

READ. LEARN. UNDERSTAND.



INFLUENZA IN THE MEDIA. KNOWING YOUR SOURCE OF INFORMATION.

The media plays a vital role in informing public attitudes and beliefs, as well as sharing knowledge about influenza vaccines and immunization services. The complexity of the information can sometimes be unclear for people reporting on the issues, professionals tasked with immunization-related decision-making, and the general public who are making decisions about influenza immunization. We've developed plain-language explanations of the most common influenza immunization topics covered by the media.

■ PREDICTING SEASONAL INFLUENZA STRAINS

In 2019, CBC's local reporting in New Brunswick explained how Canada looks to Australia for seasonal influenza trends.

"[...] according to indications from southern hemisphere countries, such as Australia, which Canada looks to for help forecasting what's to come. Australia was hit hard and early this flu season, and H3N2 was the dominant strain."

<https://www.cbc.ca/news/canada/new-brunswick/flu-season-outlook-new-brunswick-vaccines-1.5340272>

Global influenza surveillance is coordinated by the World Health Organization's (WHO) Global Influenza Programme (GIP), which provides countries with information about influenza transmission in other parts of the world, and informs which influenza viruses need to be included in seasonal influenza vaccines. The WHO recommends that seasonal influenza vaccines contain the three most common influenza A and B strains predicted to be circulating, plus an additional influenza B strain.

■ FACTORS THAT INFLUENCE HOW WELL AN INFLUENZA VACCINE WORKS

On January 17, 2020, The HuffPost reported that more children this year were hospitalized because of influenza viruses.

"Right now we have influenza A-H3N2, which is still predominant, but influenza A, another strain, H1N1, is escalating and influenza B is early so all of this is going on at the same time, which is certainly having an impact on different communities and individuals," said Dr. Theresa Tam, Chief Public Health Officer of Canada.

https://www.huffingtonpost.ca/entry/flu-season-2020_ca_5e219f1fc5b673621f745da6

How well an influenza vaccine works (or its ability to prevent influenza illness) can vary from season to season. At least two factors play an important role in determining how well an influenza vaccine will protect a person from illness: 1) the characteristics of the person being immunized (age and health), and 2) the match between the influenza viruses spreading in the community and the influenza viruses the vaccine is designed to protect against.

■ INFLUENZA VACCINE EFFECTIVENESS

On January 24, 2019, CBC News published a story originally reported by The Canadian Press addressing influenza vaccine effectiveness.

“This season’s influenza vaccine appears to be highly effective, reducing the risk of infection with the dominant circulating flu strain by more than 70 per cent — far better than what was seen with last year’s shot, Canadian researchers say.”

The Canadian Press. *This season’s flu shot far more effective than last year’s, Canadian team finds.* <https://www.cbc.ca/news/health/flu-vaccine-1.4991431>

Most people understand vaccine effectiveness as the chance of an immunized individual not getting influenza. This is a common misunderstanding. Vaccine effectiveness is defined as the percentage of cases of influenza that could be prevented in an immunized group compared with an unimmunized group. For example, last influenza season, the Canadian Sentinel Practitioner Surveillance Network (SPSN) reported that the influenza vaccine had a vaccine effectiveness of 72% against influenza A(H1N1). It means that immunized individuals were 72% less likely to become ill with influenza A (H1N1) than unimmunized individuals.

■ PEOPLE AT HIGHEST RISK OF INFLUENZA ILLNESS

On February 9, 2020, CTV News reported: *“Thirty-eight people have died of influenza in Canada since August, according to the FluWatch report. In that time, 1,358 influenza-associated hospitalizations occurred. Of those hospitalized due to influenza, 774 (57%) were children under the age of 16. In the week ending Feb. 1 alone, there were 117 hospitalizations of children. Between 2015 and 2019, the average number of hospitalizations of children at this time of year due to the flu was around 50.”*

<https://www.ctvnews.ca/health/as-coronavirus-hogs-headlines-flu-season-is-in-full-swing-across-canada-1.4803953>

For some people, influenza immunization is an important tool for significantly reducing the risk of serious illness, hospitalization and even death. The protection that an influenza vaccine provides is particularly important for young children, who are building immunity to illnesses, and for older adults, whose immune functions decline with age. Additionally, pregnant women, Indigenous Peoples, people with chronic conditions, and people on immune-suppressing therapies or with immune-compromising conditions are at greater risk of influenza illness and can benefit from immunization.

■ IMPACT OF REPEATED ANNUAL INFLUENZA IMMUNIZATION ON VACCINE EFFECTIVENESS

On January 18, 2018, CBC Radio interviewed Dr. Brian Goldman, who discussed vaccine effectiveness and the need for annual immunization.

“This week, the Canadian Medical Association Journal published a study that suggests repeated flu shots in older adults reduces the severity of influenza.”

<https://www.cbc.ca/radio/thecurrent/the-current-for-january-10-2017-1.4479544/this-year-s-flu-shot-may-be-ineffective-but-you-should-still-get-it-argues-dr-brian-goldman-1.4479692>

Repeated annual influenza immunization is beneficial during most seasons because it helps people to carry over immune protection from one season to the next. There have been reports on studies (<https://www.ctvnews.ca/health/serial-flu-shots-still-better-than-none-at-all-researchers-1.4683376>) that show repeated influenza immunization can potentially weaken immune response to some influenza viruses. However, these findings require further investigation to understand the impact of yearly immunization.



■ MATCH OR MISMATCH

On January 15, 2020, CTV News published a story originally reported by CNN where an influenza expert was asked about influenza vaccine matching with circulating influenza strains.

“This year’s flu vaccine is ‘not a very good match’ for a common strain of the flu that’s especially tough on children, according to the nation’s top infectious disease doctor.”

<https://www.ctvnews.ca/health/flu-shot-can-still-save-lives-despite-mismatch-u-s-expert-1.4768194>

Influenza vaccines are most effective when the viruses they contain match those that are in circulation. However, influenza viruses are constantly changing, including during the time between when vaccine virus selection is made and the influenza season. A “drift” (small changes in the genes of influenza viruses) or a “shift” (a big abrupt change where different strains of influenza viruses combine to create a new original strain) in influenza viruses can impact the degree of similarity or difference between the circulating viruses and the viruses in the vaccines. This is often referred to as “vaccine match” or “vaccine mismatch.”

■ BENEFIT OF INFLUENZA IMMUNIZATION

On September 24, 2019, Global News reported that 4 in 10 Canadians did not plan to receive the influenza vaccine despite its benefits.

“The reality is that the flu shot is safe and it is the most effective tool we have in protecting against the flu, preventing its spread and ultimately it saves lives,” said pharmacist Gianni Del Negro.

<https://globalnews.ca/news/5938984/canadians-no-flu-shot/>

There can be frustration when the influenza vaccine does not match circulating viruses. However, it is important to remember that influenza immunization is not without benefit. Even if there is a mismatch with one influenza virus in the seasonal vaccine, it can still reduce the risk of illness and complications against others, and mitigate their transmission to people who either cannot receive the vaccine or do not respond well to immunization.

■ REFERENCES

Centers for Disease Prevention and Control. Vaccine Effectiveness: How Well Do the Flu Vaccines Work? https://www.cdc.gov/flu/vaccines-work/vaccineeffect.htm#why_flu_vax_less_effective_against_H3N2

Skowronski DM, Leir S, Sabaiduc S, et al. Interim estimates of 2018/19 vaccine effectiveness against influenza A(H1N1)pdm09, Canada, January 2019. Euro Surveill. 2019;24(4):1900055. Available at: <https://www.ncbi.nlm.nih.gov/pmc/articles/PMC6351998/>

Flannery B, Reynolds SB, Blanton L, Santibanez TA, O’Halloran A, Lu PJ, Chen J, Foppa IM, Gargiullo P, Bresee J, Singleton JA, Fry AM. Pediatrics May 2017, 139 (5) e20164244. Available at: <https://pediatrics.aappublications.org/content/139/5/e20164244>

World Health Organization (WHO). Influenza: surveillance and monitoring. https://www.who.int/influenza/surveillance_monitoring/en/

