

# Ottawa County COVID-19 Epidemiology

March 3, 2022

*Data as of February 26, 2022, unless otherwise indicated*

# Executive Summary

- **Transmission in Michigan and the US continues to decline**
  - CDC introduced new community risk levels (learn more [here](#)).
- **Ottawa community transmission levels continue to decline**
  - This past week positivity declined to 9.5%, lower than 14.1% seen last week.
  - Weekly case counts **decreased** 36% (-47% two weeks ago), from 470 two weeks ago to 303 last week.
  - Cases among children **decreased** 30% (-52% two weeks ago), from 89 two weeks ago to 62 last week.
  - The Omicron variant continues to be detected through clinical and wastewater surveillance.
- **Ottawa-area and regional hospitals have improved capacity**
  - In Ottawa County, 6% of all available beds and 20% of all ICU beds are occupied by COVID-19 patients.\*
  - No Ottawa-area hospitals employed Emergency Department diversion last week.\*\*
  - Most Ottawa hospitals are returning to usual care strategies and reinitiating elective procedures.
  - No Ottawa-area hospitals reported critical staffing challenges over the last two weeks.
- **Pediatric hospitalization rates in the US and in Michigan are improving**
  - Regional pediatric hospitalization census is approaching the pandemic average.
- **Of Ottawa County residents aged 5+, 62.3% are completely 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.

\*\*Emergency Department diversion may have the following [impacts](#): 1) delayed ambulance turnaround, 2) delayed treatment, 3) increasing short- and long-term mortality rates, 4) lost hospital revenue, 5) increased costs for more ICU care that would have been preventable with timely healthcare access.

# Ottawa County Metrics by Week

Metric	Goal	Week Ending				
		29-Jan-22	5-Feb-22	12-Feb-22	19-Feb-22	26-Feb-22
Positivity (All Ages)	<8%	33.0%	25.3%	19.5%	14.1%	9.5%
Weekly Cases (All Ages)	<147	3084	1583	879	470	303
Weekly Cases in Children (0-17 years of age)	NA	674	277	184	89	62
Total Deaths (All Ages)	0	13	13	6	5	3
CDC Risk Transmission Level	Moderate	High	High	High	High	High

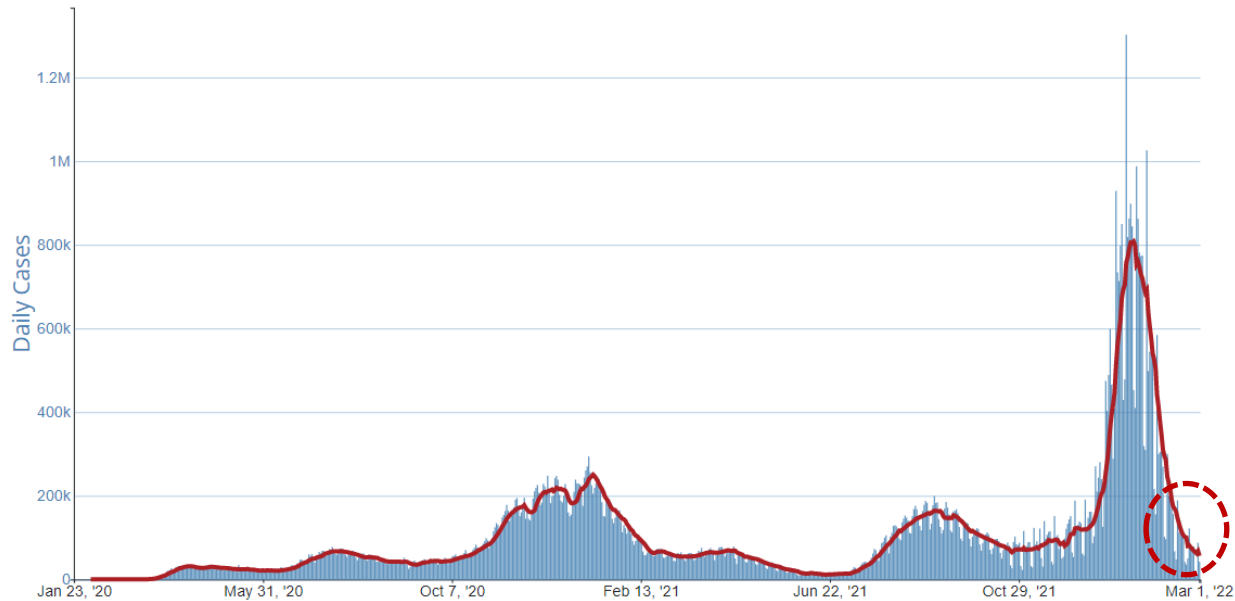
Please note that with updated CDC Community Risk Transmission levels, metrics and/or metric thresholds/goals may change.

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

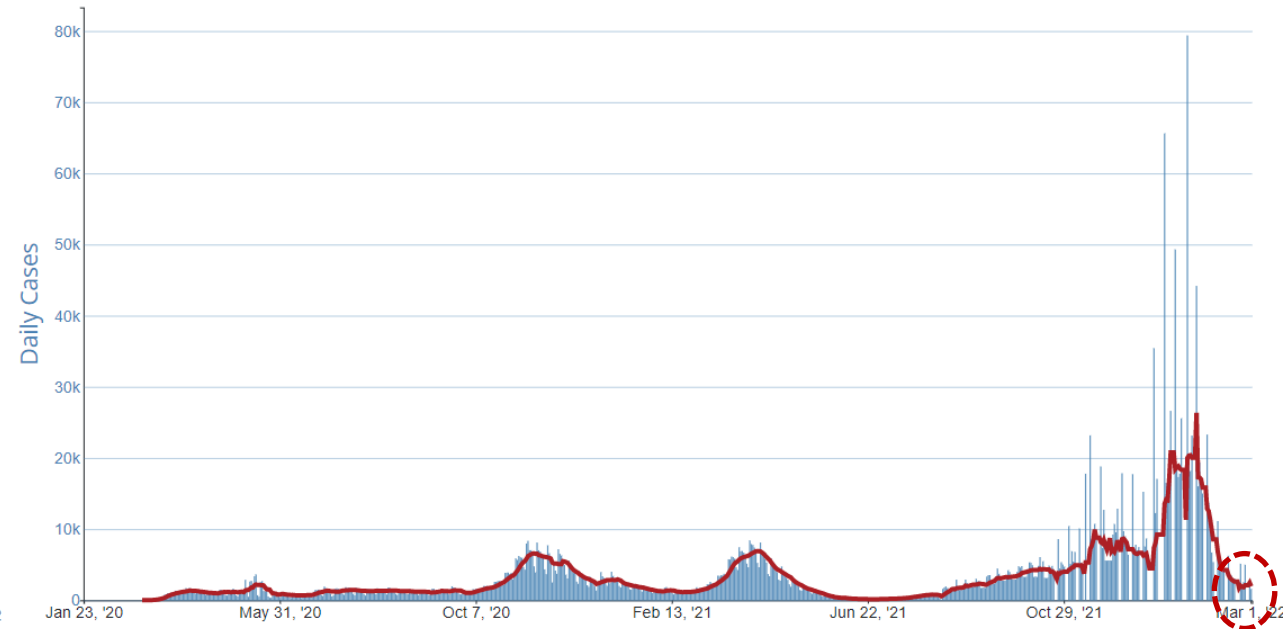
## USA

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 are declining.**

**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 March 1, 2022

USA & MI

Spread

Children

Hospitalizations

Vaccinations

Variants

Risk Levels

Other

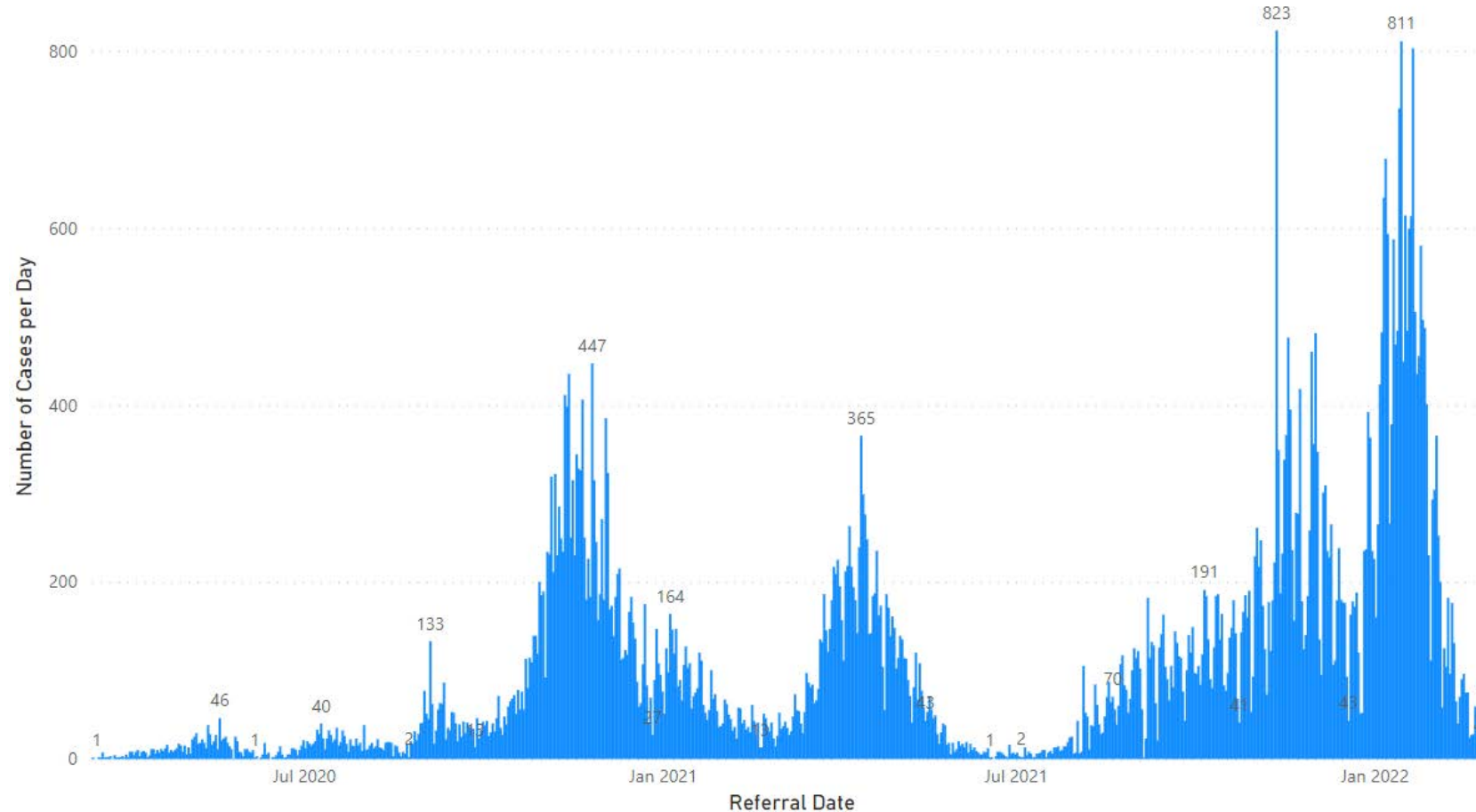
Media

Science  
Roundup

# Case Trends in Ottawa County

## COVID-19 Cases by Day, Ottawa County, March 15, 2020 – March 2, 2022

Epidemiological Curve



Total Number of Cases  
**74,107**

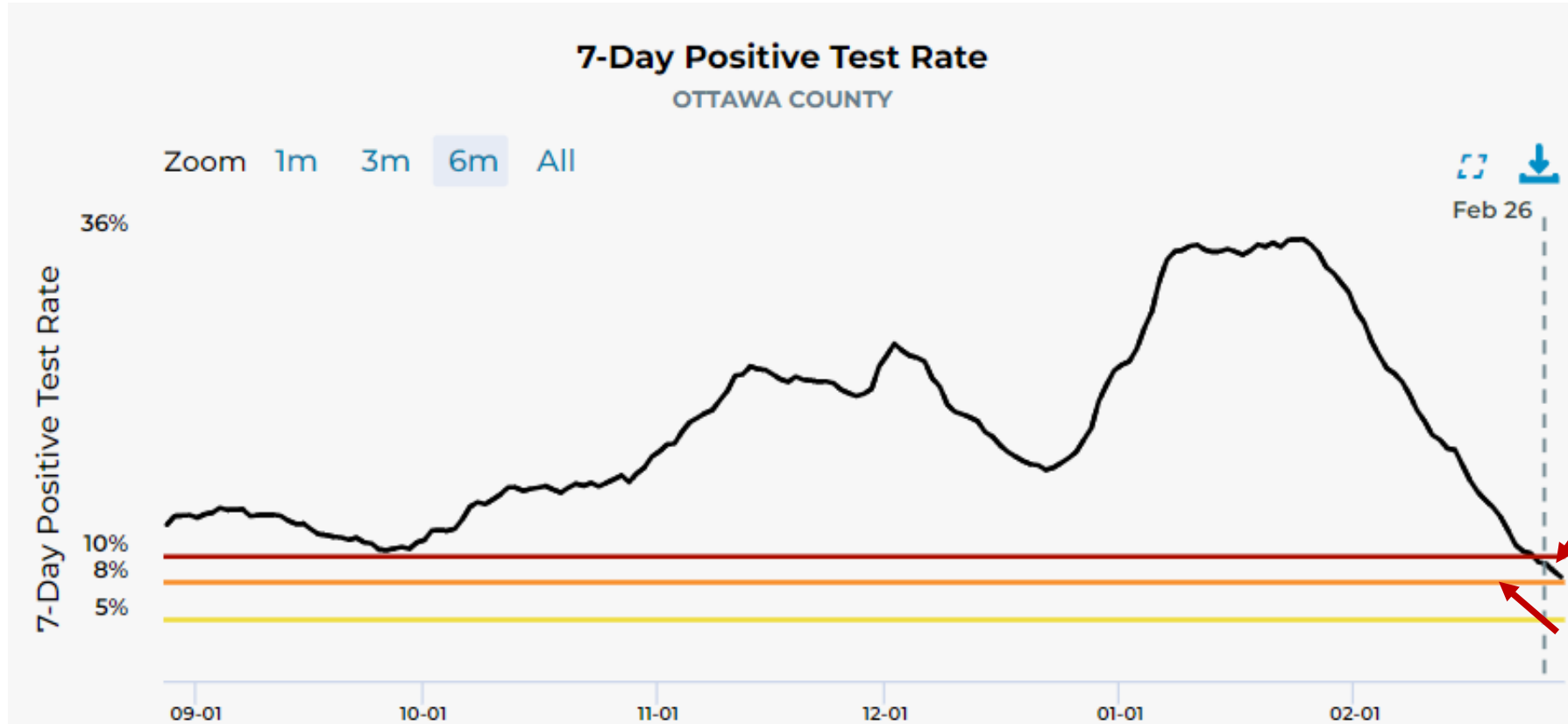
Currently the 7-day average is **35 cases per day**, lower than the 43 cases per day seen at a similar time last week. ←

**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, September 1, 2021 – February 26, 2022



Test positivity has been in decline for five weeks, **recently falling to 9.5%.**

The goal is to have less than 8% of tests coming back positive.

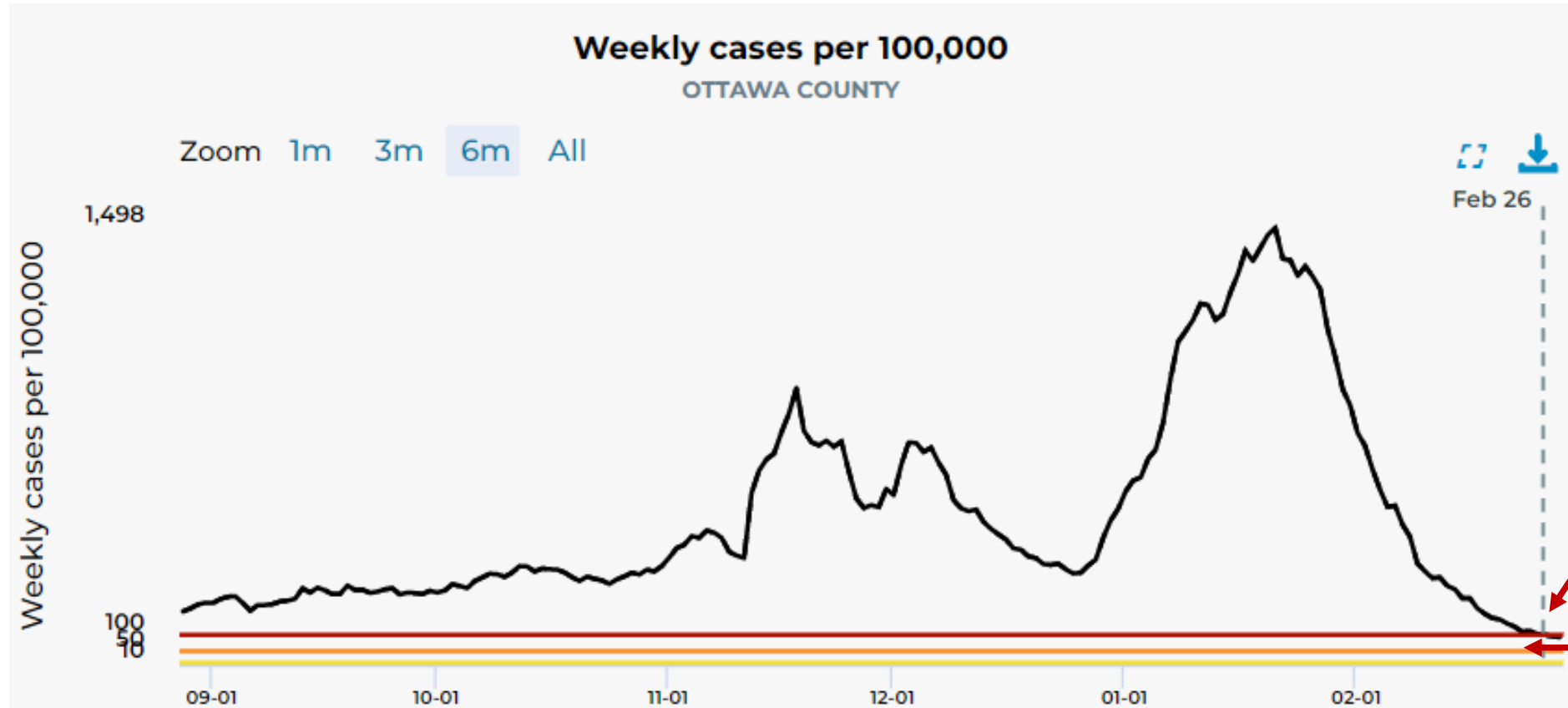
Please note that with updated CDC Community Risk Transmission levels, metrics and/or metric thresholds/goals may change.

**Note:** Testing in Ottawa County has declined over the last 4 weeks, peaking at nearly 10,000 tests in a week (week 4) and declining to about 3600 tests last week (week 8): [Testing Results | Ottawa County Covid-19 Case Summary Data \(arcgis.com\)](#) & <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>

# Case Rates in Ottawa County – All Ages

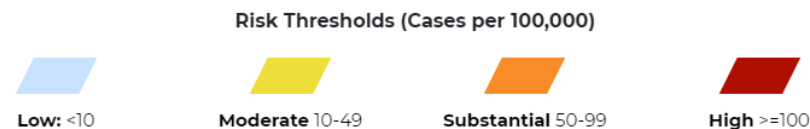
COVID-19 Cases by Day, Ottawa County, September 1, 2021 – February 26, 2022



Case rates decreased to 103 cases per week per 100,000 population (down from 161 the week prior).

The goal is to have less than 50 cases per week per 100,000 population. In Ottawa County, this would be about 21 cases per day or less.

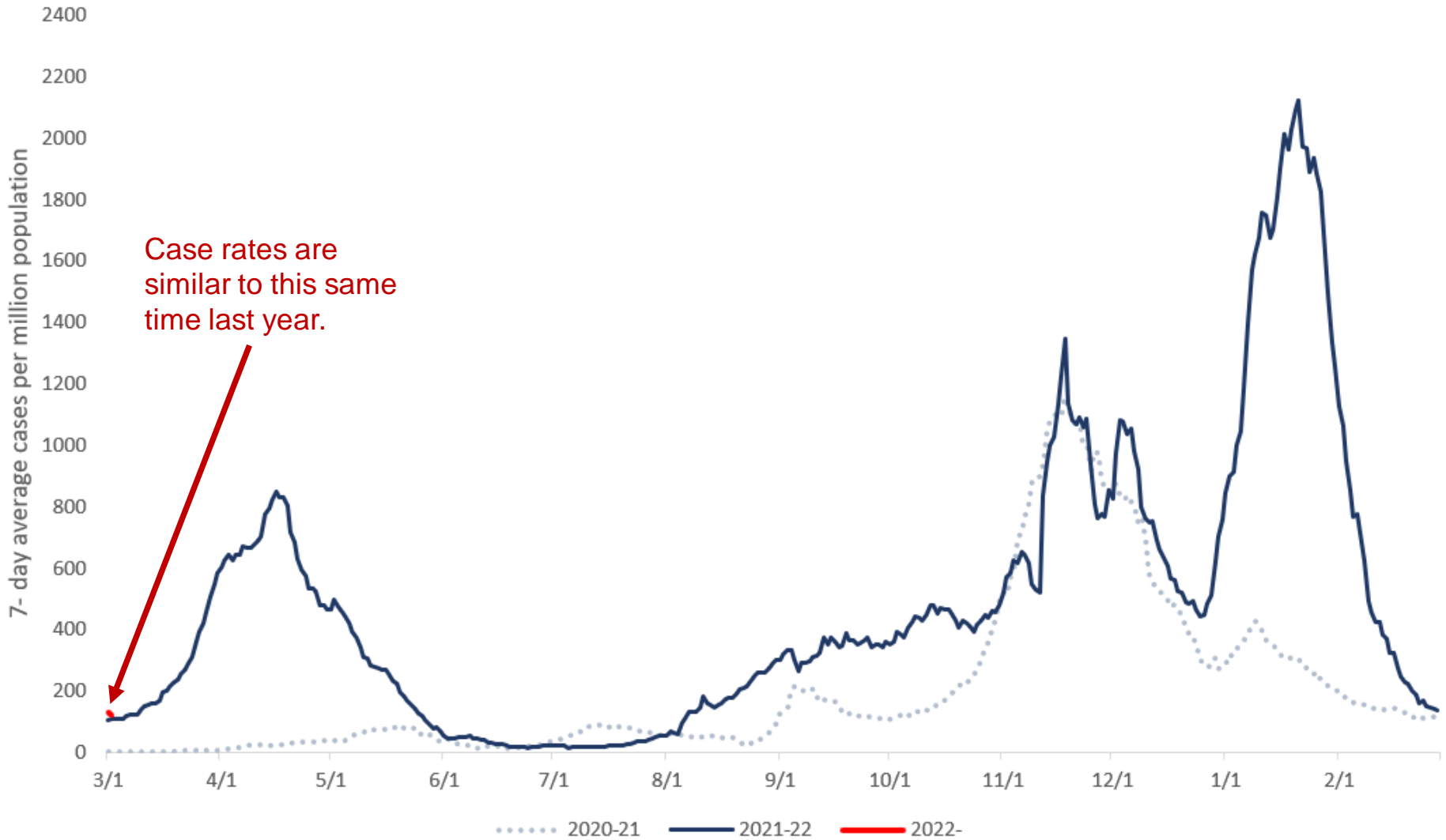
Please note that with updated CDC Community Risk Transmission levels, metrics and/or metric thresholds/goals may change.



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>

# Ottawa County Time Trends – Annual Comparison of Case Rates



Case rates are similar to 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.

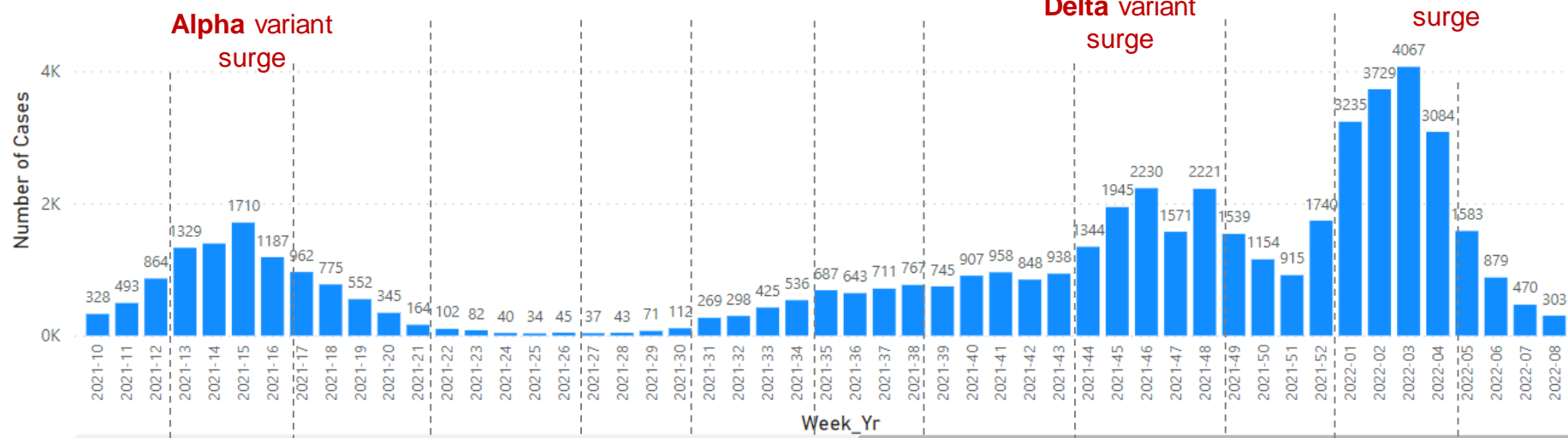
**Source:** Internal Data

Data through March 2, 2022



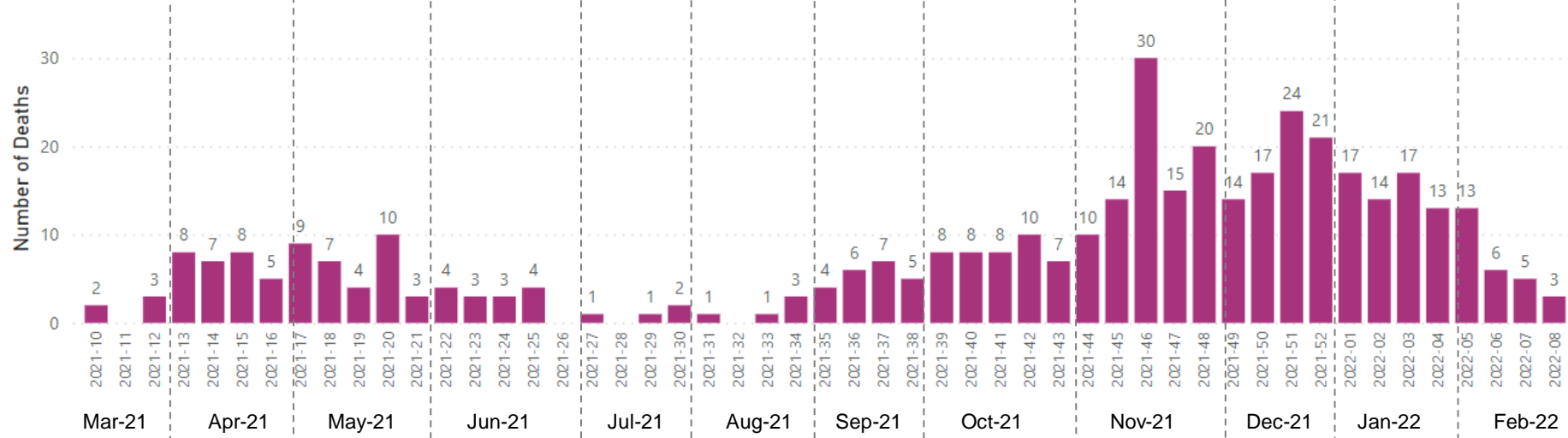
# Ottawa County – Cases & Deaths by Week, All Ages

New Cases By Week of Referral



The weekly number of cases **decreased 36%** from week 7 to week 8.

New Deaths by Week of Death



Weekly COVID-19 deaths have **declined** to levels experienced in the spring 2021 wave. Current weekly average of deaths over the last 4 weeks stands at about **7 deaths 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.

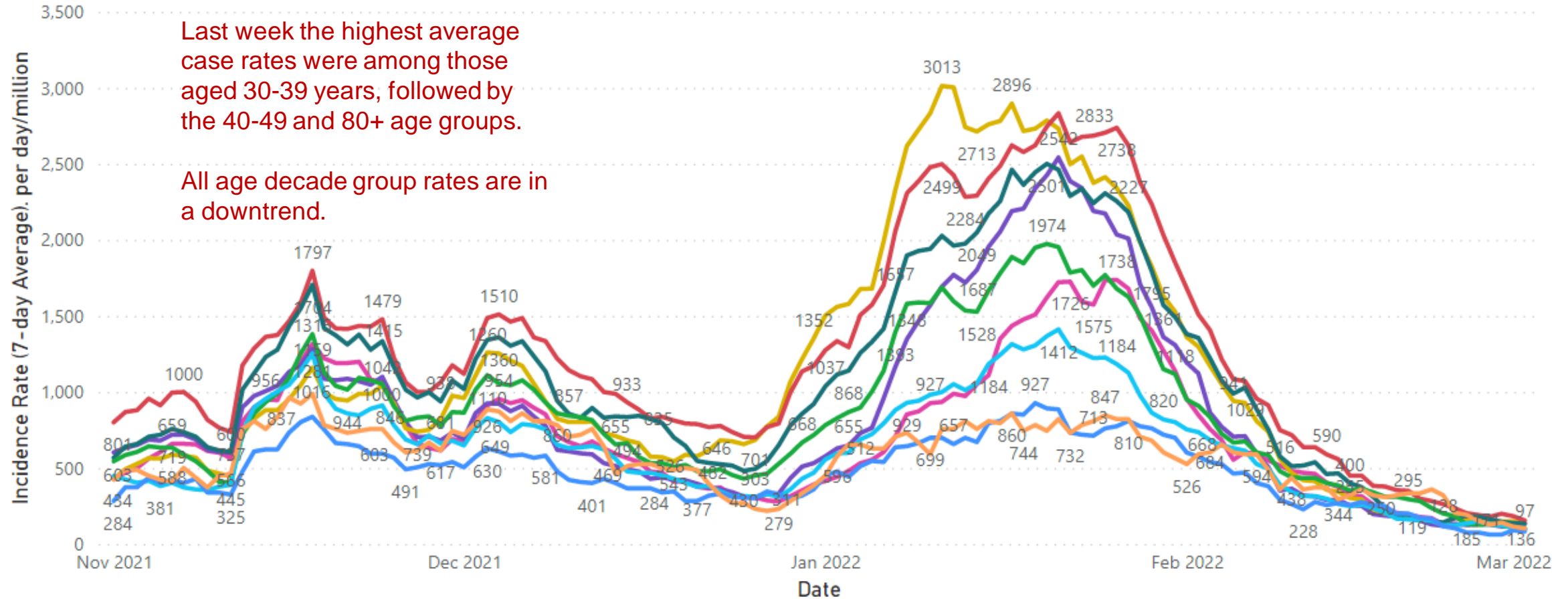
**Source:** Michigan Department of Health and Human Services, Michigan Disease Surveillance System

# Ottawa County - Case Rate Trends – by Age Decade

## COVID-19 Case Rates by Age, November 2021 – March 2, 2022

Incidence Rate (7-day Average)

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



**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

# 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 8 (February 20, 2022 – February 26, 2022)

Age Decade (Years)	Average Daily Cases	Average Daily Case Rate	One Week % Rate Change
0-9	5.4	147.4	-28%
10-19	5.4	122.6	-32%
20-29	6.6	145.3	-23%
30-39	6.9	191.4	-46%
40-49	6.0	180.8	-5%
50-59	4.4	127.0	-59%
60-69	4.9	149.1	-13%
70-79	1.6	76.0	-61%
80+	1.7	153.6	-52%

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

- 30-39
- 40-49
- 80+

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

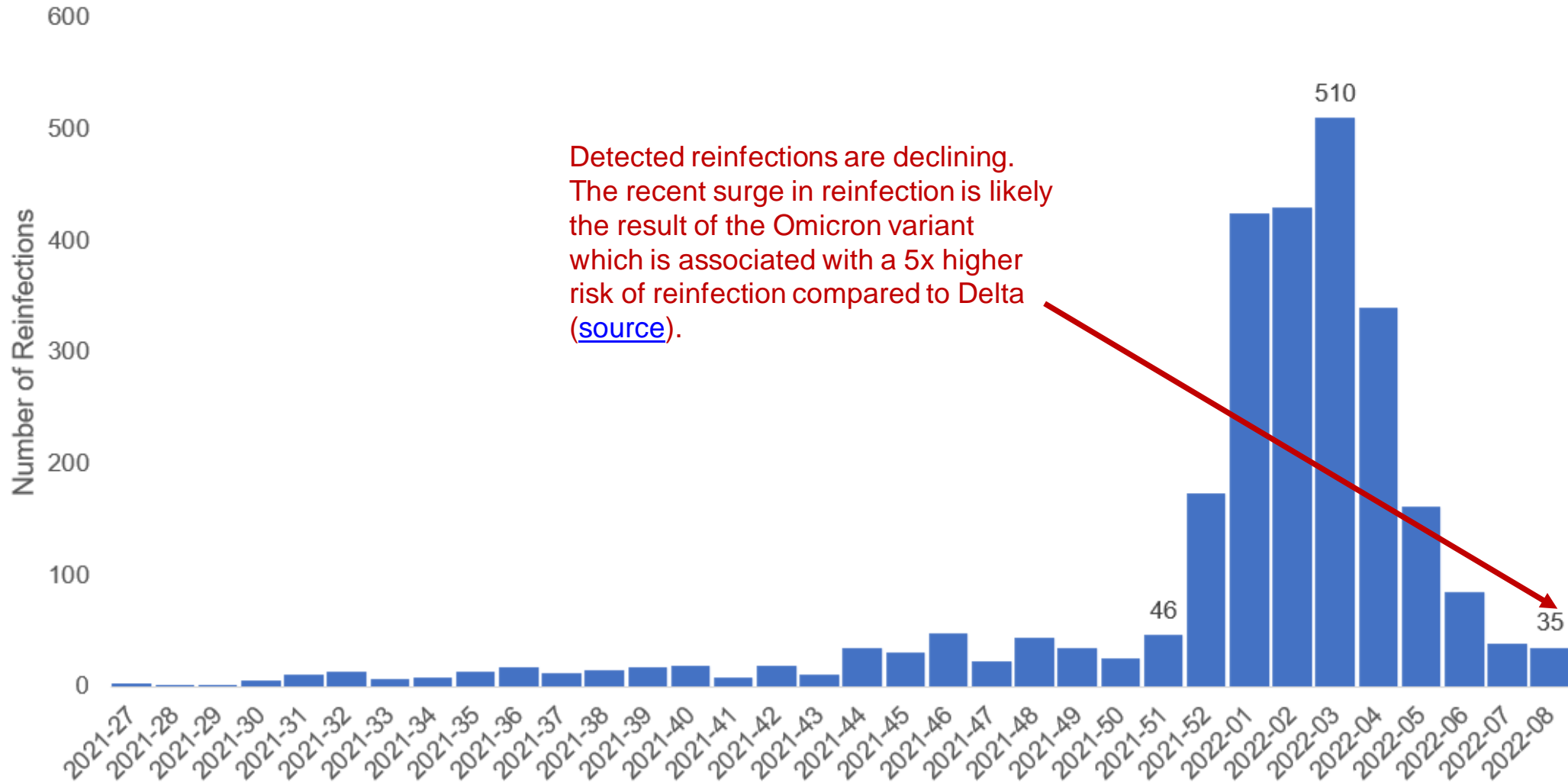
- 70-79
- 50-59
- 80+

**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 March 2, 2022

# Ottawa County – Reinfections by Week



**Notes:** \*For the purposes of this slide a reinfection is considered any Ottawa County resident who was reported two or more times as a confirmed or probable case, with at least 90 days between each referral date. This definition utilizes only cases reported to public health. The gold-standard for determining reinfection includes the variant detected in each infection; comprehensive data on the variant detected are not available for most cases. 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

Data as of March 2, 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-Oct-21	608	-2%	136	-9%	744	-3%
9-Oct-21	714	17%	197	45%	907	22%
16-Oct-21	765	7%	199	1%	958	6%
23-Oct-21	685	-10%	163	-18%	848	-11%
30-Oct-21	716	5%	219	34%	935	10%
6-Nov-21	991	38%	351	60%	1342	44%
13-Nov-21	1463	48%	487	39%	1950	45%
20-Nov-21	1662	14%	568	17%	2230	14%
27-Nov-21	1229	-26%	341	-40%	1570	-30%
4-Dec-21	1771	44%	450	32%	2221	41%
11-Dec-21	1236	-30%	302	-33%	1538	-31%
18-Dec-21	940	-24%	214	-29%	1154	-25%
25-Dec-21	766	-19%	149	-30%	915	-21%
1-Jan-22	1523	99%	214	44%	1737	90%
8-Jan-22	2792	83%	443	107%	3235	86%
15-Jan-22	3092	11%	636	44%	3728	15%
22-Jan-22	3144	2%	923	45%	4067	9%
29-Jan-22	2410	-23%	674	-27%	3084	-24%
5-Feb-22	1306	-46%	277	-59%	1583	-49%
12-Feb-22	695	-47%	184	-34%	879	-44%
19-Feb-22	381	-45%	89	-52%	470	-47%
26-Feb-22	241	-37%	62	-30%	303	-36%

Adults

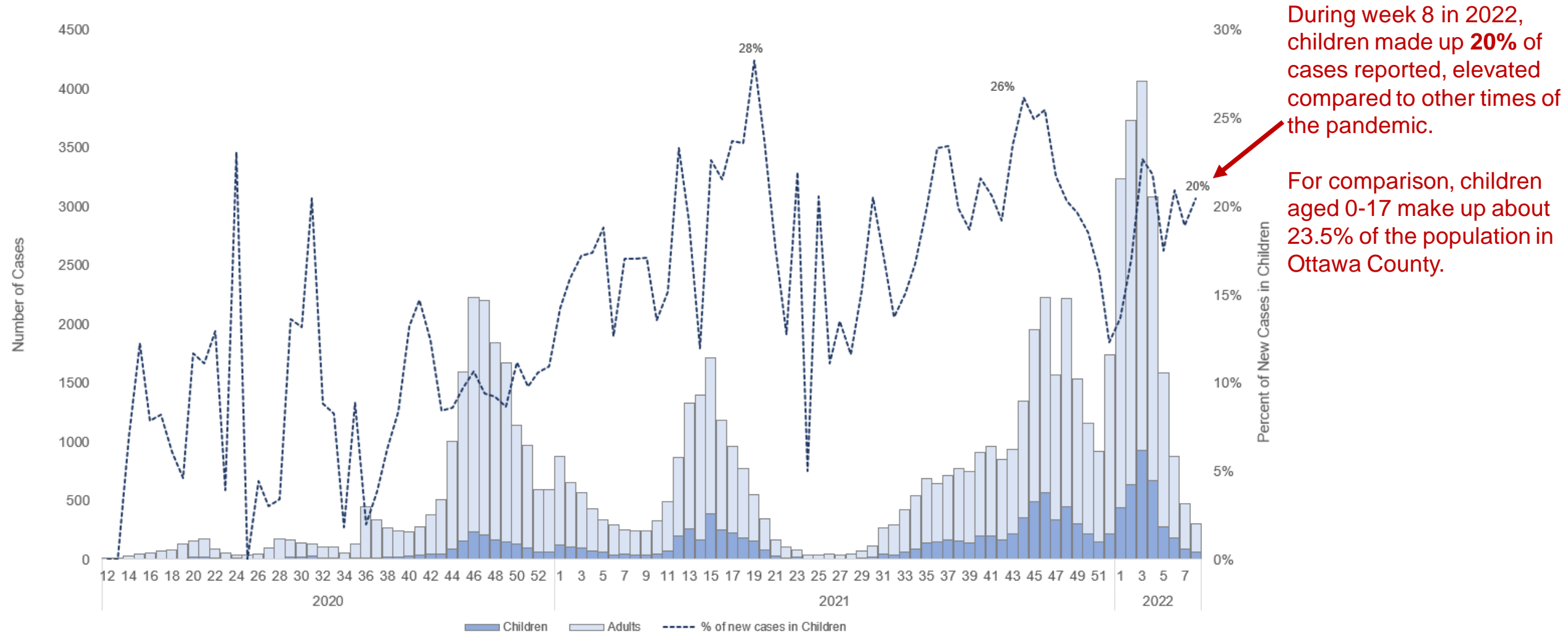
Children

Weekly case counts among **children decreased 30%** last week, and cases in **adults decreased 37%**.

**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 Weekly Case Counts and % in Children (0-17)



**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; CDC Wonder 2020

Data through Week 8, 2022

USA & MI

Spread

Children

Hospitalizations

Vaccinations

Variants

Risk Levels

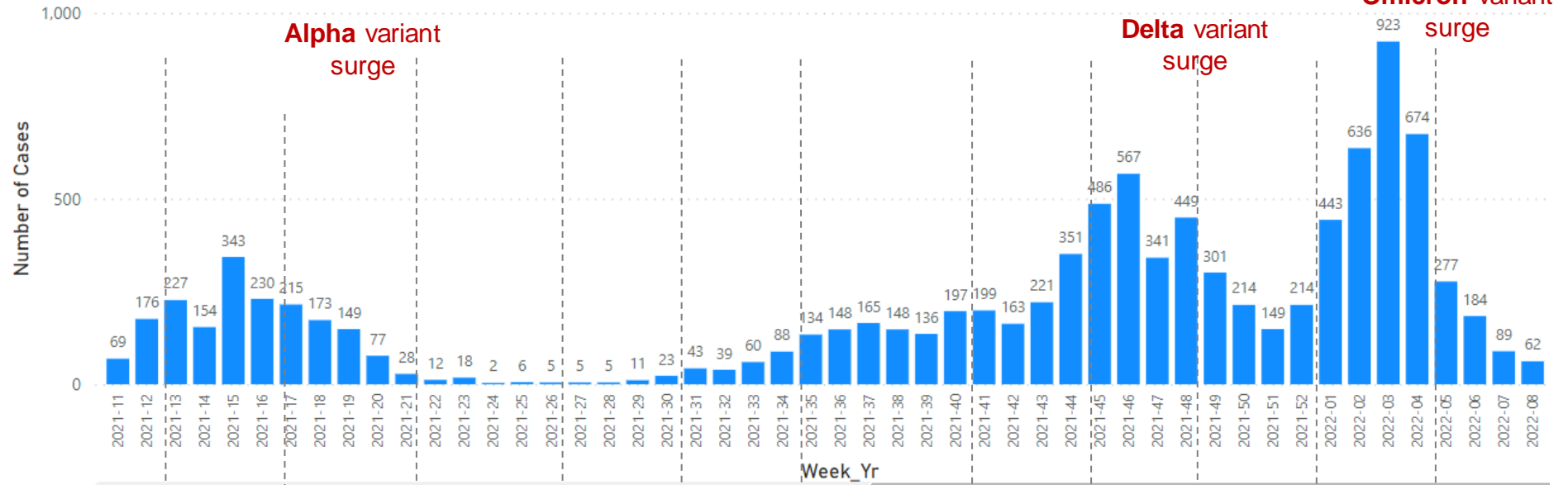
Other

Media

Science Roundup

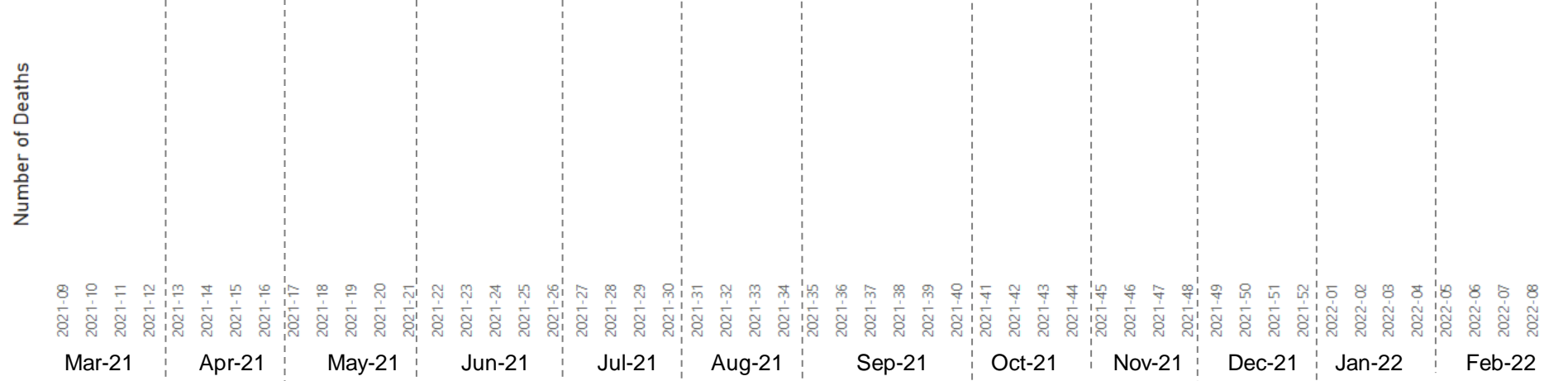
# Ottawa County – Cases & Deaths by Week Among Children (0-17 years)

New Cases By Week of Referral



The weekly number of cases among children decreased 30% from week 7 to week 8.

New Deaths by Week of Death



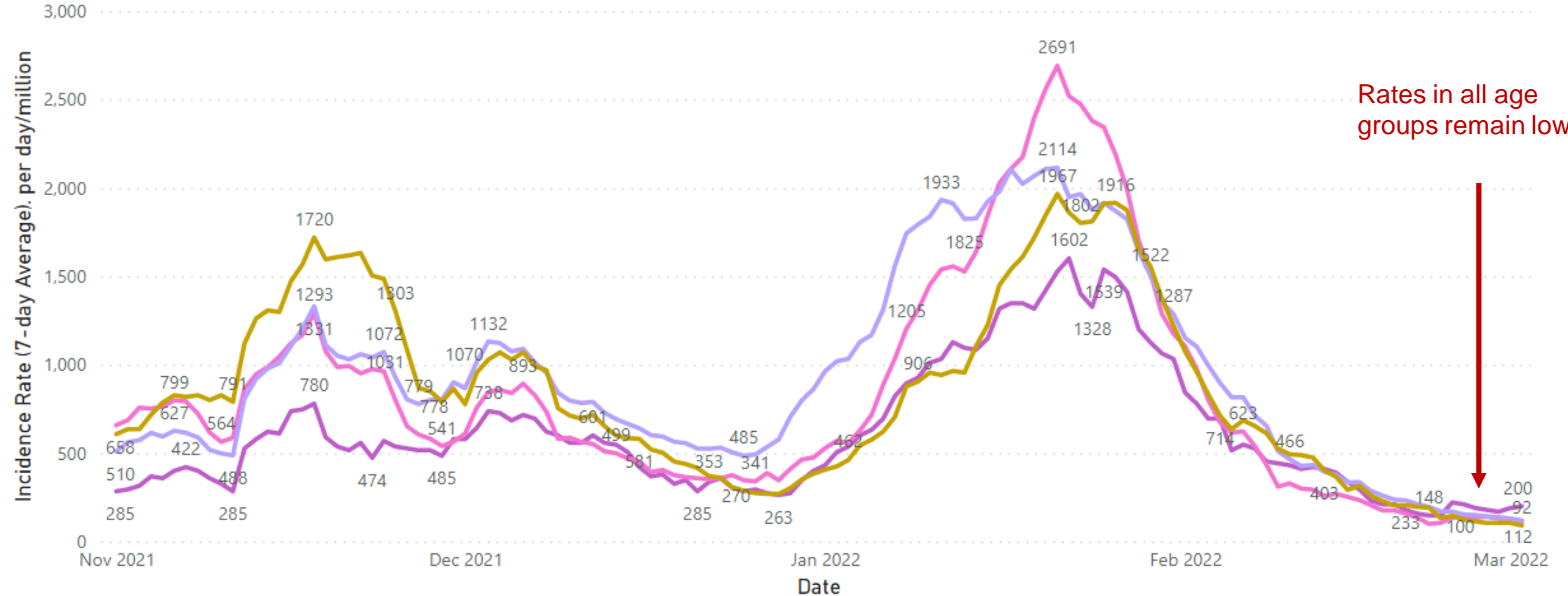
**Note:** Use of at home tests likely reduces the number of positive tests reported to Public Health, resulting in artificially deflated case counts.  
**Source:** Michigan Department of Health and Human Services, Michigan Disease Surveillance System

# Ottawa County - Case Rate Trends – by Age

COVID-19 Case Rates by Age, includes School-Aged, November 2021 – March 2, 2022

Incidence Rate (7-day Average)

rategroup ● 0-3 ● 12-17 ● 18+ ● 4-11



Rates in all age groups remain low.

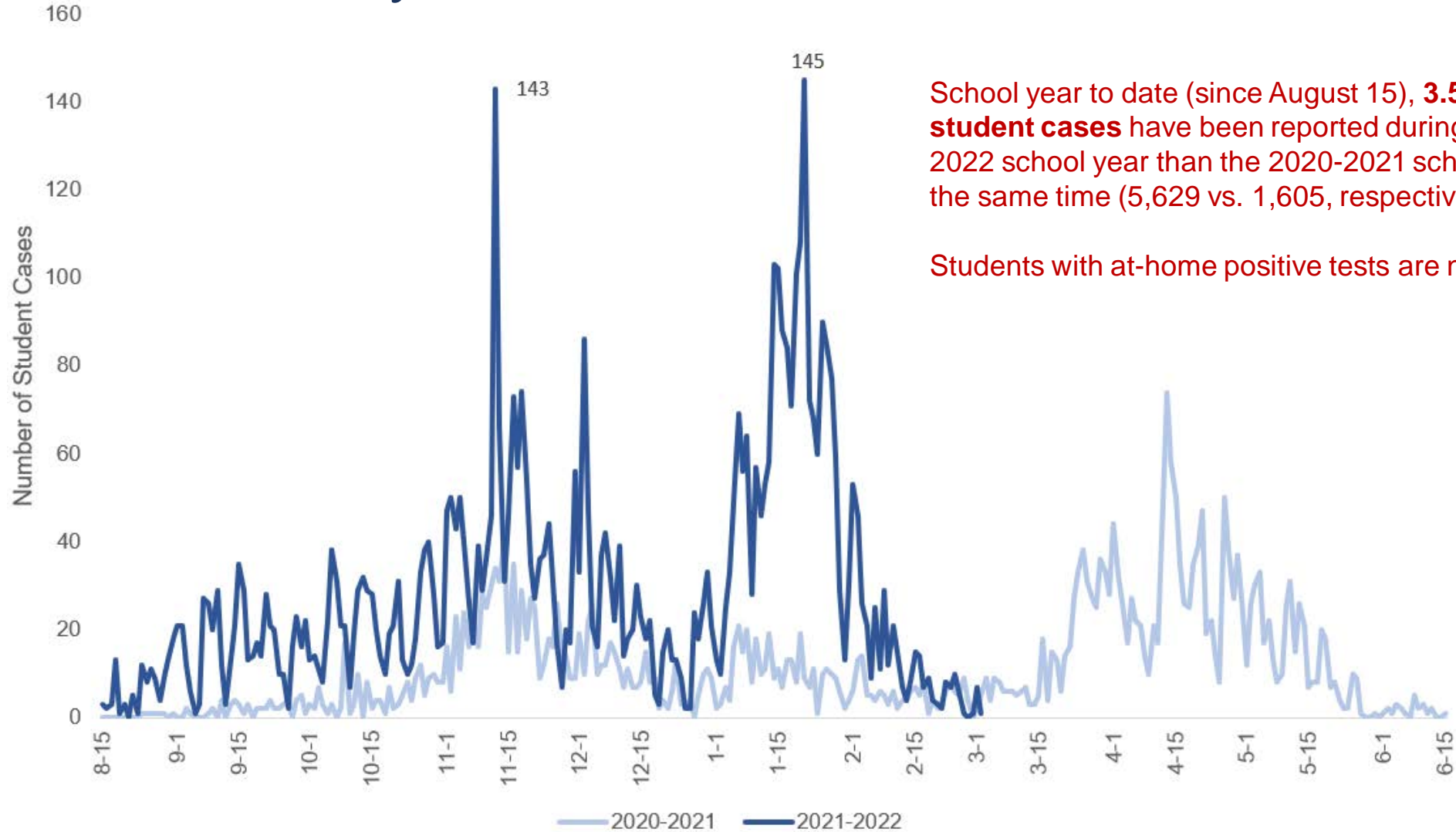


**Note:** Use of at home tests likely reduces the number of positive tests reported to Public Health, resulting in artificially deflated case rates.

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



# Ottawa County Cases in PreK-12 School Students



School year to date (since August 15), **3.5x more student cases** have been reported during the 2021-2022 school year than the 2020-2021 school year at the same time (5,629 vs. 1,605, respectively).

Students with at-home positive tests are not included.

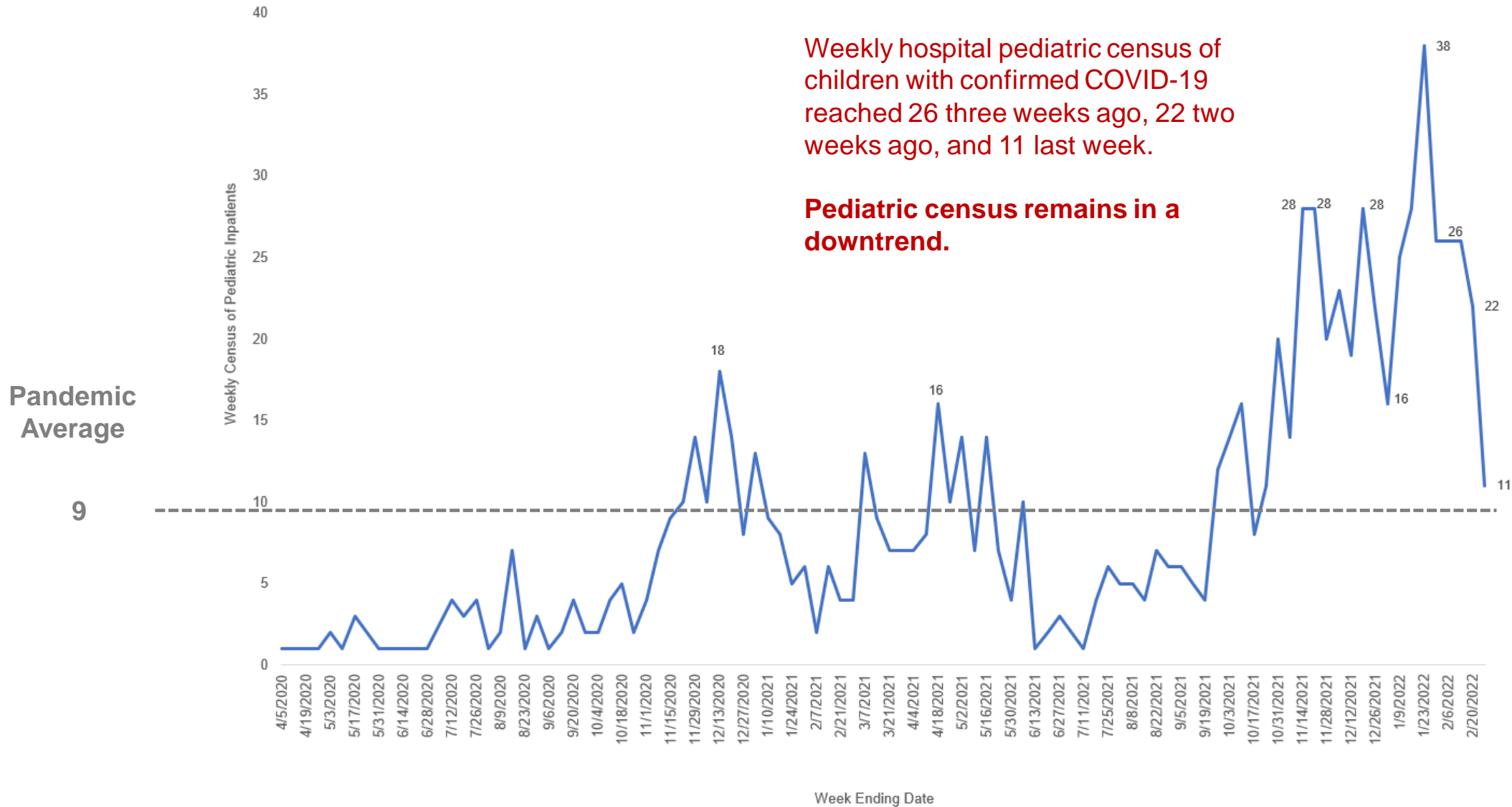
**Method:** Includes PreK-12 students known to attend a school in Ottawa County who are classified as a confirmed or probable case of COVID-19.

**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 March 2, 2022

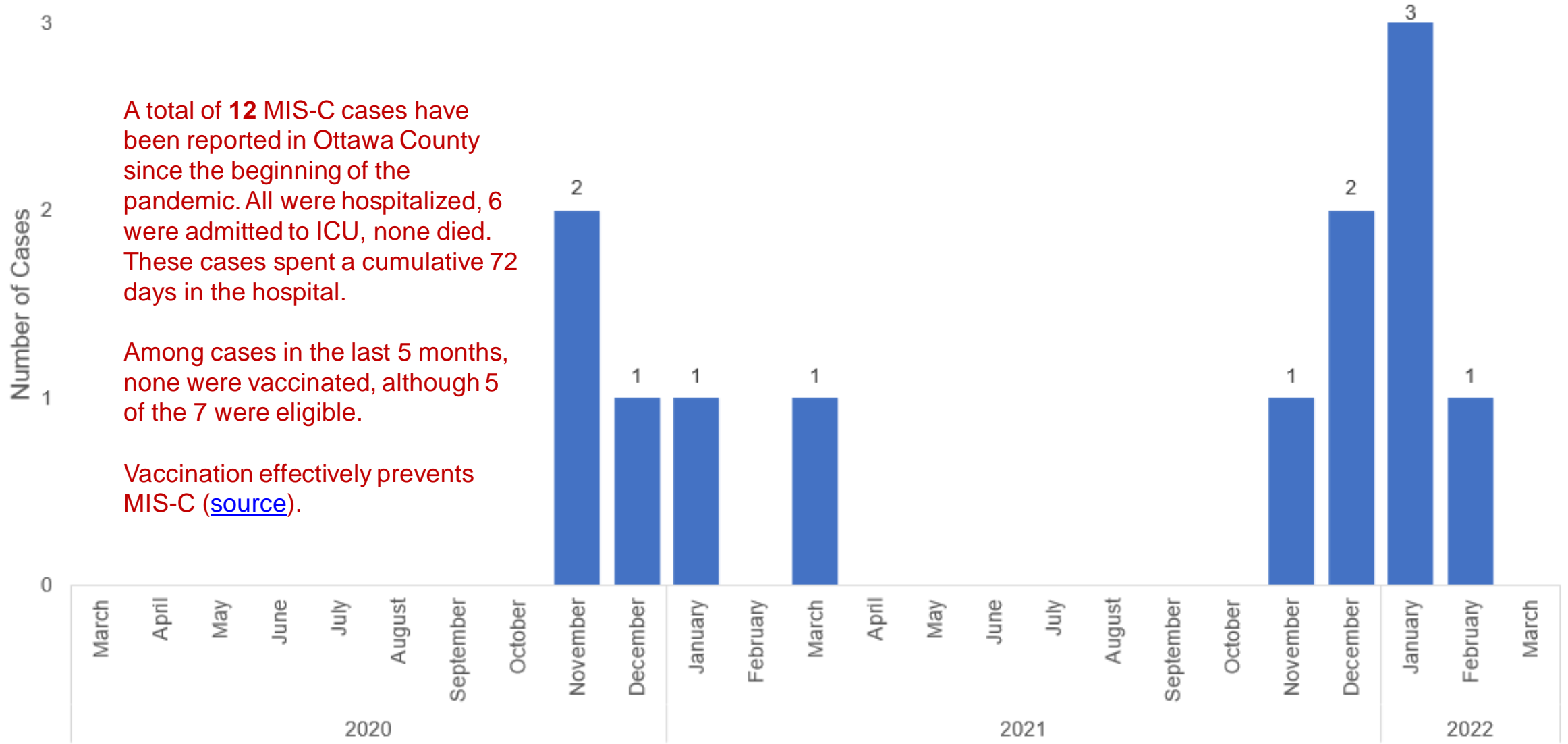
# Weekly Hospital Pediatric Census – A Regional Healthcare System



**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 February 27, 2022

# Ottawa County MIS-C\* Cases by Month



A total of **12** 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 72 days in the hospital.

Among cases in the last 5 months, none were vaccinated, although 5 of the 7 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>

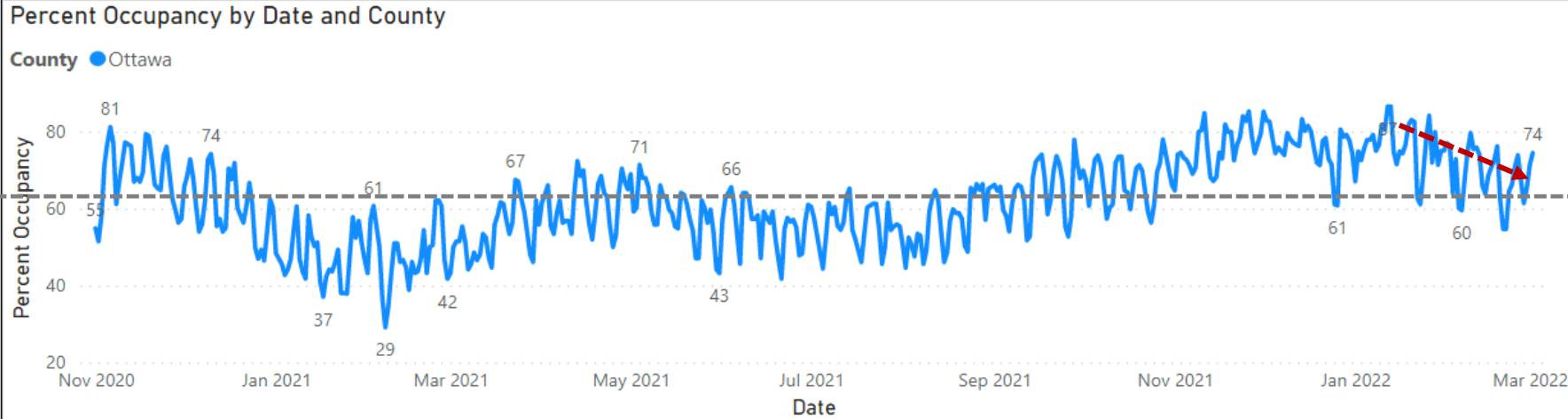
Data through March 2, 2022

# Ottawa County Hospital Capacity – All Beds

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

Pandemic Average

62%



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

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

15%

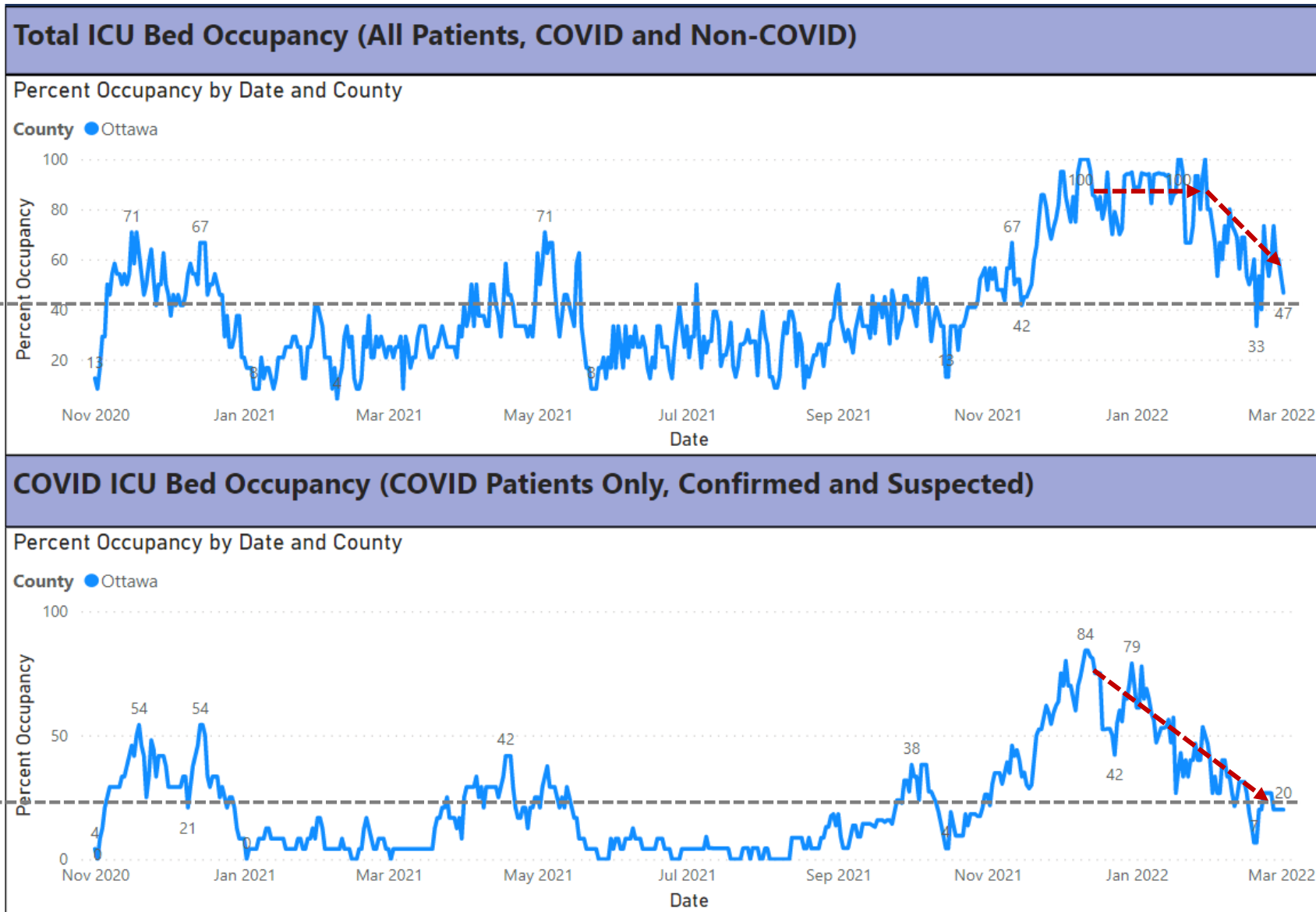


Currently **6%** of all inpatient beds are occupied by COVID-19 patients. The proportion of beds occupied by COVID-19 patients is in a downtrend, after peaking in early December 2021.

Source: EMResources

Data through March 2, 2022

# Ottawa County Hospital Capacity – ICU Beds



Pandemic Average

43%

Overall ICU bed occupancy **remains slightly above the pandemic average (47%)**.

23%

The proportion of ICU beds occupied by COVID-19 patients **has reached the pandemic average**. Currently, **20%** of all ICU beds are occupied by COVID-19 patients, but a downtrend is observed.

Source: EMResources

Data through March 2, 2022

# Spectrum Health Hospitalized COVID-19 Patients

## Spectrum Health COVID-19 Hospitalizations



March 1, 2022

**Spectrum Health currently has 148 hospitalized COVID-19 patients. Of these, 98 (66%) are unvaccinated, 36 (24%) are vaccinated\*, and 14 (10%) are up to date\*\*.**



**Of those 148 patients, 31 are currently in the ICU. Of these, 20 (65%) are unvaccinated, 9 (29%) are vaccinated, and 2 (6%) are up to date.**



**Of those 31 ICU patients, 14 are on ventilators. Of these, 10 (72%) are unvaccinated, 3 (21%) are vaccinated, and 1 (7%) is up to date.**



Vaccinated and up to date patients are, on average, 8 years older (68 vs 60) and have an average of 4 co-morbidities compared to 3 for unvaccinated patients.

Data includes pediatric and adult COVID-19 positive inpatients across all Spectrum Health Hospitals.

\*Vaccinated means a person has received their primary series of COVID-19 vaccines.

\*\*Up to date means a person has received all recommended COVID-19 vaccines, including any booster dose(s) when eligible.

Source: <https://www.facebook.com/spectrumhealth/photos/a.126445034231/10159055940494232/>

# Ottawa County Age-Standardized Rates of COVID-19 Cases, Hospitalizations, & Deaths by Vaccination Status

Unvaccinated adults aged 18 years and older had:

1.7x

Risk of Becoming a COVID-19 Case

AND

11.4x

Risk of Dying from COVID-19

8.8x

Risk of Being Hospitalized for COVID-19

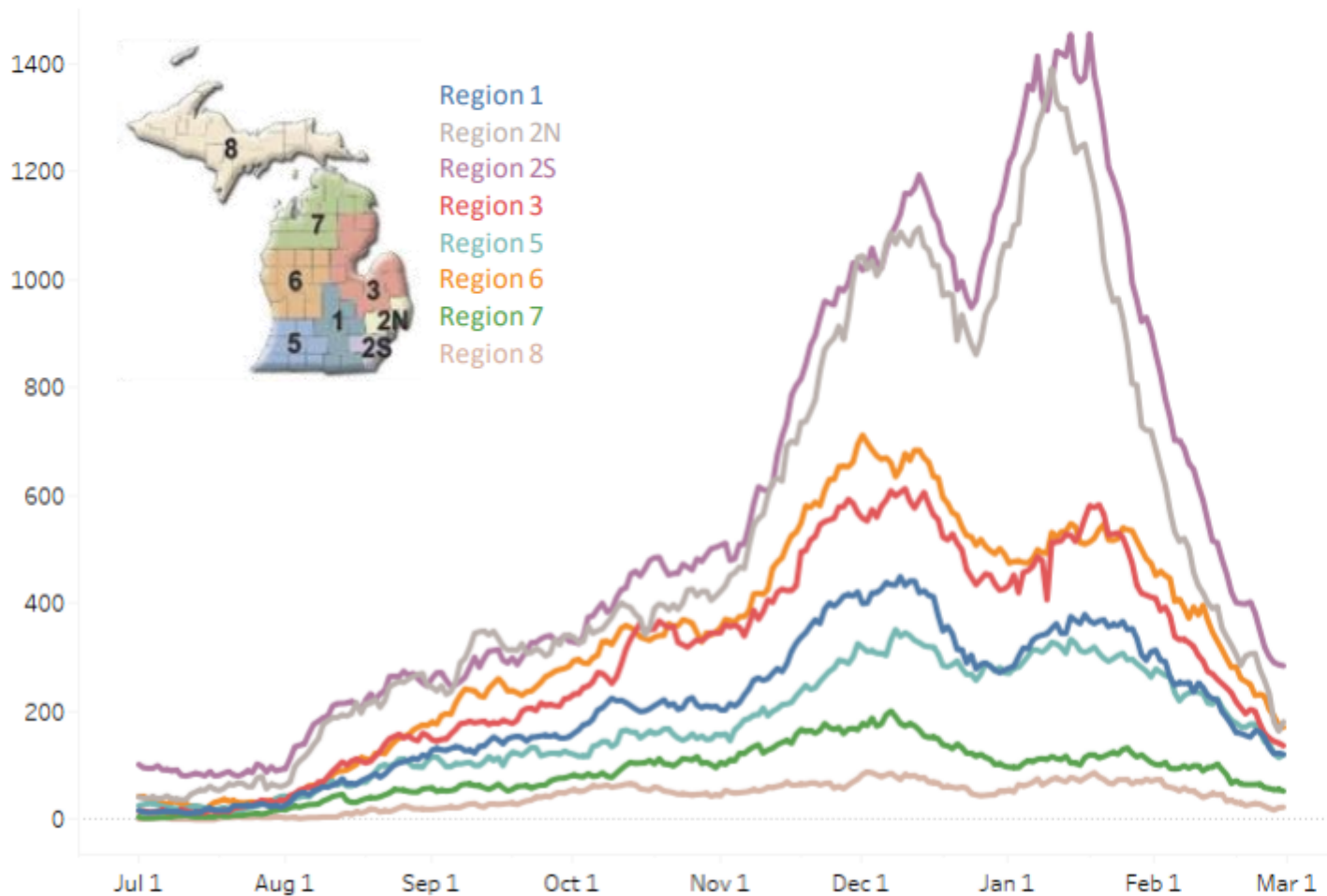
in January 2022, compared to people vaccinated with at least a primary series.

**Notes:** For comparison to the nation please see: <https://covid.cdc.gov/covid-data-tracker/#rates-by-vaccine-stat>

**Methods:** Both probable and confirmed cases were included, denominators were obtained from CDC Wonder (2019), and standardized population is 2000 US population. Methods may be refined, resulting in updated data.

# Statewide Hospitalization Trends: Regional COVID+ Census

Hospitalization Trends 7/1/2021 – 2/28/2022  
Confirmed Positive by Region



This week hospitalizations have decreased in all regions.

All regions have fewer than 150 hospitalized per Million population.

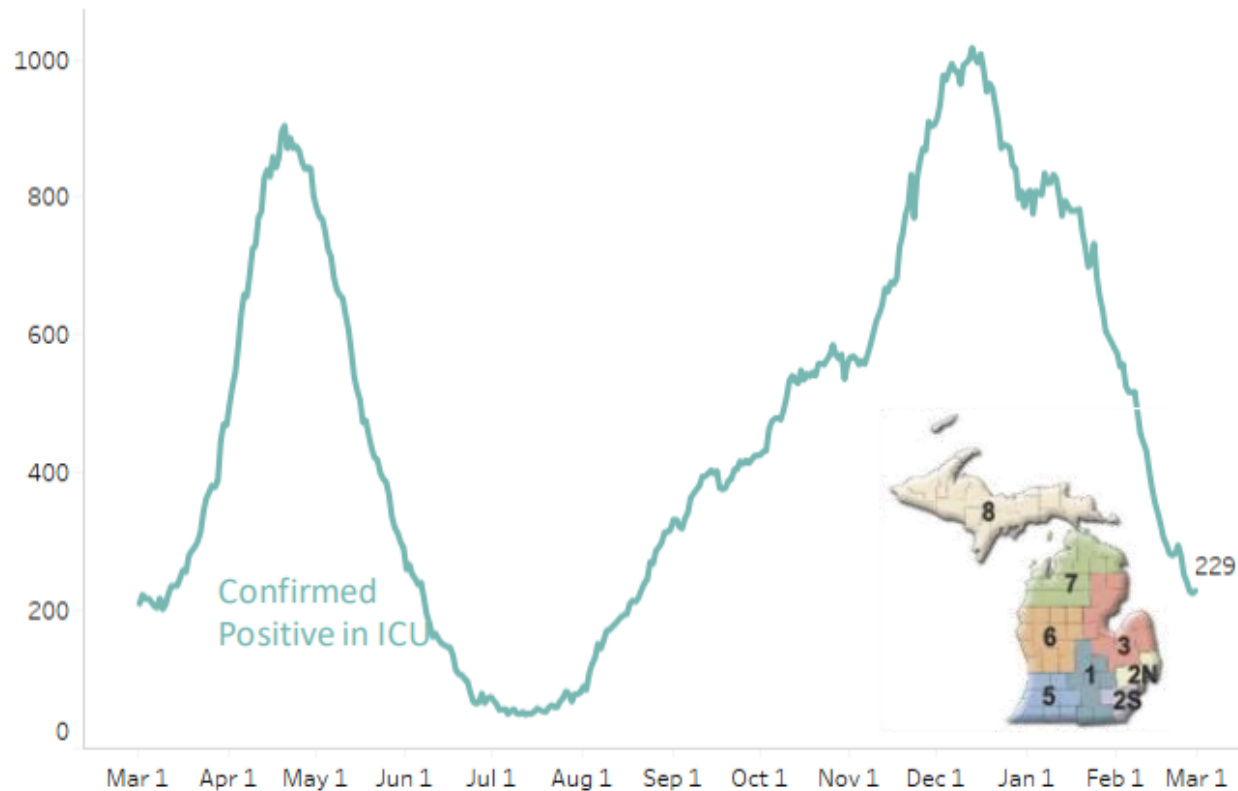
Region	COVID+ Hospitalizations (% Δ from last week)	COVID+ Hospitalizations / MM
Region 1	121 (-21%)	112/M
Region 2N	181 (-41%)	82/M
Region 2S	285 (-29%)	128/M
Region 3	137 (-33%)	121/M
Region 5	120 (-32%)	126/M
Region 6	171 (-32%)	117/M
Region 7	53 (-18%)	106/M
Region 8	23 (-18%)	74/M

Source: MDHHS Data and Modelling: [https://www.michigan.gov/documents/coronavirus/20220222\\_Data\\_and\\_modeling\\_update\\_vPRESENT\\_002\\_748652\\_7.pdf](https://www.michigan.gov/documents/coronavirus/20220222_Data_and_modeling_update_vPRESENT_002_748652_7.pdf)



# Statewide Hospitalization Trends: ICU COVID+ Census

Hospitalization Trends 3/1/2021 – 2/28/2022  
Confirmed Positive in ICUs



Overall, the census of COVID+ patients in ICUs has decreased by 19% from last week (previous week was down by 21%). All regions show decreasing or flat trends in ICU census.

All regions except Region 3 have ICU occupancy below 85%. All regions have 15% or fewer of ICU beds filled with COVID+ patients.

Region	Adult COVID+ in ICU (% Δ from last week)	ICU Occupancy	% of ICU beds COVID+
Region 1	18 (-25%)	79%	10%
Region 2N	28 (-36%)	70%	5%
Region 2S	70 (-18%)	79%	10%
Region 3	37 (-16%)	87%	12%
Region 5	18 (-18%)	67%	10%
Region 6	37 (-10%)	79%	15%
Region 7	15 (-12%)	75%	11%
Region 8	6 (0%)	56%	10%

Source: MDHHS Data and Modelling: [https://www.michigan.gov/documents/coronavirus/20220222\\_Data\\_and\\_modeling\\_update\\_vPRESENT\\_002\\_748652\\_7.pdf](https://www.michigan.gov/documents/coronavirus/20220222_Data_and_modeling_update_vPRESENT_002_748652_7.pdf)

# Pediatric Hospitalization Rates – USA, Georgia, Michigan

United States | 0 - 17 Years



GA | 0 - 17 Years



MI | 0 - 17 Years



Pediatric hospitalization rates across the US, in Georgia, and in Michigan **show continued improvement.**

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

Accessed March 2, 2022

# Pediatric Hospitalization Rates – Select Midwest States

OH | 0 - 17 Years



IN | 0 - 17 Years



IL | 0 - 17 Years

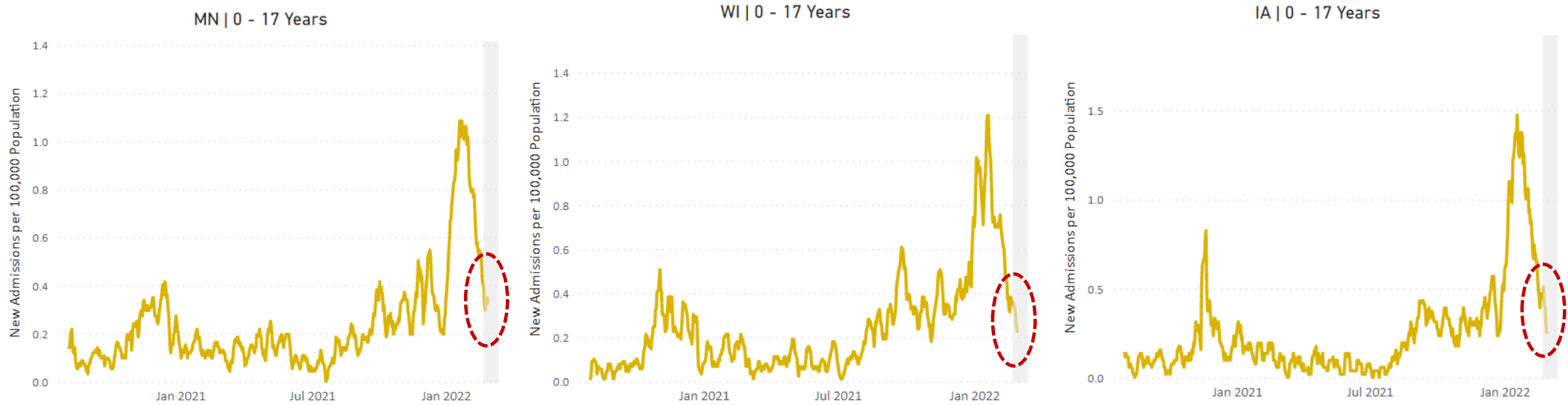


Ohio, Indiana, and Illinois are all showing **improving pediatric hospitalization rates.**

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

Accessed March 2, 2022

# Pediatric Hospitalization Rates – Select Midwest States

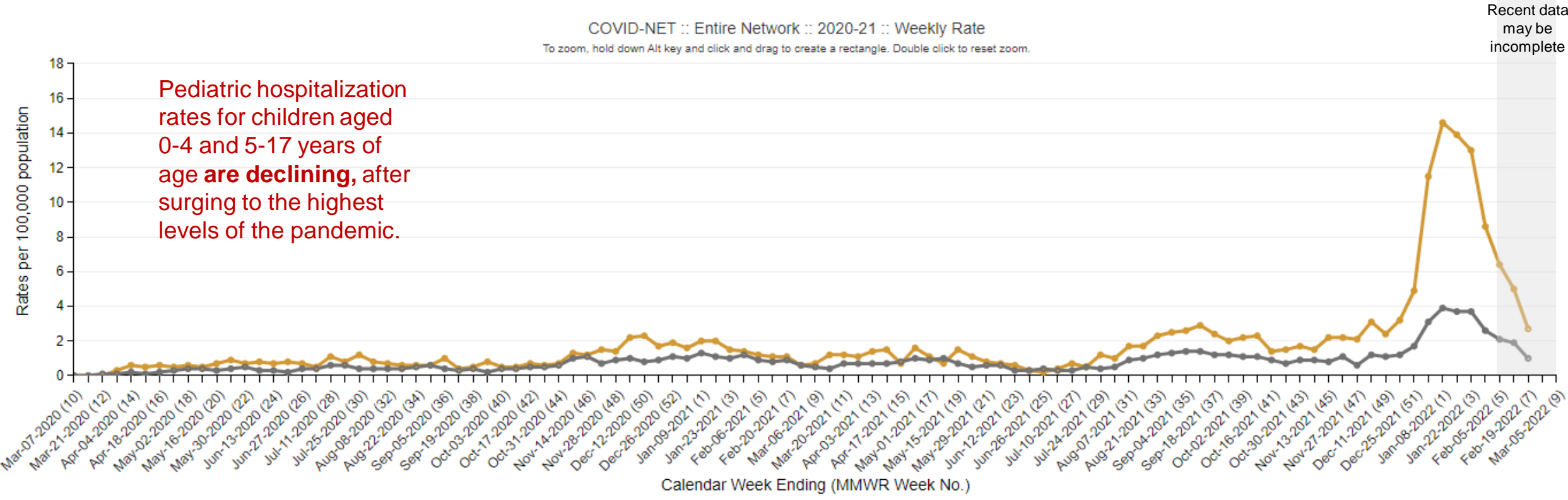


Pediatric hospitalization rates in Minnesota, Wisconsin, and Iowa are declining.

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

Accessed March 2, 2022

# Pediatric Hospitalization Rates by Age Group – USA



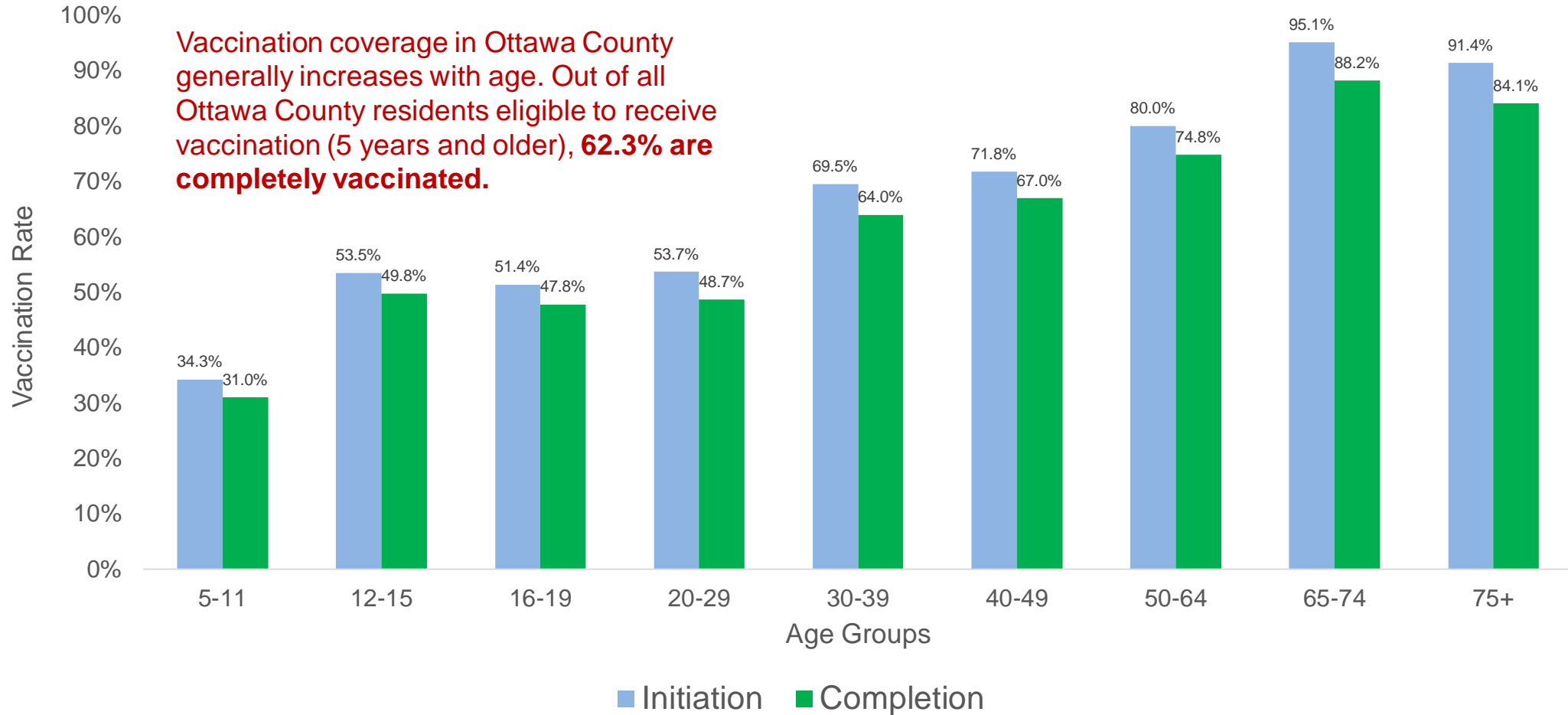
The Coronavirus Disease 2019 (COVID-19)-Associated Hospitalization Surveillance Network (COVID-NET) hospitalization data are preliminary and subject to change as more data become available. In particular, case counts and rates for recent hospital admissions are subject to lag. Lag for COVID-NET case 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 March 2, 2022

# Vaccination Coverage by Age



**Notes:**

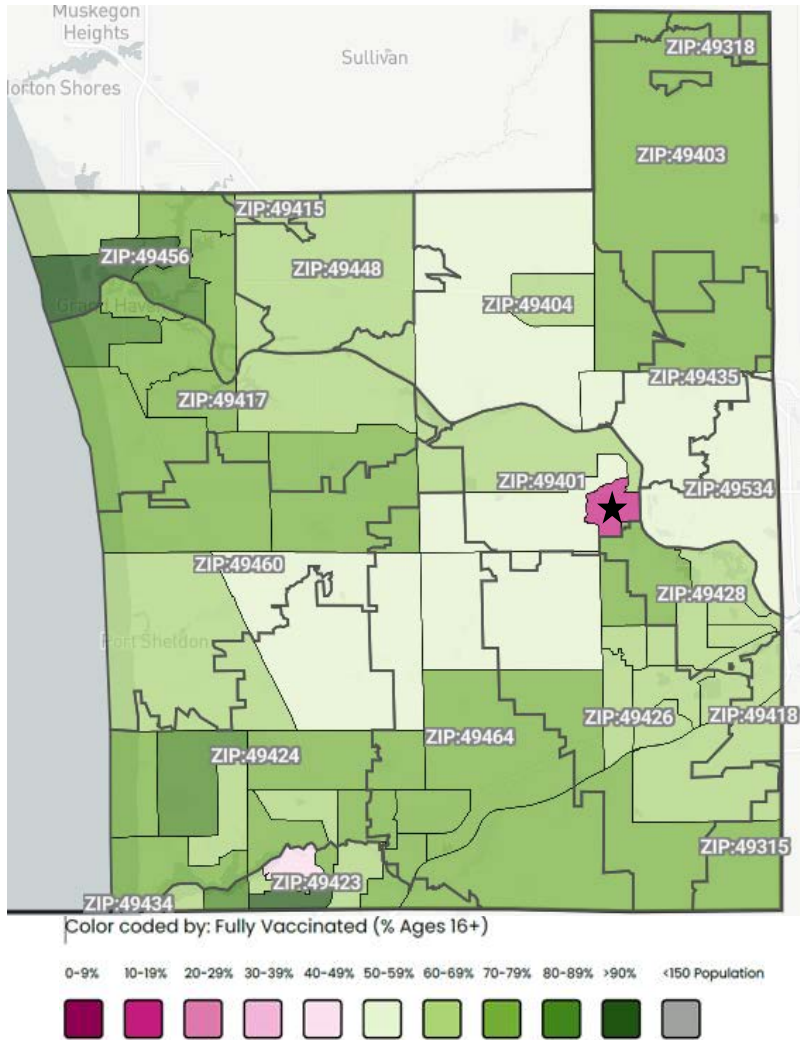
Completion is the percentage of people receiving at least 2 doses of Pfizer or Moderna or 1 dose of J&J.

Source: [https://www.michigan.gov/coronavirus/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)

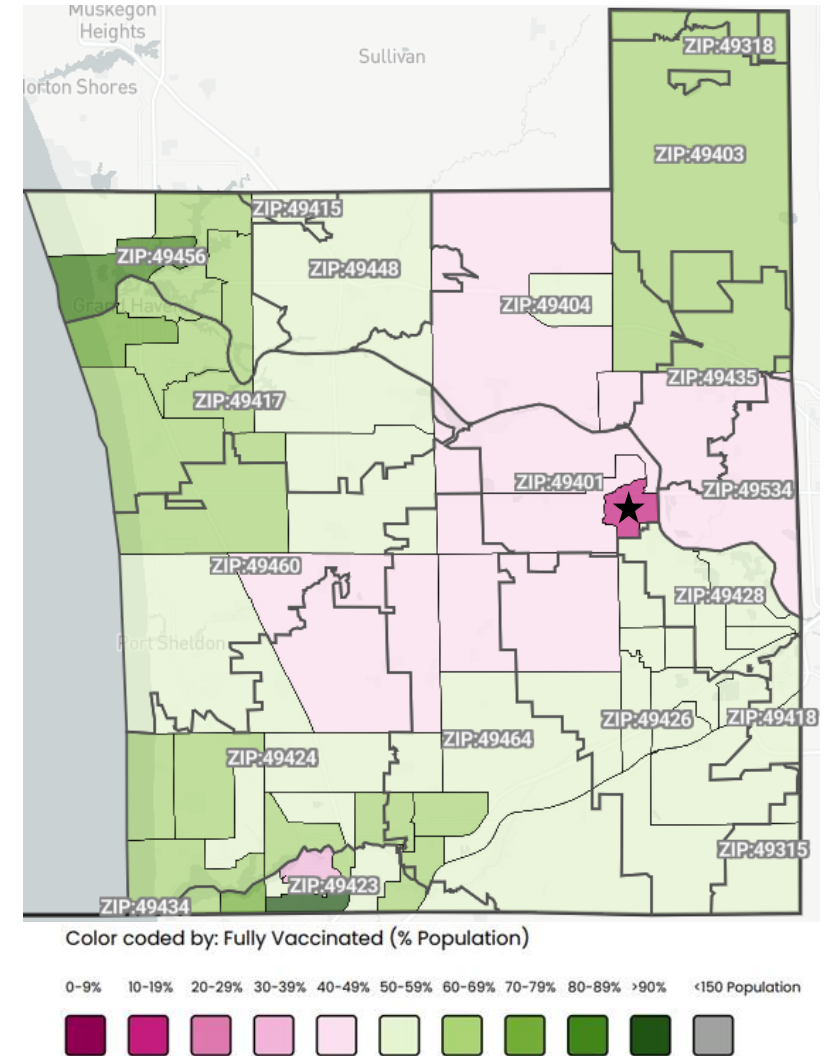
Data through March 1, 2022

# Vaccination Coverage by Place of Residence

Fully vaccinated: % Ages 16+ years



Fully vaccinated: % Total Population



Vaccination rates vary across Ottawa County, but most areas have at least 50% of the population aged 16+ completely vaccinated (**left**).

When considering the entire population (not just those aged 16+), there are pockets of the county with much higher and much lower vaccination rates (**right**).

★ The vaccination rate for this census tract is likely underestimated because census estimates in this tract may be inflated by seasonal students at a large university.

# Cumulative Cases by Vaccination Status, Ottawa County, January 15, 2021 – February 26, 2022

Fully Vaccinated People (170,346 )	
Cases	Deaths
Percent of Cases in People Not Fully Vaccinated (35,872 / 53,930) <b>66.5%</b>	Percent of Deaths in People Not Fully Vaccinated (276 / 420) <b>65.7%</b>
Total Cases Not Fully Vaccinated <b>35,872</b>	Total Deaths Not Fully Vaccinated <b>276</b>
Total Breakthrough Cases <b>18,058</b>	Total Breakthrough Deaths <b>144</b>
Percent of Fully Vaccinated People who Developed COVID-19 (18,058 / 170,346) <b>10.6%</b>	Percent of Fully Vaccinated People who Died of COVID-19 (144 / 170,346) <b>0.09%</b>
Percent of Cases who were Fully Vaccinated (18,058 / 53,930) <b>33.5%</b>	Percent of Deaths who were Fully Vaccinated (144 / 420) <b>34.3%</b>
Total Cases <b>53,930</b>	Total Deaths <b>420</b>

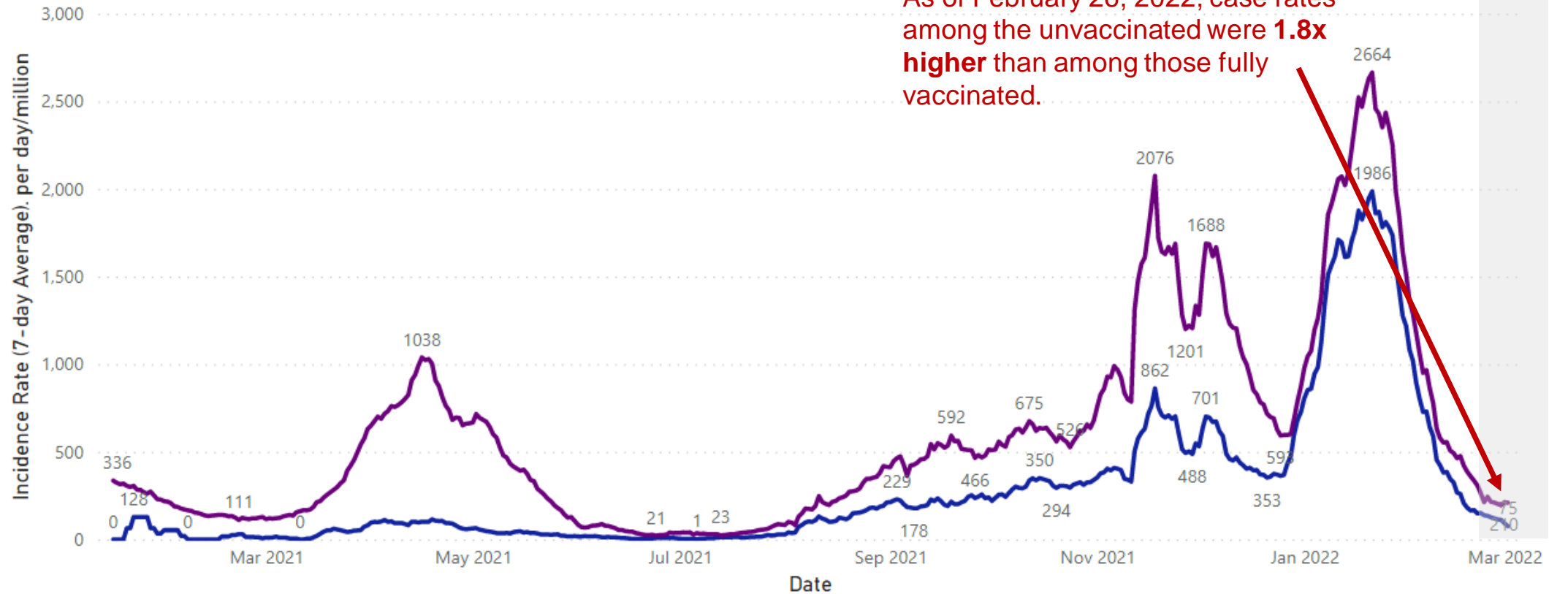
**Sources:**  
Michigan Department of Health and Human Services, Michigan Disease Surveillance System  
MDHHS COVID-19 Dashboard: [https://www.michigan.gov/coronavirus/0,9753,7-406-98178\\_103214\\_103272-547150--00.html](https://www.michigan.gov/coronavirus/0,9753,7-406-98178_103214_103272-547150--00.html)



# Ottawa County COVID-19 Vaccination Breakthrough Case Trends

Incidence Rate (7-day Average)

rategroup ● Fully Vaccinated ● Unvaccinated



As of February 26, 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](#); partially vaccinated persons were excluded.

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

**Sources:**

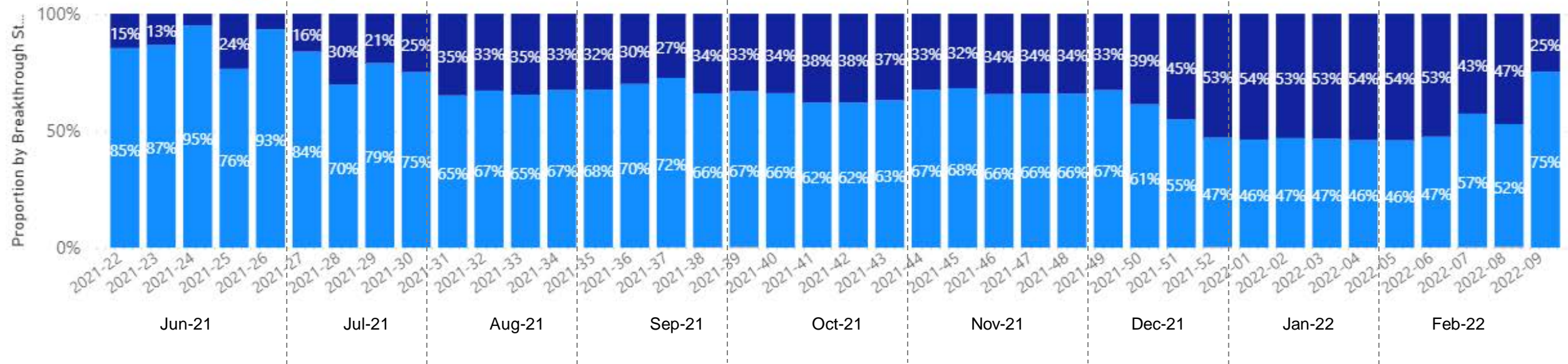
Michigan Department of Health and Human Services, Michigan Disease Surveillance System  
 MDHHS COVID-19 Dashboard: [https://www.michigan.gov/coronavirus/0,9753,7-406-98178\\_103214\\_103272-547150--,00.html](https://www.michigan.gov/coronavirus/0,9753,7-406-98178_103214_103272-547150--,00.html)

# Ottawa County COVID-19 Vaccination Breakthrough Case Trends

## By Week

Breakthrough Proportions by Week

Vaccine\_Breakthrough ● ● NO ● YES



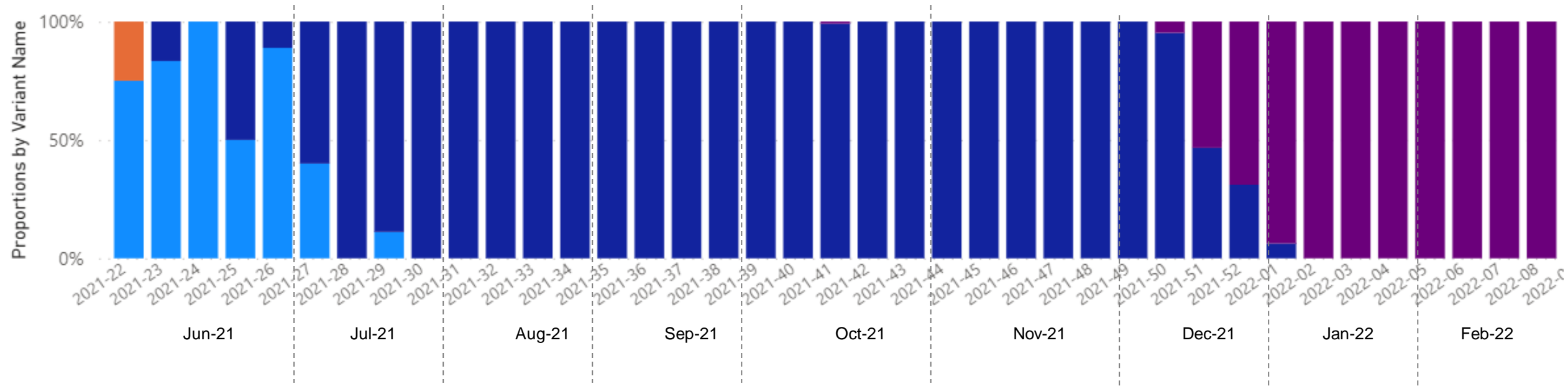
Through the Delta wave, which was most pronounced August through early December of 2021, about 34% of all cases reported to public health were breakthrough cases. At the end of 2021 and into 2022, the proportion of vaccine breakthrough cases increased to roughly 49% of cases reported each week. Weekly breakthrough rates observed in Ottawa County are similar to [other geographies reporting this same data](#).

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

# Variants – Clinical Samples from Ottawa County Residents

Variant Proportions by Week

Variant Name ● Alpha ● Delta ● Gamma ● Omicron

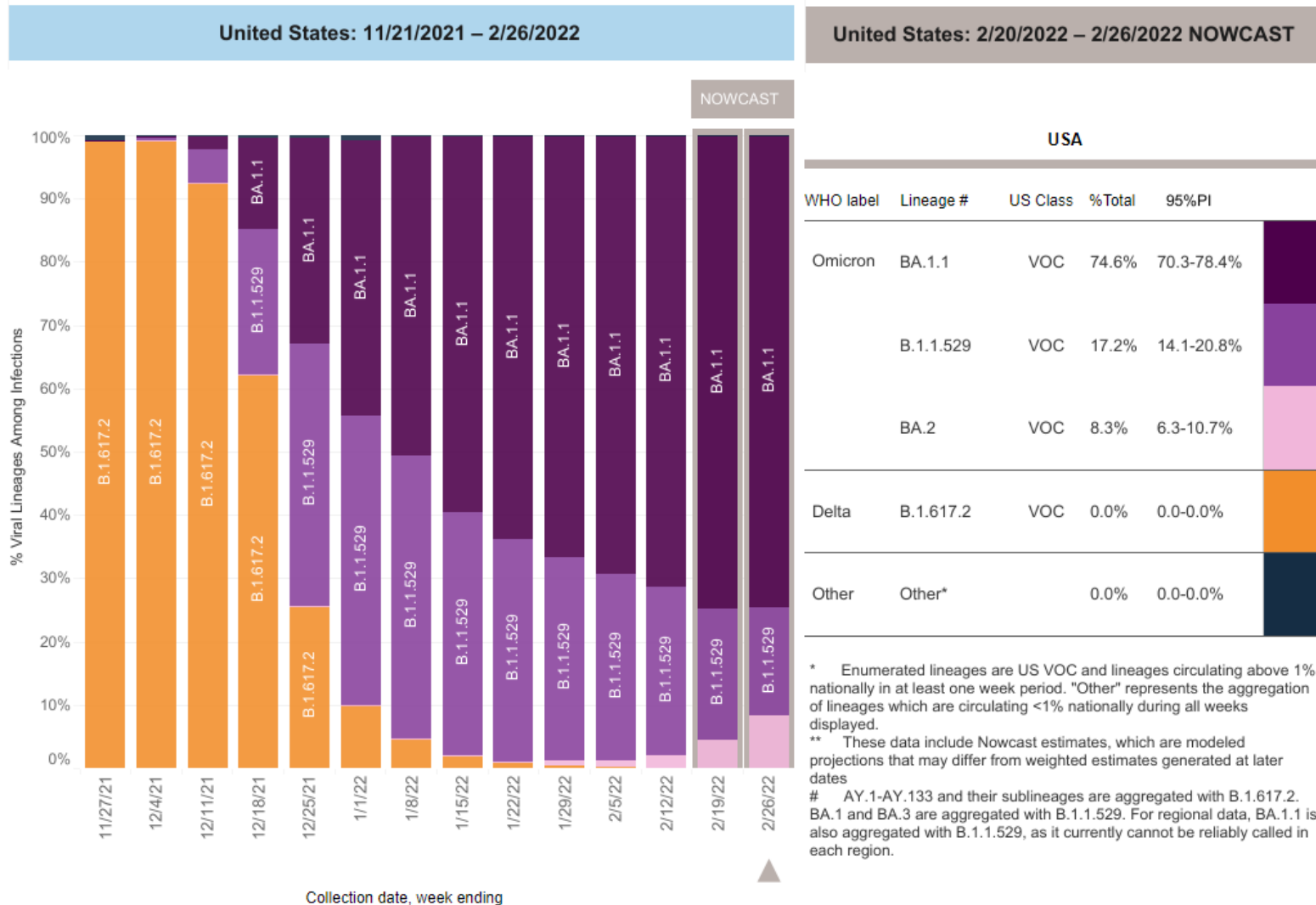


In June of 2021, most clinical samples\* submitted for variant testing came back as the **Alpha** variant. By the end of July 2021, all clinical samples tested were returned as the **Delta** variant. From late July through early December 2021 all clinical samples submitted for variant testing came back positive for 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 (along with **Delta** in wastewater).

\* 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 close to 100% of all clinical samples collected in the United States the week ending February 26, 2022.

Omicron subvariants are also circulating, but their impact on transmission in near-term is unknown.

# Variants – Wastewater Sampling – Holland/Zeeland

Sample Date	Site	Delta	Omicron
01/09/2022	North Holland	N	N
01/10/2022	Zeeland	N	Y
01/12/2022	North Holland	N	Y
01/13/2022	Zeeland	N	Y
01/16/2022	North Holland	N	Y
01/17/2022	Zeeland	N	Y
02/13/2022	North Holland	N	Y
02/14/2022	Zeeland	N	Y
02/16/2022	North Holland	N	Y
02/17/2022	Zeeland	N	Y
2/20/2022	North Holland	N	Y
2/21/2022	Zeeland	N	Y
02/23/2022	North Holland	N	Y
02/24/2022	Zeeland	N	N
02/27/2022	North Holland	N	N
02/28/2022	Zeeland	N	N

Y = Detected  
N = Not Detected

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 consistently detected in wastewater in Holland and Zeeland since early January 2022.

# CDC Community Risk Transmission Levels & Metrics

These CDC Community Risk Transmission Levels are **being replaced** by an updated CDC method for assessing State and County risk.

Indicator - If the two indicators suggest different transmission levels, the higher level is selected	Low Transmission Blue	Moderate Transmission Yellow	Substantial Transmission Orange	High Transmission Red
Total new cases per 100,000 persons in the past 7 days	0-9.99	10-49.99	50-99.99	≥ 100
Percentage of NAATs <sup>1</sup> that are positive during the past 7 days	0-4.99%	5-7.99%	8-9.99%	≥ 10.0%

Ottawa's goal is to be in the Moderate category\*

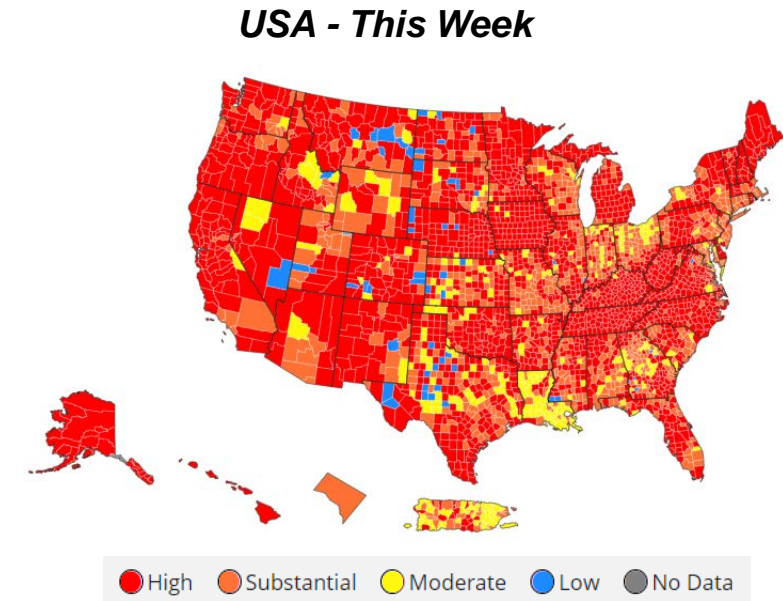
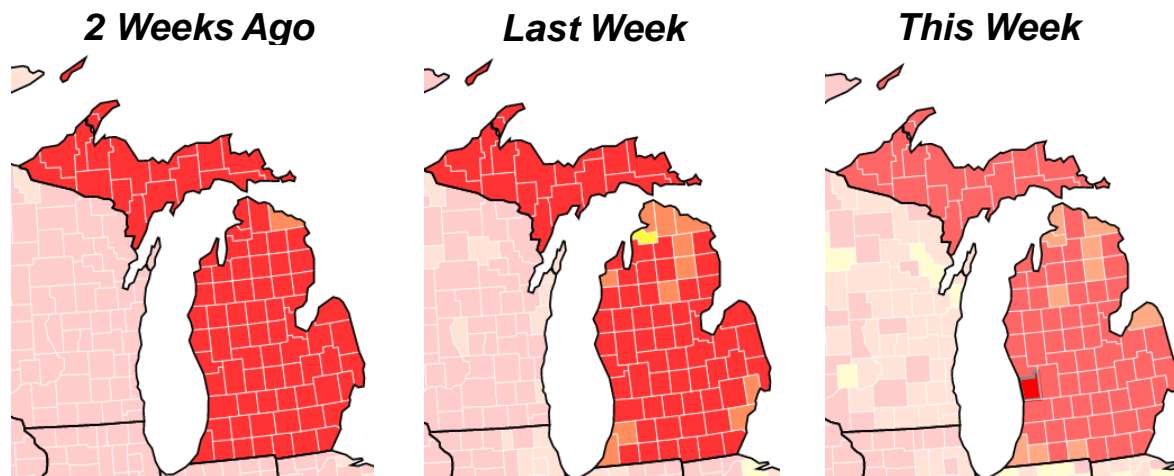
Ottawa is in the High category right now

Source: <https://covid.cdc.gov/covid-data-tracker/#county-view>

# CDC Community Transmission Risk Levels – Ottawa County

- Current Risk Level in Ottawa – **HIGH** (for last **28+** weeks)
- Current Data:
  - Positivity = 7.51%
  - Case Rate = 133.64 cases per week per 100,000

These CDC Community Risk Transmission Levels are **being replaced** by an updated CDC method for assessing State and County risk.

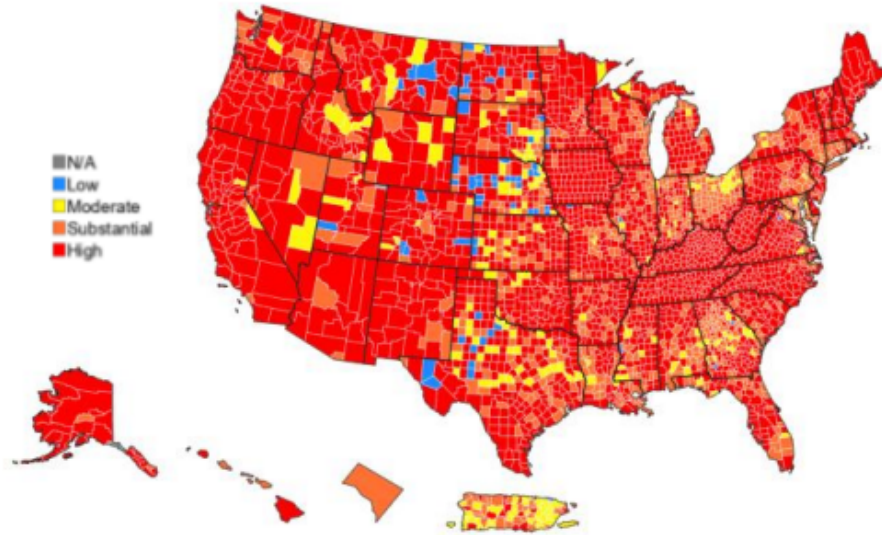


Data through March 1, 2022 for case rates and through February 27, 2022 for positivity.

Source: <https://covid.cdc.gov/covid-data-tracker/#county-view>

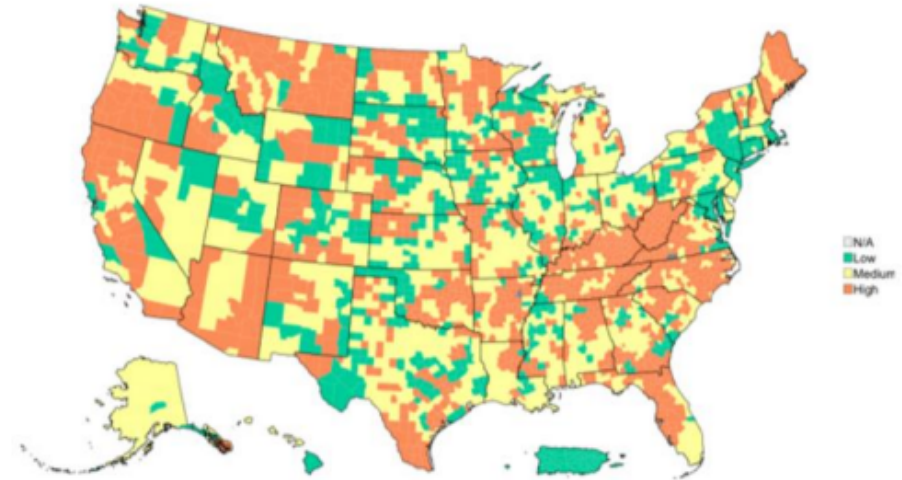
# Comparison between former Levels of Community Transmission and new COVID-19 Community Levels

Former Levels of Community Transmission



Indicator - If the two indicators suggest different transmission levels, the higher level is selected	Low Transmission Blue	Moderate Transmission Yellow	Substantial Transmission Orange	High Transmission Red
Total new cases per 100,000 persons in the past 7 days	0-9.99	10-49.99	50-99.99	≥100
Percentage of NAATs <sup>1</sup> that are positive during the past 7 days	0-4.99%	5-7.99%	8-9.99%	≥10.0%

New COVID-19 Community Levels



COVID-19 Community Levels – Use the Highest Level that Applies to Your Community

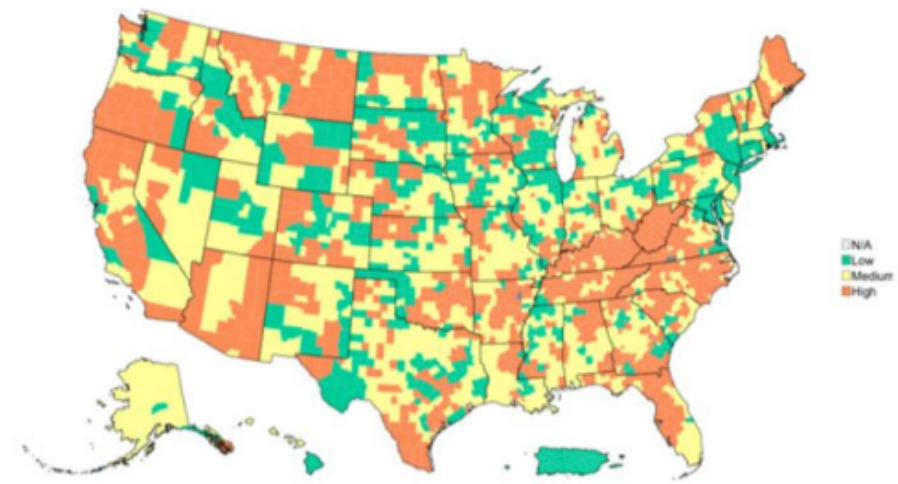
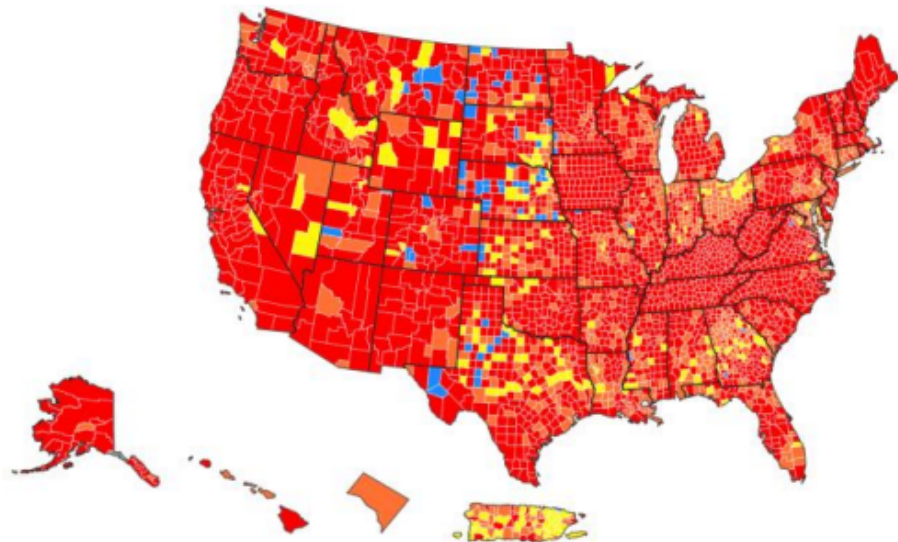
New COVID-19 Cases Per 100,000 people in the past 7 days	Indicators	Low	Medium	High
Fewer than 200	New COVID-19 admissions per 100,000 population (7-day total)	<10.0	10.0-19.9	≥20.0
	Percent of staffed inpatient beds occupied by COVID-19 patients (7-day average)	<10.0%	10.0-14.9%	≥15.0%
200 or more	New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

- On February 25, CDC proposed new COVID-19 Community Levels to assess and predict severe COVID outcomes (i.e., hospitalization capacity, ICU utilization, death)
- New COVID-19 Community Levels consist of Low, Medium, and High as determined by cases per 100K, hospital admissions, and COVID hospital occupancy

Source: [https://www.michigan.gov/documents/coronavirus/20220301\\_Data\\_and\\_modeling\\_update\\_vDRAFT\\_003\\_749180\\_7.pdf](https://www.michigan.gov/documents/coronavirus/20220301_Data_and_modeling_update_vDRAFT_003_749180_7.pdf)



# Comparison between former Levels of Community Transmission and new COVID-19 Community Levels



Community Transmission in US by County

	Total	Percent	% Change
High	2248	69.77%	-20.92%
Substantial	686	21.29%	14.84%
Moderate	219	6.8%	5.4%
Low	67	2.08%	0.65%

	% of Counties	% of Pop.
Low	23.0%	29.5%
Medium	39.6%	42.2%
High	37.3%	28.2%

- Under the former levels, 69.8% of U.S. counties were classified with high community transmission, whereas new levels classify 37.3% of counties with high risk for medically significant disease and healthcare strain
- Under the former levels, 86% (71/83) of Michigan counties were classified as high, whereas new levels classify 20% (17/83) of MI counties as high

**Note:** These new COVID-19 risk levels will be released at least once weekly by CDC and can be found here: <https://www.cdc.gov/coronavirus/2019-ncov/your-health/covid-by-county.html>

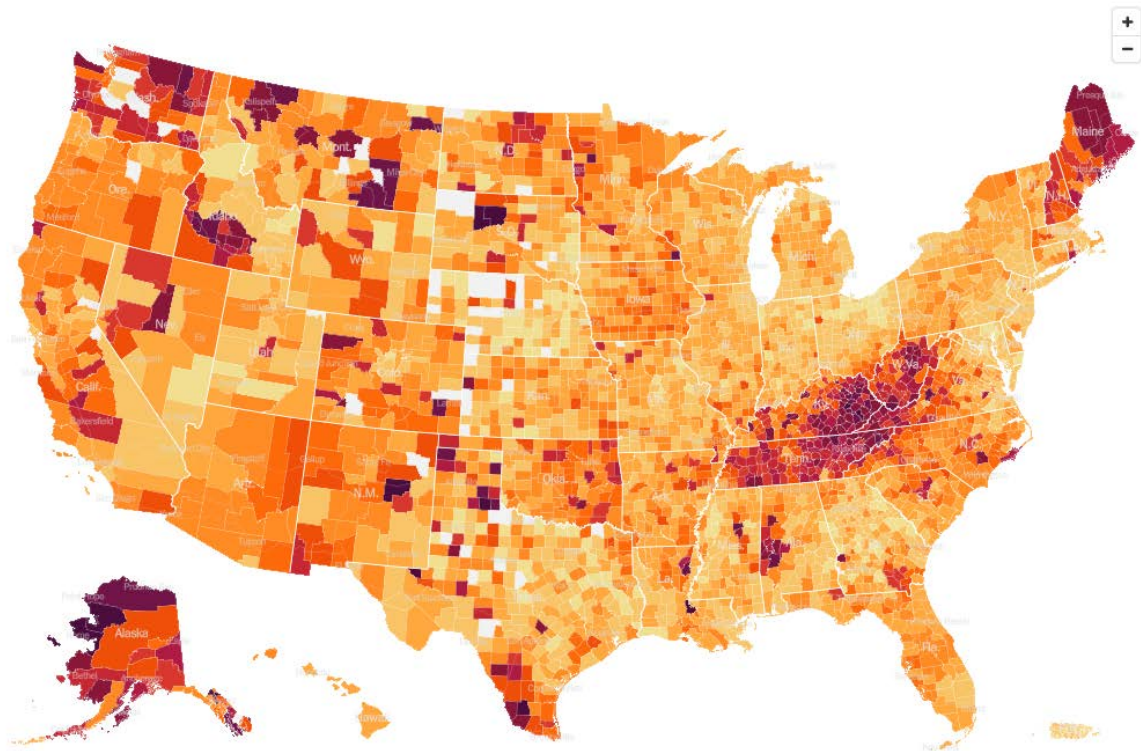
**Source:** [https://www.michigan.gov/documents/coronavirus/20220301\\_Data\\_and\\_modeling\\_update\\_vDRAFT\\_003\\_749180\\_7.pdf](https://www.michigan.gov/documents/coronavirus/20220301_Data_and_modeling_update_vDRAFT_003_749180_7.pdf)

# COVID-19 Case Rates by County Across the US

*Last Week*

Hot spots

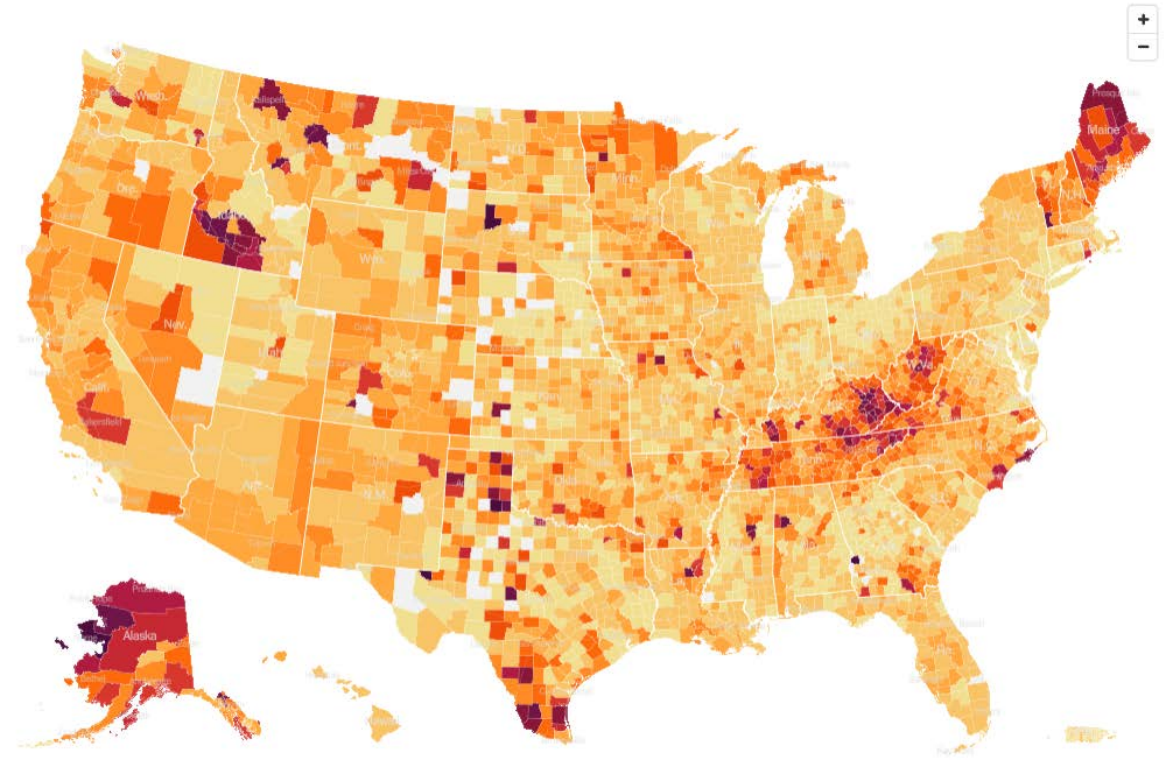
AVERAGE DAILY CASES PER 100,000 PEOPLE IN PAST WEEK  
10 30 50 70 100 200 FEW OR NO CASES



*This Week*

Hot spots

AVERAGE DAILY CASES PER 100,000 PEOPLE IN PAST WEEK  
10 30 50 70 100 200 FEW OR NO CASES



Case rate continue to improve across the nation.

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

Accessed March 2, 2022

USA & MI

Spread

Children

Hospitalizations

Vaccinations

Variants

Risk Levels

Other

Media

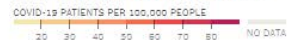
Science Roundup

# COVID-19 Hospitalization Rates by County Across the US

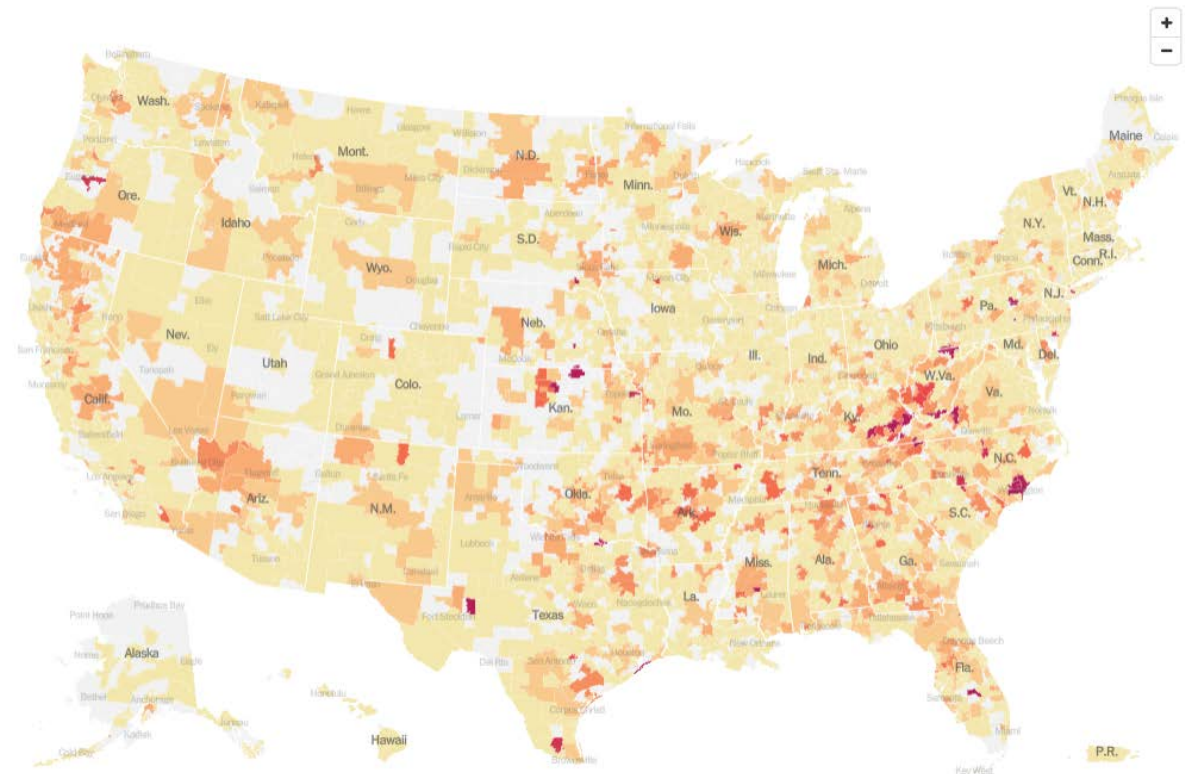
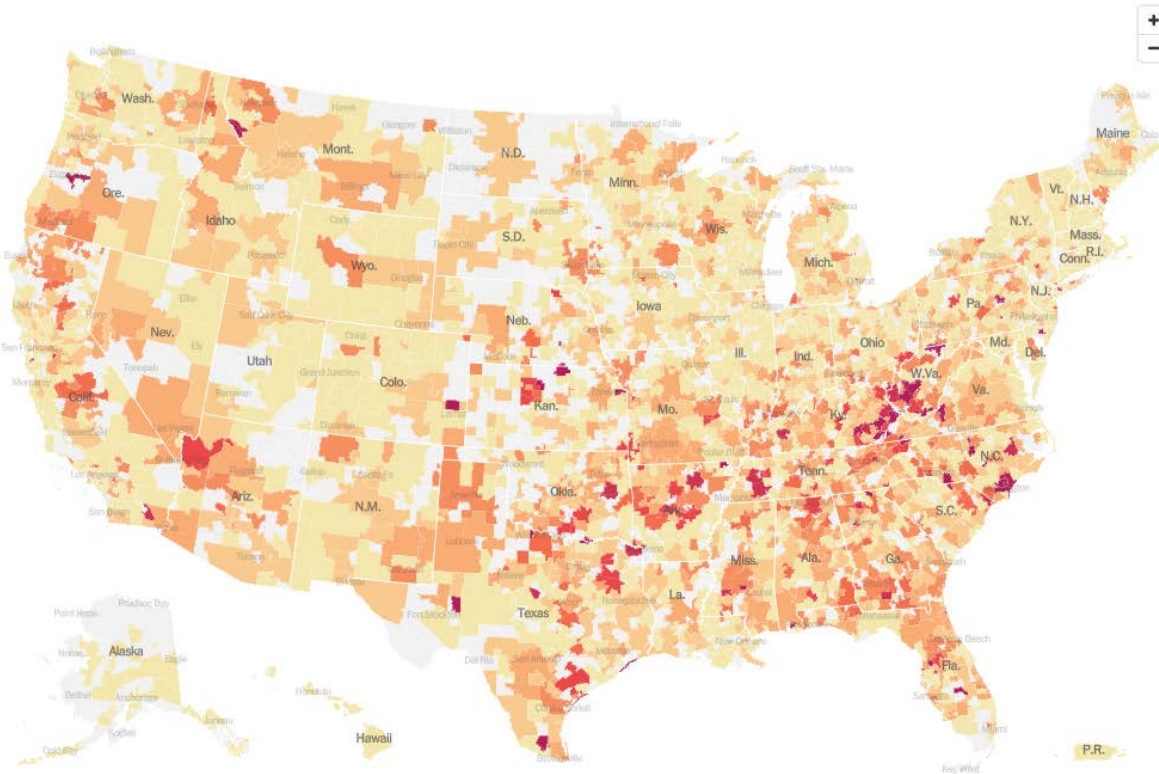
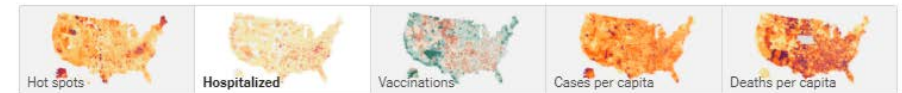
Last Week

This Week

Current hospitalizations



Current hospitalizations



Hospitalization rates continue to improve across the nation.

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

Accessed March 2, 2022

USA & MI

Spread

Children

Hospitalizations

Vaccinations

Variants

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Other

Media

Science Roundup

# Status of School Mask Rules

Place	Status	Tentative Rescind Date
<b>State</b>		
California	In place	March 11, 2022
Connecticut	Rescinded	-
Delaware	Rescinded	-
Hawaii	In place	-
Illinois	Rescinded	-
Maryland	Rescinded	-
Massachusetts	Rescinded	-
New Mexico	Rescinded	-
New Jersey	In place	March 7, 2022
New York	In place	-
Nevada	Rescinded	-
Oregon	In place	March 11, 2022
Rhode Island	In place	March 4, 2022
Washington	In place	March 11, 2022
Washington D.C.	In place	-
<b>Michigan County</b>		
Antrim	Rescinded	-
Benzie	Rescinded	-
Charlevoix	Rescinded	-
Emmet	Rescinded	-
Ingham	Rescinded	-
Leelanau	Rescinded	-
Oakland	Rescinded	-
Otsego	Rescinded	-
Washtenaw	Rescinded	-
Wayne	Rescinded	-
<b>Ottawa School District</b>		
Black River	Rescinded	-
Holland Public	Rescinded	-
Grand Haven Public	Rescinded	-

**Note:** Information is changing rapidly, list may not be comprehensive or up-to-date.

As of March 3, 2022

# COVID-19 News Headlines

## **CDC eases masking guidelines for many Americans**

<https://wwmt.com/news/connect-to-congress/cdc-eases-masking-guidelines-for-many-americans>

## **Daily COVID cases drop to six-month low in Michigan**

<https://www.mlive.com/public-interest/2022/02/daily-covid-cases-drop-to-six-month-low-in-michigan.html>

## **Saugatuck Schools dropping mask mandate Feb. 28**

<https://www.hollandsentinel.com/story/news/education/2022/02/23/saugatuck-schools-dropping-mask-mandate-feb-28/6890894001/>

## **New CDC Covid-19 metrics drop strong mask recommendations for most of the country**

<https://www.cnn.com/2022/02/25/health/cdc-covid-metrics-mask-guidance/index.html>

## **White House unveils plan to move America to a new stage of the Covid pandemic**

<https://www.cnn.com/2022/03/02/politics/new-covid-plan-white-house/index.html>

## **CDC recommends some Americans wait longer between 1st and 2nd COVID vaccine shots**

<https://abcnews.go.com/Health/cdc-recommends-americans-wait-longer-covid-vaccine-shots/story?id=83070150>

# Science Roundup

Global, regional, and national minimum estimates of children affected by COVID-19-associated orphanhood and caregiver death, by age and family circumstance up to Oct 31, 2021: an updated modelling study

[https://www.thelancet.com/journals/lanchi/article/PIIS2352-4642\(22\)00005-0/fulltext](https://www.thelancet.com/journals/lanchi/article/PIIS2352-4642(22)00005-0/fulltext)

← A modelling study found that the global number of children affected by COVID-19 orphanhood and caregiver death nearly doubled from early 2021 to late 2021. Paternal orphanhood was most common.

## Efficacy of Ivermectin Treatment on Disease Progression Among Adults With Mild to Moderate COVID-19 and Comorbidities

The I-TECH Randomized Clinical Trial

<https://jamanetwork.com/journals/jamainternalmedicine/fullarticle/2789362>

← A recent clinical trial found no evidence that ivermectin given during early illness to high-risk patients prevented progression to severe disease.

## Protection against SARS-CoV-2 after Covid-19 Vaccination and Previous Infection

<https://www.nejm.org/doi/full/10.1056/NEJMoa2118691>

← A study in the New England Journal of Medicine found that infection-induced immunity boosted with vaccination remained high after one year.

Effectiveness of COVID-19 Pfizer-BioNTech BNT162b2 mRNA Vaccination in Preventing COVID-19–Associated Emergency Department and Urgent Care Encounters and Hospitalizations Among Nonimmunocompromised Children and Adolescents Aged 5–17 Years — VISION Network, 10 States, April 2021–January 2022

[https://www.cdc.gov/mmwr/volumes/71/wr/mm7109e3.htm?s\\_cid=mm7109e3\\_w](https://www.cdc.gov/mmwr/volumes/71/wr/mm7109e3.htm?s_cid=mm7109e3_w)

← A CDC study found that although vaccination in children and adolescents provided protection against seeking healthcare, effectiveness waned in the Omicron wave, particularly for children 5-11.