

**SENTINEL EPIDEMIOLOGICAL SURVEILLANCE FOR INFLUENZA AND ARVI IN
THE CITY SHYMKENT OF THE SOUTH KAZAKHSTAN REGION IN THE EPIDEMIC
SEASON 2015-2016**

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Introduction: In 2014 in the Republic of Kazakhstan, in accordance with the recommendations of WHO and UNAIDS, sentinel epidemiological surveillance of influenza (SES) was introduced. We estimated the SES system for influenza in the conditions of the Shymkent city infectious hospital during the epidemic season 2015-2016.

Methods: Retrospective analysis of the effectiveness using of the standard definition of the case of severe acute respiratory infection (SARI) on the medical records of inpatients; Determination of the etiological structure of influenza by the laboratory PCR method.

Results: In the 2015-2016 epidemic season started from November to June, 5431 people were hospitalized with a diagnosis of acute respiratory infections in the city infectious diseases hospital. Among those hospitalized with ARVI SARI diagnosis was diagnosed in 588 cases, the largest number of them in January, February, December and March. According to the rules of SES, some of them were centrally examined in the virological laboratory using the PCR method, a total of 235 analyzes, of which 103 viruses were detected in 103 samples, that is, 44% of the patients examined. In 92.2% of cases (95 patients) type A, subtype H1N1, and in 7.8% (in 8 patients) - type A, subtype H3N2 were detected. The greatest number of laboratory detection of influenza cases among the surveyed was in January and February 2016, in a smaller number - in December 2015. Among the surveyed SARI in March-June 2016, the influenza virus was not detected laboratory-wide. When compared with the 2014-2015 epidemic season, The number of hospitalized patients with ARVI diagnosis was 5963, of which SARI was 517, 174 were screened by laboratory, 174 were detected in 56 cases; type A - 33 cases (H3N2), which was 59%; type B - 22 cases (39%). In 1 case, it was not possible to verify the type of virus detected.

Conclusion: The introduction of sentinel surveillance in Shymkent city of the South Kazakhstan region was an effective measure for monitoring the epidemiological situation of influenza in vulnerable groups of population. A high frequency of viruses of type A, H1N1 - in 92.2% of cases and type A, H3N2 - in 7,8% of cases was established in December - February 2015-2016 years.