

ANEMIES IN CHILDREN FROM 0 TO 3 YEARS

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The article shows the prevalence of anemia among children, based on the example of Soligorsk.

Keywords: children's population, anemia incidence, ecological causes.

In the Republic of Belarus, diseases of the respiratory system, trauma, skin and subcutaneous tissue diseases, diseases of the digestive system, as well as infectious and parasitic diseases take the leading place in the structure of the primary incidence of children. At the same time, the fact that, according to the National Statistical Committee of the Republic of Belarus, an increase in cases of diseases of various kinds of anemia is also important.

To improve the health of the younger generation, it is necessary to take active measures on the part of the state, health authorities and institutions: to increase the effectiveness of providing medical care to children, and to develop preventive programs aimed at reducing the incidence [1].

According to statistical data of the Ministry of Health of the Republic of Belarus, registered cases of anemia in children in 2016 were found to be 2566,9 per 10000 population [2]. This indicator in 2015 has increased sufficiently in comparison with previous years. Over the past three years, the incidence rate in children under 14 years of age has been recorded at a high level. In 2016, the total incidence of children under 14 years of age increased by 7,8 % compared with 2015 [2].

The study of the incidence rates of various types of anemia in children aged 0 to 3 years in Soligorsk was carried out by means of an analysis of the reports on the number of cases in the Soligorsk Central District Hospital.

The results of our study allowed us to draw the following conclusions:

1. Morbidity of the child population of the Republic of Belarus in the period from 2012 to 2016. has a significant increase: the total incidence of children increased by 32 %, primary incidence – by 45 %. On the city of Soligorsk these indicators, on the contrary, tend to decrease, but the number of children standing on dispensary records increases.

2. The deteriorating state of children's health is based on a whole range of medical, socio-economic, environmental causes.

3. The total incidence of anemia in the children's population (aged 0–3 years) in Soligorsk as of 2016 was 312 cases per 1000 inhabitants, which is several times less than in 2015 (412 cases) and higher than in 2010 (300 cases).

4. Among the various types of anemia, predominant are iron deficiency anemia, the lowest in number of cases – anemia of a mixed type.

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ENGINEERING OF BACTERIAL STRAIN PRODUCING FUSION PROTEIN

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As a result of the study, a new recombinant strain *Escherichia coli* AA17, producer of chimeric protein consisting of human annexin A5 (AA5) and bacterial adenosine deaminase (ADase) was constructed. 18 mg of purified protein was recovered from 1 liter of cultural liquid. The protein content was about 7 % of the total cellular proteins