

# Ottawa County Respiratory Illness Report

Submitted for Publication November 28, 2023

*Dates of data may vary.*



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# Executive Summary

## *Influenza (Flu)*

*There is little evidence of elevated or increasing influenza activity in Ottawa County.*

*Influenza activity remains low in [Michigan](#) and in most areas of the United States, with some regional increases noted nationally.*

## *Coronavirus (COVID-19)*

*Local COVID-19 hospital occupancy and school/childcare reporting indicators show little evidence of elevated or increasing COVID-19 activity. However, wastewater signals from Holland/Zeeland and Allendale may be increasing, and the wastewater signal in the Grand Haven – Spring Lake area remains elevated.*

*The weekly rate of new COVID-19 hospitalizations per 100,000 population in [Michigan](#) and the [United States](#) remains relatively low.*

## *Respiratory Syncytial Virus (RSV)*

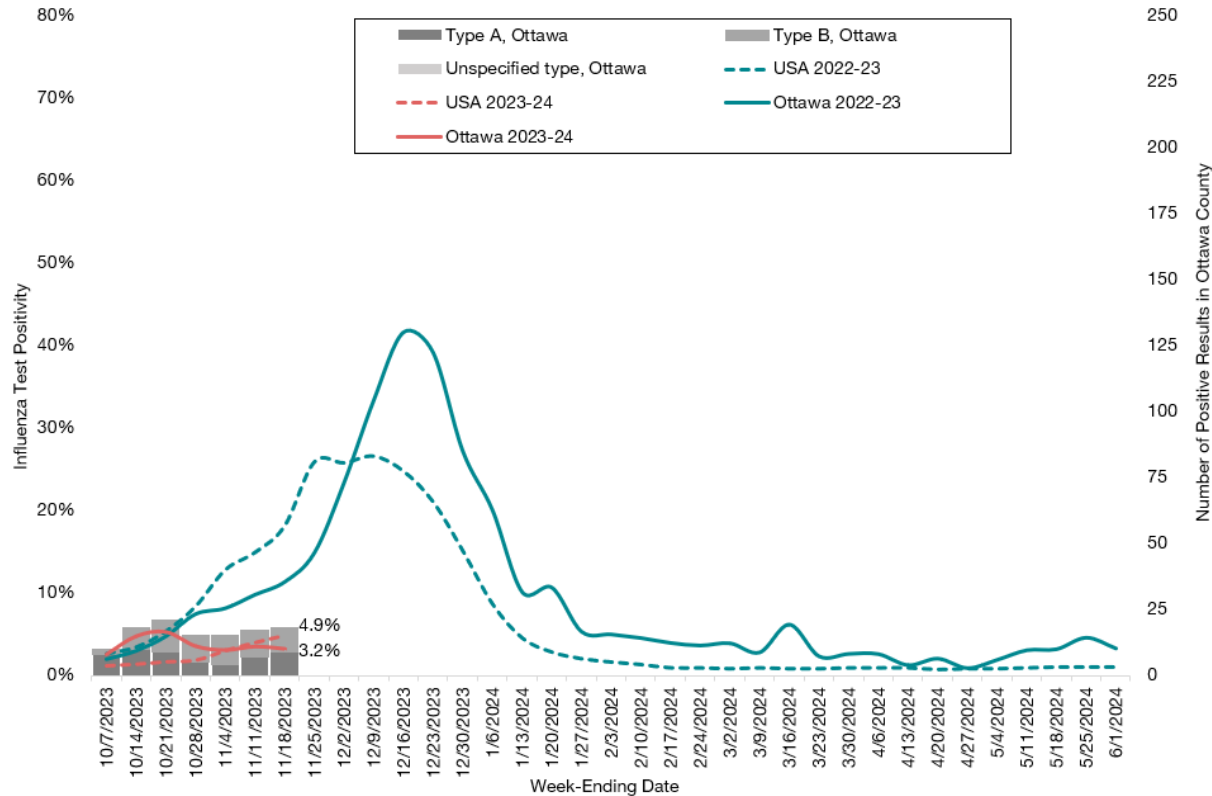
*Currently, RSV activity appears low in Ottawa County and Michigan, with some increases noted nationally.*

# Influenza Surveillance

*MMWR\* Week 46: November 12, 2023 – November 18, 2023*

# Influenza Test Positivity in the USA and Ottawa County

**Figure 1: Positivity Rate\* of Influenza Tests by Week, Ottawa County and United States**



**Table 1: Influenza Positive Tests Reported in Ottawa County – Last 7 Weeks**

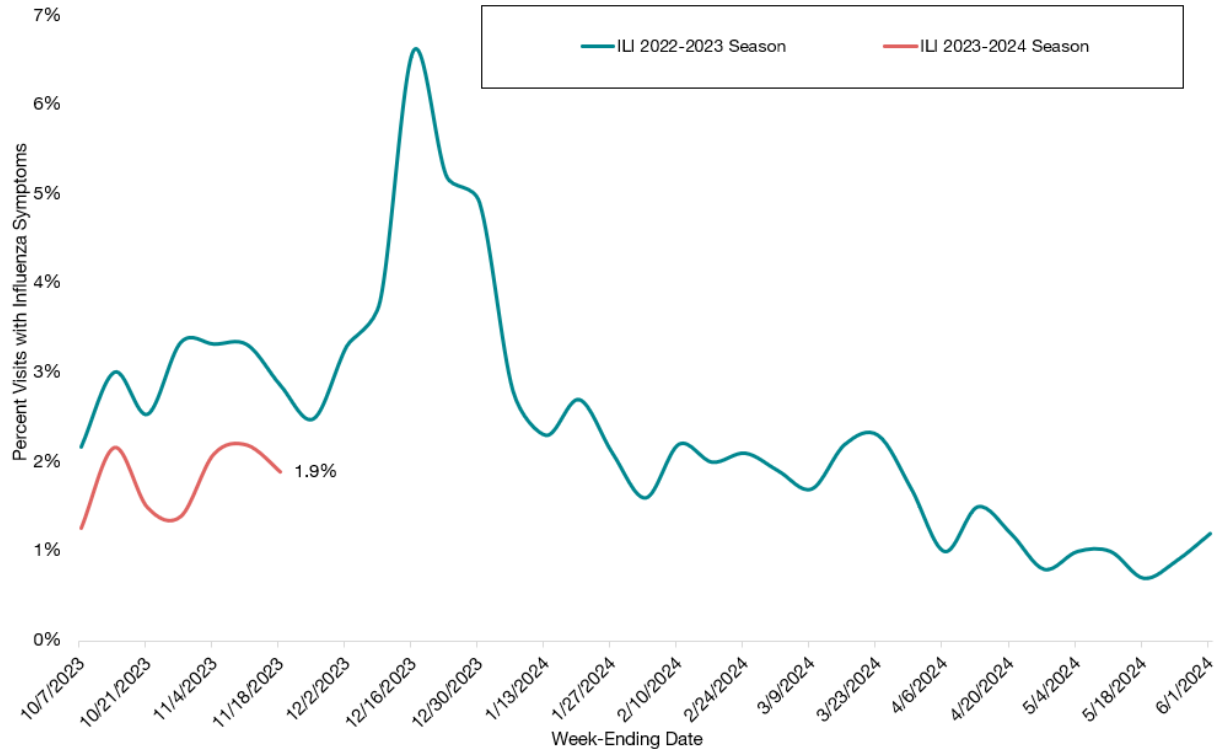
Week-Ending Date	Type A	Type B	Unspecified	Total Influenza	Total Tested	Positivity
10/7/2023	8	2	0	10	401	2.5%
10/14/2023	10	8	0	18	384	4.7%
10/21/2023	9	12	0	21	404	5.2%
10/28/2023	5	10	0	15	431	3.5%
11/4/2023	4	11	0	15	497	3.0%
11/11/2023	7	10	0	17	494	3.4%
11/18/2023	9	9	0	18	570	3.2%

\*Influenza positivity is the percent of influenza tests conducted by reporting providers and laboratories that result positive. Elevated influenza positivity is often an indication that influenza is circulating in the community.

- During week 46 influenza test positivity in Ottawa County decreased to 3.2% from 3.4% the previous week. The number of influenza tests increased by about 15% from the previous week, from 494 to 570.
- The latest influenza positivity estimate in Ottawa County is low and well below that reported at a similar time last influenza season (11.3%).
- Seasonal influenza activity continues to increase in most parts of the country. Nationwide test positivity was 4.9% during week 46.

# Syndromic Surveillance for Influenza in Ottawa County

**Figure 2: Percentage of Emergency Department (ED) and Urgent Care (UC) Visits in Ottawa County with Influenza-like Illnesses (ILI)\***



\*Influenza-like illness include sudden onset of fever, cough and/or sore throat.

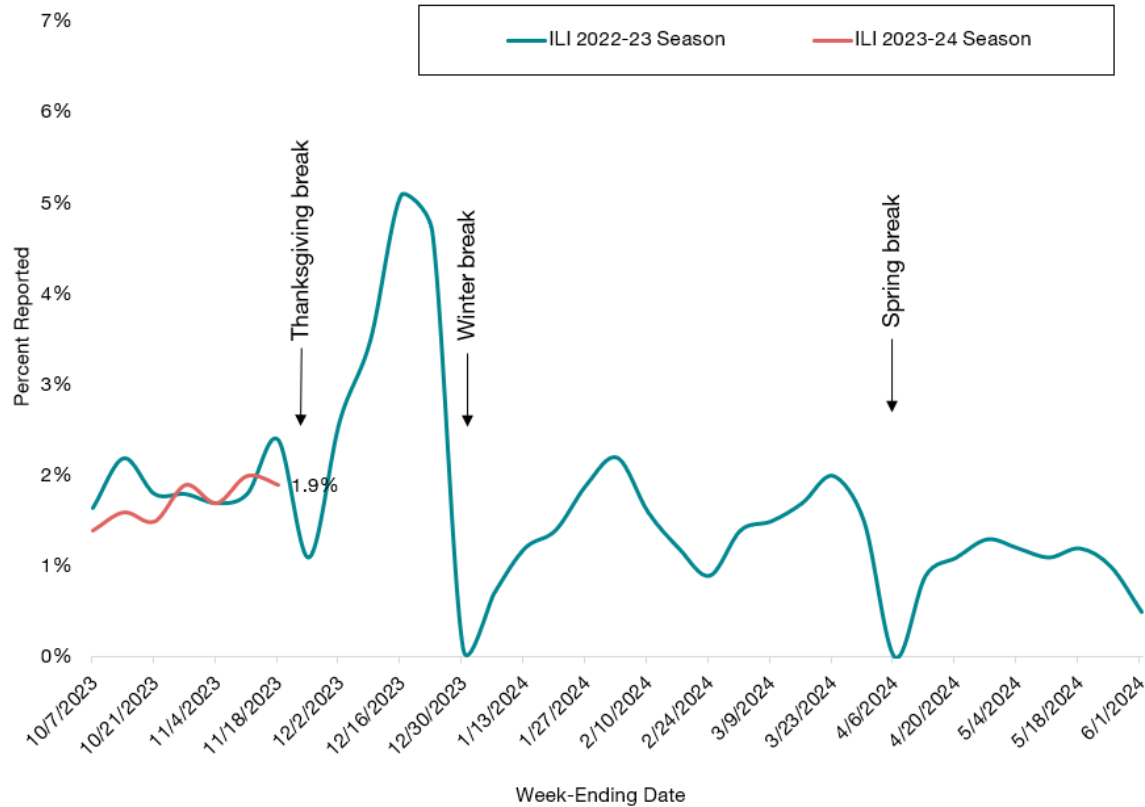
**Table 2: Emergency Department and Urgent Care Visits with Influenza-like Illnesses in Ottawa County – Last 7 Weeks**

MMWR Week	Week-Ending Date	ILI Visits	Total ED/UC Visits	Percent of ED/UC Visits
40	10/7/2023	31	2439	1.3%
41	10/14/2023	50	2303	2.2%
42	10/21/2023	35	2273	1.5%
43	10/28/2023	34	2495	1.4%
44	11/4/2023	50	2389	2.1%
45	11/11/2023	53	2462	2.2%
46	11/18/2023	49	2520	1.9%

- During week 46, Ottawa County ED and UC visits with ILI decreased slightly to 1.9%, from 2.2% reported the previous week. This proportion is relatively low and well below that seen at a similar time last season (2.9%).

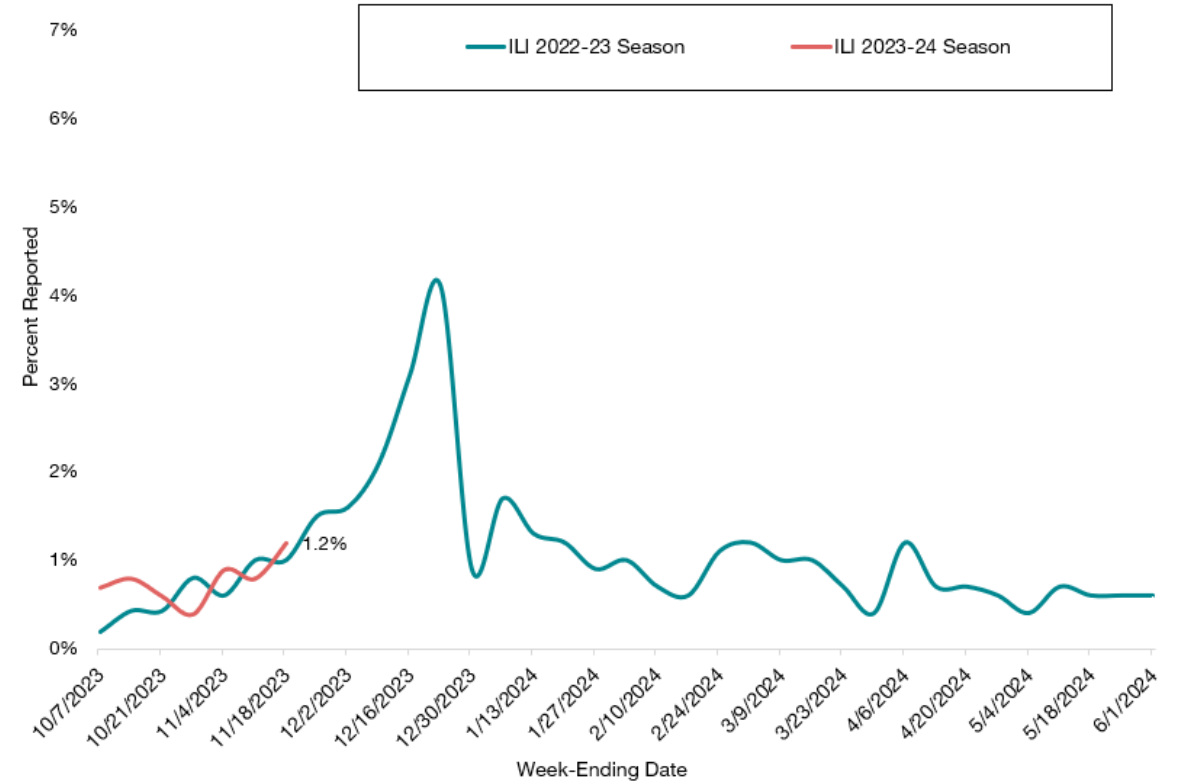
# Influenza-Like Illness (ILI) Surveillance from Reporting Schools, Child care and Healthcare Settings

Figure 3: Percent ILI in Schools and Child care by Week



- During week 46, the proportion of ILI reported in school/child care settings was 1.9%, comparable to 2.0% reported the previous week. This proportion is slightly lower than that reported at the same time last season (2.4%).

Figure 4: Percent Healthcare ILI Visits by Week



- Reported ILI in healthcare offices was 1.2%, slightly higher than 0.8% reported the previous week. The 1.2% reported in week 46 is comparable to that reported at a similar time last season (1.0%).
- There were no reported influenza outbreaks in long-term care facilities (LTCFs) during week 46.

# Influenza-Associated Pediatric Mortality & Vaccine Coverage

## Influenza-Associated Pediatric Mortality

- Nationally, **two (2) influenza-associated pediatric deaths** have been reported for the 2023-24 flu season. During the entire 2022-2023 influenza season, there were a total of **182 influenza-associated pediatric deaths** reported. No influenza-associated pediatric deaths have been reported in Michigan so far this season. There have been no reports of influenza-associated pediatric deaths in Ottawa County. *(Note that other measures of disease severity including influenza associated hospitalizations and complications are not reported in this data).*

## Influenza Vaccination Coverage

- The best way to reduce the risk of getting the seasonal flu and its potentially serious complications is to get vaccinated every year. Over the past five influenza seasons, average vaccination coverage in Ottawa County hovered around 40%. Table 3 below reflects total vaccination coverage rate in Ottawa County and statewide (Michigan) over the last five seasons and through November 18 this season.

**Table 3: Influenza Vaccination Rates in Ottawa County and Michigan, Previous Five Seasons and 2023-24 Season YTD**

	2018-19 Season	2019-20 Season	2020-21 Season	2021-22 Season	2022-23 Season	2023-24 Season (YTD)
Ottawa County	39%	40.2%	42.9%	40.1%	35.4%	24.1%
Michigan	30.3%	31.6%	34.3%	31.8%	29.2%	20.7%
Healthy People 2030 Target	70%	70%	70%	70%	70%	70%

YTD = Year To Date

## Preventing the Flu/Influenza

- Get the flu vaccine
- Stay home when sick and limit contact with other people
- Wash hands frequently with soap and water
- Cover coughs and sneezes

[Click here to learn more about preventative steps](#)

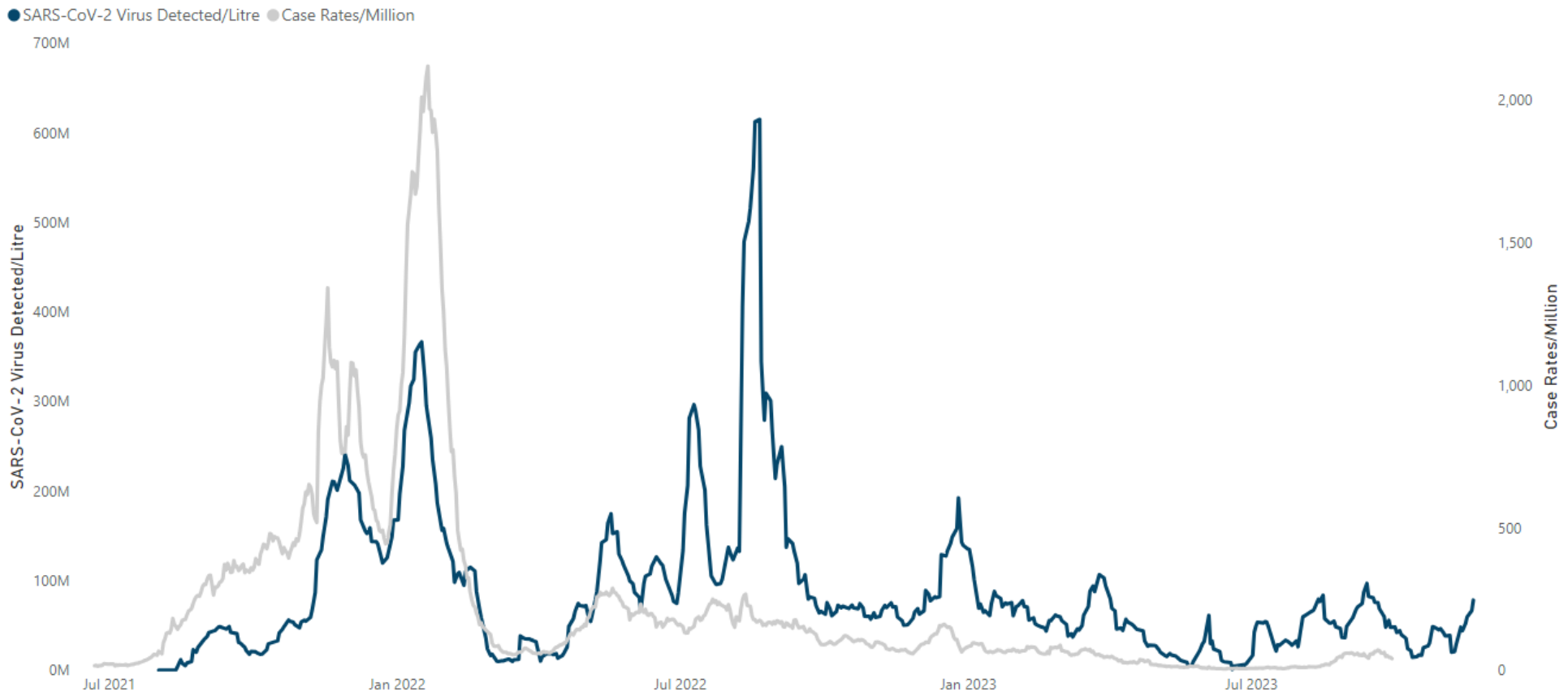
# Coronavirus (COVID-19) Surveillance

*Dates of data may vary.*



# Holland-Zeeland Wastewater Surveillance

SARS-CoV-2 Virus Detected/Litre by Sample Date With COVID-19 Case Rates/Million by Referral Date (7-Day Averages)



**Data Interpretation:** The **blue line** on the graph shows the 7-day average levels of SARS-CoV-2 virus (N2 markers) detected in wastewater sampled from treatment plants in Holland & Zeeland. The **gray line** on the graph represents the 7-day average COVID-19 case rates/million for all of Ottawa County by referral date.

**Notes:** Use of at home tests since late 2021 likely reduces the number of positive tests reported to Public Health, resulting in artificially deflated case rates. Display of wastewater data may change as analytical methods are refined. A data point from Zeeland collected June 23, 2022, was removed from data analysis as an extreme outlier. County case rate calculation was discontinued on September 27, 2023 due to limited resources to maintain data.

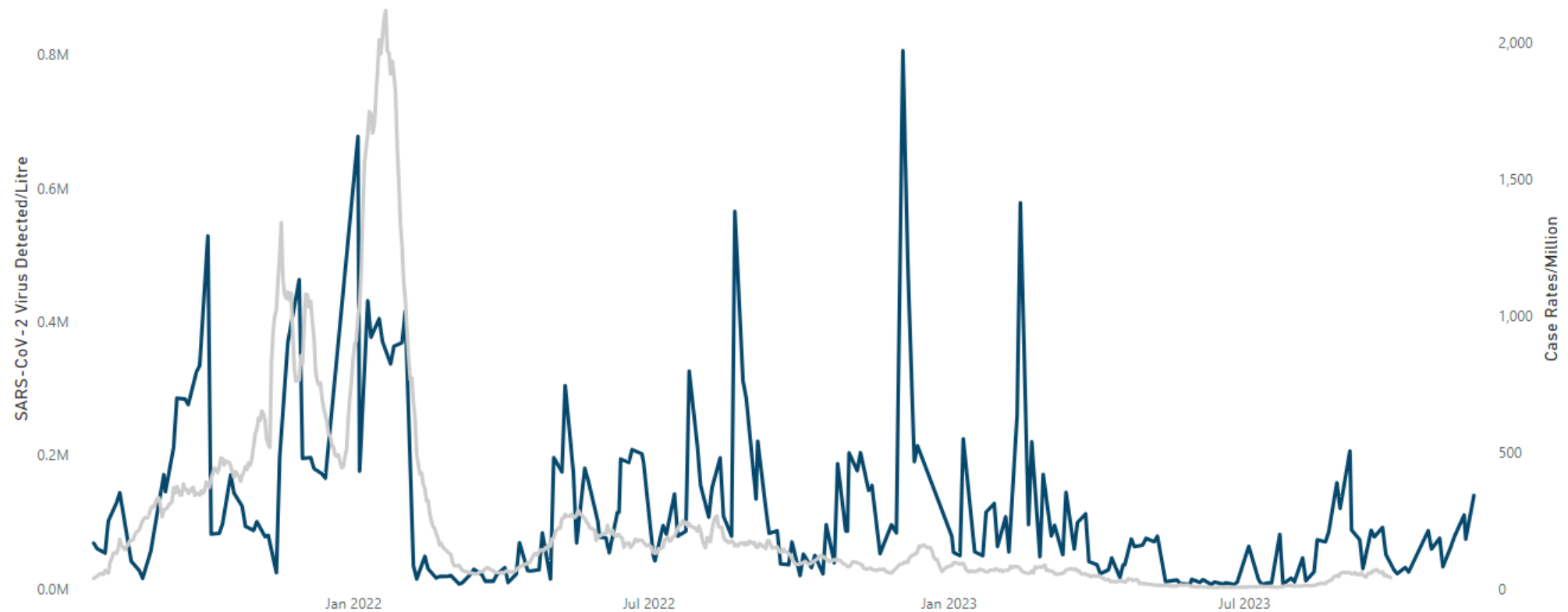
**Source:** Hope College Global Water Research Institute as part of the MDHHS SEWER-Network, Aaron Best, Ph.D. ([best@hope.edu](mailto:best@hope.edu))

**Additional Information:** [Michigan COVID-19 Wastewater Surveillance Pilot Project \(arcgis.com\)](https://arcgis.com), [Coronavirus - Sentinel Wastewater Epidemiology Evaluation Project \(SWEEP\) \(michigan.gov\)](https://michigan.gov)

# Allendale Wastewater Surveillance

SARS-CoV-2 Virus Detected/Litre by Sample Date With COVID-19 Case Rates/Million by Referral Date (7-Day Averages)

● SARS-CoV-2 Virus Detected/Litre ● Case Rates/Million



**Data Interpretation:** The **blue line** on the graph shows the 7-day average levels of SARS-CoV-2 virus (N2 markers) detected in wastewater sampled from treatment plants in Holland & Zeeland. The **gray line** on the graph represents the 7-day average COVID-19 case rates/million for all of Ottawa County by referral date.

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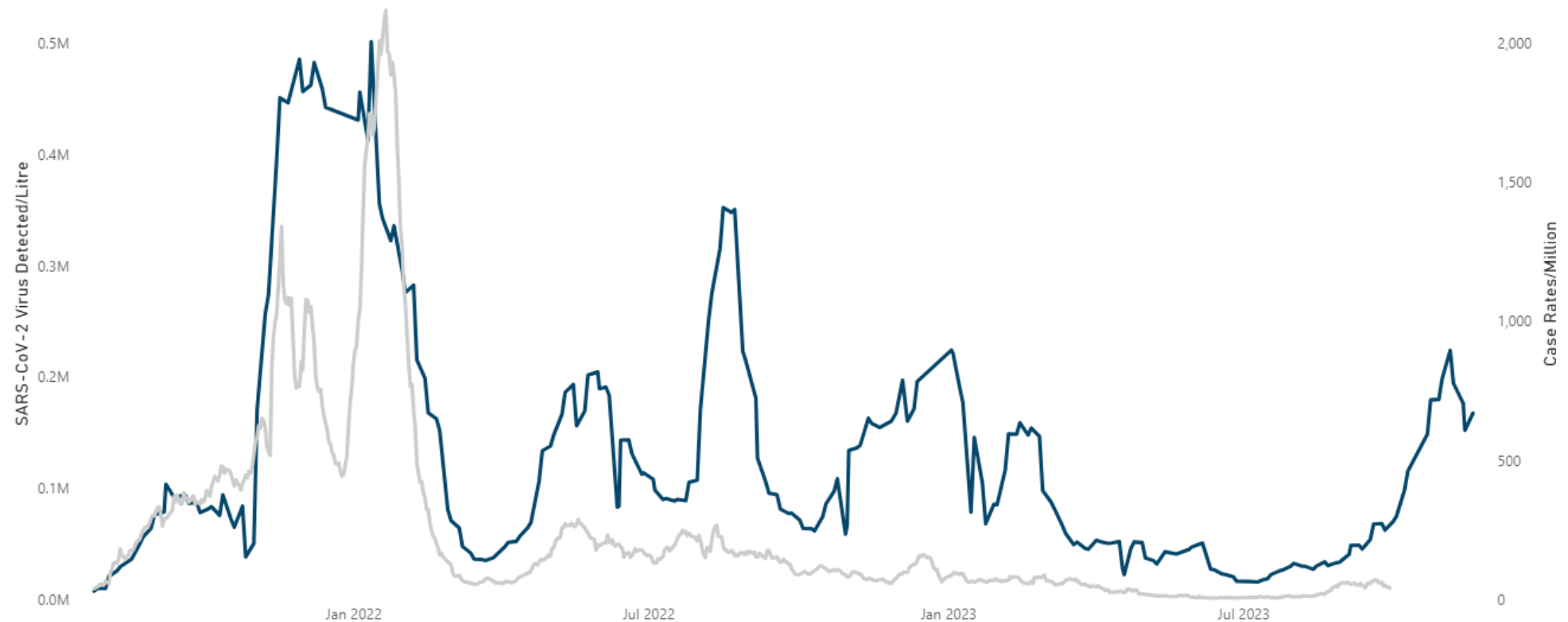
**Source:** Grand Valley State University Annis Water Resources Institute as part of the MDHHS SEWER-Network, Richard Rediske, Ph.D. ([redisker@gvsu.edu](mailto:redisker@gvsu.edu))

**Additional Information:** [Michigan COVID-19 Wastewater Surveillance Pilot Project \(arcgis.com\)](https://arcgis.com), [Coronavirus - Sentinel Wastewater Epidemiology Evaluation Project \(SWEEP\) \(michigan.gov\)](https://michigan.gov)

# Grand Haven-Spring Lake Wastewater Surveillance

SARS-CoV-2 Virus Detected/Litre by Sample Date With COVID-19 Case Rates/Million by Referral Date (7-Day Averages)

● SARS-CoV-2 Virus Detected/Litre ● Case Rates/Million



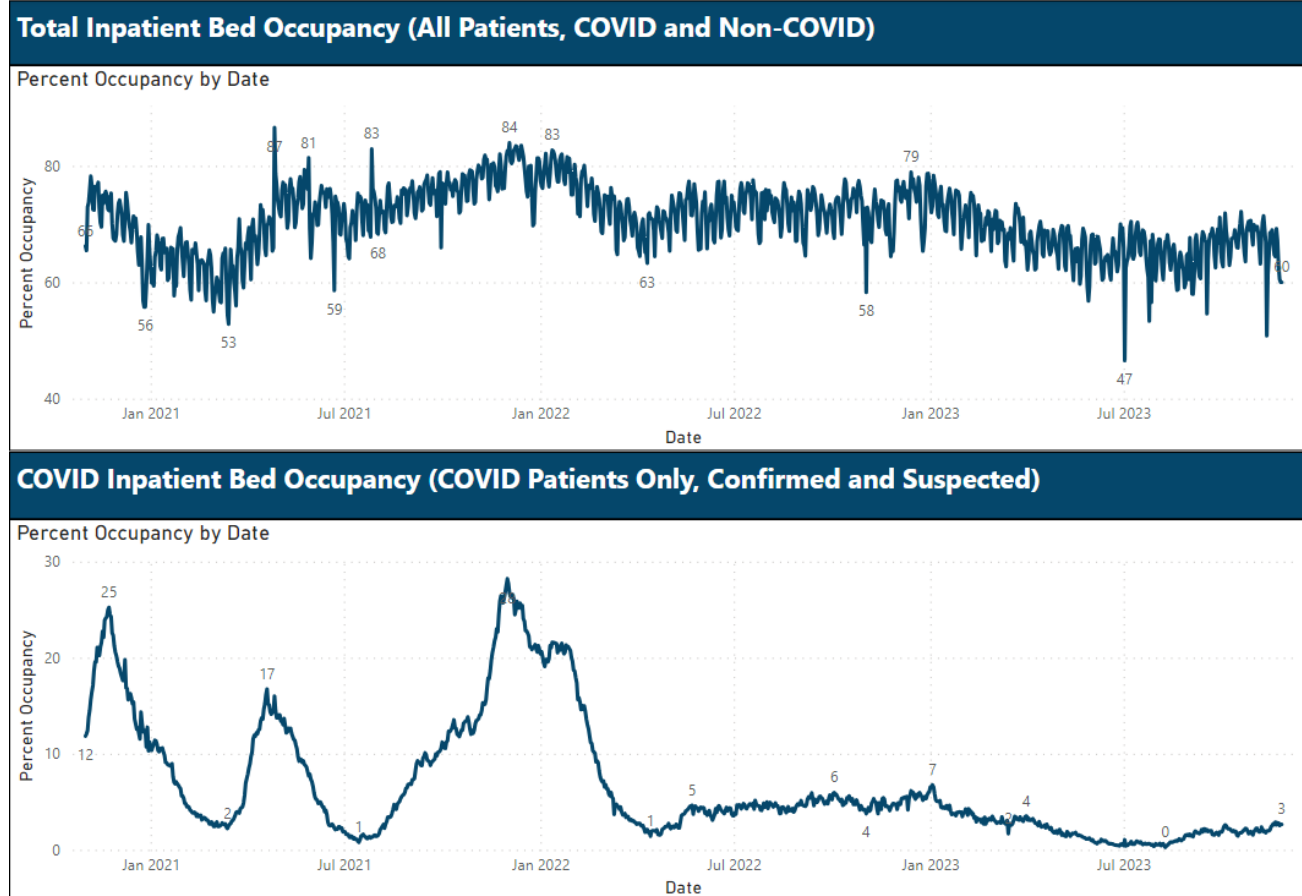
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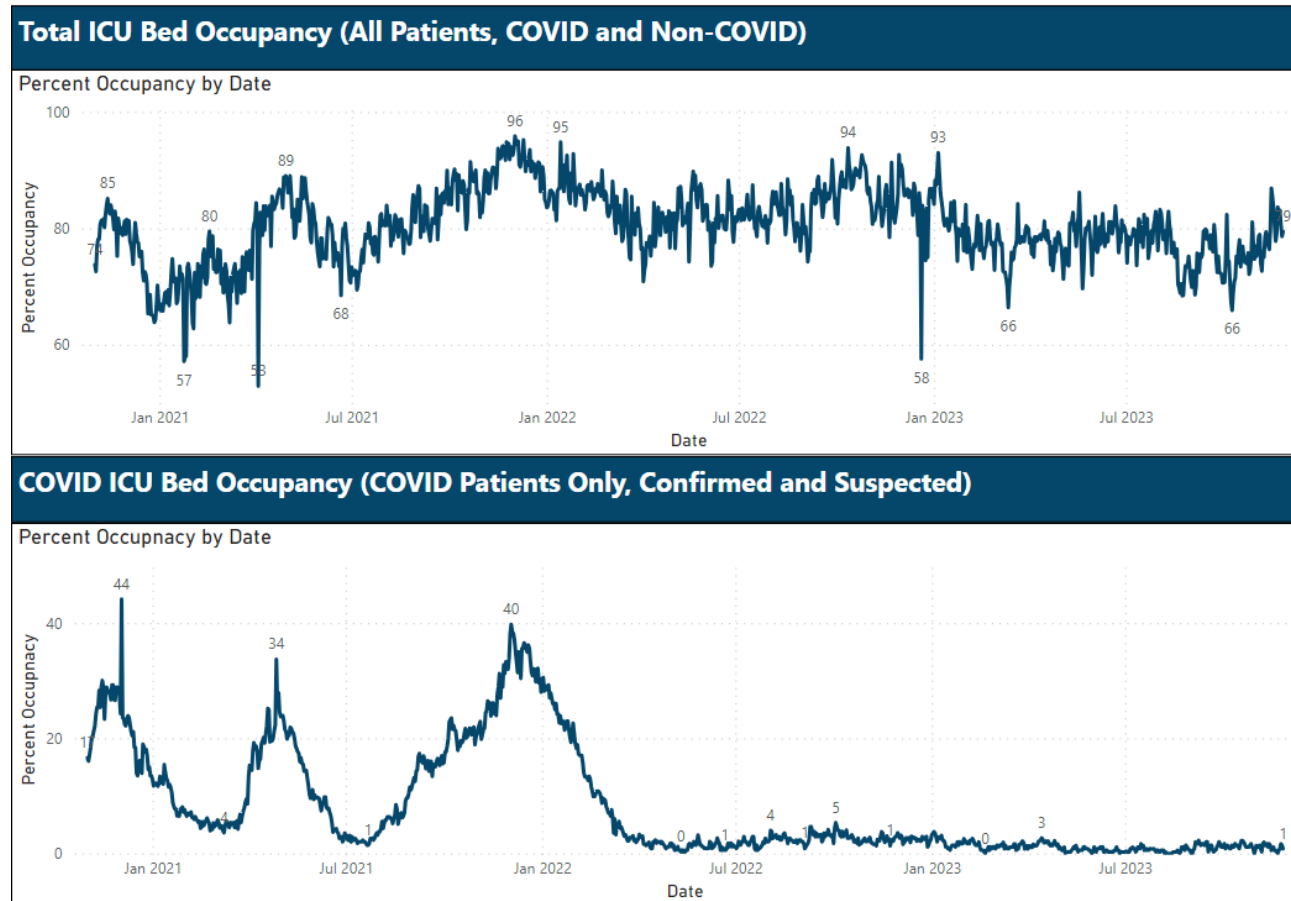
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# Ottawa County Inpatient Bed Occupancy



- Total hospital bed occupancy is 60%, slightly below the pandemic average of 63%.
- Currently, 3% of all inpatient beds are occupied by COVID-19 patients.

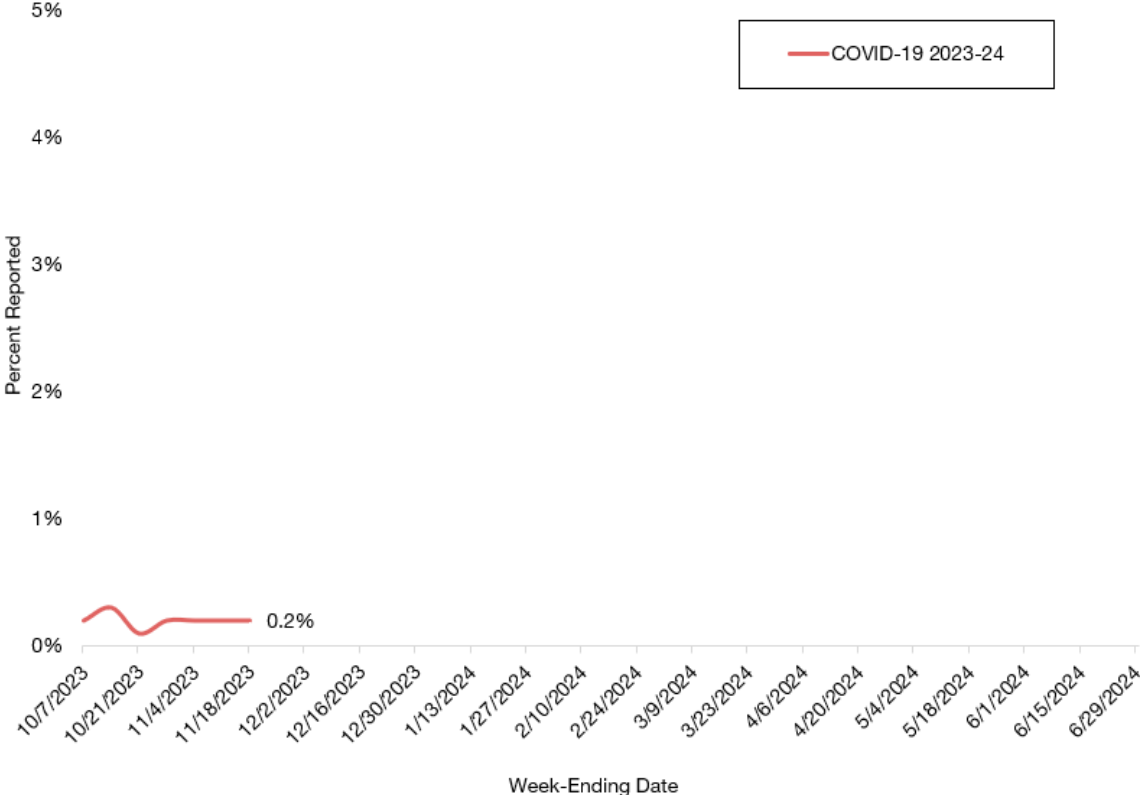
# Ottawa County ICU Bed Occupancy



- Total ICU bed occupancy varies considerably by day. Currently, ICU bed occupancy is 79%.
- Currently, 1% of ICU beds are occupied by COVID-19 patients.

# COVID-19 Surveillance from Reporting Schools/Child care Facilities

Figure 5: Percent COVID-19 Cases Reported\* by Week



\*Not all schools/child care facilities in Ottawa County are report each week. Over the last seven weeks an average of about 25 schools/child care facilities reported cases weekly.

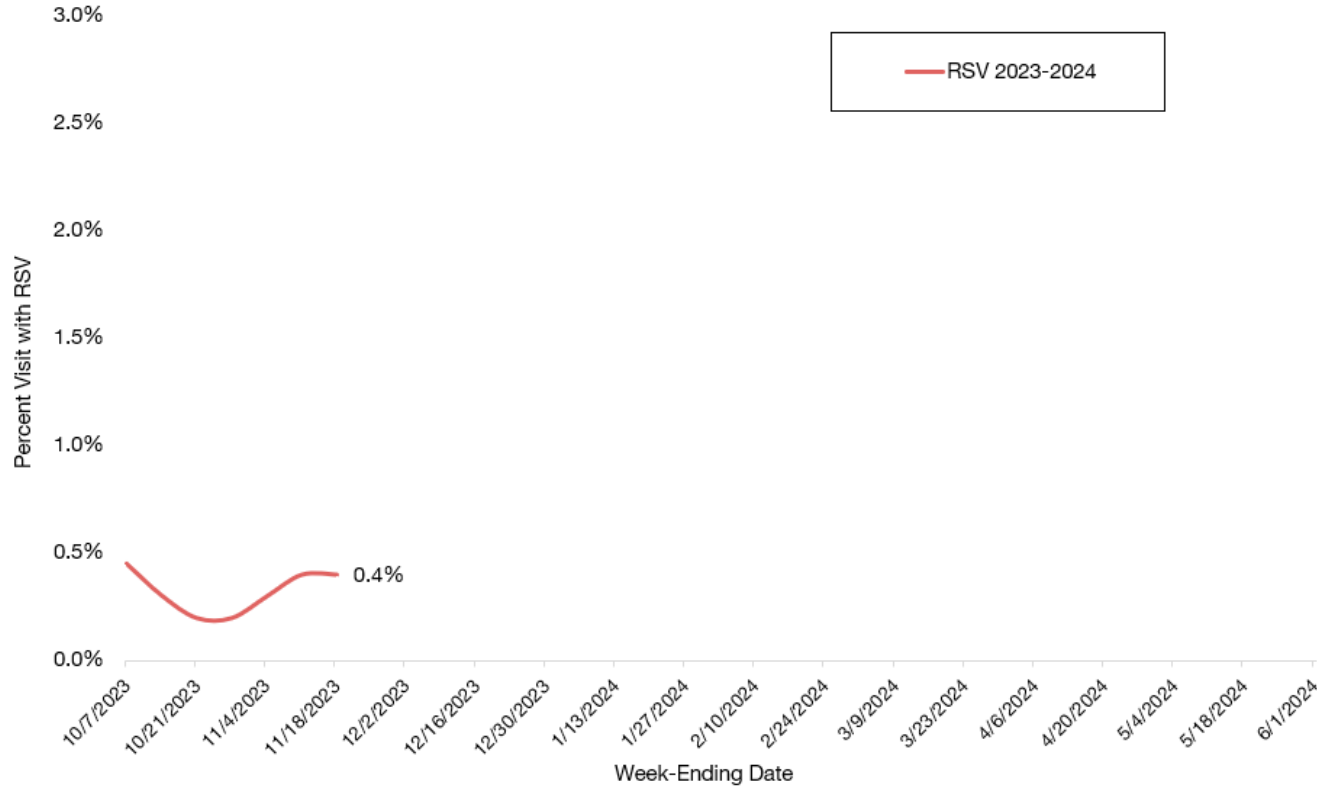
- During week 46, the proportion of COVID-19 student/staff cases reported in school/child care settings remained the same as the previous week at 0.2%.

# Respiratory Syncytial Virus (RSV) Surveillance

*MMWR Week 46: November 12, 2023 – November 18, 2023*

# Syndromic Surveillance for Respiratory Syncytial Virus in Ottawa County

**Figure 6: Percentage of Emergency Department (ED) and Urgent Care (UC) Visits in Ottawa County with Respiratory Syncytial Virus (RSV) Illness**



**Note:** Data includes all ages.

**Table 4: Emergency Department and Urgent Care Visits with RSV Illnesses in Ottawa County – Last 7 Weeks**

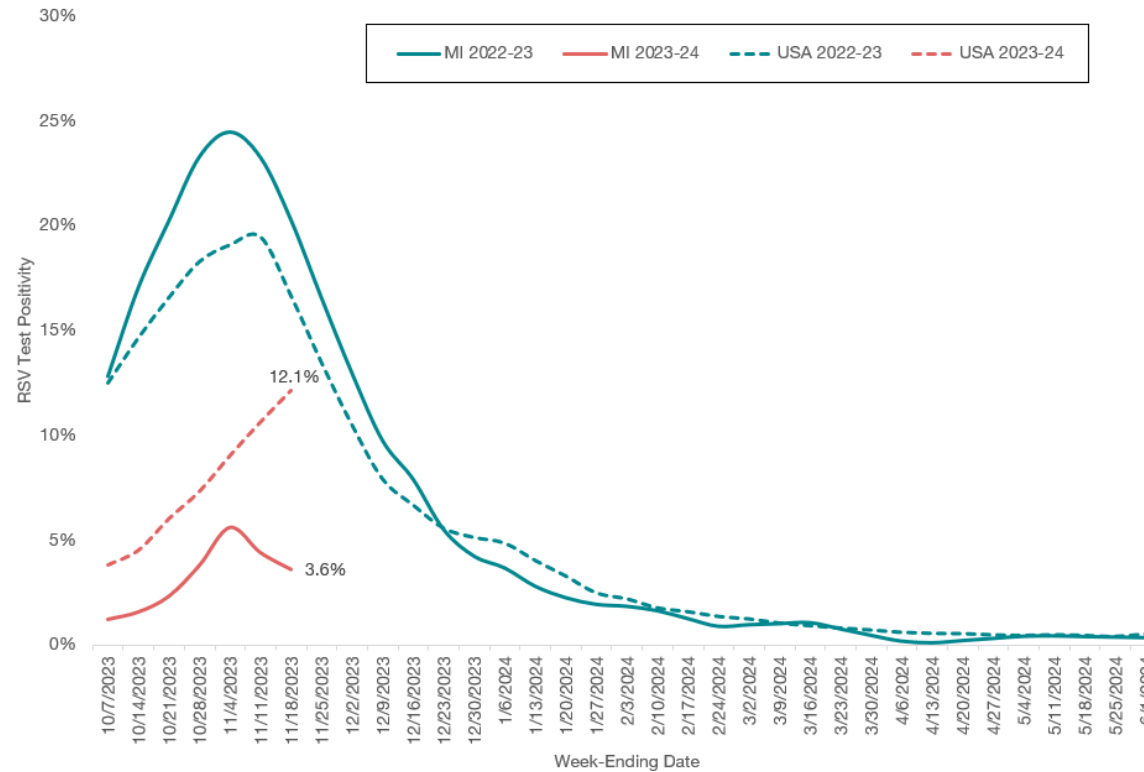
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45	11/11/2023	11	2462	0.4%
46	11/18/2023	10	2520	0.4%

- During week 46, Ottawa County ED and UC visits with RSV illnesses remained the same as the previous week at 0.4%.



# RSV Test Positivity in the United States and Michigan

Figure 7: Positivity Rate\* of RSV PCR Tests by Week, United States and Michigan



\*RSV positivity is the percent of RSV PCR tests conducted by reporting laboratories that result positive. Michigan data displayed are 3-week moving averages. US data displayed are 5-week moving averages.

**Note:** Due to reporting delays, recent statistics may be updated as more data is obtained

- During week 46, RSV positivity in the US increased to 12.1%.
- Michigan RSV positivity decreased to 3.6% during week 46.

# Additional Resources

## Influenza (Flu):

- National influenza surveillance data are available at: <https://www.cdc.gov/flu/weekly/index.htm>
- Statewide influenza surveillance reports are available at: [https://www.michigan.gov/flu/surveillance/past-michigan-flu-focus-surveillance-reports?utm\\_campaign=&utm\\_medium=email&utm\\_source=govdelivery](https://www.michigan.gov/flu/surveillance/past-michigan-flu-focus-surveillance-reports?utm_campaign=&utm_medium=email&utm_source=govdelivery)
- State and county level influenza vaccination coverage data are available at: <https://www.michigan.gov/flu/flu-dashboard>
- Disease burden of flu in the United States: <https://www.cdc.gov/flu/about/burden/index.html>
- Preventing Seasonal Flu: <https://www.cdc.gov/flu/prevent/index.html>
- Season flu vaccine effectiveness studies: <https://www.cdc.gov/flu/vaccines-work/effectiveness-studies.htm>
- Flu vaccine finder: <https://www.vaccines.gov/find-vaccines/>
- Healthy People 2030 Flu Vaccination Objective: [Increase the proportion of people who get the flu vaccine every year — IID-09 - Healthy People 2030 | health.gov](#)

## Coronavirus (COVID-19) Resources:

- CDC COVID Data Tracker: <https://covid.cdc.gov/covid-data-tracker/#datatracker-home>
- Michigan COVID-19 Website: <https://www.michigan.gov/Coronavirus>
- Michigan Wastewater Dashboard: <https://www.michigan.gov/coronavirus/stats/wastewater-surveillance/dashboard/sentinel-wastewater-epidemiology-evaluation-project-sweep>

## Respiratory Syncytial Virus (RSV) Resources:

- National RSV Information: <https://www.cdc.gov/rsv/index.html>
- Preventing RSV: <https://www.cdc.gov/rsv/about/prevention.html>
- National RSV surveillance data are available at: <https://www.cdc.gov/surveillance/nrevss/rsv/index.html>

# Data Sources

## Influenza (Flu) Data Sources:

- USA Positivity Rate from Weekly U.S. Influenza Surveillance Report <https://www.cdc.gov/flu/weekly/index.htm#ClinicalLaboratories>
- Ottawa County Positivity Rate is calculated from data reported by providers and laboratories in the community through weekly reporting
- ILI ED and UC visit data is pulled from Michigan Syndromic Surveillance System (MSSS)
- ILI data in schools/child care facilities is provided facilities in the community through weekly reporting
- ILI healthcare visit data is provided by providers and laboratories in the community through weekly reporting
- Vaccination data from Michigan Flu Dashboard <https://www.michigan.gov/flu/flu-dashboard>

## Coronavirus (COVID-19) Data Sources:

- Inpatient and ICU Hospitalization data from EMResource
- COVID-19 cases in schools/child care facilities are reported by the facility through an online weekly reporting system

## Respiratory Syncytial Virus (RSV) Data Sources:

- RSV ED and UC visit data is pulled from Michigan Syndromic Surveillance System (MSSS)
- USA and MI RSV positivity from <https://www.cdc.gov/surveillance/nrevss/rsv/index.html>