

Ottawa County COVID-19 Epidemiology

January 26, 2022

Data as of January 22, 2022, unless otherwise indicated

Executive Summary

- **Transmission in Michigan and the US is very high**
- **Ottawa community transmission levels are very high**
 - This past week positivity remained elevated at 35.2%. The goal is to be less than 8%.
 - Weekly case counts increased 9% (+15% two weeks ago), from 3,708 two weeks ago to 4,042 last week.
 - Cases among children increased 45% (+43% two weeks ago), from 635 two weeks ago to 920 last week.
 - The Omicron variant continues to be detected in clinical samples from Ottawa County residents, and wastewater signals are suggestive of Omicron.
- **Ottawa area and regional hospitals are experiencing high numbers of COVID-19 patients**
 - In Ottawa County, 21% of all available beds and 40% of all ICU beds are occupied by COVID-19 patients.*
 - Regional healthcare systems are strained and asking for the community to take preventive action.
 - Emergency Department diversion was used by one Ottawa-area hospital last week.**
 - Adequate staffing is a challenge for many hospitals in the region.
 - Monoclonal antibody medication and recently approved oral medications may be in short supply.
- **Pediatric hospitalization rates in the US and in Michigan remain very elevated.**
 - In January 2022, MIS-C cases in Ottawa County children reached the highest monthly count of the pandemic (3). MIS-C is a rare but serious condition affecting children, associated with recent COVID-19 infection.
- **Of Ottawa County residents aged 5+, 61.2% 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				
		25-Dec-21	1-Jan-22	8-Jan-22	15-Jan-22	22-Jan-22
Positivity (All Ages)	<8%	18.0%	25.6%	34.8%	35.5%	35.2%
Weekly Cases (All Ages)	<147	915	1735	3230	3708	4042
Weekly Cases in Children (0-17 years of age)	NA	149	214	443	635	920
Total Deaths (All Ages)	0	22	21	16	13	9
CDC Risk Transmission Level	Moderate	High	High	High	High	High

Due to reduced quality, hospitalization data has been removed from this visualization.

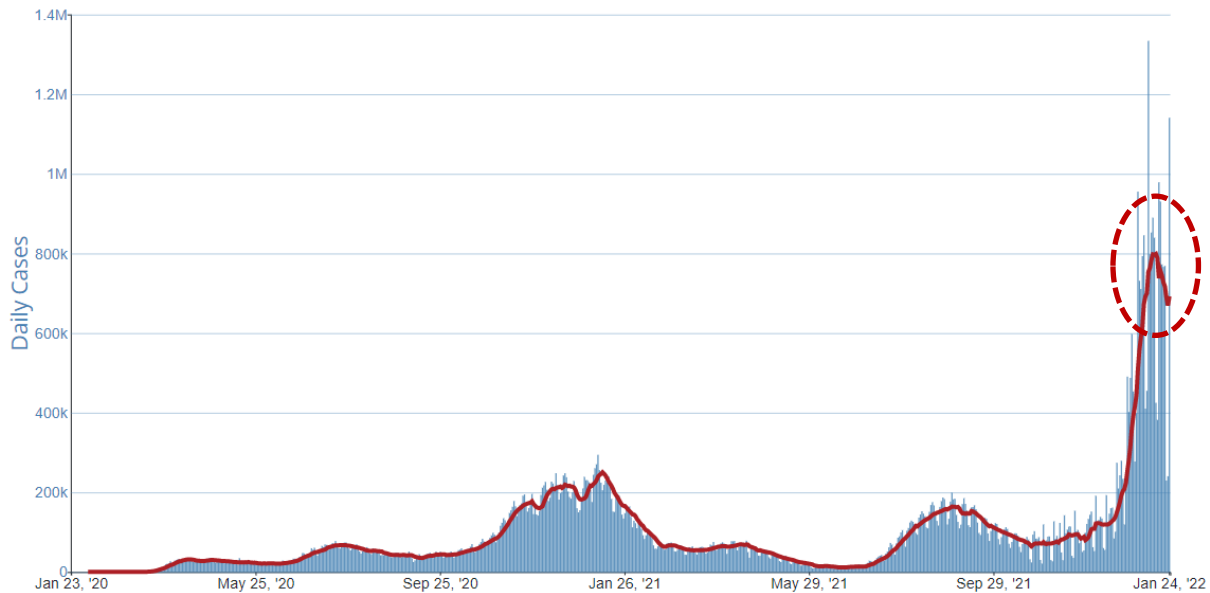
*Test positivity data is currently unavailable due to technical issues being experienced by the MI Safe Start Map.

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

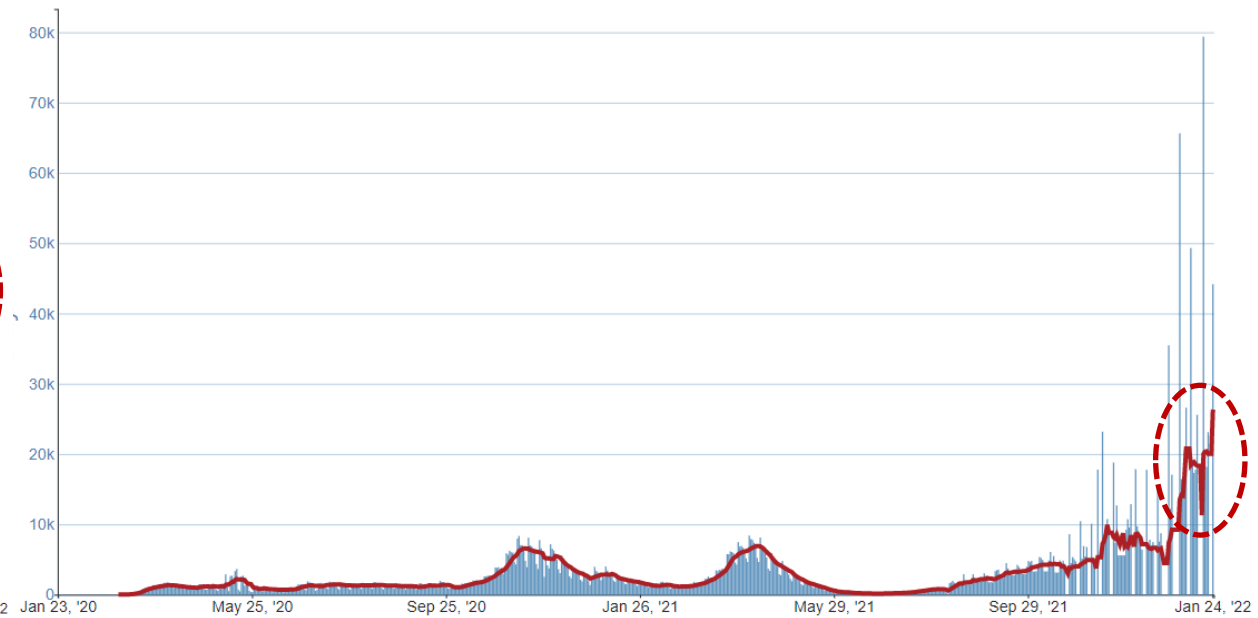
USA

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

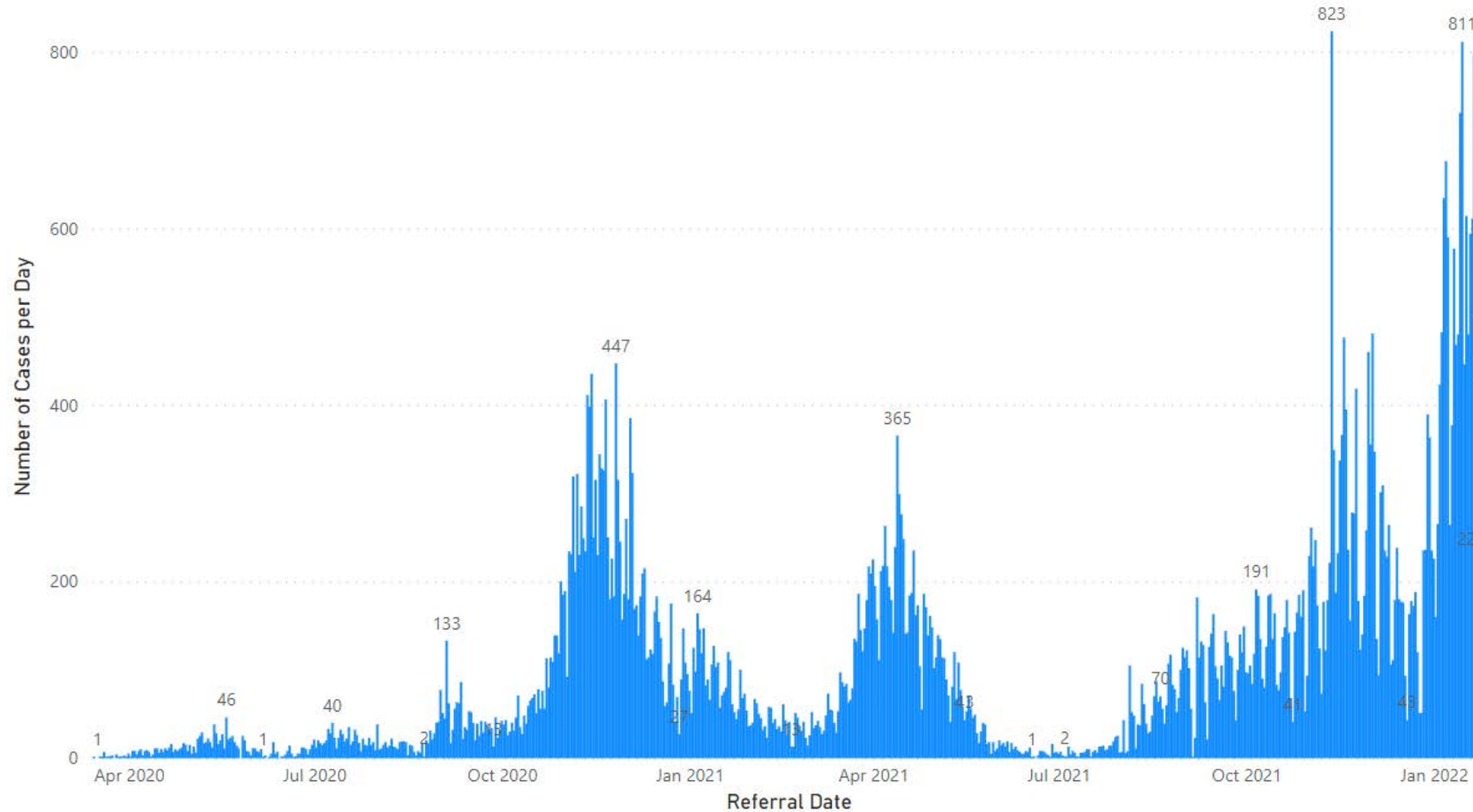


Daily case counts in Michigan and the US remain elevated and near pandemic highs.

Case Trends in Ottawa County

COVID-19 Cases by Day, Ottawa County, March 15, 2020 – January 26, 2022

Epidemiological Curve



Total Number of Cases
69,287

← Currently the 7-day average is **510 cases per day**, slightly lower than the 534 cases per day seen at a similar time last week.

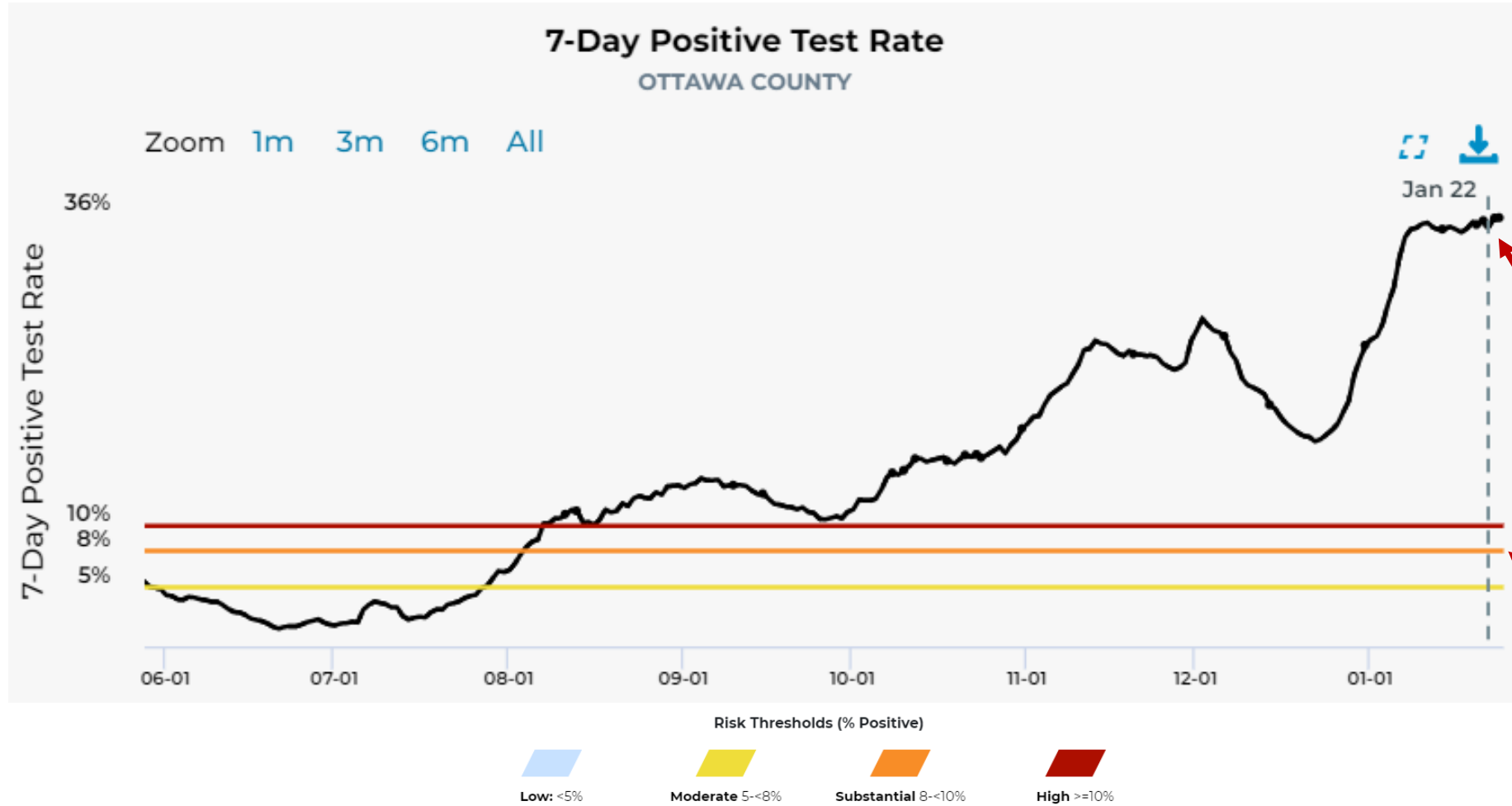
1 in every 23 people in Ottawa County was counted as a case from January 1 – January 26, 2022.

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, June 1, 2021 – January 22, 2022



Test positivity remained elevated at 35.2% as of January 22, 2022.

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

Note: Testing in Ottawa County has remained stable with at least 6000-11,000 tests each week: [Testing Results | Ottawa County Covid-19 Case Summary Data \(arcgis.com\)](#) & <https://www.mistartmap.info/mism-indicators?area=county%3Aottawa>

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

USA & MI

Spread

Children

Hospitalizations

Vaccinations

Variants

Risk Levels

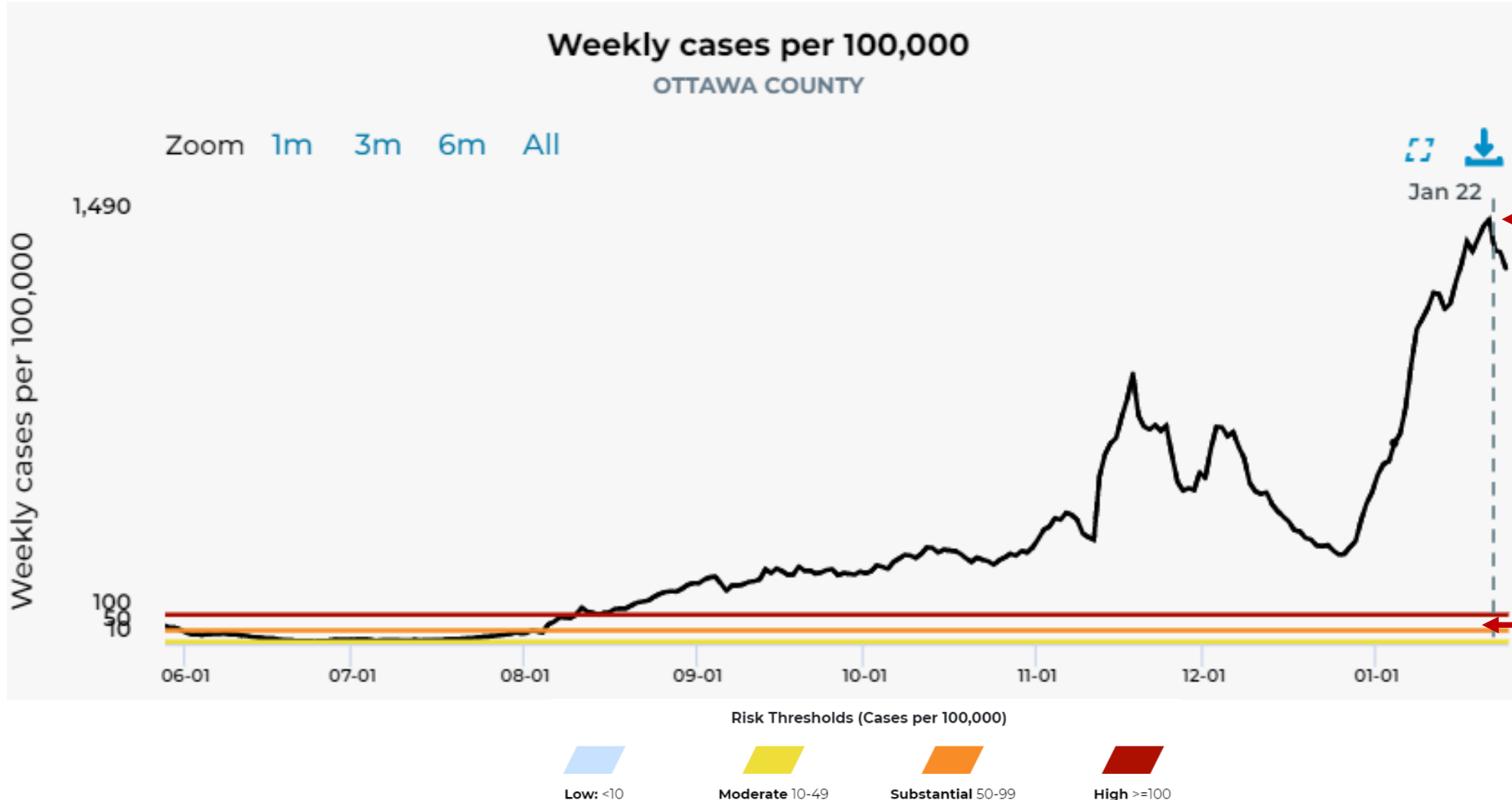
Other

Media

Science
Roundup

Case Rates in Ottawa County – All Ages

COVID-19 Cases by Day, Ottawa County, March 2020 – January 22, 2022



Case rates increased to 1,383 cases per week per 100,000 population (up from 1,262 the week prior). **This is a pandemic high.**

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.

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

Ottawa County Time Trends – Annual Comparison of Case Rates

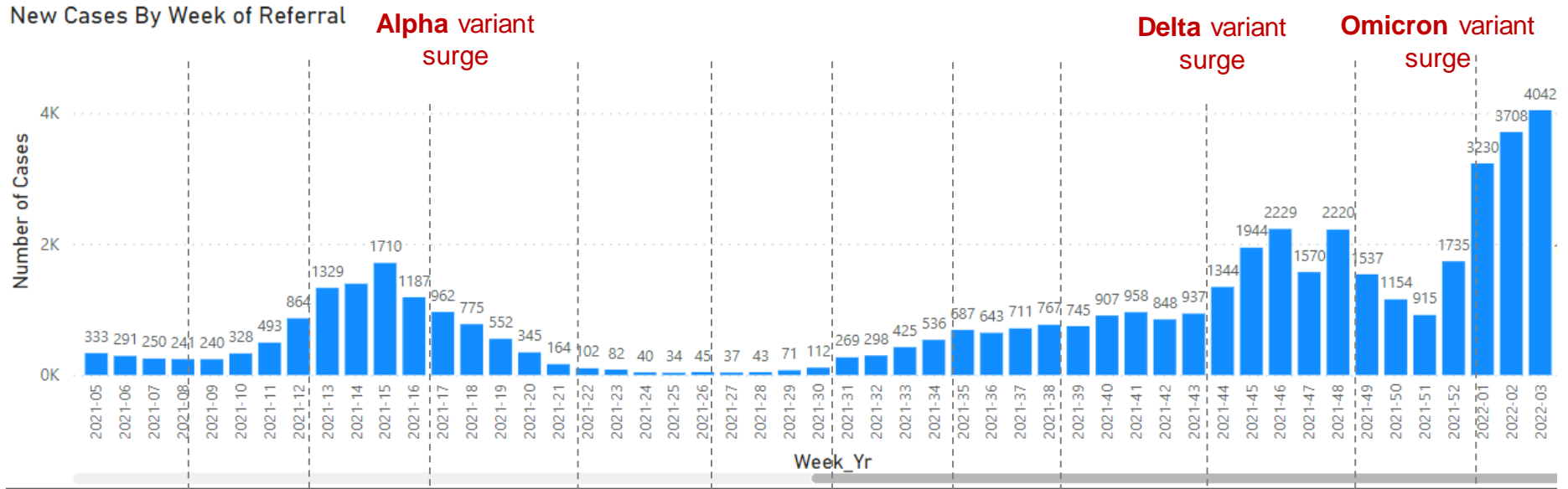


Through much of the late fall of 2021 case rates tracked similarly to 2020. After the first of the year, 2022 rates increased sharply, deviating from trends observed in past years.

Source: Internal Data

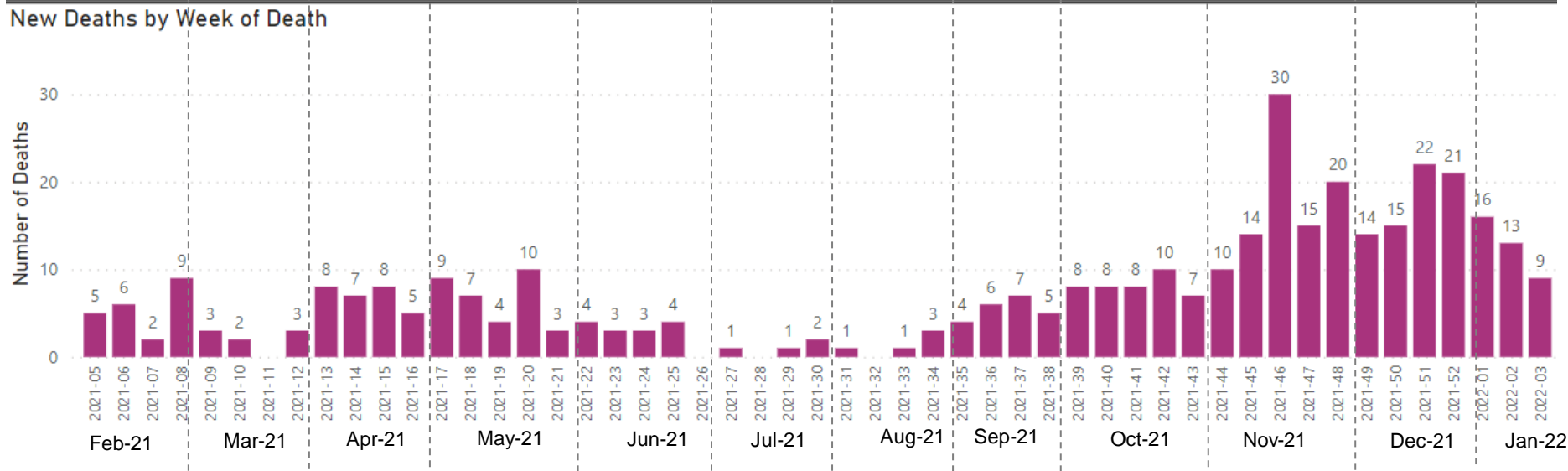
Data through January 25, 2022

Ottawa County – Cases & Deaths by Week, All Ages



The weekly number of cases increased 9% from week 2 to week 3.

Due to reduced quality, hospitalization data has been removed from this visualization.



Weekly COVID-19 deaths have exceeded levels experienced in the spring 2021 wave. Current weekly average of deaths over the last 4 weeks stands at about 15 deaths per week.

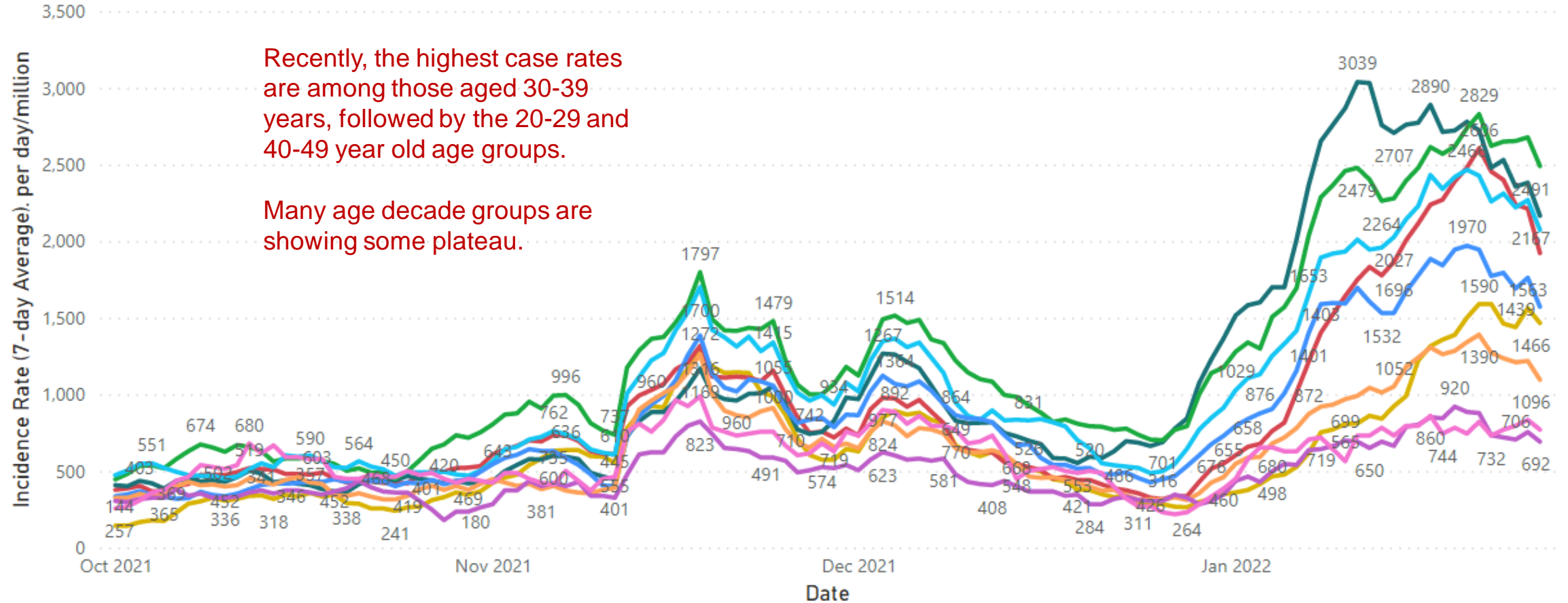
Source: Michigan Department of Health and Human Services, Michigan Disease Surveillance System

Ottawa County - Case Rate Trends – by Age Decade

COVID-19 Case Rates by Age, October 2021 – January 26, 2022

Incidence Rate (7-day Average)

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



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 3 (January 16, 2022 – January 22, 2022)

Age Decade (Years)	Average Daily Cases	Average Daily Case Rate	One Week % Rate Change
0-9	63.6	1725.99	56%
10-19	104.6	2361.14	22%
20-29	111.4	2463.74	-9%
30-39	94.4	2634.18	10%
40-49	75.6	2276.82	5%
50-59	62.1	1781.43	7%
60-69	41.9	1284.48	9%
70-79	15.1	733.31	-8%
80+	8.1	731.23	-8%

The **highest** case rates last week were among those **30-39 and 20-29 years**.

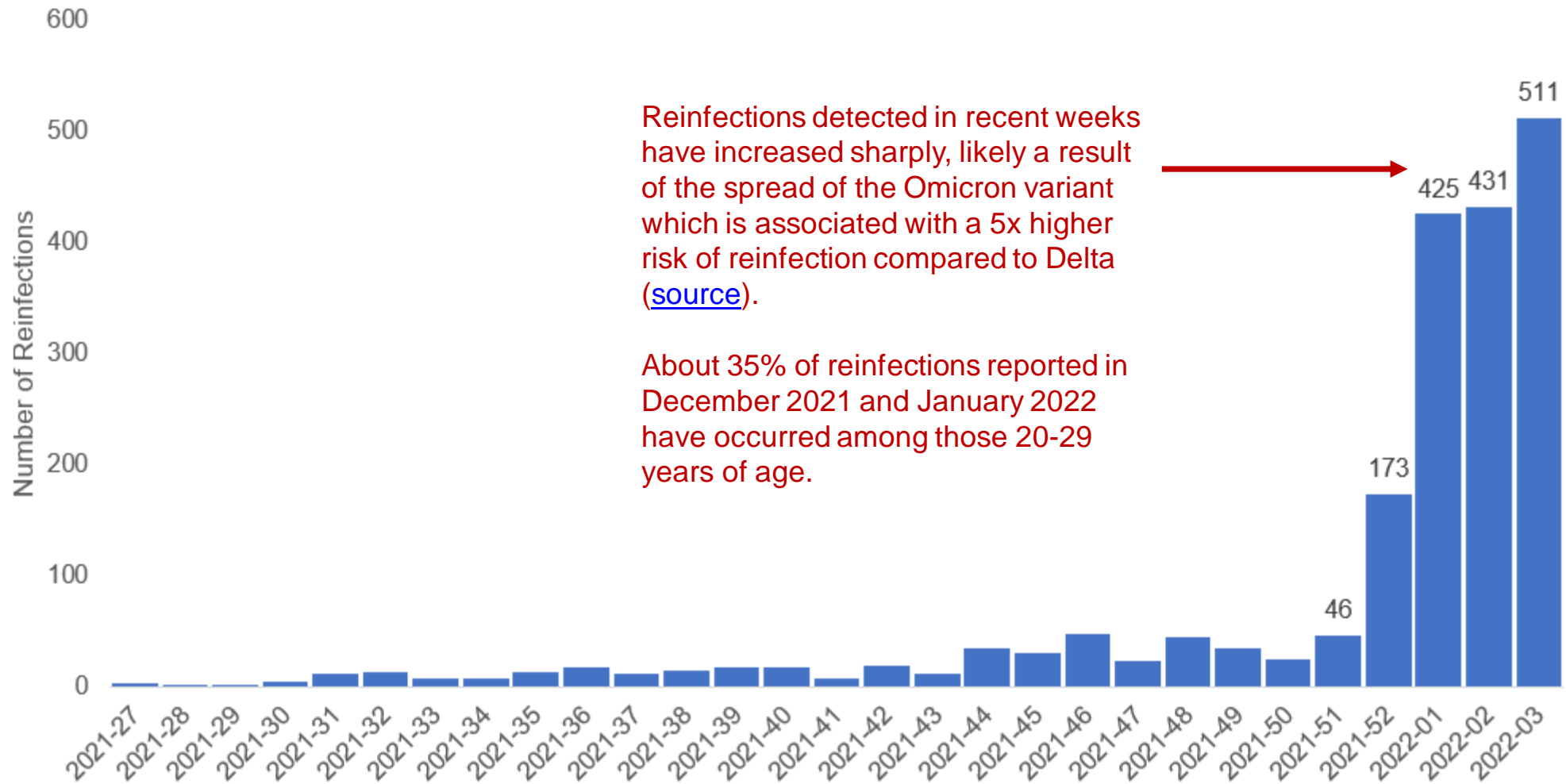
The **largest week to week increases** (week 2 to week 3) were among those **aged 0-9 (+56%) and 10-19 years (+22%)**.

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.

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

Data as of January 26, 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.

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

Data as of January 25, 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
28-Aug-21	449	23%	88	47%	537	26%
4-Sep-21	553	23%	134	52%	687	28%
11-Sep-21	496	-10%	148	10%	644	-6%
18-Sep-21	547	10%	165	11%	712	11%
25-Sep-21	620	13%	149	-10%	769	8%
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	1521	99%	214	44%	1735	90%
8-Jan-22	2787	83%	443	107%	3230	86%
15-Jan-22	3073	10%	635	43%	3708	15%
22-Jan-22	3122	2%	920	45%	4042	9%

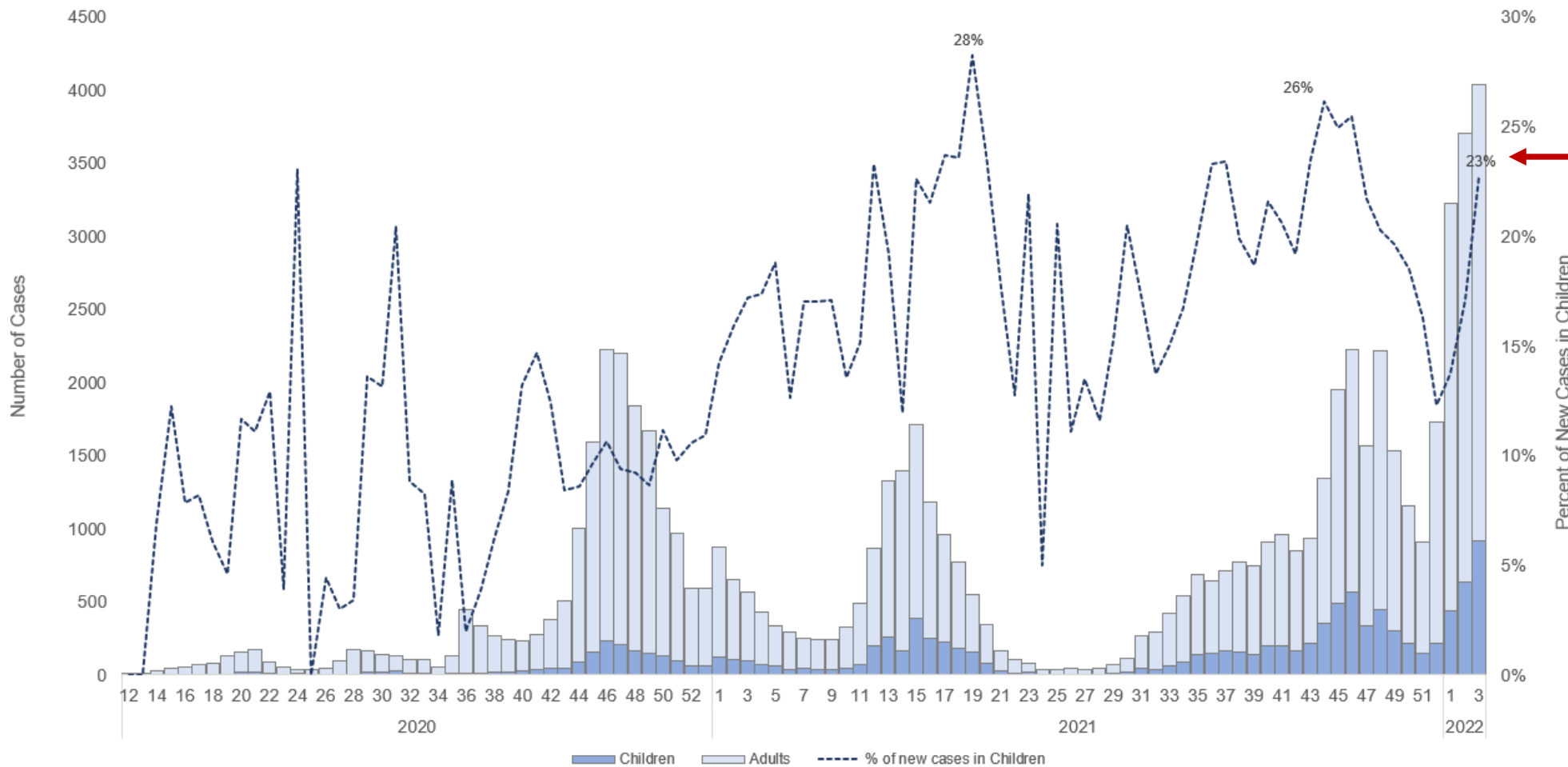
Weekly case counts among children increased 45% last week, and cases in adults increased 2%.

Adults

Children

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

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



During week 3 in 2022, children made up **23%** of cases reported, an increase compared to previous weeks.

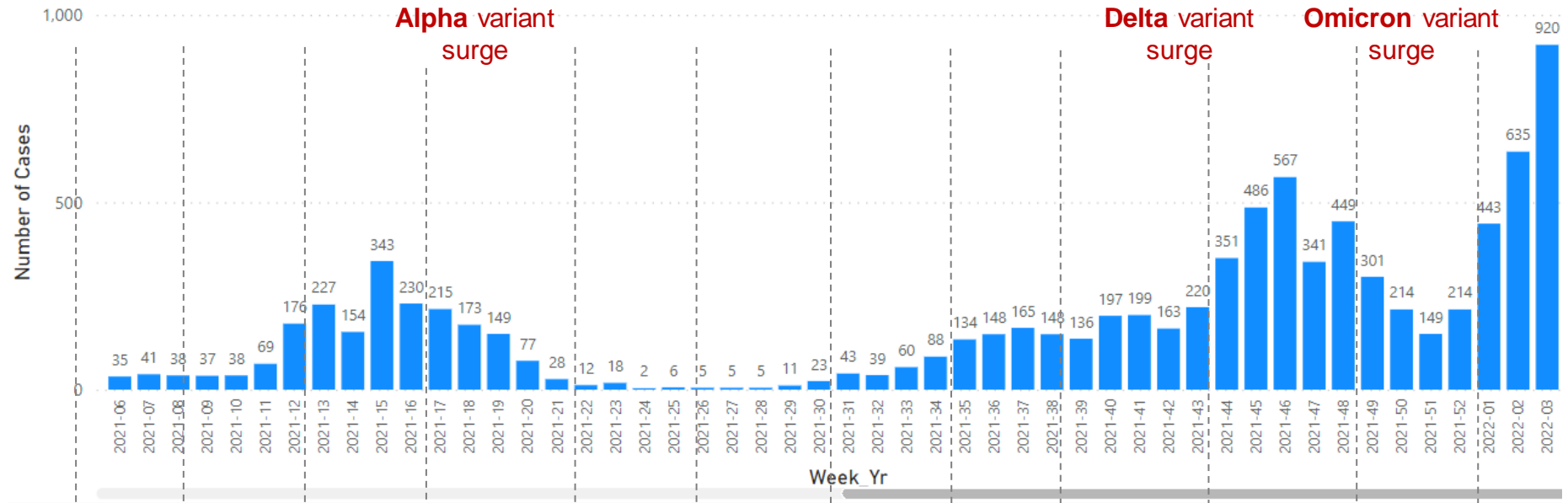
For comparison, children aged 0-17 make up about 23.5% of the population in Ottawa County.

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

Data through Week 3, 2022

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

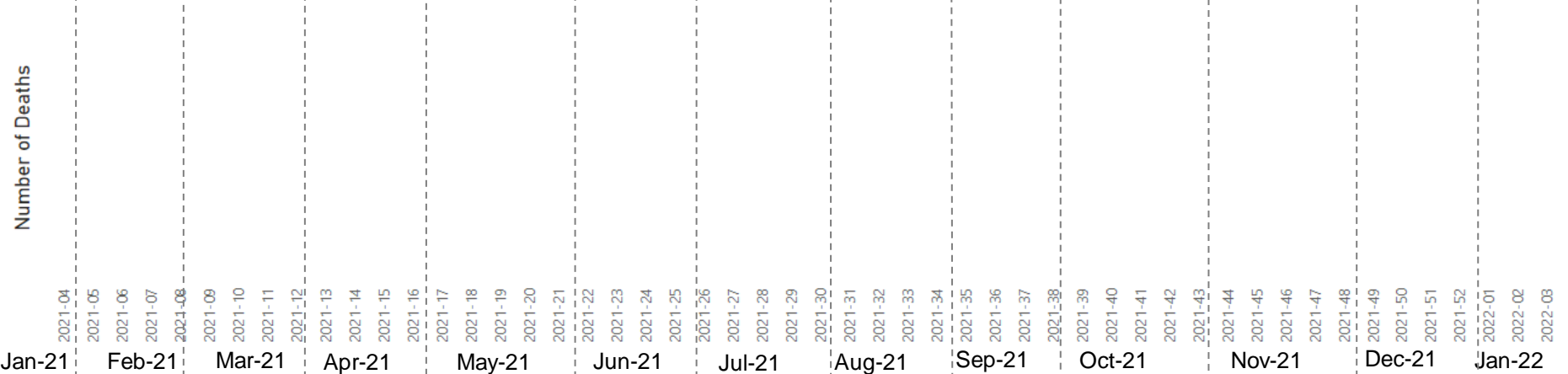
New Cases By Week of Referral



The weekly number of cases among children increased 45% from week 2 to week 3.

Due to reduced quality, hospitalization data has been removed from this visualization.

New Deaths by Week of Death



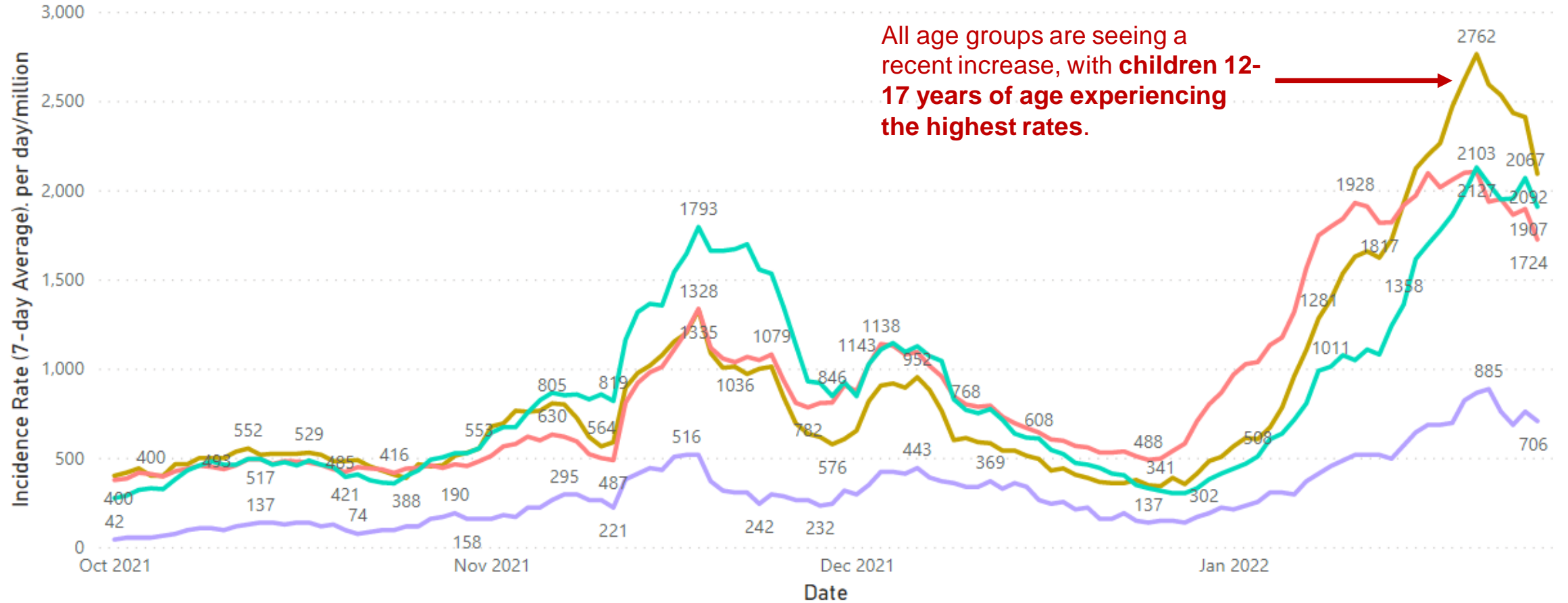
Source: Michigan Department of Health and Human Services, Michigan Disease Surveillance System

Ottawa County - Case Rate Trends – by Age

COVID-19 Case Rates by Age, includes School-Aged, October 2021 – January 26, 2022

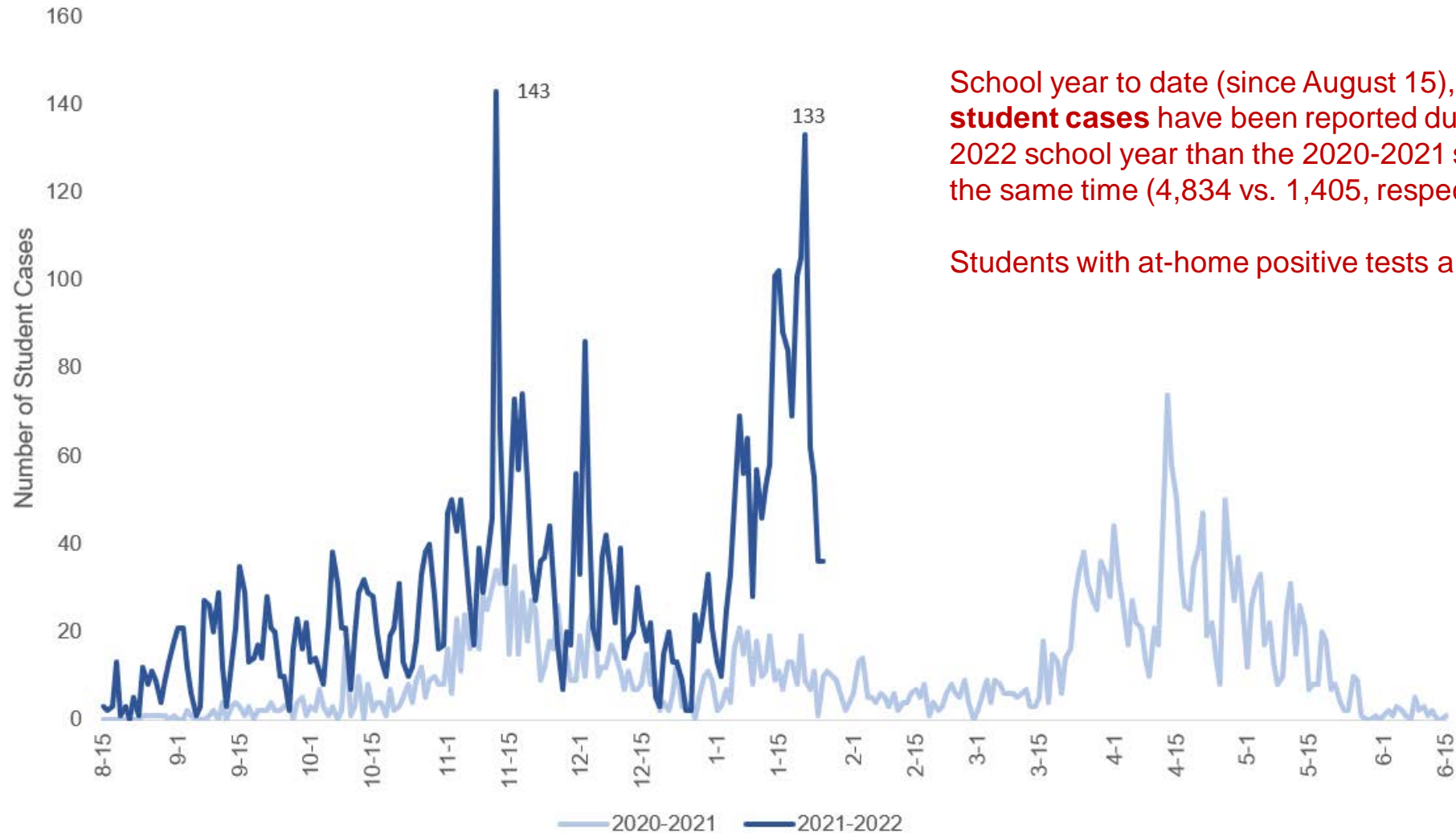
Incidence Rate (7-day Average)

rategroup ● 0-3 ● 12-17 ● 18+ ● 4-11



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), **3.4x more student cases** have been reported during the 2021-2022 school year than the 2020-2021 school year at the same time (4,834 vs. 1,405, respectively).

Students with at-home positive tests are not included.

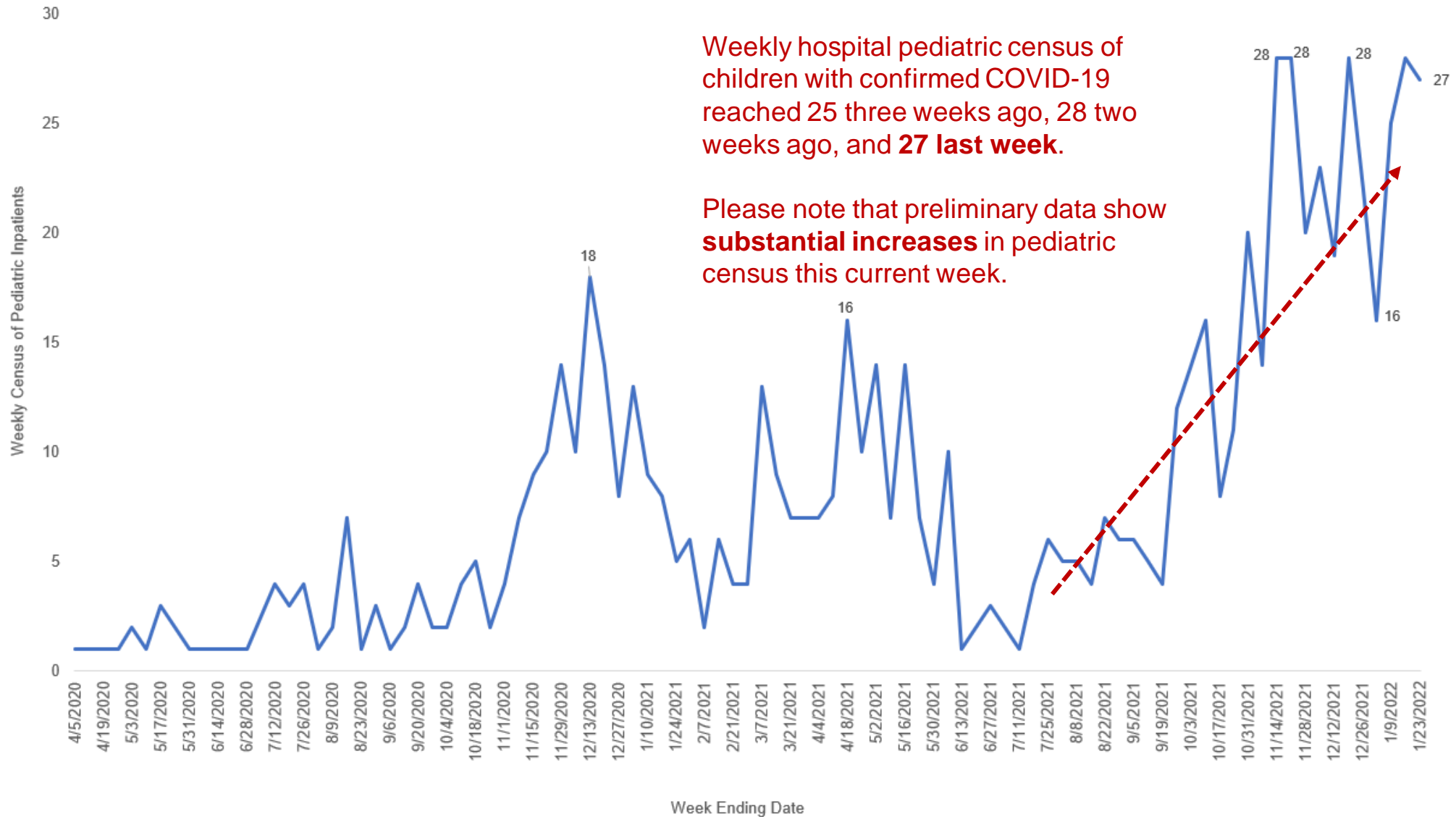
Method: Includes PreK-12 students known to attend a school in Ottawa County who are classified as a confirmed or probable case of COVID-19.

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.

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

Data through January 26, 2022

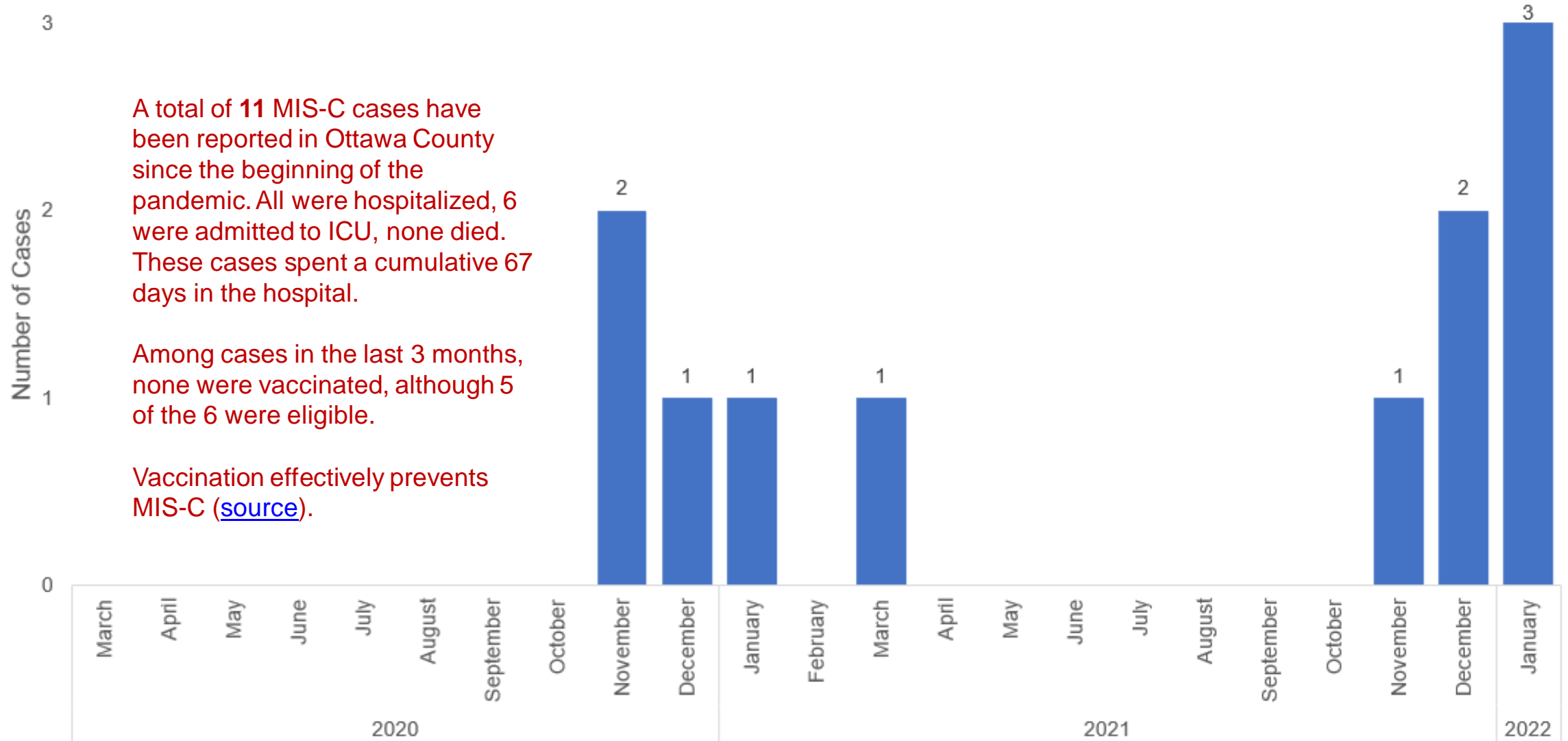
Weekly Hospital Pediatric Census – A Regional Healthcare System



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 January 23, 2022

Ottawa County MIS-C* Cases by Month



A total of **11** 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 67 days in the hospital.

Among cases in the last 3 months, none were vaccinated, although 5 of the 6 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>

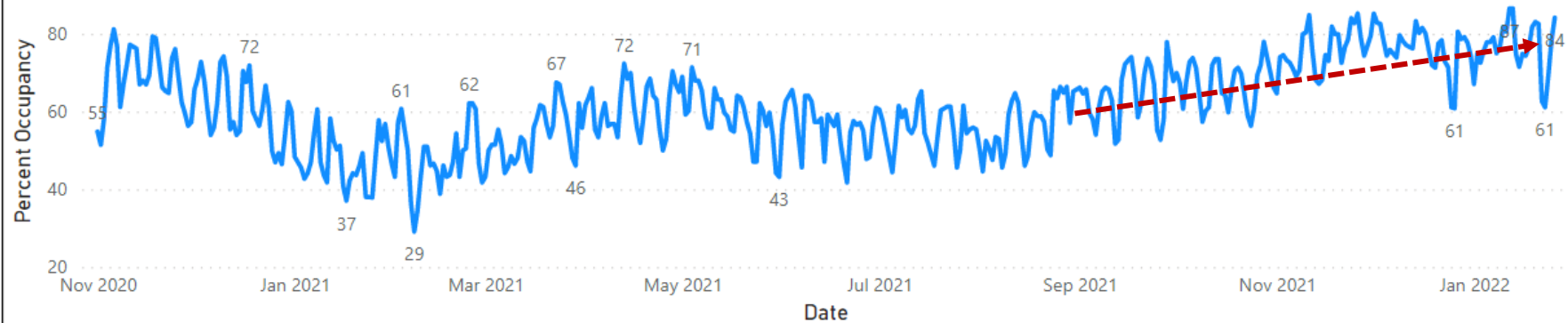
Data through January 26, 2022

Ottawa County Hospital Capacity – All Beds

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

Percent Occupancy by Date and County

County ● Ottawa



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

Percent Occupancy by Date and County

County ● Ottawa



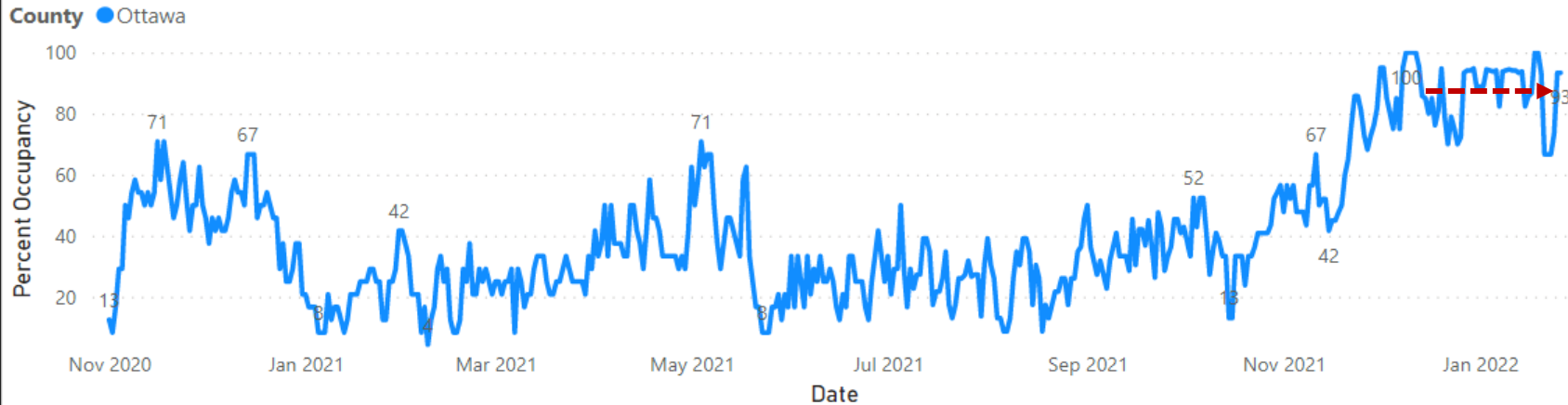
Total hospital bed occupancy **remains elevated**, as is the proportion of beds occupied by COVID-19 patients.

Currently **21%** of all inpatient beds are occupied by COVID-19 patients, but there may be signs of a decline.

Ottawa County Hospital Capacity – ICU Beds

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

Percent Occupancy by Date and County



Overall ICU bed occupancy **remains elevated (93%)**.

The proportion of ICU beds occupied by COVID-19 patients also **remains elevated**. Currently, **40%** of all ICU beds are occupied by COVID-19 patients.

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

Percent Occupancy by Date and County



Data through January 26, 2022

Source: EMResources

Spectrum Health Hospitalized COVID-19 Patients

Spectrum Health COVID-19 Hospitalizations



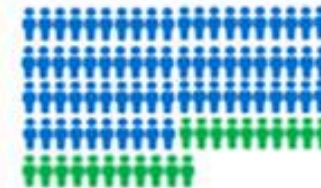
January 25, 2022

Spectrum Health currently has 404 hospitalized COVID-19 patients. Of these, 296 (73%) are unvaccinated and 108 are vaccinated*.

*Vaccinated patients are, on average, 10 years older (66 vs 56) and have an average of 4 co-morbidities compared to 3 for unvaccinated patients.



Of those 404 patients, 91 are currently in the ICU. Of these, 70 (77%) are unvaccinated and 21 are vaccinated.



Of those 91 ICU patients, 57 are on ventilators. Of these, 48 (84%) are unvaccinated and 9 are vaccinated.

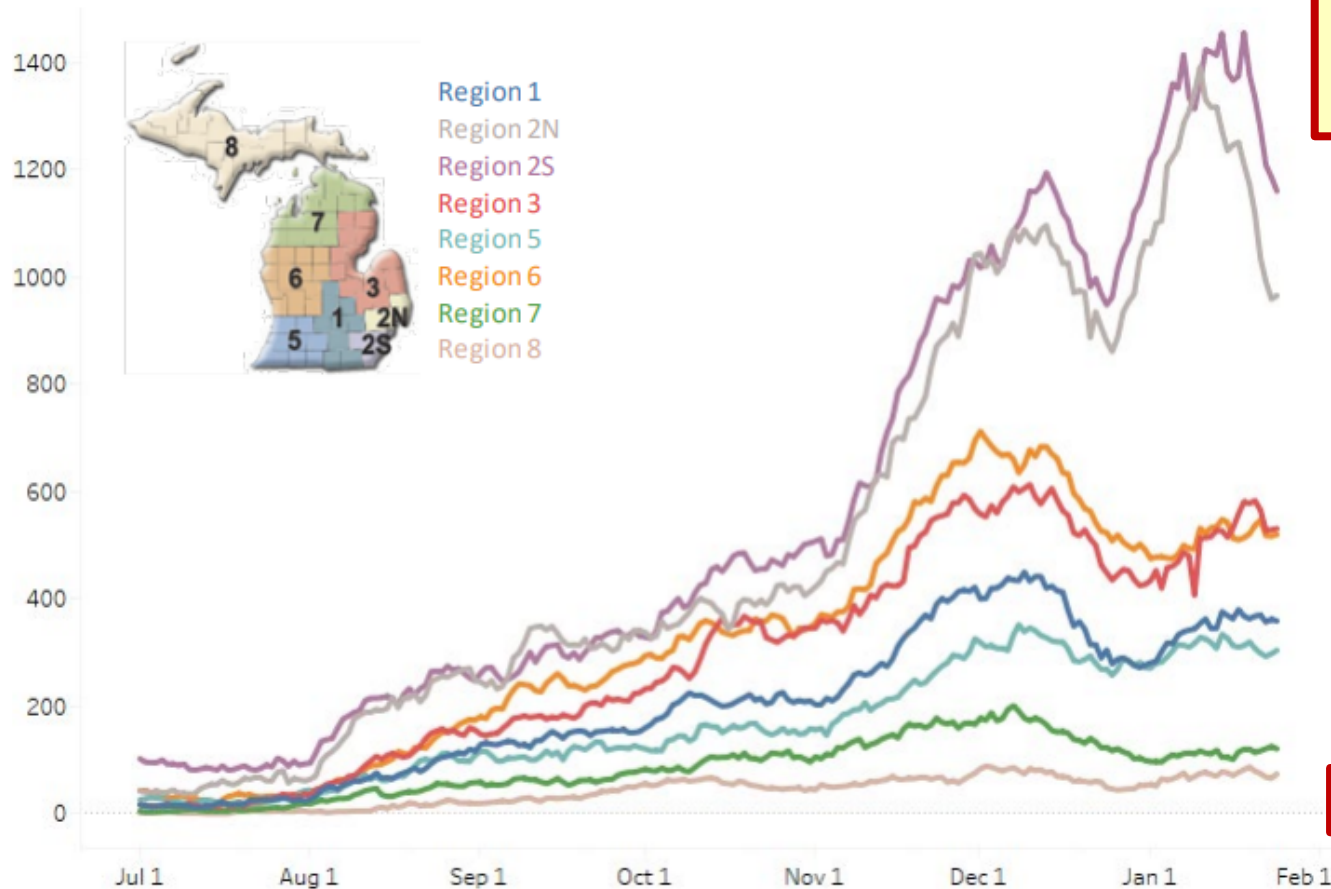


Data includes pediatric and adult COVID-19 positive inpatients across all Spectrum Health Hospitals.
*Vaccinated = 2 weeks after receipt of the second dose in a 2-dose series, such as the Pfizer or Moderna vaccines, or a single-dose vaccine, such as Johnson & Johnson's Janssen vaccine.

Source: <https://www.facebook.com/spectrumhealth/photos/a.126445034231/10158998808529232/>

Statewide Hospitalization Trends: Regional COVID+ Census

Hospitalization Trends 7/1/2021 – 1/24/2022
Confirmed Positive by Region



COVID+ hospital census has plateaued or decreased in nearly all regions. Regions 6 and 7 are the only regions showing growth this week. Regions 2N and 2S, which drove the majority of the January increase, have a significant decreasing trend.

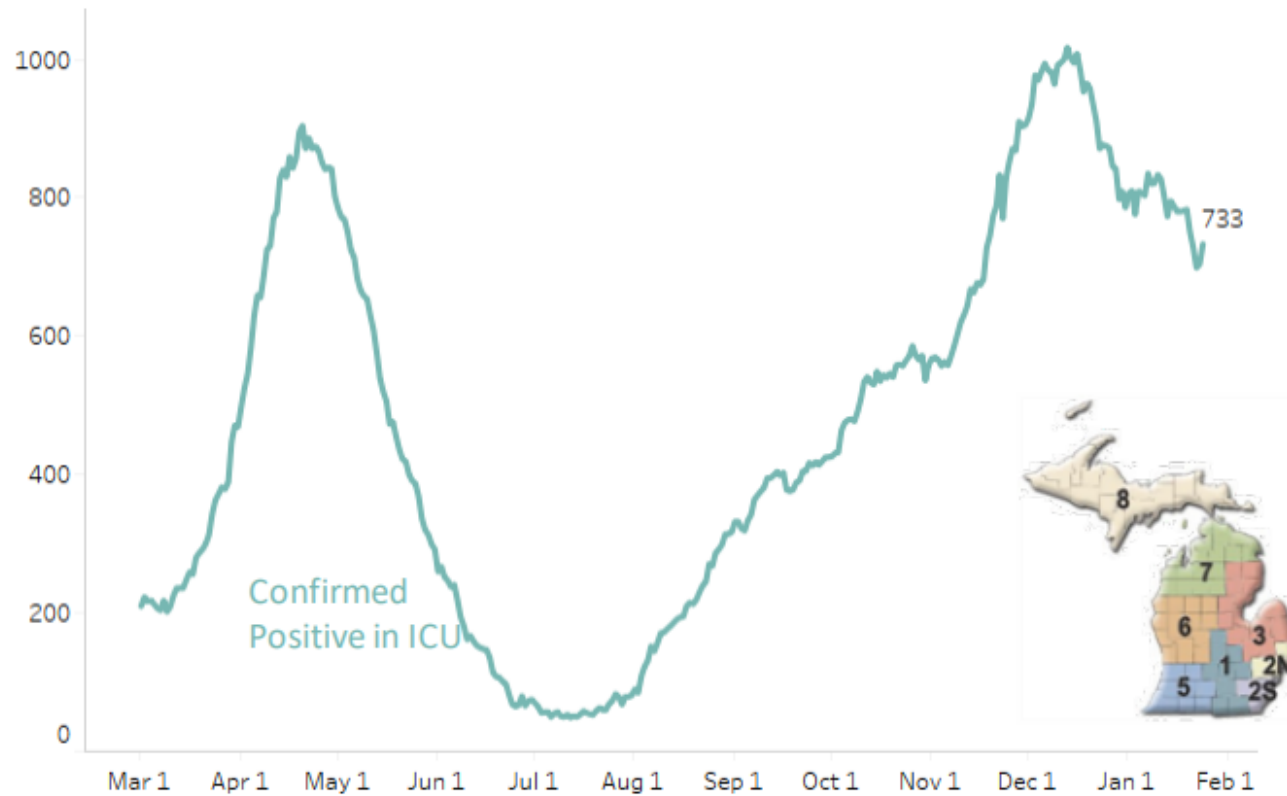
Regions 2N, 2S, and 3 have greater than 400/Million population hospitalized with COVID.

Region	COVID+ Hospitalizations (% Δ from last week)	COVID+ Hospitalizations / MM
Region 1	359 (-6%)	332/M
Region 2N	965 (-23%)	436/M
Region 2S	1160 (-16%)	521/M
Region 3	531 (-5%)	468/M
Region 5	304 (-2%)	319/M
Region 6	520 (2%)	354/M
Region 7	121 (5%)	242/M
Region 8	74 (-4%)	238/M

Source: MDHHS Data and Modelling: https://www.michigan.gov/documents/coronavirus/20220125_Data_and_modeling_update_vMEDIA_746583_7.pdf

Statewide Hospitalization Trends: ICU COVID+ Census

Hospitalization Trends 3/1/2021 – 1/24/2022
Confirmed Positive in ICUs



The census of COVID+ patients in ICUs has decreased by 6% from last week. Region 6 and 7 are the only regions showing growth this week with Region 7 showing 24% growth.

Regions 2S, 3 and 6 have ICU occupancy greater than 85%. Regions 1, 2S, 3, and 6 have 30% or more of adult ICU beds filled with COVID+ patients.

Region	Adult COVID+ in ICU (% Δ from last week)	Adult ICU Occupancy	% of Adult ICU beds COVID+
Region 1	69 (0%)	82%	33%
Region 2N	148 (-17%)	77%	26%
Region 2S	220 (0%)	86%	32%
Region 3	97 (-16%)	90%	30%
Region 5	43 (-12%)	65%	24%
Region 6	104 (2%)	87%	39%
Region 7	36 (24%)	83%	26%
Region 8	16 (-6%)	75%	25%

Source: MDHHS Data and Modelling: https://www.michigan.gov/documents/coronavirus/20220125_Data_and_modeling_update_vMEDIA_746583_7.pdf

Pediatric Hospitalization Rates – USA, Georgia, Michigan



Pediatric hospitalization rates across the US, in Georgia, and in Michigan **remain high but may be showing some signs of improvement.**

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

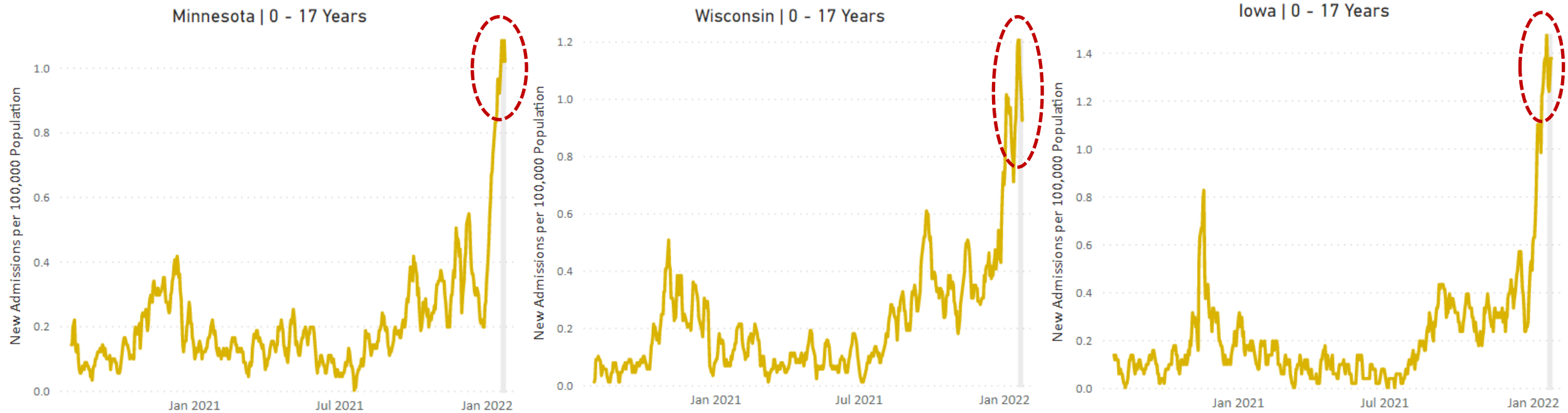
Accessed January 26, 2022

Pediatric Hospitalization Rates – Select Midwest States



Ohio, Indiana, and Illinois are all experiencing substantially elevated pediatric hospitalization rates.

Pediatric Hospitalization Rates – Select Midwest States

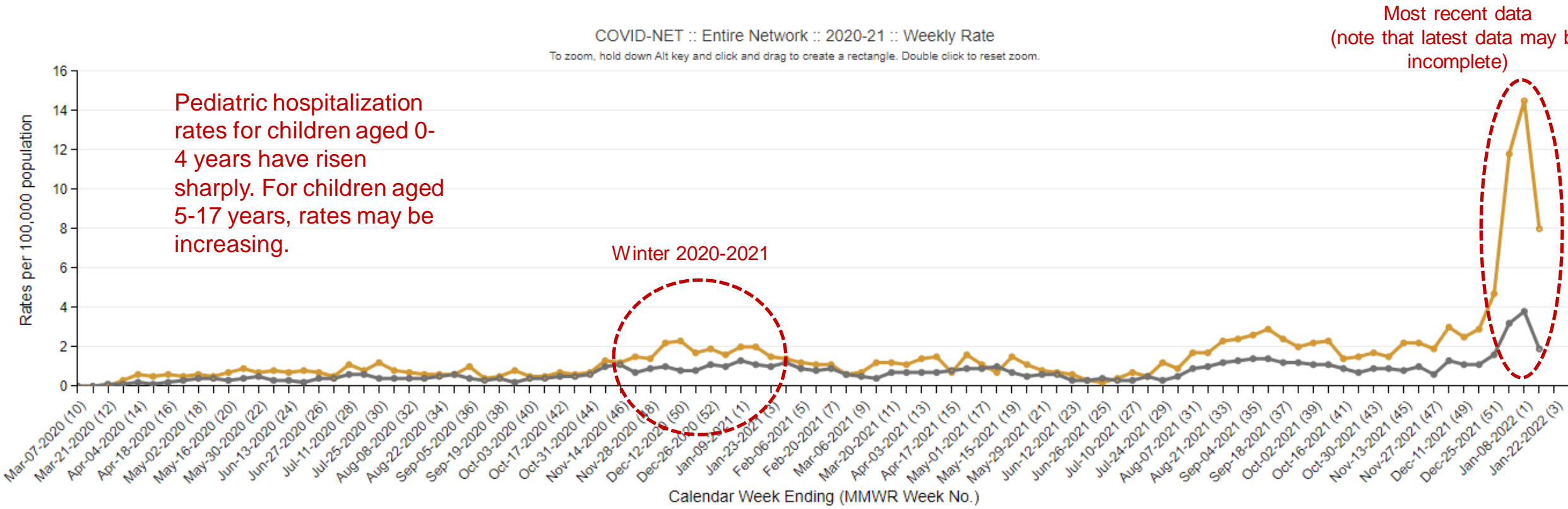


Pediatric hospitalization rates in, Wisconsin remain elevated while rates in Minnesota and Iowa **have reached some of the highest levels of the pandemic.**

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

Accessed January 26, 2022

Pediatric Hospitalization Rates by Age Group – USA



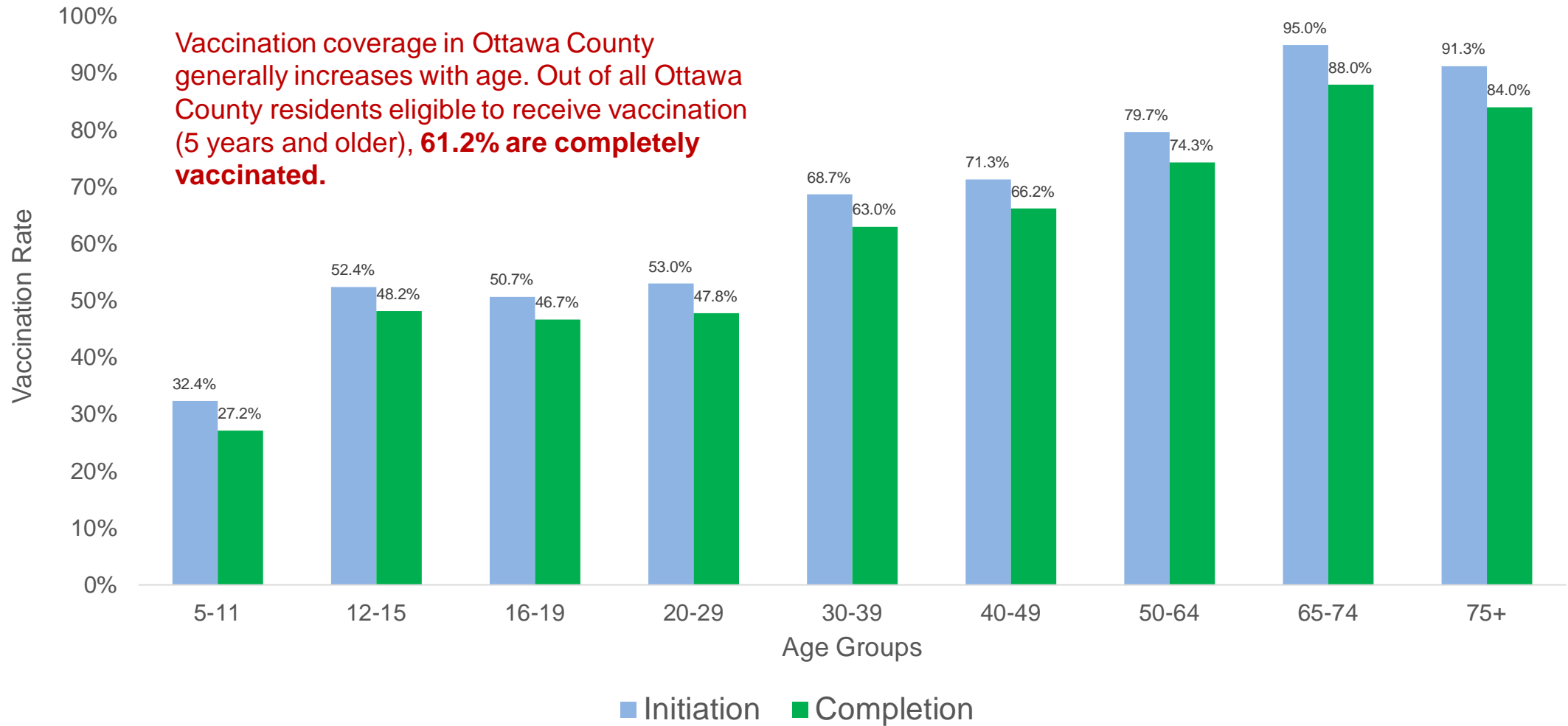
The Coronavirus Disease 2019 (COVID-19)-Associated Hospitalization Surveillance Network (COVID-NET) hospitalization data are preliminary and subject to change as more data become available. In particular, case counts and rates for recent hospital admissions are subject to lag. Lag for COVID-NET case 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 January 26, 2022

Vaccination Coverage by Age



Note:

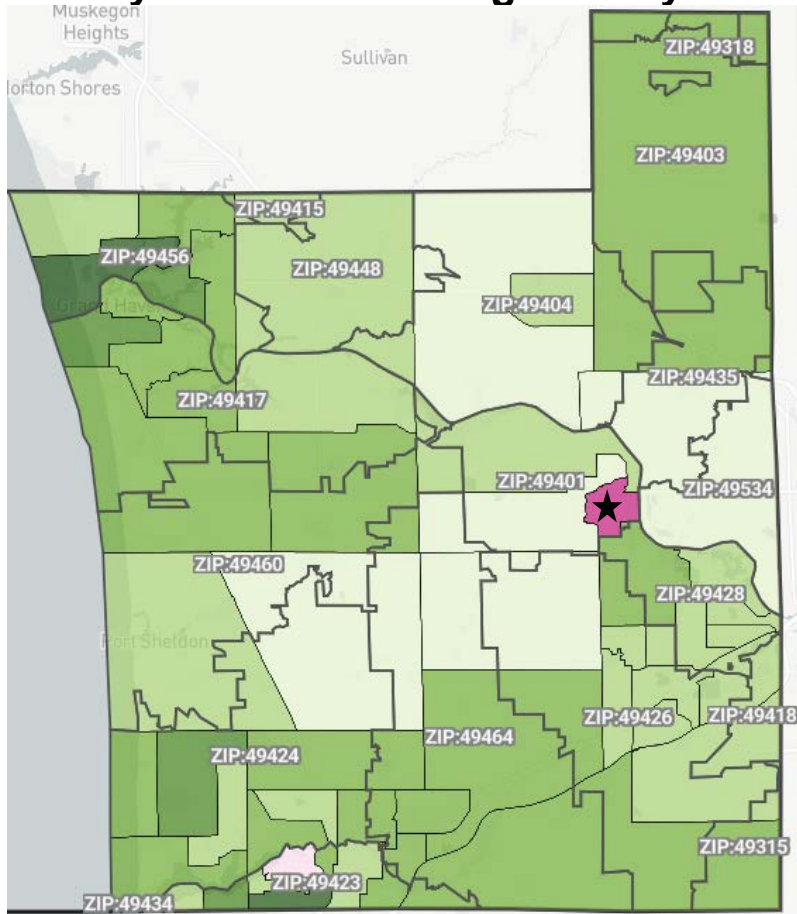
Completion is the percentage of people receiving 2 doses of Pfizer or Moderna or 1 dose of J&J.

Source: https://www.michigan.gov/coronavirus/0,9753,7-406-98178_103214_103272-547150--,00.html

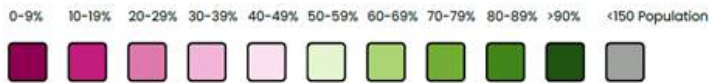
Data through January 25, 2022

Vaccination Coverage by Place of Residence

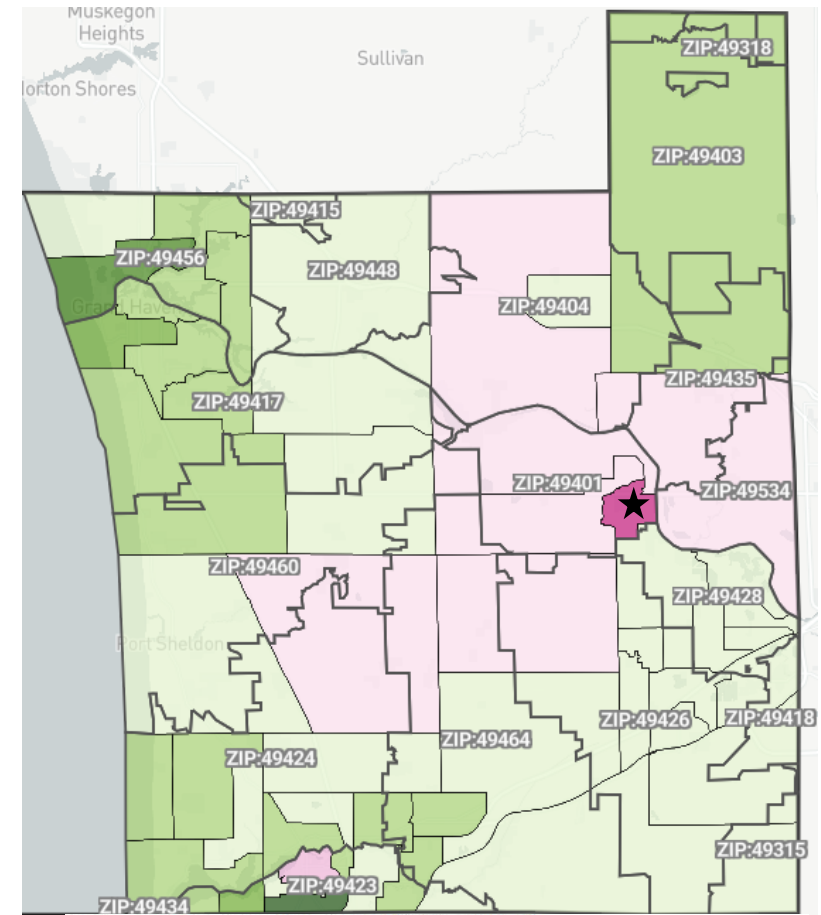
Fully vaccinated: % Ages 16+ years



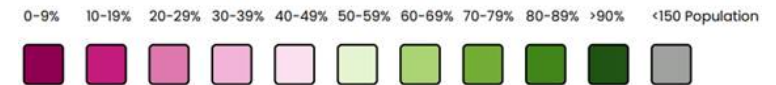
Color coded by: Fully Vaccinated (% Ages 16+)



Fully vaccinated: % Total Population



Color coded by: Fully Vaccinated (% 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 – January 22, 2022

Fully Vaccinated People (167,935)	
Cases	Deaths
Percent of Cases in People Not Fully Vaccinated (34,304 / 47,548) 72.1%	Percent of Deaths in People Not Fully Vaccinated (247 / 366) 67.5%
Total Cases Not Fully Vaccinated 34,304	Total Deaths Not Fully Vaccinated 247
Total Breakthrough Cases 13,244	Total Breakthrough Deaths 119
Percent of Fully Vaccinated People who Developed COVID-19 (13,244 / 167,935) 7.9%	Percent of Fully Vaccinated People who Died of COVID-19 (119 / 167,935) 0.071%
Percent of Cases who were Fully Vaccinated (13,244 / 47,548) 27.9%	Percent of Deaths who were Fully Vaccinated (119 / 366) 32.5%
Total Cases 47,548	Total Deaths 366

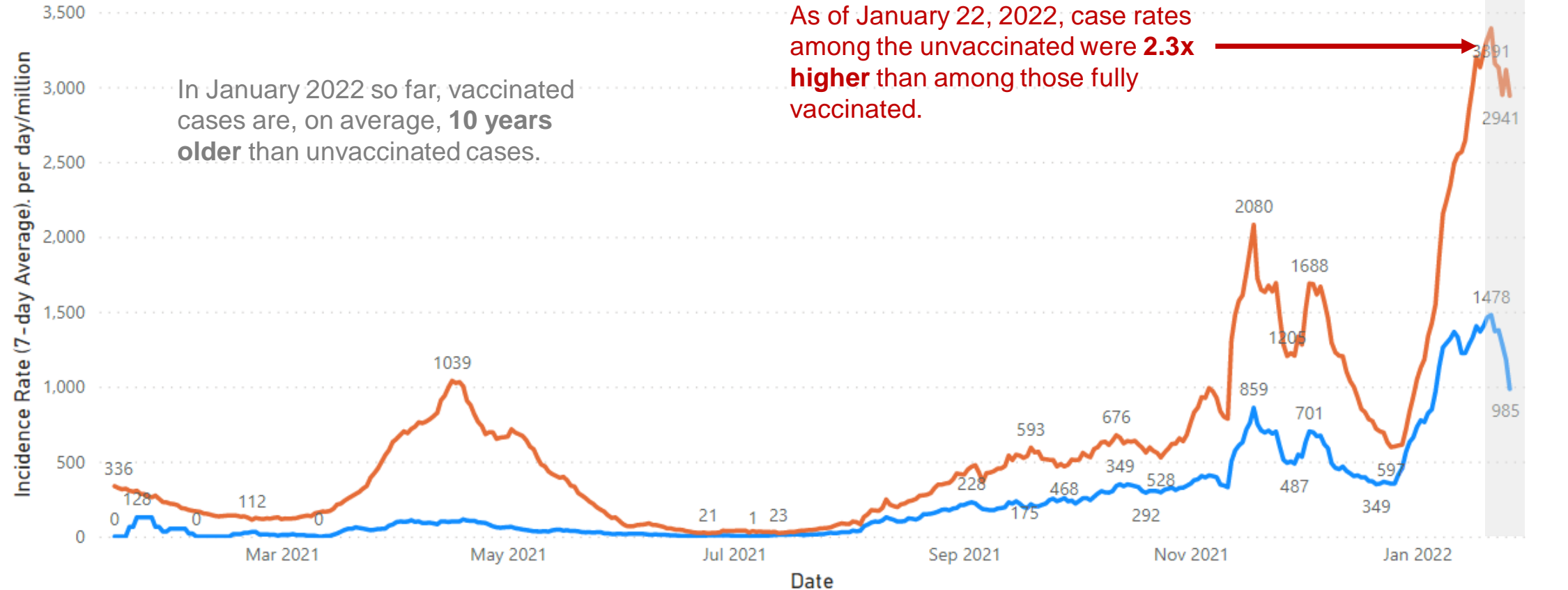
Due to reduced quality, hospitalization data has been removed from this visualization.

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

Ottawa County COVID-19 Vaccination Breakthrough Case Trends

Incidence Rate (7-day Average)

rategroup ● Fully Vaccinated ● Unvaccinated



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.

Sources:

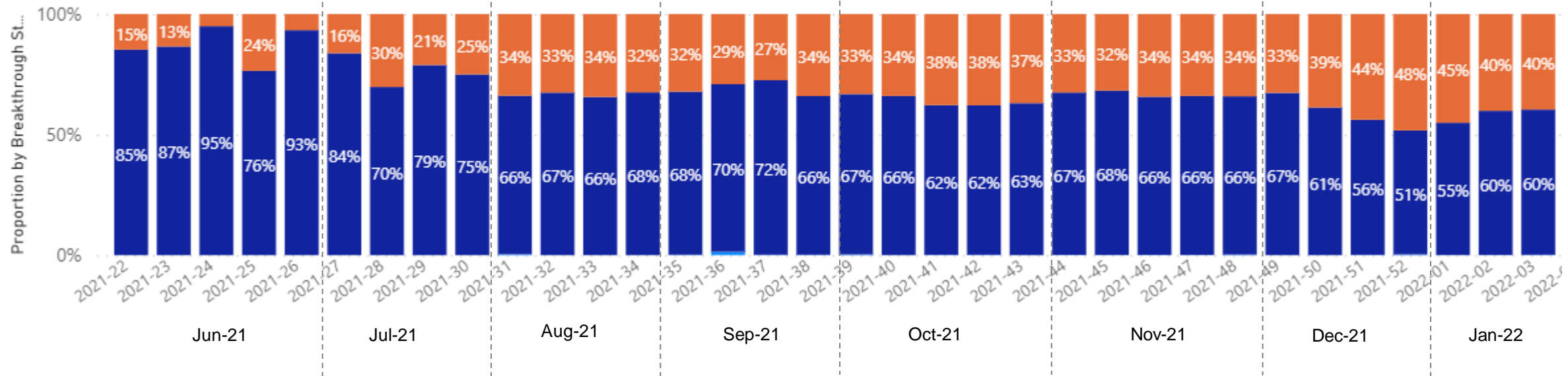
Michigan Department of Health and Human Services, Michigan Disease Surveillance System
 MDHHS COVID-19 Dashboard: https://www.michigan.gov/coronavirus/0,9753,7-406-98178_103214_103272-547150--,00.html

Ottawa County COVID-19 Vaccination Breakthrough Case Trends

By Week

Breakthrough Proportions by Week

Vaccine_Breakthrough ● NO ● YES

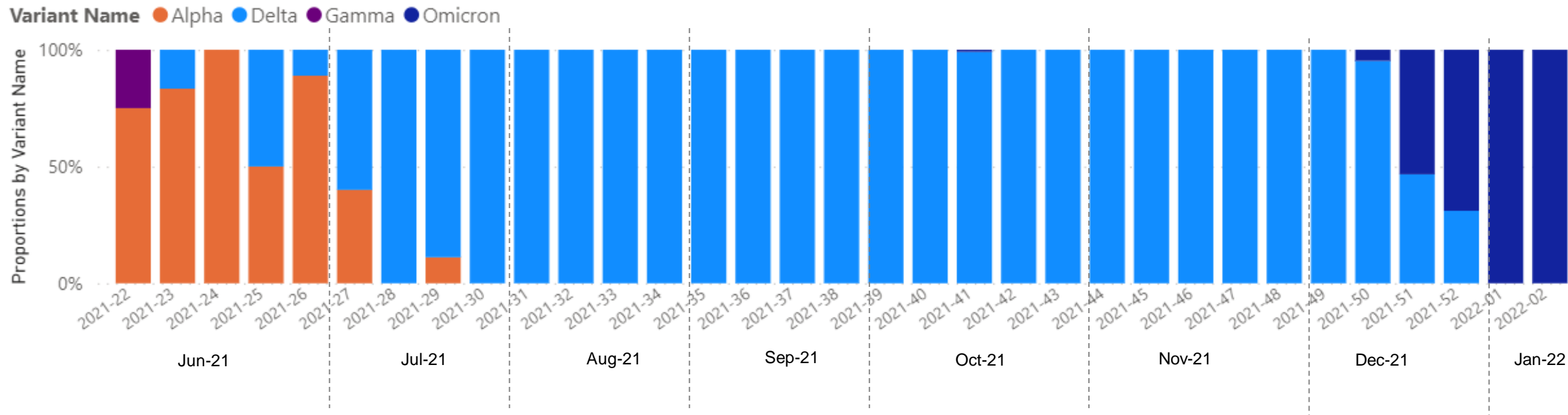


Through the Delta wave, which was most pronounced August through early December of 2021, about 33% of all cases reported to public health were breakthrough cases. At the end of 2021 and into 2022, the proportion of vaccine breakthrough cases increased to roughly 45% of cases reported each week. Weekly 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

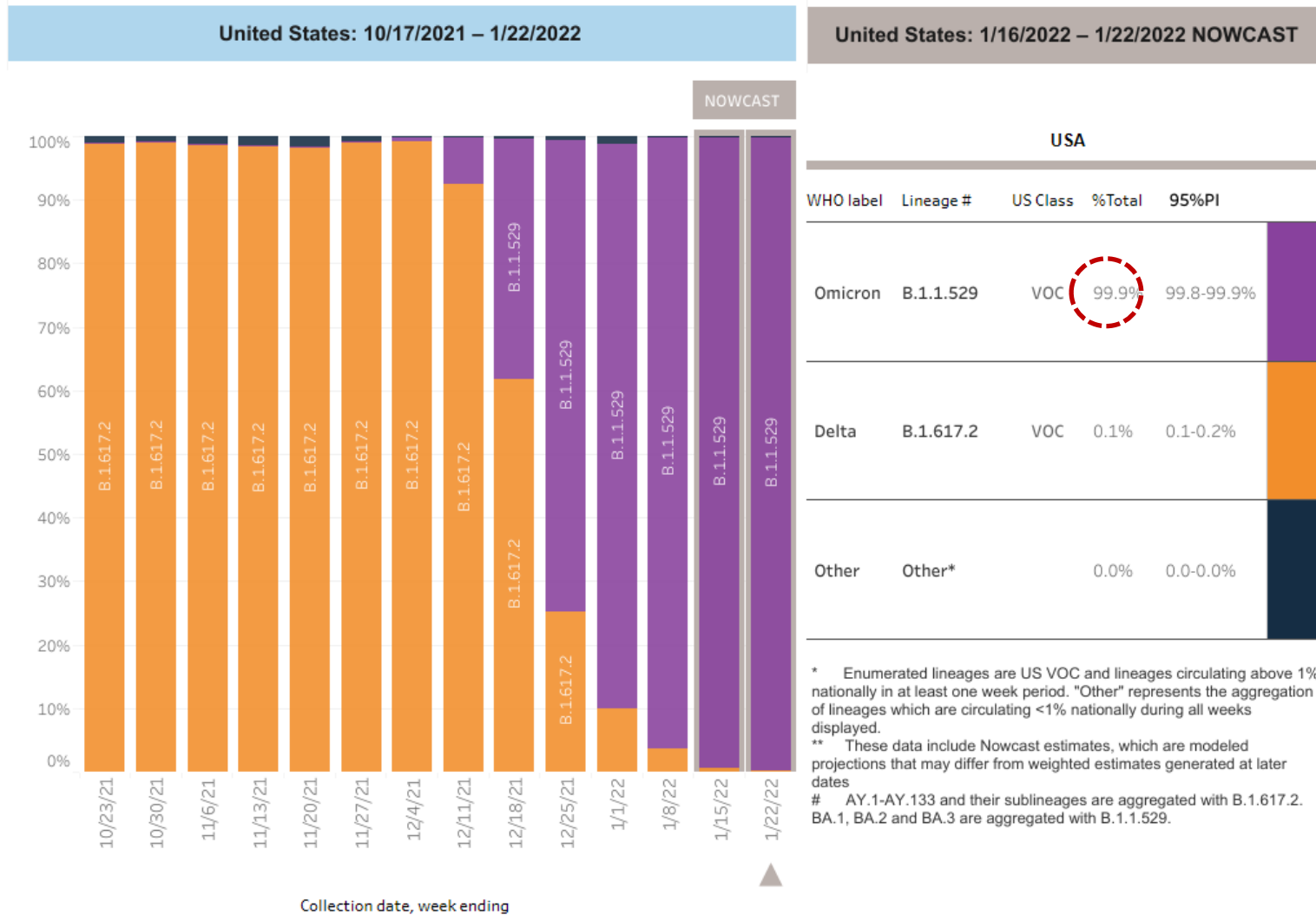


In June of 2021, most clinical samples* submitted for variant testing came back as the **Alpha** variant. By the end of July 2021, all clinical samples tested were returned as the **Delta** variant. From late July through early December 2021 all clinical samples submitted for variant testing came back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

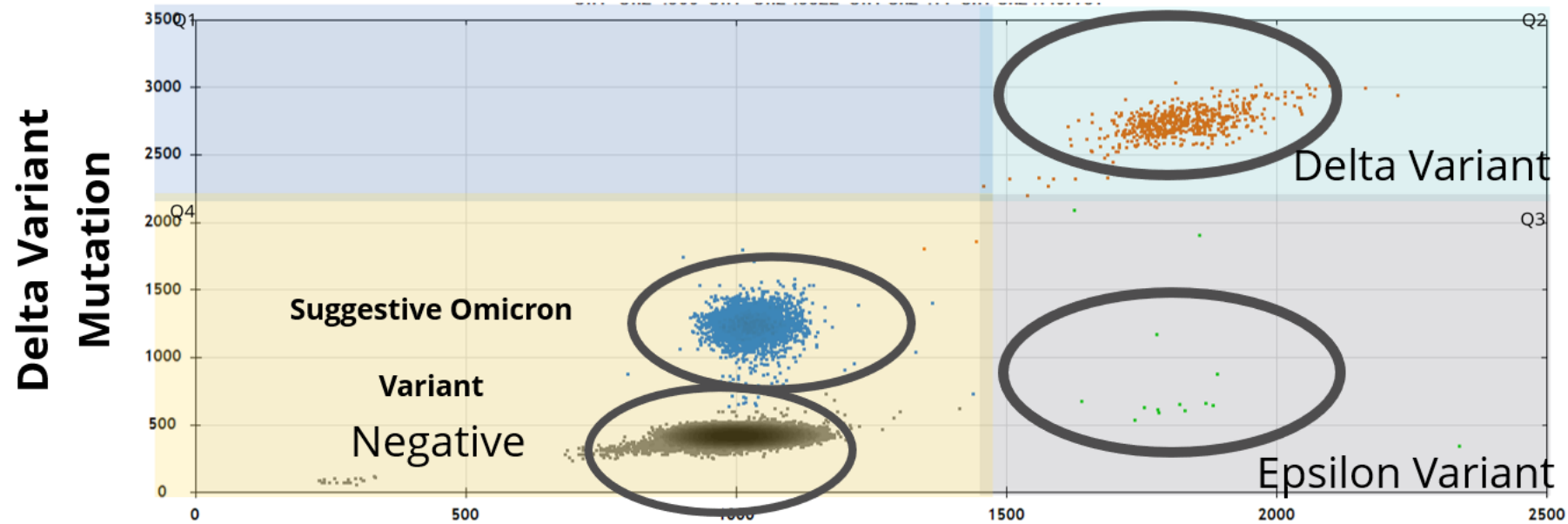
Variants – Clinical Samples from Across the USA



The **Omicron** variant is estimated to account for as much as **99.9%** of clinical samples collected in the United States as of January 22, 2022.

Variants - Wastewater Sampling

Grand Haven, Spring Lake, & Allendale



Epsilon/Delta Lineage Variant Mutation

Wastewater sampling data from Grand Haven, Spring Lake, and Allendale show a signal for **Delta** and a suggestive signal for **Omicron**, demonstrating co-circulation of **Delta** and **Omicron** in Ottawa County.

- Q2 Delta Variant Positive Droplets
- Q3 Epsilon Variant Positive Droplets
- Q4 Parental Wild Type Positive Droplets
- Q4 Negative Droplets

Source: MDHHS SEWER Network grant and the Annis Water Resources Institute at Grand Valley State University

CDC Community Risk Transmission Levels & Metrics

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 ¹ that are positive during the past 7 days	0-4.99%	5-7.99%	8-9.99%	≥ 10.0%

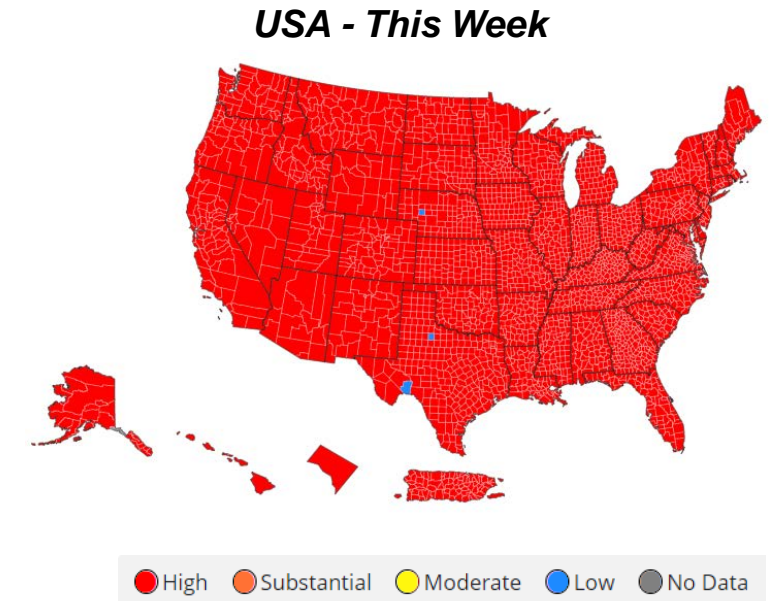
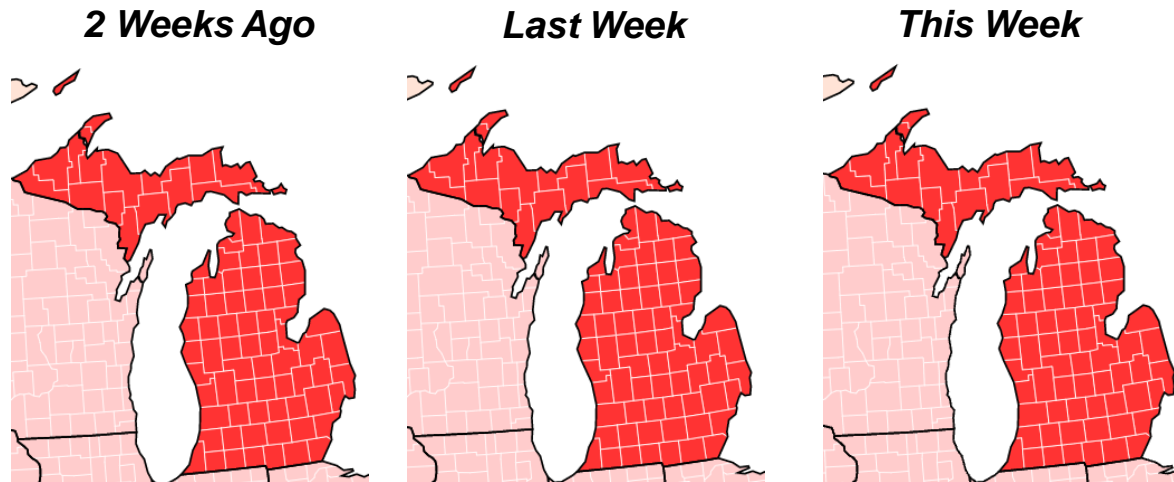
Ottawa's goal is to be in the Moderate category*

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 **23+** weeks)
- Current Data:
 - Positivity = 35.72%
 - Case Rate = 2,042.97 cases per week per 100,000



Data through January 19, 2022 for case rates and through January 23, 2022 for positivity.

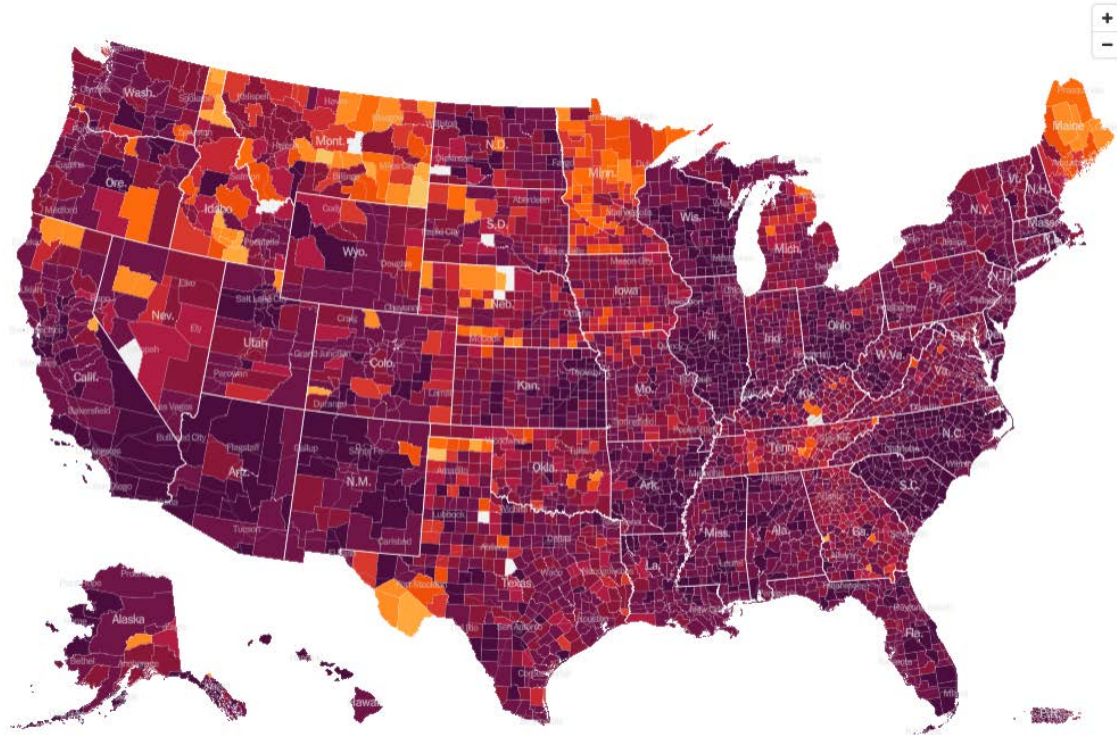
Source: <https://covid.cdc.gov/covid-data-tracker/#county-view>

COVID-19 Case Rates by County Across the US

Last Week

Hot spots

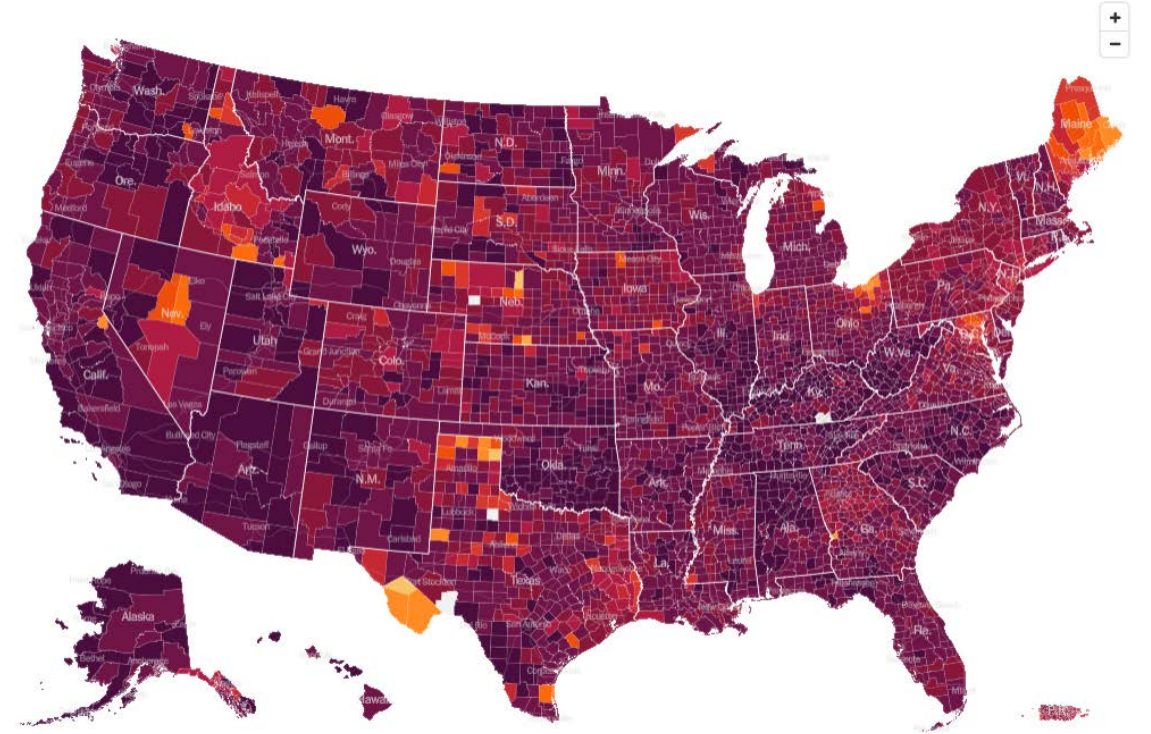
AVERAGE DAILY CASES PER 100,000 PEOPLE IN PAST WEEK
10 30 50 70 100 200 FEW OR MISSING NO CASES DATA



This Week

Hot spots

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



Case rates remain elevated across the nation.

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

Accessed January 26, 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

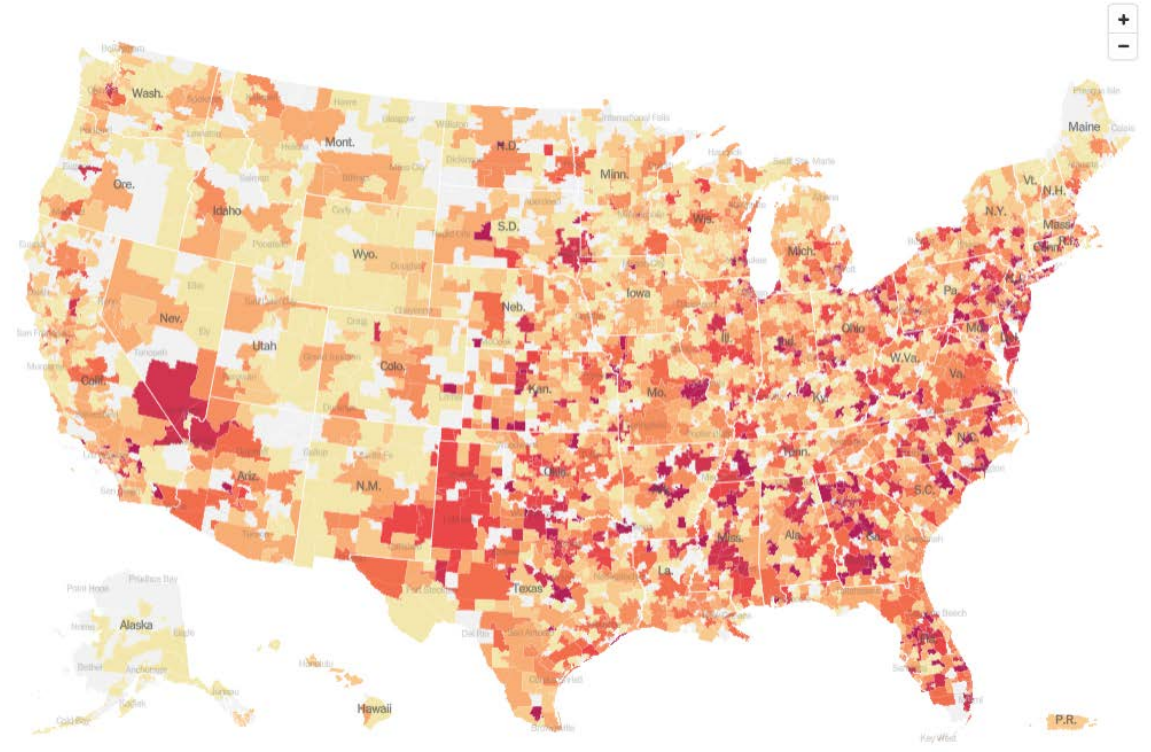
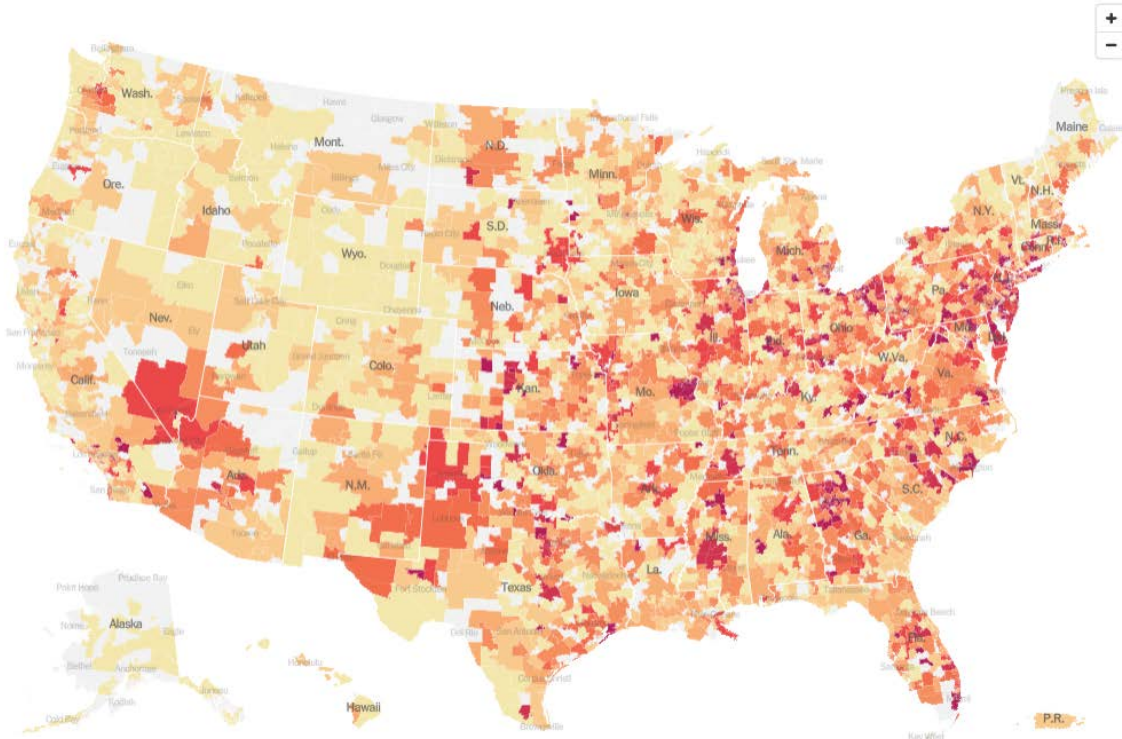
This Week

Current hospitalizations

Current hospitalizations

COVID-19 PATIENTS PER 100,000 PEOPLE
20 30 40 50 60 70 80 NO DATA

COVID-19 PATIENTS PER 100,000 PEOPLE
20 30 40 50 60 70 80 NO DATA



Hospitalization rates remain elevated and/or are increasing in many states across the nation.

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

Accessed January 26, 2022

USA & MI

Spread

Children

Hospitalizations

Vaccinations

Variants

Risk Levels

Other

Media

Science Roundup

States and Michigan Counties with School Masking Requirements

- **States/Districts (16):** California, Connecticut, Delaware, Hawaii, Illinois, Maryland, Massachusetts, New Mexico, New Jersey, New York, Nevada, Oregon, Rhode Island, Virginia, Washington, & Washington D.C.
- **Michigan Counties (12):**
 - **PreK/K-6:** Marquette
 - **K-12:** Antrim, Benzie, Charlevoix, Emmet, Ingham, Leelanau, Oakland, Otsego, St. Clair*, Washtenaw, and Wayne
- **Rescinded County Mask Mandates (10):**
 - Allegan, Barry, Berrien, Eaton, Iron, Dickinson (rescinded October 2021)
 - Kalamazoo, Genesee (rescinded December of 2021)
 - Ottawa, Kent (rescinded January of 2022)
- **Ottawa County School Districts Retaining Mask Rules (4):**
 - Holland Public, Black River, Grand Haven Public, & Spring Lake Public

Note: Lists may not be comprehensive.

Source for State/Districts: <https://www.nytimes.com/interactive/2021/us/cdc-mask-guidance-states.html>

*St. Clair issued a K-12 mask mandate on December 29, 2021, which lasts through January 28, 2022 ([source](#)).

COVID-19 News Headlines

Helen DeVos Children's Hospital sees highest-ever number of COVID-19 patients

<https://www.mlive.com/news/grand-rapids/2022/01/helen-devos-childrens-hospital-sees-highest-ever-number-of-covid-19-patients.html>

State of Michigan secures additional federal team to assist Sparrow Hospital in Lansing with staffing

<https://www.michigan.gov/coronavirus/0,9753,7-406-98158-576050--,00.html>

Federal court blocks Biden's vaccine mandate for federal workers

<https://www.npr.org/2022/01/21/1074815838/federal-court-blocks-bidens-vaccine-mandate-for-federal-workers>

EDUCATION

COVID case counts rise in local schools

<https://www.hollandsentinel.com/story/news/education/2022/01/23/covid-case-counts-rise-local-schools/6605541001/>

Public health

Michigan nursing homes ordered to offer on-site booster shot

https://www.grandhaventribune.com/news/health_care/michigan-nursing-homes-ordered-to-offer-on-site-booster-shot/article_184b9514-9288-5e8d-8faf-2d439d9c7c02.html

The Transition Away from Universal Case Investigation & Contact Tracing for COVID-19

[The Transition Away from Universal Case Investigation & Contact Tracing for COVID-19 - Council of State and Territorial Epidemiologists \(cste.org\)](https://www.cste.org/the-transition-away-from-universal-case-investigation-and-contact-tracing-for-covid-19)

Science Roundup

Direct Comparison of SARS-CoV-2 Nasal RT-PCR and Rapid Antigen Test (BinaxNOW™) at a Community Testing Site During an Omicron Surge

<https://www.medrxiv.org/content/10.1101/2022.01.08.22268954v4>

← A pre-print study found that rapid antigen BinaxNOW test samples collected from nasal swabs were more reliable than oral swabs (throat or cheek).

A prospective cohort study of COVID-19 vaccination, SARS-CoV-2 infection, and fertility

<https://pubmed.ncbi.nlm.nih.gov/35051292/>

← An NIH-funded study on fertility found no indication that either COVID-19 vaccination or infection reduced female fertility. COVID-19 vaccination was not found to reduce male fertility; but it was noted that COVID-19 infection may temporarily reduce male fertility.

Evaluation of disease severity during SARS-COV-2 reinfection, January 2020 to April 2021, England: an observational study

[https://www.journalofinfection.com/article/S0163-4453\(22\)00010-X/fulltext](https://www.journalofinfection.com/article/S0163-4453(22)00010-X/fulltext)

← A study out of England found that prior infection and immunization were both protective against severe disease, and that older age and more comorbidities increased risk of severe outcomes among those experiencing reinfection.

Trends in Disease Severity and Health Care Utilization During the Early Omicron Variant Period Compared with Previous SARS-CoV-2 High Transmission Periods — United States, December 2020–January 2022

[Trends in Disease Severity and Health Care Utilization During the Early Omicron Variant Period Compared with Previous SARS-CoV-2 High Transmission Periods — United States, December 2020–January 2022 | MMWR \(cdc.gov\)](https://www.cdc.gov/mmwr/mmwr-reports/2022/sr0101a1.htm)

← A CDC study showed that although disease severity appears to be lower with Omicron, the volume of cases and hospitalizations is higher than at any other point in the pandemic, straining healthcare.