



INFANT MORTALITY IN THE REPUBLIC OF UZBEKISTAN

<https://doi.org/10.5281/zenodo.14544243>

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Abstract

Aim. Analysis of the indicator of infant mortality in the Republic of Uzbekistan on the basis of official statistics. **Materials and methods.** It was analyzed the data on infant mortality of the Republic of Uzbekistan for 2014-2023 years. The data used was taken from their official website (stat.uz) and generally accepted statistical methods were used in their processing. **Results.** In 2023, the number of deaths in the Republic of Uzbekistan amounted to 172,757 people, and the death rate was 4.7 per thousand inhabitants. Of the total number of deaths, 11,413 were children under the age of 5. Deaths of children under the age of 1 accounted for 71.6% (8,175 persons) of deaths of children under the age of 5. According to WHO, the Republic of Uzbekistan ranks second among Central Asian countries in terms of infant mortality, ranking 125th in the world. There is a decrease in the rate of infant mortality. if this figure was 10.8 %oin 2014, it has decreased to 8.5%o by 2023. **Conclusion.** A number of measures aimed at reducing infant mortality are being implemented in the Republic of Uzbekistan, and despite their results, the fact that this country ranks 125th among the countries of the world still indicates that there is a huge reserve for improvement in this regard and the need for further improvement of the health system.

Key words

infants, death, child mortality up to 5 years of age.

Introduction. Infant mortality is an important medical, social and economic indicator, since it characterizes not only the health status of the child population, but also the expected life expectancy and the health status of the entire population. According to WHO, 6,500 babies die every day. Infant mortality is 47% of children who died before the age of 5 [1, 2, 3].

In recent years, there has been a decline in infant mortality. If 5 million children died in 1990, the indicator was 2.3 million in 2022. The World Health Organization and UNICEF treat infant mortality as an important indicator that reflects the functioning of the country's health system. They consider the infant mortality rate as an indicator of the health and well-being of a nation and seeks to reduce it worldwide [3, 4, 5, 6, 7, 8, 9].

Goal. Analysis of the indicator of infant mortality in the Republic of Uzbekistan on the basis of official statistics

Materials and methods. It was analyzed the data on infant mortality of the Republic of Uzbekistan for 2014-2023 years. The data used was taken from their official website (stat.uz) and generally accepted statistical methods were used in their processing.

The obtained results and their analysis. The population of the Republic of Uzbekistan at the beginning of 2024 was 36799800 people. In 2023, a total of 961,962 children were born, while the birth rate in the same year was 26.1%. And the number of deaths in 2023 amounted to 172,757 people, while the death rate was 4.7 per thousand inhabitants. Children under the age of 5 accounted for 11,413 of the total number of deaths. Infants (i.e. children under the age of 1 year) accounted for 71.6% (8,175) of the total number of children who died before the age of 5 years (Fig. 1).

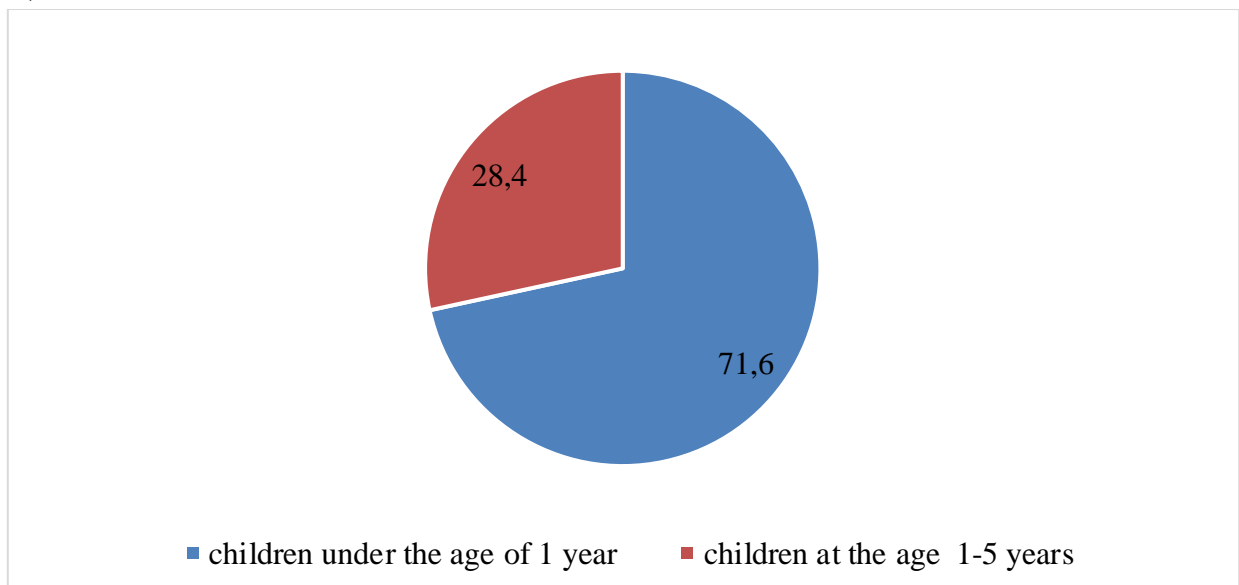


Figure 1. The proportion of infants (%) in children who died before 5 years of age.

According to WHO, the Republic of Uzbekistan ranks second among Central Asian countries in terms of infant mortality, ranking 125th in the world. These data indicate that there is still a large reserve in reducing infant mortality and the need for further improvement of the work carried out in this direction.



Table 1

Prevalence of births and infant mortality across different countries (2022)

Countries	Birth rate (per 1000 population)	Infant mortality rate (compared to 1,000 live births)
Japan	6,95	1,8
Australia	12,3	2,9
Germany	9,08	3,1
Great Britain By world	10,79	3,6
Russia	9,45	3,9
USA	12,28	5,4
Kazakhstan	15,38	8,9
Uzbekistan	15,53	11,7
Kyrgyzstan	19,54	15
Tajikistan	20,73	27,1
Turkmenistan	17,51	35,1
Afghanistan	35,46	44,7
Nigeria	47,08	73
Worldwide		27,9

A number of measures aimed at reducing infant mortality are being implemented in the Republic of Uzbekistan. As a result, there is a decrease in the infant mortality rate. Infant mortality in Uzbekistan in 2014 was 10.8%, falling to 8.5% by 2023 (Figure 2).

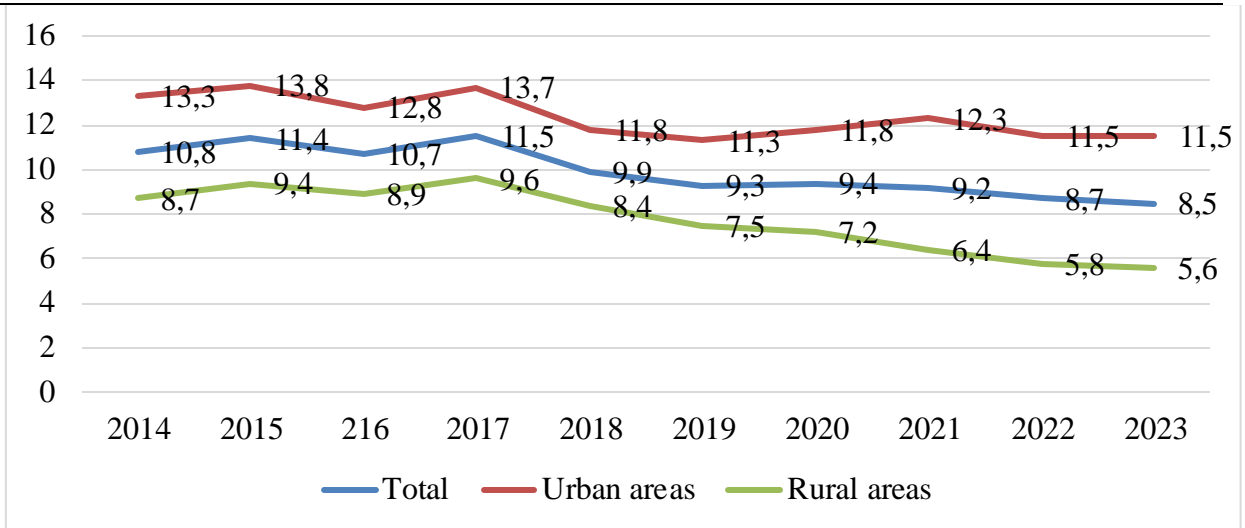


Figure 2. Infant mortality rate in urban and rural areas of the Republic of Uzbekistan (%).

Statistical analysis shows that the infant mortality rate in rural areas is lower than in urban areas. Infant mortality should be relatively lower in areas where medicine is well developed. But the information presented in the picture shows the opposite. Most medical institutions are located in cities, and those who live in a rural area also resort to them, especially in severe cases. We explain the difference between the infant mortality rate in cities and villages by the fact that children living in the village die in urban clinics, while in such cases they can be registered as urban deaths.

When analyzing by region, it was found that the infant mortality rate in 2023 was 11.5% in the city of Tashkent and the Republic of Karakalpakstan, which is the highest in the republic. The lowest was recorded in the Jizzakh region (5.3%) (Figure 3).

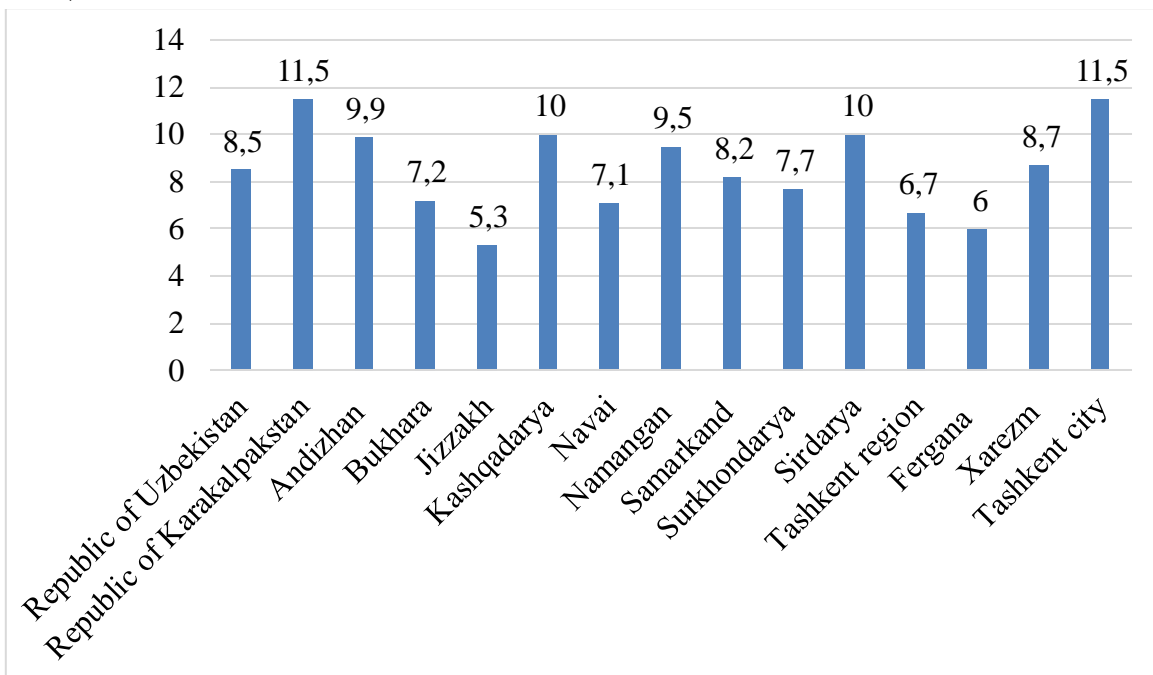




Figure 3. The prevalence of infant mortality across the Republic of Uzbekistan and its territories (‰).

A study of the correlation between fertility and infant mortality in the administrative-territorial units of the Republic of Uzbekistan showed that there is a direct average correlation ($R=0.37$). As a result of this analysis, it can be concluded that a higher birth rate in the regions can also lead to an increase in infant mortality.

Conclusion. A number of measures aimed at reducing infant mortality are being implemented in the Republic of Uzbekistan, and despite their results, the fact that this country ranks 125th among the countries of the world still indicates that there is a huge reserve for improvement in this regard and the need for further improvement of the health system.

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