



Michigan Flu Focus

Weekly Influenza Surveillance Report

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Week Ending June 3, 2023 | WEEK 22

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Michigan 2022-2023 Season Overview

Note: Most systems were impacted by the COVID-19 pandemic and should be interpreted with caution.

Outbreaks – 72 (24C, 4N, 23SE, 21SW) flu outbreaks were reported during the 2022-2023 season.

Sentinel Provider Surveillance (ILINet) – provisional data shows Michigan’s ILI activity peaked at 4.3% during Week 51 and above baseline for 5 weeks during the 2022-2023 season.

Laboratory – 756 flu positive results (230 Influenza A/H1N1, 482 Influenza A/H3, 44 Influenza B) were reported by the MDHHS Bureau of Laboratories.

Hospitalizations – 795 (128 pediatric, 667 adult) flu hospitalizations were reported in the catchment area from October 1, 2022 to April 30, 2023.

Pediatric flu deaths – Four (4) pediatric flu deaths have been reported in MI for the 2022-2023 season.

Novel Influenza A Viruses

Nationally, 1 human infection with a variant influenza A virus (H3N2v) was reported for the 2022-2023 season.

For more information, visit the [CDC FluView Interactive on Novel Influenza A Virus Infections](#)

The MDHHS **Swine Variant Influenza Toolkit** will help LHDs in planning for and responding to suspected influenza outbreaks associated with swine at agricultural fairs and exhibits. See:

- [Swine Variant Influenza Toolkit](#)
- [Swine Variant Influenza Toolkit Templates Document](#)

Flu Bytes

Vaccinate Your Family E-Book

INFLUENZA (FLU)

Flu is a serious and contagious disease caused by flu viruses. People with flu can spread it to others up to about 6 feet away. Flu spreads when infected people cough, sneeze, or talk, or when a person touches a surface or object that has the flu virus on it and then touches their own mouth or nose. Flu is different than the common cold and it is also more dangerous.

Serious complications of flu can result in hospitalization or death, even in healthy children. Some children are at higher risk of severe flu illness and complications, including kids under 5 years old and children who have chronic health conditions like asthma, heart disease or extreme obesity. Each year in the U.S., about 20,000 children under age 5 are hospitalized because of flu and approximately 100 children die.

SYMPTOMS

Symptoms of the flu usually come on quickly and may include:

- Fever over 100°F (38°C)
- Sore throat
- Cough
- Muscle and body aches
- Chills and sweats
- Headache
- Extreme tiredness and weakness
- Stuffy or runny nose
- Vomiting and diarrhea (more common in children than adults)
- *Not everyone who has flu will have a fever.

PREVENTION

The flu vaccine is recommended for everyone 6 months and older each season. The best way to protect yourself and your family from the flu and its serious complications is to get the flu vaccine every year.

Vaccination can help reduce your child’s risk of getting very sick, being hospitalized or even dying from the flu. Some children 6 months through 8 years of age need two doses of flu vaccine. If your child needs two doses, try to make sure they get both doses as early as possible so they are protected before the flu starts spreading. It usually takes about two weeks after the second dose for protection against flu to begin.

The best way to protect babies under 6 months from the flu is for their parent to get a flu shot during pregnancy and for everyone around them to be vaccinated.

To see if your children are up to date on their vaccines, look at the [CDC’s immunization schedule](#) and talk to your healthcare provider.

[VACCINATE YOUR FAMILY](#) | [Vaccinateyourfamily.org](#) | PROTECT YOUR CHILDREN. 1 | 8

CHICKENPOX (VARICELLA)
COVID-19
DIPHTHERIA
HAEKORINUS INFLUENZA TYPE B (H3N2)
HEPATITIS A
HEPATITIS B
HUMAN PAPILLOMAVIRUS (HPV)
INFLUENZA (FLU)
MEASLES
MENINGOCOCCAL DISEASE
MUMPS
PNEUMOCOCCAL DISEASE
POLIO
ROTAVIRUS
RUBELLA
TETANUS
WHOOPING COUGH (PERTUSSIS)

Vaccinate Your Family, an advocacy organization focused on protecting people of all ages from vaccine-preventable diseases, developed an online e-book with information regarding all of the recommended childhood and adolescent vaccines. This is a great resource for immunization providers and families to understand which vaccines their child needs and the importance of immunization. Find out more at www.vaccinateyourfamily.org.

Influenza News Blast

- [Researchers getting closer to a “universal” flu vaccine](#)
- [STUDY: Vaccine Effectiveness Against Life-Threatening Influenza Illness in Children](#)
- [STUDY: Comparison between Patients Hospitalized with Influenza and COVID-19 at a Tertiary Care Center](#)

Updates of Interest

CDC has recently posted the [Respiratory Virus Laboratory Emergency Department Network Surveillance \(RESP-LENS\)](#) dashboard, which reports on laboratory-confirmed severe acute respiratory coronavirus type 2 (SARS-CoV-2), influenza (flu), and respiratory syncytial virus (RSV). RESP-LENS collects information from the electronic medical records of patients who visit a participating emergency department (ED) with acute respiratory illness (ARI).

Congregate Setting Respiratory Virus Outbreaks

There were **0** influenza outbreaks reported to MDHHS during this time period. Respiratory virus outbreaks for the 2022 summer season are summarized below.

of Congregate Setting Outbreaks by Region

Facility Type	C	N	SE	SW	Summer 2023 Total	2022-2023 Season Total
Schools: K-12 & College	0	0	0	0	0	9
Long-term Care / Assisted Living Facility	0	0	0	0	0	57
Healthcare Facility	0	0	0	0	0	2
Daycare	0	0	0	0	0	0
Homeless Shelter	0	0	0	0	0	0
Correctional Facility	0	0	0	0	0	4
Other	0	0	0	0	0	0
Total	0	0	0	0	0	72
2022-2023 Season Total	24	4	23	21		72

Note: Data are reported on laboratory confirmed influenza outbreaks. Non-flu, non-COVID outbreaks and ILI outbreaks without confirmatory flu testing are not reported above.

Did you know?

Congregate setting outbreaks of viral respiratory illnesses are required to be reported to your local health department? See:

- [Influenza Guidance for Healthcare Providers](#)
- [Guidelines for Influenza and Respiratory Virus Outbreaks in Long-Term Care Facilities](#)

U.S. Outpatient Influenza-like Illness Surveillance Network (ILINet)

During the 2022-2023 influenza season, provisional data shows Michigan ILI activity peaked at 4.3% during Week 51 (Week Ending December 24, 2022).

Number of Reports and ILI % by Region in Michigan during this time period:

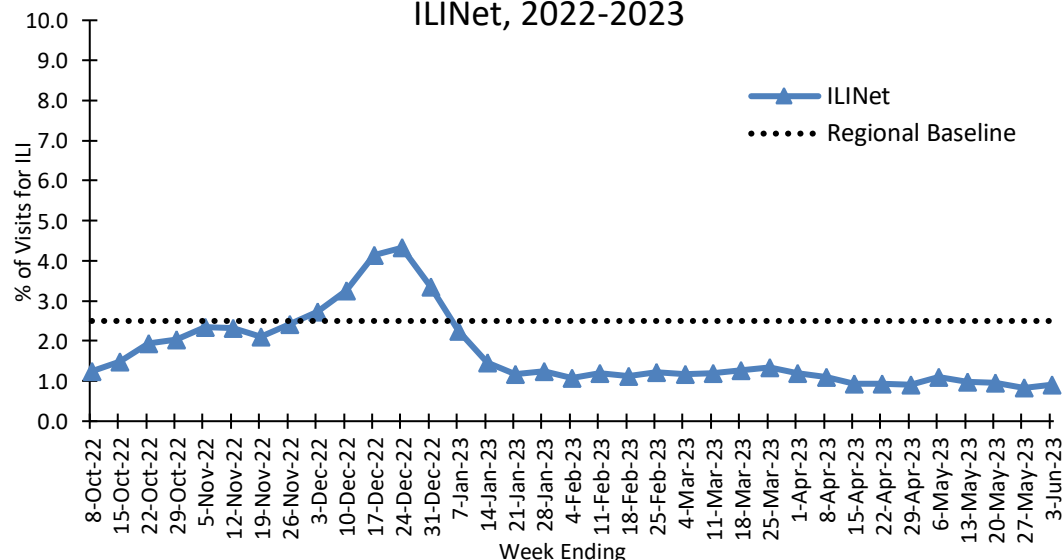
Region	C	N	SE	SW
No. of Reporters, Total (146)	49	18	51	28
ILI %	0.7	1.2	1.1	0.6

Data is provisional and may change as additional results are reported.

Michigan ILI Activity: 0.9% (Last Week: 0.8%) A total of 779 patient visits due to ILI were reported out of 86,747 outpatient visits during Week 22.

*Regional baseline is developed by calculating the mean percentage of patient visits for ILI during non-influenza weeks for the previous three seasons and adding two standard deviations

Percentage of Visits for ILI in Michigan Reported by ILINet, 2022-2023



Note: ILINet monitors visits for ILI (fever and cough and/or sore throat) and may capture patient visits due to other respiratory pathogens that cause similar symptoms.

Become an ILINET provider!

Contact Shelly Doeblen at DoeblerM@michigan.gov

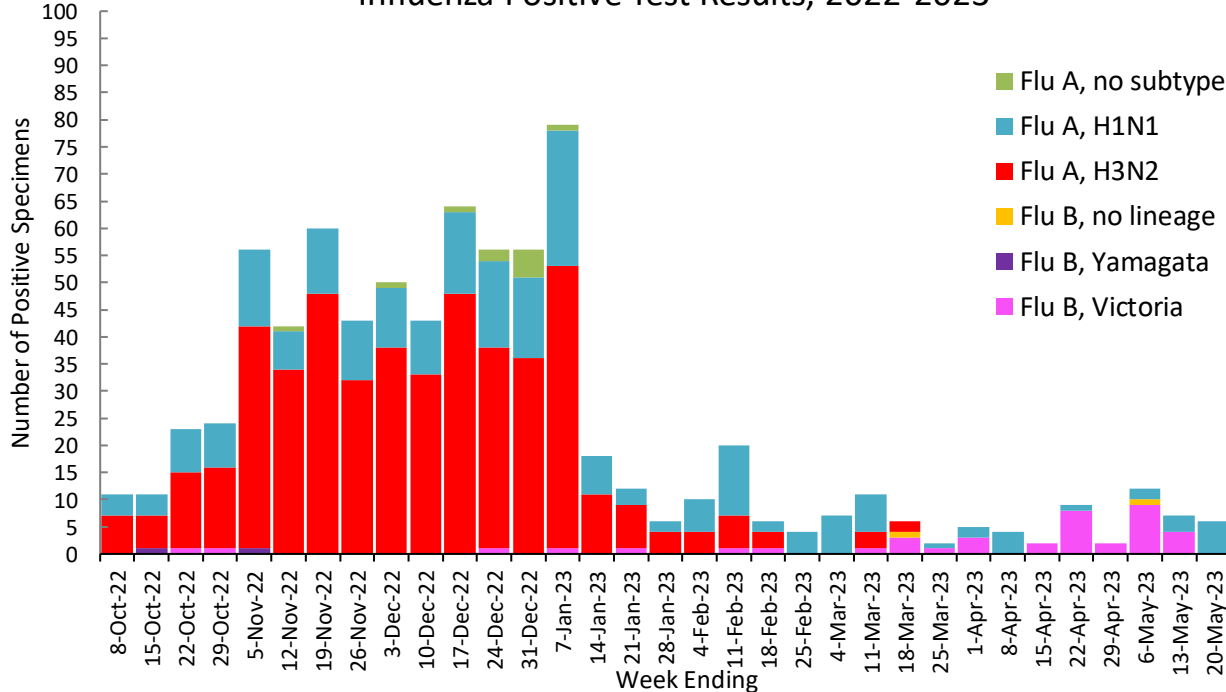
MDHHS Laboratory Data

There were **10** (2C, 0N, 4SE, 4SW) positive influenza results reported by the MDHHS Bureau of Laboratories (BOL) during this time period.

of Positive Influenza Results by Region

Flu Type, Subtype	C	N	SE	SW	Summer 2023 Total	2022-2023 Flu Season Total
Flu A, H1N1	1	0	3	3	7	230
Flu A, H3N2	0	0	0	1	1	482
Flu B	2	0	2	1	5	44
Total	3	0	5	5	13	
2022-2023 Total	163	6	309	278		756

Influenza Positive Test Results, 2022-2023



Note: Based on Specimen Collection Date. Flu B lineage data will be reported based on MDHHS BOL testing runs and will be backtracked into this graph

National Respiratory and Enteric Virus Surveillance System (NREVSS)

The [National Respiratory and Enteric Virus Surveillance System \(NREVSS\)](#) is a laboratory-based system that monitors temporal and geographic circulation patterns (patterns occurring in time and place) of respiratory syncytial virus (RSV), human parainfluenza viruses (HPIV), human metapneumovirus (HMPV), respiratory adenoviruses, human coronavirus, rotavirus, and norovirus. Participating U.S. laboratories voluntarily report weekly to CDC the total number of weekly aggregate tests performed to detect these viruses, and the weekly aggregate positive tests, in addition to specimen type, location, and week of collection.

[Michigan RSV Trends](#)

[Midwest Human Metapneumovirus \(HMPV\) Trends](#)

[Midwest Common Human Coronaviruses Trends](#)

[U.S. Respiratory Adenovirus Trends](#)

[U.S. Parainfluenza Type 1, 2, 3 Trends](#)

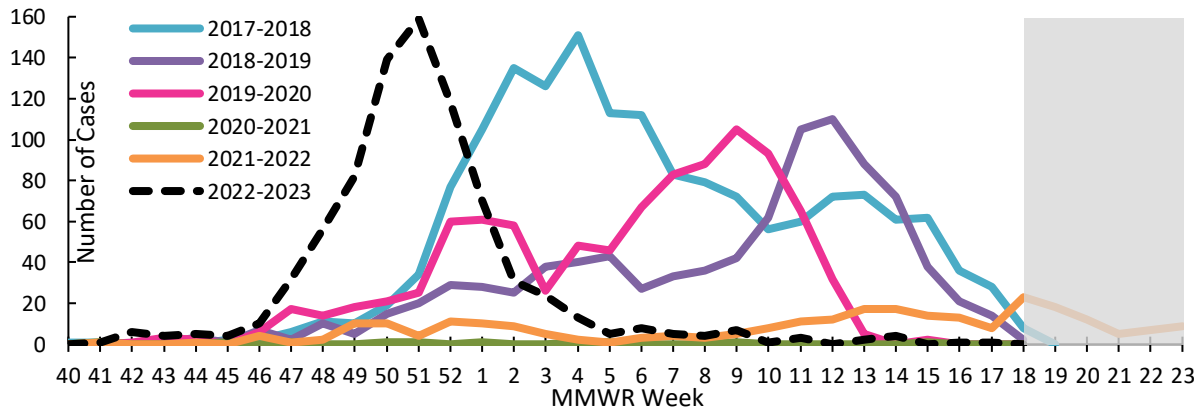
Data updated as of June 7, 2023

Influenza Hospitalization Surveillance Project (IHSP)

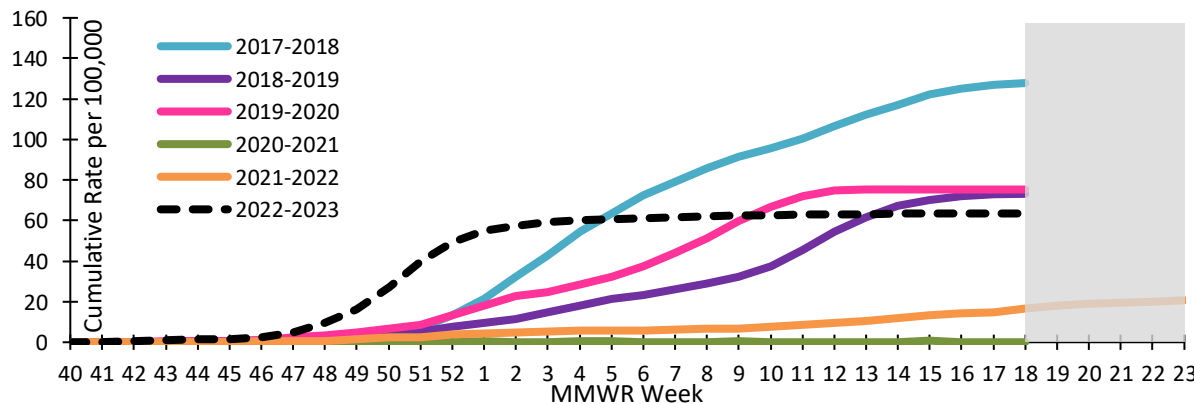
The CDC's Influenza Hospitalization Surveillance Network (FluSurv-NET) provides population-based rates of laboratory-confirmed influenza-associated hospitalizations from October 1st through April 30th each year. Michigan participates as an IHSP state in FluSurv-NET for Clinton, Eaton, Genesee, Ingham, and Washtenaw Counties.

Since October 1st, **795** (128 pediatric, 667 adult) influenza-related hospitalizations were reported in the catchment area for the 2022-2023 season.

IHSP Cases, 2017-18 Through 2022-2023



Cumulative IHSP Rates per 100,000



Washtenaw County was added in the 2017-2018 season.

Due to late season activity during 2021, IHSP surveillance was extended through June 11 for the 2021-2022 season.

Mortality Surveillance

Pneumonia & Influenza (P&I) Mortality Surveillance

Michigan Department of Health and Human Services Vital Records and Health Statistics provides pneumonia & influenza mortality data based on death certificates. Please visit the [Michigan Mortality Statistics](#) webpage for more info.

Influenza-associated Pediatric Mortality

Four (4) pediatric flu deaths have been confirmed by MDHHS for the 2022-2023 influenza season.

Nationally, 155 influenza-associated pediatric deaths have been reported for the 2022-2023 influenza season.

Total influenza-associated pediatric deaths in the U.S. and Michigan by season are listed in the table below.

	2018-19	2019-20	2020-21	2021-22	2022-23
U.S. Total <small>Source: CDC FluView</small>	145	199	1	46	155
MI Total	3	6	0	1	4

Pediatric deaths due to influenza are required to be reported in Michigan. Please see:

- [Influenza-Related Pediatric Mortality Investigation and Reporting](#)

Additional Resources

- [MDHHS Influenza Webpage](#) and [Influenza Surveillance in MI](#)
- [MDHHS Flu Vaccination Dashboard](#)
- [MDHHS Bureau of Laboratories \(BOL\) Webpage](#) and [Test Request Forms](#)
- [Preliminary in-season burden estimates for 2022-2023 season](#)
- [Immunization Action Coalition: Ask the Experts - Flu](#)
- [CDC Healthcare Professionals Flu Toolkit](#)
- [CDC FluView Weekly Report](#)

View Michigan Flu Focus Report archives [here](#).

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