glassware and equipment and the following nutrient media were used for the study: Endo medium, bismuth sulfate agar, a number of sugars (fructose, sucrose, glucose), Kliger medium, "salmonella row" (nutrient agar, semi-solid agar by Edwards, Raj Hans medium, acetate agar, urea, lysine, phenylalanine).

General requirements for the selection, packaging and transportation of material to the laboratory are set out in State Sanitary Rules 9.9.5.-080-2002 "Rules of arrangement and safety of work in laboratories (departments) of microbiological profile", approved by the resolution of the Chief State Sanitary Doctor of Ukraine dated 28.01.2002 № 1.

Results and Conclusions. In 2015, four serovars - serovar *Enteritidis var* - were identified and identified. *Jena*, *S. enterica serovar typhimurium*, *S. enterica serovar tshiongwe*, *serovar montevideo*. For this swarm, serovar *Enteritidis var* was isolated. *Jena* – 90 strains. Of these, in January – 2 strains, in February – 4, in March – 5, in April – 11, in May – 9, in June – 18, in July – 16, in September – 2, in October – 3, in November – 1, in December – 1. In 2015, *serovar typhimurium* was isolated – 112 strains. In January, this serovar was not isolated, in February it was isolated 2 strains, in March – 5, in April – 13, in May – 12, in June – 18, in July – 22, in August – 9, in October – 9, in November – 5, in December one strain was seen. *Serovar tshiongwe* was isolated for this swarm – 91 strains. Of these, in January – 2 strains, in February – 2, in March – 5, in April – 13, in May – 14, in June – 20, in July – 11, in August – 4, in October – 2, in November – 2, in December this serovar was not determined. For this swarm *serovar montevideo* was isolated – 98 strains. Of these, in January and February this serovar was not determined, in March – 6 strains, in April – 6, in May – 18, in June – 22, in July – 18, in August – 7, in October – 3, in November – 1, in December this serovar was not determined. Therefore, according to our study, the seasonality of *Salmonella* infection is clearly expressed, so the increase in the number of visits to medical institutions is observed from the end of spring and throughout the summer, the peak of the visits can be noted from the end of April to the end of August, which can be explained by the deterioration of food storage conditions.