

# Ottawa County COVID-19 Epidemiology

June 09, 2022

*Data as of June 04, 2022, unless otherwise indicated*

# Executive Summary

- **Transmission has flattened in the US and slowed in Michigan**
- **Ottawa County transmission may be slowing**
  - This past week positivity **increased** to 24.4%, from 23.5% seen two weeks ago.
  - Weekly case counts **decreased** 9% (-20% two weeks ago), from 436 two weeks ago to 396 last week.
  - Cases among children **decreased** 27% (-10% two weeks ago), from 55 two weeks ago to 40 last week.
  - COVID-19 wastewater signals in Holland/Zeeland are mixed, while Spring Lake/Grand Haven and Allendale **may be trending down**.
  - Ottawa remains in the LOW CDC Community Level.
- **Ottawa-area and regional hospitals have adequate capacity**
  - In Ottawa County, 3% of all available beds and 0% of all ICU beds are occupied by COVID-19 patients.\*
  - Ottawa County hospitals are utilizing usual care strategies, are reporting adequate staffing, and are minimizing Ottawa County ED diversion.
- **Pediatric hospitalization rates in the US and in Michigan remain relatively low**
  - Regional pediatric hospitalization census remained low.
- **Of Ottawa County residents aged 5+, 63.1% are fully vaccinated**

\*Some hospitals in Ottawa County immediately transfer acutely ill adults or children to regional hospitals that offer a higher level of care. This practice may reduce the proportion of beds occupied by COVID-19 patients in Ottawa and increase bed occupancy in urban centers with large hospitals, such as Kent County.

# Limitations

- **Case Counts, Case Rates, and Test Positivity**

With the widescale availability of at-home antigen tests for COVID-19 which are not reported or included in public health surveillance data, the case counts and case rates in this report underestimate the true burden of disease. However, it is expected that trends reflect the relative amount of transmission in the community.

- **Wastewater Surveillance**

Wastewater samples are collected from specific geographic sites in the county and may not reflect COVID-19 burden across the entire county population. However, detected trends generally correlate with case rates, therefore wastewater readings are displayed alongside countywide incidence rates in this report.

# Ottawa County Metrics by Week

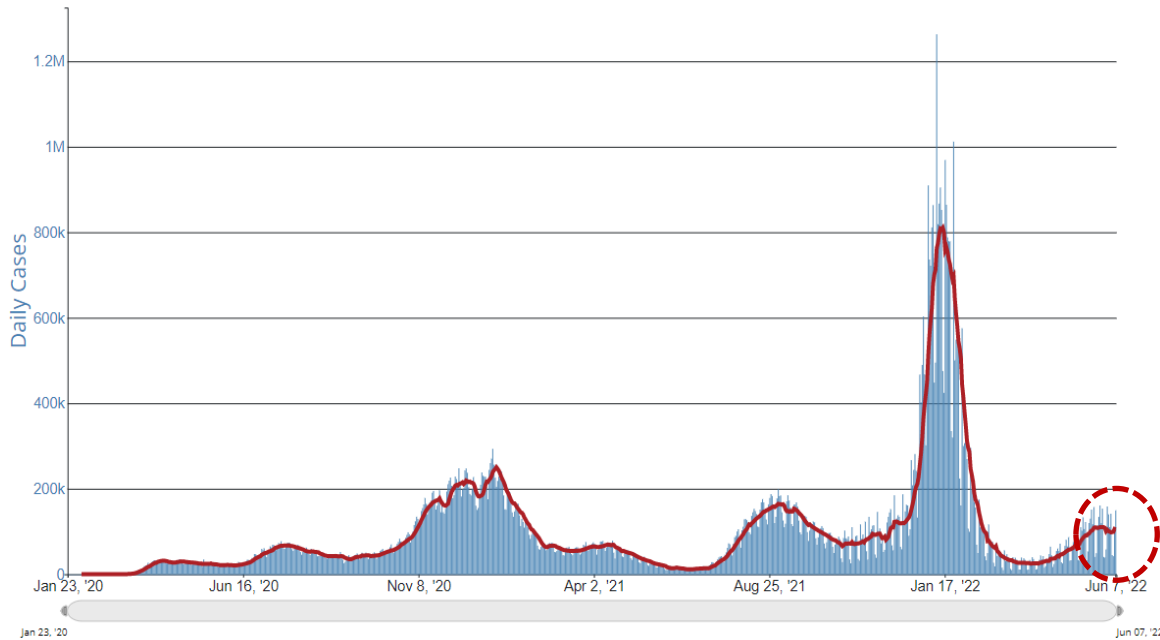
Metric	Goal	Week Ending				
		7-May-22	14-May-22	21-May-22	28-May-22	4-Jun-22
Positivity (All Ages)	NA	20.1%	22.9%	23.8%	23.5%	24.4%
Weekly Cases (All Ages)	<592	467	550	546	436	396
Weekly Cases in Children (0-17 years of age)	NA	51	57	61	55	40
Total Deaths (All Ages)	0	3	1	1	0	1
CDC COVID-19 Community Level (New)	Low	Low	Low	Low	Low	Low

Please note that with updated CDC Community Risk Transmission levels, metrics and/or metric thresholds/goals may change.

# Case Trends in the USA and Michigan

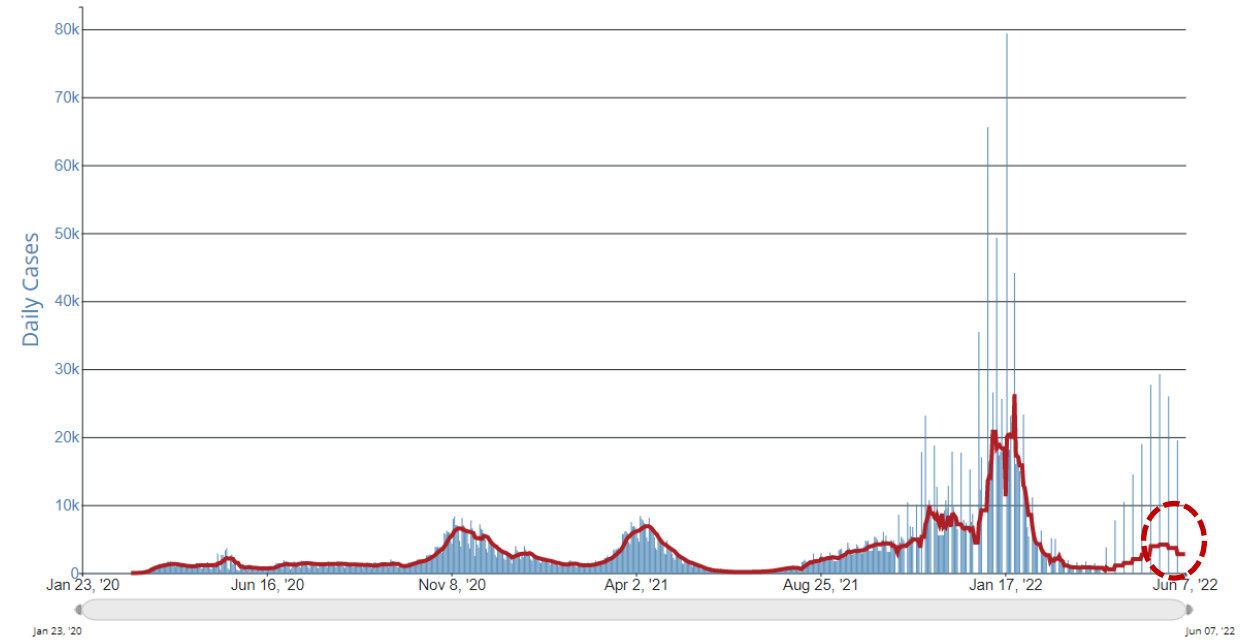
## USA

Daily Trends in Number of COVID-19 Cases in The United States Reported to CDC



## Michigan

Daily Trends in Number of COVID-19 Cases in Michigan Reported to CDC



Daily case counts in the US and Michigan remain lower than previous surges.  
**Recent uptrends in the US have flattened and may have slowed in Michigan.**

**Note:** Use of at home tests likely reduces the number of positive tests reported to Public Health, resulting in an artificially deflated number of cases.

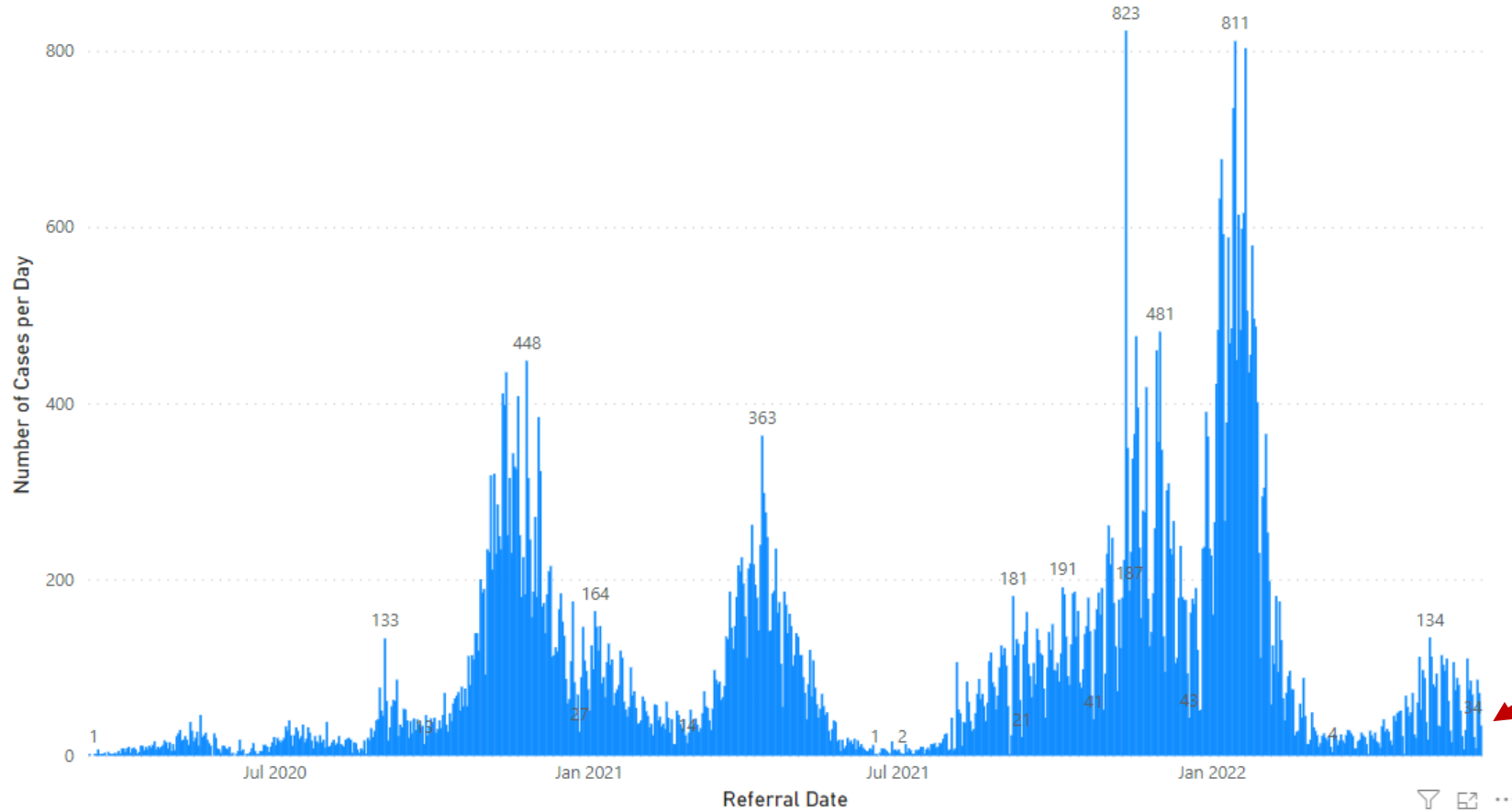
**Source:** [https://covid.cdc.gov/covid-data-tracker/#trends\\_dailycases](https://covid.cdc.gov/covid-data-tracker/#trends_dailycases)

Data through June 07, 2022

# Case Trends in Ottawa County

## COVID-19 Cases by Day, Ottawa County, March 15, 2020 – June 08, 2022

Epidemiological Curve



Total Number of Cases  
**78,170**

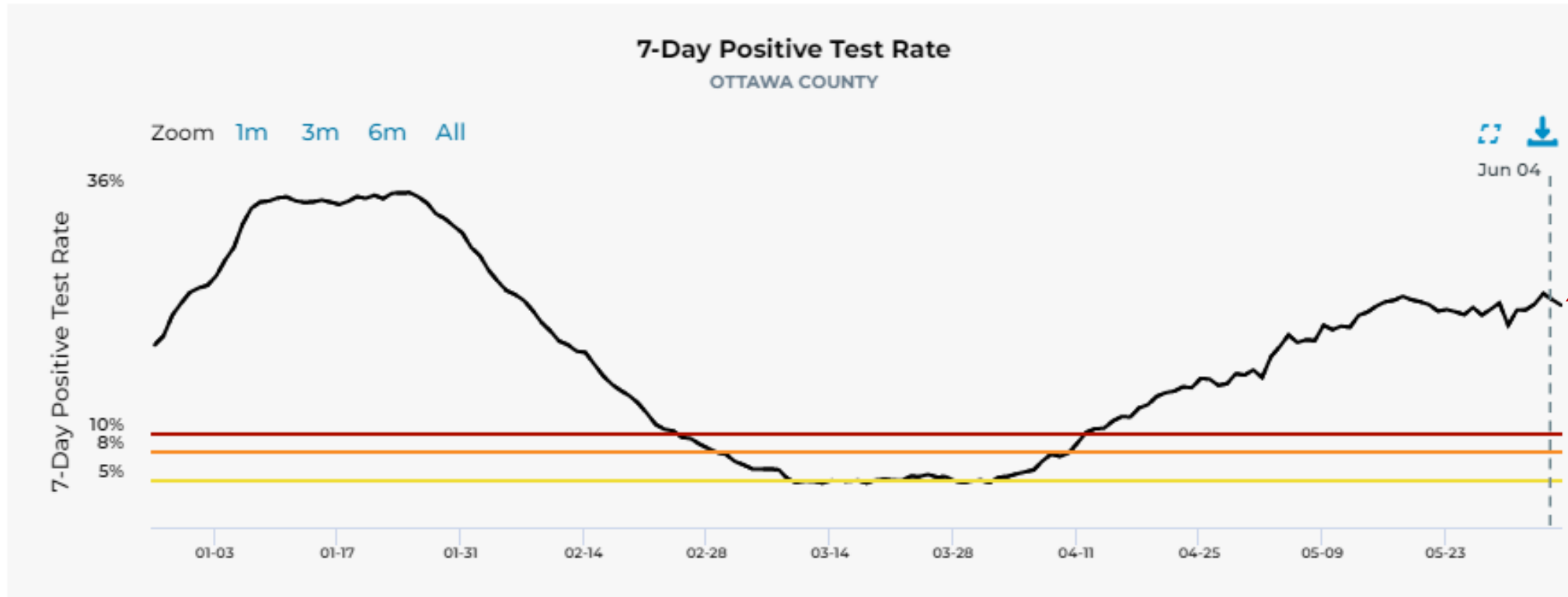
Currently, the 7-day average is a little over **53 cases per day**, a slight increase compared to the approximately 48 cases per day reported last week at this time.

**Notes:** Use of at home tests likely reduces the number of positive tests reported to Public Health, resulting in an artificially deflated number of cases. Additionally, On November 12, 2021, MDHHS updated their database resulting in a backlog of cases being reported in one day.

**Source:** Michigan Department of Health and Human Services, Michigan Disease Surveillance System

# Test Positivity in Ottawa County

COVID-19 Cases by Day, Ottawa County, January 1, 2022 – June 04, 2022



Positivity remained elevated at 24.4% last week, reestablishing an uptrend.

This visualization may change as CDC Community Transmission levels, metrics and/or metric thresholds/goals change.



**Note:** Testing data and can be found at the following sources: [Testing Results | Ottawa County Covid-19 Case Summary Data \(arcgis.com\)](https://arcgis.com) & <https://www.mistartmap.info/mism-indicators?area=county%3Aottawa>. Use of at-home tests likely reduces the number of positive tests reported to Public Health, resulting in an artificially deflated number of cases.

**Source:** <https://www.mistartmap.info/cdc-indicators?area=county%3Aottawa>

USA & MI

Spread

Children

Hospitalizations

Vaccinations

Variants

Risk Levels

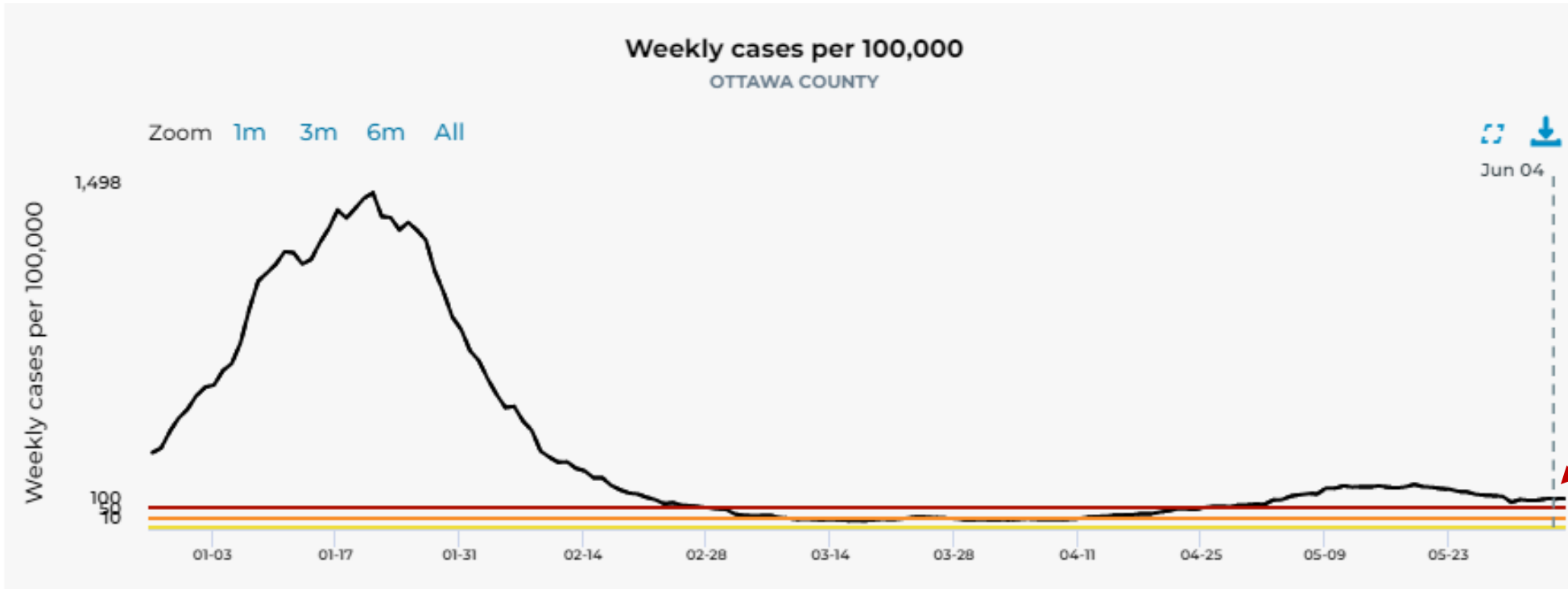
Other

Media

Science Roundup

# Case Rates in Ottawa County – All Ages

## COVID-19 Cases by Day, Ottawa County, January 1, 2022 – June 04, 2022



Case rates **remained low at 135.4** cases per week per 100,000 population (**slightly lower than 148** the week prior).

Please note that with updated CDC Community Transmission levels, metrics and/or metric thresholds/goals may change.



**Note:** Use of at home tests likely reduces the number of positive tests reported to Public Health, resulting in artificially deflated case rates.

**Source:** <https://www.mistartmap.info/cdc-indicators?area=county%3Aottawa>

USA & MI

Spread

Children

Hospitalizations

Vaccinations

Variants

Risk Levels

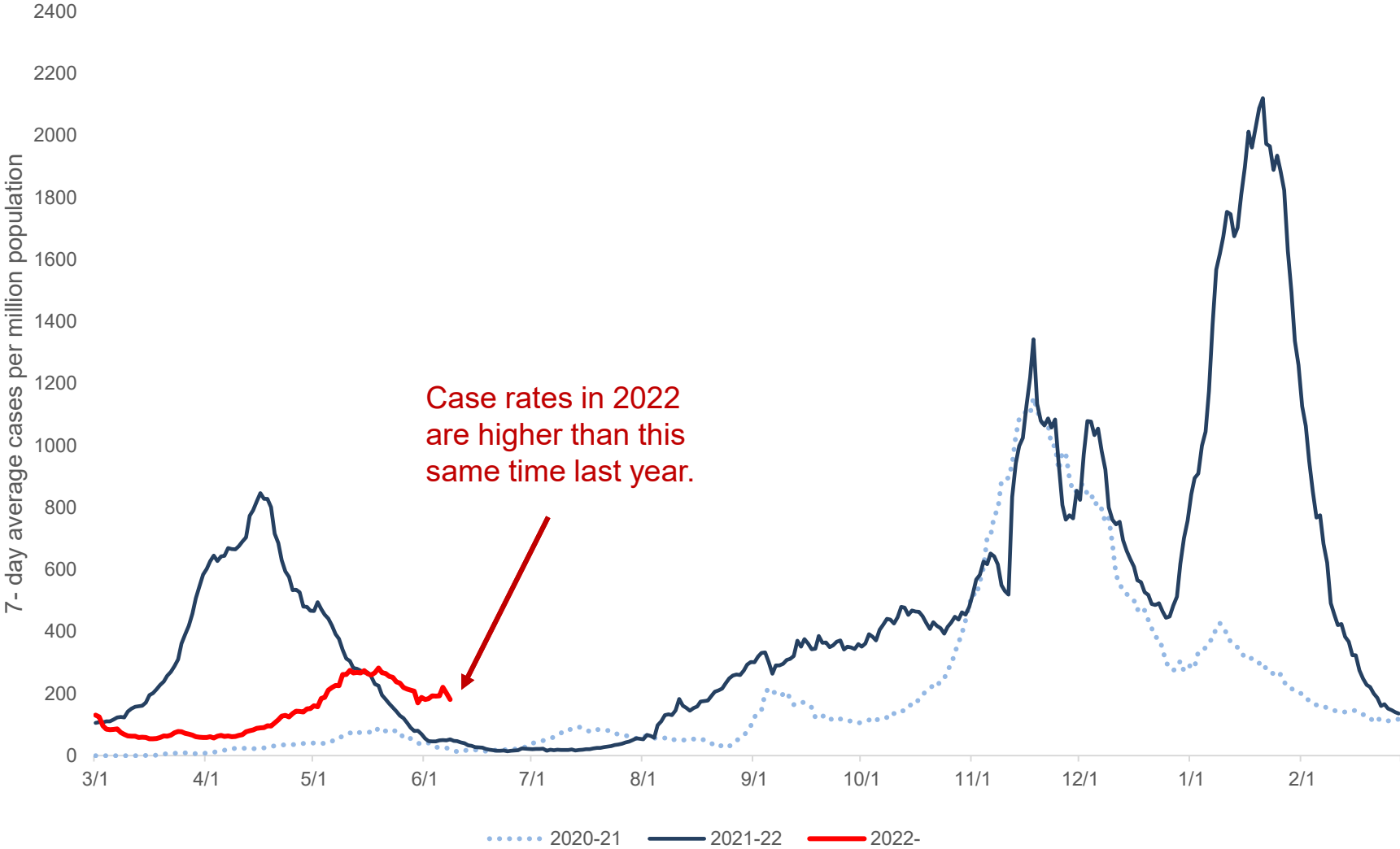
Other

Media

Science Roundup



# Ottawa County Time Trends – Annual Comparison of Case Rates



Case rates in 2022 are higher than this same time last year.

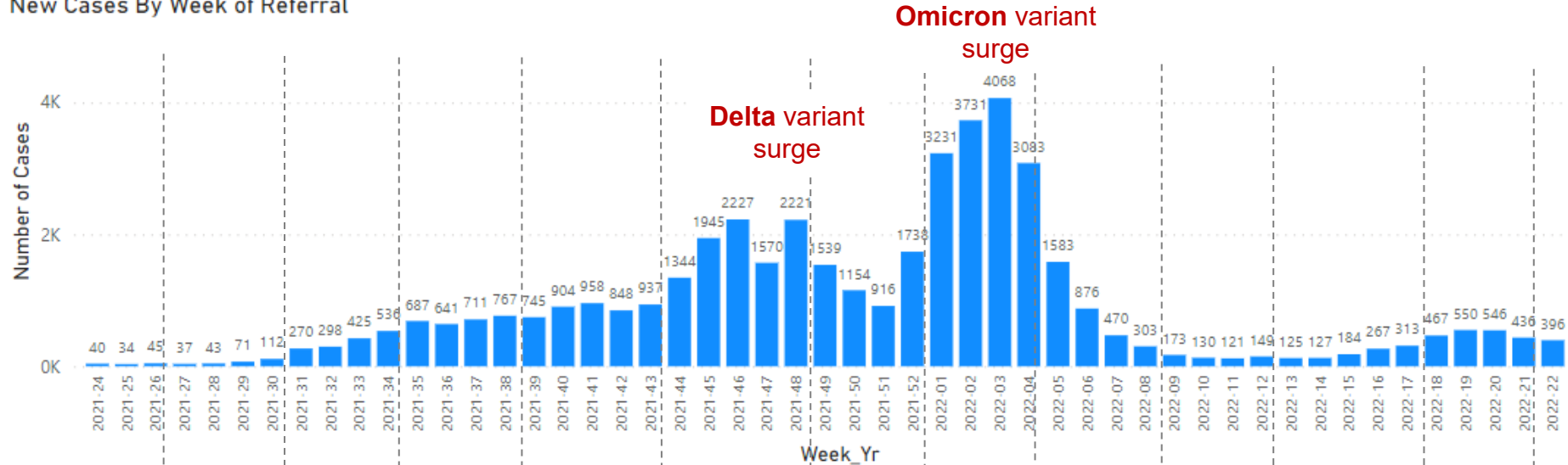
**Note:** Use of at home tests likely reduces the number of positive tests reported to Public Health, resulting in artificially deflated case rates.

**Source:** Internal Data

Data through June 08, 2022

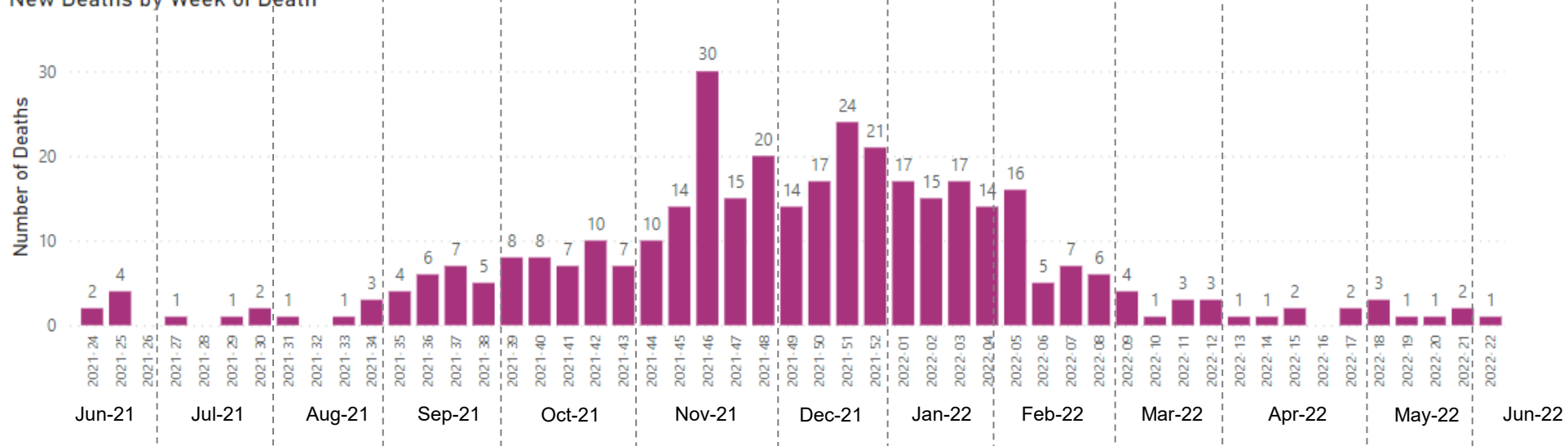
# Ottawa County – Cases & Deaths by Week, All Ages

New Cases By Week of Referral



The weekly number of **cases decreased 9%** from week 21 to week 22.

New Deaths by Week of Death



Weekly COVID-19 **deaths remain low**. The current weekly average number of deaths over the last 4 weeks stands at about **1 death per week**.

**Note:** Use of at home tests likely reduces the number of positive tests reported to Public Health, resulting in artificially deflated number of cases.

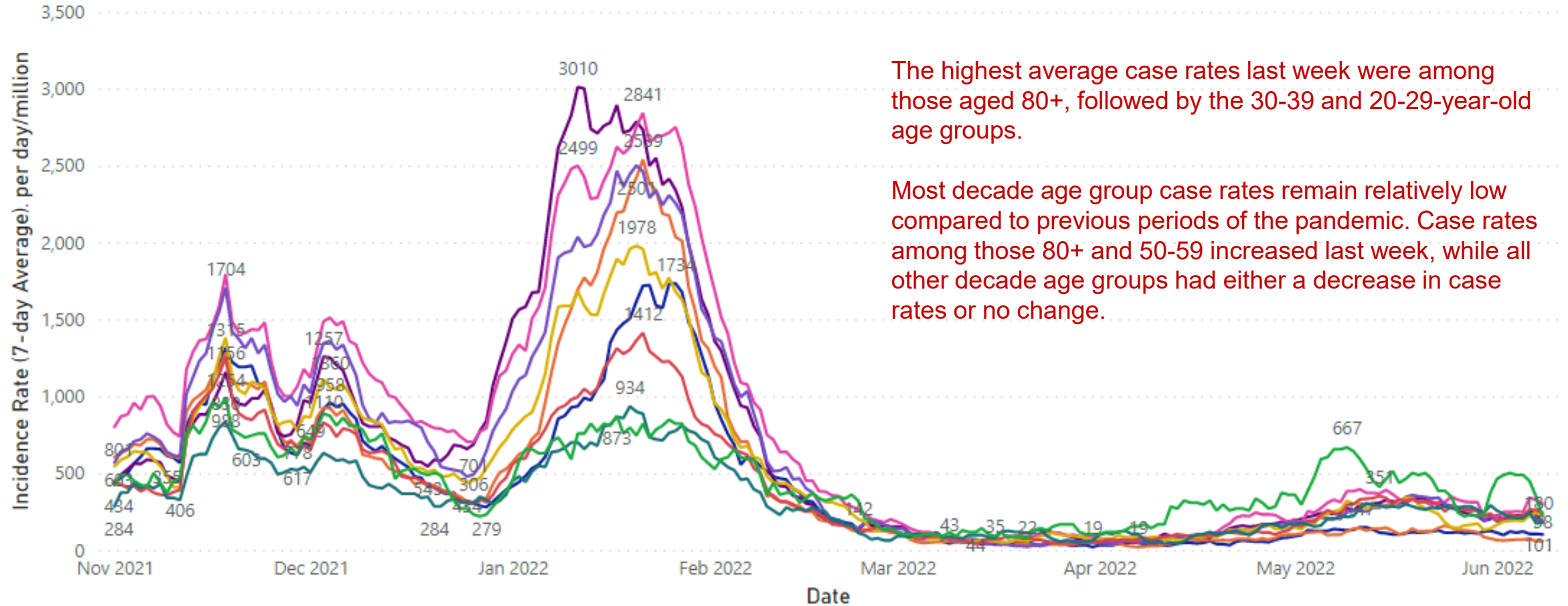
**Source:** Michigan Department of Health and Human Services, Michigan Disease Surveillance System

# Ottawa County - Case Rate Trends – by Age Decade

## COVID-19 Case Rates by Age, November 2021 – June 08, 2022

Incidence Rate (7-day Average)

rategroup ● 0-9 ● 10-19 ● 20-29 ● 30-39 ● 40-49 ● 50-59 ● 60-69 ● 70-79 ● 80+



The highest average case rates last week were among those aged 80+, followed by the 30-39 and 20-29-year-old age groups.

Most decade age group case rates remain relatively low compared to previous periods of the pandemic. Case rates among those 80+ and 50-59 increased last week, while all other decade age groups had either a decrease in case rates or no change.

**Note:** Use of at home tests likely reduces the number of positive tests reported to Public Health, resulting in artificially deflated case rates.

**Source:** Michigan Department of Health and Human Services, Michigan Disease Surveillance System

Data as of June 08, 2022

# Ottawa County - Case Rate Trends – by Age Decade

Daily new confirmed and probable cases per day per million by age group (daily average per week)

Week 22 (May 29, 2022 – June 4, 2022)

Age Decade (Years)	Average Daily Cases	Average Daily Case Rate	One Week % Rate Change
0-9	4.1	112.4	0%
10-19	3.0	67.7	-45%
20-29	10.1	224.2	0%
30-39	9.0	251.1	-18%
40-49	6.7	202.2	-24%
50-59	6.6	188.4	15%
60-69	7.1	219.1	-14%
70-79	4.3	207.8	-25%
80+	5.4	487.8	111%

**Age groups with highest average case rates last week:**

- 80+
- 30-39
- 20-29

**Age groups with largest week-over-week increase in case rates:**

- 80+
- 50-59

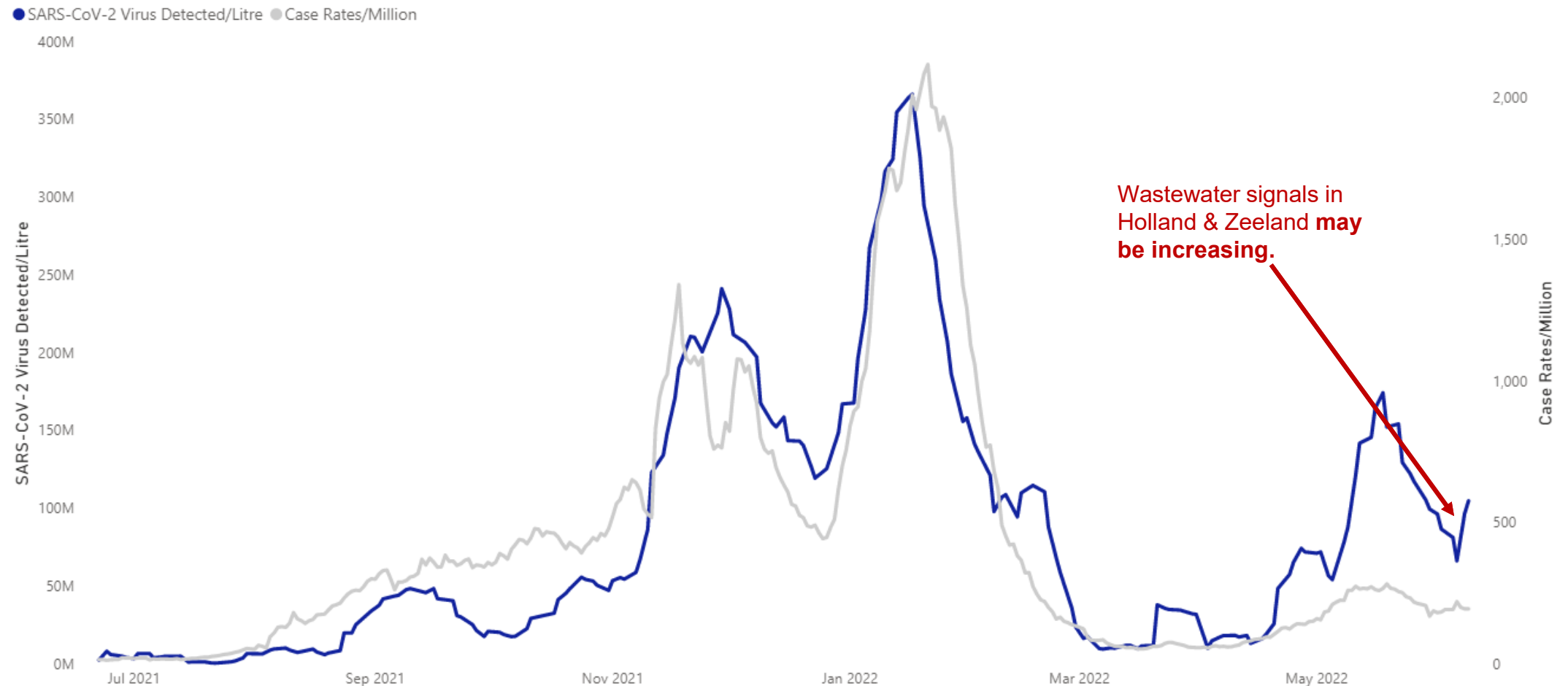
**Notes:** Average daily cases is calculated by summing the weekly total number of cases and dividing by seven. Cases counted in weeks of interest reflect referral date. Use of at home tests likely reduces the number of positive tests reported to Public Health, resulting in artificially deflated case rates.

**Source:** Michigan Department of Health and Human Services, Michigan Disease Surveillance System; CDC Wonder 2020 population

Data as June 8, 2022

# 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.

**Note:** Use of at home tests 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.

**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 \(SWEET\) \(michigan.gov\)](https://michigan.gov)

Data through June 9, 2022

USA & MI

Spread

Children

Hospitalizations

Vaccinations

Variants

Risk Levels

Other

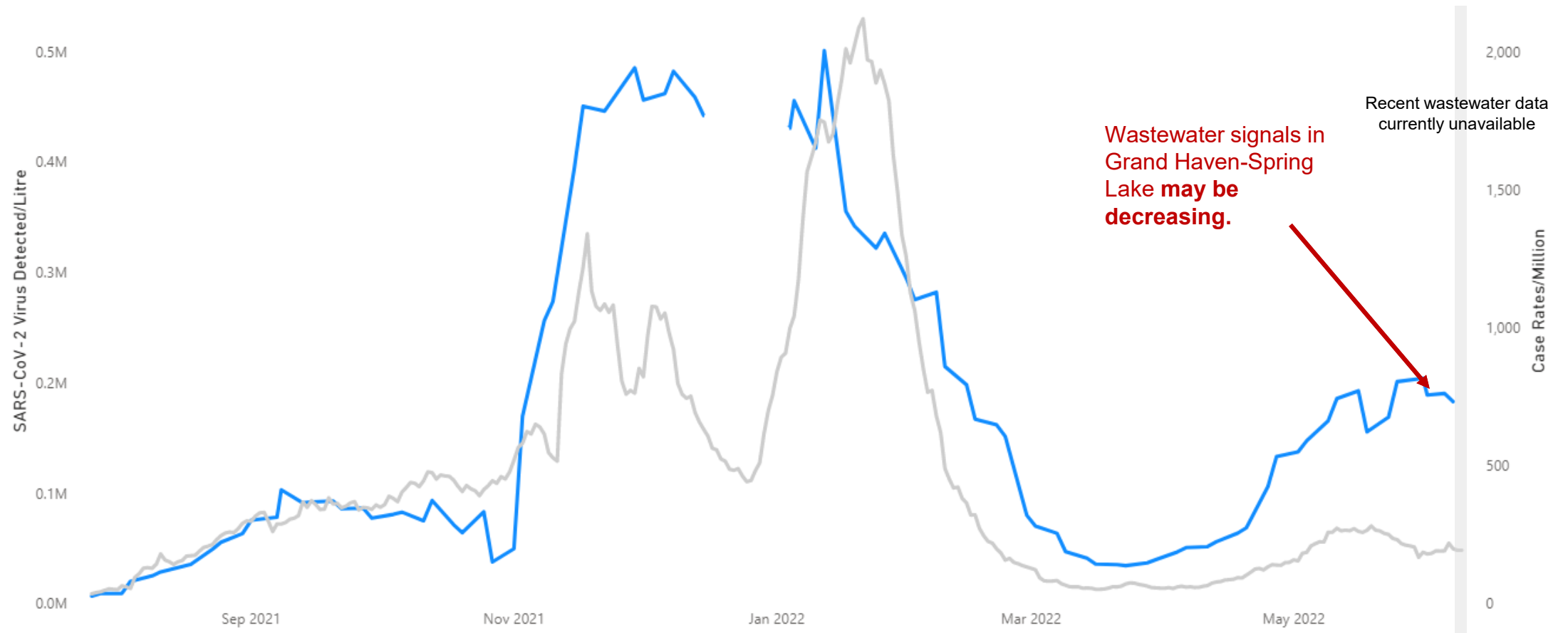
Media

Science  
Roundup

# 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



**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 the treatment plant in Grand Haven-Spring Lake. The **gray line** on the graph represents the 7-day average COVID-19 case rates/million for all of Ottawa County by referral date.

**Note:** Use of at home tests 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.

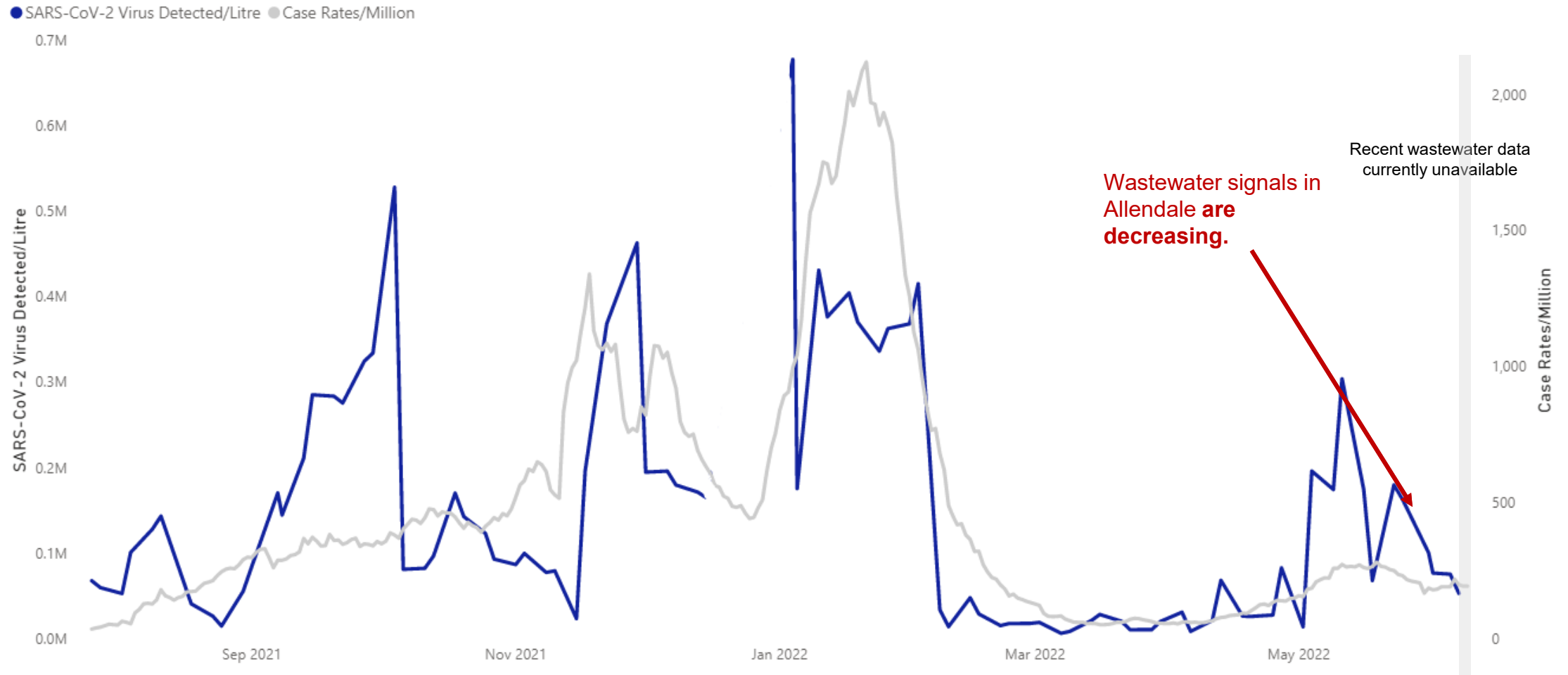
**Source:** Grand Valley State University Annis Water Resources Institute as part of the MDHHS SEWER-Network, Richard Rediske, Ph.D. ([redisker@gvsu.edu](mailto:redisker@gvsu.edu))

**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)

Data through June 7, 2022

# Allendale 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 the treatment plant in Allendale. The **gray line** on the graph represents the 7-day average COVID-19 case rates/million for all of Ottawa County by referral date.

**Note:** Use of at home tests 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.

**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)

Data through June 7, 2022



# Ottawa County Weekly Case Counts and % Change, by Age

Week Ending	Adults (18+)		Children (0-17 years)		Total	
	Number	% Change from Previous Week	Number	% Change from Previous Week	Number	% Change from Previous Week
2-Apr-22	108	-21%	17	31%	125	-17%
9-Apr-22	114	6%	13	-24%	127	2%
16-Apr-22	165	45%	19	46%	184	45%
23-Apr-22	240	45%	27	42%	267	45%
30-Apr-22	271	13%	42	56%	313	17%
7-May-22	416	54%	51	21%	467	49%
14-May-22	493	19%	57	12%	550	18%
21-May-22	485	-2%	61	7%	546	-1%
28-May-22	381	-21%	55	-10%	436	-20%
4-Jun-22	356	-7%	40	-27%	396	-9%

-7%

Adults

-27%

Children

Weekly case counts among **children decreased 27%** last week, and cases in **adults decreased 7%**.

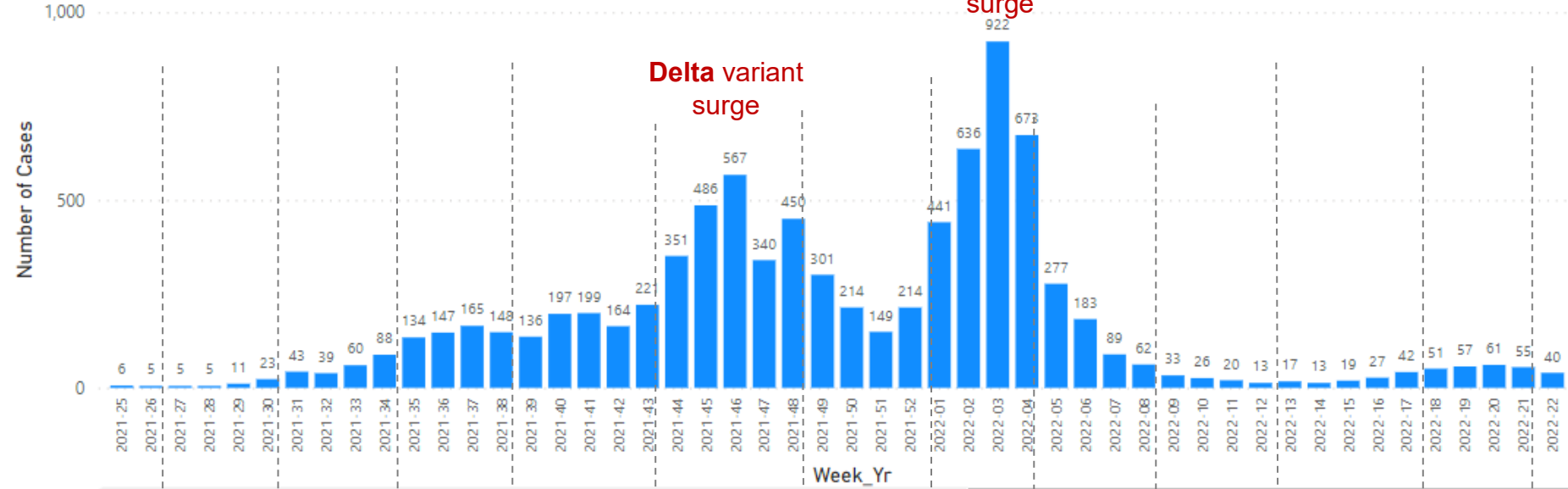
**Note:** Use of at home tests likely reduces the number of positive tests reported to Public Health, resulting in artificially deflated case counts.

**Source:** Michigan Department of Health and Human Services, Michigan Disease Surveillance System

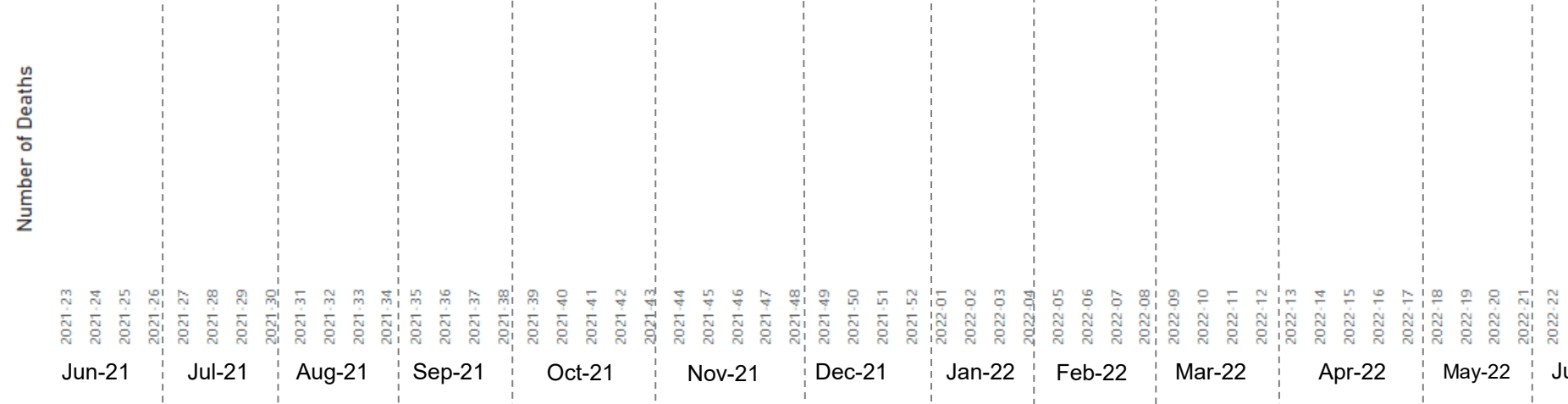


# Ottawa County – Cases & Deaths by Week Among Children (0-17 years)

New Cases By Week of Referral



New Deaths by Week of Death



The weekly number of cases among children **decreased 27%** from week 21 to week 22.

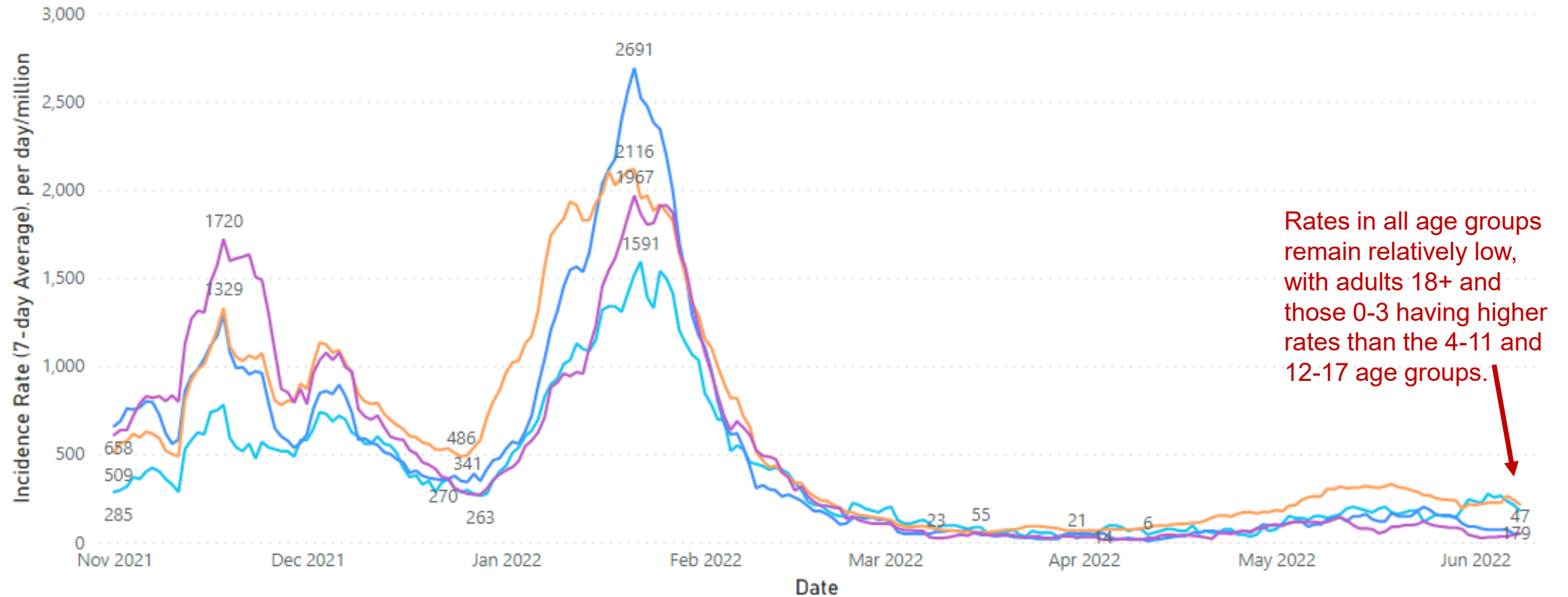
**Note:** Use of at home tests likely reduces the number of positive tests reported to Public Health, resulting in artificially deflated case counts.  
**Source:** Michigan Department of Health and Human Services, Michigan Disease Surveillance System

# Ottawa County - Case Rate Trends – by Age

COVID-19 Case Rates by Age, includes School-Aged, November 2021 – June 08, 2022

Incidence Rate (7-day Average)

rategroup ● 0-3 ● 12-17 ● 18+ ● 4-11



**Note:** Use of at home tests likely reduces the number of positive tests reported to Public Health, resulting in artificially deflated case rates.

**Source:** Michigan Department of Health and Human Services, Michigan Disease Surveillance System

Data as of June 08, 2022

USA & MI

Spread

Children

Hospitalizations

Vaccinations

Variants

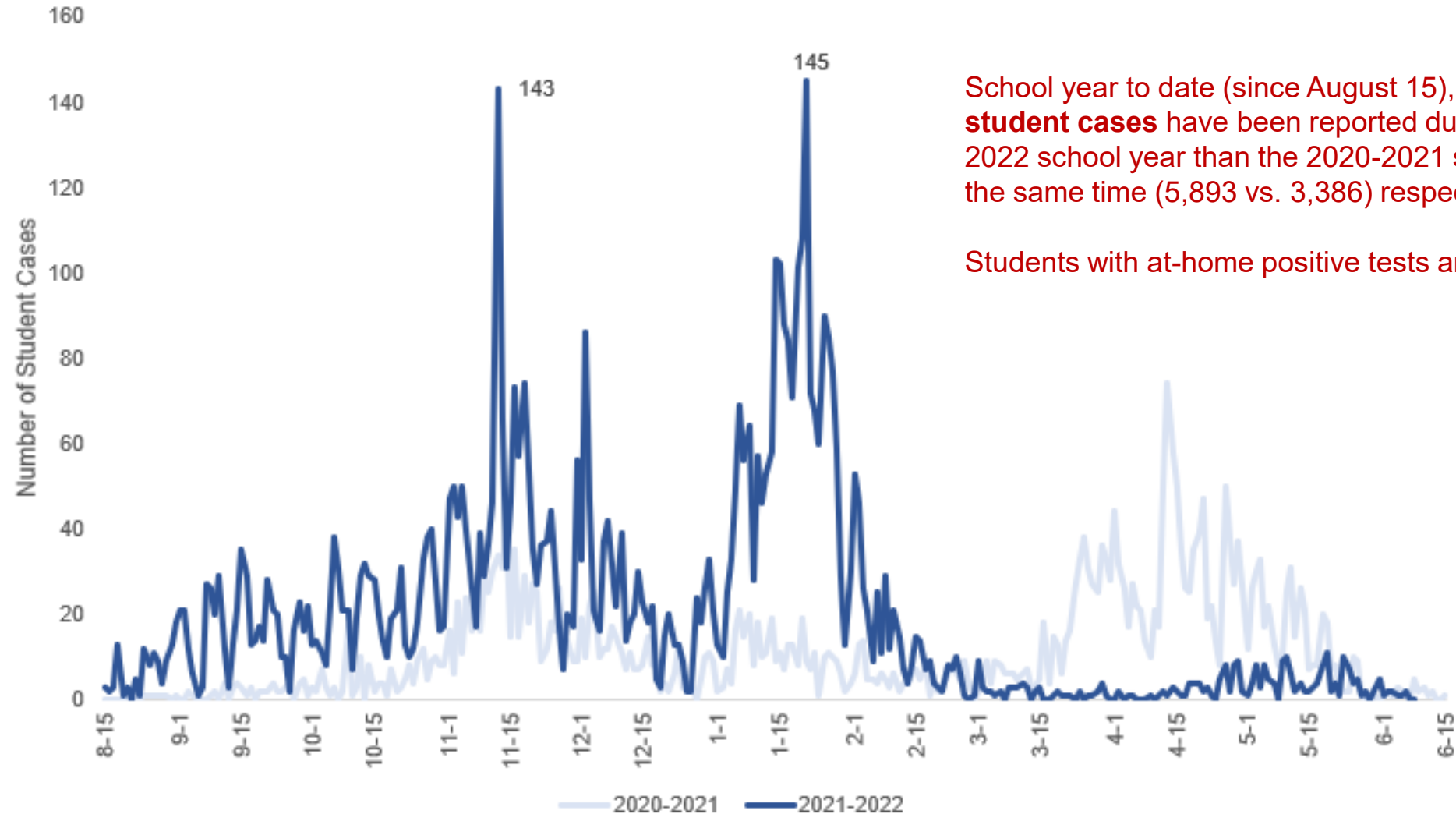
Risk Levels

Other

Media

Science Roundup

# Ottawa County Cases in PreK-12 School Students



School year to date (since August 15), **1.7x more student cases** have been reported during the 2021-2022 school year than the 2020-2021 school year at the same time (5,893 vs. 3,386) respectively).

Students with at-home positive tests are not included.

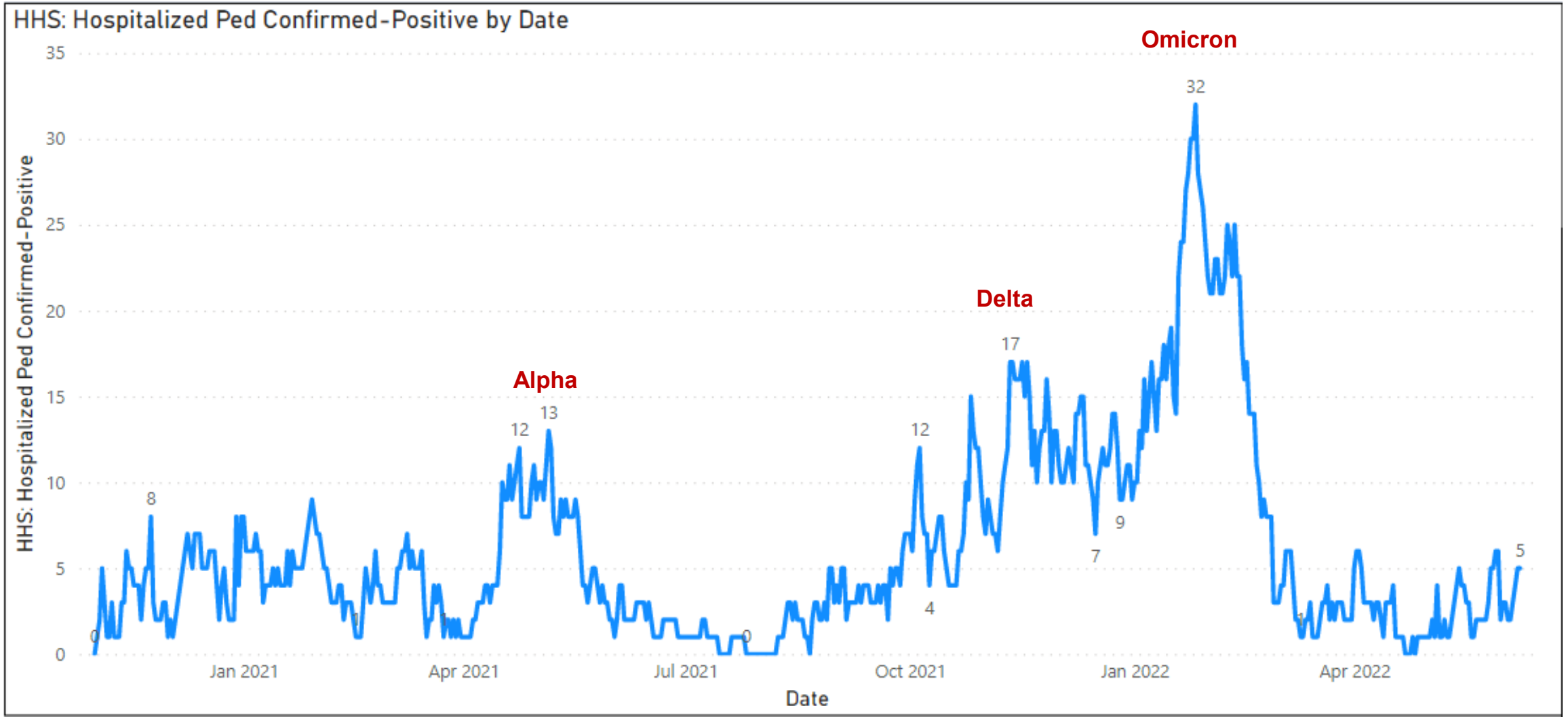
**Method:** Includes PreK-12 students known to attend a school in Ottawa County who are classified as a confirmed or probable case of COVID-19.

**Note:** Data may change as information is updated and methods are refined. Cases reported in 2022 will likely increase. The peak of 143 cases reported on November 12, 2021 is the result of a database update by MDHHS that reported a backlog of cases from the previous days. Use of at home tests likely reduces the number of positive tests reported to Public Health, resulting in artificially deflated case counts.

**Source:** Michigan Department of Health and Human Services, Michigan Disease Surveillance System; Internal data systems

Data through June 8, 2022

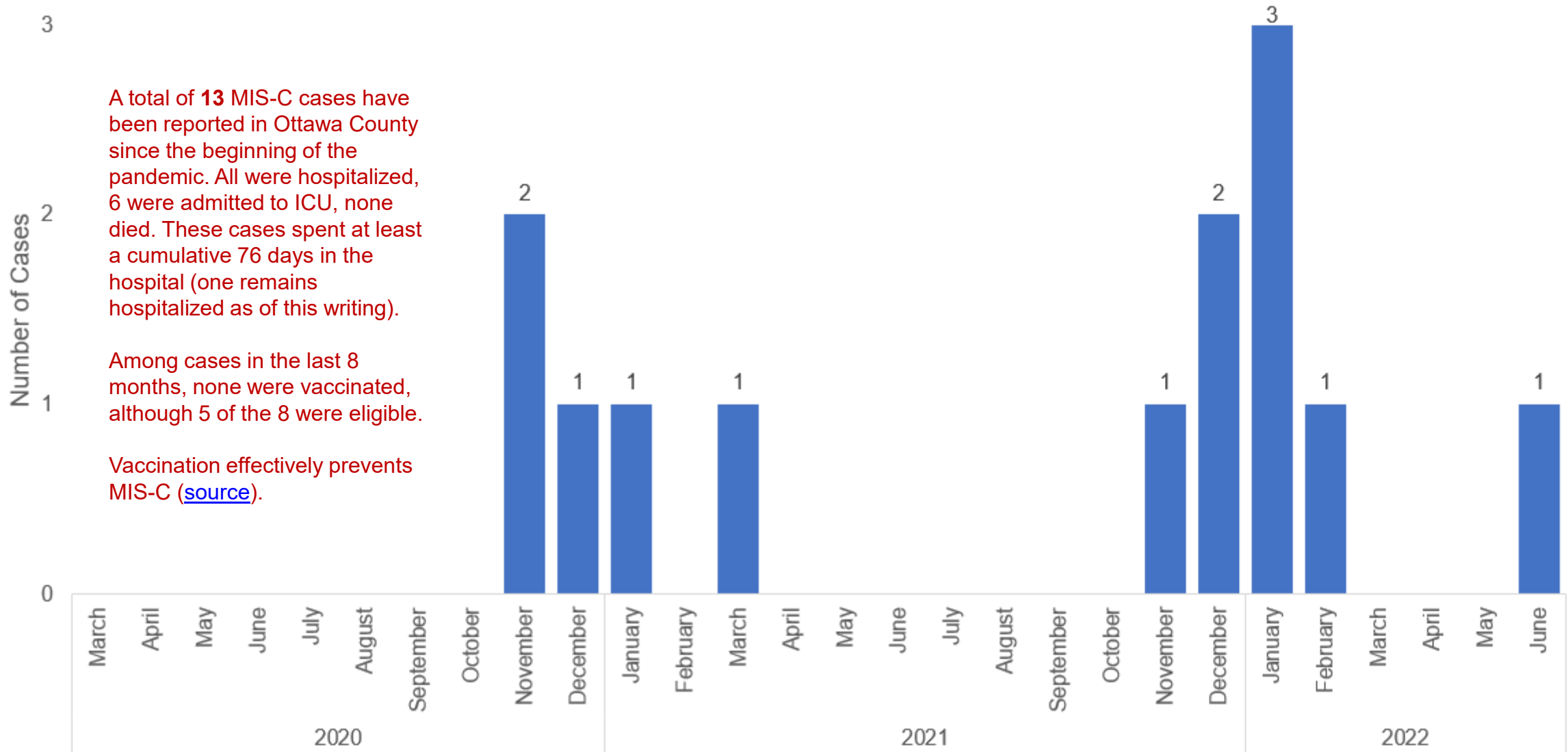
# Daily Hospital Pediatric Census – West Michigan



**Note:** Data above includes persons younger than 18 years of age with confirmed COVID-19 hospitalized at West Michigan hospitals. Patients may be listed in more than one day. Data may change as information is updated. Includes patients that reside in counties across the region, including Ottawa County.

Data through June 08, 2022

# Ottawa County MIS-C\* Cases by Month



A total of **13** MIS-C cases have been reported in Ottawa County since the beginning of the pandemic. All were hospitalized, 6 were admitted to ICU, none died. These cases spent at least a cumulative 76 days in the hospital (one remains hospitalized as of this writing).

Among cases in the last 8 months, none were vaccinated, although 5 of the 8 were eligible.

Vaccination effectively prevents MIS-C ([source](#)).

**Notes:** Includes confirmed and probable cases.

\*MIS-C is a rare but serious condition affecting children, associated with recent COVID-19 infection. For more details on MIS-C please visit: <https://www.cdc.gov/mis/index.html>

Data through June 9, 2022

# Ottawa County Hospital Capacity – All Beds

## Hospital Inpatient Bed Occupancy - By County

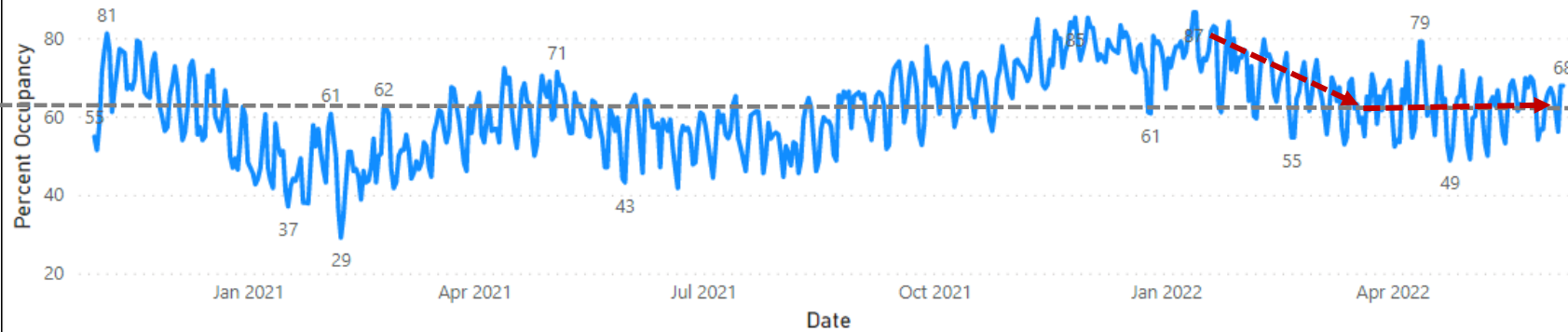
### Total Inpatient Bed Occupancy (All Patients, COVID and Non-COVID)

Pandemic Average

62%

Percent Occupancy by Date and County

County ● Ottawa



Total hospital bed occupancy is **slightly above the pandemic average.**

Currently **3%** of all inpatient beds are occupied by COVID-19 patients.

### COVID Inpatient Bed Occupancy (COVID Patients Only, Confirmed and Suspected)

13%

Percent Occupancy by Date and County

County ● Ottawa



Data through June 08, 2022

Source: EMResources

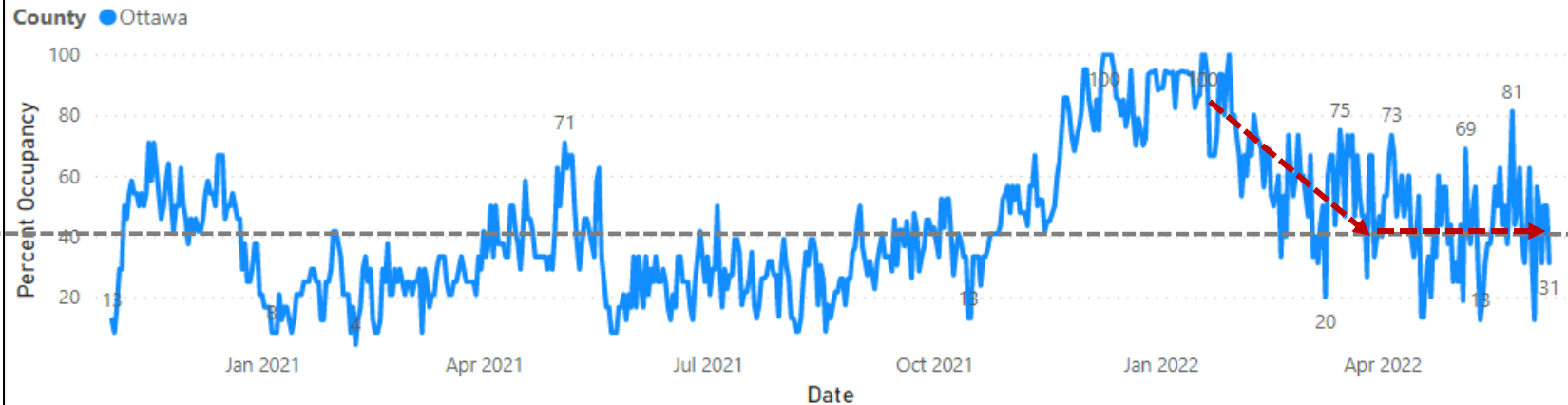
# Ottawa County Hospital Capacity – ICU Beds

## Hospital ICU Bed Occupancy - By County

### Total ICU Bed Occupancy (All Patients, COVID and Non-COVID)

Pandemic Average

Percent Occupancy by Date and County

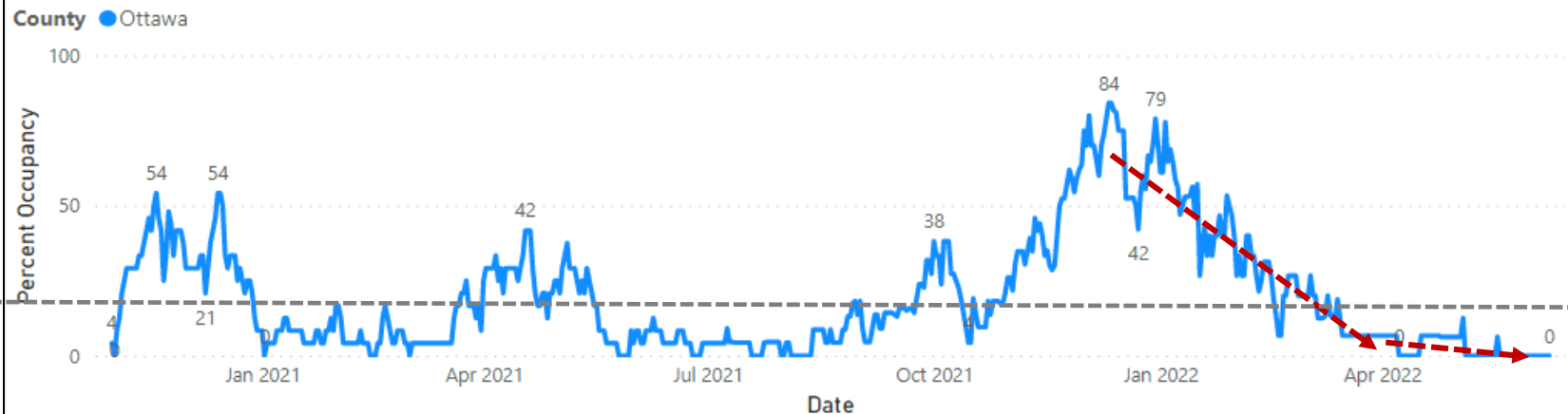


Total ICU bed occupancy is **currently at 31%** but has been trending near the pandemic average of 42% over the past two months.

### COVID ICU Bed Occupancy (COVID Patients Only, Confirmed and Suspected)

Percent Occupancy by Date and County

20%



The proportion of ICU beds occupied by COVID-19 patients is **below the pandemic average**. Currently, **0%** of ICU beds are occupied by COVID-19 patients.

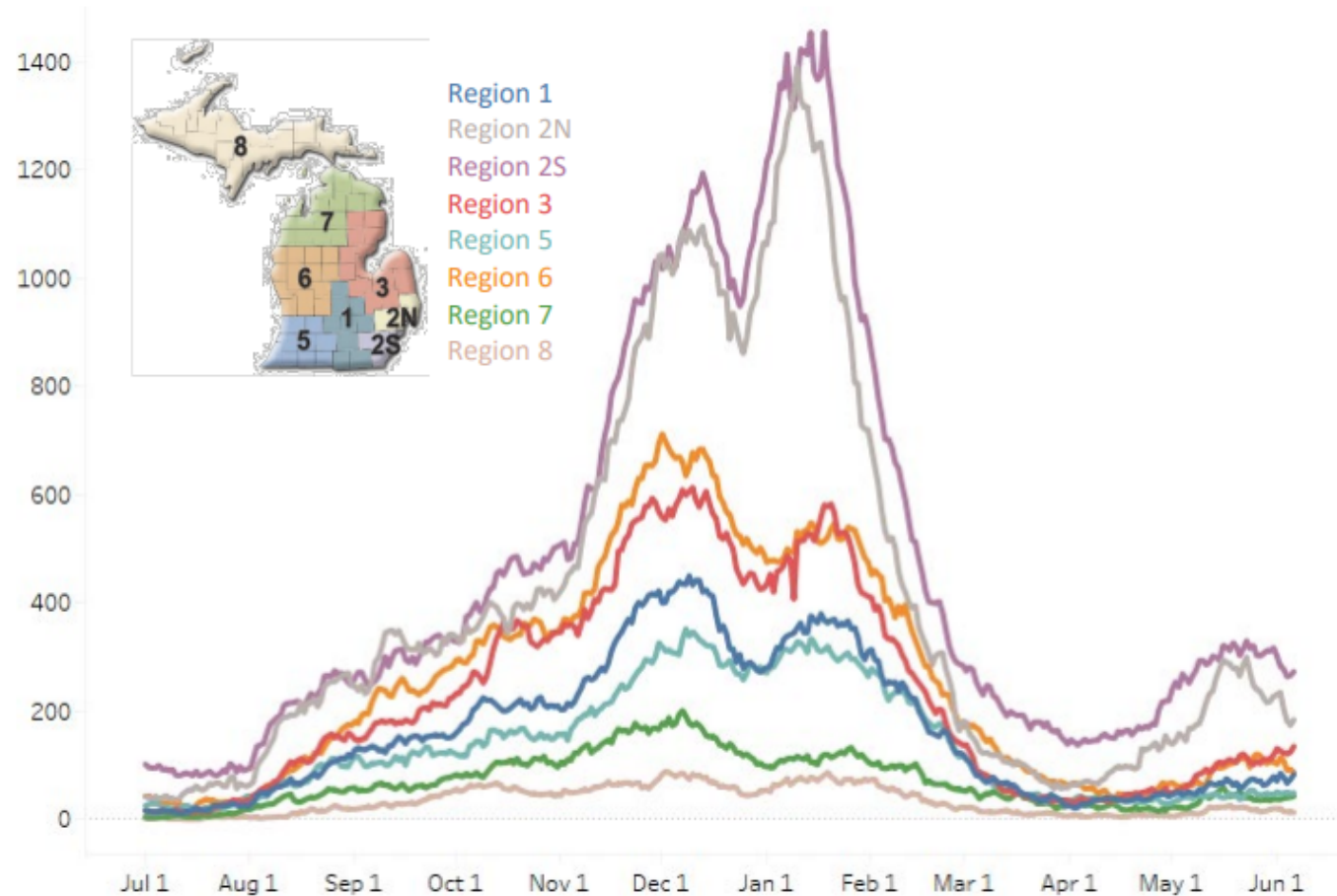
Source: EMResources

Data through June 08, 2022



# Statewide Hospitalization Trends: Regional COVID+ Census

Hospitalization Trends 7/1/2021 – 6/6/2022  
Confirmed Positive by Region



This week the COVID+ hospital census has increased in Regions 1, 3, 5, and 7. The census has decreased in Regions 2N, 2S, 6, and 8.

Regions 2S and 3 have greater than 100 hospitalizations/M

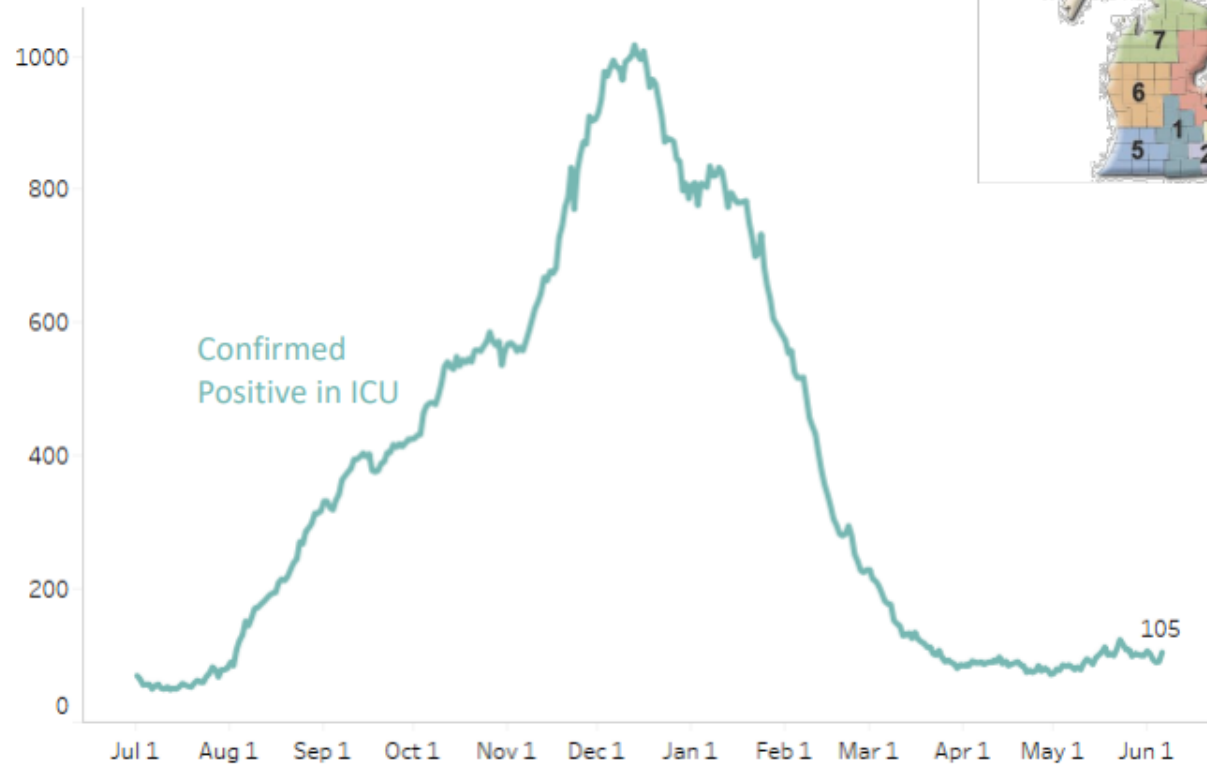
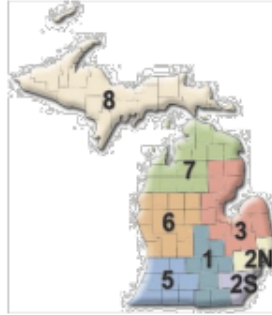
Region	COVID+ Hospitalizations (% Δ from last week)	COVID+ Hospitalizations / MM
Region 1	83 (5%)	77/M
Region 2N	184 (-19%)	83/M
Region 2S	273 (-15%)	123/M
Region 3	135 (13%)	119/M
Region 5	49 (7%)	51/M
Region 6	87 (-19%)	59/M
Region 7	43 (10%)	86/M
Region 8	13 (-35%)	42/M

Source: MDHHS Data and Modelling: [MI COVID response Data and modeling update \(michigan.gov\)](https://www.michigan.gov/mdhhs/0,4570,7510_7512_7514_7516_7518,00.html)



# Statewide Hospitalization Trends: ICU COVID+ Census

Hospitalization Trends 7/1/2021 – 6/6/2022  
Confirmed Positive in ICUs



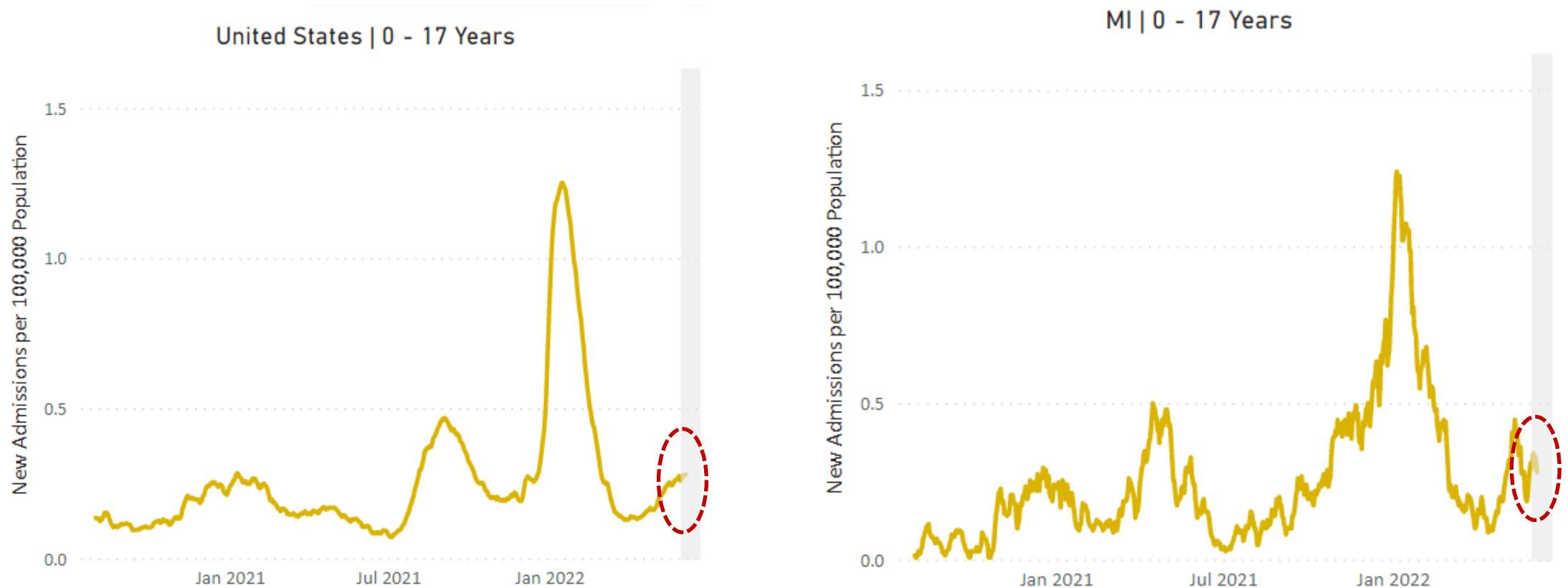
Overall, the census of COVID+ patients in ICUs has increased by 5% from last week. There are 105 COVID+ patients in ICU beds across the state.

COVID+ ICU census has decreased or remained flat in Regions 2N, 5, and 6. ICU census has increased in Regions 1, 2S, 3, 7, 8. ICU occupancy is at or above 85% in Region 3.

Region	Adult COVID+ in ICU (% Δ from last week)	ICU Occupancy	% of ICU beds COVID+
Region 1	9 (50%)	73%	5%
Region 2N	23 (-21%)	63%	4%
Region 2S	38 (12%)	84%	6%
Region 3	13 (18%)	85%	4%
Region 5	4 (0%)	65%	2%
Region 6	4 (-20%)	65%	2%
Region 7	12 (100%)	82%	9%
Region 8	2 (200%)	60%	3%

Source: MDHHS Data and Modelling: [MI COVID response Data and modeling update \(michigan.gov\)](https://www.michigan.gov/mdhhs/0,4570,7530_7532_7534_7536_7538,00.html)

# Pediatric Hospitalization Rates – USA, Michigan



Pediatric hospitalization rates across the US continue increasing. **Rates in Michigan are mixed with no trend currently manifesting.**

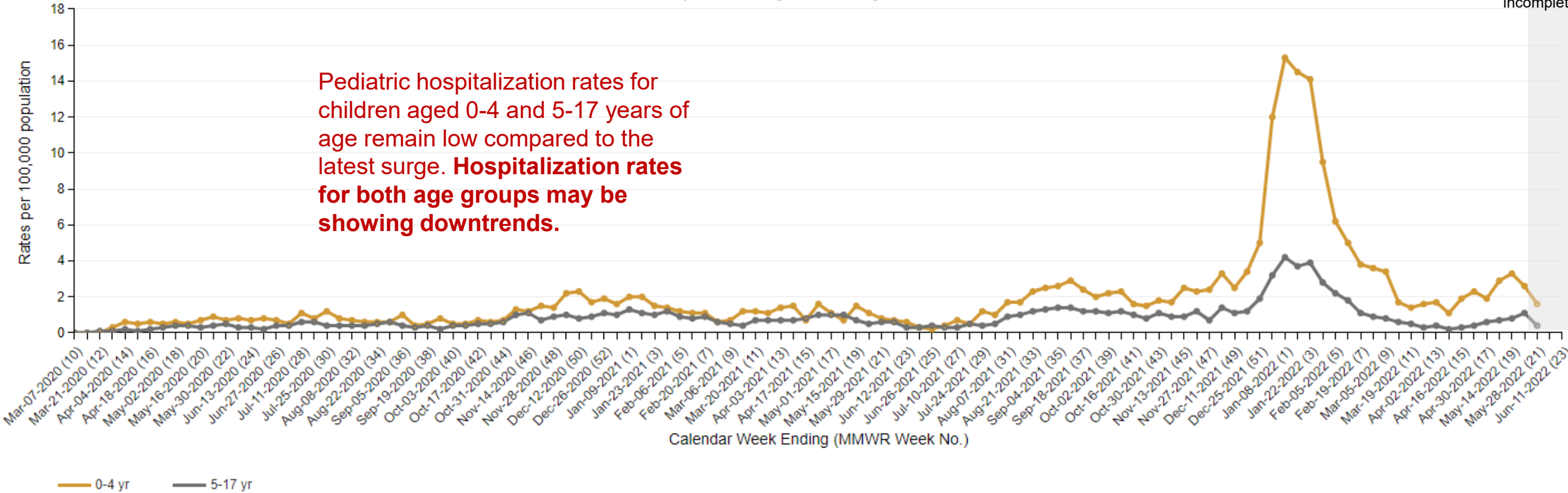
Source: <https://covid.cdc.gov/covid-data-tracker/#new-hospital-admissions>

Accessed June 09, 2022

# Pediatric Hospitalization Rates by Age Group – USA

COVID-NET :: Entire Network :: 2020-21 :: Weekly Rate  
 To zoom, hold down Alt key and click and drag to create a rectangle. Double click to reset zoom.

Recent data may be incomplete



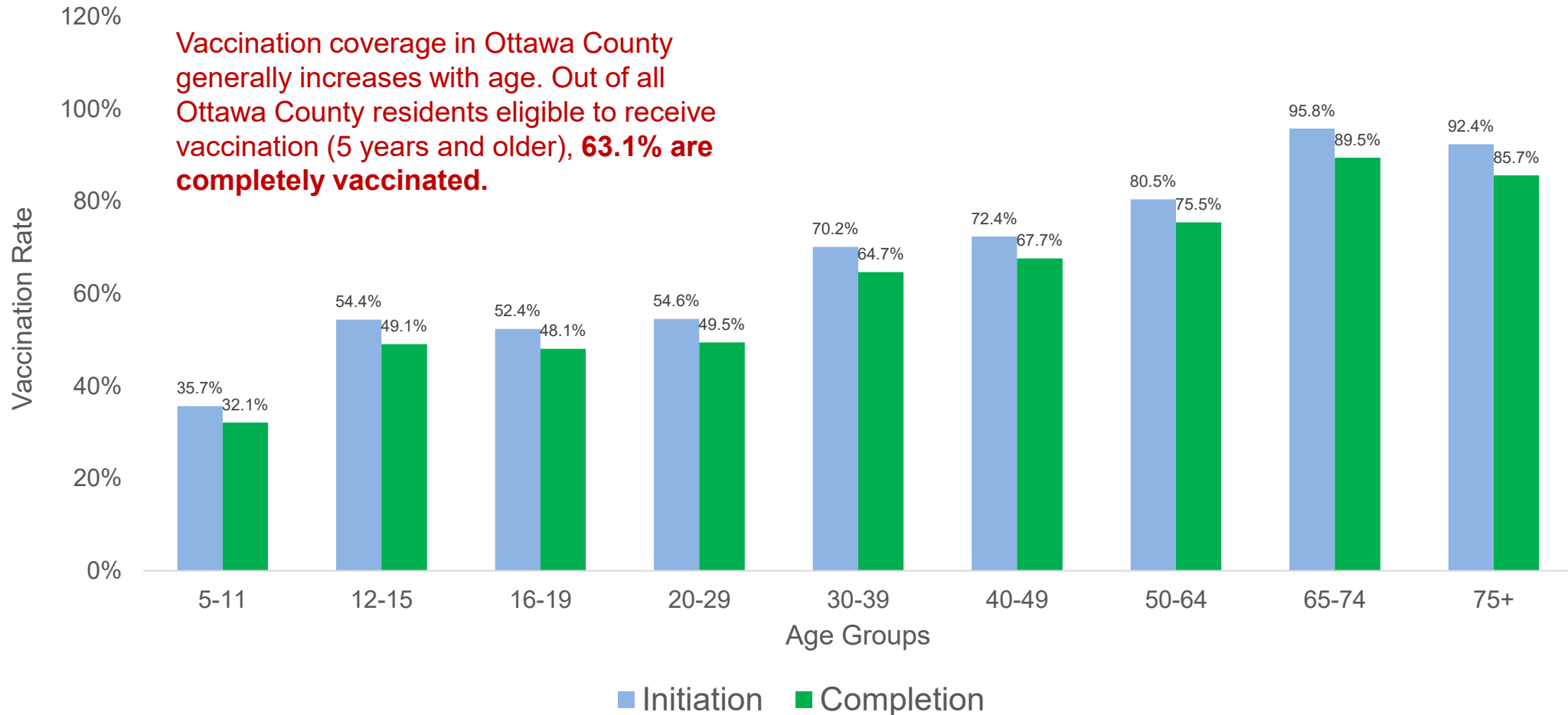
The Coronavirus Disease 2019 (COVID-19)-Associated Hospitalization Surveillance Network (COVID-NET) hospitalization data are preliminary and subject to change as more data become available. In particular, case counts and rates for recent hospital admissions are subject to lag. Lag for COVID-NET case identification and reporting might increase around holidays or during periods of increased hospital utilization. As data are received each week, prior case counts and rates are updated accordingly. COVID-NET conducts population-based surveillance for laboratory-confirmed COVID-19-associated hospitalizations in children (less than 18 years of age) and adults. COVID-NET covers nearly 100 counties in the 10 Emerging Infections Program (EIP) states (CA, CO, CT, GA, MD, MN, NM, NY, OR, TN) and four Influenza Hospitalization Surveillance Project (IHSP) states (IA, MI, OH, and UT). Incidence rates (per 100,000 population) are calculated using the National Center for Health Statistics' (NCHS) vintage 2020 bridged-race postcensal population estimates for the counties included in the surveillance catchment area. The rates provided are likely to be underestimated as COVID-19 hospitalizations might be missed due to test availability and provider or facility testing practices.

Starting MMWR week 48, MD data are temporarily removed from weekly rate calculations.

Source: <https://covid.cdc.gov/covid-data-tracker/#covidnet-hospitalization-network>

Accessed June 09, 2022

# Vaccination Coverage by Age



**Notes:**

Completion is the percentage of people receiving at least 2 doses of Pfizer or Moderna or 1 dose of J&J.

Source: <https://www.michigan.gov/coronavirus/resources/covid-19-vaccine/covid-19-dashboard>

Data through June 08, 2022

# Cumulative Cases by Vaccination Status, Ottawa County, January 15, 2021 – June 4, 2022

Fully Vaccinated People (172,886)	
Cases	Deaths
Percent of Cases in People Not Fully Vaccinated (37,350 / 57,898) <b>64.5%</b>	Percent of Deaths in People Not Fully Vaccinated (292 / 450) <b>64.9%</b>
Total Cases Not Fully Vaccinated <b>37,350</b>	Total Deaths Not Fully Vaccinated <b>292</b>
Total Breakthrough Cases <b>20,548</b>	Total Breakthrough Deaths <b>158</b>
Percent of Fully Vaccinated People who Developed COVID-19 (20,548 / 172,886) <b>11.9%</b>	Percent of Fully Vaccinated People who Died of COVID-19 (158 / 172,886) <b>0.09%</b>
Percent of Cases who were Fully Vaccinated (20,548 / 57,898) <b>35.5%</b>	Percent of Deaths who were Fully Vaccinated (158 / 450) <b>35.1%</b>
Total Cases <b>57,898</b>	Total Deaths <b>450</b>

**Note:**

Fully vaccinated is defined as 2 or more doses of an mRNA vaccination or at least one dose of J&J.

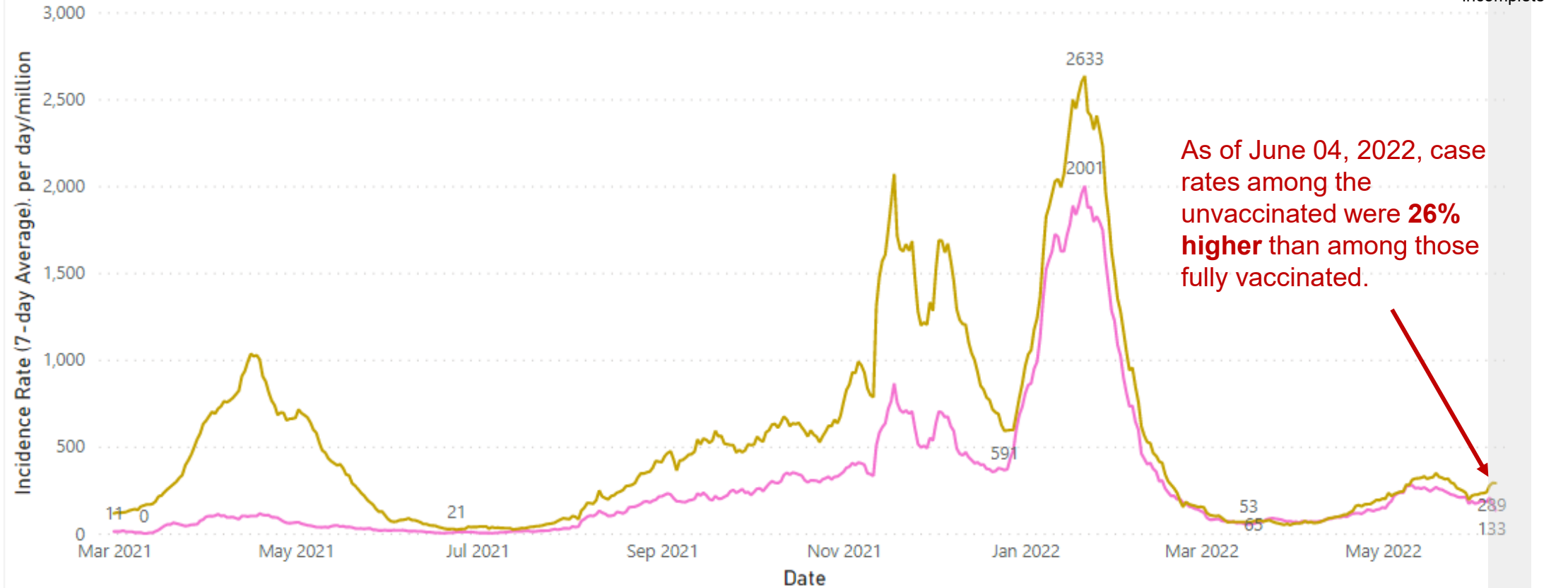
**Sources:**

Michigan Department of Health and Human Services, Michigan Disease Surveillance System  
MDHHS COVID-19 Dashboard: <https://www.michigan.gov/coronavirus/resources/covid-19-vaccine/covid-19-dashboard>

# Ottawa County COVID-19 Vaccination Breakthrough Case Trends

Incidence Rate (7-day Average)

rategroup ● Fully Vaccinated ● Unvaccinated



As of June 04, 2022, case rates among the unvaccinated were **26% higher** than among those fully vaccinated.

Recent data may be incomplete

**Method:**

Daily case counts were obtained from the MDSS and summarized by referral date. Cases were compared to data from the State of Michigan immunization database to confirm COVID-19 vaccination status. Counts of persons completely vaccinated in Ottawa County were compiled from the Michigan COVID-19 vaccination dashboard. The total population denominator was obtained from CDC Wonder; the 2019 population estimate was used. Daily COVID-19 case rates were calculated and averaged over the previous 7 days; a rate of cases per day per million population was used. Cases ineligible for vaccination are included in this data. On December 22, 2021 this figure was updated to compare fully vaccinated and unvaccinated persons, to align more closely with [CDC data](https://www.cdc.gov); partially vaccinated persons were excluded. Fully vaccinated is defined as 2 or more doses of an mRNA vaccination or at least one dose of J&J.

**Note:** Use of at home tests likely reduces the number of positive tests reported to Public Health, resulting in artificially deflated case rates.

**Sources:**

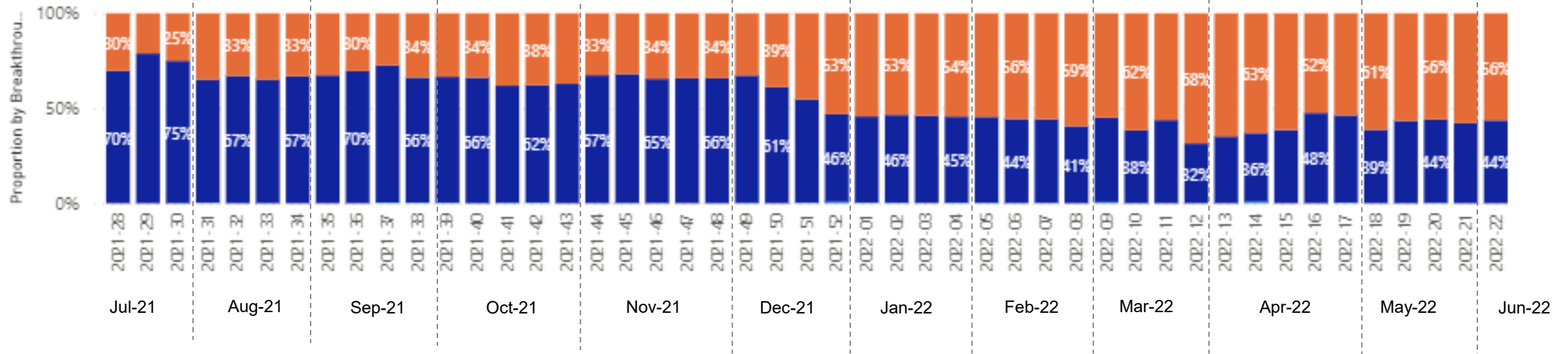
Michigan Department of Health and Human Services, Michigan Disease Surveillance System  
 MDHHS COVID-19 Dashboard: [https://www.michigan.gov/coronavirus/0,9753,7-406-98178\\_103214\\_103272-547150--,00.html](https://www.michigan.gov/coronavirus/0,9753,7-406-98178_103214_103272-547150--,00.html)

# Ottawa County COVID-19 Vaccination Breakthrough Case Trends

## By Week

Breakthrough Proportions by Week

Vaccine\_Breakthrough ● NO ● YES

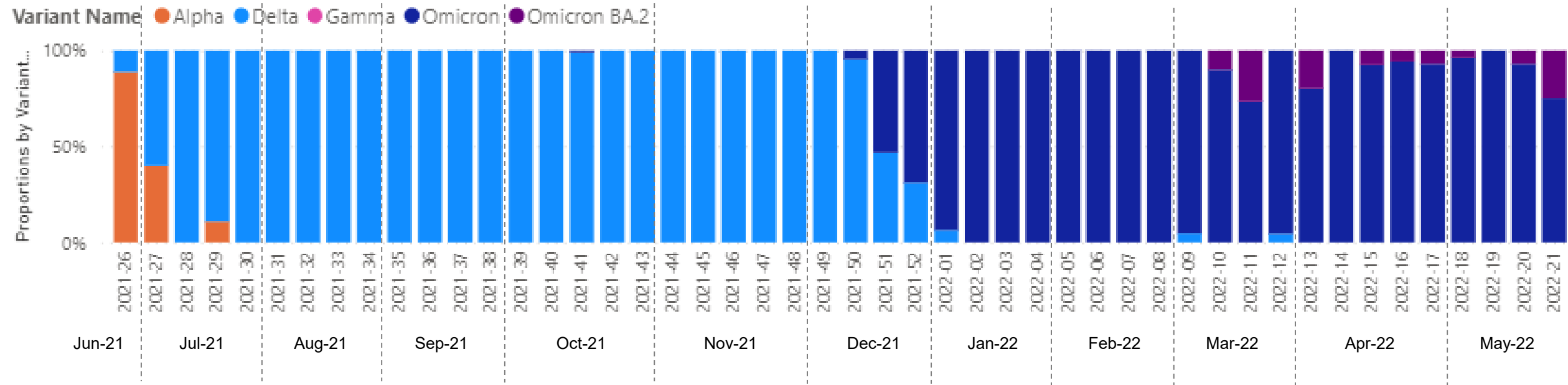


Source: Michigan Department of Health and Human Services, Michigan Disease Surveillance System



# Variants – Clinical Samples from Ottawa County Residents

Variant Proportions by Week



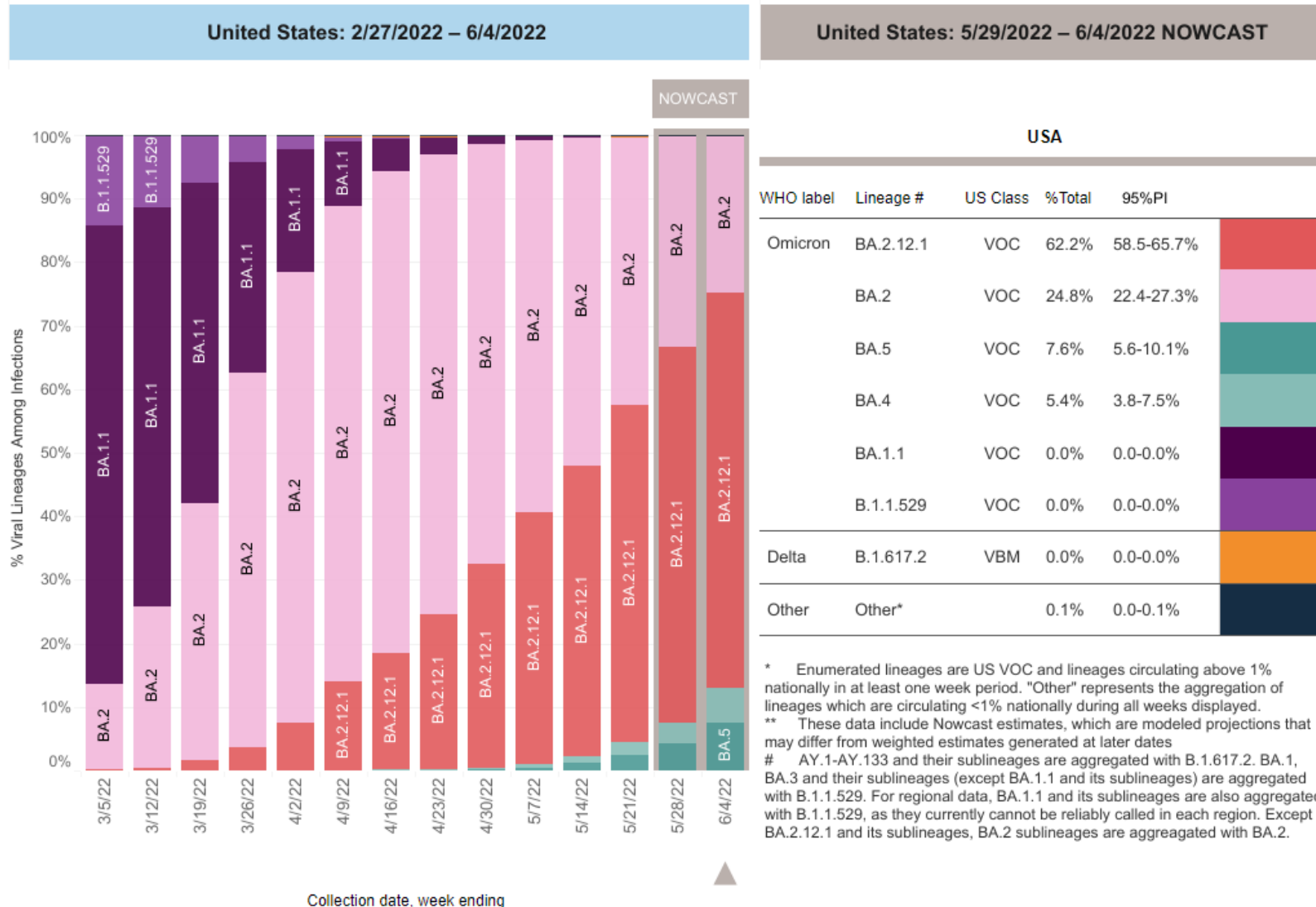
In June of 2021, most clinical samples\* submitted for variant testing were identified as the **Alpha** variant. By the end of July 2021, all clinical samples tested were identified as the **Delta** variant. From late July through early December 2021 all clinical samples submitted for variant testing were identified as the **Delta** variant. In mid-December 2021, the first **Omicron** positive samples were collected in an Ottawa County resident, and **Omicron** continues to be detected into 2022, including the BA.2 variant.

\* Swabs from Ottawa County residents that tested positive for COVID-19 by PCR; only a small proportion of all COVID-19 positive tests are tested for variants.

Source: Michigan Department of Health and Human Services, Michigan Disease Surveillance System



# Variants – Clinical Samples from Across the USA



The **Omicron** variant is estimated to account for nearly 100% of all clinical samples collected in the United States the week ending June 04, 2022.

Omicron subvariants are also circulating, with BA.2 variants predominating.

Collection date, week ending

Source: CDC: <https://covid.cdc.gov/covid-data-tracker/#variant-proportions>

Accessed June 09, 2022

# Variants – Wastewater Sampling – Holland/Zeeland

Y = Detected  
N = Not Detected

Sample Date	Site	Delta	Omicron
03/02/2022	North Holland	N	N
03/03/2022	Zeeland	N	N
03/10/2022	Zeeland	N	N
03/13/2022	North Holland	N	N
03/14/2022	Zeeland	N	N
03/17/2022	Zeeland	N	N
03/21/2022	Zeeland	N	Y
03/23/2022	North Holland	N	N
03/24/2022	Zeeland	N	N
03/27/2022	North Holland	N	N
04/03/2022	North Holland	N	N
04/04/2022	Zeeland	N	N
04/17/2022	North Holland	N	N
04/18/2022	Zeeland	N	N
04/20/2022	North Holland	N	N
04/21/2022	Zeeland	N	N
04/24/2022	North Holland	N	N
04/25/2022	Zeeland	N	N
04/27/2022	North Holland	N	Y
04/28/2022	Zeeland	N	Y
05/01/2022	North Holland	N	Y
05/02/2022	Zeeland	N	Y
05/08/2022	North Holland	N	N
05/09/2022	Zeeland	N	Y
05/11/2022	North Holland	N	N
05/12/2022	Zeeland	N	N
05/15/2022	North Holland	N	Y
05/16/2022	Zeeland	N	N
05/18/2022	North Holland	N	Y
05/19/2022	Zeeland	N	Y
05/22/2022	North Holland	N	Y
05/23/2022	Zeeland	N	Y
05/25/2022	North Holland	N	Y
05/26/2022	Zeeland	N	N

The **Delta** variant was consistently detected in Holland and Zeeland wastewater samples through all of November and December of 2021 (data not displayed here).

The **Omicron** variant has been detected in wastewater in Holland and Zeeland since early January 2022 (January and February not displayed here), with renewed, frequent detection in late April and May 2022.

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))

# Variants – Wastewater Sampling – Grand Haven/Spring Lake

Date	Sample Name	Delta	Epsilon	Alpha	Omicron
4/13/2022	Allendale Wastewater Treatment Plant	N	N	N	Y
4/20/2022	Grand Haven Spring Lake Wastewater	N	N	N	Y
4/25/2022	Grand Haven Spring Lake Wastewater				Y
4/27/2022	Allendale Wastewater Treatment Plant				Y
5/4/2022	Allendale Wastewater Treatment Plant				Y
5/4/2022	Grand Haven Spring Lake Wastewater				Y
5/9/2022	Allendale Wastewater Treatment Plant				Y
5/9/2022	Grand Haven Spring Lake Wastewater				Y
5/11/2022	Allendale Wastewater Treatment Plant				Y
5/11/2022	Grand Haven Spring Lake Wastewater				Y
5/16/2022	Allendale Wastewater Treatment Plant				Y
5/18/2022	Grand Haven Spring Lake Wastewater				Y
5/23/2022	Allendale Wastewater Treatment Plant				Y
5/25/2022	Allendale Wastewater Treatment Plant				Y
5/25/2022	Grand Haven Spring Lake Wastewater				Y
5/31/2022	Allendale Wastewater Treatment Plant				Y

N =Not Detected  
Y =Detected  
 =Not Tested

← The **Omicron** variant was consistently detected in Grand Haven, Spring Lake, and Allendale wastewater samples since January 2022.

Source: MDHHS SEWER Network grant and the Annis Water Resources Institute at GVSU

# COVID-19 Community Levels

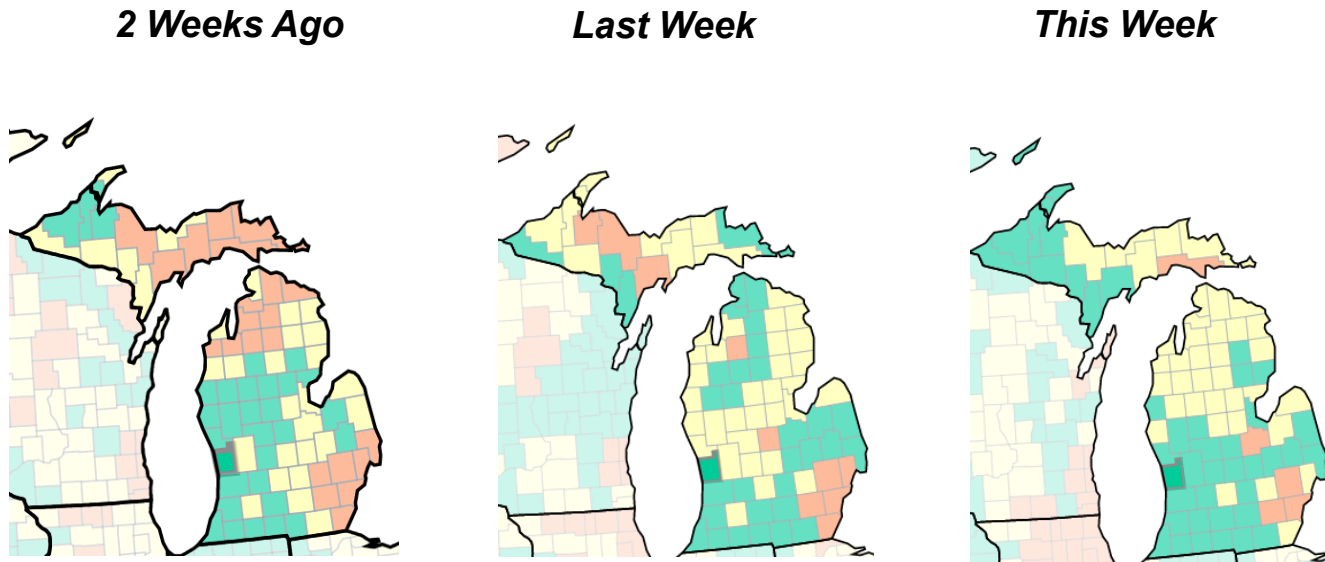
COVID-19 Community Levels – Use the Highest Level that Applies to Your Community				
New COVID-19 Cases Per 100,000 people in the past 7 days	Indicators	Low	Medium	High
Fewer than 200	New COVID-19 admissions per 100,000 population (7-day total)	<10.0	10.0-19.9	≥20.0
	Percent of staffed inpatient beds occupied by COVID-19 patients (7-day average)	<10.0%	10.0-14.9%	≥15.0%
200 or more	New COVID-19 admissions per 100,000 population (7-day total)	NA	<10.0	≥10.0
	Percent of staffed inpatient beds occupied by COVID-19 patients (7-day average)	NA	<10.0%	≥10.0%

Note: The COVID-19 community level is determined by the higher of the new admissions and inpatient beds metrics, based on the current level of new cases per 100,000 population in the past 7 days.

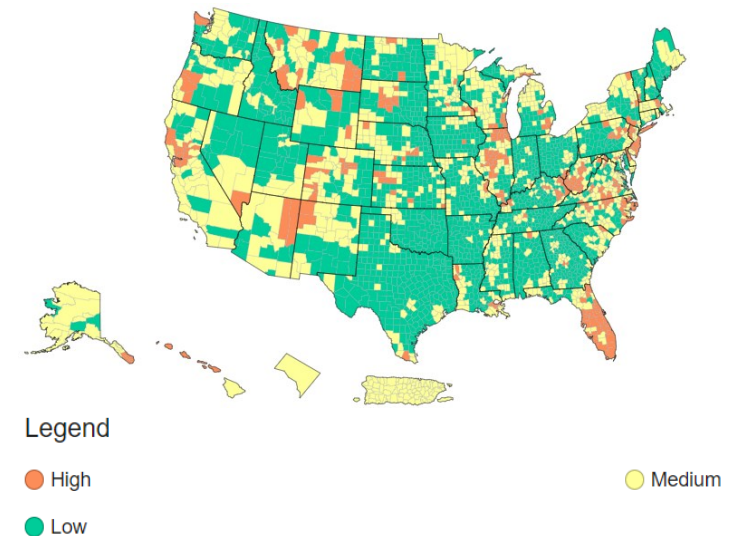
Source: <https://www.cdc.gov/coronavirus/2019-ncov/science/community-levels.html>

# CDC Community Levels – Ottawa County

- Current Community Level in Ottawa – **LOW**
- Current Data:
  - Case Rate (per 100k pop 7-day total) = **142.89**
  - COVID-19 Hospital Admissions (per 100K pop 7-day total) = **2.7**
  - COVID-19 Inpatient Hospital Bed Utilization (7-day average) = **1.9%**



**USA - This Week**



Data updated by CDC on Jun 09, 2022

Source: <https://www.cdc.gov/coronavirus/2019-ncov/your-health/covid-by-county.html>



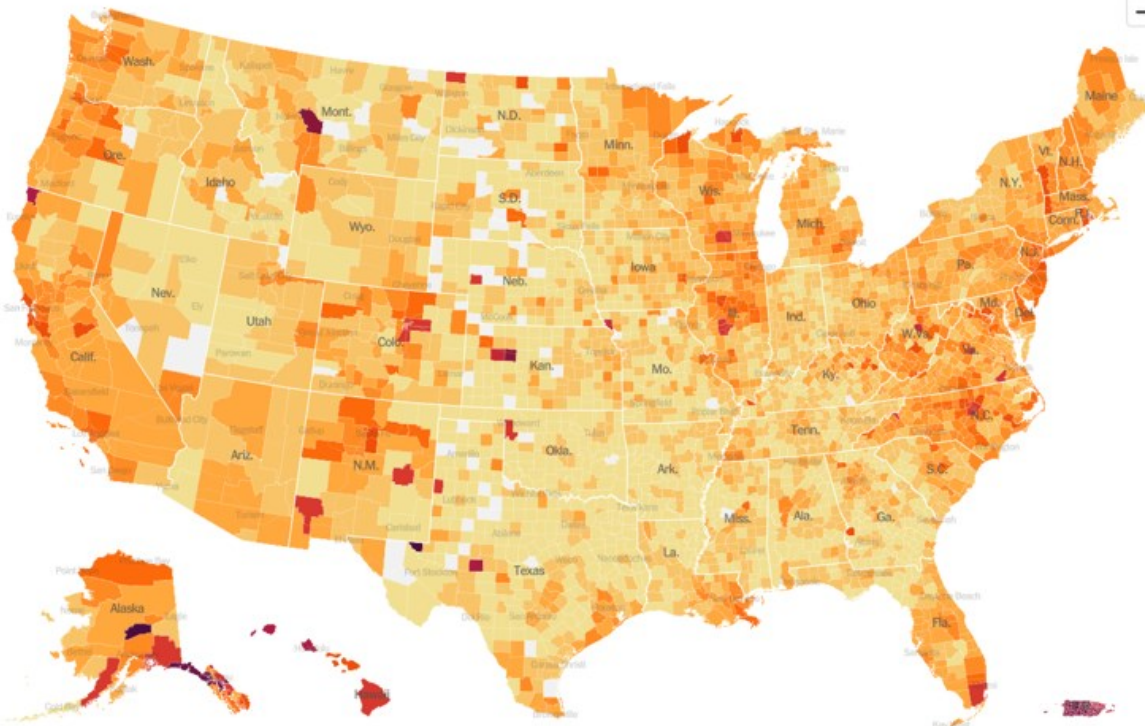
# COVID-19 Case Rates by County Across the US

*Last Week*

*This Week*

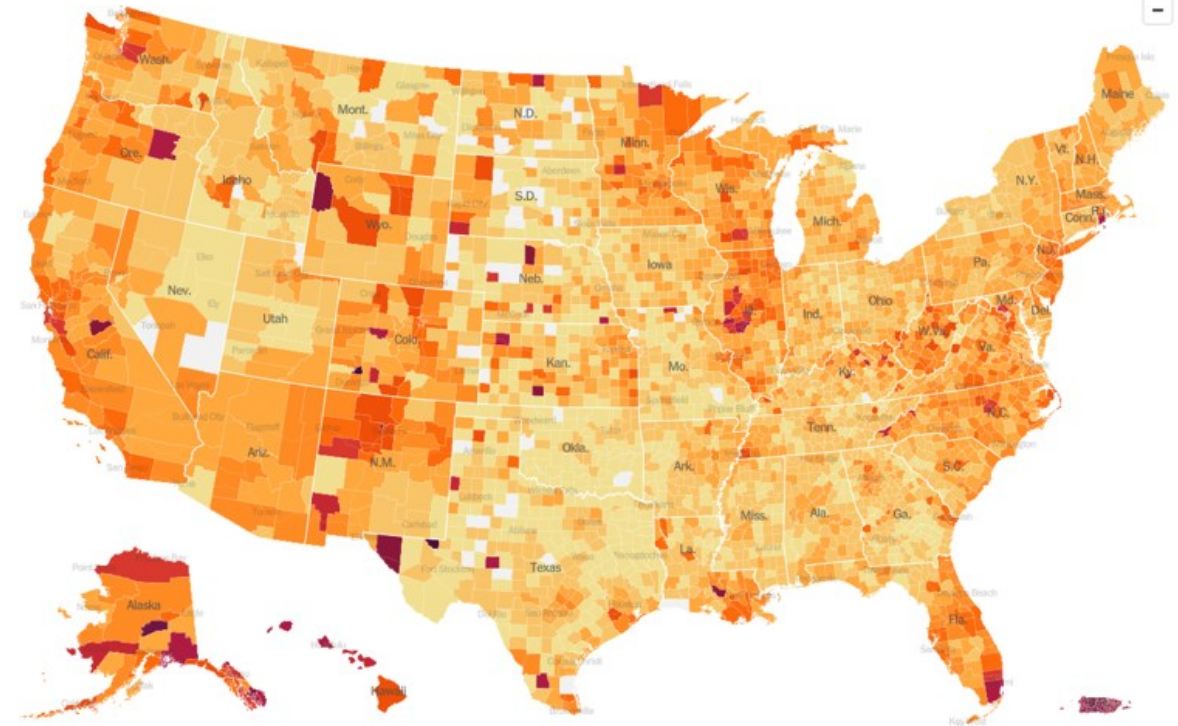
Hot spots

AVERAGE DAILY CASES PER 100,000 PEOPLE IN PAST WEEK  
10 30 50 70 100 250 FEW OR NO CASES



Hot spots

AVERAGE DAILY CASES PER 100,000 PEOPLE IN PAST WEEK  
10 30 50 70 100 250 FEW OR NO CASES



Case rates in some areas across the nation may be increasing.

Source: <https://www.nytimes.com/interactive/2021/us/covid-cases.html>

Accessed June 09, 2022

USA & MI

Spread

Children

Hospitalizations

Vaccinations

Variants

Risk Levels

Other

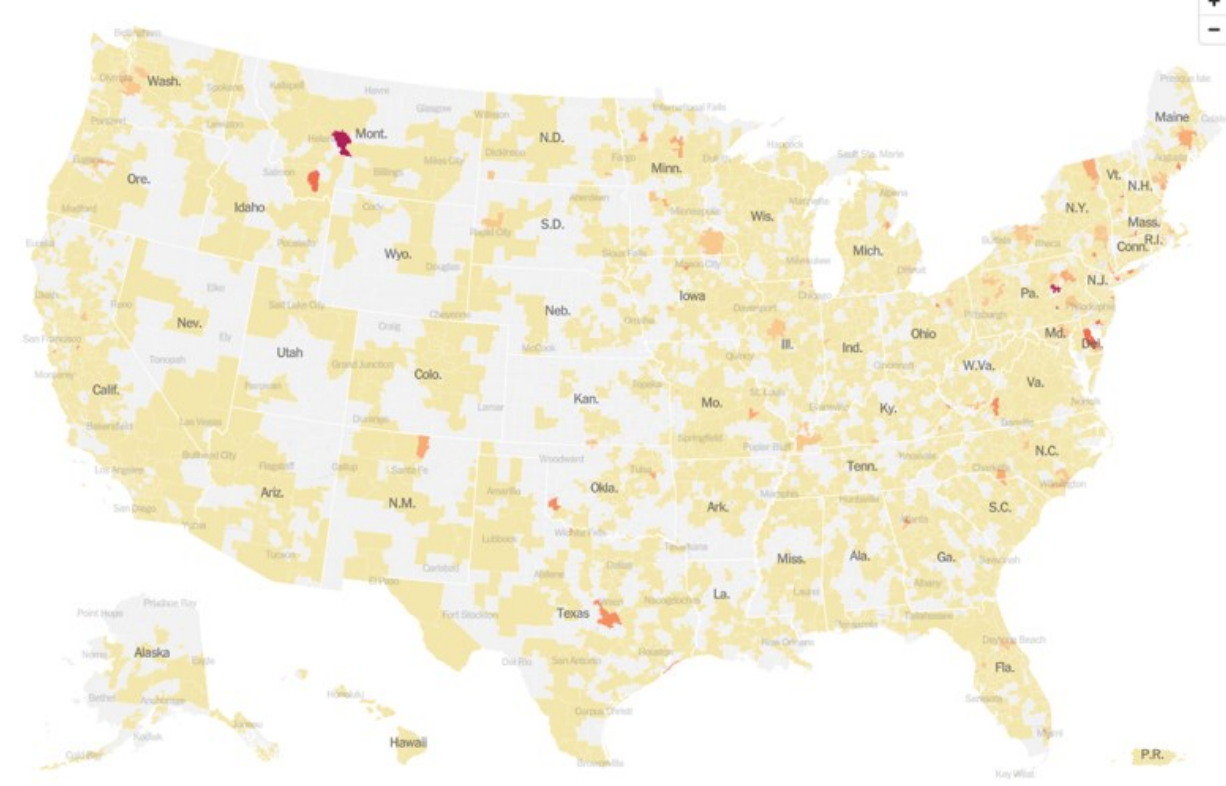
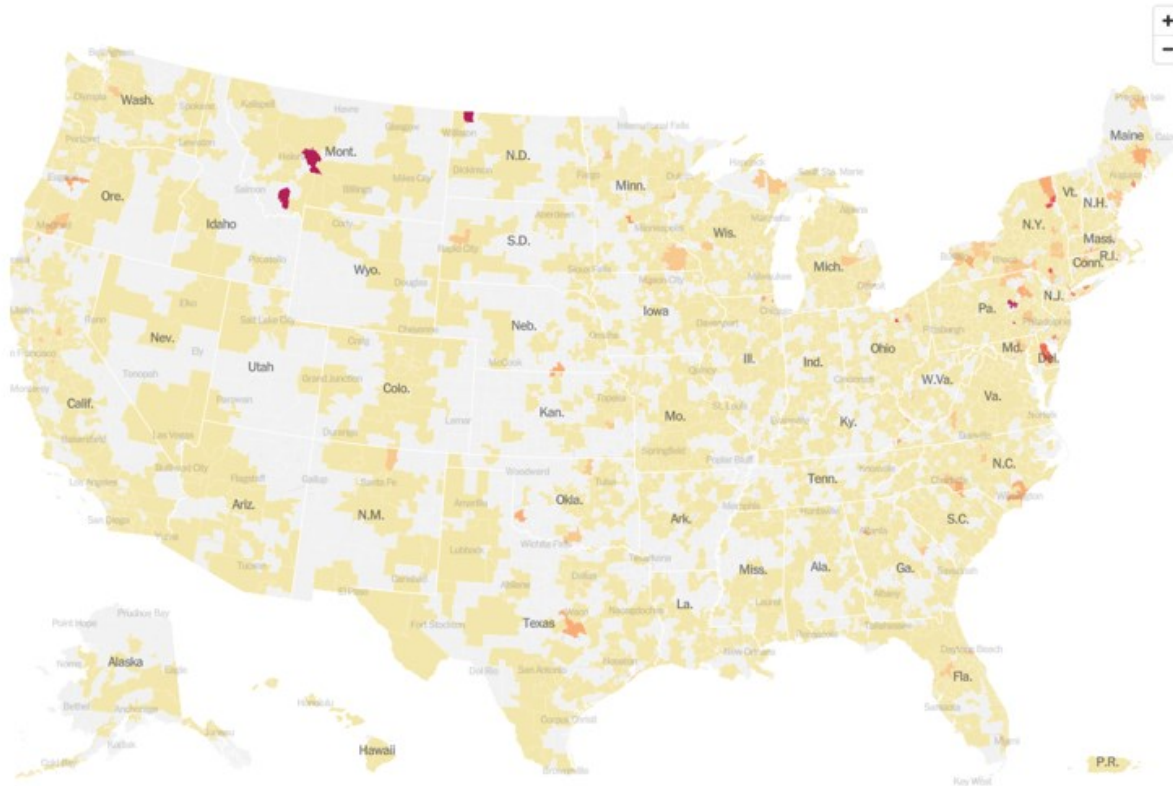
Media

Science Roundup

# COVID-19 Hospitalization Rates by County Across the US

Last Week

This Week



Hospitalization rates remain low across the nation.

Source: <https://www.nytimes.com/interactive/2021/us/covid-cases.html>

Accessed June 09, 2022

USA & MI

Spread

Children

Hospitalizations

Vaccinations

Variants

Risk Levels

Other

Media

Science Roundup



# Treatment Options for Non-hospitalized Adults With COVID-19

PATIENT DISPOSITION	PANEL'S RECOMMENDATIONS
<p>Does Not Require Hospitalization or Supplemental Oxygen</p>	<p>All patients should be offered symptomatic management (<b>AIII</b>).</p> <p>For patients who are at high risk of progressing to severe COVID-19,<sup>a</sup> use 1 of the following treatment options:</p> <p><b>Preferred Therapies</b> Listed in order of preference:</p> <ul style="list-style-type: none"> <li>• Ritonavir-boosted nirmatrelvir (Paxlovid)<sup>b,c</sup> (<b>AIIa</b>)</li> <li>• Remdesivir<sup>c,d</sup> (<b>BIIa</b>)</li> </ul> <p><b>Alternative Therapies</b> For use <i>ONLY</i> when neither of the preferred therapies are available, feasible to use, or clinically appropriate. Listed in alphabetical order:</p> <ul style="list-style-type: none"> <li>• Bebtelovimab<sup>e</sup> (<b>CIII</b>)</li> <li>• Molnupiravir<sup>c,f</sup> (<b>CIIa</b>)</li> </ul> <p>The Panel <b>recommends against</b> the use of dexamethasone<sup>g</sup> or other systemic corticosteroids in the absence of another indication (<b>AIII</b>).</p>
<p>Discharged From Hospital Inpatient Setting in Stable Condition and Does Not Require Supplemental Oxygen</p>	<p>The Panel <b>recommends against</b> continuing the use of remdesivir (<b>AIIa</b>), dexamethasone<sup>g</sup> (<b>AIIa</b>), or baricitinib (<b>AIIa</b>) after hospital discharge.</p>
<p>Discharged From Hospital Inpatient Setting and Requires Supplemental Oxygen</p> <p><i>For those who are stable enough for discharge but who still require oxygen<sup>h</sup></i></p>	<p>There is insufficient evidence to recommend either for or against the continued use of remdesivir or dexamethasone.</p>
<p>Discharged From ED Despite New or Increasing Need for Supplemental Oxygen</p> <p><i>When hospital resources are limited, inpatient admission is not possible, and close follow-up is ensured<sup>i</sup></i></p>	<p>The Panel recommends using dexamethasone 6 mg PO once daily for the duration of supplemental oxygen (dexamethasone use <b>should not exceed</b> 10 days) with careful monitoring for AEs (<b>BIII</b>).</p> <p>Since remdesivir is recommended for patients with similar oxygen needs who are hospitalized,<sup>j</sup> clinicians may consider using it in this setting. As remdesivir requires IV infusions for up to 5 consecutive days, there may be logistical constraints to administering remdesivir in the outpatient setting.</p>
<p><b>Rating of Recommendations:</b> A = Strong; B = Moderate; C = Weak  <b>Rating of Evidence:</b> I = One or more randomized trials without major limitations; IIa = Other randomized trials or subgroup analyses of randomized trials; IIb = Nonrandomized trials or observational cohort studies; III = Expert opinion</p>	

Source: <https://www.covid19treatmentguidelines.nih.gov/management/clinical-management/clinical-management-summary/>

For more information on COVID-19 risk factors, see the CDC webpage: [Underlying Medical Conditions Associated With Higher Risk for Severe COVID-19](#)



# COVID-19 News Headlines

## Michigan reports 18,453 confirmed and probable cases of COVID-19 since last week

[Michigan reports 18,453 confirmed and probable cases of COVID-19 since last week \(fox17online.com\)](#)

CDC adds destinations to 'high' risk list for COVID-19 amid summer travel season

[CDC adds destinations to 'high' risk list for COVID-19 \(wcvb.com\)](#)

## Covid Is Way More Lethal to Kids Than The Flu

[Coronavirus Daily: Covid Is More Lethal to Kids Than The Flu - Bloomberg](#)

Washtenaw, Oakland, Wayne see big case drop: Michigan COVID data for Thursday, June 2

[Washtenaw, Oakland, Wayne see big case drop: Michigan COVID data for Thursday, June 2 - mlive.com](#)

## Virus testing the new normal as China sticks to 'zero-COVID'

[Virus testing the new normal as China sticks to 'zero-COVID' | AP News](#)

# Science Roundup

## Concordance of SARS-CoV-2 RNA in Aerosols From a Nurses Station and in Nurses and Patients During a Hospital Ward Outbreak

[Concordance of SARS-CoV-2 RNA in Aerosols From a Nurses Station and in Nurses and Patients During a Hospital Ward Outbreak](#) | [Infectious Diseases](#) | [JAMA Network Open](#) | [JAMA Network](#)

← A cohort study found genetically identical SARS-CoV-2 RNA fragments in aerosols obtained from a nurse's station and in human samples during an outbreak in a healthcare setting, suggesting that aerosols may have contributed to hospital transmission.

## Perceptions of COVID-19 Vaccine Incentives Among Adolescents and Young Adults

[Perceptions of COVID-19 Vaccine Incentives Among Adolescents and Young Adults](#) | [Adolescent Medicine](#) | [JAMA Network Open](#) | [JAMA Network](#)

← A qualitative survey study involving adolescents and young adults found youth awareness of COVID-19 vaccine incentives are well known to youth but not a significant self-reported motivator for vaccination.

## Ventilation Improvement Strategies Among K–12 Public Schools — The National School COVID–19 Prevention Study, United States, February 14–March 27, 2022

[Ventilation Improvement Strategies Among K–12 Public Schools — The National School COVID–19 Prevention Study, United States, February 14–March 27, 2022](#). [MMWR Morb Mortal Wkly Rep. ePub: 7 June 2022.](#)

← A population-based, longitudinal study found higher-cost and resource-intensive ventilation improvement strategies, such as using portable high-efficiency particulate air (HEPA) filtration systems in classrooms were less frequently reported.

## Risk and Phenotype of Multisystem Inflammatory Syndrome in Vaccinated and Unvaccinated Danish Children Before and During the Omicron Wave

[Risk and Phenotype of Multisystem Inflammatory Syndrome in Vaccinated and Unvaccinated Danish Children Before and During the Omicron Wave](#) | [Pediatrics](#) | [JAMA Pediatrics](#) | [JAMA Network](#)

← Findings from a cohort study out of Denmark suggests the risk of multisystem inflammatory syndrome in children (MIS-C) after SARS-CoV-2 infection during the Omicron wave is substantially lower compared with previous SARS-CoV-2 variants. Also, during the Omicron wave, the risk of MIS-C in vaccinated children after infection with COVID-19 was lower than among unvaccinated children.