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MONITORING OF POST-VACCINAL IMMUNITY AMONG THE PRESCHOOL-AGED CHILDREN OF MINSK

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Post-vaccination immunity is the basis of anti-epidemic measures. It is carried out as part of the national vaccination program, in order to achieve collective immunity sufficient to prevent the development of epidemics for this infection. Since the formation of post-vaccination immunity is largely mediated by the individual characteristics of the body and the reactivity of the immune system in a certain period of time, the provision of collective immunity requires monitoring of post-vaccination immunity in children.

Keywords: vaccine, vaccination, immunity, children, infections, monitoring, statistics.

Objective: to monitor post-vaccination immunity in preschool children in Minsk.

Materials and methods: the study took: the national vaccination calendar of the Republic of Belarus, the calendar of preventive vaccinations according to epidemic indications, reports of Minsk children's clinics on conducting preventive vaccinations of preschool children, at the expense of the budget and on a paid basis (considering that all vaccinations included in the national calendar is done for free), Decree of the Ministry of Health of the Republic of Belarus No. 42 of 05/17/2018, Decree of the Ministry of Health of the Republic of Belarus No. 191 of 02/27/2014, Decree Ministry of Health of the Republic of Belarus No. 49 dated 05/31/2011, order of the Ministry of Health of the Republic of Belarus No. 852 dated November 14, 2006.

Results: Thanks to effective vaccination programs for children, there is a significant reduction in many infectious diseases in our country:

1. There are no cases of polio, which previously led to the development of malformations and disabilities.
2. The incidence of rubella decreased by 43,000 times (from 43,000 cases in 1997 to 1 case in 2018).
3. The incidence of measles has decreased by more than 1,000 times (in the pre-vaccination period (before 1967), about 70,000 cases were recorded per year, in 2018 - 53 cases), the incidence of measles was due to 5 imported cases from countries where measles is registered : Russian Federation, Poland, Georgia, Ukraine and Israel (out of the number of reported measles cases, 38 were related to imported ones).
4. Incidence of diphtheria - in the pre-vaccination period (before 1957) 14,000 cases were recorded, since 2012 there have been no cases.
5. The incidence of viral hepatitis B - 14 times (from 1266 cases in 1998 to 76 in 2018).
6. Tetanus morbidity - isolated sporadic cases of tetanus were recorded, since 2011 there have been no cases.