miOttawa Department of Public Health

Ottawa County COVID-19 Epidemiology

September 29, 2022

Data as of September 24, 2022, unless otherwise indicated.

Executive Summary

- **Transmission in the US and in Michigan is stable and may be declining**

- **Ottawa County transmission signals are mostly declining**
  - Last week positivity **decreased** to 13.6%, from 16.1% two weeks ago.
  - Weekly case counts **decreased** 12% (-3% two weeks ago), from 311 two weeks ago to 273 last week.
  - Cases among children **decreased** 57% (-20% two weeks ago), from 35 two weeks ago to 15 last week.
  - COVID-19 wastewater signals in Ottawa County are **mostly declining**; decreasing in Holland/Zeeland and Grand Haven/Spring Lake and slightly increasing in Allendale.
  - Based on national data and local clinical variant sampling, the Omicron subvariant BA.5 likely predominates.
  - Ottawa's CDC Community Level is LOW.

- **Ottawa-area and regional hospitals have adequate capacity**
  - In Ottawa County, 6% of all available beds and 7% of all ICU beds are occupied by COVID-19 patients.*

- **Pediatric hospitalization rates in the US are increasing, but are relatively low and stable in Michigan**
  - Regional pediatric hospitalization census remains low compared to the late 2021 and early 2022 Omicron surge, and pediatric hospitalization census has declined in recent weeks.

- **Of Ottawa County residents aged 6 months and older, 58.6% 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 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

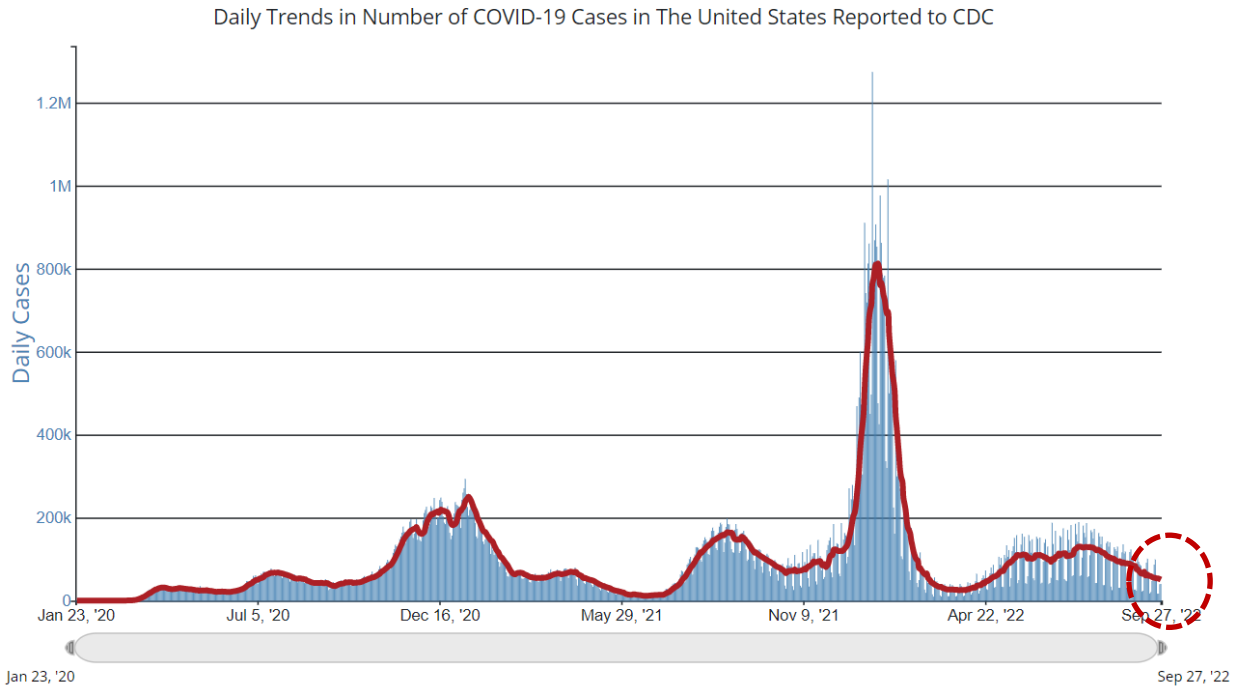
		Week Ending				
Metric	Goal	27-Aug-22	3-Sep-22	10-Sep-22	17-Sep-22	24-Sep-22
Positivity (All Ages)	NA	19.5%	19.5%	16.9%	16.1%	13.6%
Weekly Cases (All Ages)	<592	348	329	322	311	273
Weekly Cases in Children (0-17 years of age)	NA	26	35	44	35	15
Total Deaths (All Ages)	0	3	4	2	0	2
CDC COVID-19 Community Level (New)	Low	Low	Low	Low	Low	Low

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

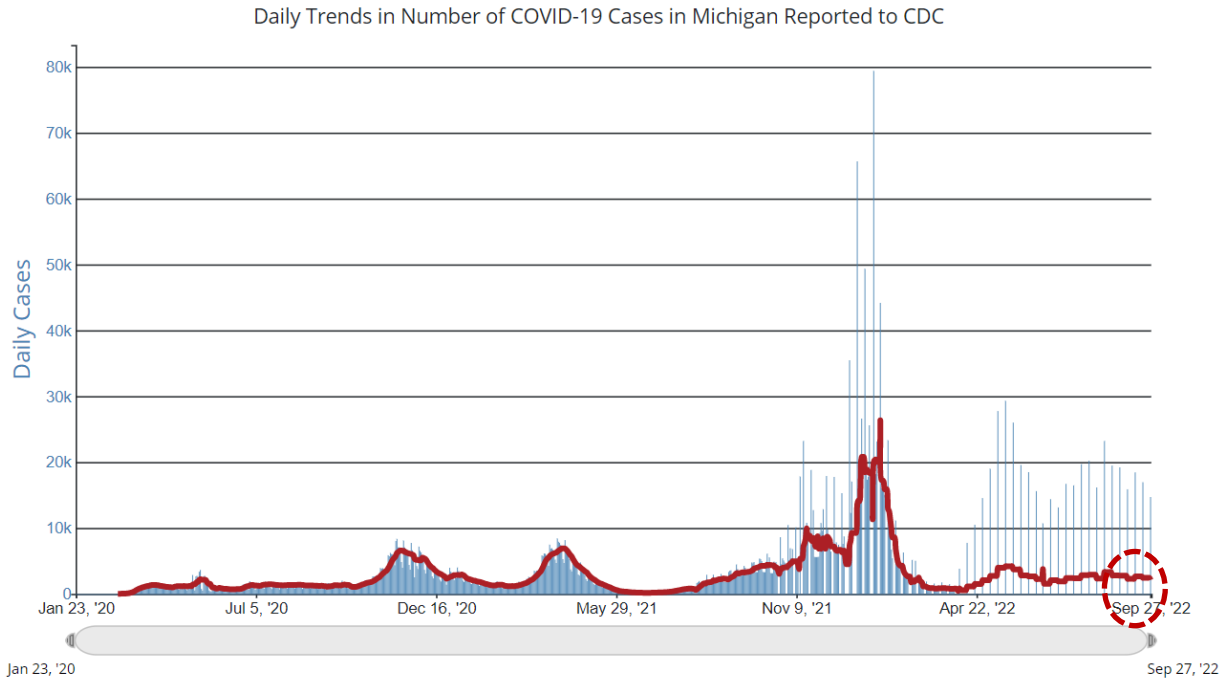
Notes: Use of at home tests likely reduces the number of positive tests reported to Public Health, resulting in an artificially lower number of cases. Hospitalization and/or death may occur after initial infection, meaning the number of hospitalizations and deaths from recent weeks may increase

Case Trends in the USA and Michigan

USA



Michigan



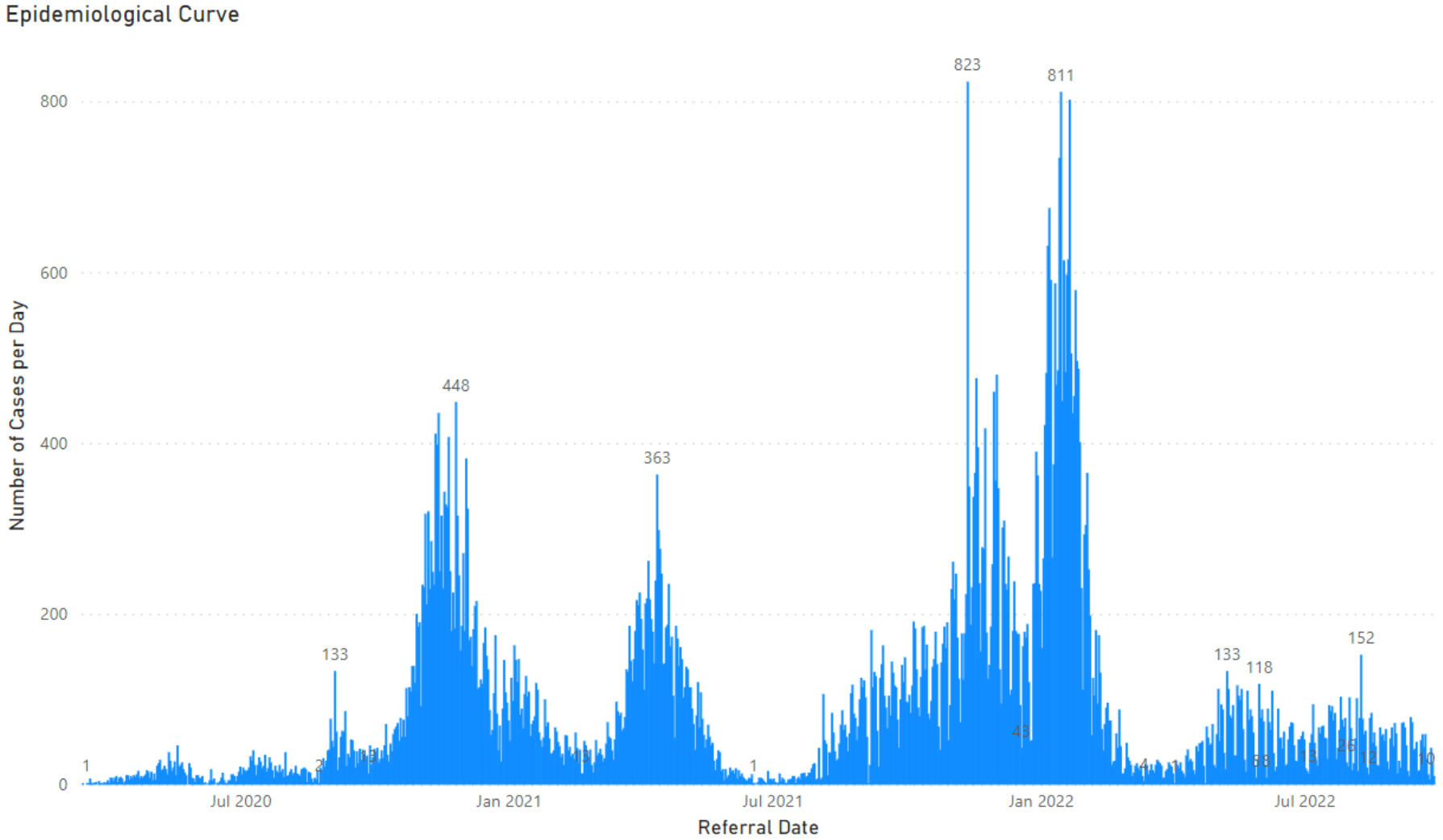
Daily case counts in the US and Michigan remain lower than previous surges and may be stabilizing.

Note: Use of at home tests since late 2021 likely reduces the number of positive tests reported to Public Health, resulting in an artificially lower number of cases.
Source: https://covid.cdc.gov/covid-data-tracker/#trends_dailycases

Data through September 27, 2022

Case Trends in Ottawa County

COVID-19 Cases by Day, Ottawa County, March 15, 2020 – September 28, 2022



Total Number of Cases

83,935

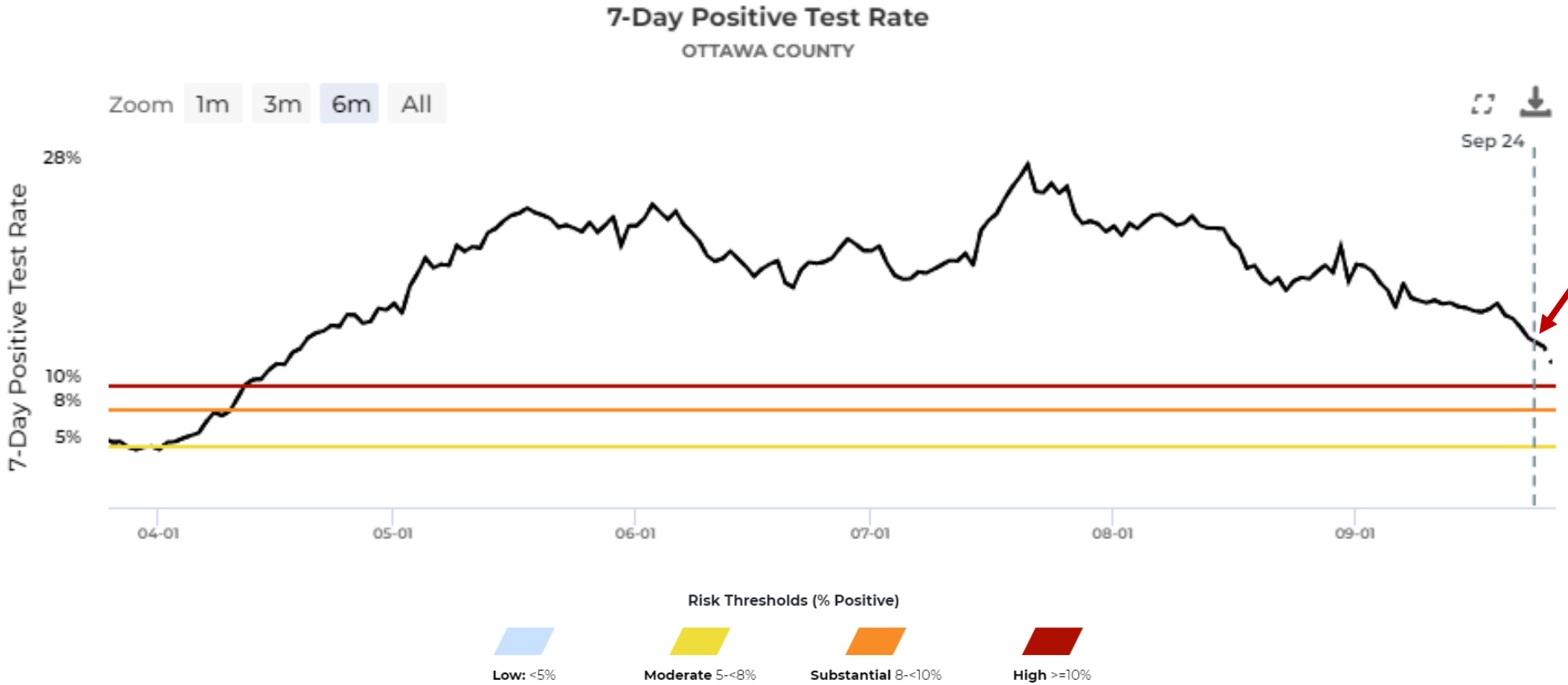
Currently, the 7-day average is about **26 cases per day,** a decrease from the approximately **42** cases per day seen two weeks ago.

Notes: Use of at home tests since late 2021 likely reduces the number of positive tests reported to Public Health, resulting in an artificially lower 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, April 1, 2022 – September 24, 2022



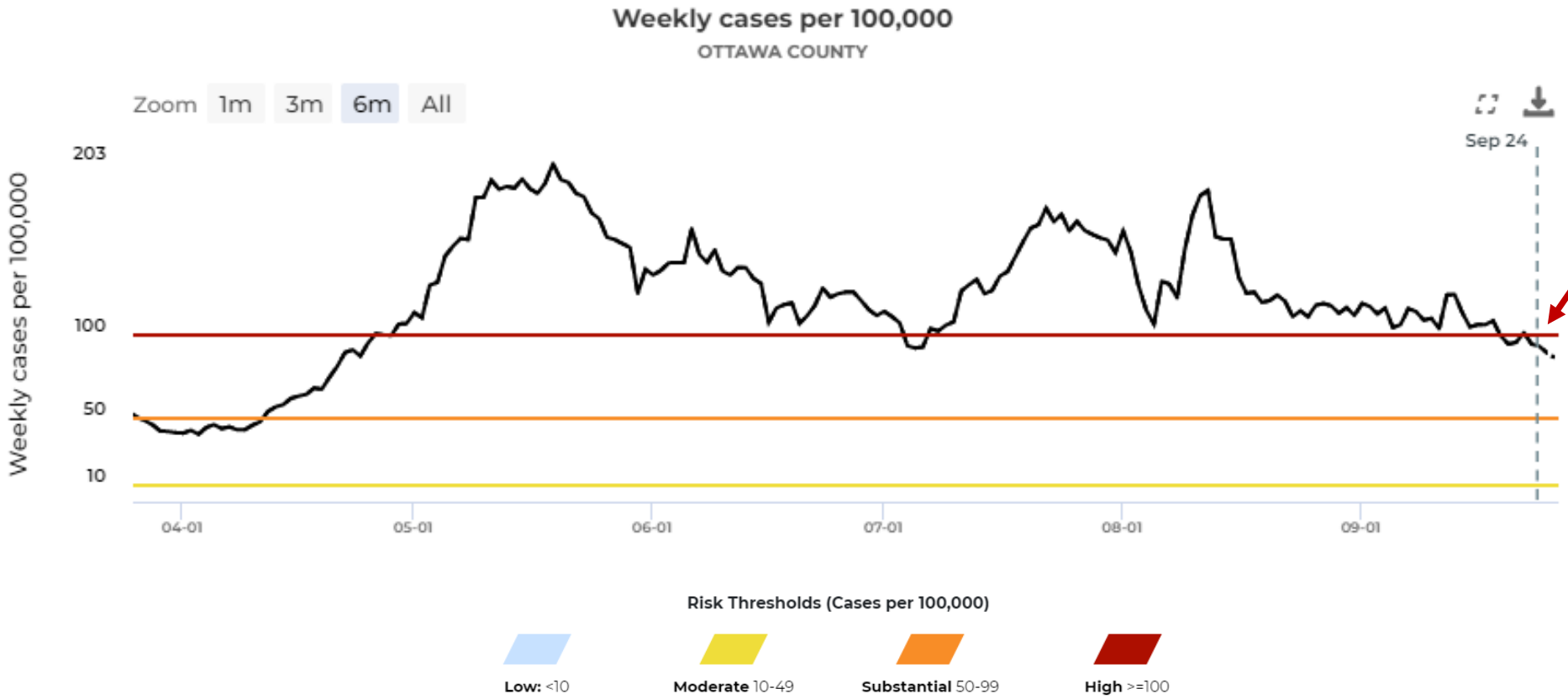
Positivity trended lower at **13.6%** last week compared to the **16.1%** the week prior.

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 lower number of cases.
Source: MI Safe Start Map-Ottawa County

Case Rates in Ottawa County – All Ages

COVID-19 Cases by Day, Ottawa County, April 1, 2022 – September 24, 2022



Case rates **trended at 93.2** cases per week per 100,000 population (**lower than 106.2** the week prior).

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

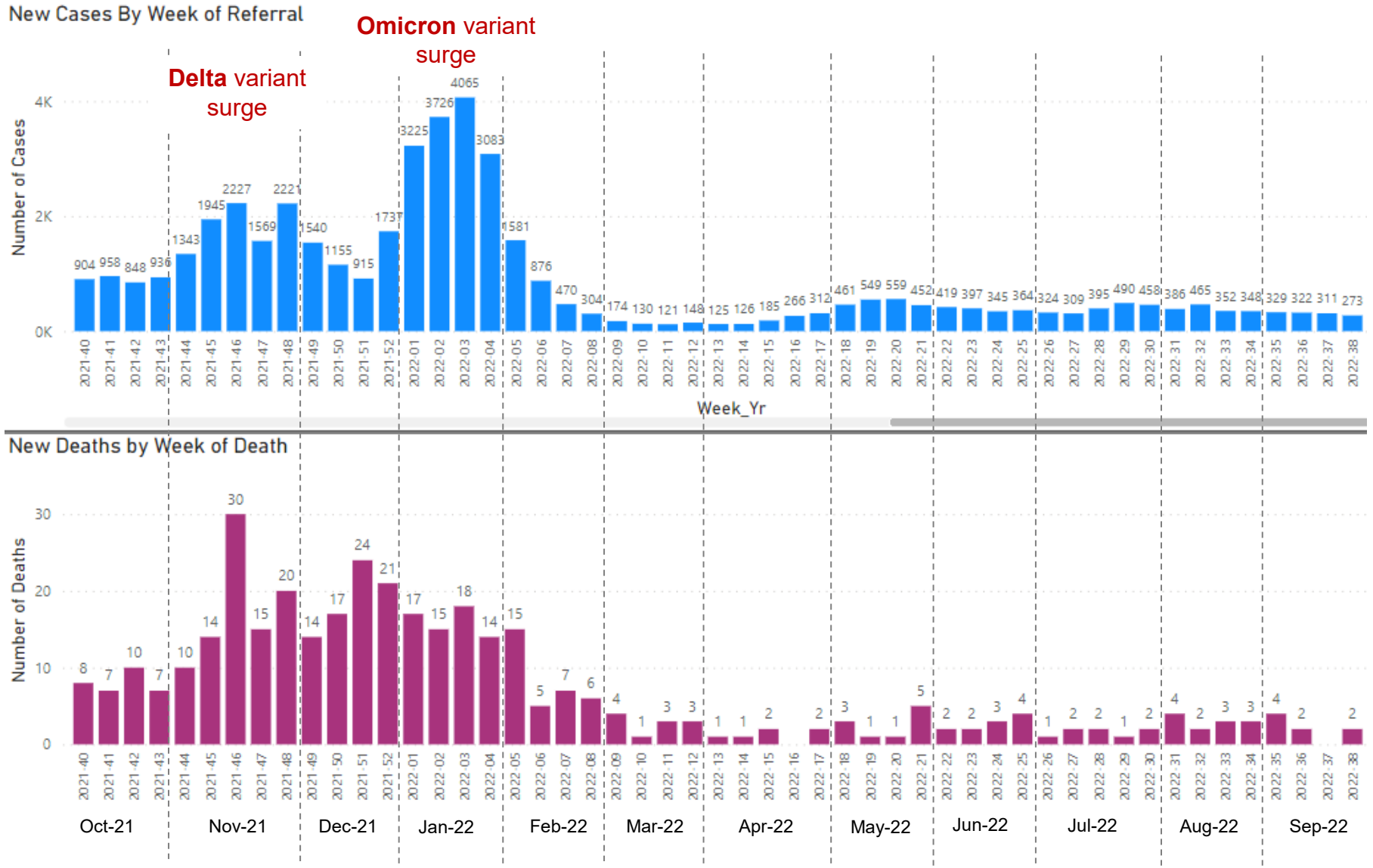
Note: Use of at home tests since late 2021 likely reduces the number of positive tests reported to Public Health, resulting in artificially lower rates.
Source: MI Safe Start Map-Ottawa County

Ottawa County Time Trends – Annual Comparison of 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 lower case rates.
Source: Internal Data

Data through September 28, 2022

Ottawa County – Cases & Deaths by Week, All Ages



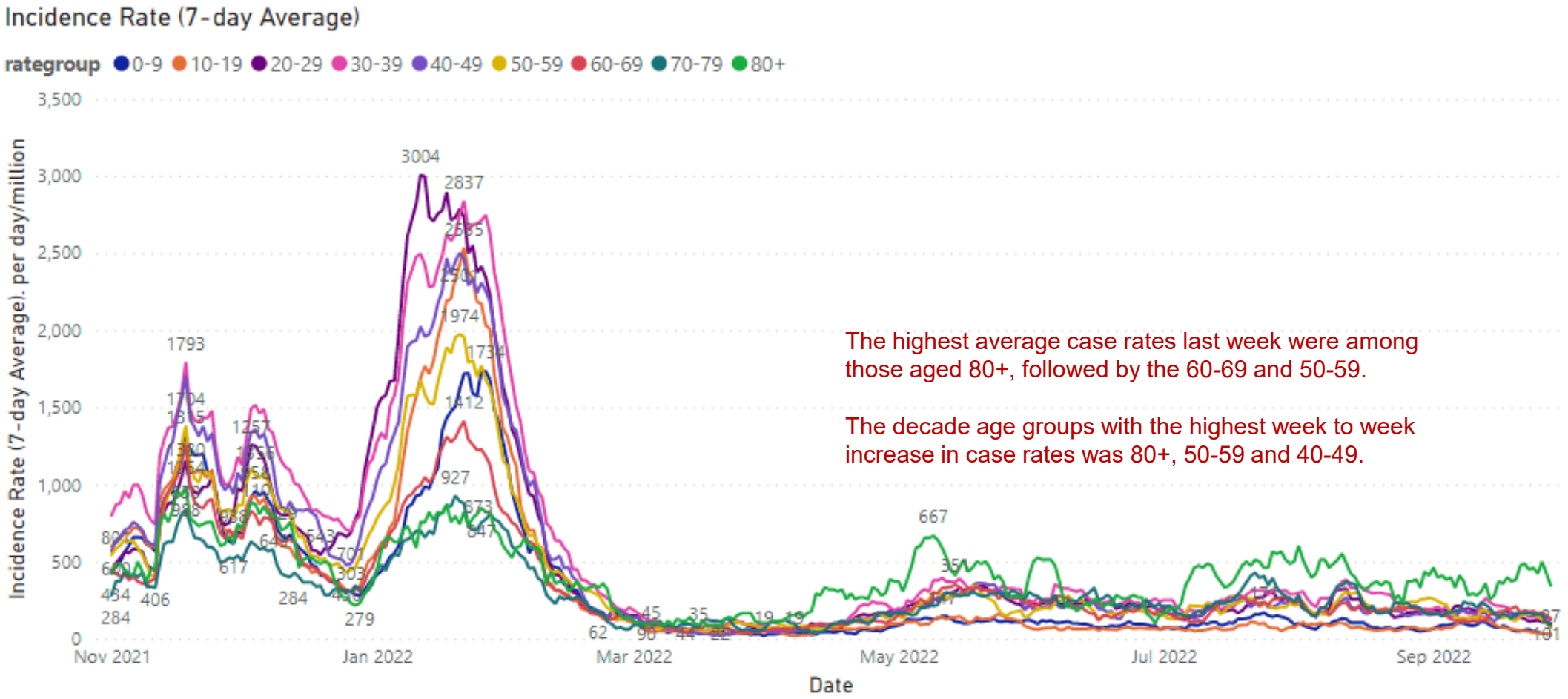
The weekly number of **cases decreased 12%** from week 37 to week 38.

Weekly COVID-19 **deaths remain low.** The current weekly average number of deaths over the last 4 weeks is **2 deaths 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 lower 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 – September 28, 2022



The highest average case rates last week were among those aged 80+, followed by the 60-69 and 50-59.

The decade age groups with the highest week to week increase in case rates was 80+, 50-59 and 40-49.

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

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

Data as of September 28, 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 32 (September 18, 2022 – September 24, 2022)

Age Decade (Years)	Average Daily Cases	Average Daily Case Rate	One Week % Rate Change
0-9	1.7	46.4	-46%
10-19	1.9	42.0	-43%
20-29	5.3	117.0	-33%
30-39	5.1	143.4	-32%
40-49	5.1	154.9	9%
50-59	5.6	159.7	15%
60-69	5.9	179.8	5%
70-79	3.3	159.4	0%
80+	5.1	461.7	29%

Age groups with highest average case rates last week:
1. 80+
2. 60-69
3. 50-59

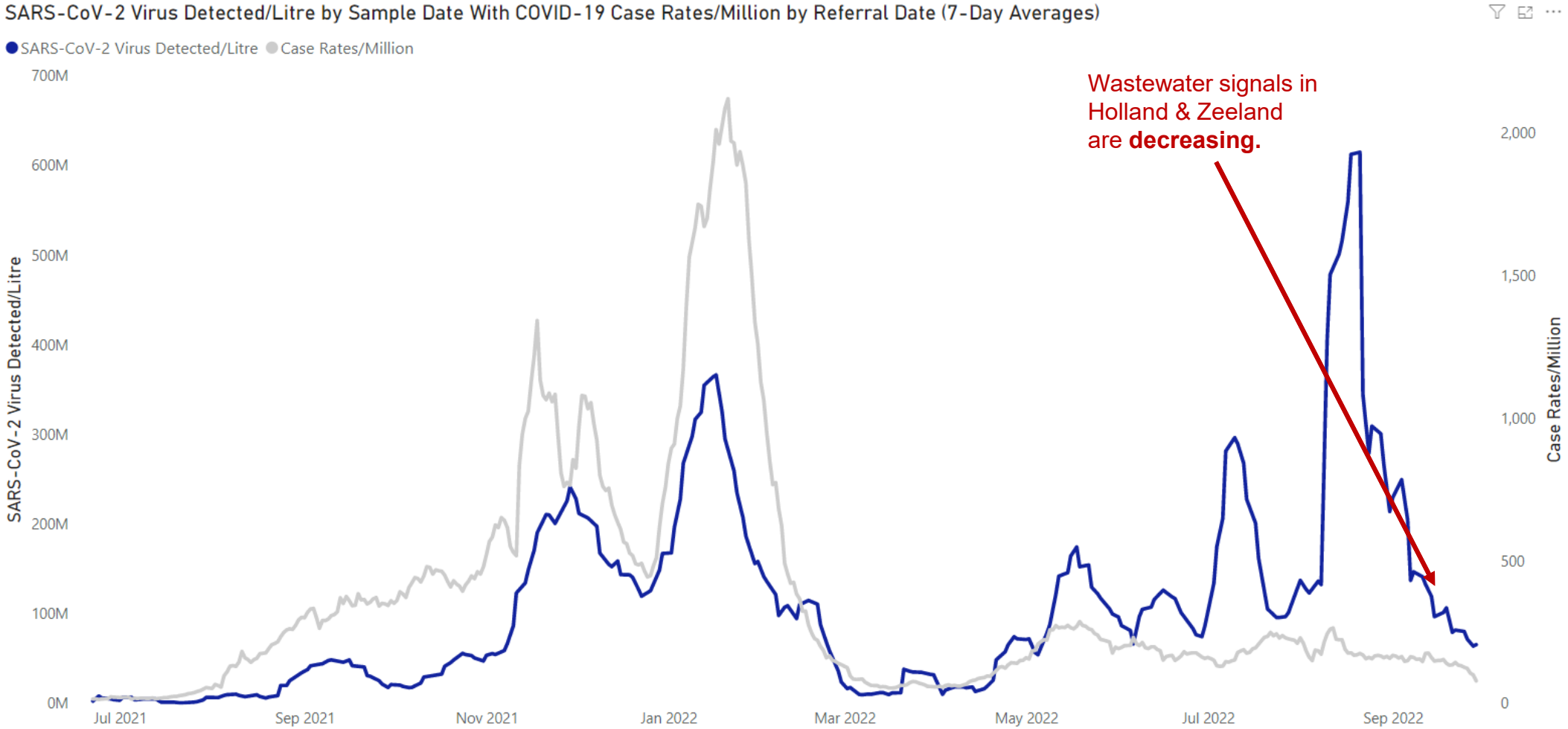
Age groups with largest week-over-week increase in case rates:
1. 80+
2. 50-59
3. 40-49

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 lower rates.

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

Data as of September 28, 2022

Holland-Zeeland Wastewater Surveillance



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.

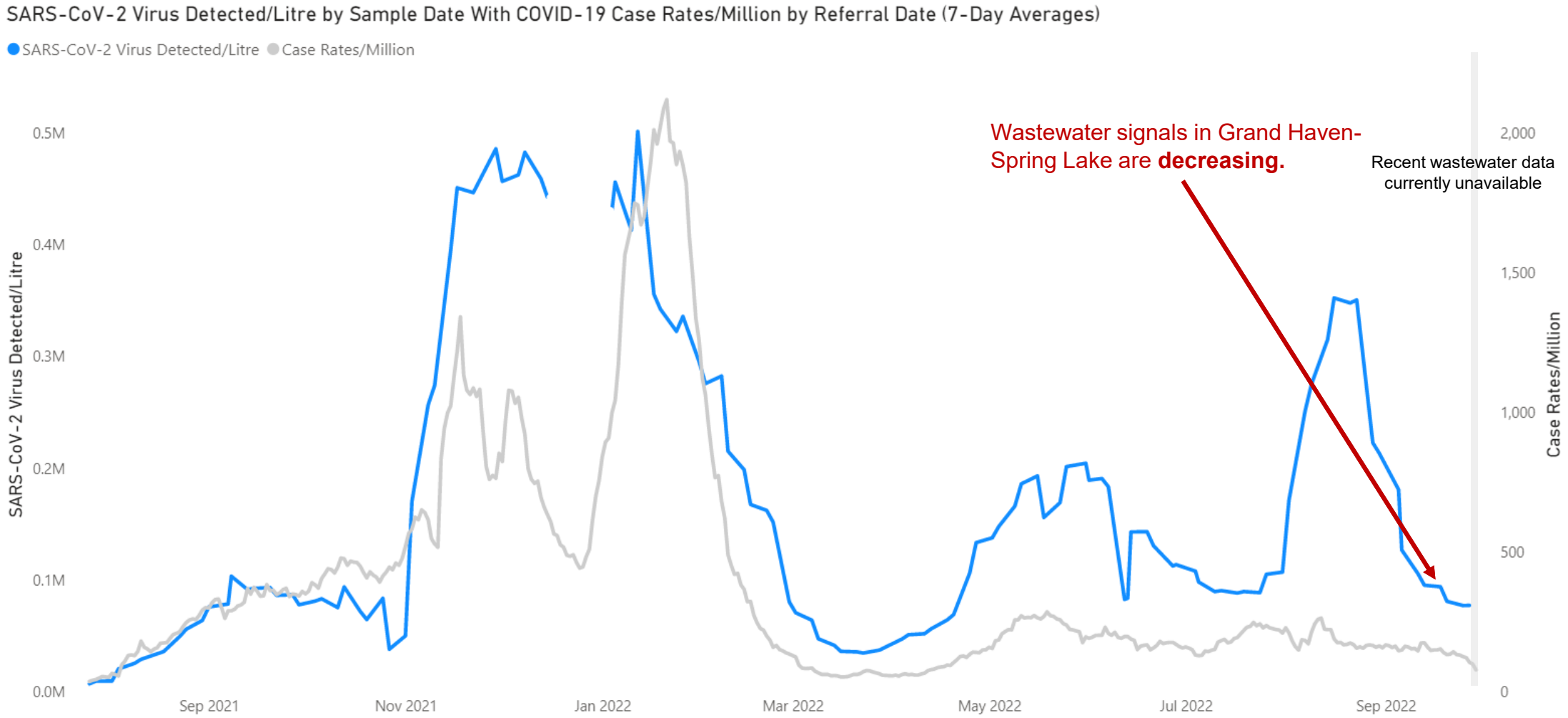
Notes: Use of at home tests since late 2021 likely reduces the number of positive tests reported to Public Health, resulting in artificially deflated case rates. Display of wastewater data may change as analytical methods are refined. A data point from Zeeland collected June 23, 2022, was removed from data analysis as an extreme outlier.

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), Coronavirus - Sentinel Wastewater Epidemiology Evaluation Project (SWEEP) (michigan.gov)

Data through September 29, 2022

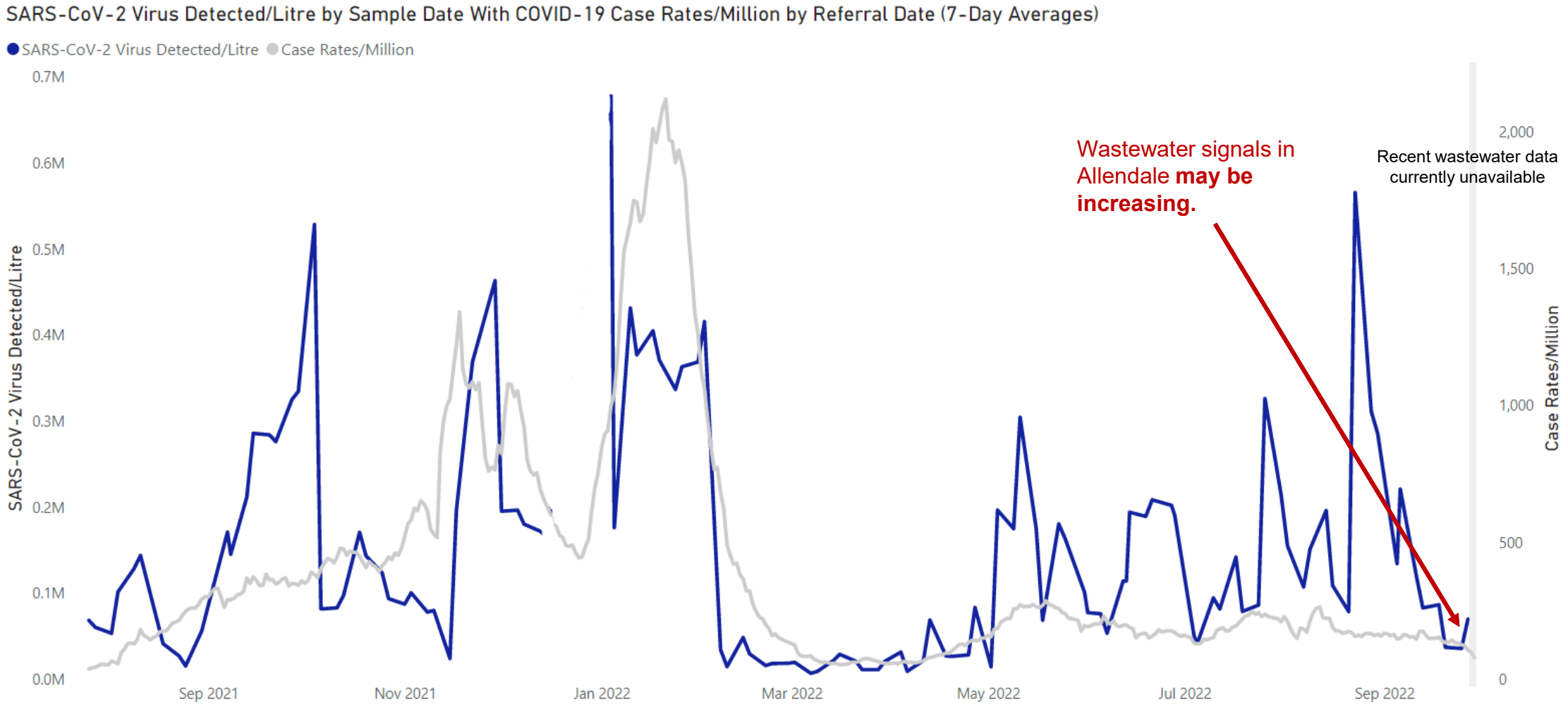
Grand Haven-Spring Lake Wastewater Surveillance



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), Coronavirus - Sentinel Wastewater Epidemiology Evaluation Project (SWEEP) (michigan.gov)

Data through September 27, 2022

Allendale Wastewater Surveillance



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), Coronavirus - Sentinel Wastewater Epidemiology Evaluation Project (SWEEP) (michigan.gov)

Data through September 27, 2022

Ottawa County Weekly Case Counts and % Change, by Age

	Adults (18+)		Children (0-17 years)		Total	
Week Ending	Number	% Change from Previous Week	Number	% Change from Previous Week	Number	% Change from Previous Week
16-Jul-22	357	30%	38	12%	395	28%
23-Jul-22	428	20%	62	63%	490	24%
30-Jul-22	413	-4%	45	-27%	458	-7%
6-Aug-22	340	-18%	46	2%	386	-16%
13-Aug-22	426	25%	39	-15%	465	20%
20-Aug-22	325	-24%	27	-31%	352	-24%
27-Aug-22	322	-1%	26	-4%	348	-1%
3-Sep-22	294	-9%	35	35%	329	-5%
10-Sep-22	278	-5%	44	26%	322	-2%
17-Sep-22	276	-1%	35	-20%	311	-3%
24-Sep-22	258	-7%	15	-57%	273	-12%

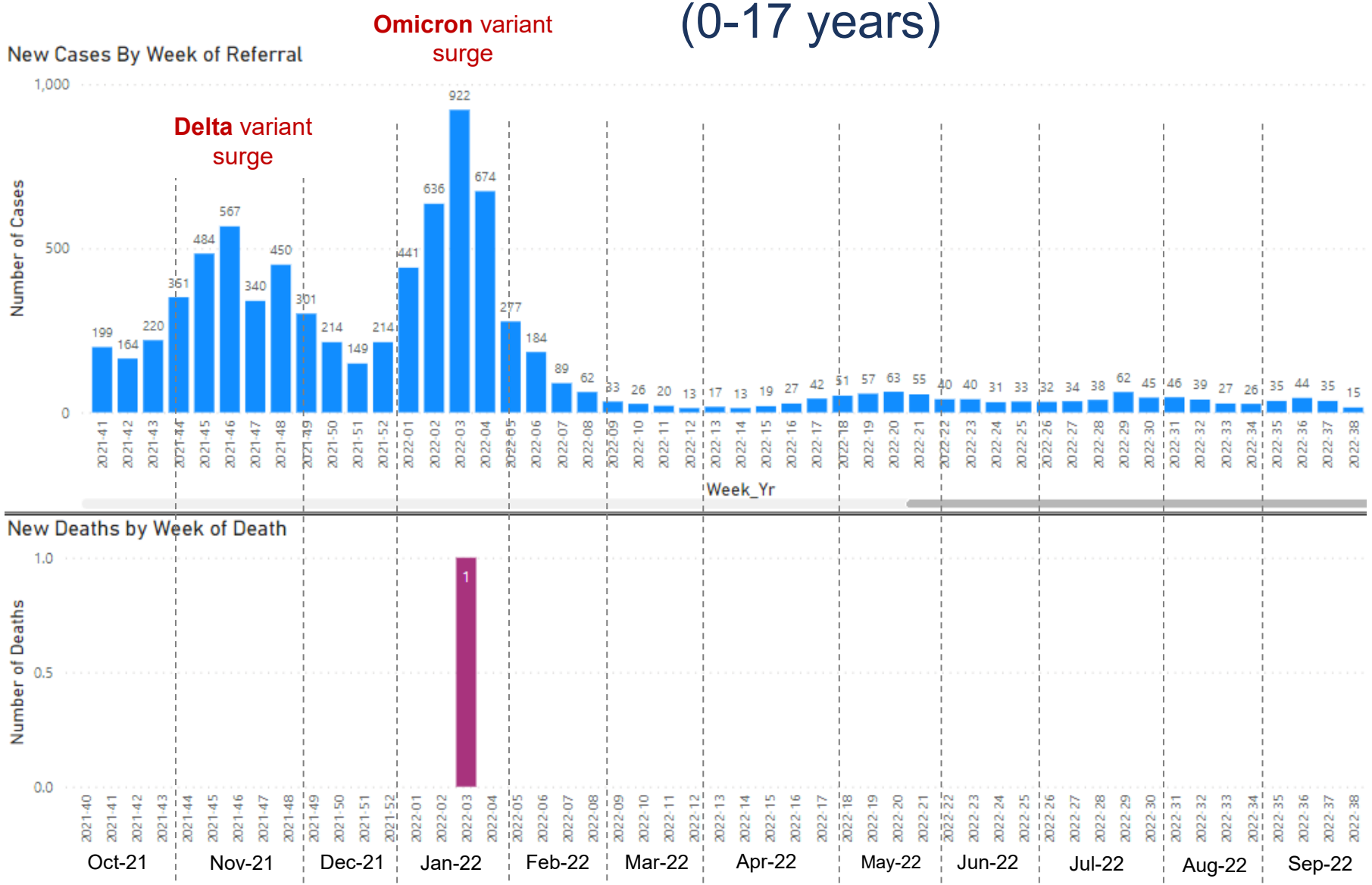
Adults

Children

Weekly case counts among **children decreased 57%** last week, and cases in **adults decreased 7%.**

Note: Use of at home tests since late 2021 likely reduces the number of positive tests reported to Public Health, resulting in an artificially lower number of cases.
Source: Michigan Department of Health and Human Services, Michigan Disease Surveillance System

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



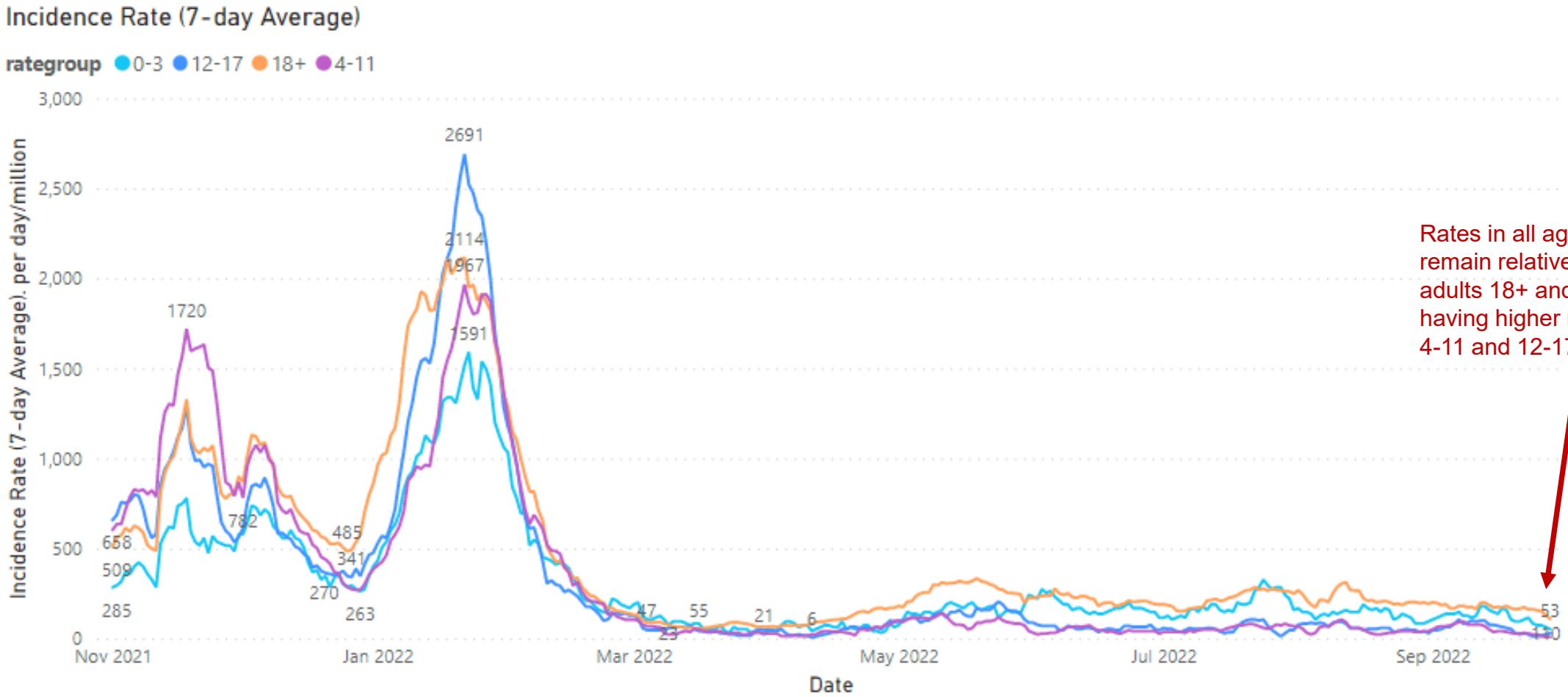
The weekly number of cases among children **decreased 57%** from week 37 to week 38.

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 – September 28, 2022

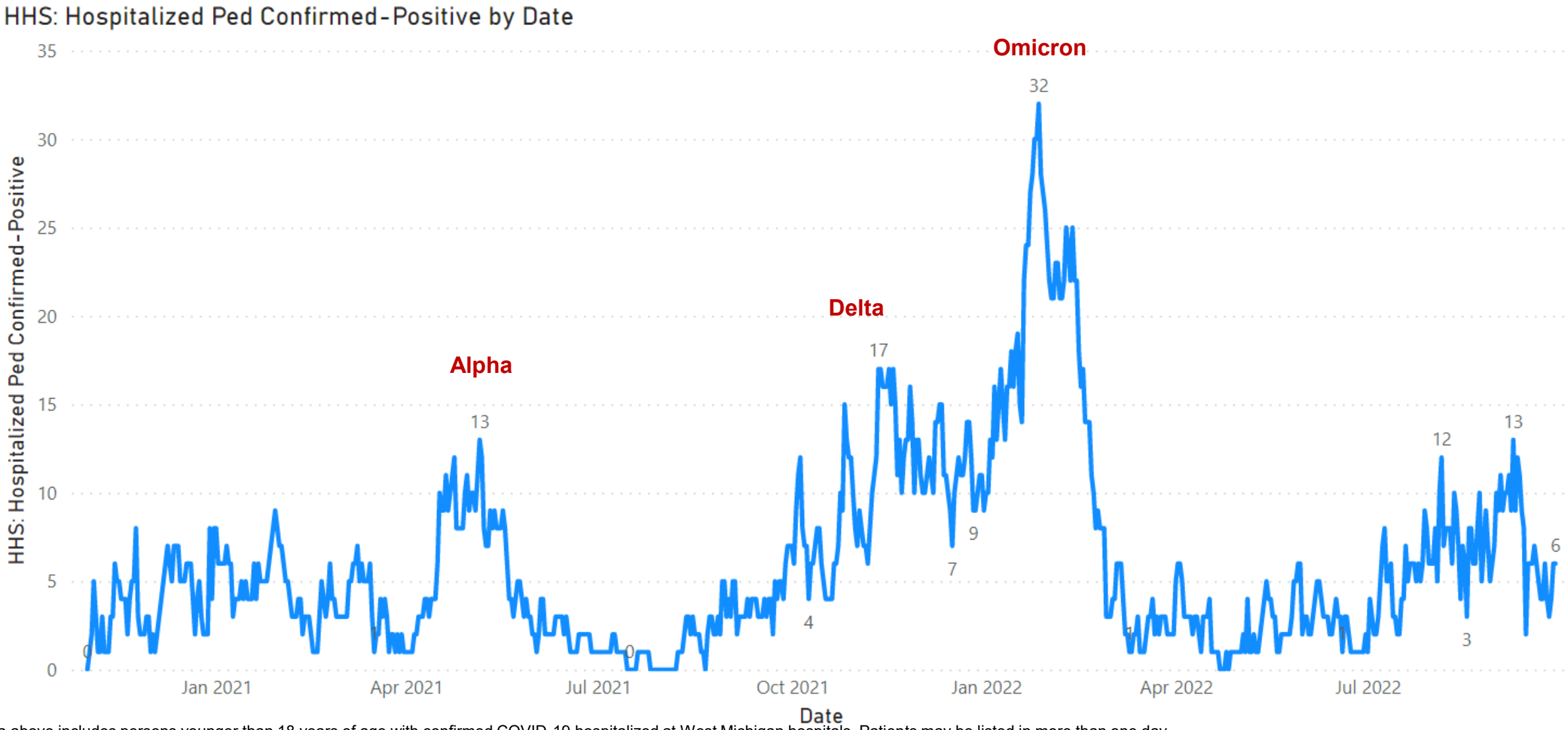


Rates in all age groups remain relatively low, with adults 18+ and those 0-3 having higher rates than the 4-11 and 12-17 age groups.

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 September 28, 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.

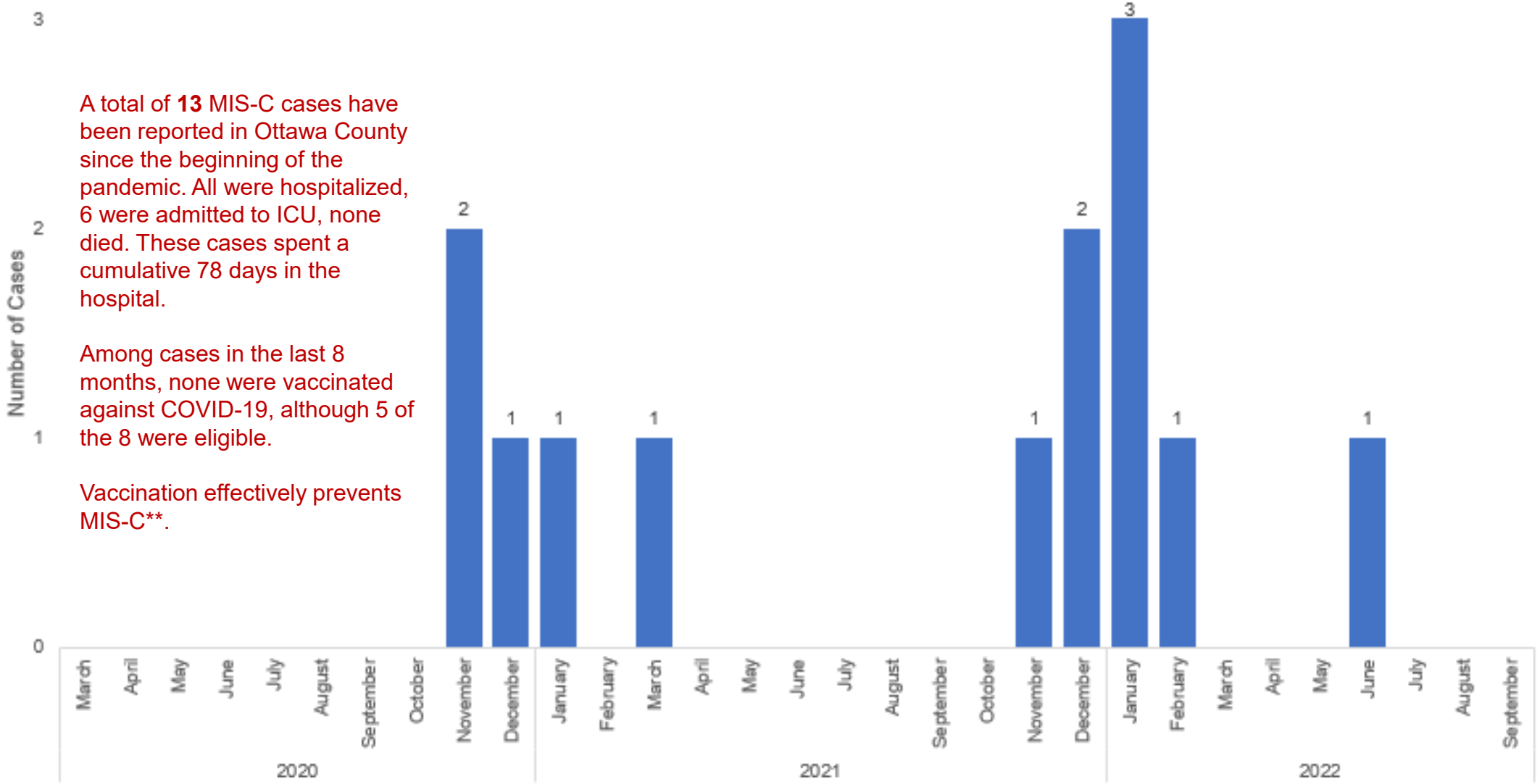
Data through September 28, 2022

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.

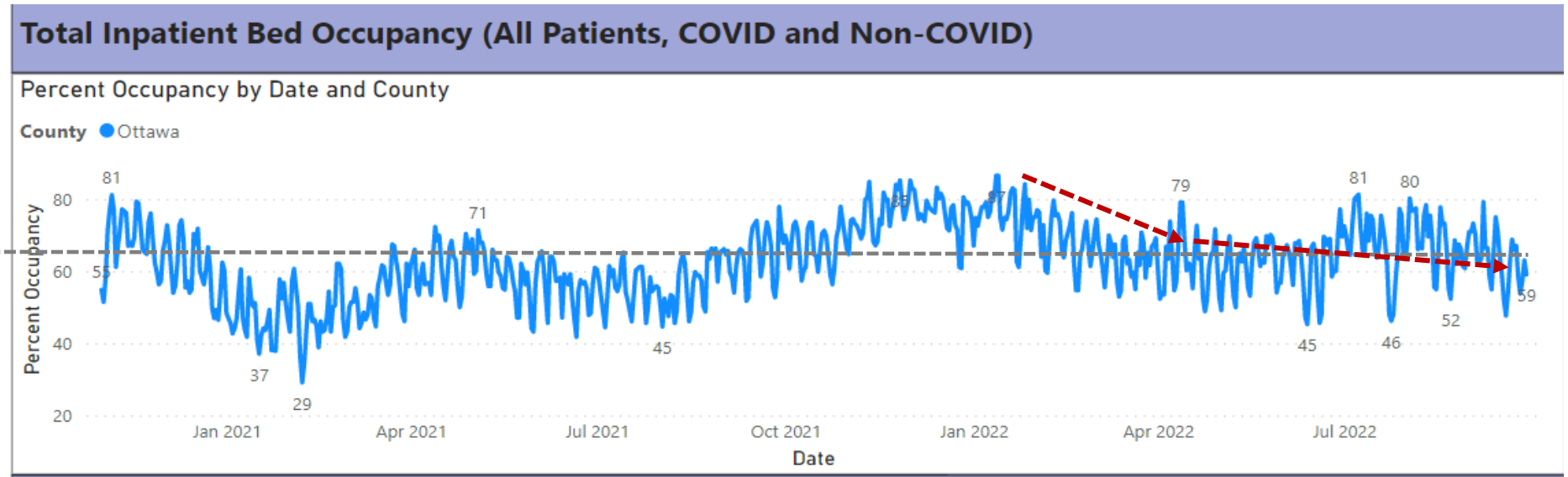
Vaccination effectively prevents MIS-C**.



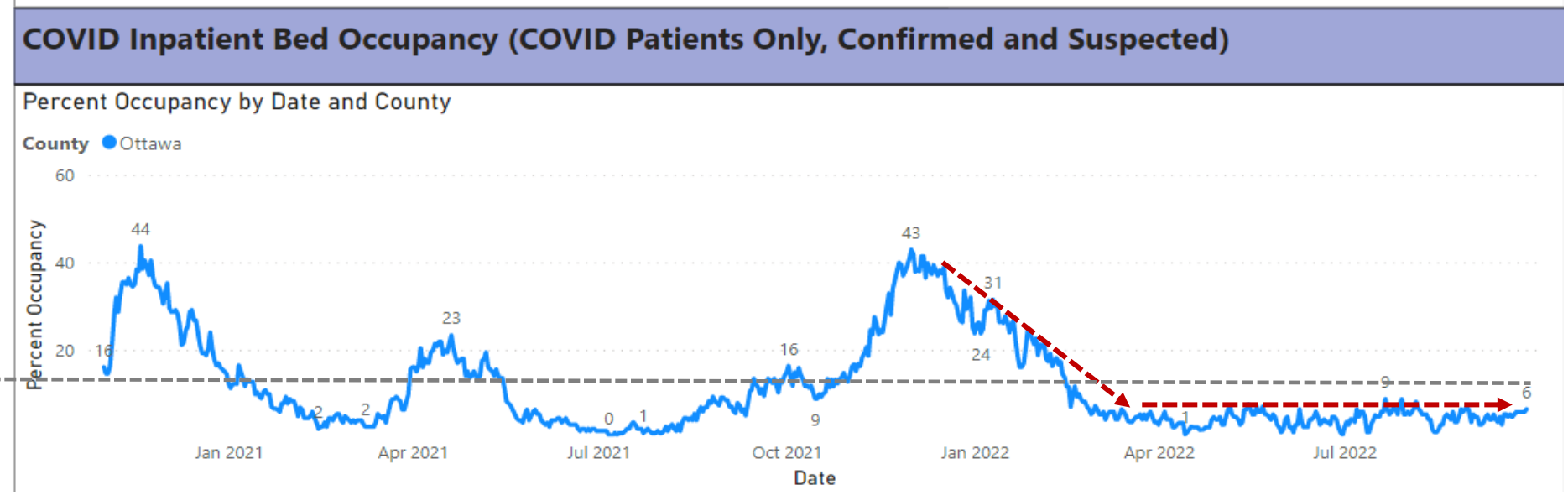
Notes: Includes confirmed and probable cases.
*MIS-C is a rare but serious condition affecting children, associated with recent COVID-19 infection. For more details on MIS-C please visit: https://www.cdc.gov/mis/index.html
**Sources: MMWR & The Lancet

Data through September 28, 2022

Ottawa County Hospital Capacity – All Beds



Total hospital bed occupancy is currently **below the pandemic average.**



Currently **6%** of all inpatient beds are occupied by COVID-19 patients.

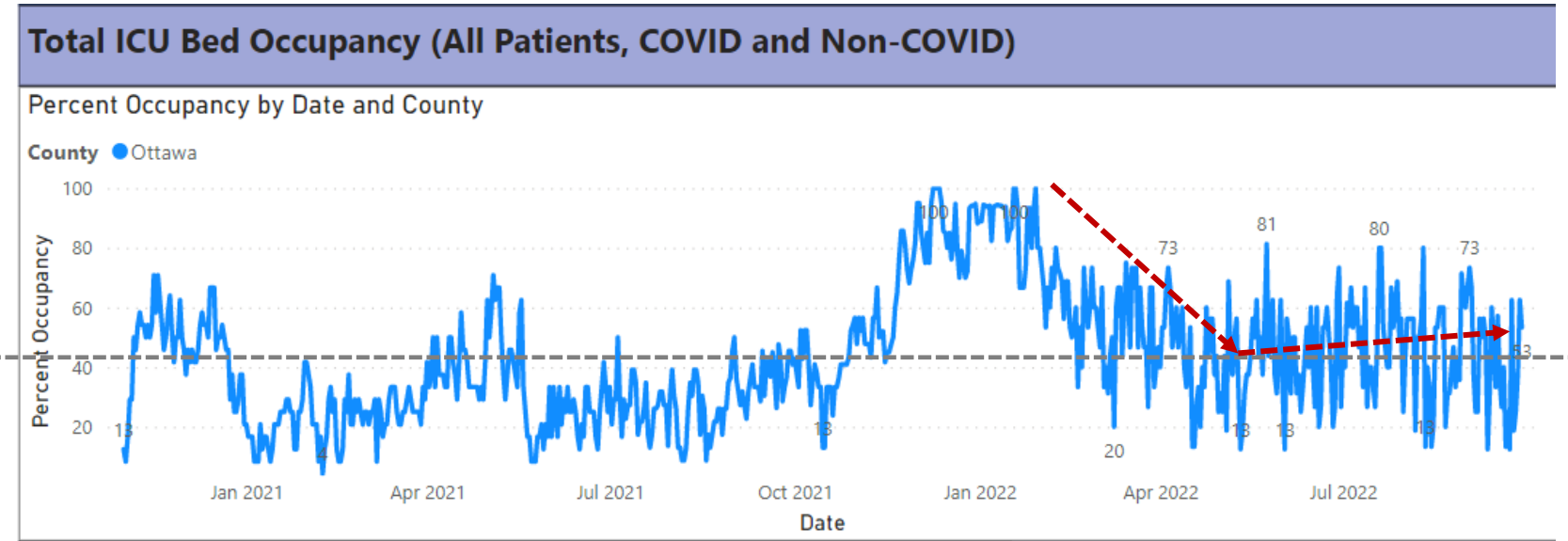
Source: EMResources

Data through September 28, 2022

Ottawa County Hospital Capacity – ICU Beds

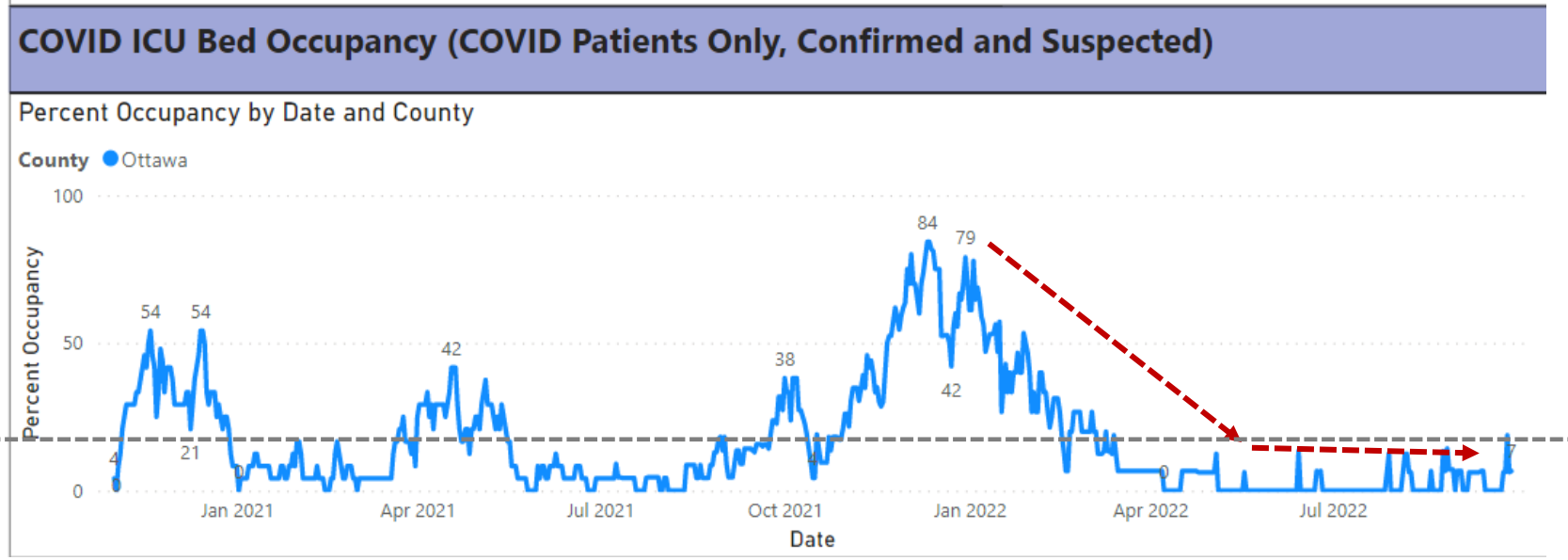
Pandemic Average

42%



Total ICU bed occupancy varies considerably by day. Lately, ICU bed occupancy continues to hover **around the pandemic average**

18%

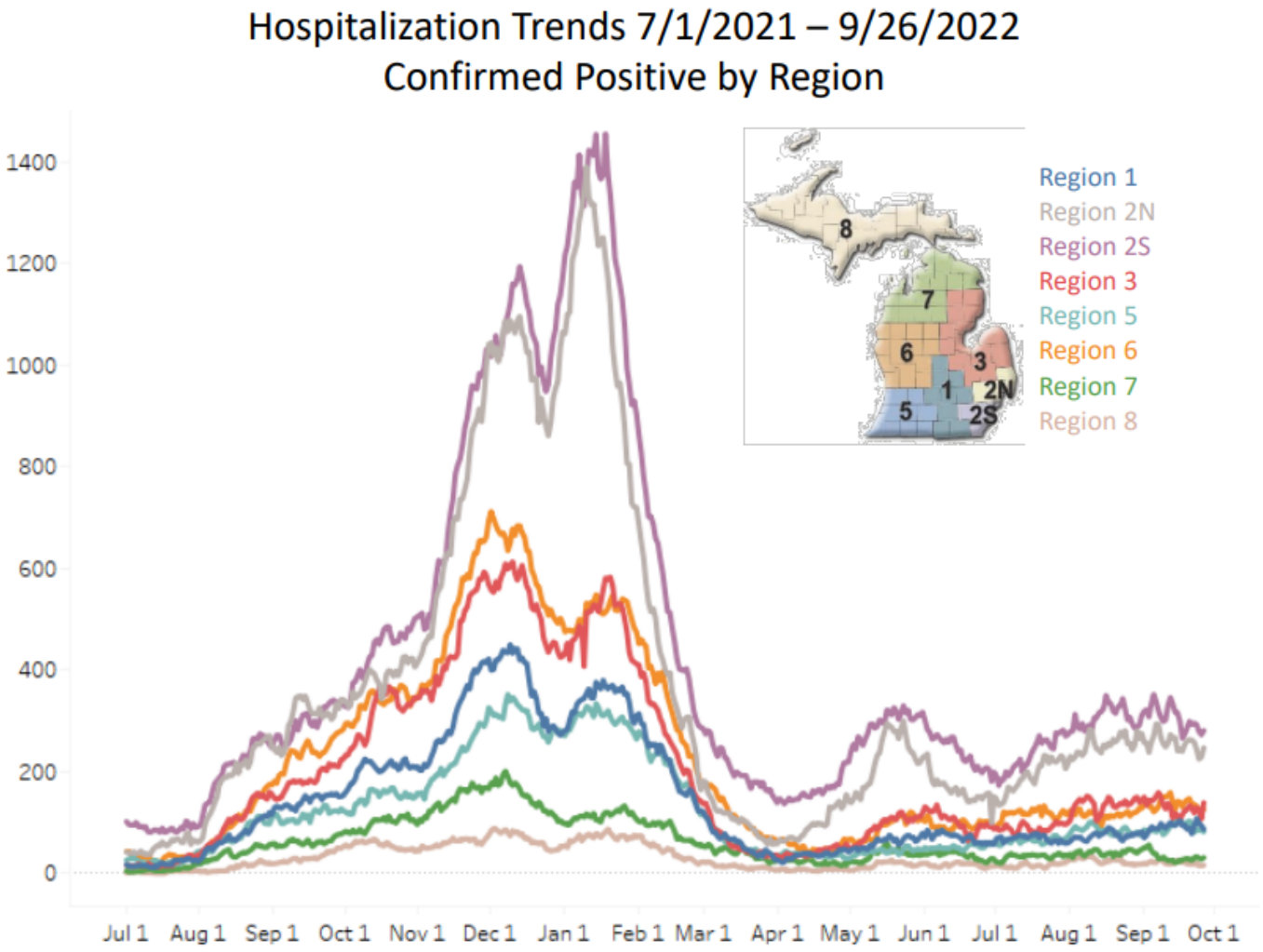


The proportion of ICU beds occupied by COVID-19 patients **is below the pandemic average.** Currently, **7%** of ICU beds are occupied by COVID-19 patients.

Source: EMResources

Data through September 28, 2022

Statewide Hospitalization Trends: Regional COVID+ Census



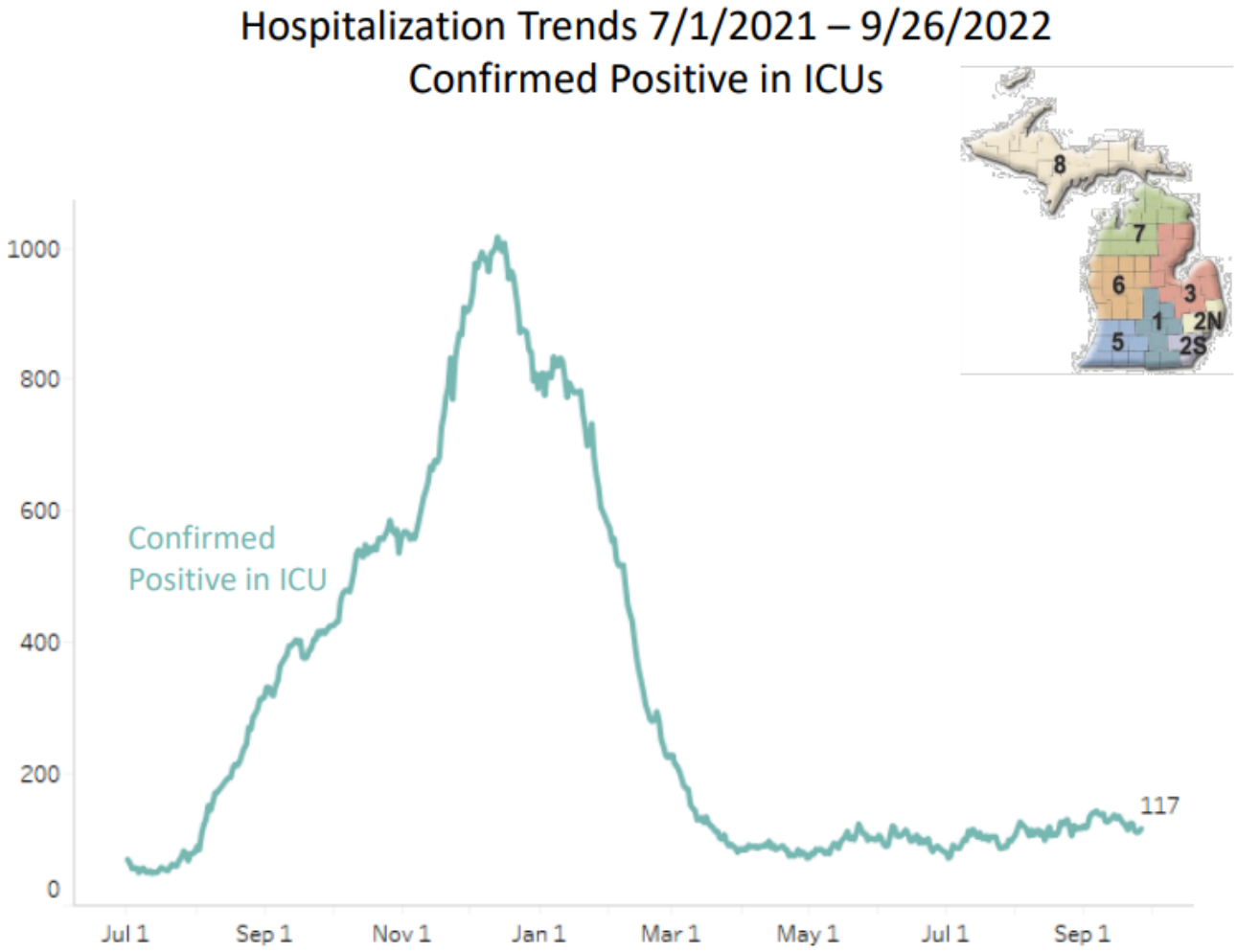
This week hospitalizations have decreased or remained flat in Regions 1, 2N, 2S, 5, 6, and 8. Hospitalizations have increased in Regions 3 and 7.

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

Region	COVID+ Hospitalizations (% Δ from last week)	COVID+ Hospitalizations / MM
Region 1	87 (0%)	80/M
Region 2N	247 (-5%)	112/M
Region 2S	281 (-2%)	126/M
Region 3	139 (11%)	123/M
Region 5	82 (-19%)	86/M
Region 6	126 (-13%)	86/M
Region 7	31 (7%)	62/M
Region 8	16 (-16%)	51/M

Source: MDHHS Data and Modelling: [MI COVID response Data and modeling update (michigan.gov)]

Statewide Hospitalization Trends: ICU COVID+ Census



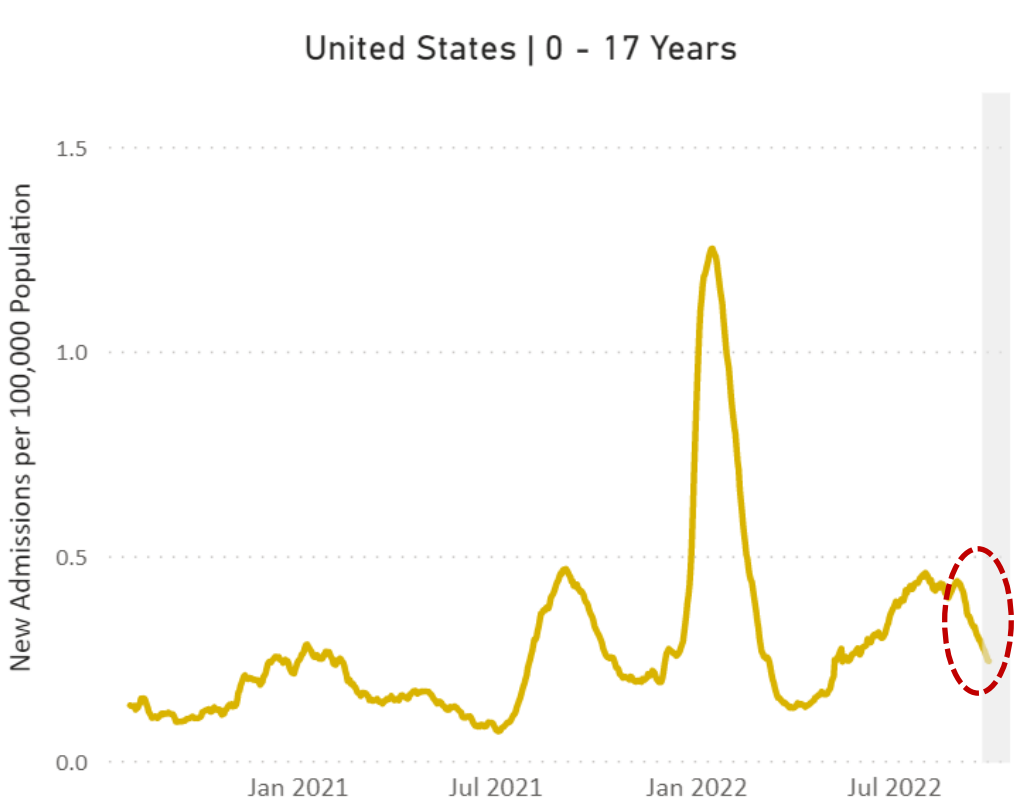
Overall, the volume of COVID+ patients in ICUs has decreased by 4% from last week. There are 117 COVID+ patients in ICU beds across the state.

ICU occupancy is less than 85% in all regions except Region 3. All regions have fewer than 10% of ICU beds occupied by COVID+ patients.

Region	Adult COVID+ in ICU (% Δ from last week)	ICU Occupancy	% of ICU beds COVID+
Region 1	12 (9%)	81%	7%
Region 2N	21 (-22%)	66%	4%
Region 2S	36 (-8%)	77%	5%
Region 3	20 (11%)	85%	7%
Region 5	5 (0%)	66%	3%
Region 6	16 (14%)	78%	7%
Region 7	4 (-33%)	76%	3%
Region 8	3 (50%)	55%	5%

Source: MDHHS Data and Modelling: MI COVID response Data and modeling update (michigan.gov)

Pediatric Hospitalization Rates – USA, Michigan

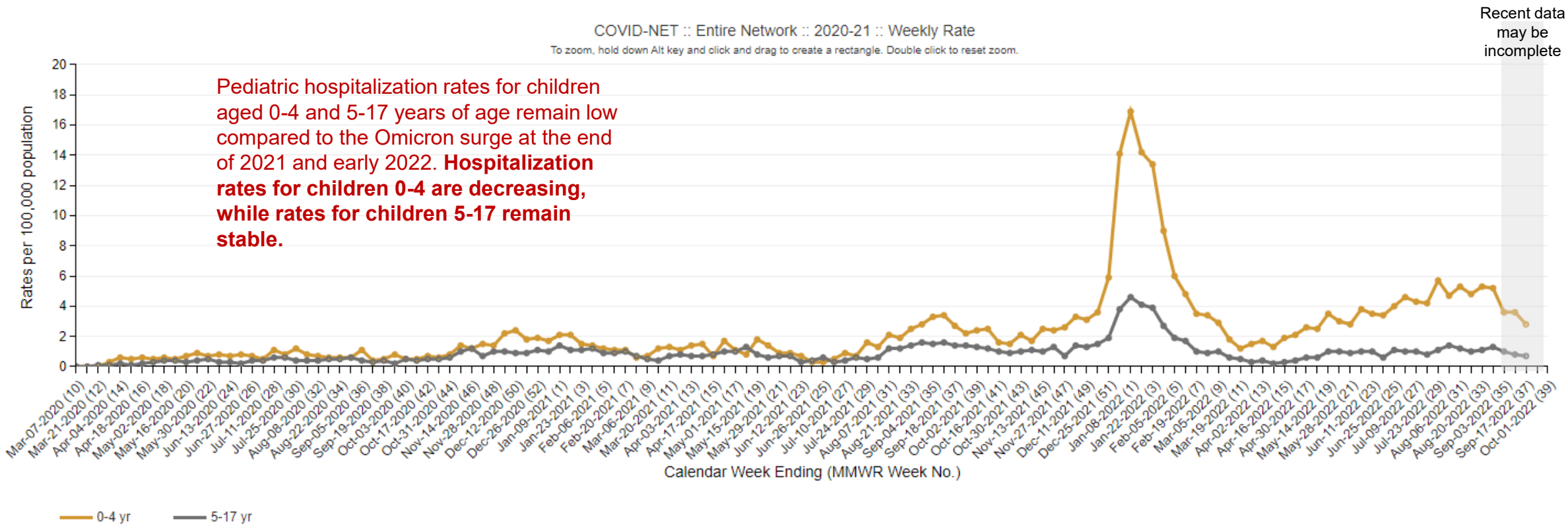


Pediatric hospitalization rates across the US and Michigan
are decreasing.

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

Accessed September 28, 2022

Pediatric Hospitalization Rates by Age Group – USA



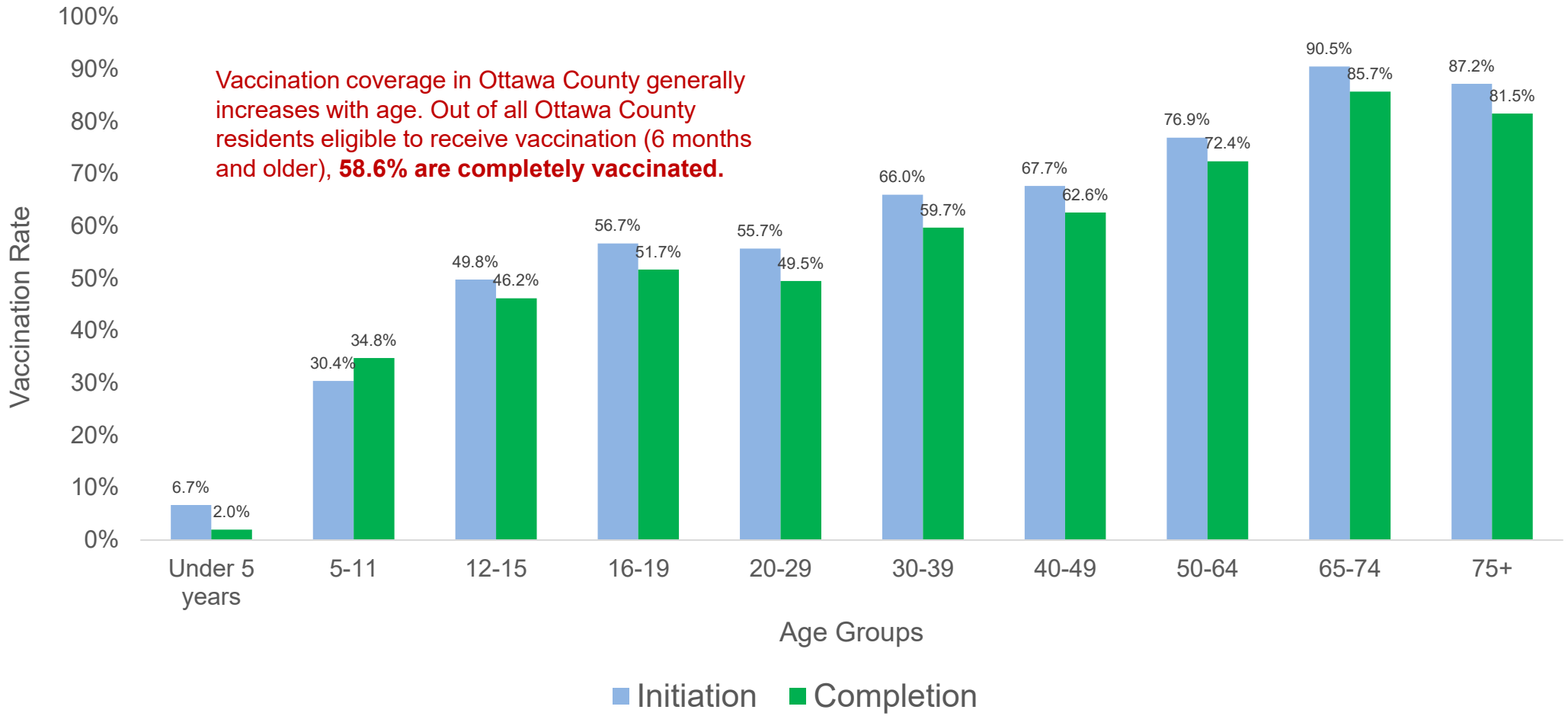
The Coronavirus Disease 2019 (COVID-19)-Associated Hospitalization Surveillance Network (COVID-NET) hospitalization data are preliminary and subject to change as more data become available. In particular, case counts and rates for recent hospital admissions are subject to lag. Lag for COVID-NET case 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 September 28, 2022

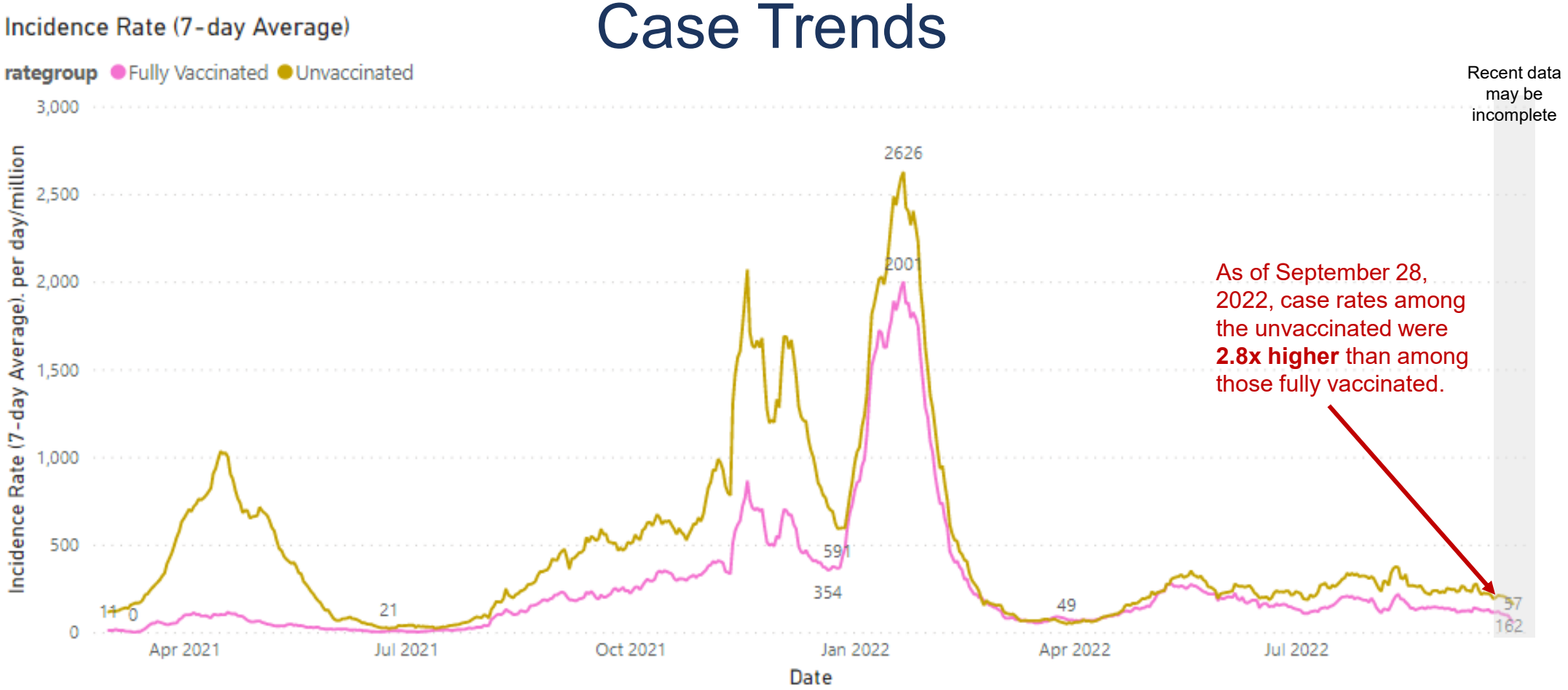
Vaccination Coverage by Age



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 September 28, 2022

Ottawa County COVID-19 Vaccination Breakthrough Case Trends

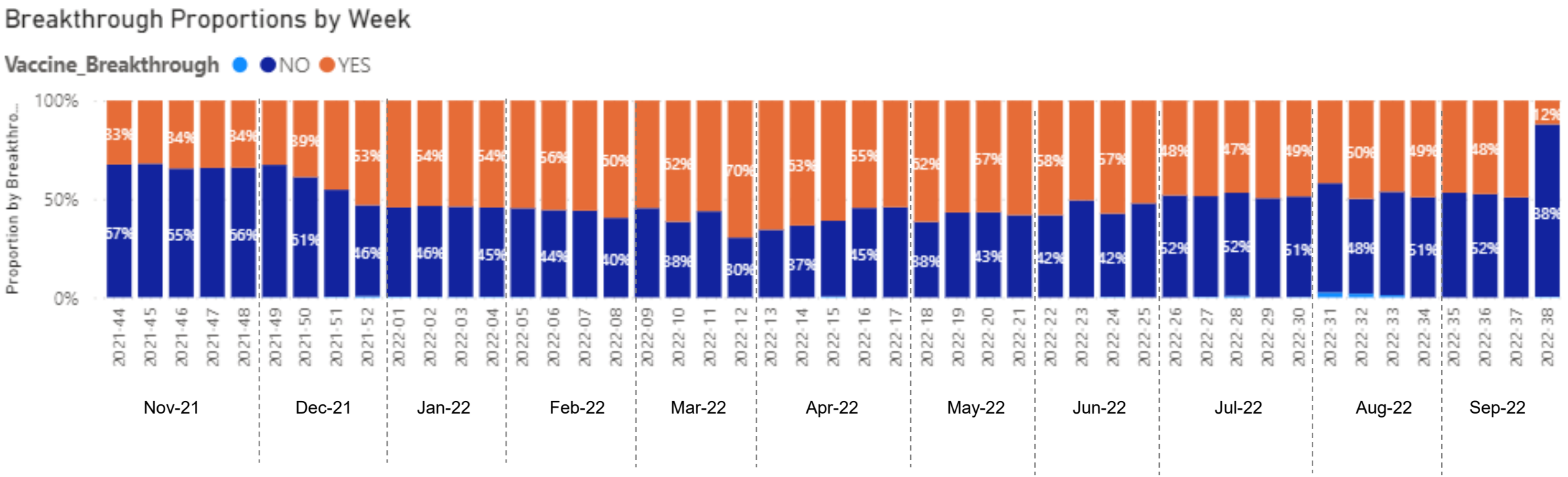


Method:
Daily case counts were obtained from the MDSS and summarized by referral date. Cases were compared to data from the State of Michigan immunization database to confirm COVID-19 vaccination status. Counts of persons completely vaccinated in Ottawa County were compiled from the Michigan COVID-19 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; 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

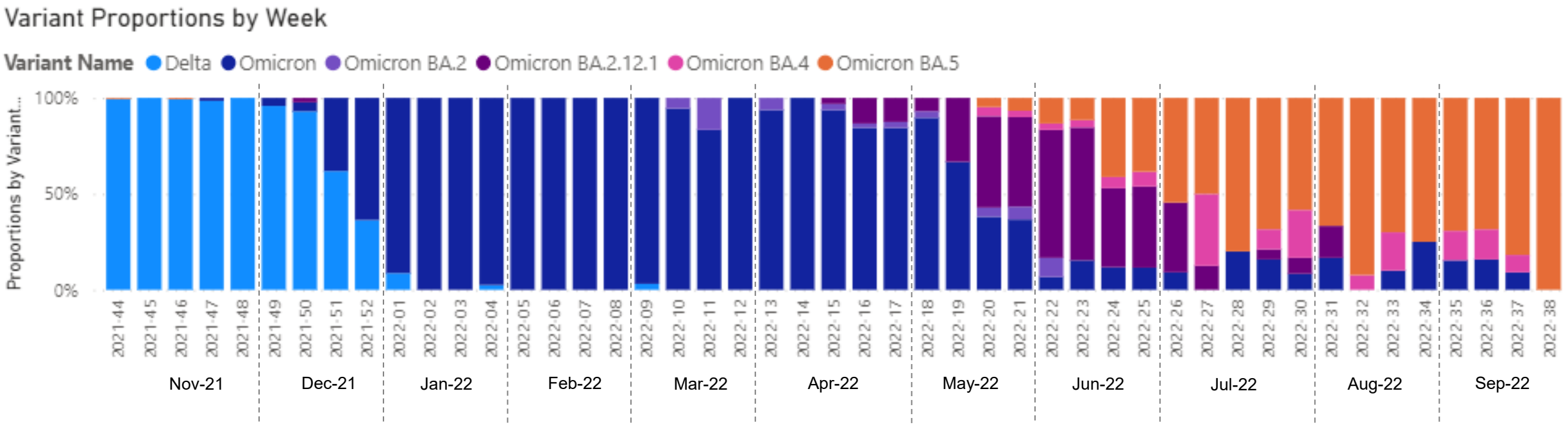
Ottawa County COVID-19 Vaccination Breakthrough Case Trends

By Week



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

Variants – Clinical Samples from Ottawa County Residents



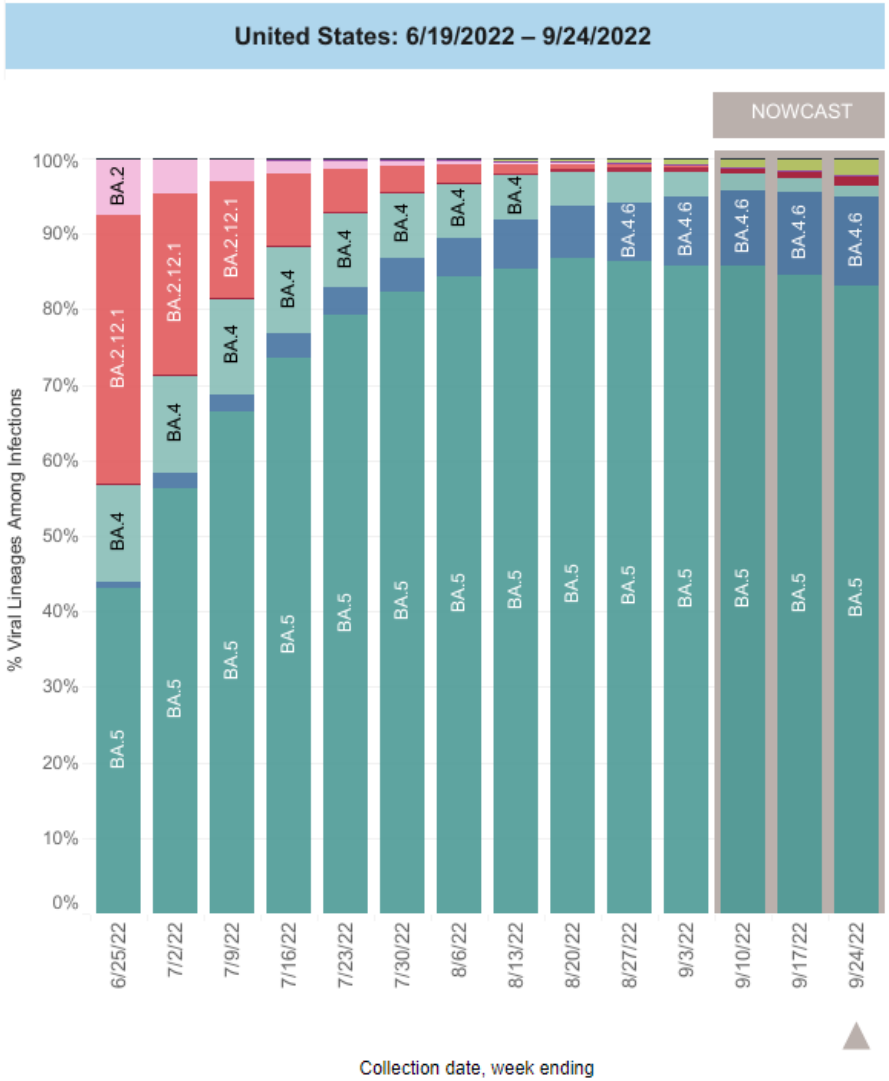
By the end of July 2021, all clinical samples* tested were identified as the **Delta** variant, and from late July through early December 2021, all clinical samples submitted for variant testing continued to be identified as the **Delta** variant.

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 (first 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



United States: 9/18/2022 – 9/24/2022 NOWCAST

USA

WHO label	Lineage #	US Class	%Total	95%PI
Omicron	BA.5	VOC	83.1%	81.3-84.7%
	BA.4.6	VOC	11.9%	10.6-13.4%
	BF.7	VOC	2.3%	1.7-3.0%
	BA.4	VOC	1.4%	1.3-1.5%
	BA.2.75	VOC	1.4%	0.9-2.0%
	BA.2.12.1	VOC	0.0%	0.0-0.0%
	BA.2	VOC	0.0%	0.0-0.0%
	B.1.1.529	VOC	0.0%	0.0-0.0%
	BA.1.1	VOC	0.0%	0.0-0.0%
Delta	B.1.617.2	VBM	0.0%	0.0-0.0%
Other	Other*		0.0%	0.0-0.0%

* Enumerated lineages are US VOC and lineages circulating above 1% nationally in at least one week period. "Other" represents the aggregation of lineages which are circulating <1% nationally during all weeks displayed.
** These data include Nowcast estimates, which are modeled projections that may differ from weighted estimates generated at later dates
# AY.1-AY.133 and their sublineages are aggregated with B.1.617.2. BA.1, BA.3 and their sublineages (except BA.1.1 and its sublineages) are aggregated with B.1.1.529. Except BA.2.12.1, BA.2.75 and their sublineages, BA.2 sublineages are aggregated with BA.2. Except BA.4.6, sublineages of BA.4 are aggregated to BA.4. Except BF.7, sublineages of BA.5 are aggregated to BA.5. Sublineages of BA.1.1 and BA.2.75 are aggregated to the parental BA.1.1 and BA.2.75 respectively. Previously, BA.2.75 was aggregated with BA.2, and BF.7 was aggregated with BA.5.

The **Omicron** variant and it's subvariants are estimated to account for 100% of all clinical samples collected in the United States the week ending September 24, 2022.

The BA.5 subvariant currently predominates.

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

Accessed September 28, 2022

Variants – Wastewater Sampling – Holland/Zeeland

Y	= Detected
N	= Not Detected

Sample Date	Site	Delta	omicron
07/27/2022	North Holland	N	Y
07/28/2022	Zeeland	N	Y
07/31/2022	North Holland	N	Y
08/01/2022	Zeeland	N	Y
08/03/2022	North Holland	N	Y
08/04/2022	Zeeland	N	Y
08/07/2022	North Holland	N	Y
08/08/2022	Zeeland	N	Y
08/10/2022	North Holland	N	Y
08/11/2022	Zeeland	N	Y
08/14/2022	North Holland	N	Y
08/15/2022	Zeeland	N	Y
08/17/2022	North Holland	N	Y
08/18/2022	Zeeland	N	Y
08/21/2022	North Holland	N	Y
08/22/2022	Zeeland	N	Y
08/24/2022	North Holland	N	Y
08/25/2022	Zeeland	N	Y
08/28/2022	North Holland	N	Y
08/29/2022	Zeeland	N	Y
08/31/2022	North Holland	N	Y
09/01/2022	Zeeland	N	Y
09/04/2022	North Holland	N	Y
09/11/2022	North Holland	N	Y
09/12/2022	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, and its subvariants, has consistently been detected in wastewater in Holland and Zeeland since January 2022.

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

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%

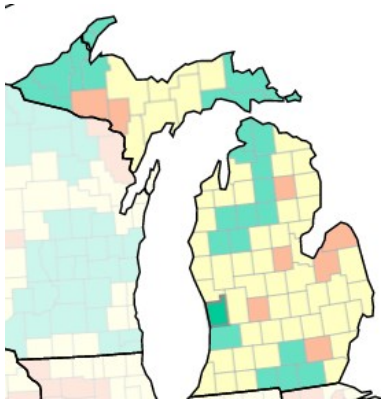
Note: The COVID-19 community level is determined by the higher of the new admissions and inpatient beds metrics, based on the current level of new cases per 100,000 population in the past 7 days.

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

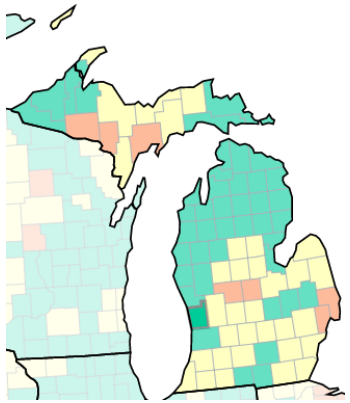
CDC Community Levels – Ottawa County

- Current Community Level in Ottawa – LOW
- Michigan CDC Community Levels can now be viewed on the [MI Safe Start Map]
- Current Data:
  - Case Rate (per 100k pop 7-day total) = **85.32**
  - COVID-19 Hospital Admissions (per 100K pop 7-day total) = **4.9**
  - COVID-19 Inpatient Hospital Bed Utilization (7-day average) = **5.1%**

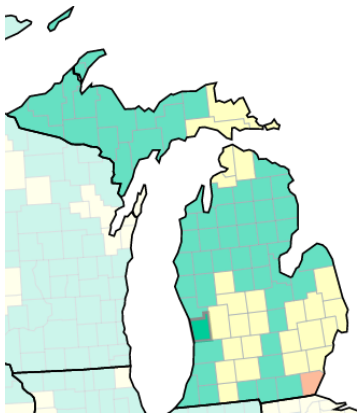
2 Weeks Ago



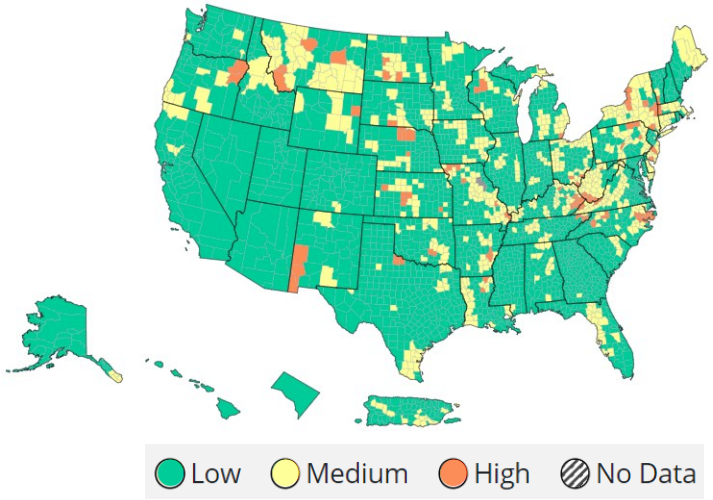
Last Week



This Week



USA - This Week

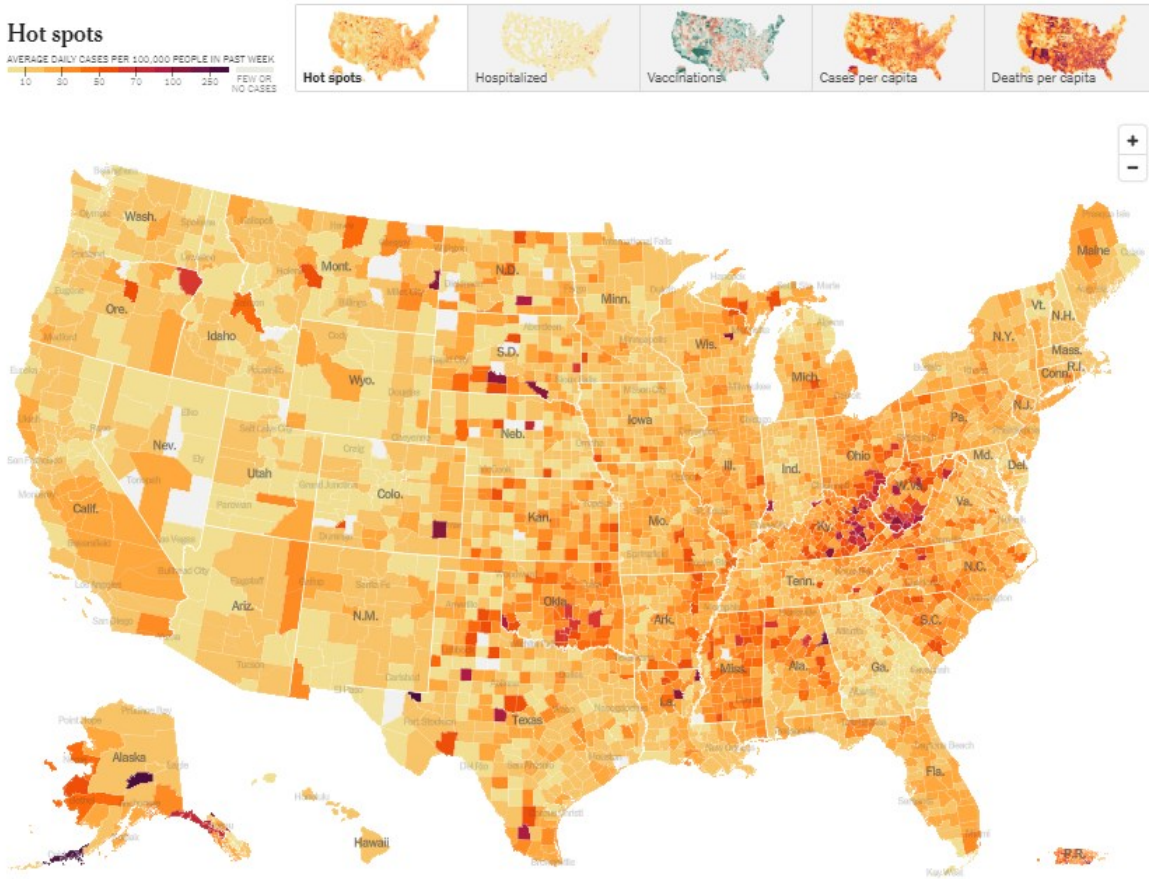


Source: CDC COVID Data Tracker: County View

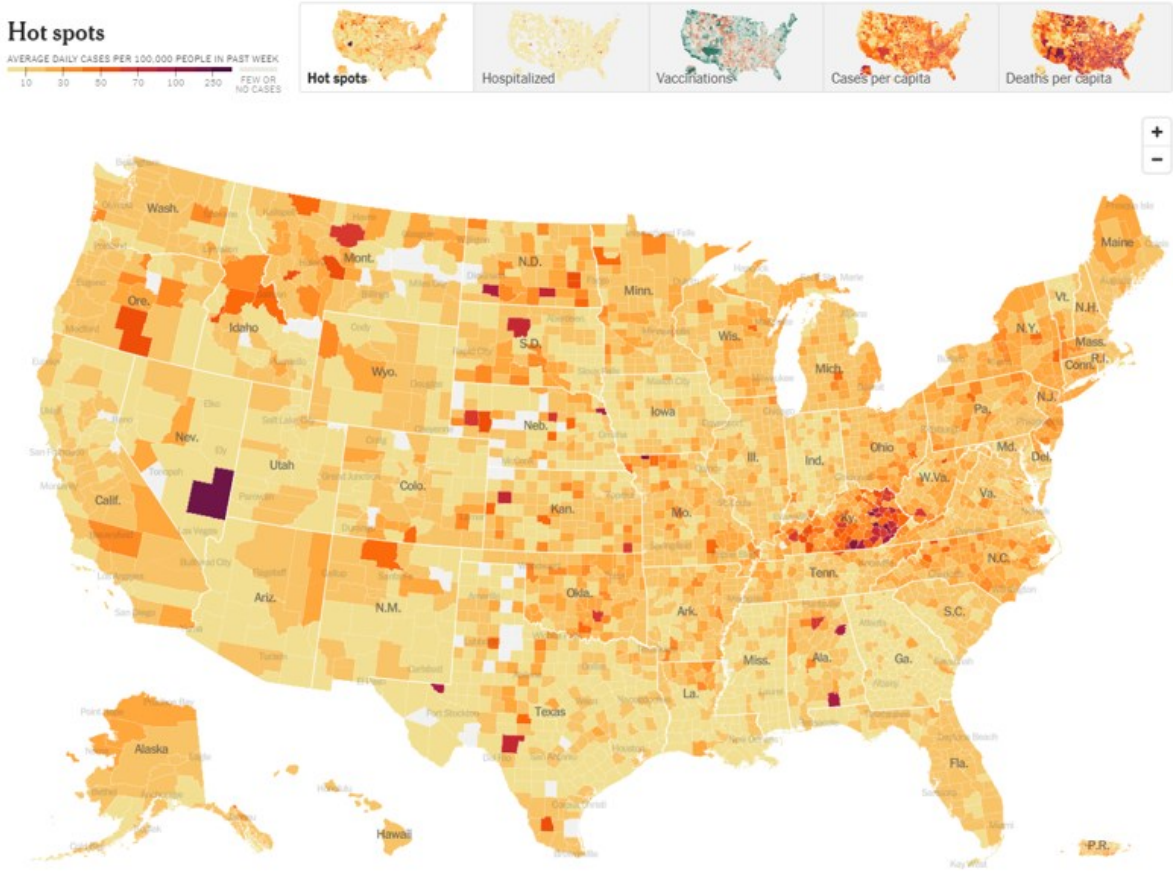
Data updated by CDC on September 28, 2022

COVID-19 Case Rates by County Across the US

Last Week



This Week



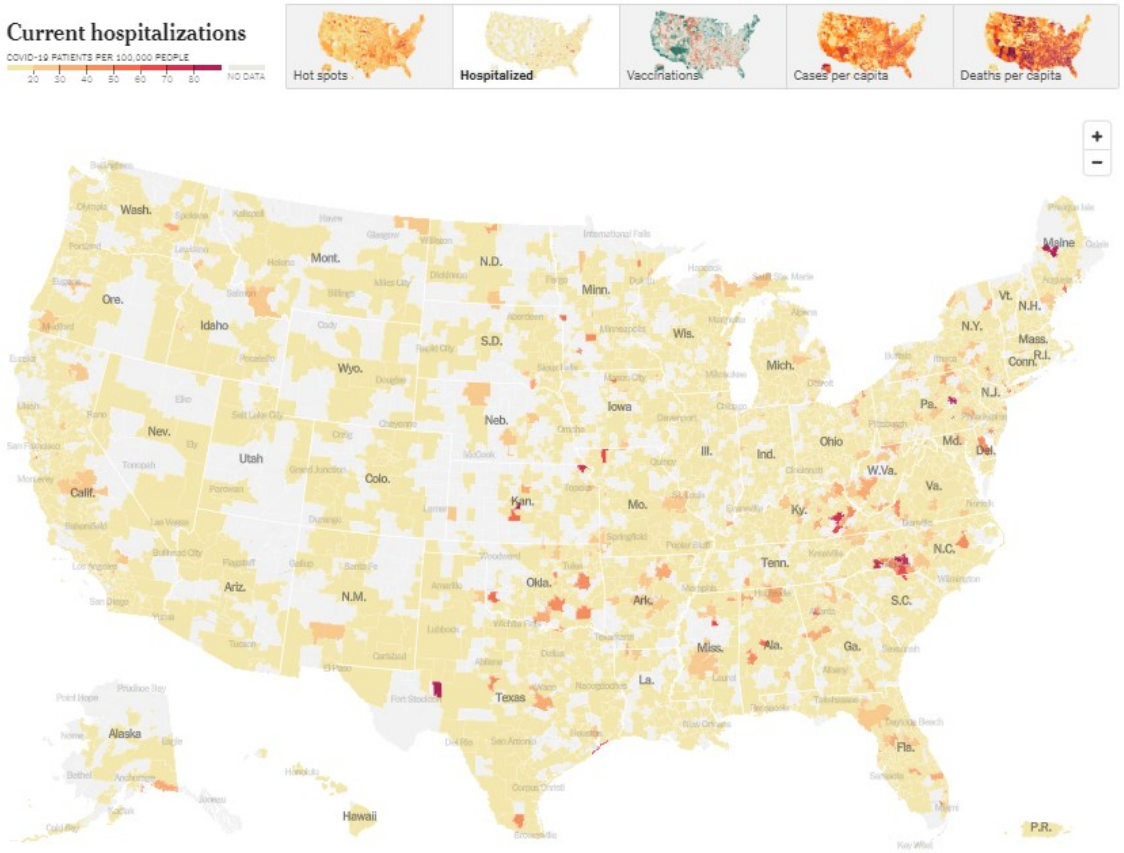
Case rates across the nation may be improving.

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

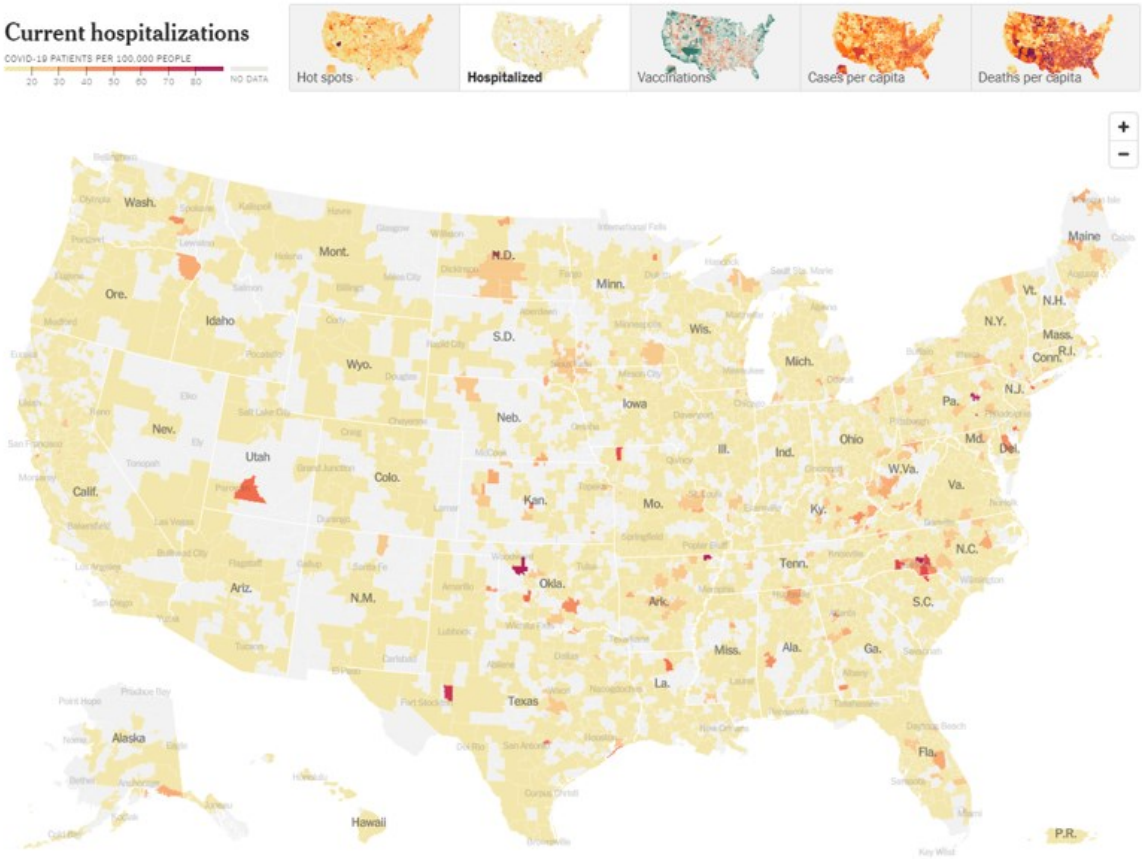
Accessed September 28, 2022

COVID-19 Hospitalization Rates by County Across the US

Last Week



This Week



Hospitalization rates remain relatively low across most of the nation, with increases in some areas.

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

Accessed September 29, 2022

COVID-19 News Headlines

Michigan adds 14,678 COVID cases, 160 new deaths

Michigan adds 14,678 COVID cases, 160 new deaths - mlive.com

Michigan's pandemic response 'well coordinated' but implementation fell short: draft report

Michigan's pandemic response 'well coordinated' but implementation fell short: draft report - mlive.com

Masks advised in 7 Michigan counties this week, CDC says

Masks advised in 7 Michigan counties this week, CDC says - mlive.com

Repurposing existing drugs to fight new COVID-19 variants

Repurposing existing drugs to fight new COVID-19 variants | MSUToday | Michigan State University

Rising Covid-19 cases in the UK may be a warning for the US

Rising Covid-19 Cases in the UK may be a warning for the US | CNN

Healthcare Workers Unhappy With New CDC Mask Guidance

Healthcare Workers Unhappy With New CDC Mask Guidance | MedPage Today

Science Roundup

Excess diabetes mellitus-related deaths during the COVID-19 pandemic in the United States

Excess diabetes mellitus-related deaths during the COVID-19 pandemic in the United States (thelancet.com)

This study found there was an increase in mortality of more than 30% among diabetes mellitus related deaths that occurred during the COVID-19 pandemic. Mortality rate (per 100,000 persons) went from 106.8 in 2019 to 148.3 in 2021. The study also found a widened racial/ethnic disparity, with Hispanics demonstrating the highest excess deaths at almost three times that of non-Hispanic whites.

Circulating anti-nuclear autoantibodies in COVID-19 survivors predict long-COVID symptoms

Circulating anti-nuclear autoantibodies in COVID-19 survivors predict long-COVID symptoms | European Respiratory Society (ersjournals.com)

This study found that among the study participants, individuals who experienced long-lasting COVID-19 symptoms were more likely to have markers in their blood indicative of autoimmune disease compared to those who had not experienced long-lasting COVID-19 symptoms or that had never been infected.

Estimation of COVID-19 mRNA Vaccine Effectiveness Against Medically Attended COVID-19 in Pregnancy During Periods of Delta and Omicron Variant Predominance in the United States

Estimation of COVID-19 mRNA Vaccine Effectiveness Against Medically Attended COVID-19 in Pregnancy During Periods of Delta and Omicron Variant Predominance in the United States | Vaccination | JAMA Network Open | JAMA Network

A study on the effectiveness of mRNA COVID-19 vaccines during pregnancy found that two initial doses followed by a booster dose are effective in protecting against hospitalization, serious disease, emergency department or urgent care visits in expecting mothers regardless of when the shots were administered (before or during pregnancy).

Association between menstrual cycle length and covid-19 vaccination: global, retrospective cohort study of prospectively collected data

Association between menstrual cycle length and covid-19 vaccination: global, retrospective cohort study of prospectively collected data | BMJ Medicine

This study found that, on average, participants who were vaccinated experienced an increase of less than one day in each cycle of which they were vaccinated, suggesting an association between COVID-19 vaccination and a temporary increase in menstrual cycle length.