

# SGA incidence in one of the regions of the Russian Federation

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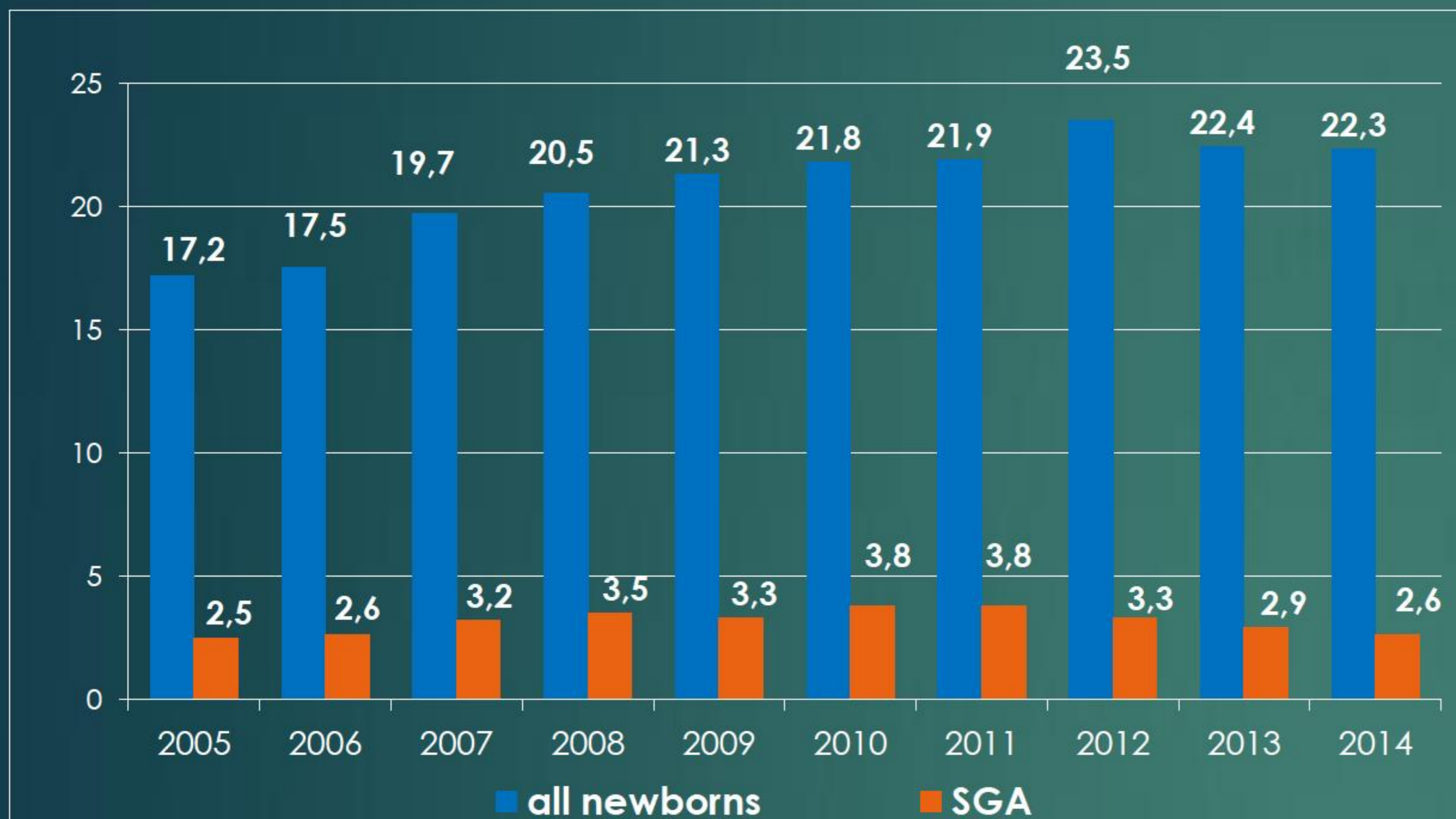
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**Background:** Intrauterine growth retardation (synonym SGA – «Small for Gestational Age») is connected with perinatal morbidity, neurological pathology and stature.

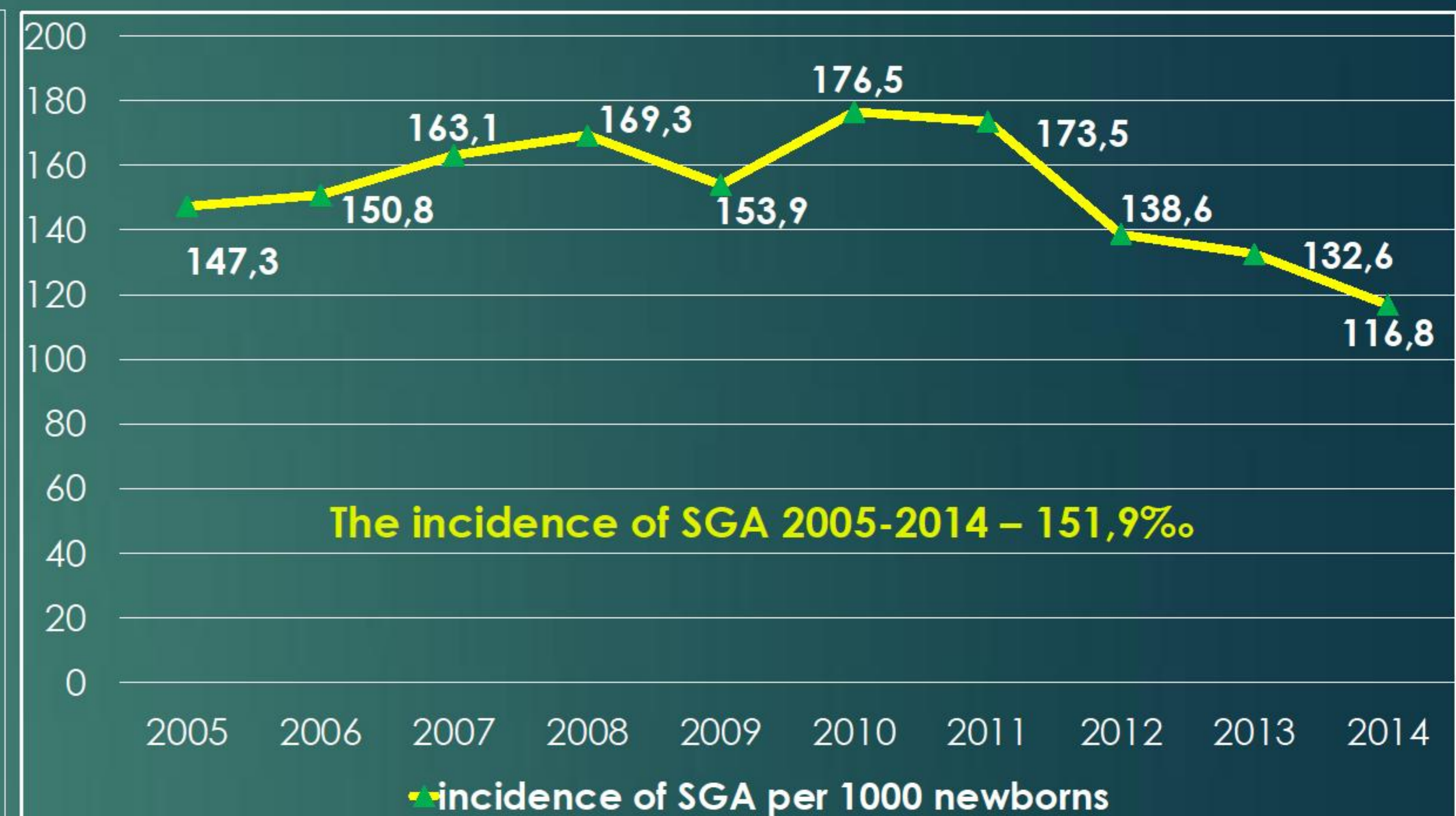
**Objective and hypotheses:** The purpose of this study was to estimate the incidence of SGA and its consequences in newborns and infants at the age 1.

**Method:** The incidence of SGA among newborns in the Udmurt Republic (the region of the European part of the Russian Federation) has been studied. SGA has been diagnosed according to national standards: birth weight and / or length below the 10 th percentile for gestational age.

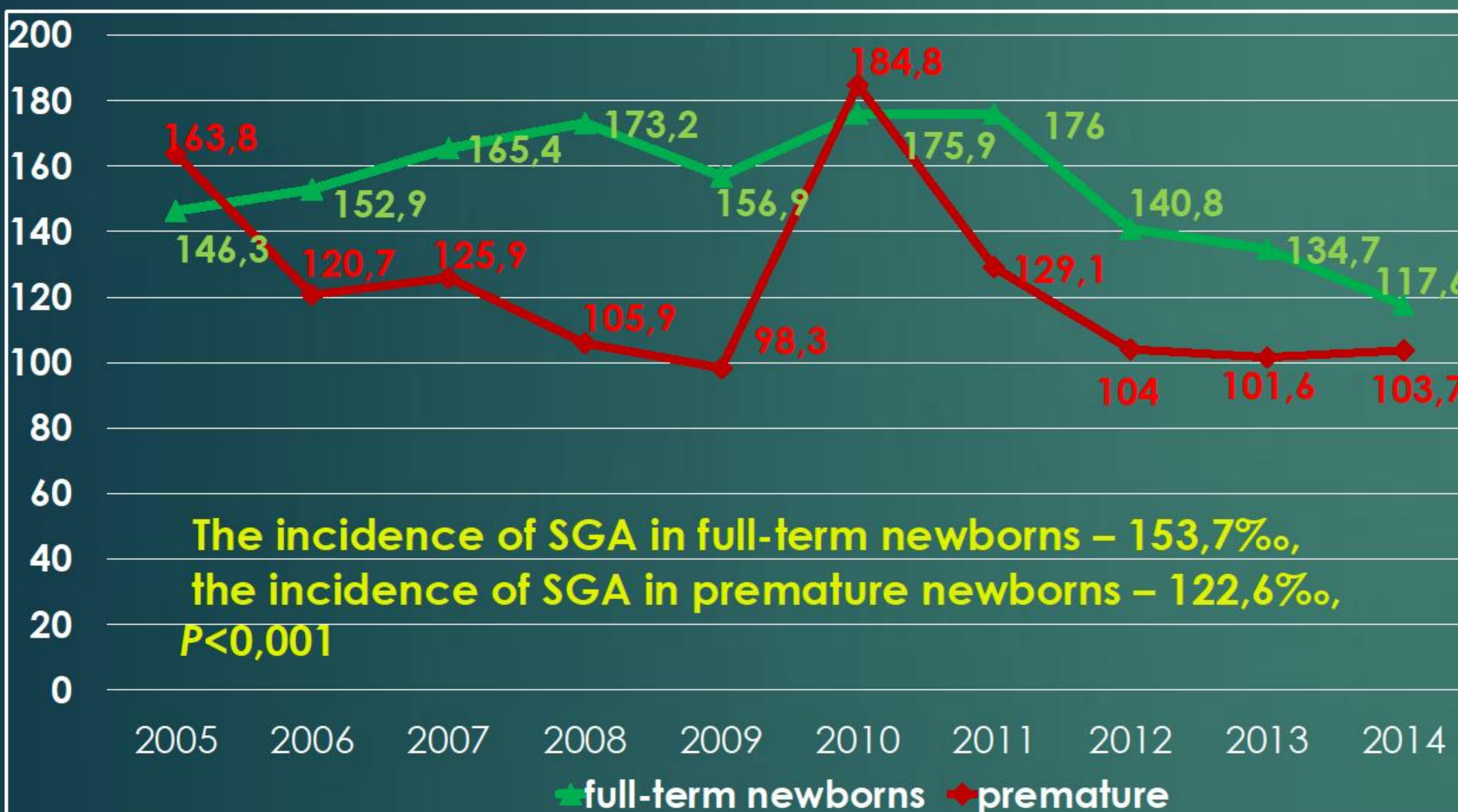
## Results:



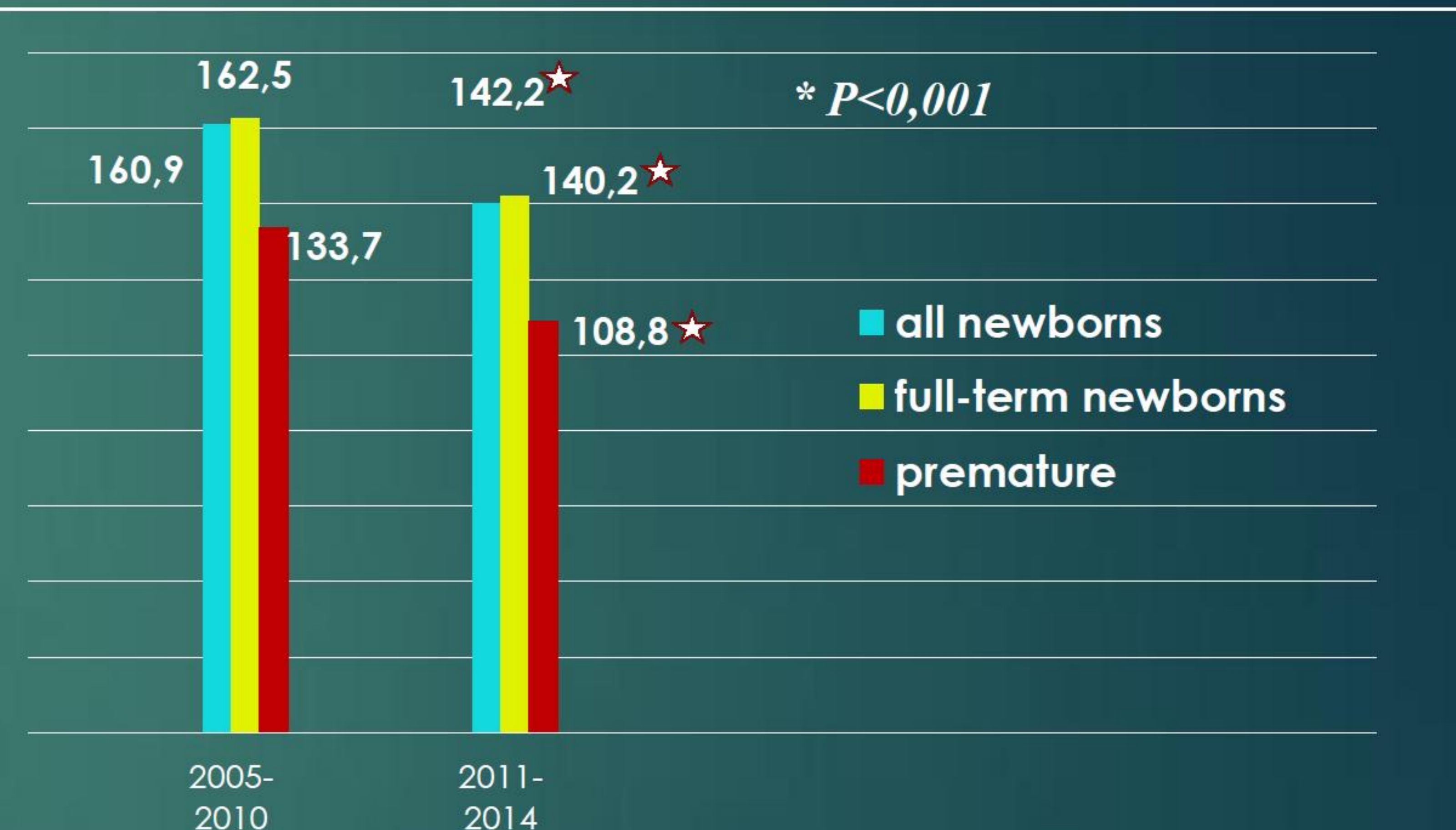
Pic.1. The number of all newborns and newborns with SGA during the period of 2005-2014 (thousands)



Pic.2. The incidence of SGA during the period of 2005-2014 (‰)  
The incidence of SGA 2005-2014 – 151,9‰.



Pic.3. The incidence of SGA among full-term newborns and premature newborns (‰)  
The incidence of SGA in full-term newborns – 153,7‰, the incidence of SGA in premature newborns – 122,6‰,  $P < 0,001$



Pic.4. The incidence of SGA during the period of 2005-2010 and 2011-2014 (‰)  
\*  $P < 0,001$

Clinical examination of 500 newborns has shown that SGA is connected with perinatal pathology of the nervous system ( $84,8 \pm 1,6\%$ ), perinatal infections ( $50,6 \pm 2,2\%$ ), metabolic disorders ( $26,0 \pm 1,9\%$ ). SGA consequences in infants at the age of 1 are the low rates of physical development ( $22,8 \pm 1,9\%$ ).

**Conclusion:** Our study indicates the high incidence of SGA that involves other medical problems.