

Report on zoonosis, foodborne and waterborne diseases in the Slovak Republic in 2015

This report describes 32 zoonotic causative agents, 5 foodborne diseases without zoonotic potential and 4 waterborne diseases. From all causative agents 22 are of the bacterial origin, 8 parasites, 10 viruses and prions.

In 2015 there were notified 23 482 human diseases caused by these 41 causative agents; 29,9% was related to campylobacterioses, 21,7% to salmonelloses and 19,7% were caused by *Rotavirus*. Higher contribution to diseases also showed the *Norwalk virus* 8,9%, *Clostridium difficile* 6,1% and *Borrelia burgdorferi s.l.* 3,9%. During 2015 in Slovakia have been notified 503 epidemic outbreaks, from which 44,9% were salmonelloses, 20,5% campylobacterioses and 18,3% were caused by *Rotavirus*. A smaller contribution percentage on the outbreaks showed *Hepatitis A virus* 6,9%, *Norwalk virus* 5,9%, *Staphylococcal enterotoxigenesis* 1% and Tick-borne encephalitis 0,8%. These 41 causative agents caused death of 56 patients.

There were tested 46 089 samples of food for 11 causative agents and the positive findings were determined in 1% of the samples. Higher contribution to positive findings were related to *Escherichia coli* 4,6%, *Staphylococcus aureus* 1,6% and *Listeria monocytogenes* 1,47%.

Within the official controls, screenings, monitorings, research and from sick or dead animals the presence of 26 causative agents were monitored in 798 359 samples from livestock and wild animals, pets and ZOO animals.

Feedingstuffs were examined for the presence of *Salmonella* spp. (0,8% samples with positive finding) and *Clostridium* spp., in case of which a higher percentage of positive samples were determined within the examined feedingstuffs that represented 8,2% of positive samples.

With the result of 2,7% of positive samples, 99 392 samples from the environment were examined for the presence of 6 causative agents. The highest rate of contribution to positive findings belonged to *Legionella* spp. 11,4% and *Escherichia coli* 4,96%.

Also the presence of 4 causative agents was tested in vectors with prevalence from 0 to 10%. The highest prevalence 10,4% was in ticks *Ixodes ricinus* for Tick born encephalitis. Report also includes the results of antimicrobial resistance which has an increasing trend worldwide and represents a real risk in the treatment of infections. Antimicrobial resistance was monitored in *Salmonella* spp., *E. coli*, *Campylobacter* spp. and *Staphylococcus aureus*.