Offering flu vaccinations to children having surgery significantly increases number vaccinated

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Actively offering an influenza (flu) vaccination to children having surgery and general anesthesia increased the number of patients

vaccinated by 3,500% at Children's Hospital Colorado, Aurora, according to a study presented at the ANESTHESIOLOGY 2021 annual meeting.

"The ongoing threat of a simultaneous COVID-19 pandemic and seasonal flu epidemic makes the widespread use of flu vaccines more important than ever," said Tyler Morrissey, M.D., lead author of the study and assistant professor of pediatric anesthesiology, Department of Anesthesiology, University of Colorado School of Medicine, Aurora. "Our research shows that having a standardized process for getting children vaccinated for flu while under anesthesia during surgery provides a 'teachable moment' and opportunity to educate families on the importance of flu vaccination, and may be a model for other childhood vaccinations while under anesthesia, including the COVID-19 vaccine."

Epidemics of seasonal flu occur annually, typically from Sept. 1–March 31. The Centers for Disease Control and Prevention (CDC) estimates that 38 million people were sick with the flu during the 2019-20 season. Although the CDC recommends that everyone 6 months and older receive a yearly flu vaccine, during the 2019-20 flu season, vaccination rates in adults and children were less than 50% and 60%, respectively, the authors note.

In the study, the authors hypothesized that the perioperative period when patients are undergoing anesthesia for surgery would be a "teachable moment" for flu vaccination. A "teachable moment" was defined as an event that motivates individuals to spontaneously adopt risk-reducing health behaviors.

The authors developed a standardized "Best Practice Alert" process to actively offer flu vaccinations to all pediatric patients having general anesthesia—implemented in October 2020. During patient registration in the preanesthetic area, a computer alert was initiated to the anesthesia

care team. A care team member then determined if the child was eligible, discussed the benefits of vaccination and obtained parental consent for the vaccine. The vaccine was then administered in the operating room (O.R.) by an anesthesia practitioner or O.R. nurse after the induction of general anesthesia. Prior to the 2020-21 season, flu vaccinations under anesthesia were only offered upon patient or family request.

The researchers found the number of children who received flu vaccinations under general anesthesia before and after implementation of the institution's standardized protocol increased by 3,500% compared to the previous year. During the 2019-20 flu season, only 30 perioperative vaccines were administered. Prior to the intervention during the 2020-21 flu season, only 30 vaccines were given over a six-week period (Sept. 1-Oct. 16). However, after the intervention that same season, 1,063 flu vaccines were administered over a 25-week period (Oct. 16-March 31). There were no reported vaccine-related complications.

"We're super encouraged to see so many parents agree to have their children vaccinated for flu while undergoing anesthesia," said Dr. Morrissey. "The CDC has recommended that flu vaccination be offered to children 6 months of age and older at every health care seeking opportunity. As physicians on the front lines of the COVID-19 pandemic, this is another great opportunity for our specialty to make a significant impact on public health."

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