

MEASLES OUTBREAK IN THE NIŠAVA AND TOPLICA DISTRICTS*Zoran Veličković^{1,2}, Mirko Ilić¹, Nataša Rančić^{1,2}*

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Measles are a highly contagious viral disease. Until the discovery of a vaccine, it was one of the most common diseases of children younger than 5 years. The aim of this paper was to present the measles outbreak in the territory of the Nišava and Toplica Districts in 2015. To detect outbreaks, the recommendations of the Commission for Infectious Diseases of the European Union (EU) from 2012 were used. Analysis of blood serum was carried out in the reference laboratory of the Institute of Virology, Vaccines and Sera Torlak. From January to 31st of August 2015, 240 patients with measles were registered, of which 103 (42.9%) men and 137 (57.1%) women. The first sick person was detected on the 11th of January (six-year-old unvaccinated child from Niš). The largest number of patients was registered in April (71) and May (61). Of the total number of patients, 210 (87.5%) were younger than 40 years. The largest number of patients was registered in the age of 1-4 years (n=55), 30-34 (n=20) and 35-39 (n=16). Only two (0.8%) persons were vaccinated with two doses, 7 (2.9%) had received one dose of vaccine, 127 (52.9%) were unvaccinated and in 104 (43.3%) patients vaccination status was not known. The diseases was laboratory confirmed in 120 (50%) patients, 55 (22.9%) were suspected cases in which the epidemiological link was established, in 40 clinically diagnosed cases serum was not taken. Twenty-five sera were negative. Complications were found in 57 (33.1%) patients, of which 21 (36.8%) had diarrhea, 8 (14.05) had pneumonia, and in 7 (12.3%) cases malnutrition was registered. Before the introduction of vaccination in 1971, measles were the disease among the youngest population. After the introduction of vaccination, the structure of patients was altered - the number of patients younger than 5 years decreased, and the number of those older than 15 increased. In the present epidemic, the majority of cases were unvaccinated, and in the vaccinated population more than ten years after the vaccination had elapsed. Due to the limited duration of immunity, vaccination coverage less than 95% of the vulnerable population, irregular supply of vaccine as well as the increasing activity of the anti-vaccine lobby, new cases of measles can be expected in the future. *Acta Medica Medianae 2016;55(2):71-75.*

Key words: measles, vaccination, epidemics