

Seroprevalence of Cytomegalovirus among school-aged children in Russian Federation

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Background. Cytomegalovirus (CMV) is an important human pathogen in case of immature or compromised immune system, such as the unborn child have. We thus aimed to examine risk factors for CMV infection in young people in Russia and, in order to improve our understanding of CMV epidemiology and guide future disorder prophylaxis strategies.

Objectives. To explore cytomegalovirus (CMV) seroprevalence among school-aged children in different age groups.

Methods. We conducted retrospective evaluation of the seroprevalence of CMV IgG antibodies among immunocompetent school-aged children ($n = 1315$), age group from 10 to 15 years, from different regions in Russia ($n = 7$). Children were divided into 2 groups; in the first group was children under 13 years old, in the second group — over 13 years old. Comparison of two independent groups was deter-

mined using the Mann-Whitney test and the Kruskal-Wallis test. We analyzed the prevalence of CMV serotype and risk factors for infection.

Results. We estimated a total CMV seroprevalence of 74.6% ($n = 981$). The median of age in the 1st group was 10.9 (10.6; 11.3), the median of age in the 2nd group was 14.9 (14.6; 15.1). CMV seroprevalence was strongly associated with age, increasing from 71.8% in the first group, throughout adolescence (77.2% in the second group) $p = 0,048$. There were no statistically significant gender differences between regions.

Conclusion. The results are consistent with global data and require further study. These estimates of the CMV distribution will help develop national and regional models and algorithms for disorder prophylaxis in target populations.