

## **Nosocomial infections (Healthcare - associated infections)\***

Nosocomial or healthcare - associated infections (hereinafter - HAI) are a special group of infectious diseases, which differ from other diseases by demonstrating a variety of pathogens and epidemiological patterns, and causing complications in prevention and management. HAI are frequent in all countries. HAI prevalence depends on many factors: the duration of treatment in the hospital, the patient's immune status, the number of invasive procedures, its nature, resistance of microorganisms to antibiotics, etc<sup>1</sup>. Despite the modern infection control and prevention measures, HAI remains an important personal and public health problem.

The overall prevalence of HAI in Lithuanian general hospitals was 4.4 % (in 2016). In 2016, HAI prevalence among children (2.4 %) was 1.9 times lower than in adults (4.6%). The highest prevalence of HAI was registered in general hospitals – 4.8 %).

The dominant infections in HAI structure were pneumonia and other lower respiratory tract infections.

In recent years, intravascular catheters were prevailing risk factors for HAI in hospitals of Lithuania. Intravascular catheters in Lithuanian hospitals were used in 32.5% of tested patients. In intensive care units, the most common risk factor for adults was urinary bladder catheter or stoma.

In 2016, more (14%) HAI cases were confirmed by microbiological tests, compared to previous years (2015). Only in 8 (10.3 %) HAI case (out of 78) in hospitals of supportive care and nursing facilities microbiological tests were performed. Most common agents in Lithuanian general hospitals: staphylococcus, *Klebsiella spp.*, *Escherichia coli*, *Enterococcus spp.*, *Acinetobacter spp.*, *Pseudomonas aeruginosa*. In 2016, the use of antimicrobial drugs for preventive purposes decreased (14.7 % compared to 17.5 % in 2015). Most antibiotics in intensive care units were prescribed for empirical treatment and only 22.2% of antimicrobial drugs were prescribed after micro-organism was identified.

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<sup>1</sup> International Federation of Infection Control (IFIC). Basic concept of infection control, 2016; 3-4

\* According to the data from Hygiene Institute pursuant to Order No. V-1110 of 14 November 2008 On Epidemiological Surveillance and Control of Nosocomial Infections (Official Gazette. 2008, No. 138-5465)

