

Influenza & Complications in Children

Influenza season has arrived in Michigan and so has the new 2025-26 flu vaccine. While anybody can get sick with influenza, some people are at greater risk for serious complications related to influenza infection. One group that is at greater risk are children, especially those with chronic medical conditions or those under 2 years old. With influenza vaccination declining throughout the state, the risk for influenza complications in children increases. The best way to keep children safe is by getting the seasonal flu vaccine for yourself and your children.

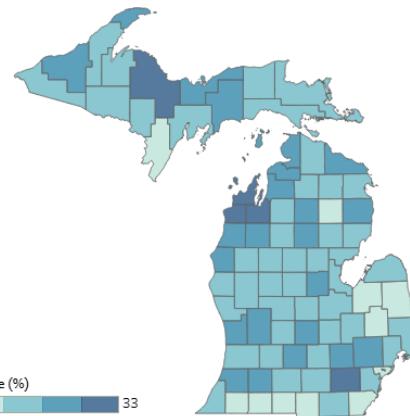
Did You Know?

- Vaccination coverage for influenza in Michigan has been declining for the past four years for children aged 6 months to 17 years
- As of November 22nd 2025 only 21% of Michiganders had received the 2025-26 flu vaccine
 - In Grand Traverse County 29% of residents received the 2025-26 flu vaccine
- Most people who get flu recover within two weeks, but some can develop complications which can be life-threatening and result in death
- 14 children died in Michigan during the 2024-25 flu season

Influenza

2,070,034 people are vaccinated for the 2025-2026 season: that's about 1 in 5 Michiganders protected.

21% of residents are vaccinated



Last updated: 11/26/2025 | Data as of: 11/22/2025

Sources: [Respiratory Disease Reports](#)

Key Facts About Flu Vaccine

[Influenza Vaccination Coverage](#)

What are Flu Complications and how Common are They?

There are several complications that can arise in children due to influenza infection. Some can be attributed directly to the influenza virus while others can be related to how the body responds to the infection. Knowing what the complications and warning signs are can help children receive treatment faster and result in better health outcomes. Additionally, while complications that result in death are relatively rare, flu-related pediatric death was very high in the 2024-2025 flu season.

Complications

- Pneumonia: an illness where the lungs get infected and inflamed
- Dehydration: when a child's body loses too much water and salts, often because fluid losses are greater than from fluid intake
- Worsening of long-term medical problems like heart disease or asthma
- Brain dysfunction such as encephalopathy
- Sinus problems and ear infections
- In rare cases, flu complications can lead to death

Warning Signs

- Fast breathing or trouble breathing
- Bluish lips or face
- Ribs pulling in with each breath
- Chest pain
- Severe muscle pain (child refuses to walk)
- Dehydration (no urine for 8 hours, dry mouth, no tears when crying)
- Not alert or interacting when awake
- Seizures
- Fever above 104 degrees Fahrenheit that is not controlled by fever-reducing medicine
- Any fever in children younger than 12 weeks
- Fever or cough that improve but then return or worsen
- Worsening of chronic medical conditions

Emergency Warning Signs and Complications for Children Infected with Influenza

The graphic on the left depicts the more common complications that can occur in children infected with influenza. Any child experiencing these warning signs should obtain medical attention right way.

The CDC and American Academy of Pediatrics recommend the use of antiviral drugs when influenza is suspected or confirmed in children with complications. For antiviral treatment to be most effective, it should start as soon as possible. This makes identifying the warning signs of complications extremely important. The warning signs and complications listed are not all inclusive. Contact your primary healthcare provider for any symptoms that are severe or concerning.

Sources: [Signs and Symptoms of Flu | CDC](#)

[Treatment of Flu in Children | Influenza \(Flu\) | CDC](#)

2024-25 Flu Season

Each year millions of children get sick with seasonal flu and thousands are hospitalized due to developing complications. Rarely do children die from those complications. However, the 2024-25 flu season saw the greatest amount of flu-related pediatric deaths in a non-pandemic flu season. Child death from influenza became a reportable condition tracked by the CDC in 2004, and only the 2009-10 H1N1 pandemic had a greater number of pediatric deaths.

According to a study published in 2014, flu vaccination reduced children's risk of intensive care unit admission by 74% during the flu season from 2010-2012. Additionally, among children with known vaccination status who were vaccine-eligible, 89% who died in the 2024-25 flu season were not fully vaccinated. Collectively, the 2024-25 flu season highlights the importance for children to receive the seasonal flu vaccine.

Resource Spotlight: Vaccines for Children (VFC)

The Vaccines for Children program is funded through the CDC with the goal of making vaccinations easily available for all children in the United States. The CDC purchases vaccines at a discounted price and distributes them to state and local partners where they can be administered without a fee for the vaccine itself. The VFC program has many vaccines available including the seasonal flu vaccine. There is eligibility requirements listed below. However, no proof of a child's eligibility is required at time of vaccination.

Vaccines for Children

Protecting America's children every day



The Vaccines for Children (VFC) program helps ensure that all children have a better chance of getting their recommended vaccines. VFC has helped prevent disease and save lives.

CDC estimates that vaccination of children born between 1994 and 2023 will:

- prevent **508 million** illnesses (32 million hospitalizations)
- help avoid **1,129,000** deaths
- save nearly **\$2.7 trillion** in total societal costs (that includes \$540 billion in direct costs)

more than the current population of the entire U.S.A.

greater than the population of Seattle, WA

more than \$8,000 for each American

Updated 2023 analysis using greatest health benefit from immunization during the Vaccines for Children Program—the United States, 1994-2023*



www.cdc.gov/vaccines/vfcprogram/



2024-25 flu season had the highest reported number of flu-related pediatric deaths (280) during a non-pandemic flu season*

56%
of children who died
had an underlying
medical condition

Almost 90%
of children who died
were not fully
vaccinated

**Everyone 6 months and older should receive an annual flu vaccine.
Talk to your doctor about flu vaccination.**

MMWR

* Pediatric influenza deaths have been nationally notifiable since 2004.
Influenza-Associated Pediatric Mortality surveillance system
bit.ly/428YHOU
SEPTEMBER 25, 2025



Sources: [Influenza-Associated Pediatric Deaths — United States, 2024-25 Influenza Season | MMWR](https://www.cdc.gov/mmwr/preview/mmwrhtml/mm2434a1.htm)
[Effectiveness of Influenza Vaccine Against Life-threatening RT-PCR-confirmed Influenza Illness in US Children, 2010–2012 | The Journal of Infectious Diseases | Oxford Academic](https://www.ncbi.nlm.nih.gov/pmc/articles/PMC3803233/)

Eligibility Requirements

Children aged 18 years or younger who meet at least one of the following requirements

- American Indian or Alaska Native
- Medicaid-eligible
- Uninsured
- Underinsured (child has insurance but the policy doesn't cover vaccines)

The Grand Traverse County Health Department (GTCHD) manages all healthcare providers that participate in the VFC program in Grand Traverse County, as well as operates a clinic to give VFC vaccines. For more information on participating locations or to schedule an appointment for vaccinations at the GTCHD contact (231) 995-6131.

Sources: [About the Vaccines for Children \(VFC\) Program | VFC Program |](https://www.cdc.gov/vaccines/vfcprogram/)

Outlook in Grand Traverse County

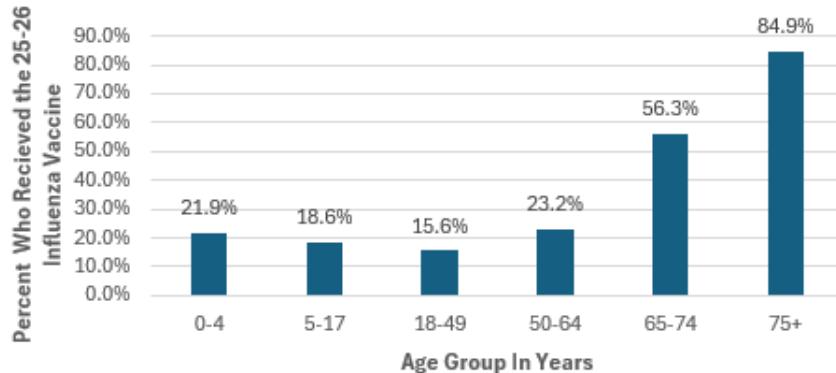
While Grand Traverse County has one of the highest rates of receiving the 2025-26 influenza vaccine in Michigan, 71% of Grand Traverse County residents have not yet received it. Additionally, influenza vaccine doses administered in Grand Traverse County is roughly 5,000 less compared to this time last flu season.

When examining those who received the 2025-26 influenza vaccine by age groups, distinct differences in coverage for groups are seen. Importantly, children ages 0-4 and ages 5-17 are below the county average even though they are at greater risk for developing complications.

Vaccination is the best way to prevent influenza related complications and hospitalizations. Clearly there is an opportunity to increase the coverage of children and adults in Grand Traverse County.

Influenza Vaccination Coverage By Age Group in Grand Traverse County for the 2025-2026 Season

Data as of 11/22/2025



Source: [Respiratory Disease Reports](#)

FAQ

Q: How many and what types of influenza viruses are in the 2025-26 flu vaccine?

A: The 2025-26 flu vaccine contains components from three different types of influenza viruses, which is why it is called a trivalent vaccine. Based on influenza virus surveillance throughout the world, the FDA determines which viruses the current flu vaccine will carry to provide the best protection for the coming flu season. The 2025-26 flu vaccine is made with components from two influenza A subtypes (H1N1 and H3N2) and one influenza B (Victoria lineage).

[Prevention and Control of Seasonal Influenza with Vaccines: Recommendations of the Advisory Committee on Immunization Practices — United States, 2025–26 Influenza Season | MMWR](#)

[Selecting Viruses for the Seasonal Influenza Vaccine | Influenza \(Flu\) | CDC](#)

Q: What are the benefits of receiving the flu vaccine?

A: The main benefits from receiving the flu vaccine are that it reduces flu illness, reduces severity of illness preventing hospitalization, and protects others around you. A study cited by the CDC from 2022 showed that flu vaccination reduced children's risk of severe life-threatening influenza by 74%. Additionally, vaccination of yourself and others can limit influenza virus exposures for people who cannot receive the flu vaccine, like those under 6 months old and people with certain health conditions.

[Benefits of the Flu Vaccine | Flu Vaccines Work | CDC](#)

Q: What are the recommendations for flu vaccination of people who have an egg allergy?

A: Everyone 6 months and older with an egg allergy should receive an annual flu vaccine. Any flu vaccine (egg based or non-egg based) that is otherwise appropriate for the recipient's age and health status can be used. Most flu shots are made using egg-based technology and contain a small amount of egg protein such as ovalbumin. However, studies have found that severe allergic reactions to flu vaccines in egg-allergic people are unlikely. Although severe allergic reactions to vaccines are rare, it is recommended that all vaccines are given in settings where allergic reactions can be recognized and managed quickly.

[Flu Vaccines and People with Egg Allergies | Influenza \(Flu\) | CDC](#)