

Грипп

Кафедра эпидемиологии и доказательной
медицины
Хасанова Г.Р.



- Ежегодные эпидемии
- Пандемии
- 1 миллиард случаев сезонного гриппа ежегодно, в том числе 3–5 миллионов случаев тяжелой формы заболевания
- Каждый год от респираторных патологий, вызванных вирусами гриппа, умирает от 290 000 до 650 000 человек
- Обострение хронических заболеваний
- Отсроченный риск ССЗ, в т.ч. случаев фатального ИМ и ОНМК.

Risk of stroke and myocardial infarction after influenza-like illness in New York State



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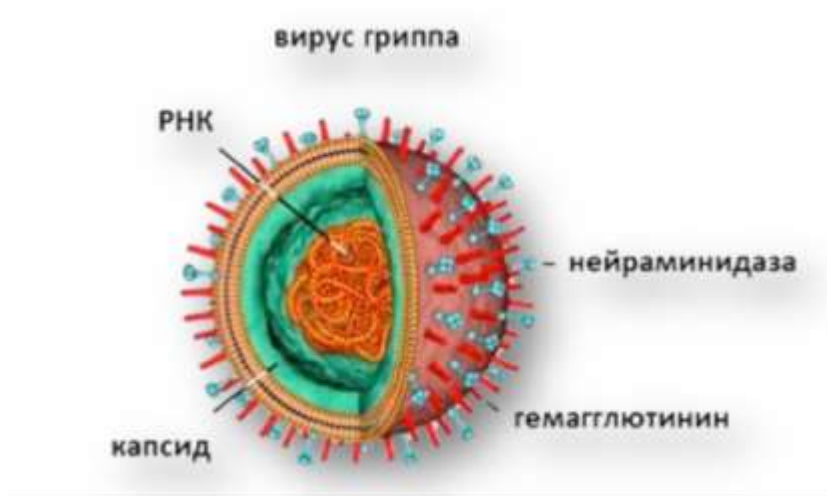
Abstract

Background: Influenza may be associated with increased stroke and myocardial infarction (MI) risk. We hypothesized that risk of stroke and MI after influenza-like illness (ILI) would be higher in patients in New York State. We additionally assessed whether this relationship differed across a series of sociodemographic factors.

Methods: A case-crossover analysis of the 2012–2014 New York Statewide Planning and Research Cooperative System (SPARCS) was used to estimate odds of ischemic stroke and MI after ILI. Each patient's case window (the time period preceding event) was compared to their control windows (same dates from the previous 2 years) in conditional logistic regression models used to estimate odds ratios and 95% confidence intervals (OR, 95% CI). We varied the case windows from 15 to 365 days preceding event as compared to control windows constructed using the same dates from the previous 2 years. Analyses were stratified by sex, race, and urban-rural status based on residential zip code.

Results: A total of 33,742 patients were identified as having ischemic stroke and 53,094 had MI. ILI events in the 15 days prior were associated with a 39% increase in odds of ischemic stroke (95% CI 1.09–1.77), increasing to an almost 70% increase in odds when looking at ILI events over the last year (95% CI 1.56, 1.83). In contrast, the effect of ILI hospitalization on MI was strongest in the 15 days prior (OR = 1.24, 95% CI 1.06–1.44). The risk of ischemic stroke after ILI was higher among individuals living in rural areas in the 90 days prior to stroke and among men in the year prior to event. In contrast, the association between ILI and MI varied only across race with whites having significantly higher ILI associated MI.

Conclusion: This study highlights risk period differences for acute cardiovascular events after ILI, indicating possible differences in mechanism behind the risk of stroke after ILI compared to the risk of MI. High risk populations for stroke after ILI include men and people living in rural areas while whites are at high risk for MI after ILI. Future



СОСТАВ ВАКЦИН ПРОТИВ ГРИППА ДЛЯ СЕЗОНА 2025/2026 гг.

- вирус, подобный A/Victoria/4897/2022 (H1N1)pdm09;
- вирус, подобный A/Croatia/10136RV/2023 (H3N2);
- вирус, подобный B/Austria/1359417/2021 (линия B/Victoria);
- вирус, подобный B/Phuket/3073/2013 (линия B/Yamagata).

Вакцинация — самый эффективный способ профилактики гриппа!

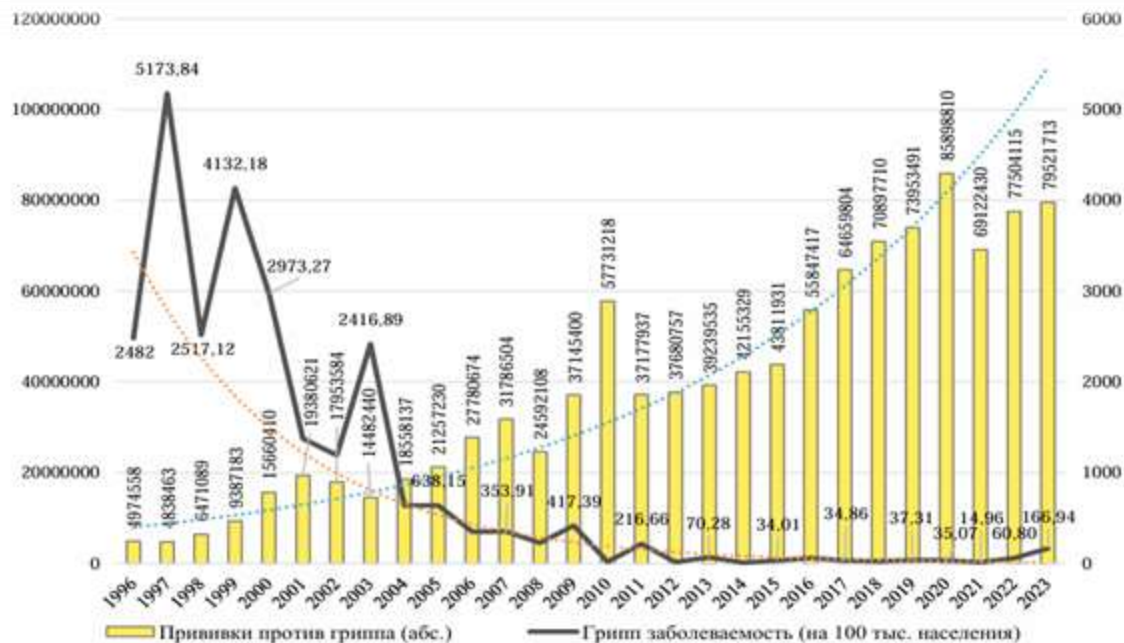


Рис. 1.181. Заболеваемость населения гриппом и охват прививками населения Российской Федерации в 1996–2023 гг.

Influenza vaccine effect on risk of stroke occurrence: a systematic review and meta-analysis

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Background: Stroke is a significant global cause of mortality and long-term disability, potentially influenced by infections that heighten systemic inflammation and thrombotic events. The full impact of influenza vaccination on stroke remains uncertain. This systematic review and meta-analysis aimed to investigate the association between influenza immunization and stroke incidence.

Methods: We searched for randomized controlled trials (RCTs), case-control, and cohort studies published in PubMed/Medline, Cochrane-Central-Register-of-Controlled-Trials (CENTRAL), and Embase until 5 December 2022, and identified articles investigating the effect of influenza vaccine on stroke occurrence. All articles were screened by two independent reviewers. We performed a meta-analysis to investigate the risk of stroke occurrence in vaccinated vs. unvaccinated individuals. The random-effects model was used in all statistical analyses.

Results: Among the 26 articles meeting our criteria, 10 were retrospective cohort studies, 9 were case-control studies, 3 were prospective cohort studies, 3 were RCTs and 1 case-series. Overall, the studies showed a significant decrease in the risk of stroke incidence/hospitalization among vaccinated patients (OR = 0.81, 95% CI [0.77–0.86], $p = 0.00001$). Furthermore, studies showed flu vaccine decreases the occurrence of mortality among stroke patients (OR = 0.50, 95% CI [0.37–0.68], $p = 0.00001$). Sub-group analysis revealed significant protective effect for patients with specific comorbidities including atrial fibrillation (OR = 0.68, 95% CI [0.57–0.81], $p = 0.0001$), diabetes (OR = 0.76, 95% CI [0.66–0.87], $p = 0.0001$), Chronic obstructive pulmonary disease (OR = 0.70, 95% CI [0.61–0.81], $p = 0.00001$), and hypertension (OR = 0.76, 95% CI [0.70–83], $p = 0.00001$).

По результатам 26 публикаций:

- ✓ Существенное снижение риска инсульта у вакцинированных от гриппа (OR = 0.81, 95% CI [0.77–0.86], $p = 0.00001$).
- ✓ Снижение смертности у пациентов с инсультом (OR = 0.50, 95% CI [0.37–0.68], $p = 0.00001$).
- ✓ Наибольший эффект – у пациентов:
 - с фибрилляцией предсердий (OR = 0.68, 95% CI [0.57–0.81], $p = 0.0001$),
 - с диабетом (OR = 0.76, 95% CI [0.66–0.87], $p = 0.0001$),
 - с ХОБЛ (OR = 0.70, 95% CI [0.61–0.81], $p = 0.00001$),
 - с АГ (OR = 0.76, 95% CI [0.70–83], $p = 0.00001$).

Influenza vaccination and risk of dementia: a systematic review and meta-analysis

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Affiliations + expand

PMID: 40601364 DOI: [10.1093/ageing/afaf169](https://doi.org/10.1093/ageing/afaf169)

Abstract

Background: The association between influenza vaccination and a reduction in dementia was unclear with inconsistent evidence. We aimed to evaluate the association between influenza vaccination and dementia risk in the overall population and the high-risk populations for dementia, such as patients with chronic kidney syndrome (CKD), chronic obstruction pulmonary disease (COPD) and vascular disease.

Methods: We performed a systematic review and searched PubMed, Embase and CENTRAL from inception to 6 April 2025. The risk of bias was assessed using the Newcastle-Ottawa Scale. A random-effects model meta-analysis was executed.

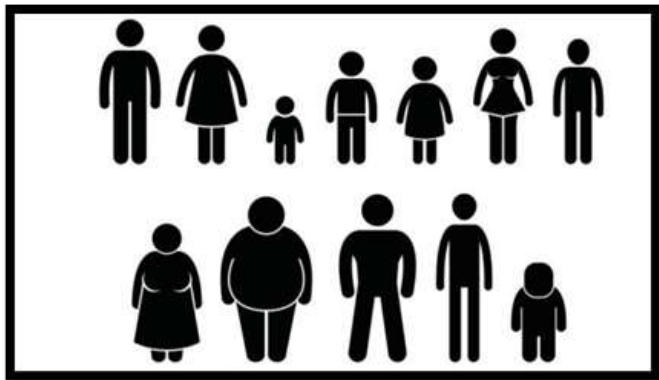
Results: We included eight cohort studies with 9,938,696 subjects. Except for one study, the risk of bias of all other included studies was low. Influenza vaccination was associated with a reduced risk of incident dementia in high-risk populations for dementia, but not in the overall population (HR 0.93; 95% CI: 0.86-1.01). For high-risk populations, more than one dose of influenza vaccination showed an association with a lower risk of incident dementia (2-3 doses: HR 0.84; 95% CI: 0.76-0.92; ≥ 4 doses: HR 0.43; 95% CI: 0.38-0.48).

Conclusion: Influenza vaccination was associated with a decreasing risk of incident dementia in a dose-response manner.

Keywords: Alzheimer disease; aged; dementia; influenza vaccination; meta-analysis; older people; systematic review.

Вакцинация показана всем!

Группы риска:



- лица старше 60 лет,
- лица с хроническими заболеваниями (сердца, легких, печени, почек, заболеваниями эндокринной системы), с иммунодефицитными состояниями;
- женщины во 2-м и 3-м триместре беременности
- лица, часто болеющие ОРВИ;
- дети старше 6 месяцев, дети, посещающие ДОУ;
- школьники, студенты;
- работники сферы обслуживания, транспорта, учебных заведений;
- воинские контингенты;
- **медицинские работники !**



гемагглютинин вируса гриппа подтипа
A(H1N1) - 15 микрограмм
гемагглютинин вируса гриппа подтипа
A(H3N2) - 15 микрограмм
гемагглютинин вируса гриппа типа В
(линия Yamagata)- 15 микрограмм
гемагглютинин вируса гриппа типа В
(линия Victoria) – 15 микрограмм



гемагглютинин вируса гриппа подтипа
A(H1N1) - 15 микрограмм
гемагглютинин вируса гриппа подтипа
A(H3N2) - 15 микрограмм
гемагглютинин вируса гриппа типа В –
15 микрограмм



гемагглютинин вируса гриппа подтипа
A(H1N1) - 5 микрограмм
гемагглютинин вируса гриппа подтипа
A(H3N2) - 5 микрограмм
гемагглютинин вируса гриппа типа В -
11 микрограмм

Где можно привиться?



Дополнительный бонус – вакцинация от пневмококковой инфекции