

Ottawa County COVID-19 Epidemiology

July 7, 2022

Data as of July 2, 2022, unless otherwise indicated

Executive Summary

- **Transmission has flattened in the US and in Michigan**
- **Ottawa County transmission has also flattened**
 - This past week positivity **increased slightly** to 21.6%, from 20.3% seen two weeks ago.
 - Weekly case counts **decreased** 14% (+7% two weeks ago), from 360 two weeks ago to 311 last week.
 - Cases among children **decreased** 6% (0% two weeks ago), from 31 two weeks ago to 29 last week.
 - COVID-19 wastewater signals in Ottawa County are mixed but may be increasing; Holland/Zeeland is increasing sharply, Spring Lake/Grand Haven and Allendale are declining.
 - Wastewater testing continues to identify signals suggestive of Omicron subvariants BA.4/5.
 - Ottawa remains in the LOW CDC Community Level.
- **Ottawa-area and regional hospitals have adequate capacity**
 - In Ottawa County, 4% of all available beds and 0% of all ICU beds are occupied by COVID-19 patients.*
- **Pediatric hospitalization rates in the US are increasing, but are relatively low and declining in Michigan**
 - Regional pediatric hospitalization census remains low.
- **Of Ottawa County residents aged 5+, 63.5% 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.

Weekly Epi Report Cadence Update

The Ottawa County Department of Public Health will be reducing the publishing cadence for the Weekly Epi Report to bi-weekly. The next report will be published on or about Friday, July 22, 2022. The latest COVID-19 surveillance information will continue to be updated daily on the Ottawa County COVID-19 Data HUB, found here:

<https://covid-hub-ottawacountymi.hub.arcgis.com/>

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 this disease. However, it is expected that increasing and decreasing 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, increases and decreases in detected trends generally correlate with case rates, therefore wastewater readings are displayed alongside countywide incidence rates in this report.

Ottawa County Metrics by Week

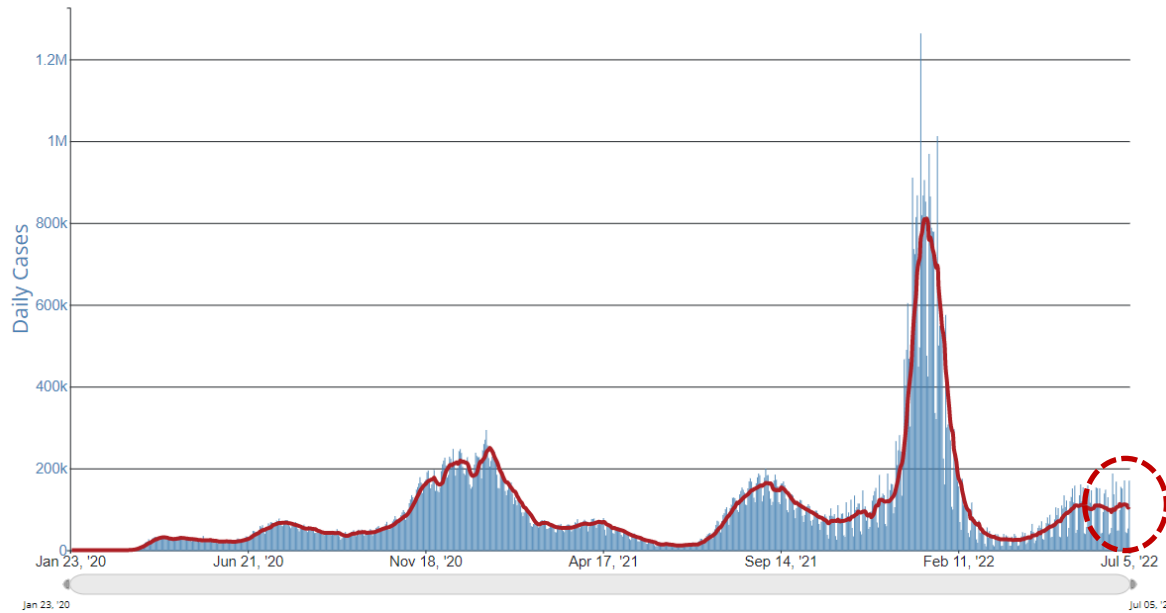
Metric	Goal	Week Ending				
		4-Jun-22	11-Jun-22	18-Jun-22	25-Jun-22	2-Jul-22
Positivity (All Ages)	NA	24.4%	20.3%	20.1%	20.3%	21.6%
Weekly Cases (All Ages)	<592	418	395	343	360	311
Weekly Cases in Children (0-17 years of age)	NA	40	40	31	31	29
Total Deaths (All Ages)	0	2	1	2	0	0
CDC COVID-19 Community 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

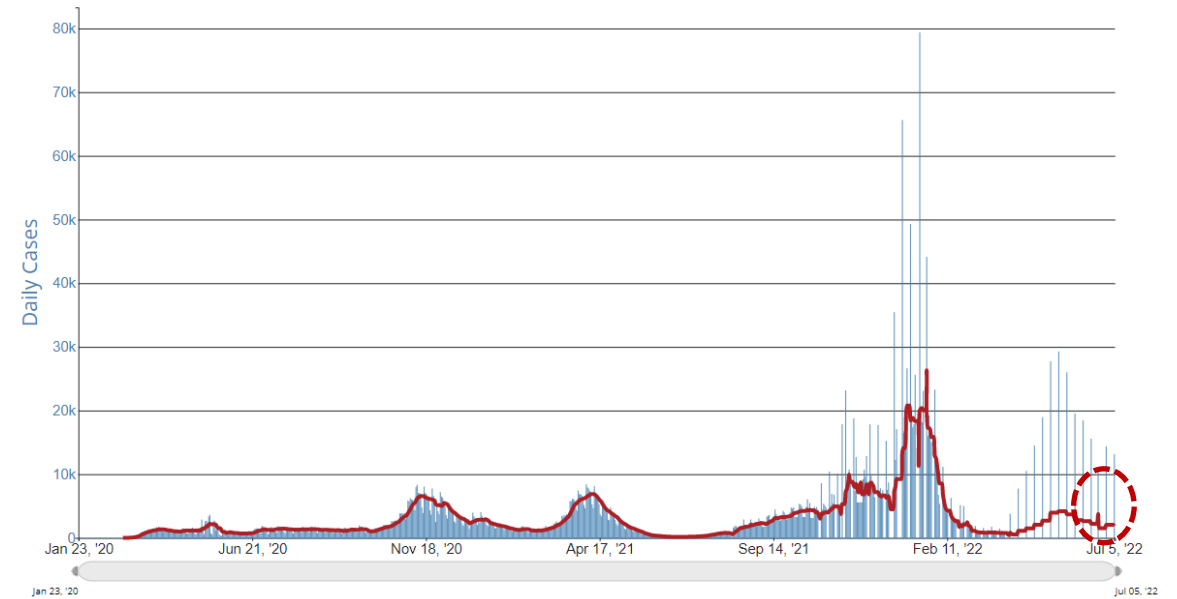
USA

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 and are currently flat or declining.

Note: Use of at home tests since late 2021 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

Data through July 4, 2022

USA & MI

Spread

Children

Hospitalizations

Vaccinations

Variants

Risk Levels

Other

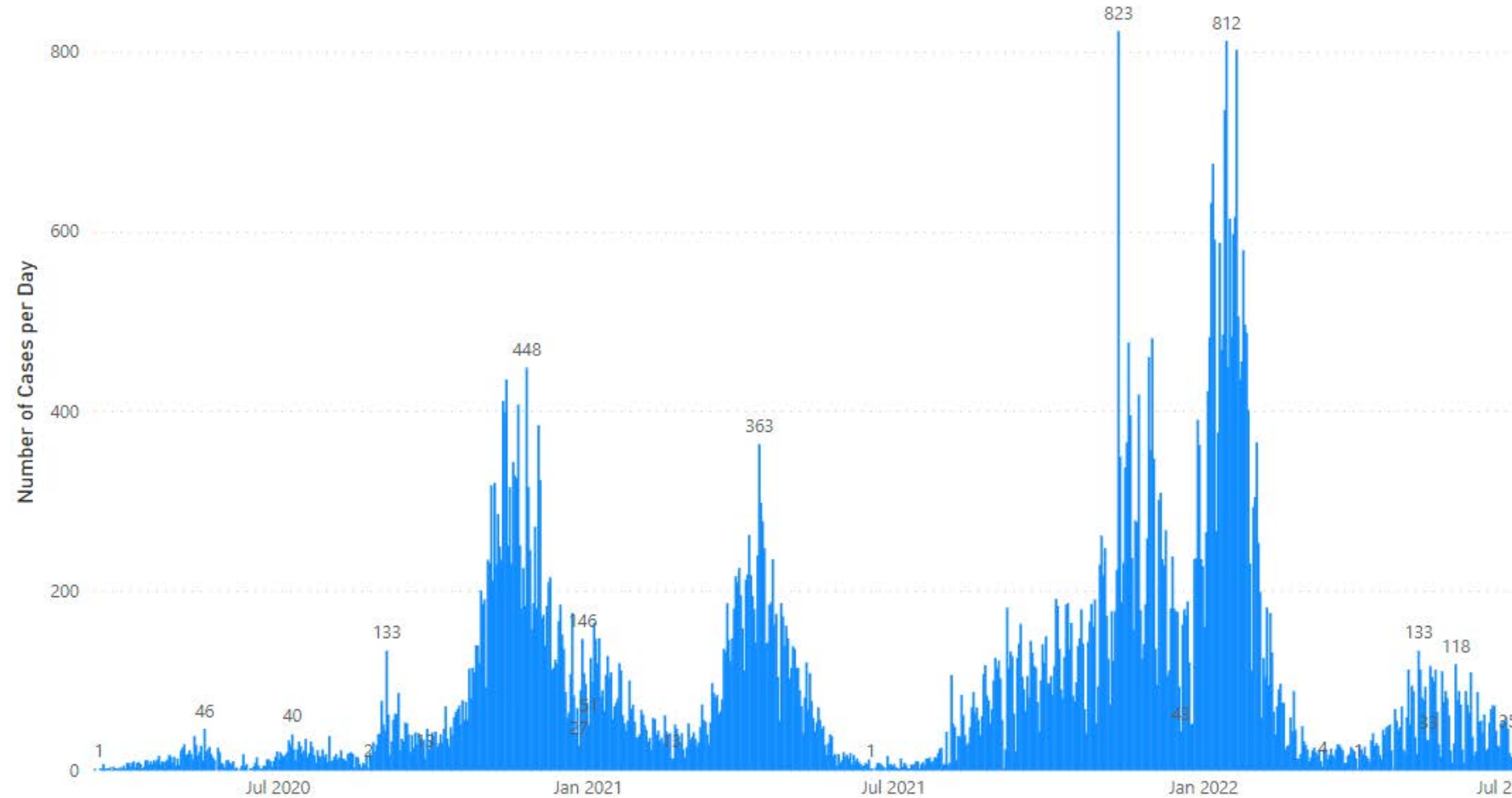
Media

Science Roundup

Case Trends in Ottawa County

COVID-19 Cases by Day, Ottawa County, March 15, 2020 – July 6, 2022

Epidemiological Curve



Total Number of Cases
79,509

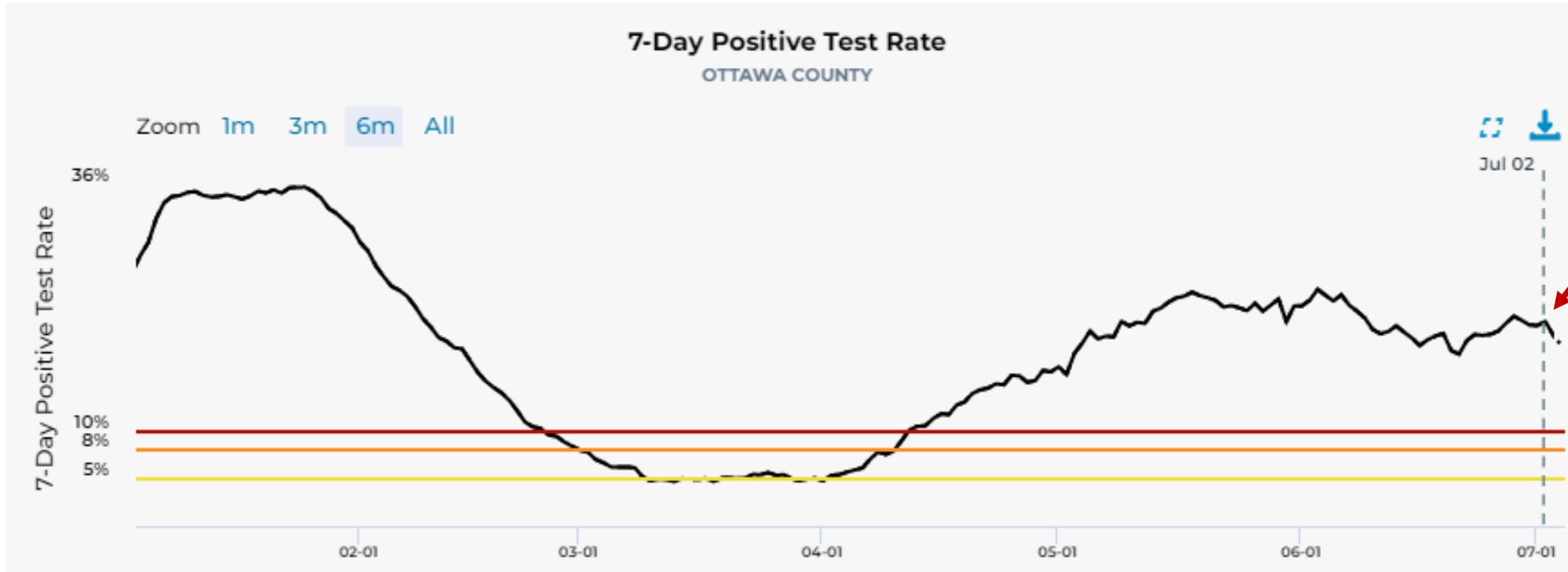
Currently, the 7-day average is just over **33 cases per day**, a decrease from the approximately 38 cases seen last week at this same time.

Notes: Use of at home tests since late 2021 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 – July 2, 2022



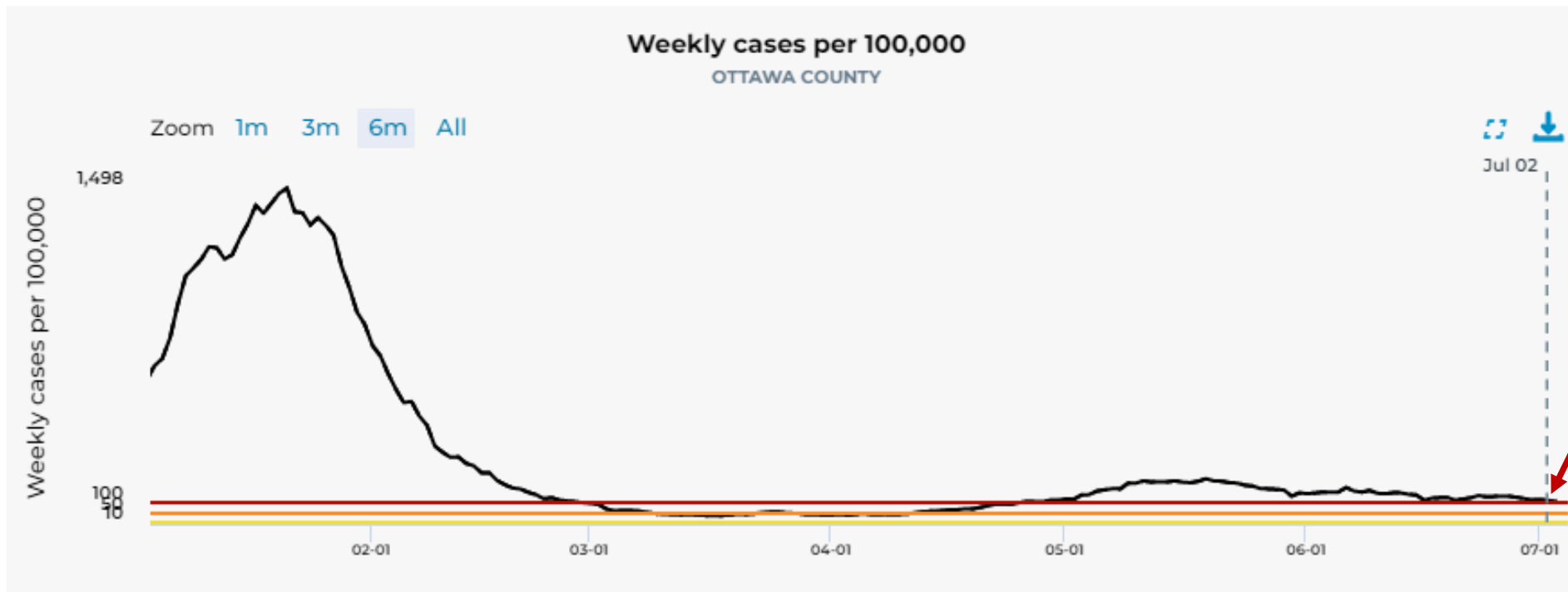
This visualization may change as CDC Community Transmission levels, metrics and/or metric thresholds/goals change.

Note: Testing data and can be found at the following sources: [Testing Results | Ottawa County Covid-19 Case Summary Data \(arcgis.com\)](#) & [MI Safe Start Map](#). Use of at-home tests since late 2021 likely reduces the number of positive tests reported to Public Health, resulting in an artificially deflated number of cases.

Source: [MI Safe Start Map-Ottawa County](#)

Case Rates in Ottawa County – All Ages

COVID-19 Cases by Day, Ottawa County, January 1, 2022 – July 2, 2022



Case rates **remained low at 106** cases per week per 100,000 population (**lower than 123** the week prior).

Risk Thresholds (Cases per 100,000)



Low: <10



Moderate 10-49



Substantial 50-99



High >=100

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

Note: 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.

Source: [MI Safe Start Map-Ottawa County](#)

USA & MI

Spread

Children

Hospitalizations

Vaccinations

Variants

Risk Levels

Other

Media

Science
Roundup

Ottawa County Time Trends – Annual Comparison of Case Rates



So far, this summer's case rates are **higher** than the previous two COVID-19 summers.

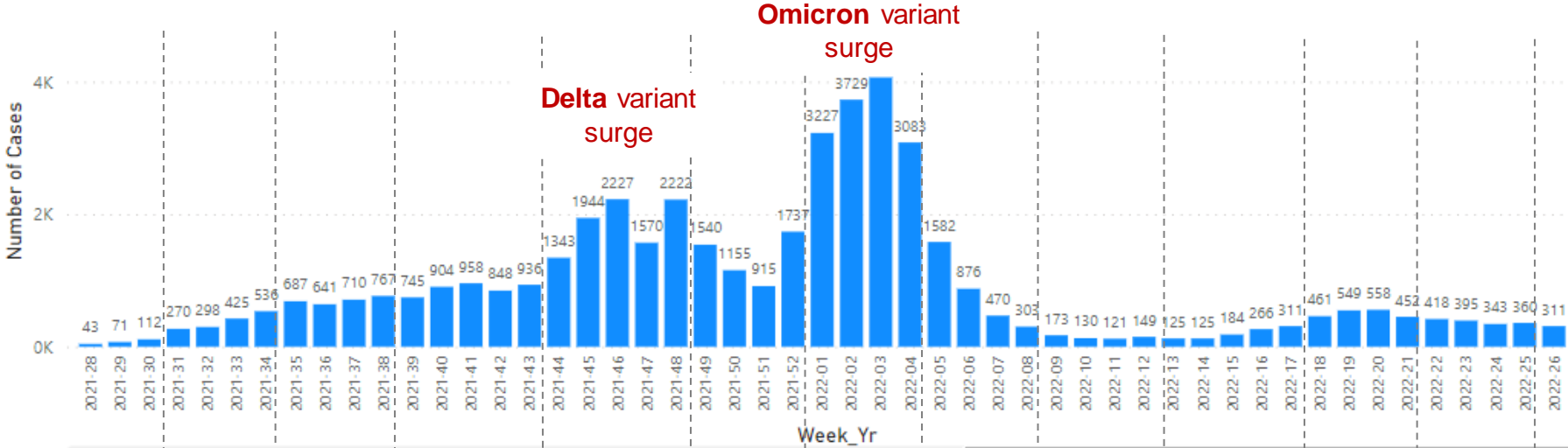
Note: Use of at home tests since late 2021 likely reduces the number of positive tests reported to Public Health, resulting in artificially deflated case rates.

Source: Internal Data

Data through July 06, 2022

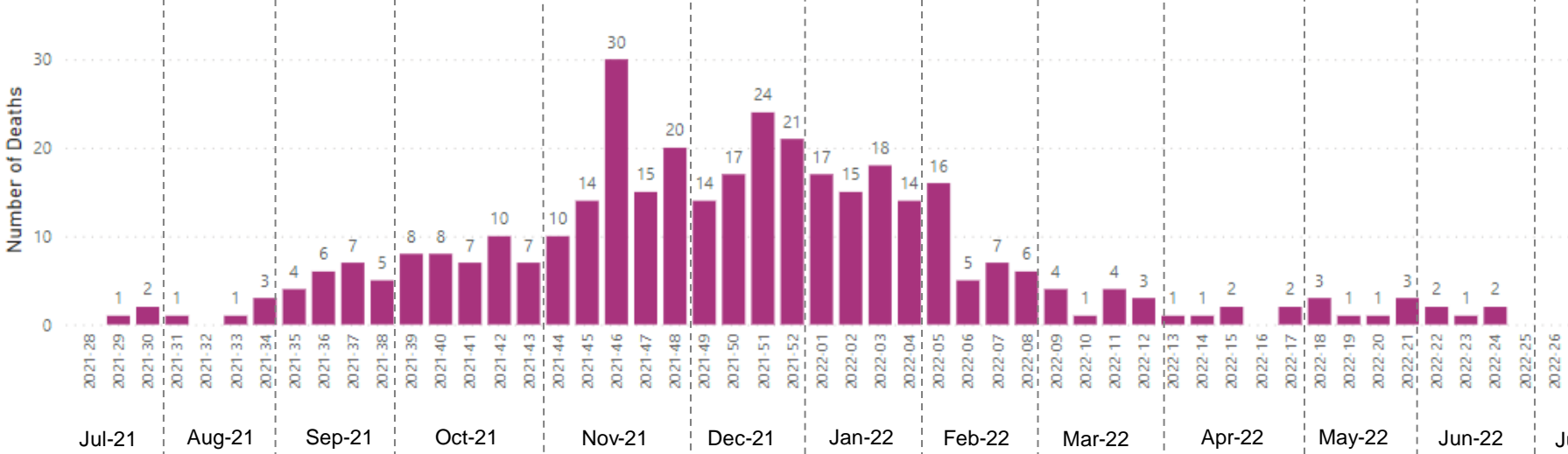
Ottawa County – Cases & Deaths by Week, All Ages

New Cases By Week of Referral



The weekly number of cases decreased 14% from week 25 to week 26.

New Deaths by Week of Death



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

Note: Use of at home tests since late 2021 likely reduces the number of positive tests reported to Public Health, resulting in artificially deflated number of cases.

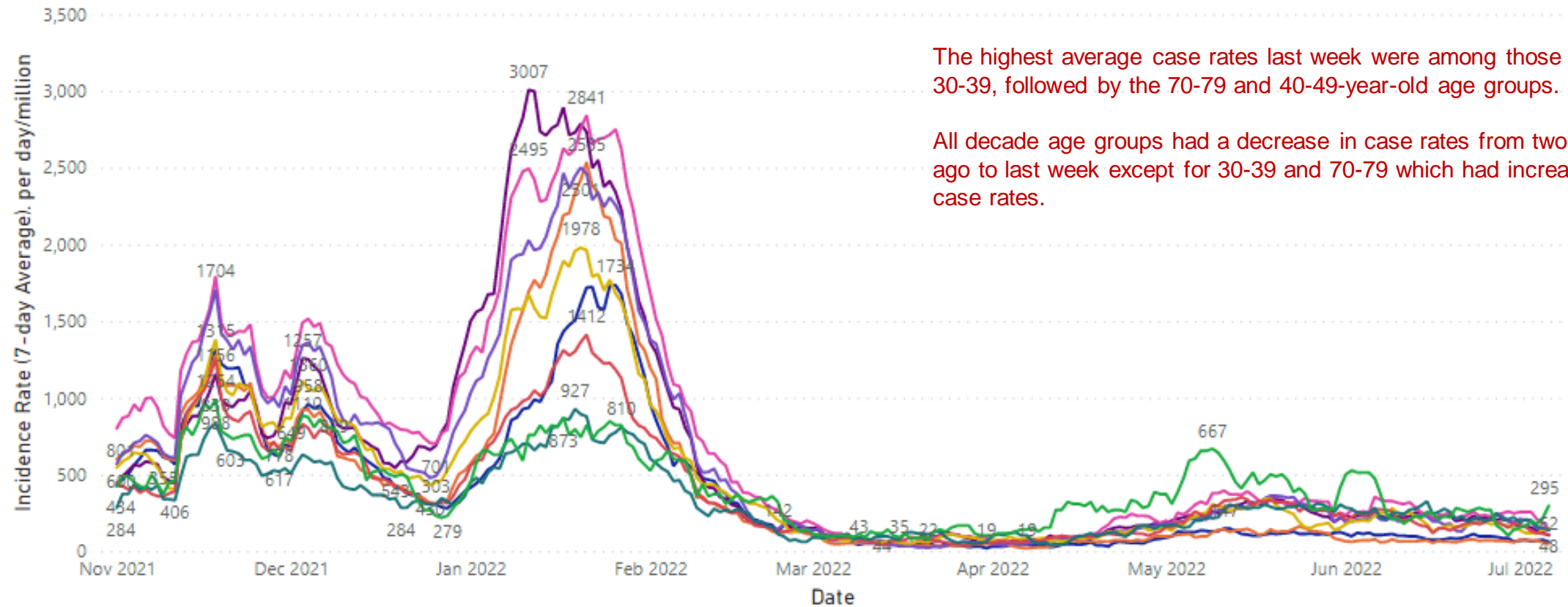
Source: Michigan Department of Health and Human Services, Michigan Disease Surveillance System

Ottawa County - Case Rate Trends – by Age Decade

COVID-19 Case Rates by Age, November 2021 – July 6, 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 30-39, followed by the 70-79 and 40-49-year-old age groups.

All decade age groups had a decrease in case rates from two weeks ago to last week except for 30-39 and 70-79 which had increases in case rates.

Note: 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.

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

Data as of July 6, 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 26 (June 26, 2022 – July 2, 2022)

Age Decade (Years)	Average Daily Cases	Average Daily Case Rate	One Week % Rate Change
0-9	2.7	73.6	-24%
10-19	3.0	67.7	-4%
20-29	7.1	157.9	-25%
30-39	8.9	247.2	7%
40-49	6.6	198.0	-2%
50-59	4.0	114.7	-39%
60-69	5.1	157.7	-16%
70-79	4.3	207.8	7%
80+	1.9	167.1	-38%

Age groups with highest average case rates last week:

- 30-39
- 70-79
- 40-49

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

- 30-39
- 70-79

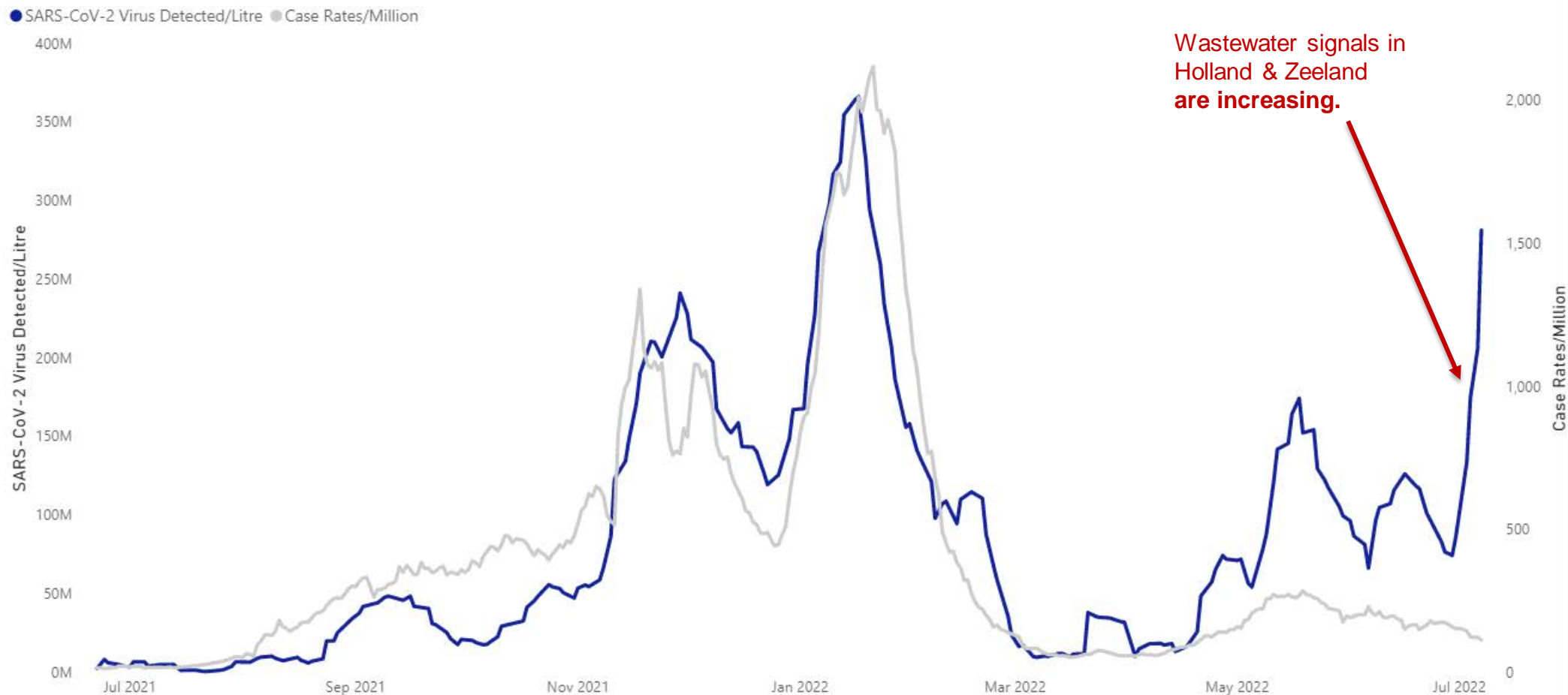
Notes: Average daily cases is calculated by summing the weekly total number of cases and dividing by seven. Cases counted in weeks of interest reflect referral date. Use of at home tests since late 2021 likely reduces the number of positive tests reported to Public Health, resulting in artificially deflated case rates.

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

Data as July 6, 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.

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. An data point from Zeeland collected June 23, 2022 was removed from data analysis as an extreme outlier.

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

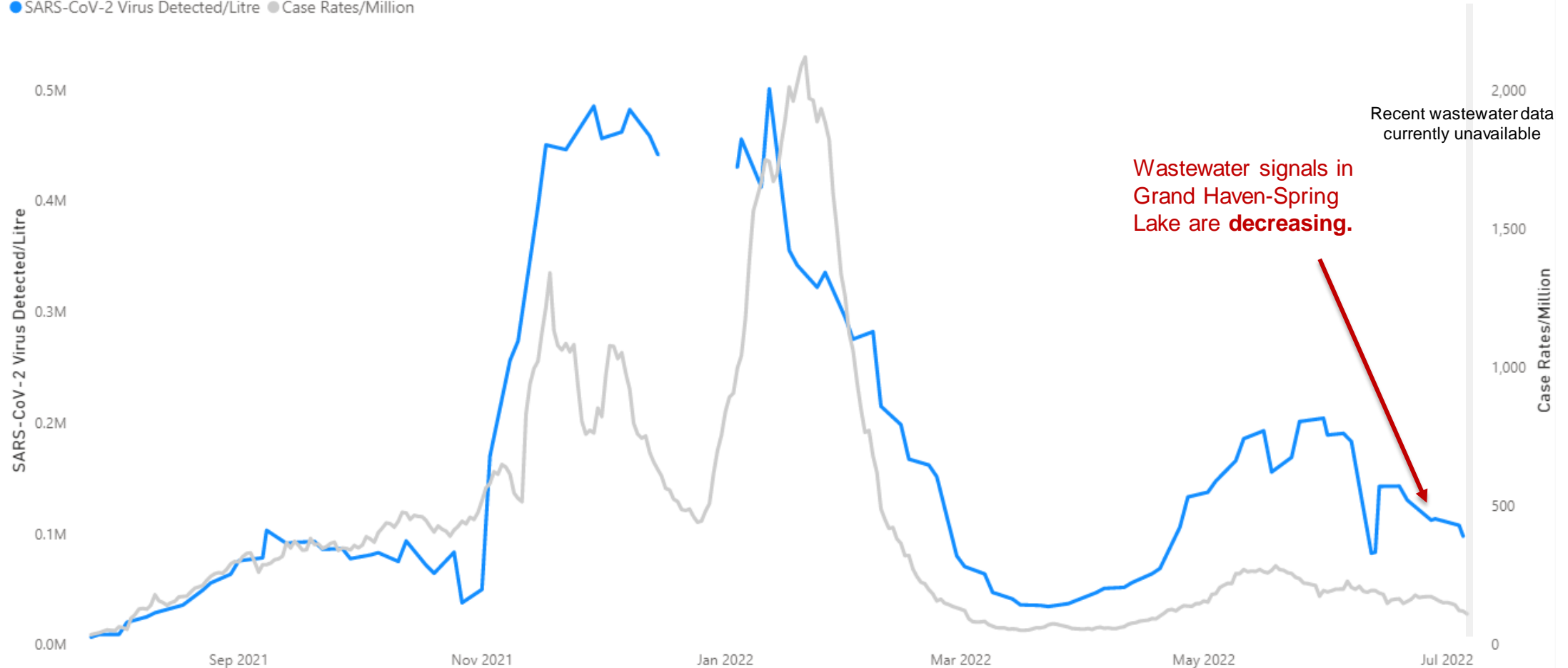
Additional Information: [Michigan COVID-19 Wastewater Surveillance Pilot Project \(arcgis.com\)](https://arcgis.com), [Coronavirus - Sentinel Wastewater Epidemiology Evaluation Project \(SWEEP\) \(michigan.gov\)](https://michigan.gov)

Data through July 7, 2022

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 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.

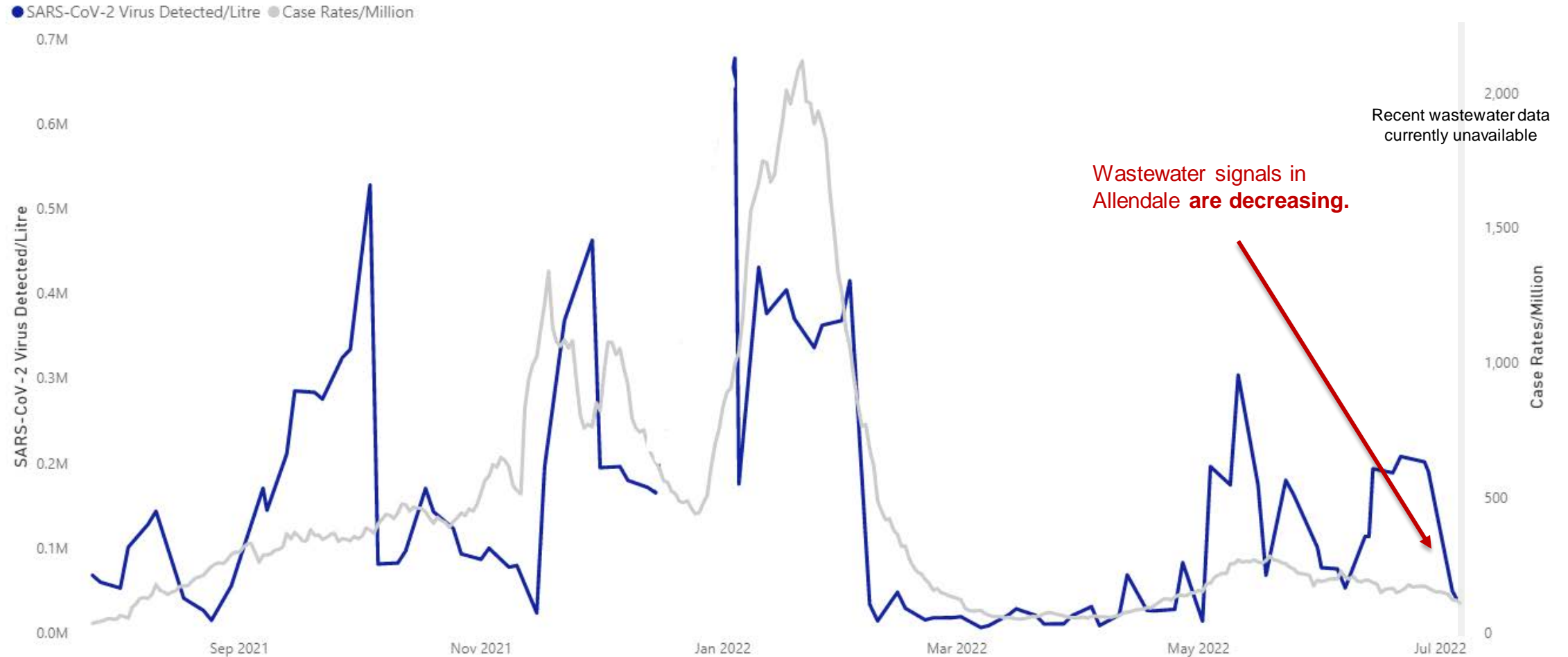
Source: Grand Valley State University Annis Water Resources Institute as part of the MDHHS SEWER-Network, Richard Rediske, Ph.D. (redisker@gvsu.edu)

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 July 5, 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 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.

Source: Grand Valley State University Annis Water Resources Institute as part of the MDHHS SEWER-Network, Richard Rediske, Ph.D. (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 July 5, 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
23-Apr-22	239	45%	27	42%	266	45%
30-Apr-22	269	13%	42	56%	311	17%
7-May-22	410	52%	51	21%	461	48%
14-May-22	492	20%	57	12%	549	19%
21-May-22	487	-1%	62	9%	549	0%
28-May-22	393	-19%	55	-11%	448	-18%
4-Jun-22	364	-7%	40	-27%	404	-10%
11-Jun-22	353	-3%	40	0%	393	-3%
18-Jun-22	304	-14%	31	-23%	335	-15%
25-Jun-22	329	8%	31	0%	360	7%
2-Jul-22	282	-14%	29	-6%	311	-14%

Weekly case counts among **children decreased 6%** last week, and cases in **adults decreased 14%**.

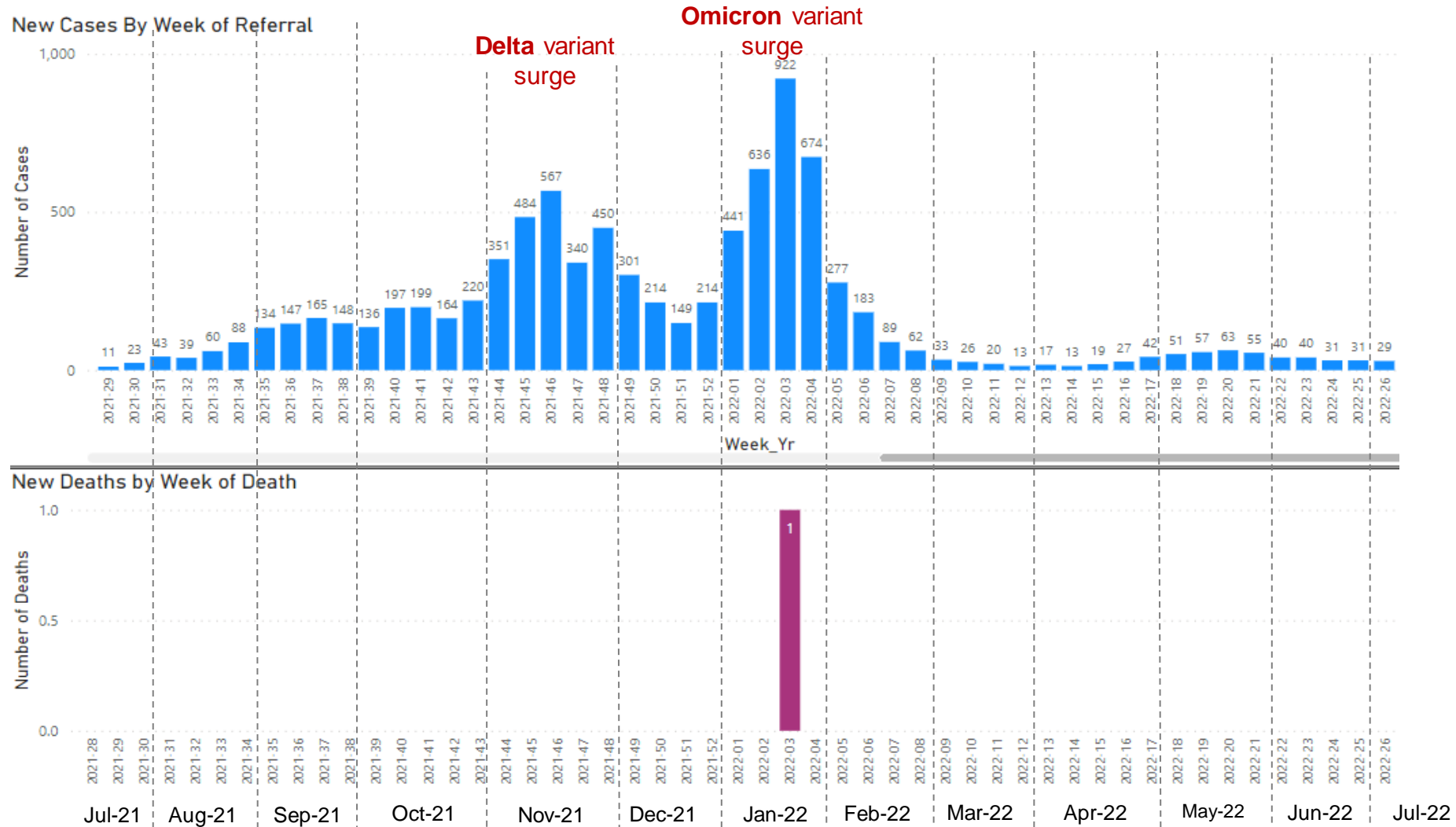
Adults

Children

Note: Use of at home tests since late 2021 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)



The weekly number of cases among children **decreased 6%** from week 25 to week 26.

The first COVID-19 associated death in a child occurred in January of 2022. The death was identified as a COVID-19 associated death in June of 2022, after the death certificate was completed.

Note: Use of at home tests since late 2021 likely reduces the number of positive tests reported to Public Health, resulting in artificially deflated case counts.

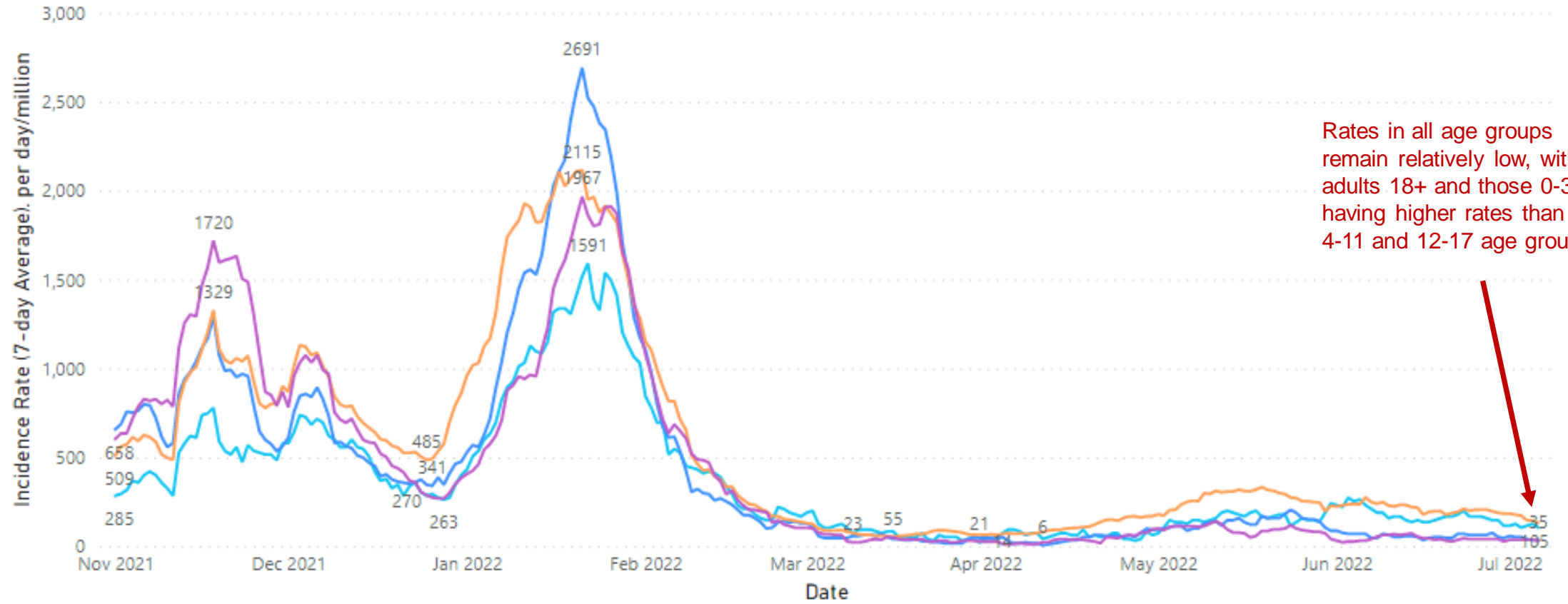
Source: Michigan Department of Health and Human Services, Michigan Disease Surveillance System

Ottawa County - Case Rate Trends – by Age

COVID-19 Case Rates by Age, includes School-Aged, November 2021 – July 6, 2022

Incidence Rate (7-day Average)

rategroup ● 0-3 ● 12-17 ● 18+ ● 4-11



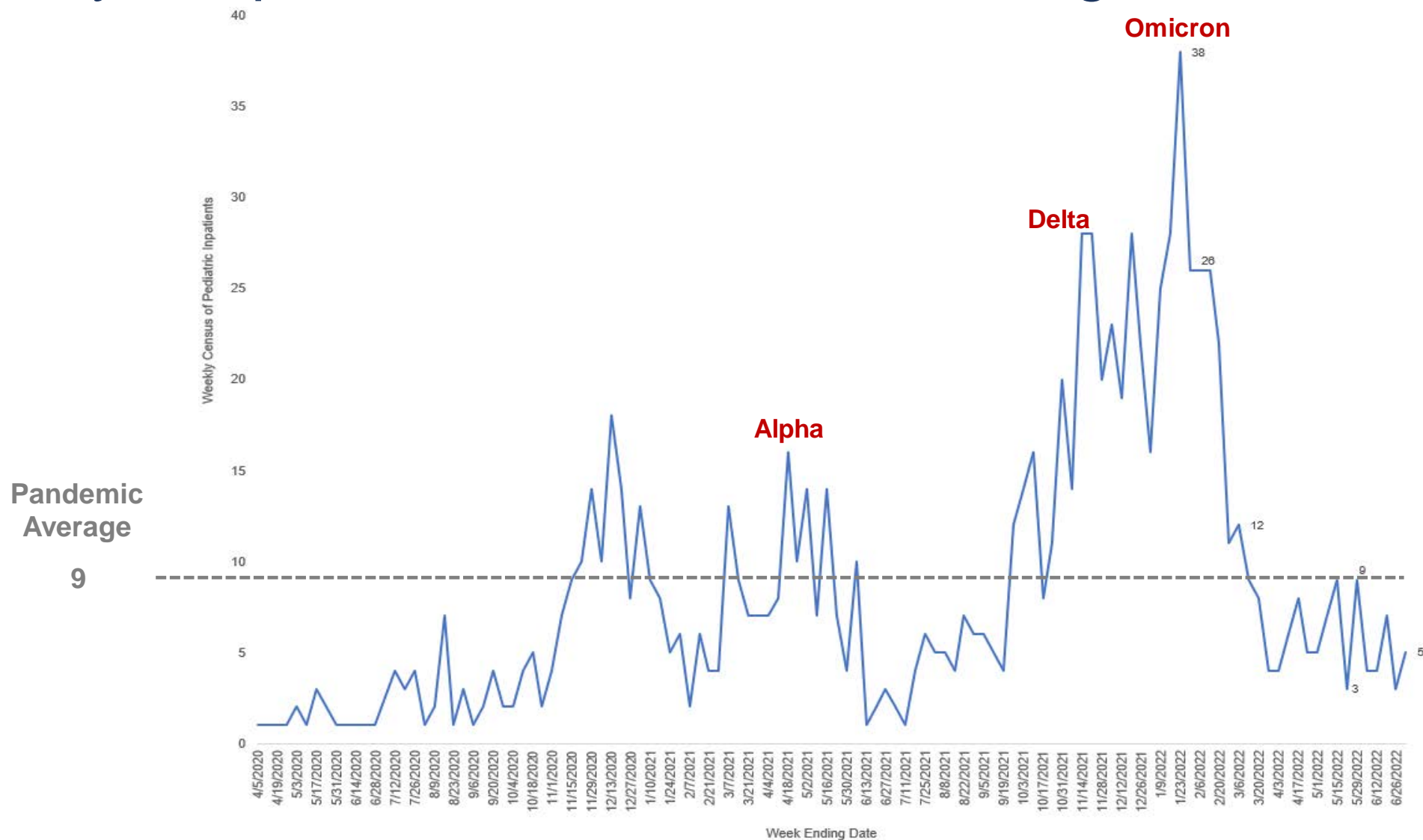
Rates in all age groups remain relatively low, with adults 18+ and those 0-3 having higher rates than the 4-11 and 12-17 age groups.

Note: 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.

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

Data as of July 6, 2022

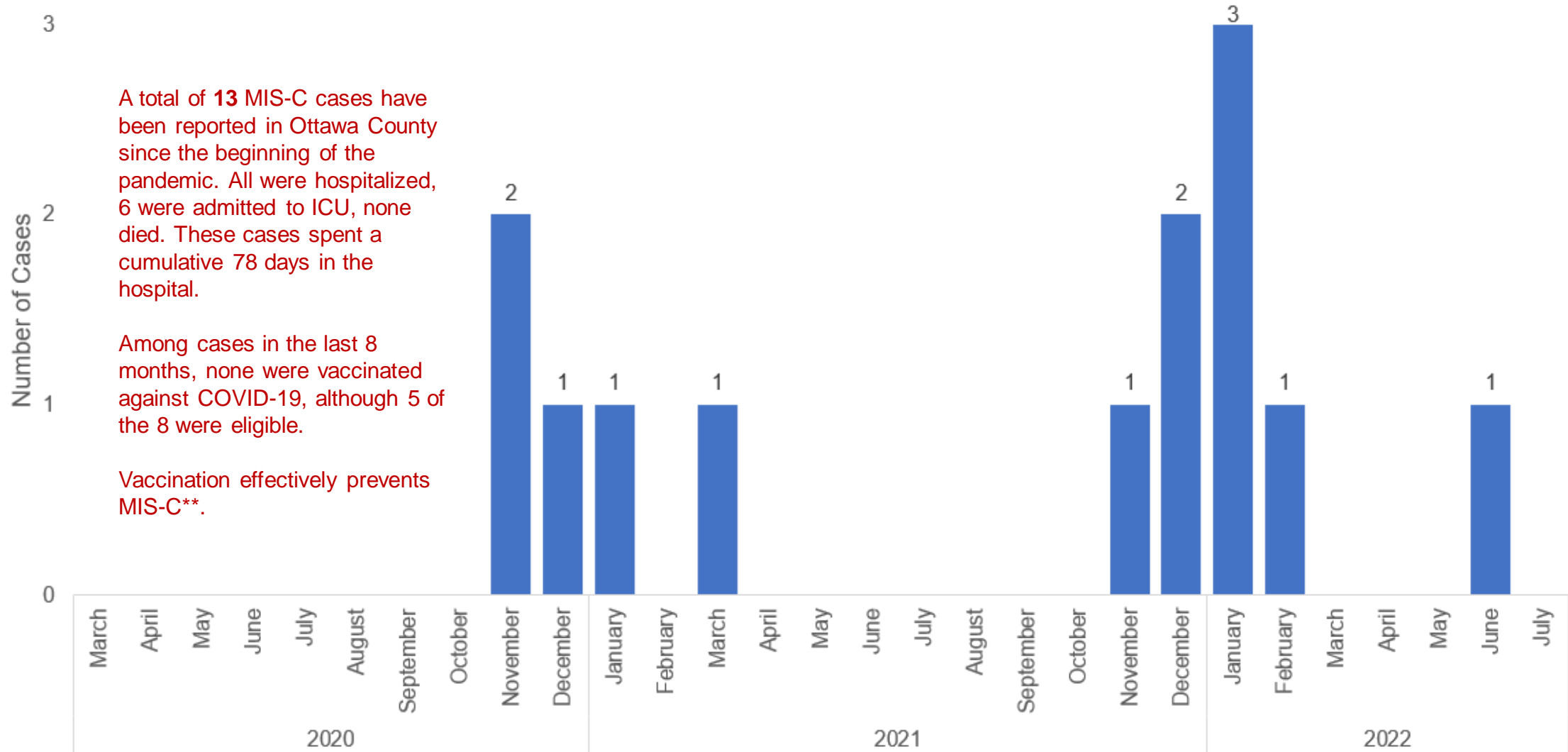
Weekly Hospital Pediatric Census – A Regional Healthcare System



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

Data through July 6, 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 a cumulative 78 days in the hospital.

Among cases in the last 8 months, none were vaccinated against COVID-19, although 5 of the 8 were eligible.

Vaccination effectively prevents MIS-C**.

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>

**Sources: [MMWR](#) & [The Lancet](#)

Data through July 6, 2022

Ottawa County Hospital Capacity – All Beds

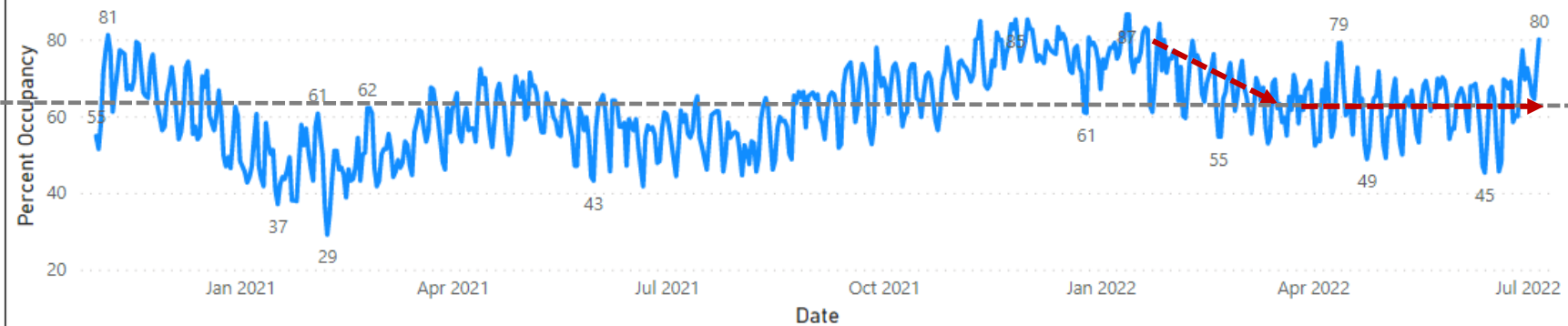
Hospital Inpatient Bed Occupancy - By County

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

Pandemic Average

Percent Occupancy by Date and County

County ● Ottawa

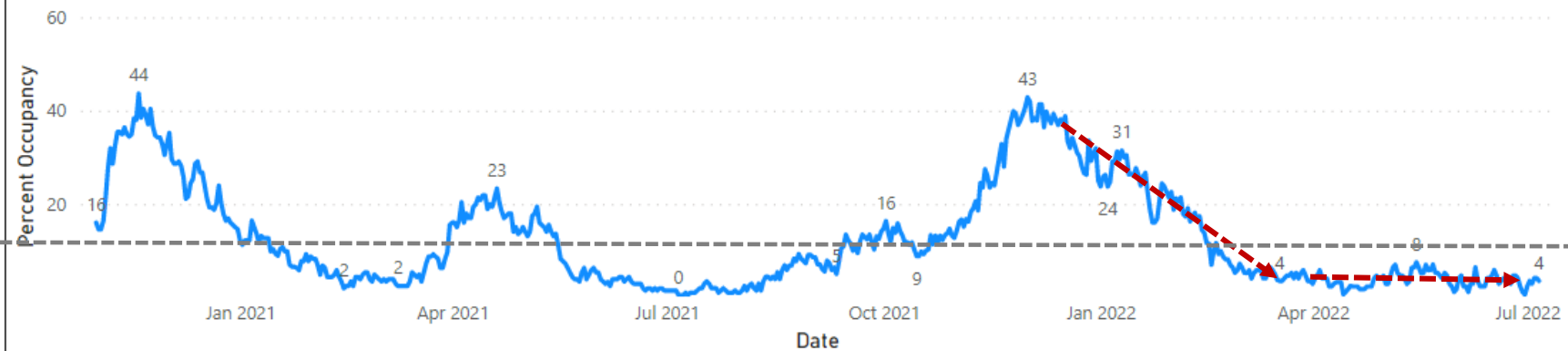


Total hospital bed occupancy is **above the pandemic average**.

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

Percent Occupancy by Date and County

County ● Ottawa

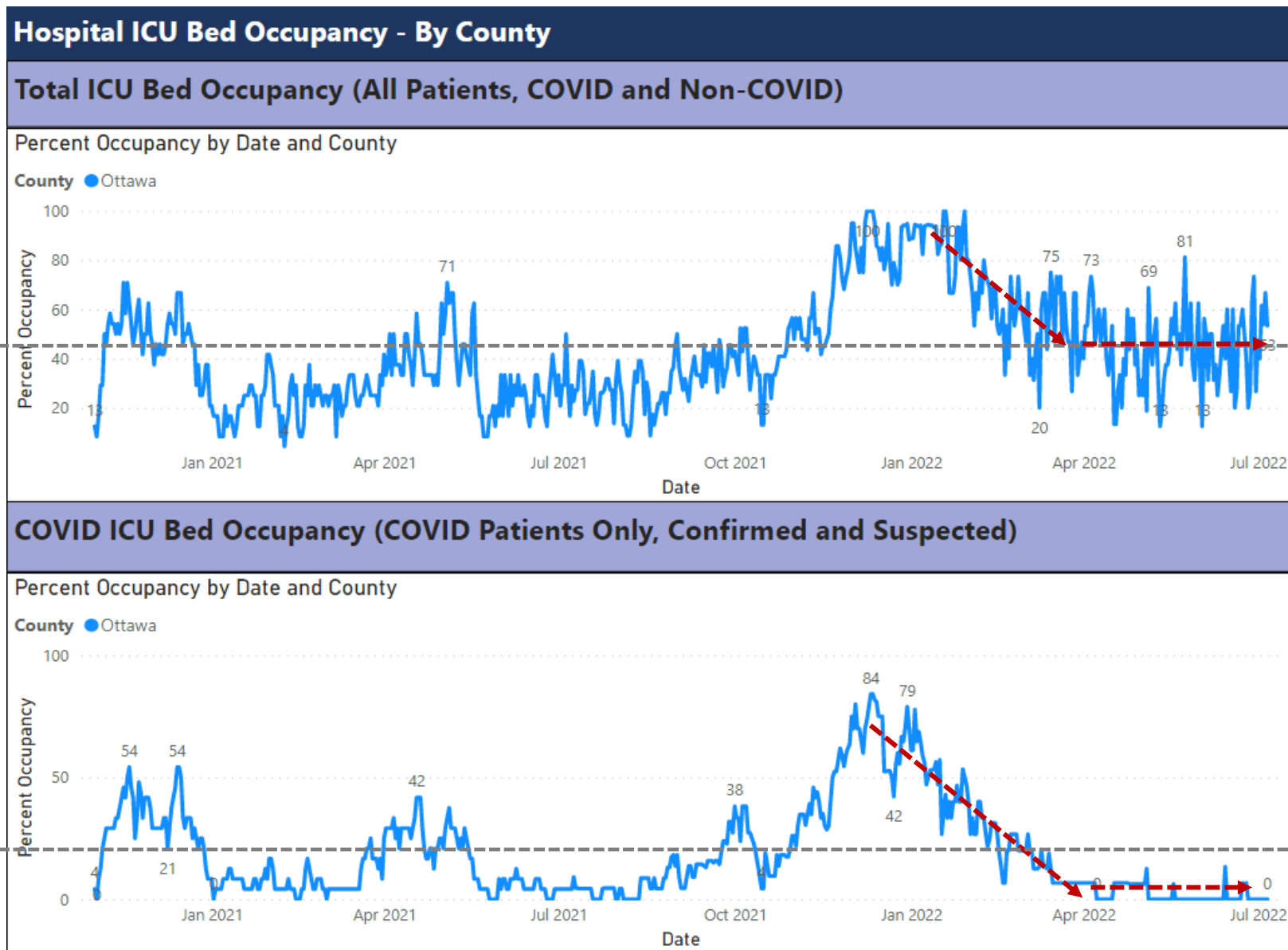


Currently **4%** of all inpatient beds are occupied by COVID-19 patients.

Source: EMResources

Data through July 06, 2022

Ottawa County Hospital Capacity – ICU Beds



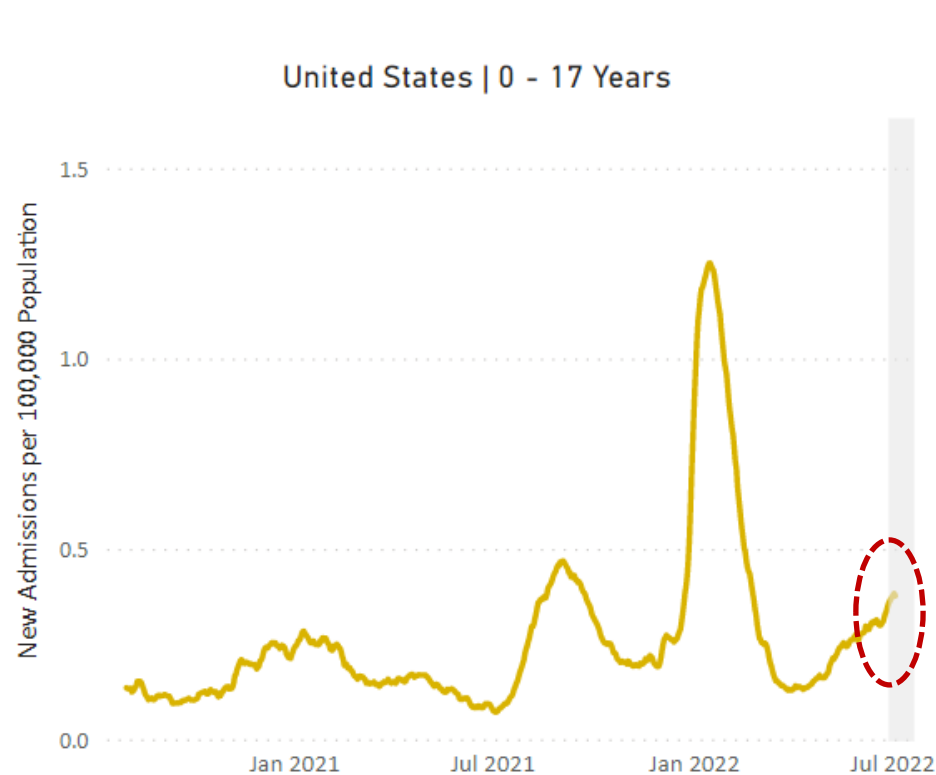
Total ICU bed occupancy is **currently at 53%** but has been trending near the pandemic average of 42% over the past two months.

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 July 06, 2022

Pediatric Hospitalization Rates – USA, Michigan



Pediatric hospitalization rates across the US continue increasing. **Rates in Michigan may be declining.**

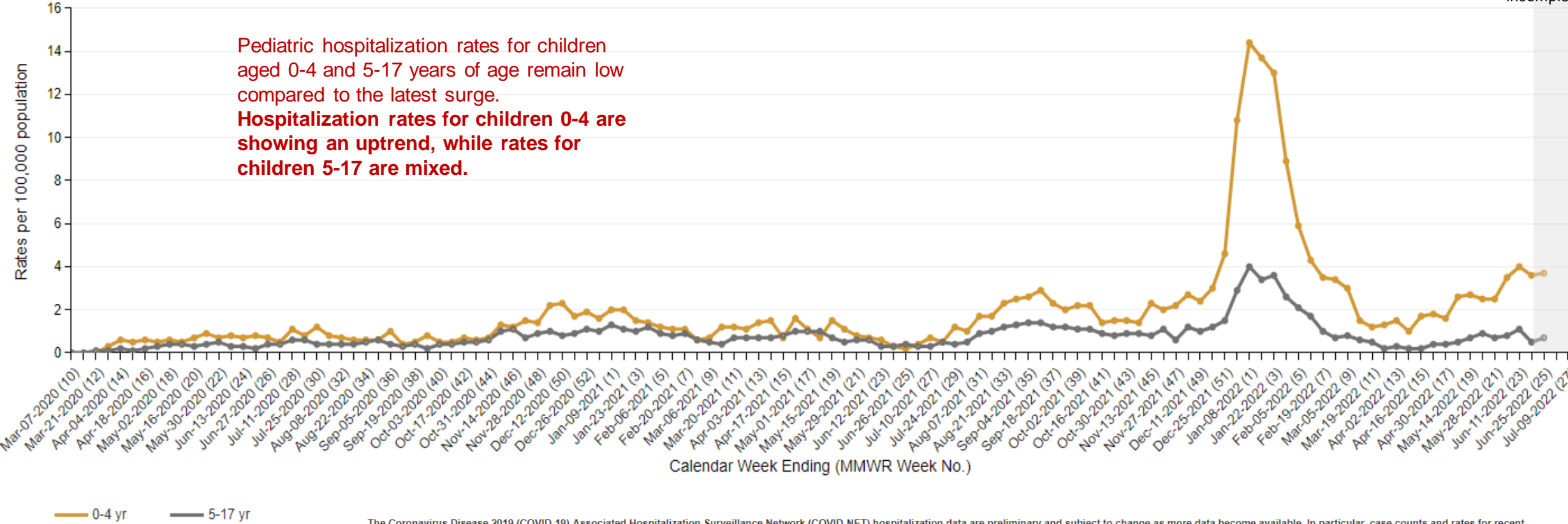
Source: <https://covid.cdc.gov/covid-data-tracker/#new-hospital-admissions>

Accessed July 07, 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



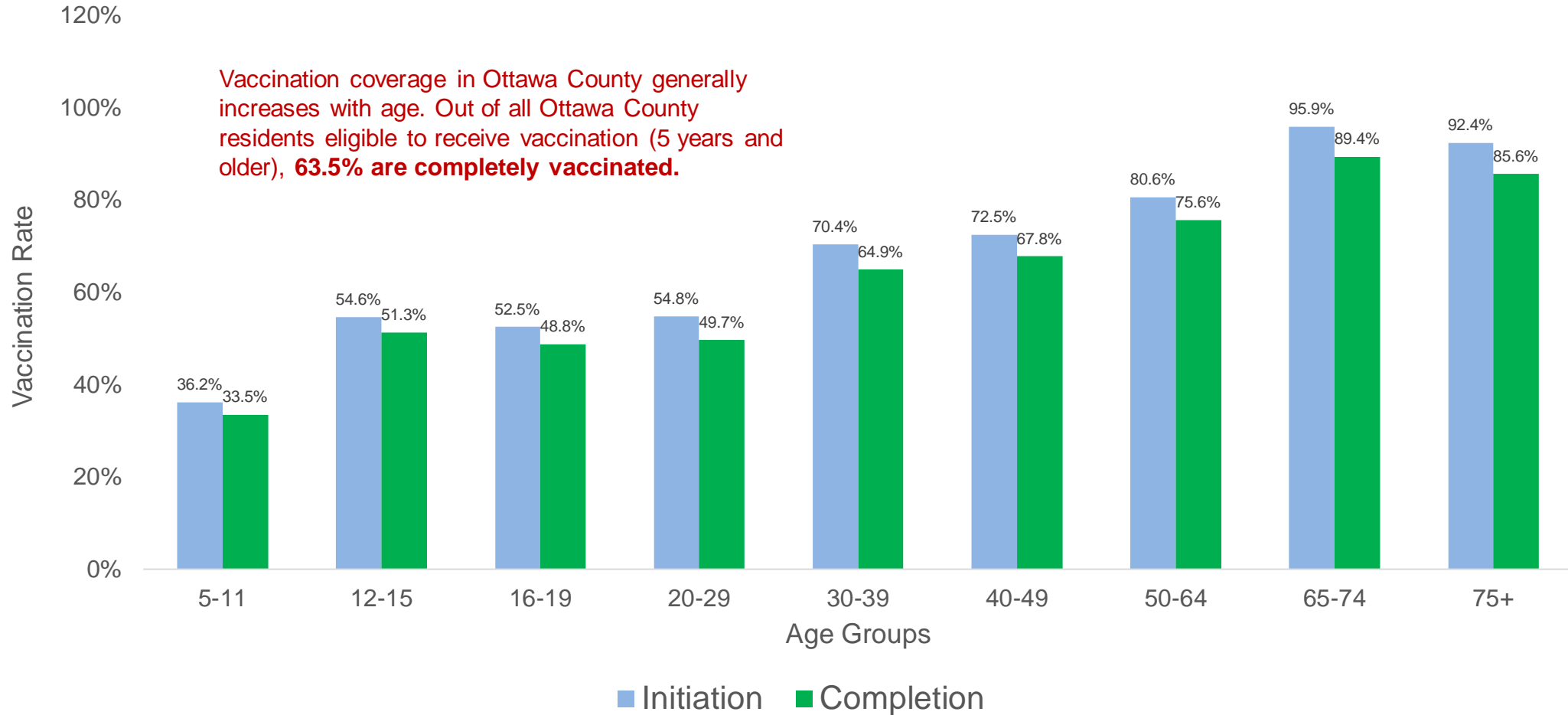
The Coronavirus Disease 2019 (COVID-19)-Associated Hospitalization Surveillance Network (COVID-NET) hospitalization data are preliminary and subject to change as more data become available. In particular, case counts and rates for recent hospital admissions are subject to lag. Lag for COVID-NET case 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 July 07, 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. Children aged 6 months to 4 years to be included in future reports.

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

Data through July 06, 2022

Cumulative Cases by Vaccination Status, Ottawa County, January 15, 2021 – July 6, 2022

Fully Vaccinated People (172,950)	
Cases	Deaths
Percent of Cases in People Not Fully Vaccinated (38,123 / 59,464) 64.1%	Percent of Deaths in People Not Fully Vaccinated (296 / 460) 64.3%
Total Cases Not Fully Vaccinated 38,123	Total Deaths Not Fully Vaccinated 296
Total Breakthrough Cases 21,341	Total Breakthrough Deaths 164
Percent of Fully Vaccinated People who Developed COVID-19 (21,341 / 172,950) 12.3%	Percent of Fully Vaccinated People who Died of COVID-19 (164 / 172,950) 0.10%
Percent of Cases who were Fully Vaccinated (21,341 / 59,464) 35.9%	Percent of Deaths who were Fully Vaccinated (164 / 460) 35.7%
Total Cases 59,464	Total Deaths 460

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

Recent data may be incomplete



As of July 02, 2022, case rates among the unvaccinated were **1.8x higher** than among those fully vaccinated.

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 since late 2021 likely reduces the number of positive tests reported to Public Health, resulting in artificially deflated case rates. Children aged 6 months to 4 years to be included in future reports.

Sources:

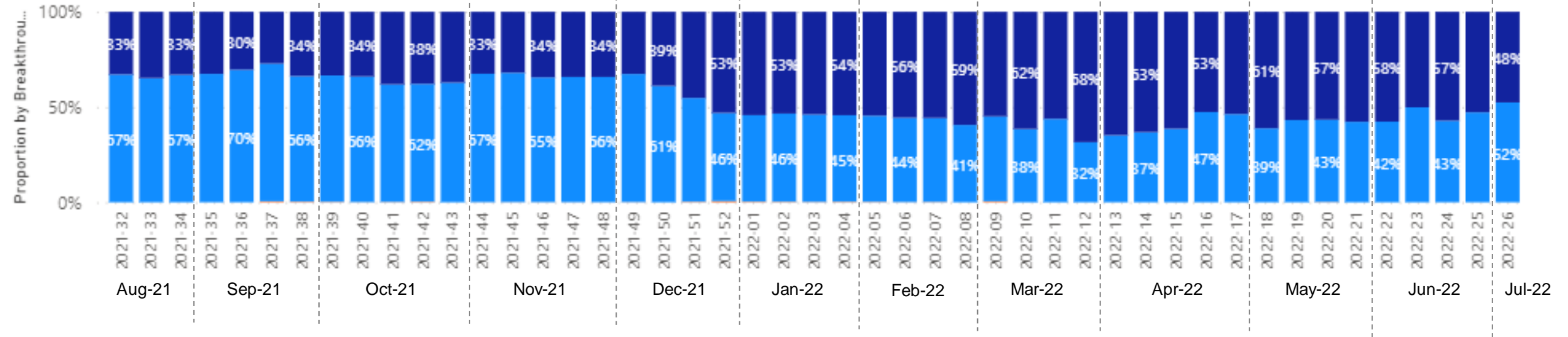
Michigan Department of Health and Human Services, Michigan Disease Surveillance System
 MDHHS COVID-19 Dashboard: <https://www.michigan.gov/coronavirus/stats>

Ottawa County COVID-19 Vaccination Breakthrough Case Trends

By Week

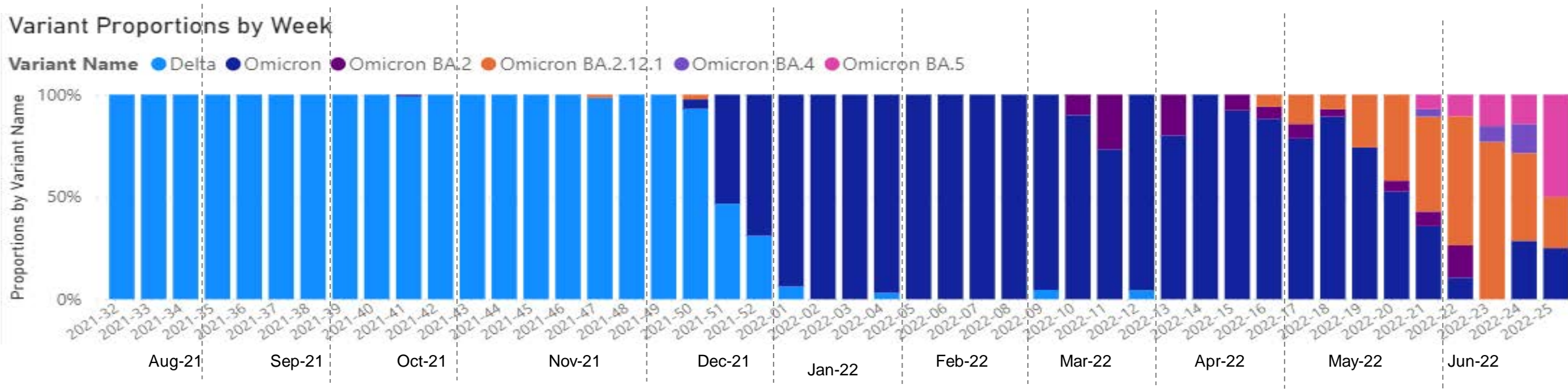
Breakthrough Proportions by Week

Vaccine_Breakthrough ● ● NO ● YES



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

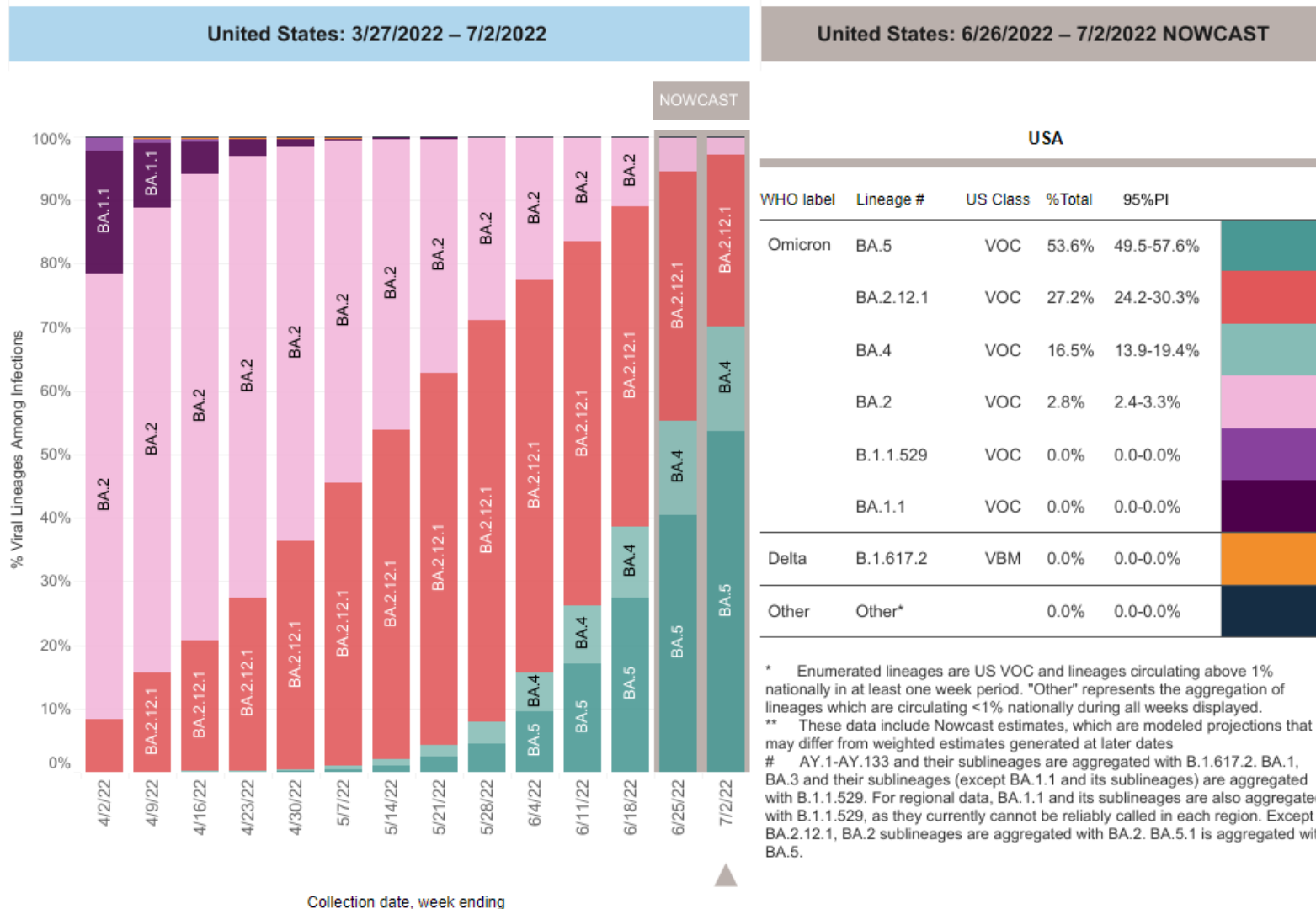
Variants – Clinical Samples from Ottawa County Residents



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 and from late July through early December 2021, all clinical samples submitted for variant testing continued to be identified as the **Delta** variant. In mid-December 2021, the first **Omicron** positive sample was collected in an Ottawa County resident, and **Omicron** continues to be detected into 2022, with more recent additions of the **Omicron subvariants** BA.2.12.1 and BA.4/5 (detected in clinical samples in late May 2022).

* 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 and its subvariants are estimated to account for 100% of all clinical samples collected in the United States the week ending July 02, 2022.

Newer Omicron subvariants are circulating, with BA.5 emerging as the dominant variant.

Variants – Wastewater Sampling – Holland/Zeeland

Y = Detected
N = Not Detected

Sample Date	Site	Delta	Omicron
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
05/29/2022	North Holland	N	Y
05/30/2022	Zeeland	N	Y
06/01/2022	North Holland	N	Y
06/02/2022	Zeeland	Y	Y
06/05/2022	North Holland	Y	Y
06/06/2022	Zeeland	Y	Y
06/08/2022	North Holland	Y	Y
06/09/2022	Zeeland	Y	Y
06/16/2022	North Holland	N	Y
06/16/2022	Zeeland	N	Y

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 through early April not displayed here), with renewed, frequent detection in May and June 2022.

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

Variants – Wastewater Sampling – Grand Haven/Spring Lake

N	=Not Detected
Y	=Detected
	=Not Tested

Date	Sample Name	Delta	Epsilon	Alpha	Omicron
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
6/12/2022	Allendale Wastewater Treatment Plant				Y

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

Although not displayed here, in early May 2022, signals suggestive of BA.4/5 were detected in Ottawa County. Since then, increasing concentrations of potential BA.4/5 have been noted across Ottawa County.

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%

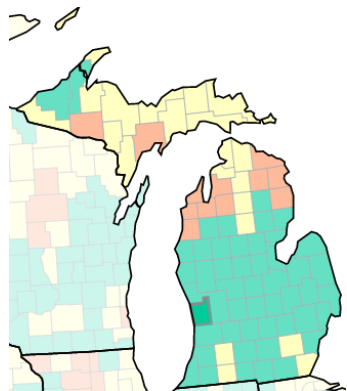
Note: The COVID-19 community level is determined by the higher of the new admissions and inpatient beds metrics, based on the current level of new cases per 100,000 population in the past 7 days.

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

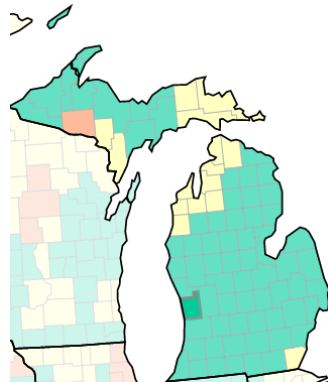
CDC Community Levels – Ottawa County

- Current Community Level in Ottawa – **LOW**
- Current Data:
 - Case Rate (per 100k pop 7-day total) = **139.12**
 - COVID-19 Hospital Admissions (per 100K pop 7-day total) = **2.2**
 - COVID-19 Inpatient Hospital Bed Utilization (7-day average) = **2.8%**

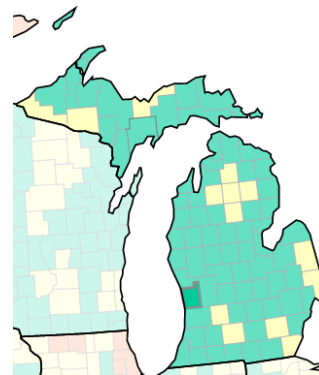
2 Weeks Ago



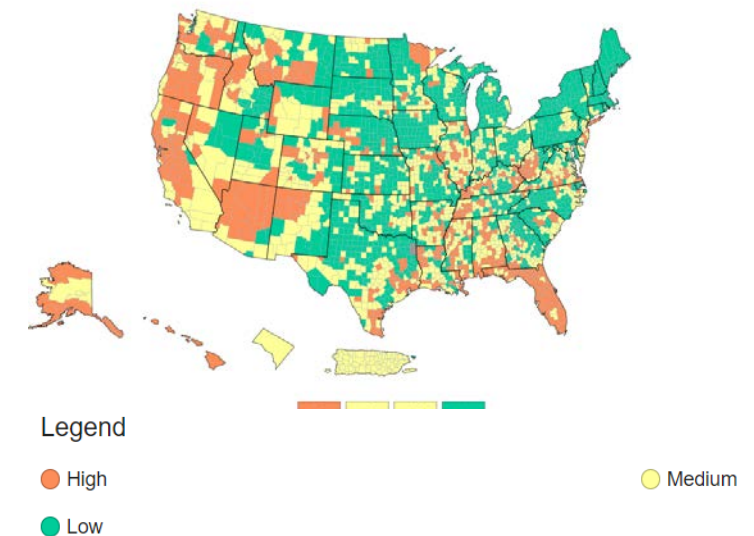
Last Week



This Week



USA - This Week



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

Data updated by CDC
on Jul 06, 2022

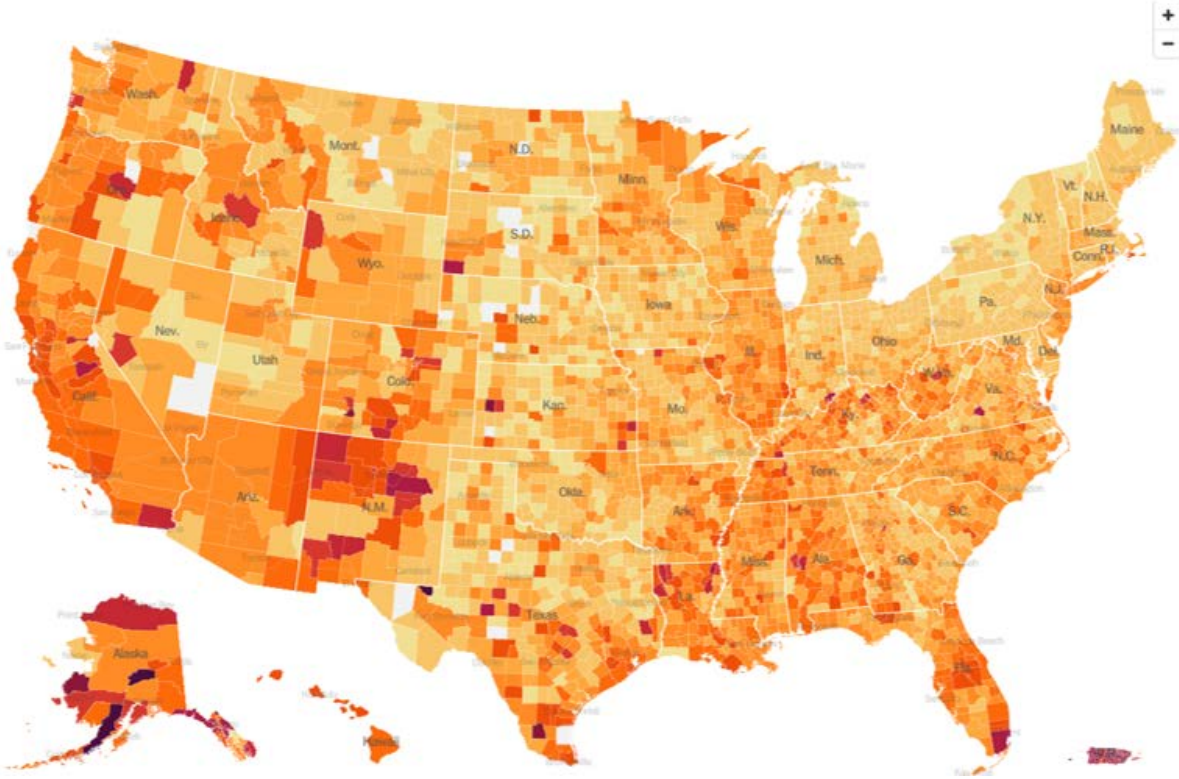
COVID-19 Case Rates by County Across the US

Last Week

This Week

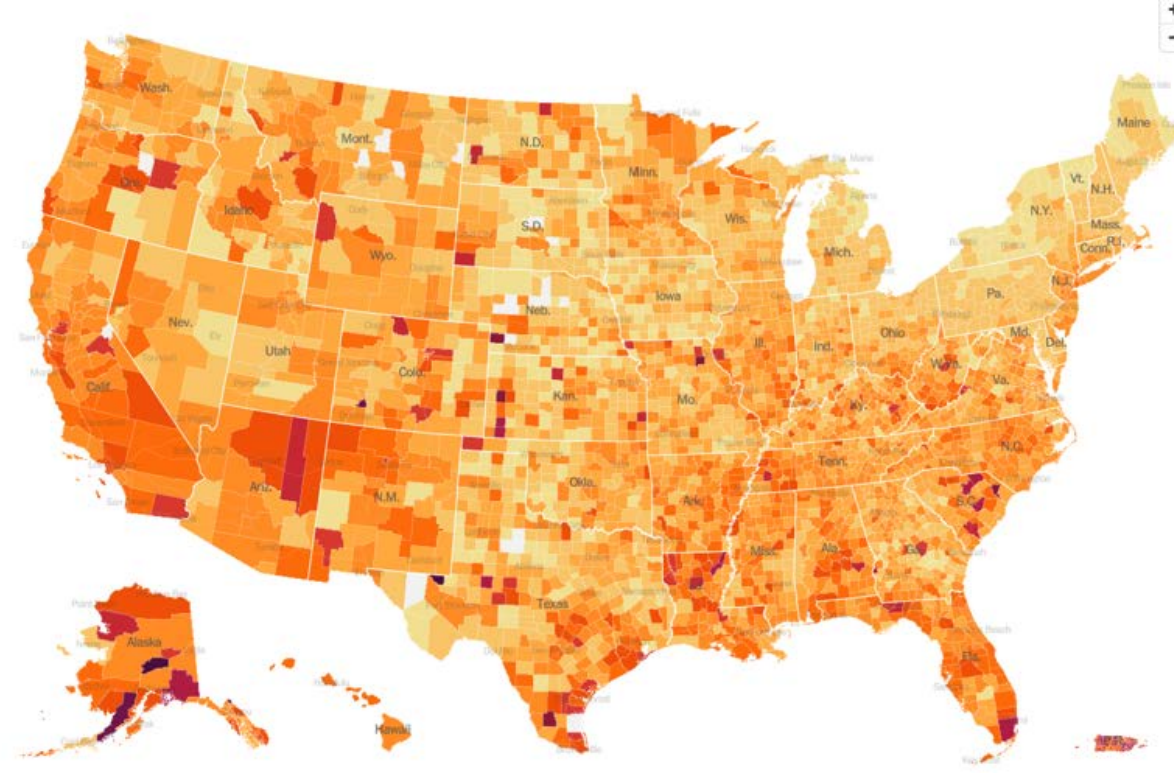
Hot spots

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 remain elevated or are increasing.

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

Accessed July 07, 2022

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COVID-19 Hospitalization Rates by County Across the US

Last Week

This Week

Current hospitalizations

COVID-19 PATIENTS PER 100,000 PEOPLE

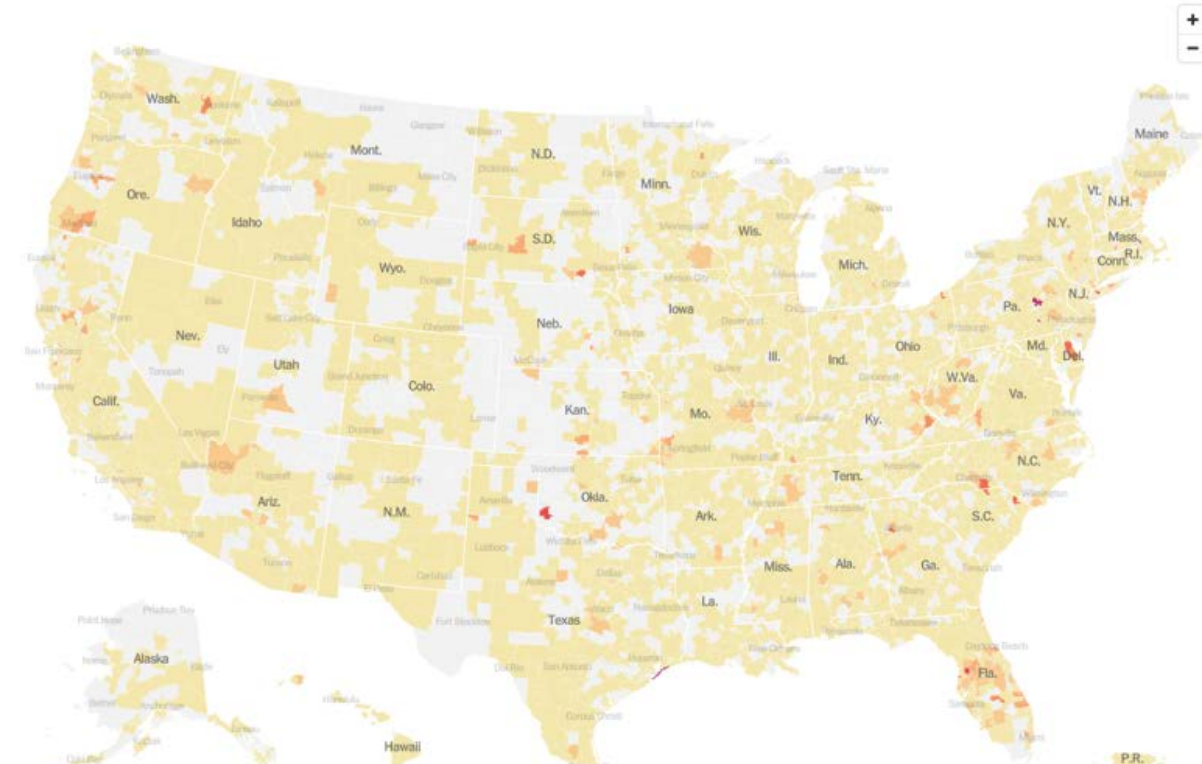
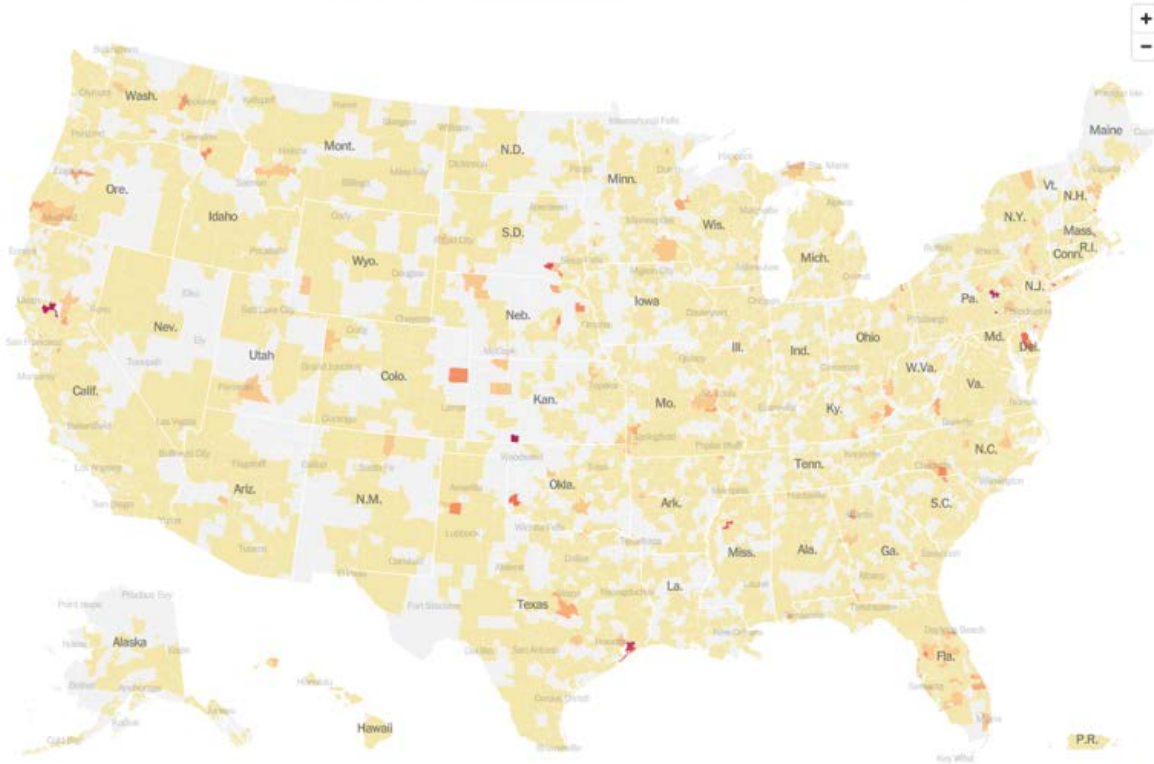
20 30 40 50 60 70 80 NO DATA



Current hospitalizations

COVID-19 PATIENTS PER 100,000 PEOPLE

20 30 40 50 60 70 80 NO DATA



Hospitalization rates remain relatively low across most of the nation.

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

Accessed July 07, 2022

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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 (AIII).</p> <p>For patients who are at high risk of progressing to severe COVID-19,^a use 1 of the following treatment options:</p> <p>Preferred Therapies Listed in order of preference:</p> <ul style="list-style-type: none"> • Ritonavir-boosted nirmatrelvir (Paxlovid)^{b,c} (AIIa) • Remdesivir^{c,d} (BIIa) <p>Alternative Therapies 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"> • Bebtelovimab^e (CIII) • Molnupiravir^{c,f} (CIIa) <p>The Panel recommends against the use of dexamethasone^g or other systemic corticosteroids in the absence of another indication (AIII).</p>
<p>Discharged From Hospital Inpatient Setting in Stable Condition and Does Not Require Supplemental Oxygen</p>	<p>The Panel recommends against continuing the use of remdesivir (AIIa), dexamethasone^g (AIIa), or baricitinib (AIIa) 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^h</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 ensuredⁱ</i></p>	<p>The Panel recommends using dexamethasone 6 mg PO once daily for the duration of supplemental oxygen (dexamethasone use should not exceed 10 days) with careful monitoring for AEs (BIII).</p> <p>Since remdesivir is recommended for patients with similar oxygen needs who are hospitalized,^j 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>Rating of Recommendations: A = Strong; B = Moderate; C = Weak Rating of Evidence: 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

LOCAL

Ottawa County to soon accept applications for its pot of COVID-19 relief money

[Ottawa County to begin application process for ARPA money \(hollandsentinel.com\)](https://www.hollandsentinel.com/story/news/local/ottawa-county-to-begin-application-process-for-arpa-money/2022/01/11/ottawa-county-to-begin-application-process-for-arpa-money/7000000001/)

Michigan's \$1 billion pandemic rent fund is drying up. What's next?

[Michigan's \\$1 billion pandemic rent fund is drying up. What's next? - mlive.com](https://www.mlive.com/news/michigan/2022/01/michigans-1-billion-pandemic-rent-fund-is-drying-up-what-next/)

Here's how long-COVID is impacting some groups in Michigan

[Here's how long-COVID is impacting some groups in Michigan \(clickondetroit.com\)](https://www.clickondetroit.com/news/2022/01/11/here-s-how-long-covid-is-impacting-some-groups-in-michigan/)

Free COVID-19 tests available to Michiganders in at-risk communities: How to get them

[Free COVID-19 tests available in at-risk Michigan communities \(freep.com\)](https://www.freep.com/story/news/local/michigan/2022/01/11/free-covid-19-tests-available-in-at-risk-michigan-communities/7000000001/)

CDC: BA.4, BA.5 Responsible for 70% of New Coronavirus Cases

[CDC: Omicron Subvariants BA.4, BA.5 Responsible for 70% of New Coronavirus Cases | Health News | US News](https://www.cdc.gov/media/releases/2022/s0111-covid-19-variants.html)

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Changes in the Relationship Between Income and Life Expectancy Before and During the COVID-19 Pandemic, California, 2015-2021

[Changes in the Relationship Between Income and Life Expectancy Before and During the COVID-19 Pandemic, California, 2015-2021](#) | [Health Disparities](#) | [JAMA](#) | [JAMA Network](#)



This retrospective analysis of census tract-level income and mortality showed a decrease in life expectancy in both 2020 and 2021 and an increase in the life expectancy gap by income level, indicating the disproportionate affect COVID-19 had on some racial and ethnic minority populations.

Leading Causes of Death in the US During the COVID-19 Pandemic, March 2020 to October 2021

[Leading Causes of Death in the US During the COVID-19 Pandemic, March 2020 to October 2021](#) | [Population Health](#) | [JAMA Internal Medicine](#) | [JAMA Network](#)



This study found that during the COVID-19 pandemic, the prominent causes of mortality overall and across all age groups were heart disease, cancer, COVID-19, accidents, and stroke with respective rates of 20.1%, 17.5%, 12.2%, 6.2%, and 4.7%. For a period in 2021, COVID-19 became the leading cause of death in persons aged 45-54 years.

Hospitalization Outcomes Among Patients With COVID-19 Undergoing Remote Monitoring

[Hospitalization Outcomes Among Patients With COVID-19 Undergoing Remote Monitoring](#) | [Health Care Delivery Models](#) | [JAMA Network Open](#) | [JAMA Network](#)



A cohort study that included 9,378 patients found that participation in a remote monitoring program was associated with lower odds of hospitalization 2 to 14 days after a positive COVID-19 test.

Changes in BMI During the COVID-19 Pandemic

[Changes in BMI During the COVID-19 Pandemic](#) | [Pediatrics](#) | [American Academy of Pediatrics \(aap.org\)](#)



This analysis found that among children aged 2-19 years, annual BMI gain was higher during the COVID-19 pandemic compared to previous years. This study also found the risk for excess BMI gain during the pandemic was higher among children with pre-pandemic obesity, and lower among children from higher-income households.