

## Infections with *Echinococcus* spp. in the epidemiological records of Poland

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Parasitic infections with *Echinococcus* spp. are currently covered by epidemiological surveillance in Poland, and are registered by the State Sanitary Inspection on the basis of reports sent by doctors. The aim of the study was to examine the epidemiological aspect of *Echinococcus* infections in Poland in the period 2006–2015.

Individual reports of cases of echinococcosis sent to the National Institute of Public Health – National Institute of Hygiene (NIPH-NIH) by Sanitary / Epidemiological Stations were examined. In addition, data from the NIPH-NIH annual bulletins and „Infectious diseases and poisoning in Poland” (GIS) for the period 2006-2015 were reviewed.

In the period 2006–2015, a total number of 375 cases of echinococcosis was registered. The average annual incidence was 0.098 per 100 000 population. After 2005, cases of echinococcosis were recorded in all voivodships. The highest average annual incidence was recorded in Podlaskie (0.594), which was six times higher than the national rate, and Warmińsko-Mazurskie (0.438), where it was four times higher. The incidence rate for echinococcosis was significantly higher in rural areas (0.137) than in urban ones (0.073). It was also higher among women (0.138) than among men (0.055). In the years 2006–2014, echinococcosis was the cause of death of at least 14 people (GUS data). A slight downward trend in the incidence of echinococcosis was observed until 2011; however, this has been reversed since then. At the same time, a slight increase was observed in the percentage of registered cases requiring laboratory tests to differentiate *Echinococcus* species: from 54.1% in 2006–2010 to 62.4% in 2011–2015. Comparing these two periods, there a greater number of infections with *E. multilocularis* (60) than with *E. granulosus* (53) were observed for the first time since records began. The period 2006–2010 saw more cases of hydatidosis (*E. granulosus* 71.4%).

Because of their severe consequences, infections with *Echinococcus* need to be constantly monitored, despite the relatively small number of recorded cases. The increase in the number of *E. multilocularis* infections as a proportion of total echinococcosis cases highlights the need for attention in this area.