



Michigan Flu Focus

Weekly Influenza Surveillance Report

April 23, 2021

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Week Ending April 17, 2021 | WEEK 15

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Data provided in this report are preliminary and will be updated as additional data is received

Influenza-Like Illness (ILI) Activity Level Indicator Determined by Data Reported to ILINet
2020-21 Influenza Season Week 15 ending Apr 17, 2021

Updates of Interest

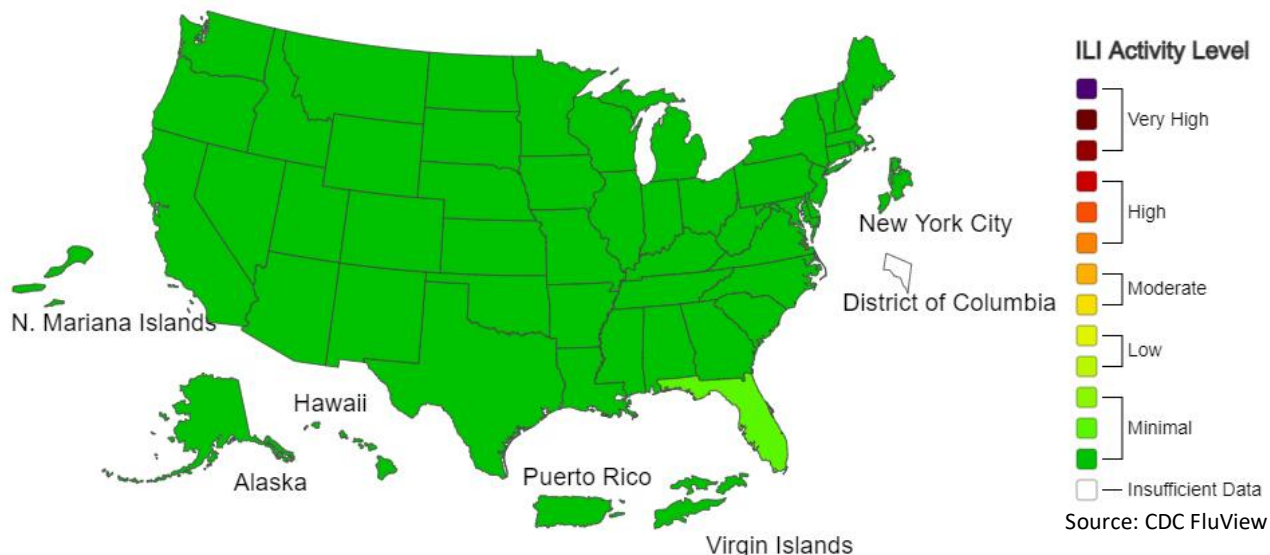
Seasonal influenza activity remains lower than usual for this time of year in Michigan and nationally.

Seasonal Flu Vaccination Coverage

Michigan's goal is to vaccinate more than **4.3 million** residents during the 2020-2021 flu season.

As of March 27, 2021, there have been **3,434,888** doses administered (**79.73%** towards goal) for the 2020-2021 flu season.

Please visit the Flu Dashboard at www.michigan.gov/flu for more info.



Note: This graph represents U.S. ILI activity levels reported to ILINet. Geographic spread of influenza has been suspended for the 2020-2021 influenza season

Influenza-associated Pediatric Mortality

Nationally, one (1) influenza-associated pediatric death has been reported thus far for the 2020-2021 flu season.

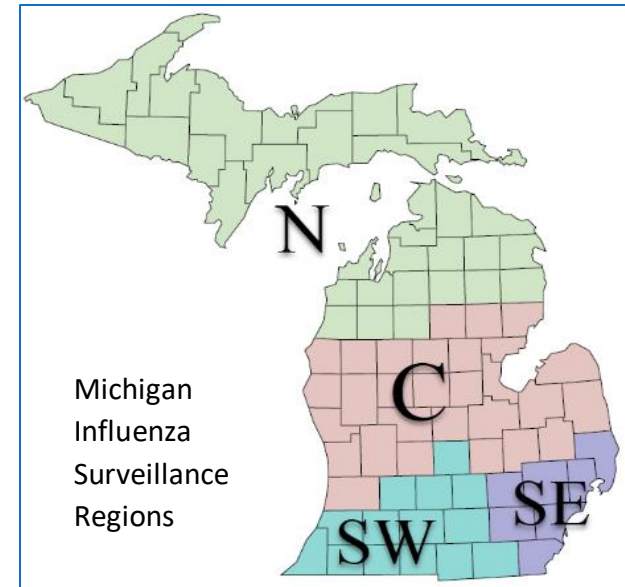
No (0) pediatric deaths have been confirmed by MDHHS for the 2020-2021 flu season.

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

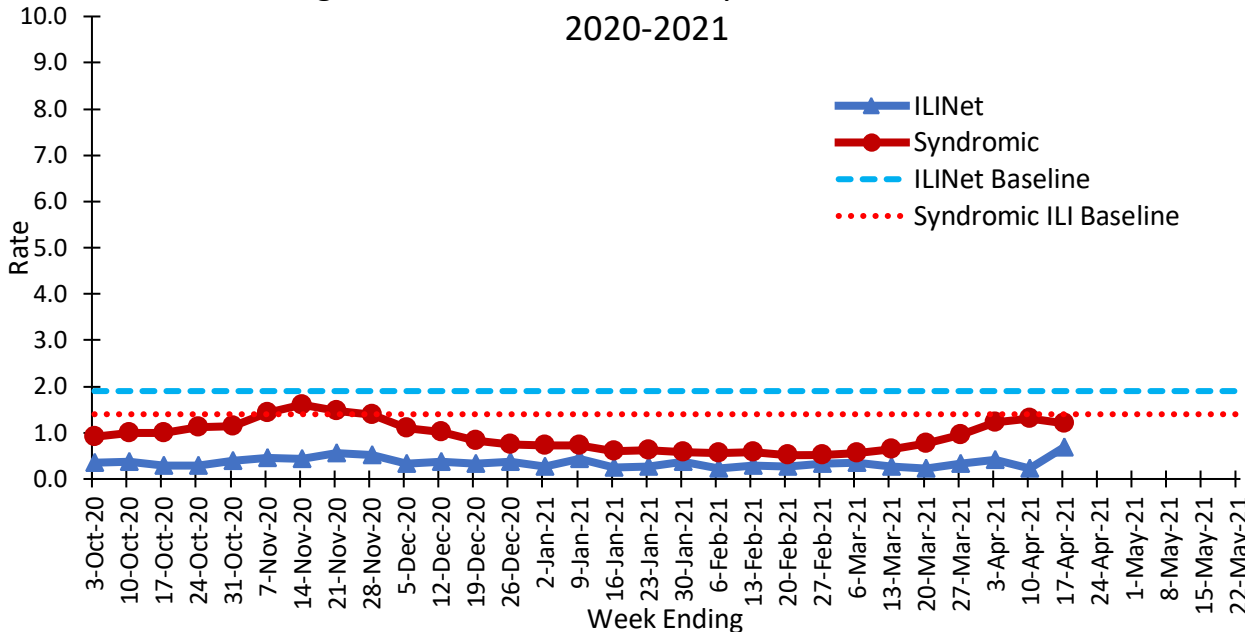
Michigan participates in ILINet, a collaborative effort between the CDC, state and local health departments, and volunteer sentinel clinicians as part of Michigan's influenza surveillance. ILINet provides data on the total number of outpatient visits to health care providers seen for any reason and the number of those patients with influenza-like illness (ILI). *ILI is defined as fever ($\geq 100^{\circ}F$) and a cough and/or a sore throat without a known cause other than influenza.*

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

Region	C	N	SE	SW
No. of Reporters (19)	8	3	7	1
ILI %	0.4	2.6	0.2	0.0



Michigan Statewide ILINet and Syndromic Surveillance, 2020-2021



Michigan ILI Activity: 0.7%

(Last week: 0.2%)

Regional Baseline*: 1.9%

A total of 57 patient visits due to ILI were reported out of 8,214 office visits for Week 15.

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

National Surveillance

In the United States, 1.1% of outpatient visits were due to ILI (Last week: 1.1%)

This is **below** the national baseline of 2.6%

Become an ILINET provider!

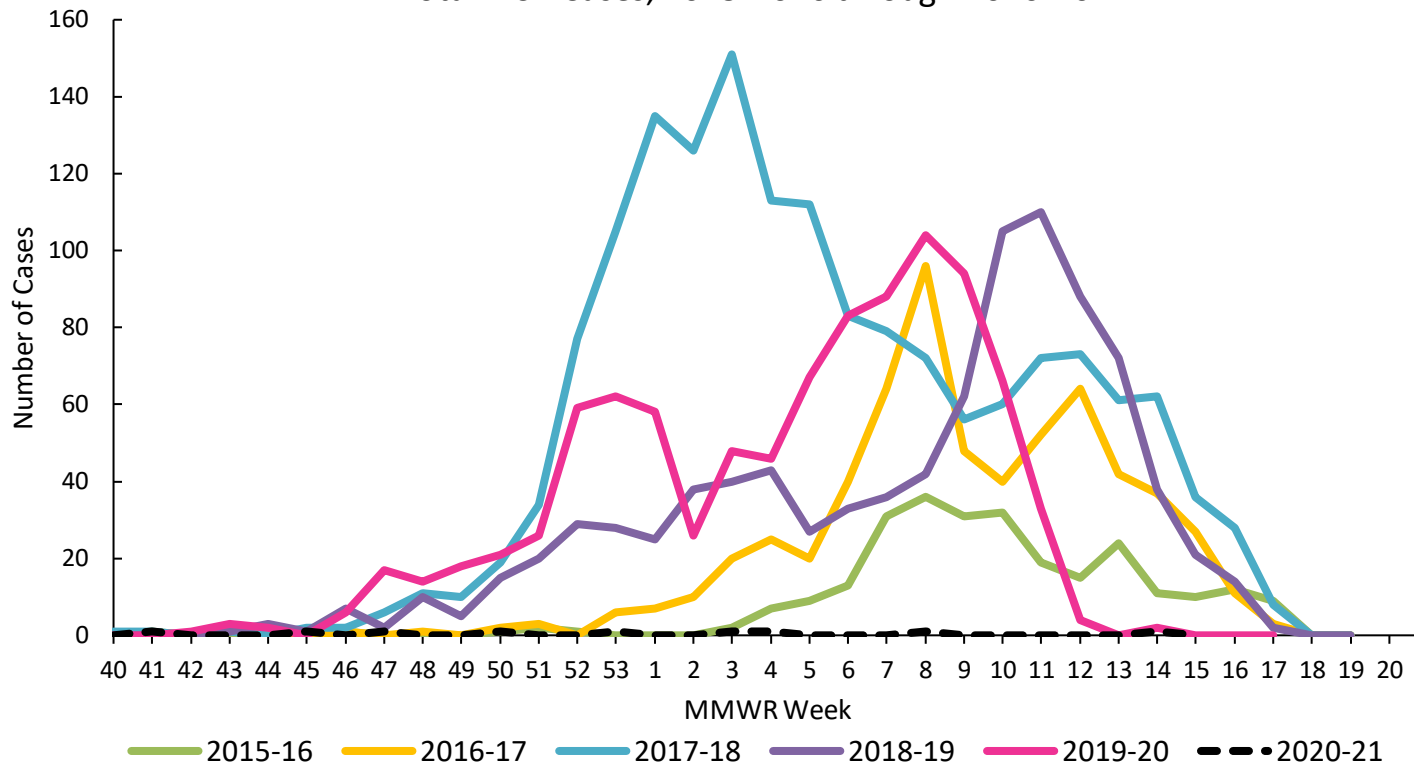
Contact Shelly Doebler at DoeblerM@michigan.gov

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.

There were no influenza-associated hospitalizations reported to MDHHS for the IHSP during this time period. Since October 1st, **9** (1 pediatric, 8 adult) influenza-associated hospitalizations were reported in the catchment area for the 2020-2021 season.

Total IHSP Cases, 2015-2016 through 2020-2021



Washtenaw County was added in the 2017-2018 season

Join the Influenza Sentinel Hospital Network (ISHN)!

What is it? ISHN is a group of hospitals in Michigan that voluntarily report weekly aggregate counts of influenza positive inpatients to assist MDHHS with statewide flu surveillance.

How it works: As a participating hospital in the ISHN, you would complete a brief Survey Monkey every week containing:

- Number of hospitalizations with a positive influenza test by age group during that time period
- The total number of hospitalizations due to any condition during that time period (if available)

The data you provide can assist providers and public health in recognizing changes in the age or geographic distribution of flu in this population.

If your facility is interested in participating or would like more details, please contact Sue Kim (KimS2@michigan.gov)

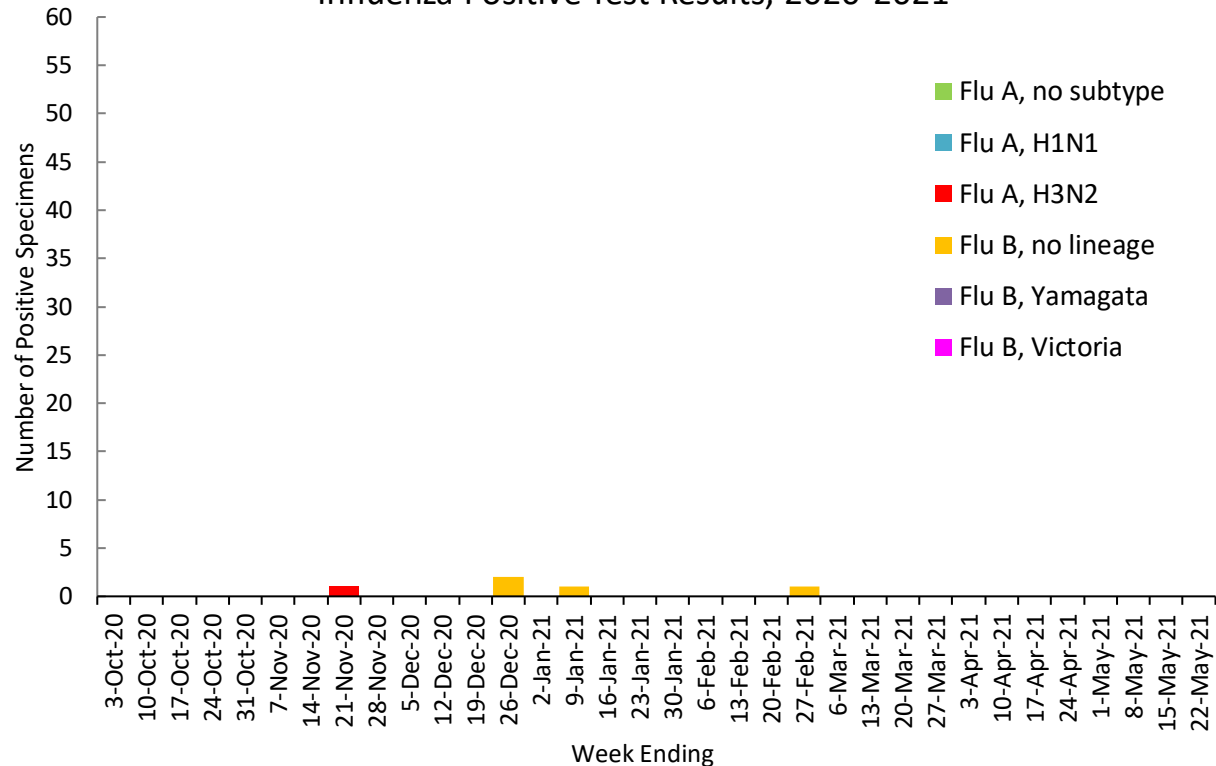
MDHHS BOL Virology Laboratory Data

There were **0** new positive influenza results (OC, ON, OSE, OSW) reported by the MDHHS Bureau of Laboratories (BOL) during this time period.

of Positive Respiratory Virus Results by Region

	C	N	SE	SW	Total
H1N1	0	0	0	0	0
H3N2	0	0	1	0	1
Infl B	0	0	4	0	4
Total	0	0	5	0	5

Influenza Positive Test Results, 2020-2021



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

Michigan Sentinel Clinical Lab Network

Respiratory Virus Data

Eight (8) sentinel clinical labs (2SE, 1SW, 5C, 0N) reported for the week ending 04/17

SE Region	
Influenza A:	sporadic
Influenza B:	no activity
Parainfluenza:	sporadic – low
RSV:	sporadic
Adenovirus:	low
hMPV:	no activity
Central Region	
Influenza A:	no activity
Influenza B:	sporadic
Parainfluenza:	sporadic
RSV:	sporadic
Adenovirus:	low
hMPV:	no activity
SW Region	
Influenza A:	sporadic
Influenza B:	sporadic
Parainfluenza:	no activity
RSV:	no activity
Adenovirus:	sporadic
hMPV:	no activity
North Region	
Influenza A:	no data available
Influenza B:	no data available
Parainfluenza:	no data available
RSV:	no data available
Adenovirus:	no data available
hMPV:	no data available

There were **0** new respiratory outbreaks (OC, ON, OSE, OSW) reported to MDHHS during this time period. Respiratory outbreaks for the 2020-2021 season are listed in the table below.

of Congregate Setting Outbreaks by Region

Facility Type	C	N	SE	SW	Total
Schools: K-12 & College	0	0	0	0	0
Long-term Care / Assisted Living Facility	0	0	0	0	0
Healthcare Facility	0	0	0	0	0
Daycare	0	0	0	0	0
Homeless Shelter	0	0	0	0	0
Correctional Facility	0	0	0	0	0
Other	0	0	0	0	0
Total	0	0	0	0	0

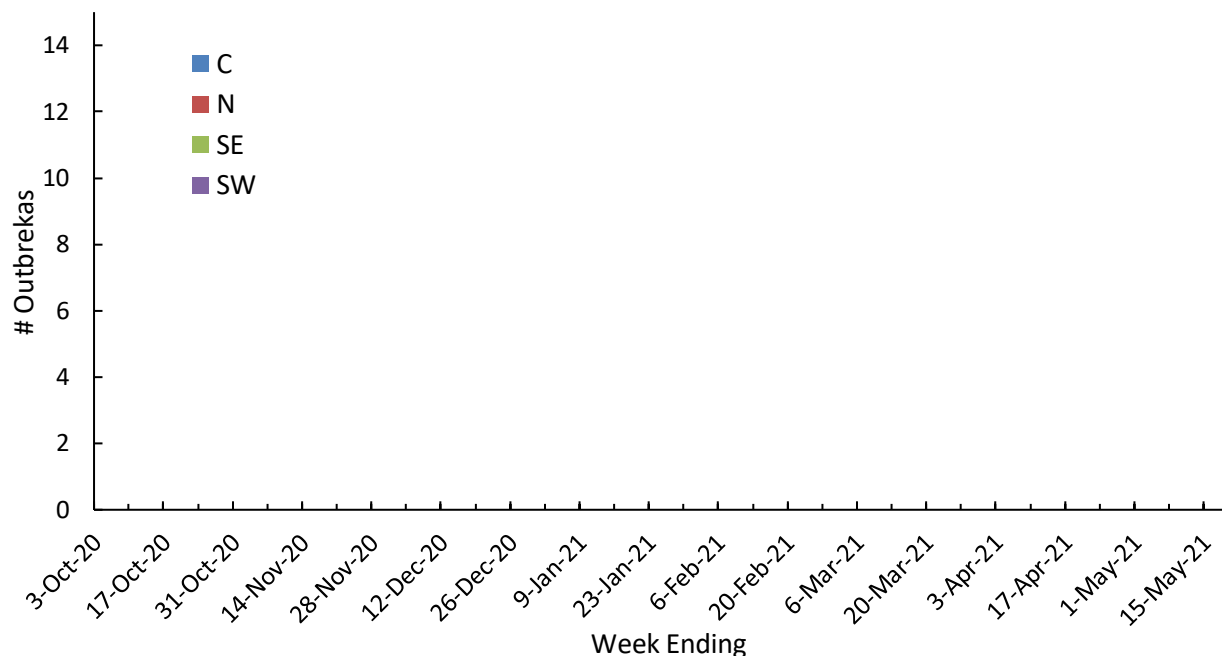
Did you know?

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

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

Note: Outbreaks associated with COVID-19 are not reported in this table (above) or graph (below).

Congregate Setting Outbreaks by Region, 2020-2021



Influenza Vaccine Updates

Comparing Vaccine Effectiveness in Preventing Influenza-Related Medical Encounters in Adults 65 Years and Older

On February 19, 2021, an [article](#) comparing the effectiveness of different influenza vaccines on preventing influenza-related medical encounters in US adults aged 65 and older was published in the journal of *Clinical Infectious Diseases*.

The following vaccines were compared:

- Adjuvanted trivalent inactivated influenza vaccines (aIIV3)
- Egg-derived quadrivalent influenza vaccines (IIV4)
- High-dose trivalent influenza vaccines (HD-IIV3)

The study reviewed data from 4.8 million patients in the 2017-18 flu season and 5.8 million patients in the 2018-19 flu season. For the 2017-18 and the 2018-19 flu seasons respectively, aIIV3 was administered to 10.9% and 17.9% of subjects, IIV4 was administered to 19% and 15.9% of subjects, and HD-IIV3 was administered to 70.1% and 66.2% subjects.

Subjects vaccinated with aIIV3 were found to have the lowest rates of influenza-related medical encounters for both seasons. Results were statistically significant for patients aged 65-74 and 75-84 in the 2018-19 influenza season.

Overall, the study found that adjuvanted trivalent inactivated influenza vaccines (aIIV3) were more effective than both IIV4 and HD-IIV3 at preventing influenza-related medical encounters for about 11 million patients 65 years and older in the 2017-18 and 2018-19 seasons.

Influenza News Blast

- [STUDY: Comparison between Patients Hospitalized with Influenza and COVID-19 at a Tertiary Care Center](#)
- [STUDY: Development of CRISPR as an Antiviral Strategy to Combat SARS-CoV-2 and Influenza](#)
- [STUDY: Programmable Inhibition and Detection of RNA Viruses Using Cas13](#)
- [STUDY: Intranasal Influenza Vaccine Spurs Strong Immune Response in Phase 1](#)
- [STUDY: Effect of Vaccination on Preventing Influenza-Associated Hospitalizations Among Children](#)

Additional Resources

- [MDHHS Influenza Webpage](#)
- [MDHHS Bureau of Laboratories \(BOL\) Webpage and Test Request Forms](#)
- [CDC FluView Weekly Report](#)
- [CDC Healthcare Professionals Flu Toolkit](#)
- [Immunization Action Coalition: Ask the Experts- Flu](#)
- [MDHHS- Influenza Vaccine F.A.Q.](#)

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

Influenza Burden Estimates

The Centers for Disease Control and Prevention (CDC) have released [preliminary burden estimates](#) for the 2019-2020 flu season.

Between October 1, 2019 through April 4, 2020, it is estimated that there have been:

- **39 million – 56 million flu illnesses**
- **18 million – 26 million flu medical visits**
- **410,000 – 740,000 flu hospitalizations**
- **24,000 – 62,000 flu deaths**

NOTE: The week of April 4 was the last week in-season influenza burden estimates will be provided for the 2019-2020 season.

2020-2021 preliminary burden estimates are expected to be released later in the flu season.

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