ANALYSIS OF MICROBIOLOGICAL TESTS RESULTS FOR PORK AND PORK PRODUCTS PRODUCED IN THE CENTRAL REGION OF THE RUSSIAN FEDERATION IN 2012-2016

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The FGBI “ARRIAH” annually performs tests of raw food materials and ready-to-eat food products manufactured in some Oblasts of the RF Central Region in the framework of National laboratory veterinary monitoring of banned and harmful substance residues in live animals, products of animal origin and feed in the Russian Federation territory. The study was aimed at analysis of the results of microbiological tests of pork and pork products produced in the Vladimir, Ivanovo and Kostroma Oblasts in 2012-2016. During this period 3,878 tests were carried out including 1,062 tests of pork (27.38%); 293 tests of offal (7.56%); 1,264 tests of pork fat (32.59%), 1,259 tests of pork preparations (32.46%). It was demonstrated that 5.57% of samples of raw meat and food products were non compliant with microbiological criteria laid down in hygienic standards. Therewith, the proportion of samples that were noncompliant with sanitary and hygienic requirements (total viable count and coliforms) and safety criteria (detection of Listeria monocytogenes and Salmonella) increased from 1.63% in 2012 to 14.89% in 2016. Noncompliance with sanitary and hygienic criteria indicates problems in sanitary control and HASPP system absence at pork- and porcine product-producing establishments. Analysis of porcine products monitoring with microbiological tests (detection Listeria monocytogenes and Salmonella bacteria) for 5 years demonstrated an increase in their contamination with pathogens: Salmonella spp. detection rate increased from 2% in 2012 up to 5.7% in 2016; L. monocytogenes contamination detection rate increased from 0.66% in 2012 up to 14.77% in 2016. Increase in pork contamination with Salmonella correlates with data on Salmonella epidemic situation in pigs in the Russian Federation (number of infected settlements and diseased animals also increased) whereas increase in Listeria contamination does not correlate with data on Listeria freedom of the RF pig establishments.