The system of epidemiological surveillance of influenza and other ARVI in the Republic of Kazakhstan.
The introduction of a system of hospital epidemiological surveillance of influenza in hospitals of Almaty, Kazakhstan

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Site presentation
This study was funded by the Foundation for Influenza Epidemiology:
1. Infectious diseases municipal hospital - 300 beds.
2. Pediatric infectious diseases municipal hospital 360 beds.
Staff working for the study: 8am on Monday and 8am on Saturday each week. Before conducting and during the investigation the coaching staff.
The number of that population for hospitals: 1349282 and 161811 people

Methods

Data Collection: questionnaire
The main criterion for inclusion in the study:
European Centre for Diseases Control (ECDC) definition of influenza-like illness (ILI): - A combination of:
° At least one of the following four ILI systemic symptoms:
Fever or a feverishness
• Headache
• Myalgia
• Malaise
° At least one of the following three ILI respiratory symptoms:
Cough
• Sore throat
• Shortness of breath

Informed consent
Informed consent is required for all patients.
Laboratory examination
Was performed 1 year and older.

Results

Etiological structure (PCR +) of influenza viruses by subtype for 2010-2017, Republic of Kazakhstan, %

Comparison of ARI incidence and percentage of influenza vaccinated population in 2001/2002 - 2016/2017 seasons

The results of the study in the hospitals of the city of Almaty, Kazakhstan

Key aspects & challenges

Earlier rise in ARI incidence as compared to the previous season (50 – 2 weeks);
The republic incidence threshold was not exceeded;
Exceed in the own control ARI incidence levels in Akmola, Almaty, Kostanay, East-Kazakhstan and North-Kazakhstan oblasts between 51 and 03 weeks of the season;
Activity of A(H3N2) and B influenza viruses (beginning of the season with greater activity of influenza B virus and end of season with dominating A(H3N2).
No circulation of A(H1N1)pdm09 virus;
11.2% of the total population were vaccinated;
The country is taking measures to increase vaccination coverage against influenza.
Circulation of strains similar to vaccine ones (A/Hong Kong/4801/2014 and B/Brisbane/60/2008);
Sensitivity to oseltamivir and resistance to amantadine and rimantadine