

Information on infectious agents

ULSVIS collects and analyzes the data on infectious agents isolated in the laboratories operating in 22 personal and public health care institutions and private laboratories. In 2016, the clinical material of 5.812 individuals, who were subjected to bacteriological, parasitological and serological tests, was examined in the laboratories.

Among infectious agents registered in 2016, intestinal infectious agents accounted for 76.2%. *Campylobacter* (50.5%, dominate *C.jejuni*) and *Salmonella* (42.4%, dominate *S.enteritidis*) were the predominant intestinal pathogens.

Identification of infectious agents from clinical samples (type, serogroup and serotype) remain a serious problem. Typing and subtyping of Human zoonotic agents, and surveillance of antimicrobial resistance is regulated by legislation, aimed at improving the quality of microbiological diagnostics and ensuring that the cultures of infectious were identified agents isolated in infection outbreaks were identified and typed.

Neither serogroup nor serotype of the major part of cultured microorganisms of *Streptococcus pneumoniae* and *Neisseria meningitidis* was identified. In 2016, 108 pathogens *Streptococcus pneumoniae* were cultured from blood and/or cerebrospinal fluid, of which 96 were serotyped. Mostly *Streptococcus pneumoniae* registered serotypes 3, 14 and 19A. Of all cultured *Neisseria meningitidis* 32 agents were serogroup B, 5 microorganisms were serogroup C and 2 bacterias were serogroup W135. This serogroup is rarely registered in Lithuania, just one case was at 2010.

Treating with antimicrobials, the resistant of microorganism is also increase. In 2016 was registered a huge percent of Ciprofloxacin-resistant *Campylobacter* – 88.1%, Tetracyclines-resistant *Campylobacter* – 69.4 %; Ampicilines resistant *Salmonella typhimurium* – 78,1%, Tetracyclines – resistant *Salmonella typhimurium* – 68,1%; Nalidixic Acid-resistant *Salmonella enteritidis* – 12.6 %, Ciprofloxacin-resistant *Salmonella enteritidis* – 7.6% and ect.

The data of 2010-2016 years shows that among registered salmonella bred from clinical samples there were serotypes and had a multiple antimicrobial resistance. According to ULSVIS data, *Salmonella bovismoribificans* and *Salmonella typhimurium* bacteria are particularly multiple antimicrobial resistance.