Progress in salmonella isolation and their serovar composition in pigs

Olga VITKova**, Olga PRUNTOVA*, Olga RUCHNOVA*, Julia SHURACHOVA**

* FGI ‘Federal Center for Animal Health’ (FGI ARRIAH) Vladimir, Russia
** FGI “Central Scientific and Methodical Veterinary Laboratory”, Moscow, Russia

*600901, Yu`revets, Vladimir, RUSSIA FGI ‘Federal Center for Animal Health’ (FGI ARRIAH)
et: pruntova@arriah.ru ; fax: +7(4922)26-38-77

Abstract

Salmonellosis monitoring and control in farm animals in the RF are performed by several state services and according to some national programmes. One of the trends in salmonellosis control is the “Programme for risk identification and assessment in the context of targeted veterinary monitoring of animal product safety in the RF territory”. The work was aimed at the analysis of data of monitoring of salmonellosis outbreaks in pigs, which occurred in the RF during 2005 – 2009. Within this period 38 712 diseased animals and 22 631 (58.46%) dead animals were reported in the salmonellosis outbreaks among pig population. The mortality was due to salmonella infection. According to the laboratory diagnostic data, the RF veterinary laboratories tested 107 996 samples of pathological materials during this period and salmonella of various serovariants were detected in 4174 (38%) samples. During the observation period Salmonella enterica was the most often to isolate: S. Choleraesuis (from 71.8% to 81.5%), S. Typhimurium (from 2.0% to 16.5%), S. Dublin (from 2.2% to 5.7%), S. Enteritidis (from 2.2% to 2.7%). Other salmonella serovariants (S. Hamburg, S. London, S. Muenchen, S. paratyphi B, S. Lagos, S. Nancy, S. Anatum, S. Adamstua, S. Veddel, non-typed and others) amounted to 19.6%. During animal food safety monitoring, pork samples amounted to 13.4% of the total amount of samples. Salmonella were detected in 1.6% of samples. The dominating serovariants were S. Typhimurium (29.8), S. Choleraesuis (19.7), S. Enteritidis (7.7), S. Lagos (5.8).