

Could a flu shot push help curb pediatric hospitalizations?

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Influenza vaccine uptake has been low and slow this season despite provinces stepping up their influenza vaccination efforts in a bid to curb hospitalizations among children.

Pediatric hospitalizations for seasonal influenza have been up to 20 times higher than usual so far this fall and winter, partly driven by an increase in influenza A (H3N2) infections, which cause more serious illness in children. Children under five have had the highest rate of hospitalizations, even compared to seniors, who normally face the highest risk.

British Columbia launched its flu shot campaign two weeks earlier than usual, followed by a drop-in vaccination blitz for children after the deaths of six young people.

For the first time, the province offered free flu shots without an appointment to everyone older than six months. British Columbia also provided free enhanced influenza vaccines for people over 65.

Like BC, Quebec offered free flu shots as an exceptional measure, too — the province is one of the few that doesn't normally cover the vaccine.

In Ontario, the Children's Hospital of Eastern Ontario pleaded with families to get vaccinated after opening a second intensive care unit and calling in the Canadian Red Cross to support staff dealing with surges in admissions.

"Unfortunately, the pace and volumes are not expected to slow because this viral season is not over," the hospital stated in a release.

Vaccines helped to cut short Australia's flu surge

Earlier in 2022, a strong flu shot push helped to curb a similar crisis in Australia.

That country's flu season — which provides an early preview of how the northern hemisphere's season might play out — was early and vicious, too, at least initially.

"At the start of winter there was a lot of talk about how this was the worst influenza season ever on record," explained Robert Ware, a clinical epidemiologist at Griffith University in Queensland, in an article in *Nature*. After the vaccination push, however, "cases almost disappeared in the second half of the winter."

Influenza A is a notoriously difficult target for vaccines because it tends to change rapidly, but according to public health officials, this season's flu shot appears to be a good match for circulating strains.

"We see 35% decreased rates of hospitalization even when we don't have a good match, which really just emphasizes when we do have a good match, how much more effective it will be," stated Rochelle Walensky of the United States Centers for Disease Control and Prevention in a briefing.

Flu shot uptake lagging

Even so, uptake of this year's flu vaccine has been lower than usual in Canada. Roughly 40% of adults typically get the shots, including 70% of those over age 65.

As of mid-December, BC had the highest flu vaccination rates of the jurisdictions reporting data. Nearly a third of that province's general population, including a quarter of children under five, have received flu vaccines this season.

In Alberta, 24% of the general population have received flu shots, including 17% of children under five.

In both Manitoba and the Northwest Territories, roughly one in five people have received the flu vaccine, including one in 10 of those under age five.

Quebec reported similarly low flu vaccination rates among health workers, only 21% of whom have received the shots.

"We had a discussion this morning with all the CEOs responsible for all the institutions and of course, we think that it's not enough," Quebec's public health director, Luc Boileau, told reporters. According to Boileau, vaccination rates among health workers who deal directly with the public are likely higher at 35%–40%.

How to boost flu shot uptake?

Some experts blame pandemic vaccination fatigue and misinformation for low uptake. However, the flu vaccine also suffers from uniquely bad PR, which is not helped by the shot's varying efficacy year to year.

For most people, the COVID-19 pandemic didn't change their overall view of vaccines, and more than a quarter now hold more positive views of vaccination, according to a recent report from the National Institute of Aging at the Toronto Metropolitan University.

Yet less than half of people who believe they are up to date on recommended vaccinations have received an annual flu vaccine — suggesting room for improvement in public education about the importance of the shots.

Administering flu shots at the same time as other vaccines, providing free access to enhanced influenza vaccines for older adults, and making vaccines more widely available through pharmacies, primary care clinics and community pop-ups may also help boost uptake.

“The COVID-19 vaccine rollout demonstrated that when vaccinations are adequately promoted and prioritized, we can mobilize to quickly get the vast majority of Canadians vaccinated,” the report concluded.

Public health officials in Ontario and Alberta are hopeful that the 2022/23 flu season has passed its peak. Still, Canada’s chief public health officer warned that infection levels continue to exceed those typically seen this time of year.

Respiratory syncytial virus and COVID-19 cases appear to have peaked already, according to Theresa Tam, although more immune evasive Omicron variants are expected to drive another uptick in respiratory illness in early 2023.

“With the increased prominence of these variants in Canada, at a minimum, we could see a slower decline and a higher plateau in the number of infections, as well as hospital admissions in Canada as this respiratory virus season plays out,” Tam said.

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