

## **Parasitic diseases**

Parasitic diseases in Lithuania account for about 0.2 % of all communicable diseases. 1939 cases of parasitic diseases were registered in Lithuania in 2015. Enterobiasis accounted for about 73.5 % of all helminthiases, ascariasis accounted for 10.9 %, and other parasitic diseases accounted for 15.6%.

From 2006 to 2015, incidence rate of enterobiasis declined from 247.6 cases/100 000 population to 49.1 cases/100 000 population, ascariasis - from 20.9 cases/100 000 population to 7.3 cases/100 000 population. The decline in enterobiasis- and ascariasis-related morbidity can be attributed to decrease in the number of tests. These diseases do not display severe clinical symptoms and are often identified during preventive examination, and the affected rarely seek medical attention.

Cases of trichinosis are reported in the country annually. The highest incidence was observed in 2009 and 2010 with 3.3 cases /100 000 population and 2.3cases /100 000 population respectively. In 2014, the incidence of trichinellosis in Lithuania, compared to the EU (the EU's overall ratio was 0.07 cases / 100 000 population) was one of the highest amounting to 0.6 cases /100 000 population. During the period of 2006-2015 a total of 414 cases (including 21 sporadic cases and 37 outbreaks) of trichinellosis were reported. Epidemiological studies showed that human trichinellosis in Lithuania is transmitted through consumption of infected pork and wild boar. Outbreaks of trichinnellosis are recorded every year (2 or more epidemiologically associated cases).

2006-2015 data show that 51.4% of the cases occurred due to consumption of infected pork, 37.8% due to consumption of infected boar, whereas the source of trichinnellosis in 10.8 % cases was not detected.

Illnesses caused by tapeworms are reported in Lithuania every year as well. Over the last decade (2006-2015) a total of 265 cases of tapeworm caused illnesses were reported. Echinococcosis accounted for 93.5% of all tapeworm invasions. If before 2003, only isolated cases of this serious disease were recorded, the situation in 2004 in Lithuania changed – there was a significant increase in the number of cases of echinococcosis. Incidence rate increased from 0.05 to 1.12 cases/100 000 population. During the last decade most of echinococcosis cases were reported in 2009 (36 cases in

total), morbidity rate reached 1.05/100 000 population. In 2014, the overall echinococcosis morbidity rate in EU was 0.18/ 100 000 population. That year, the incidence rate for echinococcosis in Lithuania was one of the highest among EU countries (0.74 cases/ 100 000 population), exceeded only by Bulgaria (4.17 cases/ 100 000 population).

Cases of imported malaria are also reported every year; there is an increase in numbers of invasive malaria among tourists and businessmen. According to data 2012, a total; of 5.124 cases of malaria in 25 EU and EEA were reported. France alone accounted for 36% of all the cases (1.851 cases) while UK accounted for 24% (1.378 cases). Incidence rate fluctuated from 0.05 to 2.19 cases per 100 000 population. The highest incidence rates in 2012 were observed in the United Kingdom (2.19 / 100 000 population). A total of 26 cases of locally acquired malaria were reported (22 cases in Greece, 2 in Belgium, 1 in France).

Over the five years, not only the cases of imported malaria, but other imported parasitic diseases, such as skin leishmaniasis, necatoriasis and strongyloidosis were reported in Lithuania.