

FIRST SIX MONTHS OF MEASLES OUTBREAK IN THE REPUBLIC OF SRPSKA IN 2024

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DOI: 10.5937/BatutPHCO24033R

Background: Surveillance is an essential component of measles and rubella elimination. Persistent low routine vaccination is the most critical driver of the measles outbreaks. MMR coverage in the Republic of Srpska in the last years is significantly below 95% (in 2023 1. dose - 62,07 and 2. dose - 76,03%).

Methods and Objectives: The aim of this descriptive study is to analyse the data on measles patients in the first six months of the outbreak that has started in 2024 in the Republic of Srpska. Information on each reported measles patient was obtained via the infectious disease notification form. Based on the measles case definition, each patient was reported as possible, probable or confirmed case according to the European Center for Disease Control (ECDC) definitions. Each sample is tested both for measles and rubella according to the recommendations.

Results: Since the beginning of 2024, a total of 256 measles cases have been registered, of which 104 are possible (40.63%), 87 are probable (33.98%) and 65 are confirmed (25.39%). Gender distribution is almost equally represented. The majority of patients belong to the age group 1-4 (41.41%) and 5-9 (28.91%). The largest number of patients was reported in cities where outbreaks was reported, namely Bijeljina (72.66%), Banja Luka (10.16%) and Istočno Novo Sarajevo (5.47%). Of total, 41 cases (16.02%) were hospitalized, of which 51% were unvaccinated or the vaccination status was unknown (29.27%). A total of 24 cases had complications, of which 70.83% were unvaccinated and 12.50% had unknown vaccination status.

Conclusions: The appearance of measles in the Republic of Srpska was expected given the low coverage of the MMR vaccine. Measles was registered 13 times more often in the unvaccinated, while complications occurred 17 times more often in the unvaccinated. There is an urgent need to improve vaccination coverage rates with both doses of the MMR vaccine.

Keywords: measles, outbreak, surveillance, Republic of Srpska