

Ottawa County COVID-19 Epidemiology

January 12, 2022

Data as of January 8, 2022, unless otherwise indicated

Executive Summary

- **Transmission in Michigan and the US is very high**
- **Ottawa community transmission levels are very high**
 - Positivity increased to 34.8% last week. The goal is to be less than 8%.
 - Weekly case counts in Ottawa increased 83%, from 1,729 two weeks ago to 3,163 last week.
 - Cases among children increased 105%, from 213 two weeks ago to 437 last week.
 - The Omicron variant continues to be detected in clinical samples from Ottawa County residents.
- **Ottawa area and regional hospitals are experiencing high numbers of COVID-19 patients**
 - In Ottawa County, 30% of all available beds and 53% of all ICU beds are occupied by COVID-19 patients.*
 - Regional healthcare systems are extremely strained and asking for the community to take preventive action.
 - 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 have reached the highest levels of the pandemic to date; hospitalizations among children in Michigan continue to increase and have reached pandemic highs.**
- **Of Ottawa County residents aged 5+, 60.6% 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.

Ottawa County Metrics by Week

Metric	Goal	Week Ending				
		11-Dec-21	18-Dec-21	25-Dec-21	1-Jan-22	8-Jan-22
Positivity (All Ages)	<8%	21.6%	18.2%	18.0%	25.6%	34.8%
Weekly Cases (All Ages)	<147	1538	1153	913	1729	3163
Weekly Cases in Children (0-17 years of age)	NA	302	214	149	213	437
Total COVID-19 Hospitalizations (All Ages)	0	60	55	40	13	1
Total Deaths (All Ages)	0	13	13	21	17	5
CDC Risk Transmission Level	Moderate	High	High	High	High	High

Public Health Recommendations

- **Get vaccinated (start series or get booster)**
- **Stay home when sick & get tested**
- **Wear your mask in public indoor places**
- **November 2021 MDHHS Advisory:**

As such, on November 19, 2021, MDHHS is issuing the following advisory on the use of face masks. **This advisory takes effect immediately and remains in effect until further notice.**

All Michiganders, regardless of vaccination status, should take the following actions to protect against COVID-19 and other respiratory illnesses:

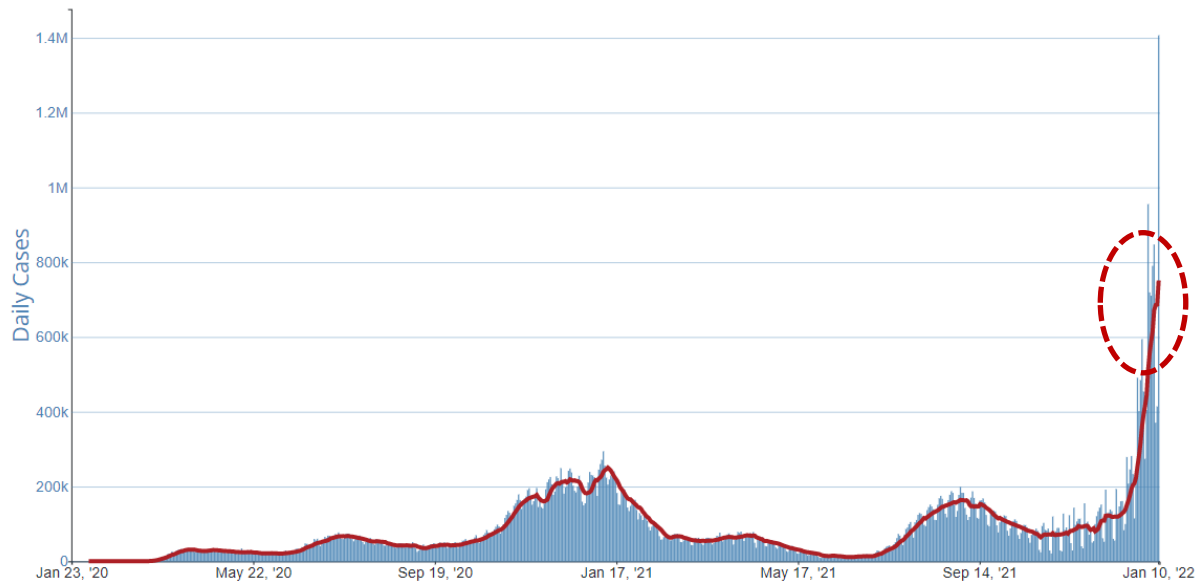
Public Health Advisory:

- (a) All persons in indoor public settings are advised to wear a face mask, regardless of their vaccination status.
- (b) Public establishments are advised to implement masking policies and encourage compliance with such policies.
- (c) Individuals who are not fully vaccinated or who are immunocompromised are advised to avoid large crowds or gatherings.

Case Trends in the USA and Michigan

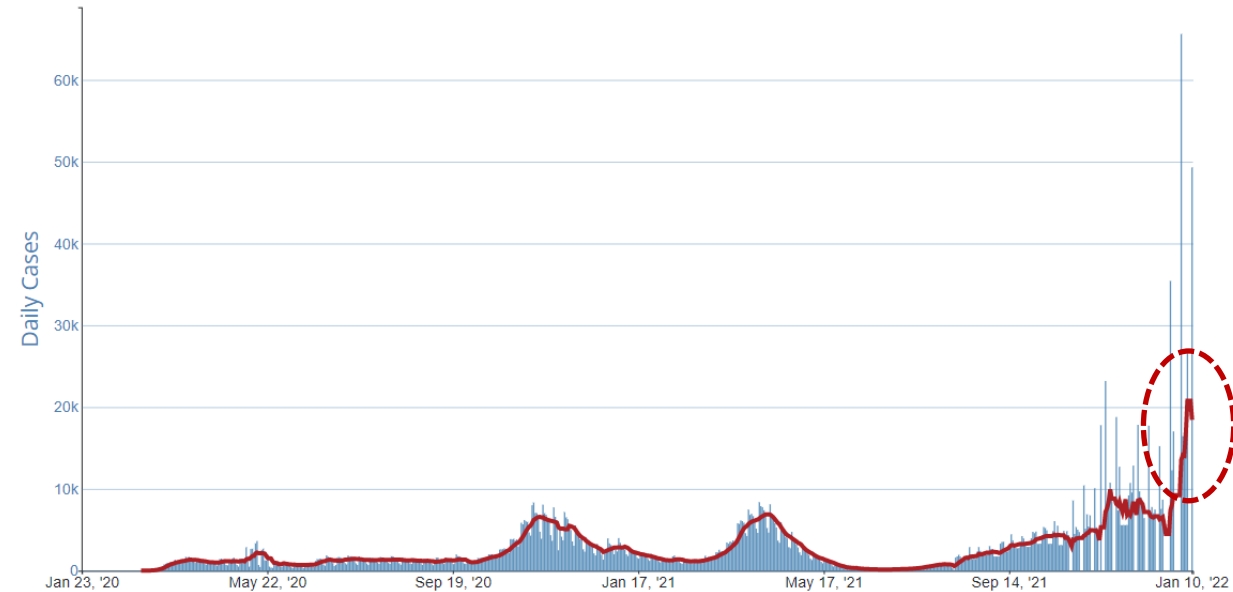
USA

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

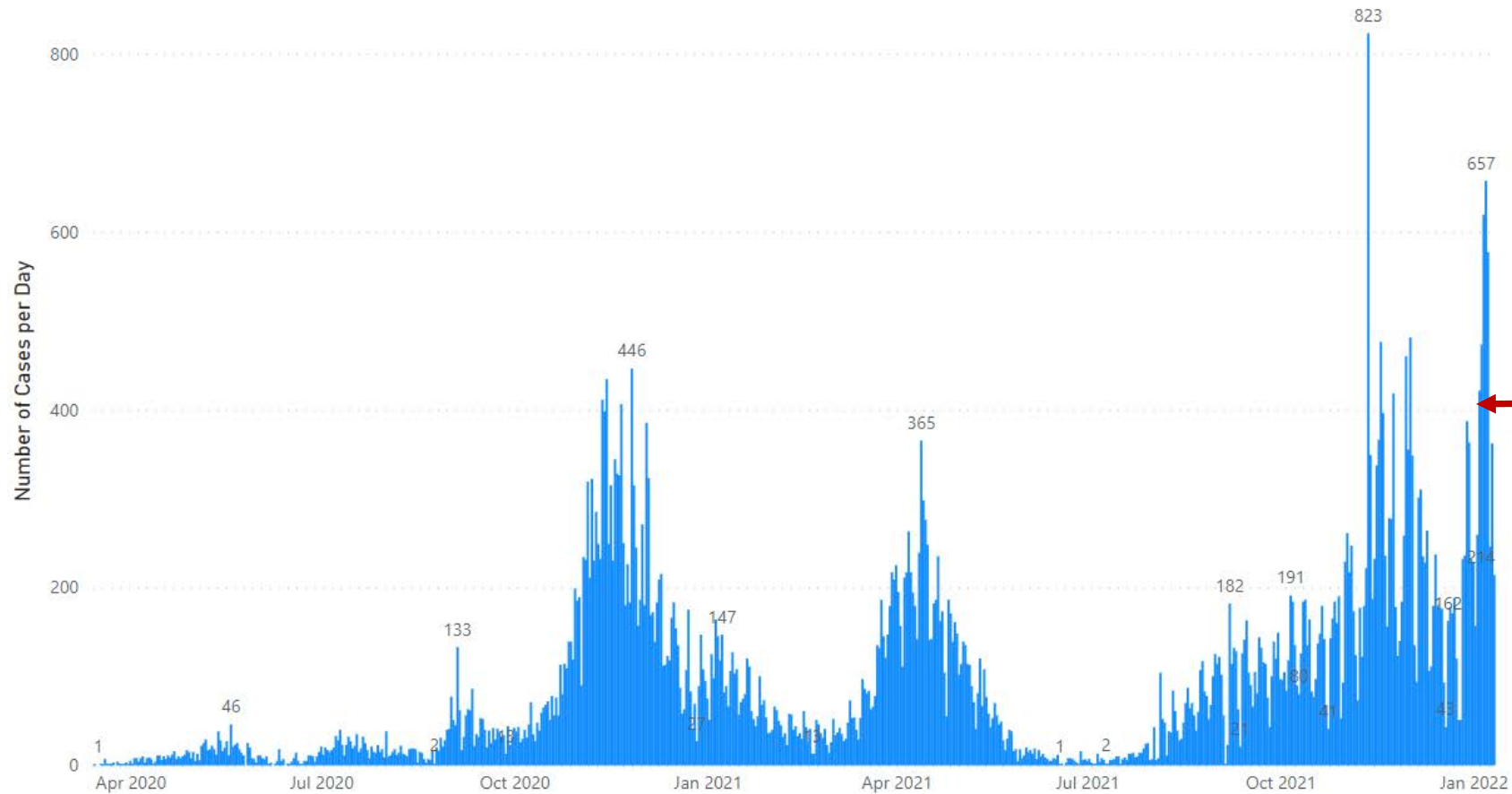


Daily case counts in Michigan and the US have reached pandemic highs.

Case Trends in Ottawa County

COVID-19 Cases by Day, Ottawa County, March 15, 2020 – January 11, 2022

Epidemiological Curve



Total Number of Cases
60,587

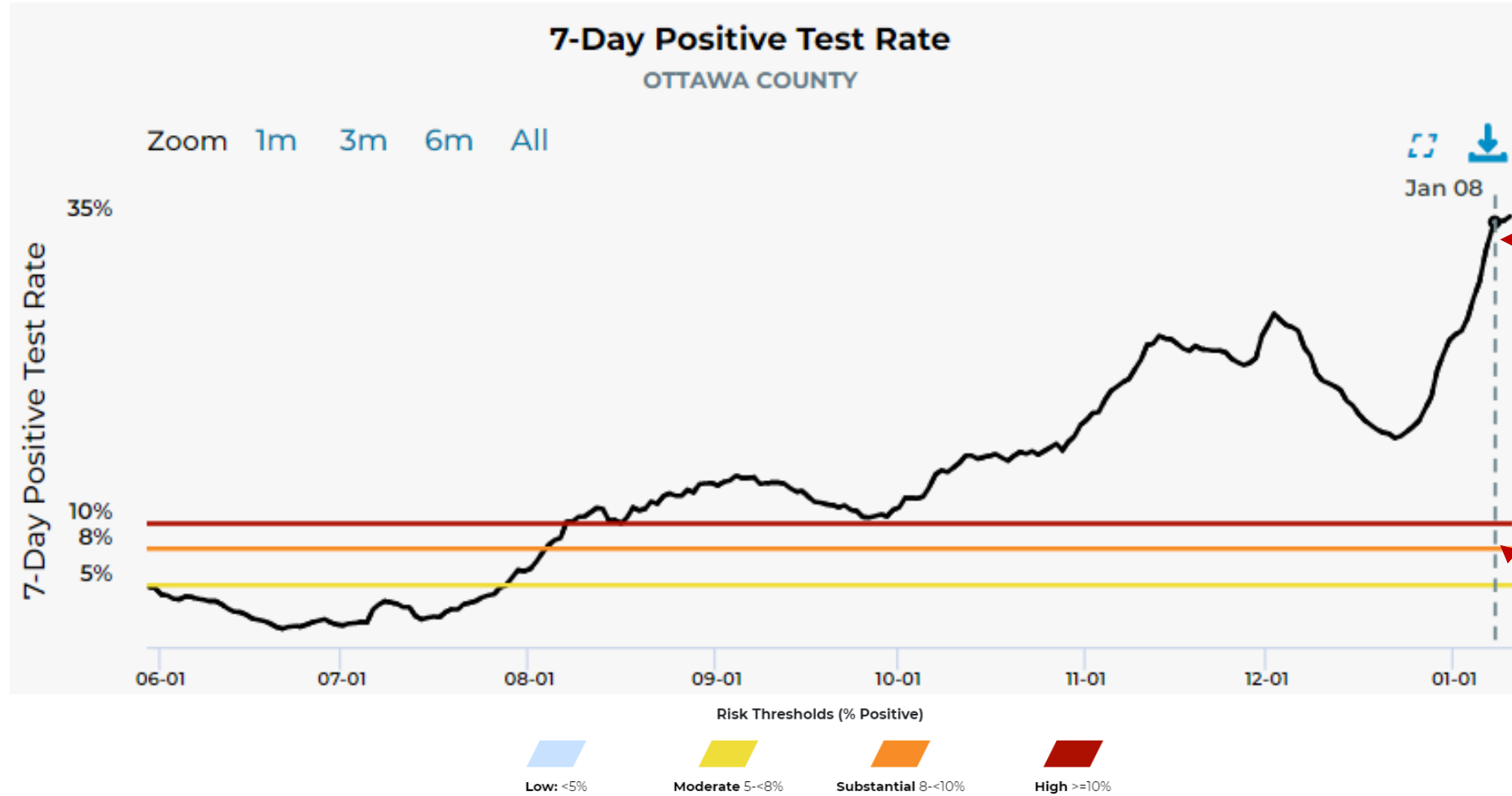
Currently the 7-day average is **449 cases per day**, much higher than the 266 cases per day seen at a similar time last week.

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, June 1, 2021 – January 8, 2022



Test positivity rose to 34.8% as of January 8, 2022, a **pandemic high**.

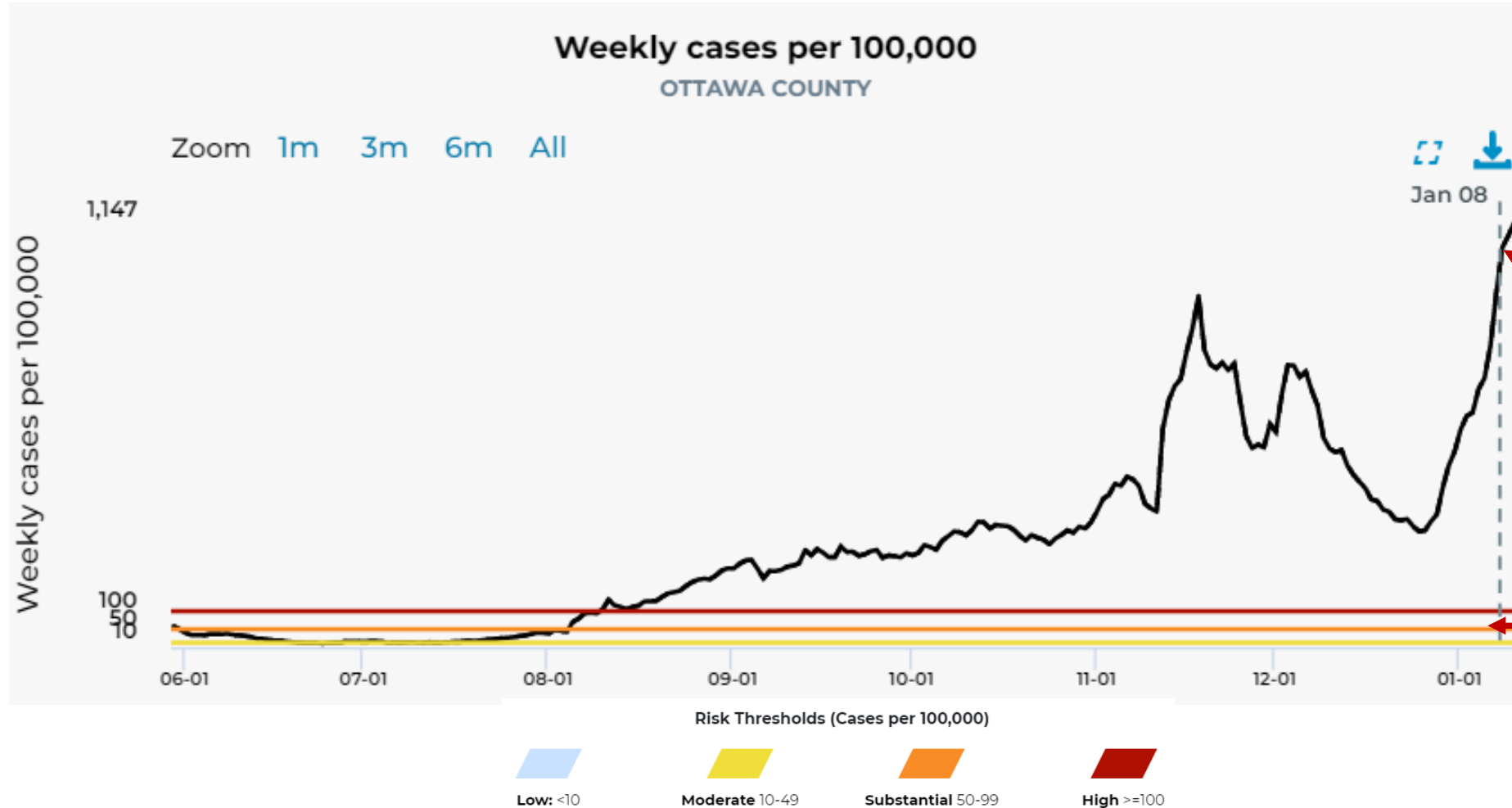
The goal is to have less than 8% of tests coming back positive.

Note: Testing in Ottawa County has remained stable with at least 6000-10,000 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>

Case Rates in Ottawa County – All Ages

COVID-19 Cases by Day, Ottawa County, June 1, 2021 – January 8, 2022



Case rates increased to 1,081 cases per week per 100,000 population (up from 584 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>

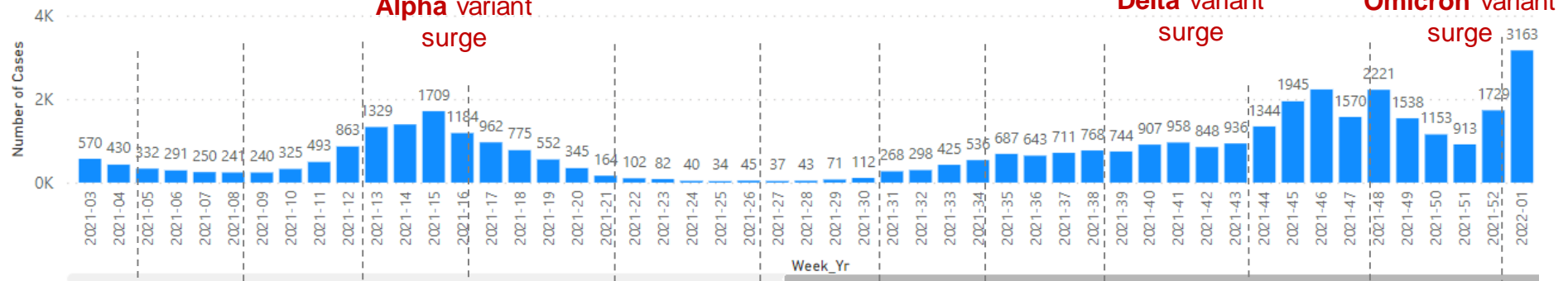
Ottawa County Time Trends – Annual Comparison



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.

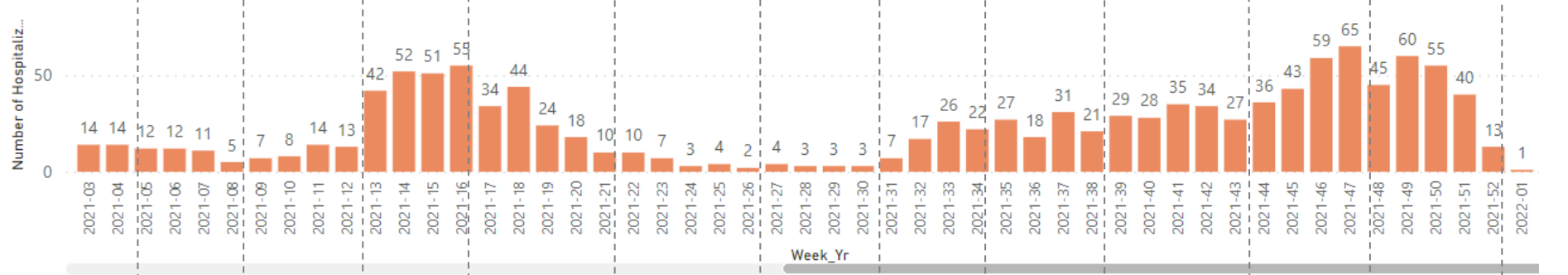
Ottawa County - Cases, Hospitalizations, & Deaths by Week, All Ages

New Cases By Week of Referral



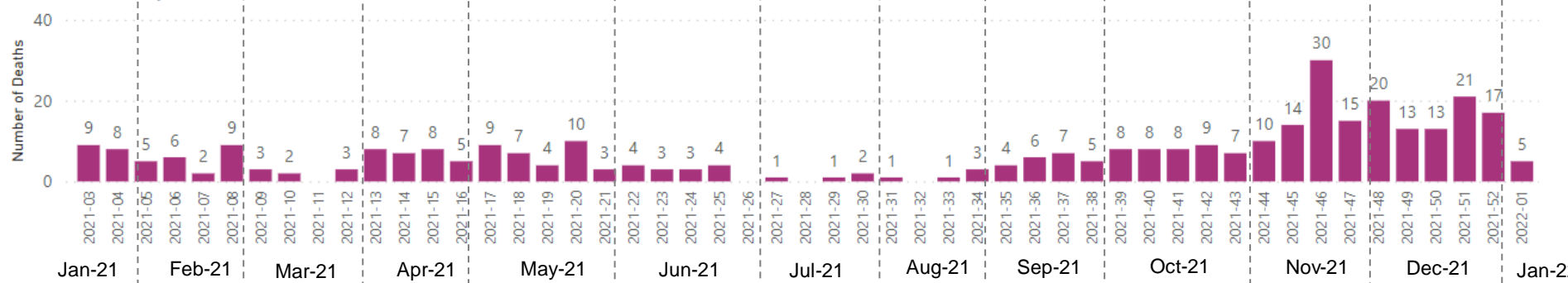
The weekly number of **cases increased 83%** from week 52 to week 1.

New Hospitalizations by Week of Admission



The weekly number of **hospitalizations** remains elevated with an average of about **27 cases hospitalized** each week over the last month (this is likely an underestimate).

New Deaths by Week of Death



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 **14 deaths per week**.

Hospitalizations and deaths in recent weeks may increase as data is updated.

Hospitalizations are likely **underestimated** because:

- (i) Hospitalization status is obtained only by manual review, and
- (ii) Hospitalization may occur after public health interview.
- (iii) As of late 2021, MDHHS discontinued interviewing Ottawa County cases, further limiting awareness of hospitalization.

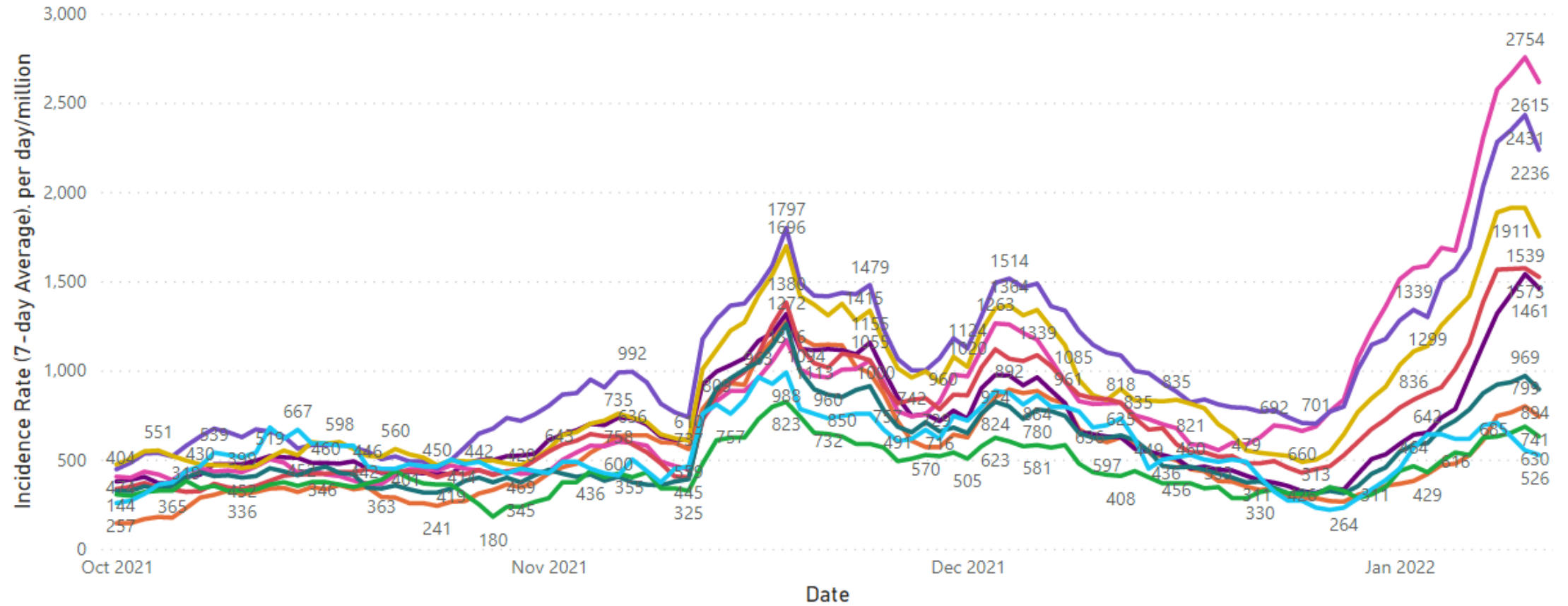
Source: Michigan Department of Health and Human Services, Michigan Disease Surveillance System

Ottawa County - Case Rate Trends – by Age Decade

COVID-19 Case Rates by Age, October 2021 – January 11, 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 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	939	-24%	214	-29%	1153	-25%
25-Dec-21	764	-19%	149	-30%	913	-21%
1-Jan-22	1516	98%	213	43%	1729	89%
8-Jan-22	2726	80%	437	105%	3163	83%

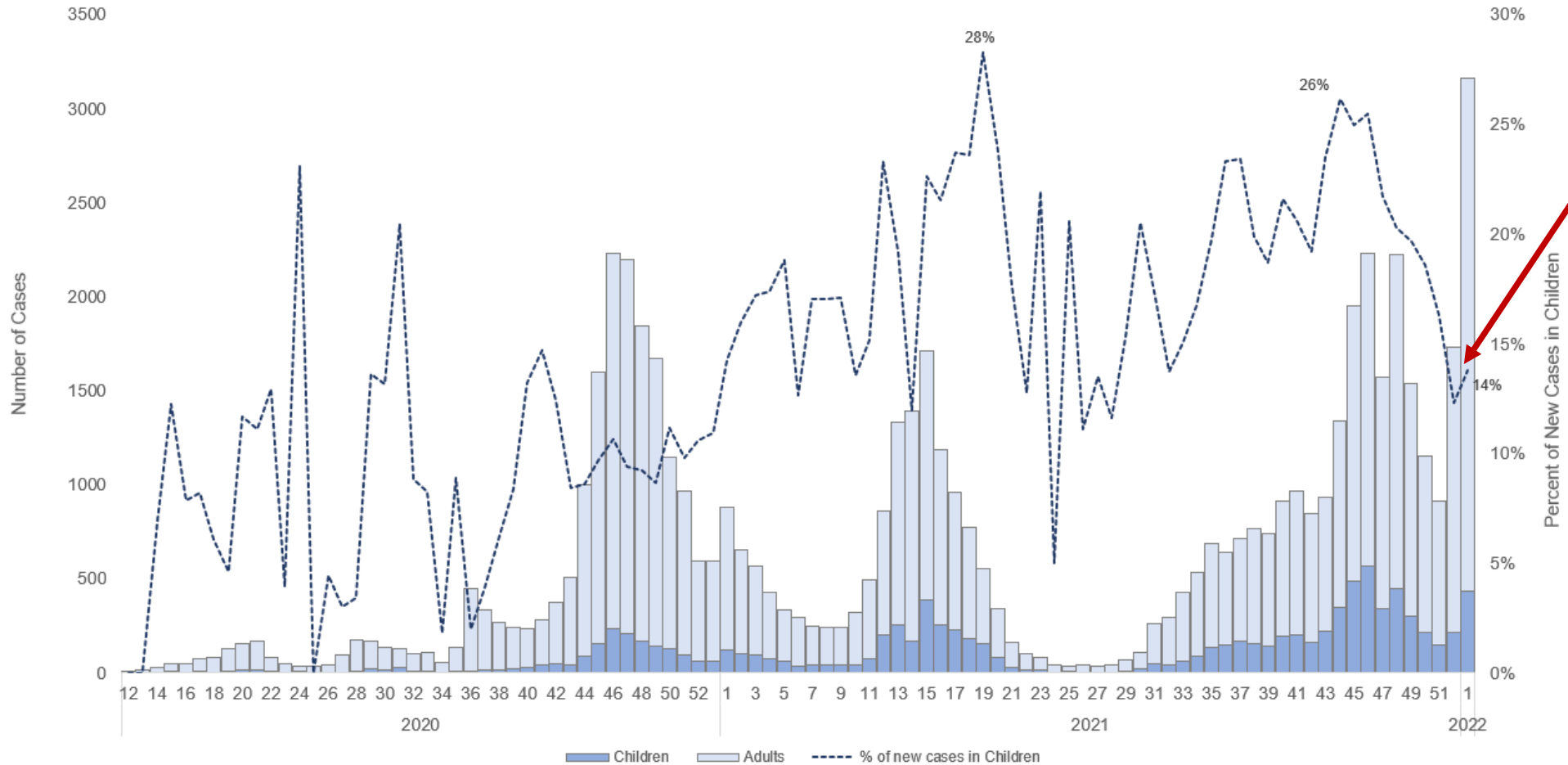
Weekly case counts among children increased 105% last week, and cases in adults increased 80%.

Adults

Children

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

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

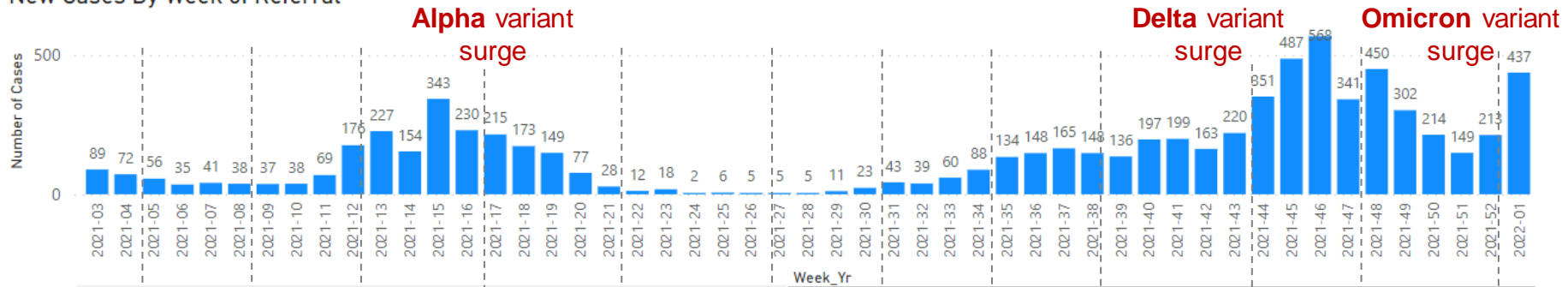


During week 1 in 2022, children made up **14%** of cases reported, lower than recent highs.

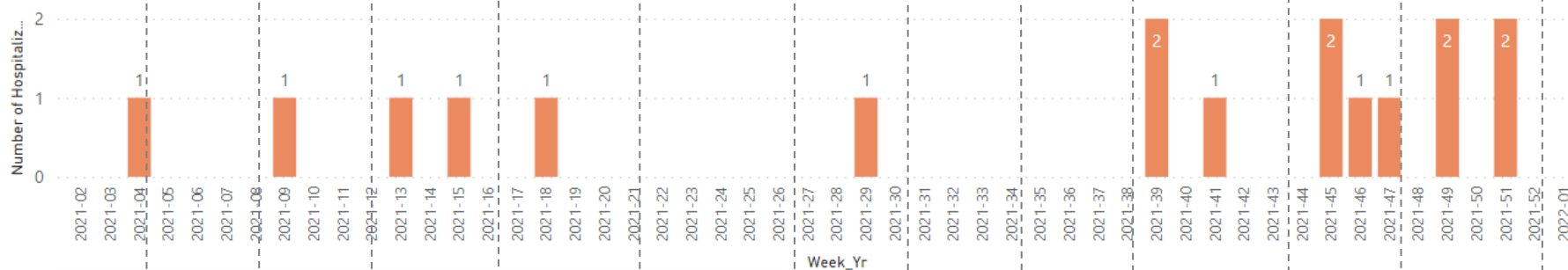
For comparison, children aged 0-17 make up about **23.5%** of the population in Ottawa County.

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

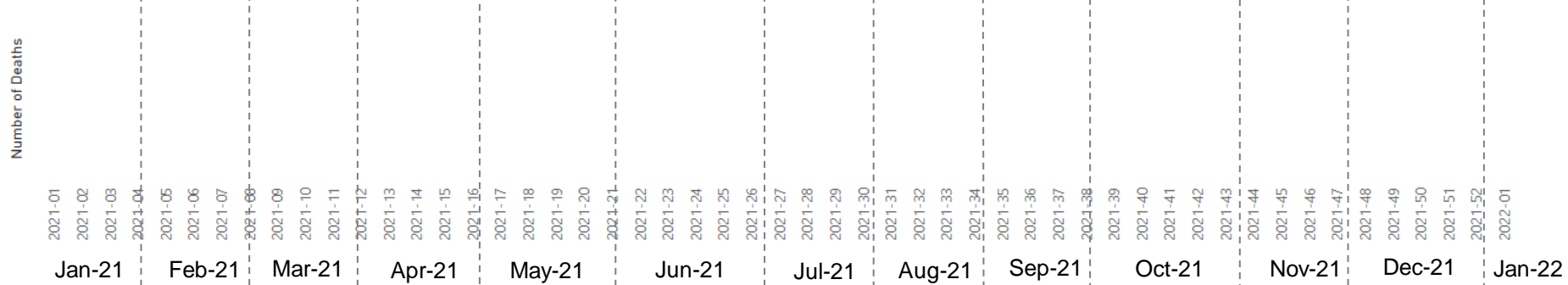
New Cases By Week of Referral



New Hospitalizations by Week of Admission



New Deaths by Week of Death



The weekly number of cases among children increased 105% from week 52 to week 1.

Hospitalizations are likely underestimated because:

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- (iii) As of late 2021, MDHHS discontinued interviewing Ottawa County cases, further limiting awareness of hospitalization.

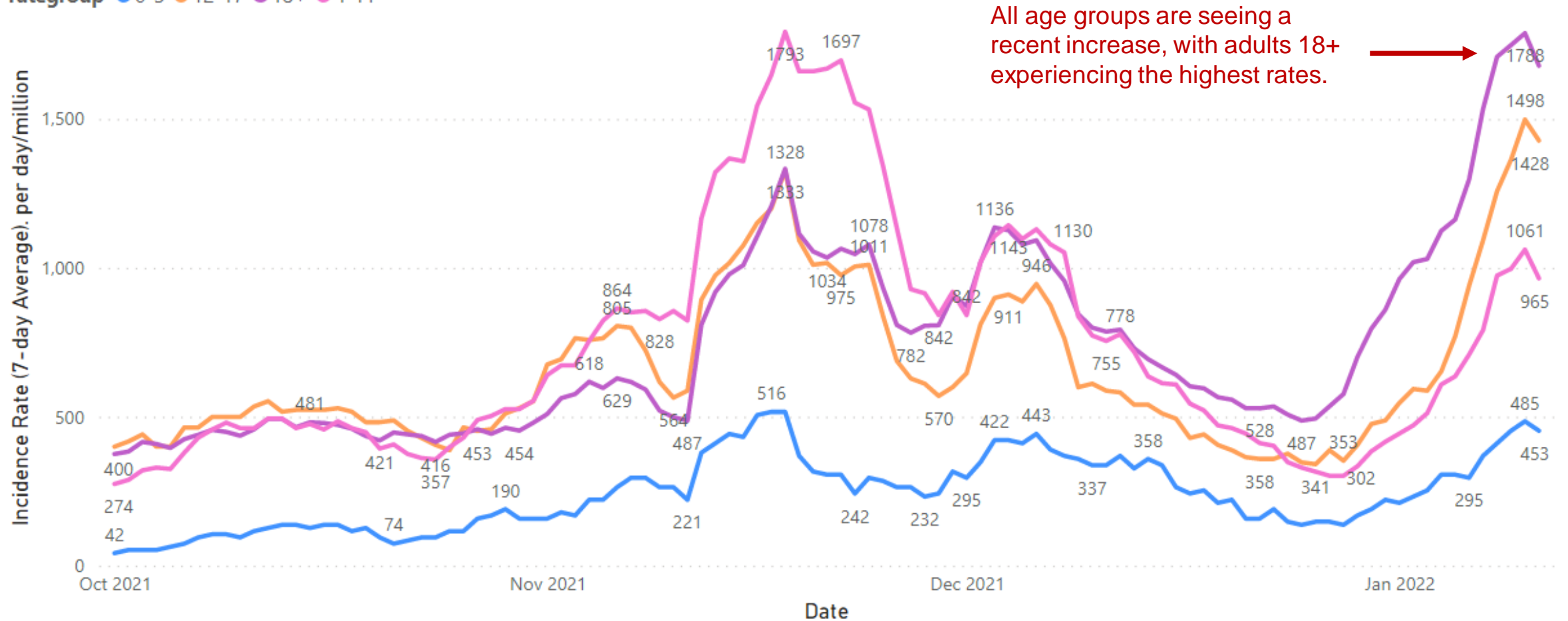
Source: Michigan Department of Health and Human Services, Michigan Disease Surveillance System

Ottawa County - Case Rate Trends – by Age

COVID-19 Case Rates by Age, includes School-Aged, October 2021 – January 11, 2022

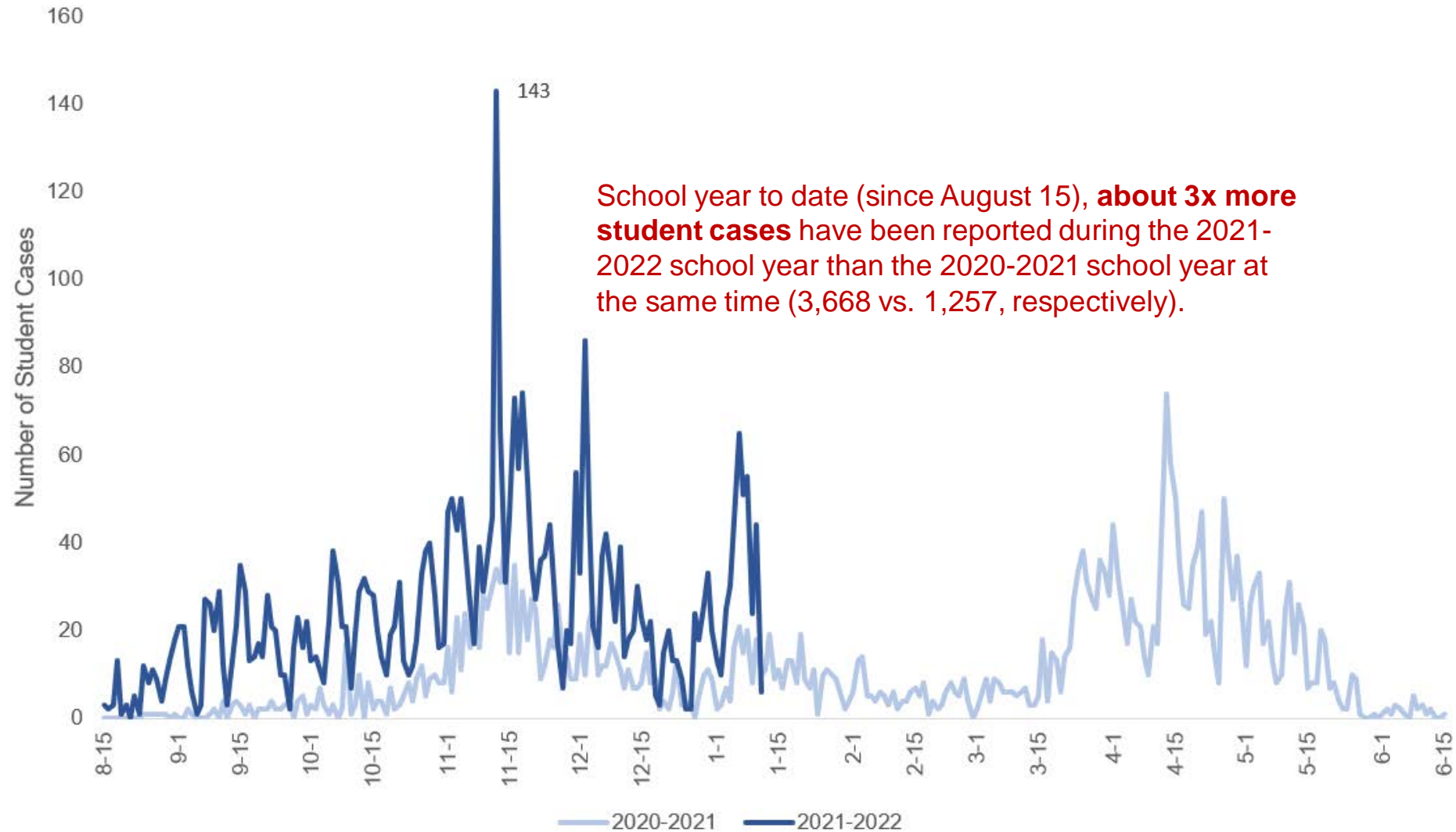
Incidence Rate (7-day Average)

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



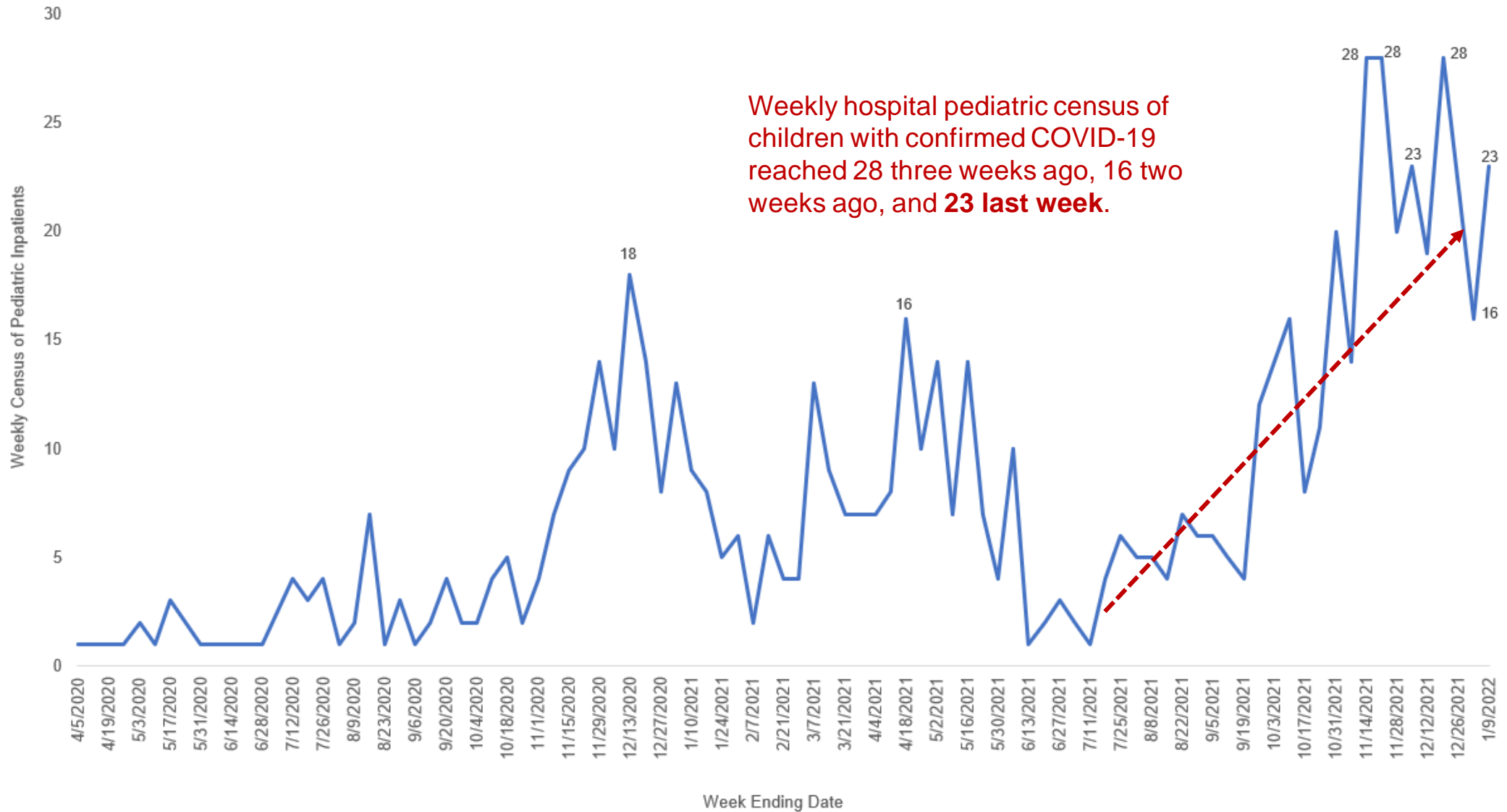
Method: Includes PreK-12 students known to attend a school in Ottawa County who are classified as a confirmed or probable case of COVID-19.

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 11, 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.

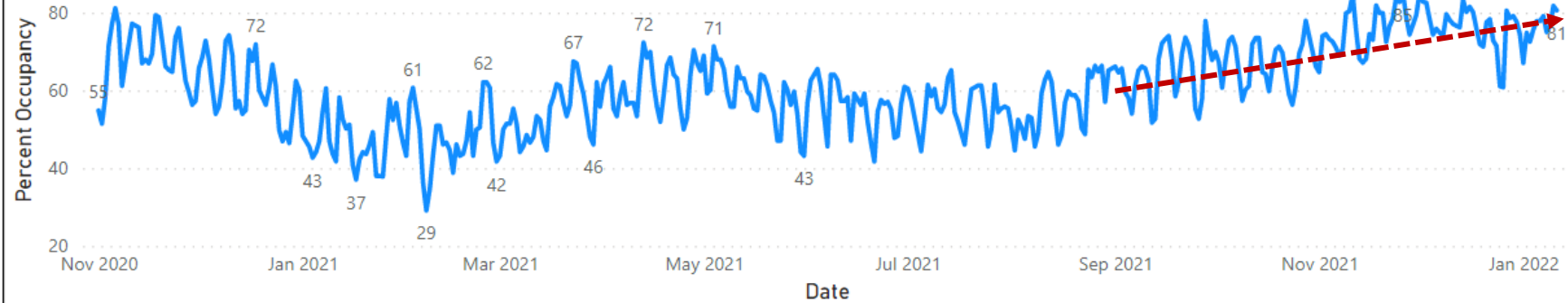
Data through January 9, 2022

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



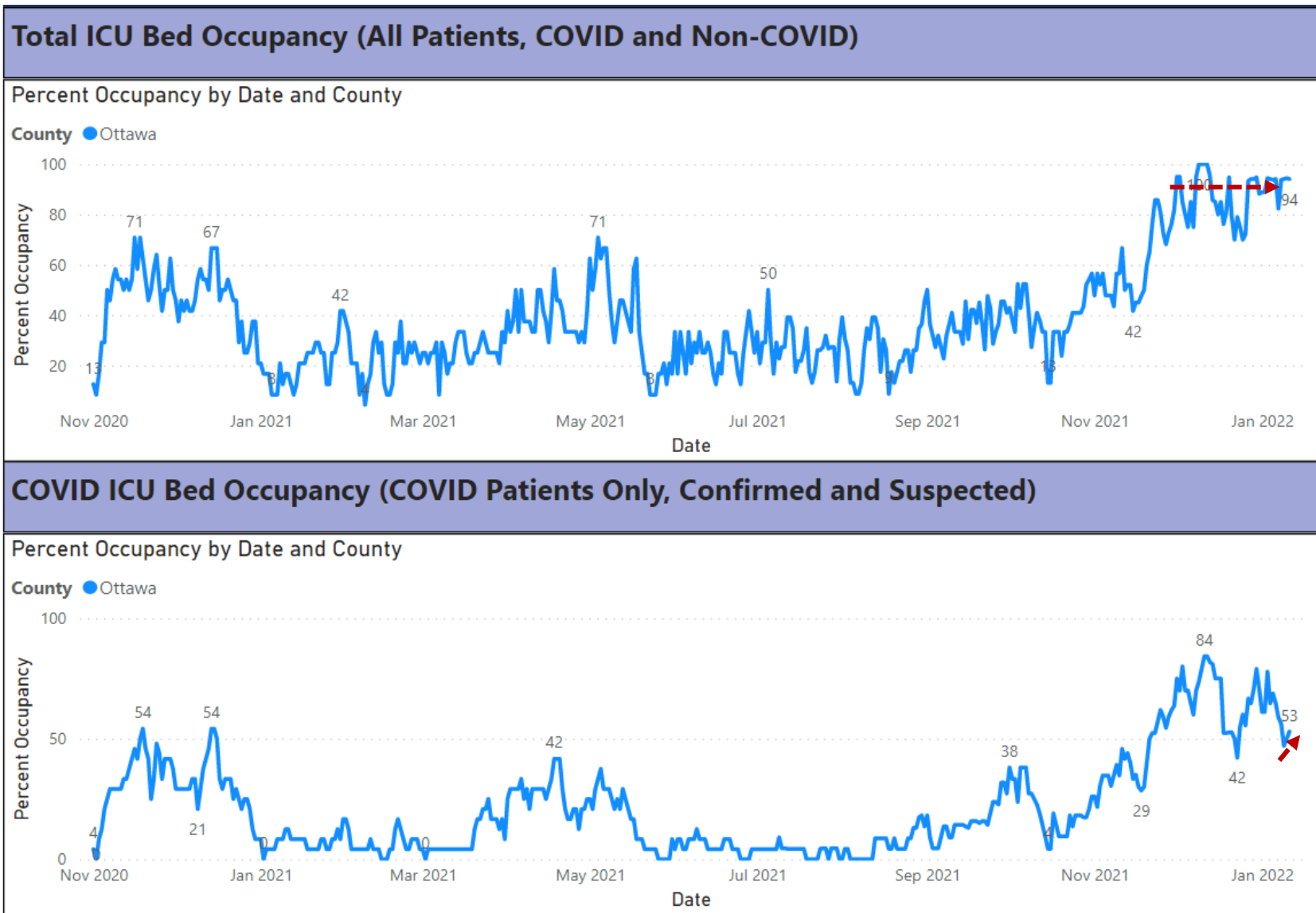
Total hospital bed occupancy **may be increasing**, as is the proportion of beds occupied by COVID-19 patients.

Currently **30%** of all inpatient beds are occupied by COVID-19 patients.

Source: EMResources

Data through January 11, 2022

Ottawa County Hospital Capacity – ICU Beds



Overall ICU bed occupancy **remains elevated (94%)**.

The proportion of ICU beds occupied by COVID-19 patients also **remains elevated**. Currently, **53%** of all ICU beds are occupied by COVID-19 patients.

Source: EMResources

Data through January 11, 2022

Spectrum Health Hospitalized COVID-19 Patients

Spectrum Health COVID-19 Hospitalizations



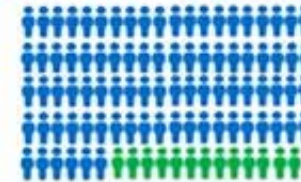
January 11, 2022

Spectrum Health currently has 369 hospitalized COVID-19 patients. Of these, 280 (76%) are unvaccinated and 89 are vaccinated*.

*Vaccinated patients are, on average, 11 years older (68 vs 57) and have an average of 5 co-morbidities compared to 2 for unvaccinated patients.



Of those 369 patients, 99 are currently in the ICU. Of these, 86 (87%) are unvaccinated and 13 are vaccinated.



Of those 99 ICU patients, 64 are on ventilators. Of these, 60 (94%) are unvaccinated and 4 are vaccinated.

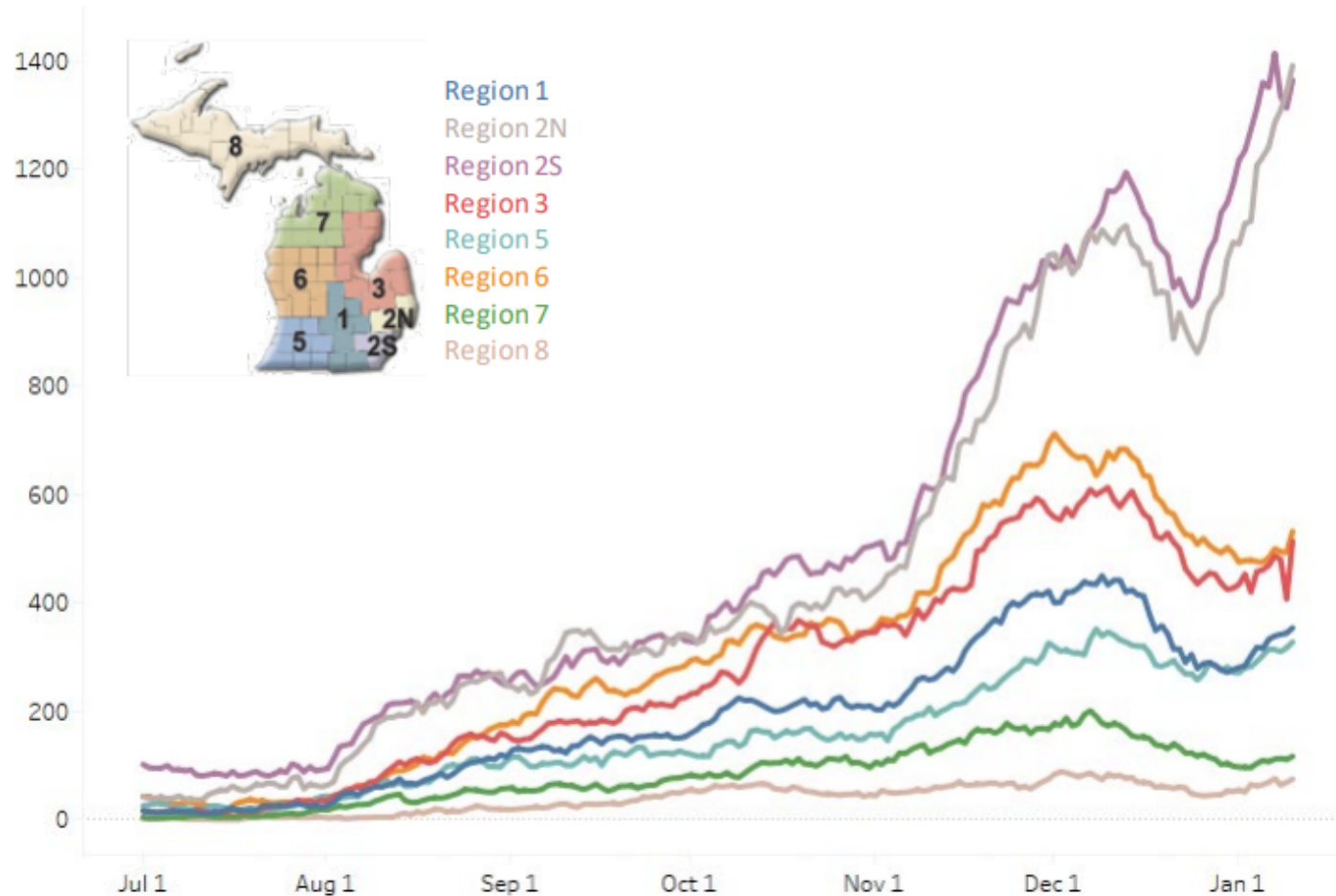


Data includes pediatric and adult COVID-19 positive inpatients across all Spectrum Health Hospitals.
*Vaccinated = 2 weeks after receipt of the second dose in a 2-dose series, such as the Pfizer or Moderna vaccines, or a single-dose vaccine, such as Johnson & Johnson's Janssen vaccine.

Source: <https://www.facebook.com/spectrumhealth/photos/a.126445034231/10158976205289232/>

Statewide Hospitalization Trends: Regional COVID+ Census

Hospitalization Trends 7/1/2021 – 1/10/2022
Confirmed Positive by Region



The COVID+ hospital census has increased in all regions since last week. The fastest growth was seen in Regions 2N, 3 and 7.

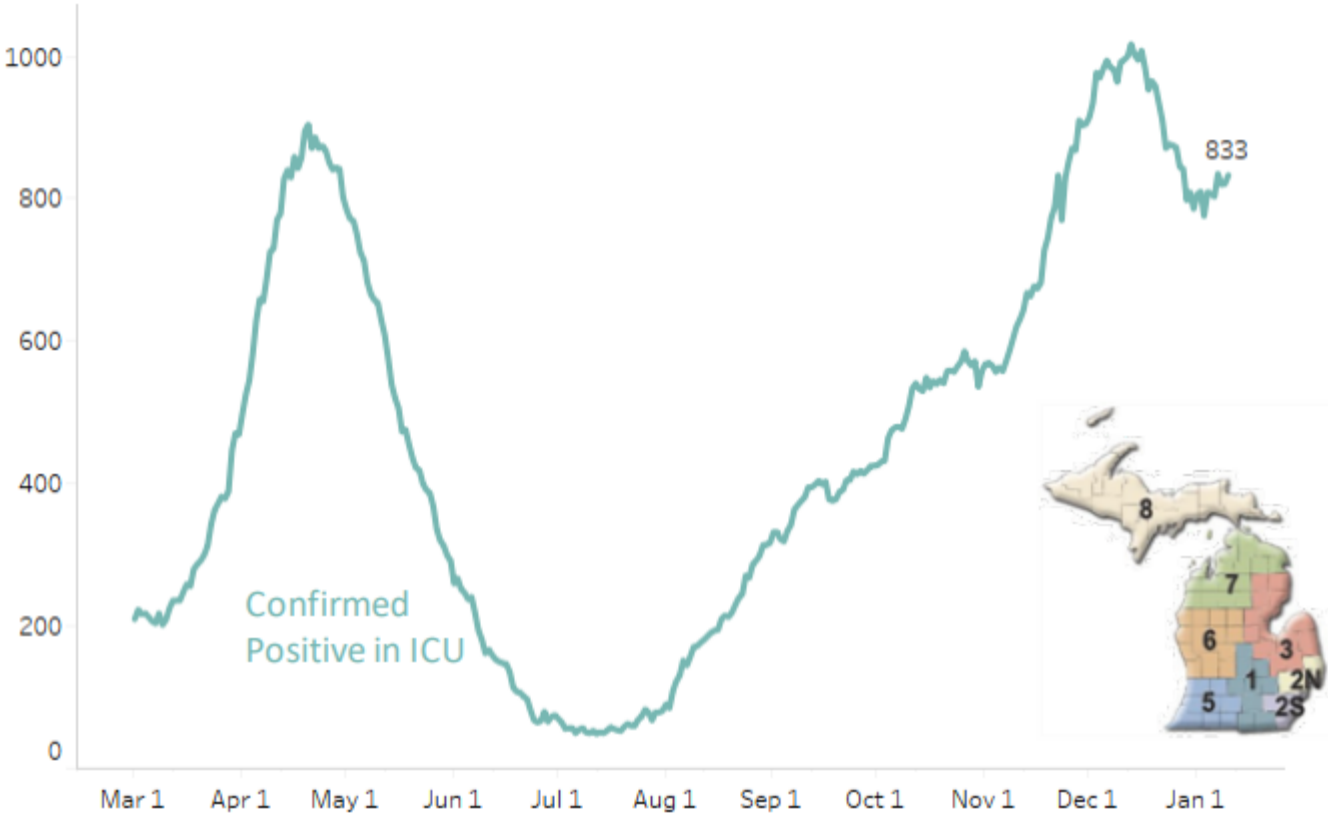
Regions 2N and 2S now have greater than 600 COVID+ patients hospitalized per Million Population.

Region	COVID+ Hospitalizations (% Δ from last week)	COVID+ Hospitalizations / MM
Region 1	354 (17%)	327/M
Region 2N	1391 (26%)	628/M
Region 2S	1364 (3%)	612/M
Region 3	514 (22%)	453/M
Region 5	328 (16%)	344/M
Region 6	532 (11%)	363/M
Region 7	117 (22%)	234/M
Region 8	75 (15%)	241/M

Source: MDHHS Data and Modelling: https://www.michigan.gov/documents/coronavirus/20220111_Data_and_modeling_update_vMEDIA_745522_7.pdf

Statewide Hospitalization Trends: ICU COVID+ Census

Hospitalization Trends 3/1/2021 – 1/10/2022
Confirmed Positive in ICUs



The census of COVID+ patients in ICUs has increased 7% from last week. Census in ICUs has increased in all regions except for Regions 3 and 6.

Regions 1, 2S, and 3 have ICU occupancy greater than 85%. All regions except for Regions 5 and 8 have 30% or more 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	76 (12%)	86%	37%
Region 2N	174 (16%)	79%	31%
Region 2S	234 (5%)	87%	34%
Region 3	111 (-5%)	93%	34%
Region 5	48 (17%)	78%	28%
Region 6	128 (0%)	81%	43%
Region 7	45 (36%)	81%	34%
Region 8	17 (6%)	76%	27%

Source: MDHHS Data and Modelling: https://www.michigan.gov/documents/coronavirus/20220111_Data_and_modeling_update_vMEDIA_745522_7.pdf

Pediatric Hospitalization Rates – USA, Georgia, Michigan



Pediatric hospitalization rates across the US, in Georgia, and in Michigan have reached the highest levels of the pandemic to date.

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

Accessed January 12, 2022

USA & MI

Spread

Children

Hospitalizations

Vaccinations

Variants

Risk Levels

Other

Media

Science
Roundup

Pediatric Hospitalization Rates – Select Midwest States



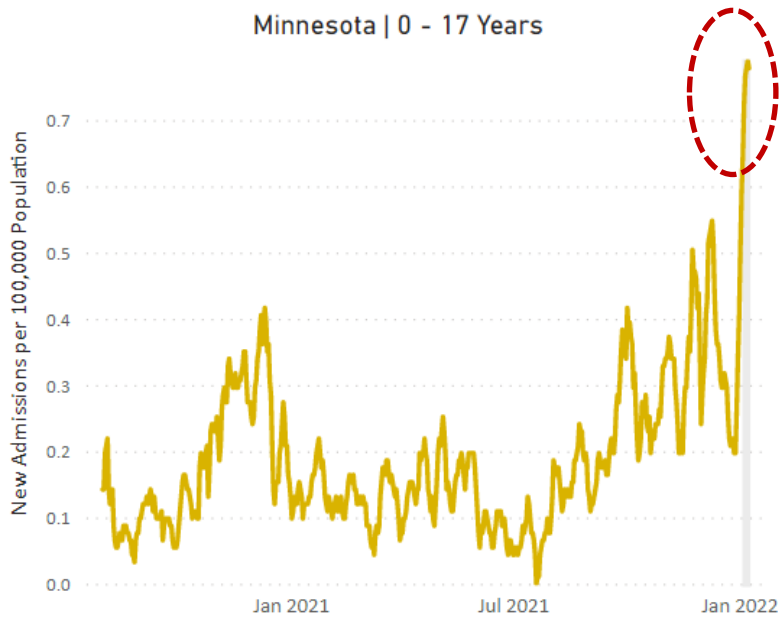
Ohio, Indiana, and Illinois are all experiencing substantial increases in pediatric hospitalization, and **have reached pandemic highs.**

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

Accessed January 12, 2022

Pediatric Hospitalization Rates – Select Midwest States

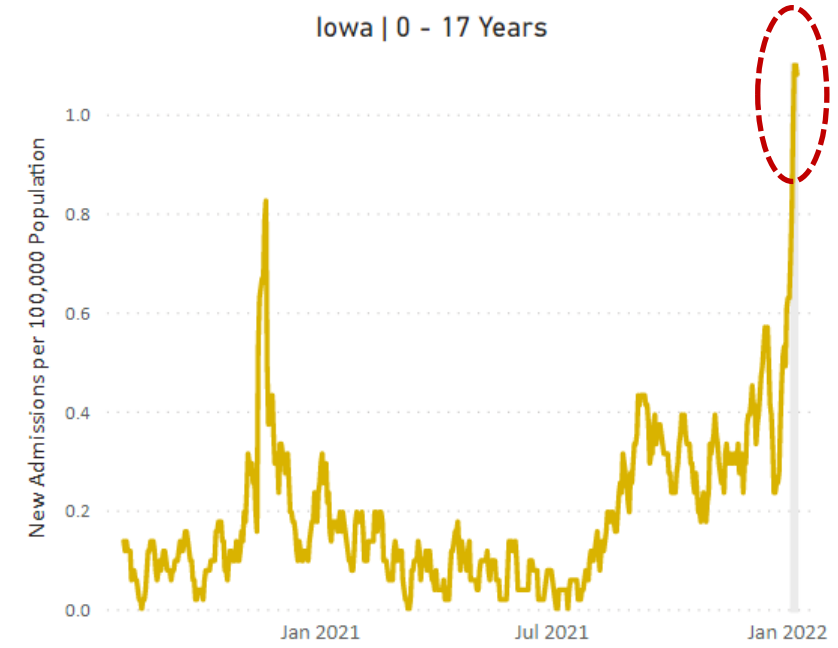
Minnesota | 0 - 17 Years



Wisconsin | 0 - 17 Years



Iowa | 0 - 17 Years

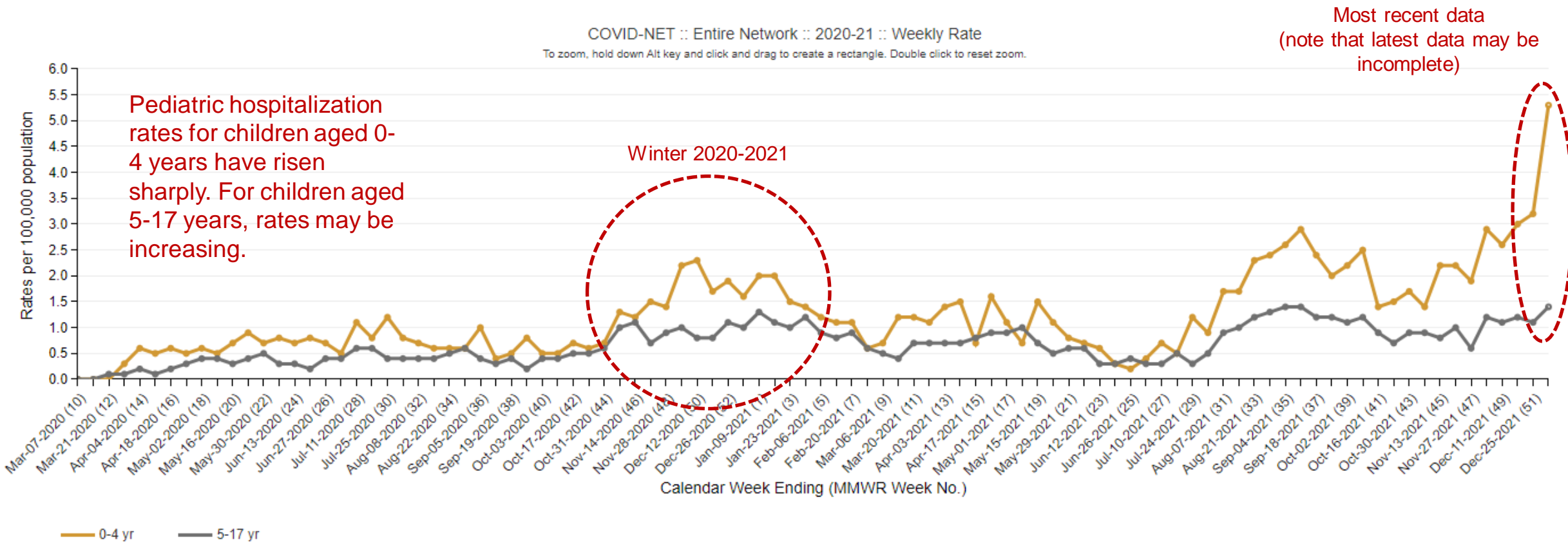


Pediatric hospitalization rates in Minnesota, Wisconsin, and Iowa remain elevated and have reached the highest levels of the pandemic.

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

Accessed January 12, 2022

Pediatric Hospitalization Rates by Age Group – USA



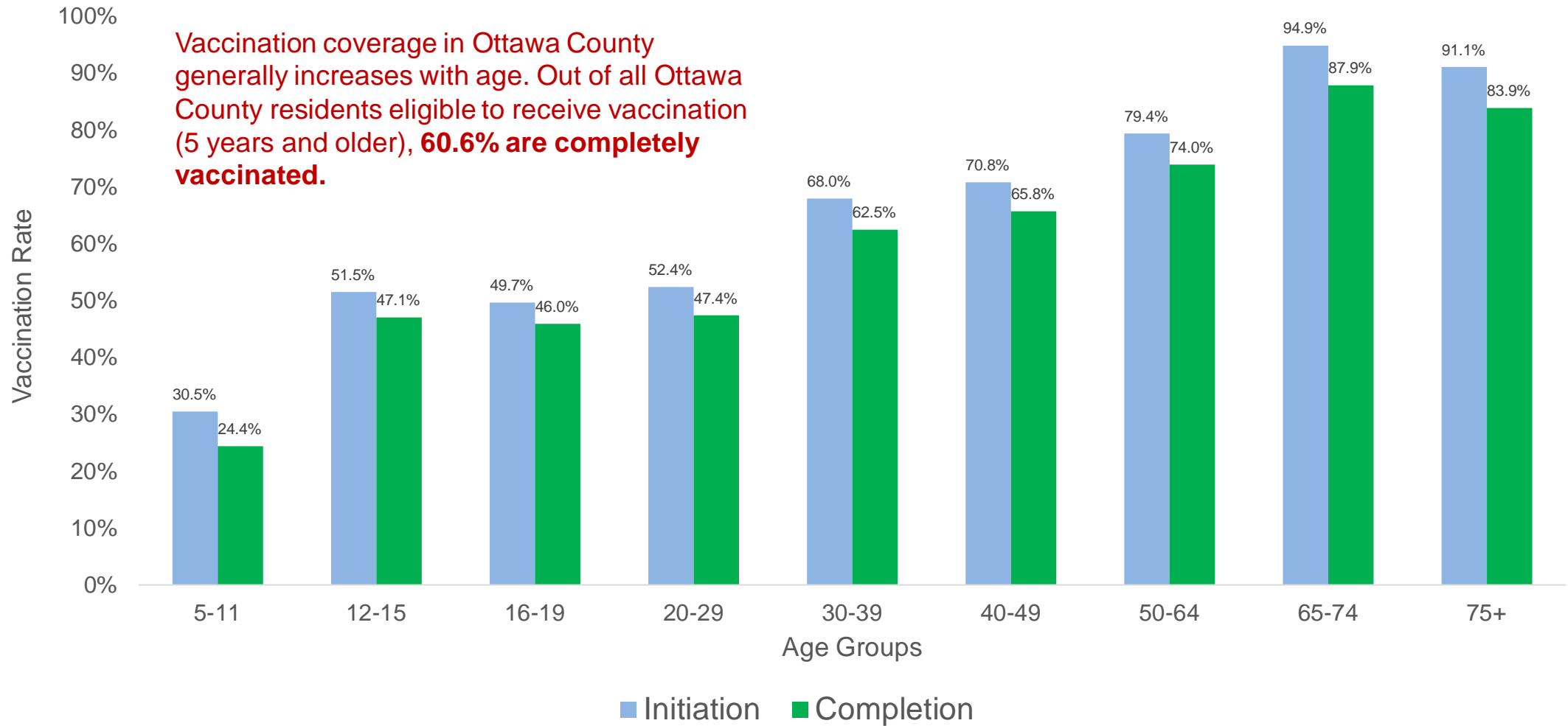
The Coronavirus Disease 2019 (COVID-19)-Associated Hospitalization Surveillance Network (COVID-NET) hospitalization data are preliminary and subject to change as more data become available. In particular, case counts and rates for recent hospital admissions are subject to lag. Lag for COVID-NET case 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 12, 2022

Vaccination Coverage by Age



Note:

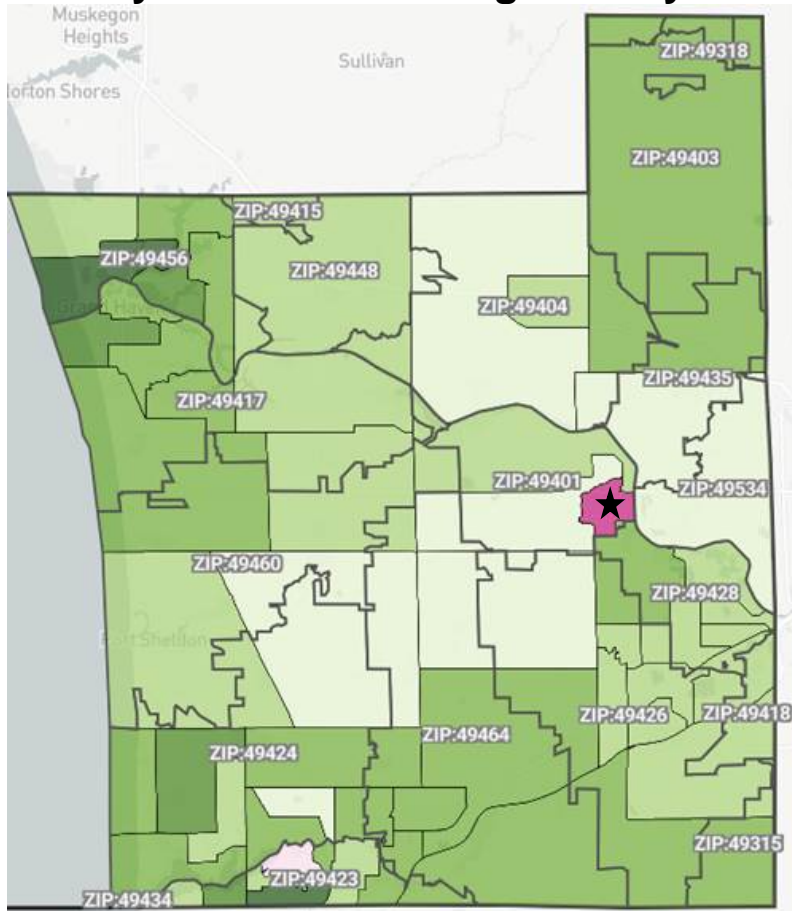
Completion is the percentage of people receiving 2 doses of Pfizer or Moderna or 1 dose of J&J.

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

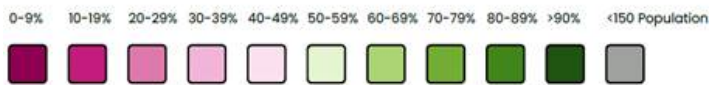
Data through January 10, 2022

Vaccination Coverage by Place of Residence

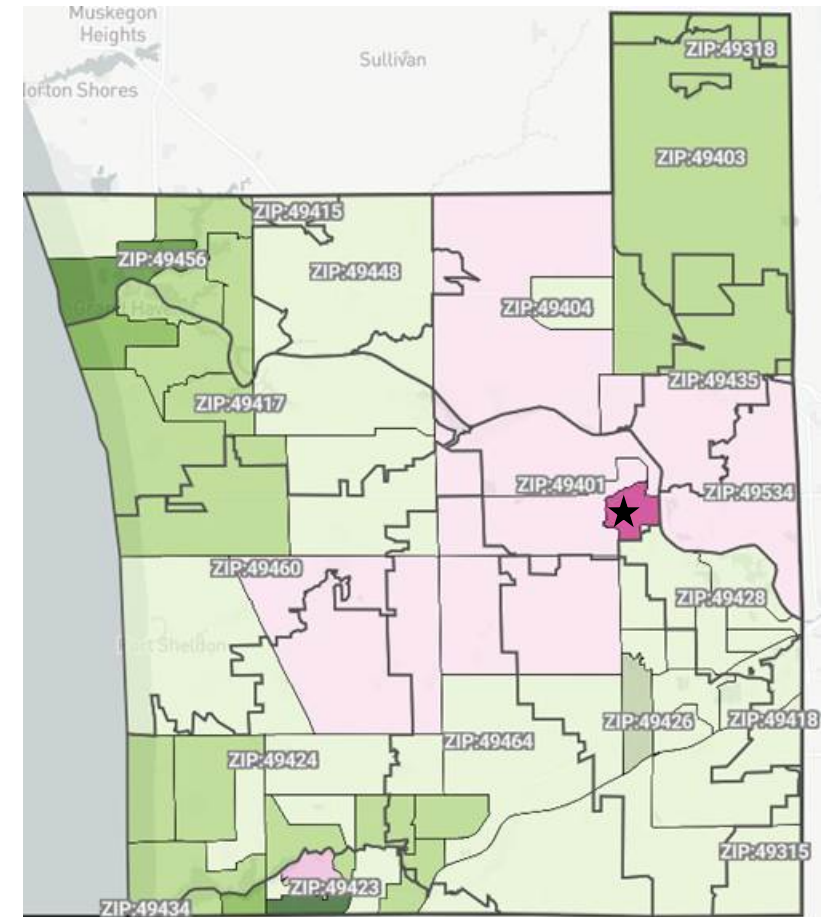
Fully vaccinated: % Ages 16+ years



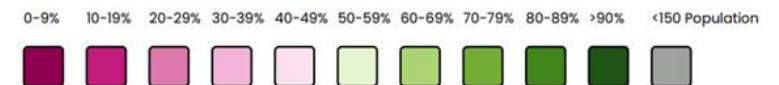
Color coded by: Fully Vaccinated (% Ages 16+)



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 8, 2022

Fully Vaccinated People (164,891)		
Cases	Hospitalizations	Deaths
Percent of Cases in People Not Fully Vaccinated (29,647 / 39,713) 74.7%	Percent of Hospitalizations in People Not Fully Vaccinated (977 / 1226) 79.7%	Percent of Deaths in People Not Fully Vaccinated (224 / 325) 68.9%
Total Cases Not Fully Vaccinated 29,647	Total Hospitalized Not Fully Vaccinated 977	Total Deaths Not Fully Vaccinated 224
Total Breakthrough Cases 10,066	Total Breakthrough Hospitalizations 249	Total Breakthrough Deaths 101
Percent of Fully Vaccinated People who Developed COVID-19 (10,066 / 164,891) 6.105%	Percent of Fully Vaccinated People who were Hospitalized for COVID-19 (249 / 164,891) 0.151%	Percent of Fully Vaccinated People who Died of COVID-19 (101 / 164,891) 0.061%
Percent of Cases who were Fully Vaccinated (10,066 / 39,713) 25.3%	Percent of Hospitalizations who were Fully Vaccinated (249 / 1226) 20.3%	Percent of Deaths who were Fully Vaccinated (101 / 325) 31.1%
Total Cases 39,713	Total Hospitalizations 1226	Total Deaths 325

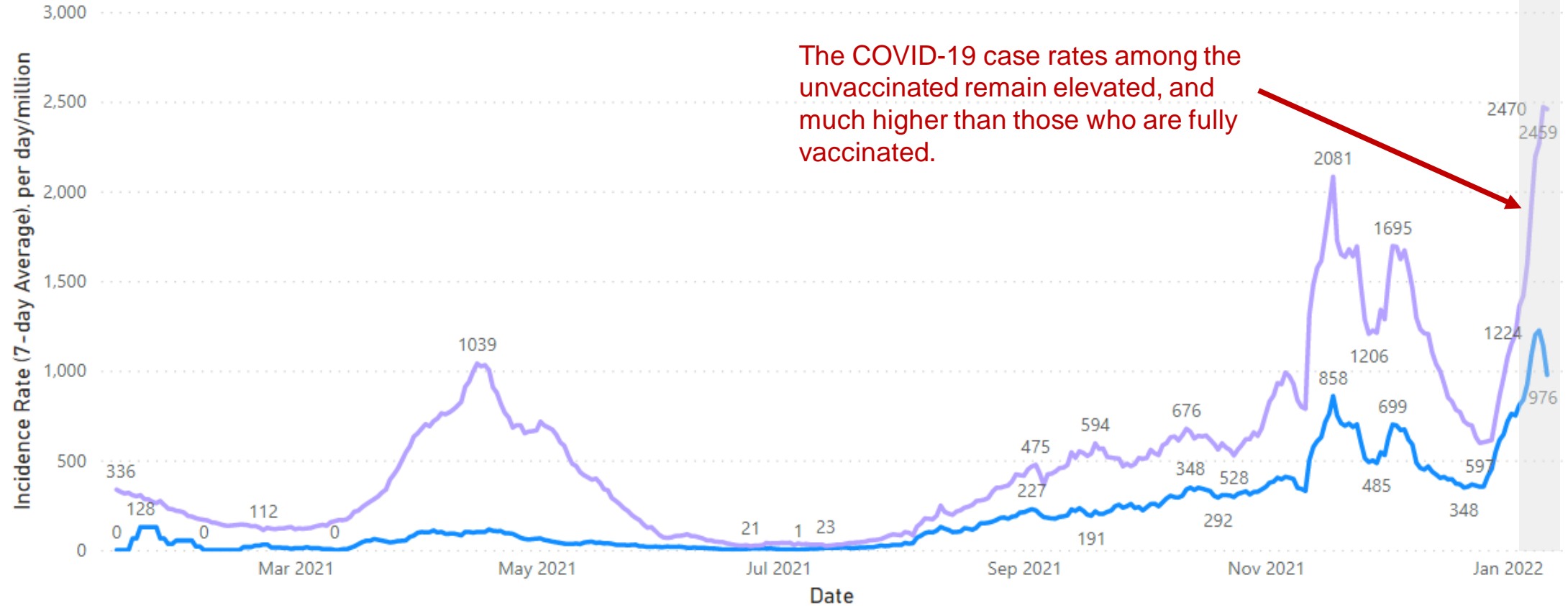
Sources:
Michigan Department of Health and Human Services, Michigan Disease Surveillance System
MDHHS COVID-19 Dashboard: https://www.michigan.gov/coronavirus/0,9753,7-406-98178_103214_103272-547150--,00.html

Ottawa County COVID-19 Vaccination Breakthrough Case Trends

Incidence Rate (7-day Average)

rategroup ● Fully Vaccinated ● Unvaccinated

Recent data may be incomplete



Method:

Daily case counts were obtained from the MDSS and summarized by referral date. Cases were compared to data from the State of Michigan immunization database to confirm COVID-19 vaccination status. Counts of persons completely vaccinated in Ottawa County were compiled from the Michigan COVID-19 vaccination dashboard. The total population denominator was obtained from CDC Wonder; the 2019 population estimate was used. Daily COVID-19 case rates were calculated and averaged over the previous 7 days; a rate of cases per day per million population was used. Cases ineligible for vaccination are included in this data. On December 22, 2021 this figure was updated to compare fully vaccinated and unvaccinated persons, to align more closely with [CDC data](#); partially vaccinated persons were excluded.

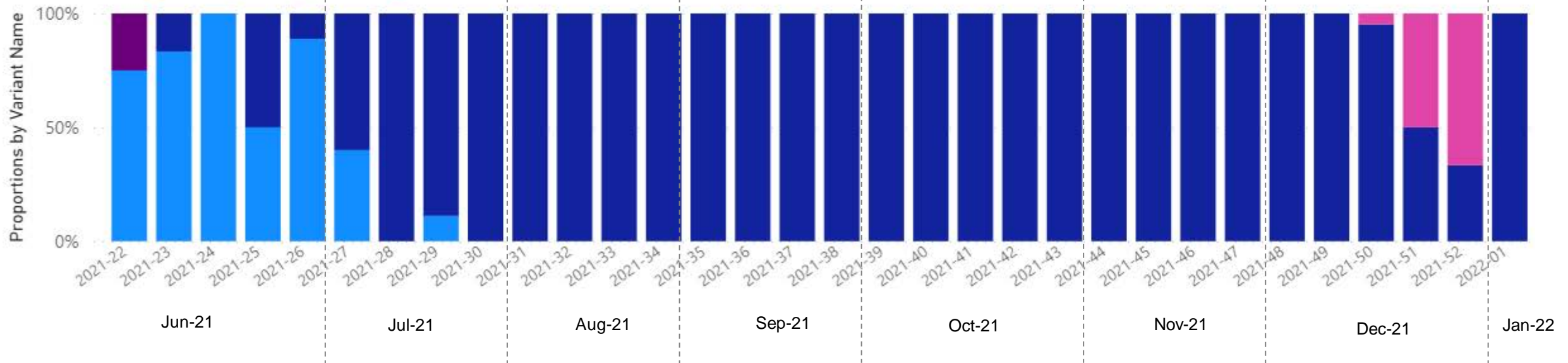
Sources:

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

Variants – Clinical Samples from Ottawa County Residents

Variant Proportions by Week

Variant Name ● Alpha ● Delta ● Gamma ● Omicron

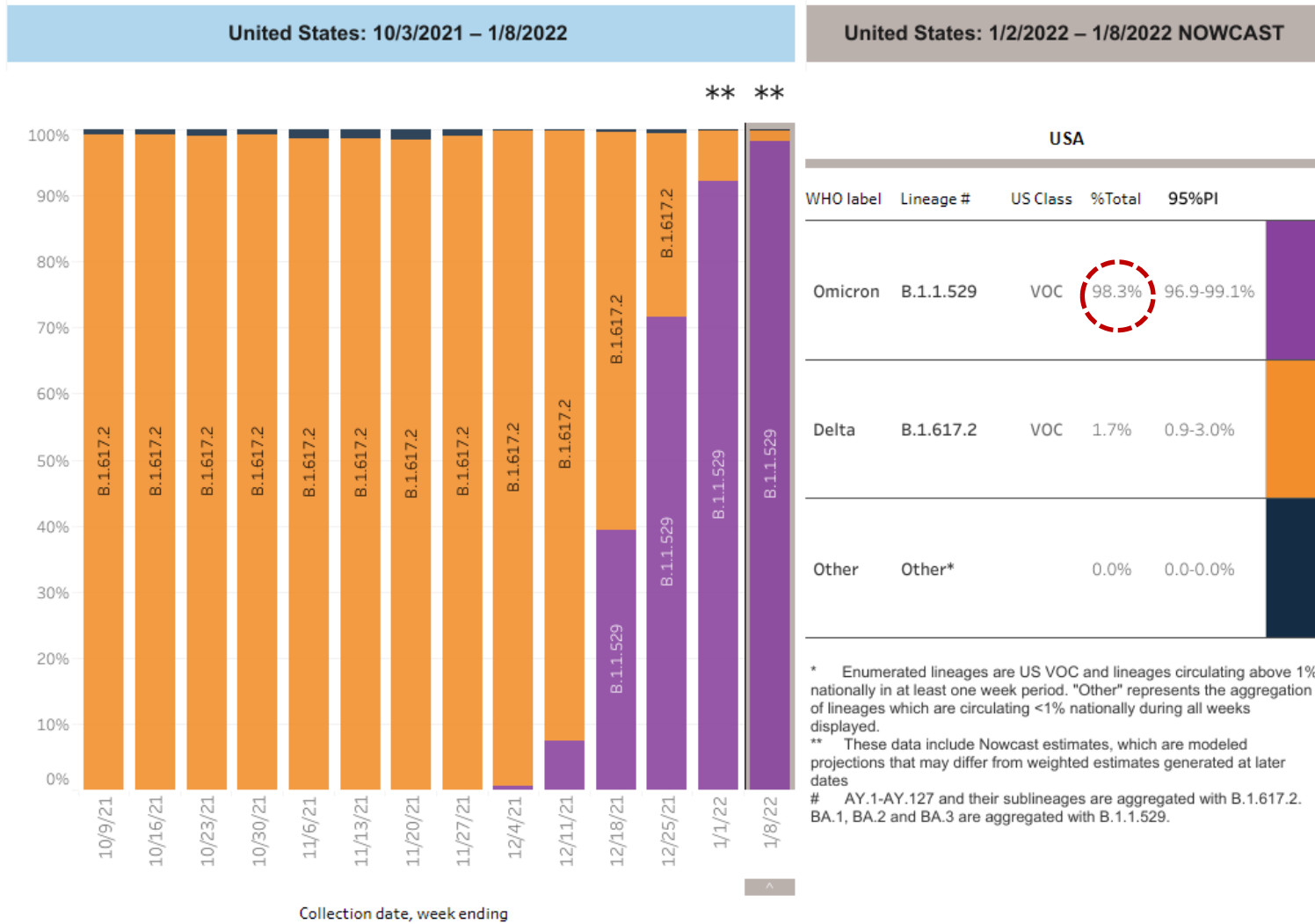


In June of 2021, most clinical samples* submitted for variant testing came back as the **Alpha** variant. By the end of July 2021, all clinical samples tested were returned as the **Delta** variant. From late July through early December 2021 all clinical samples submitted for variant testing came back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

* 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 **98.3%** of clinical samples collected in the United States as of January 8, 2022.

Variants – Wastewater Sampling – Holland/Zeeland

Sample Date	Site	Wuhan (parental)	Alpha	Beta	Gamma	Delta	Epsilon
11/1/2021	Zeeland	N	N	N	N	Y	N
11/3/2021	North Holland	N	N	N	N	Y	N
11/4/2021	Zeeland	N	N	N	N	Y	N
11/7/2021	North Holland	N	N	N	N	Y	N
11/8/2021	Zeeland	N	N	N	N	Y	N
11/10/2021	North Holland	N	N	N	N	Y	N
11/11/2021	Zeeland	N	N	N	N	Y	N
11/14/2021	North Holland	Y	N	N	N	Y	N
11/15/2021	Zeeland	N	N	N	N	Y	N
11/17/2021	North Holland	N	N	N	N	Y	N
11/18/2021	Zeeland	N	N	N	N	N	N
11/21/2021	North Holland	N	N	N	N	Y	N
11/22/2021	Zeeland	N	N	N	N	N	N
11/24/2021	North Holland	N	N	N	N	Y	N
11/24/2021	Zeeland	N	N	N	N	Y	N
11/28/2021	North Holland	N	N	N	N	Y	N
11/29/2021	Zeeland	N	N	N	N	Y	N
12/1/2021	North Holland	N	N	N	N	N	N
12/2/2021	Zeeland	N	N	N	N	Y	N
12/5/2021	North Holland	N	N	N	N	Y	N
12/6/2021	Zeeland	N	N	N	N	Y	N
12/8/2021	North Holland	N	N	N	N	Y	N
12/9/2021	Zeeland	N	N	N	N	Y	N
12/12/2021	North Holland	N	N	N	N	Y	N
12/13/2021	Zeeland	N	N	N	N	Y	N
12/15/2021	North Holland	N	N	N	N	Y	N
12/16/2021	Zeeland	N	N	N	N	Y	N
12/19/2021	North Holland	N	N	N	N	Y	N
12/20/2021	Zeeland	N	N	N	N	Y	N
12/22/2021	North Holland	N	N	N	N	Y	N
12/23/2021	Zeeland	N	N	N	N	Y	N
12/26/2021	North Holland	N	N	N	N	Y	N
12/27/2021	Zeeland	N	N	N	N	Y	N
12/29/2021	North Holland	N	N	N	N	Y	N
1/2/2022	North Holland	N	N	N	N	Y	N
1/3/2022	Zeeland	N	N	N	N	Y	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. This data indicate that the **Delta** variant remained a known dominant variant in Ottawa County through the end of 2021. Data for **Omicron** may become available as wastewater laboratory tests are developed.

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

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%

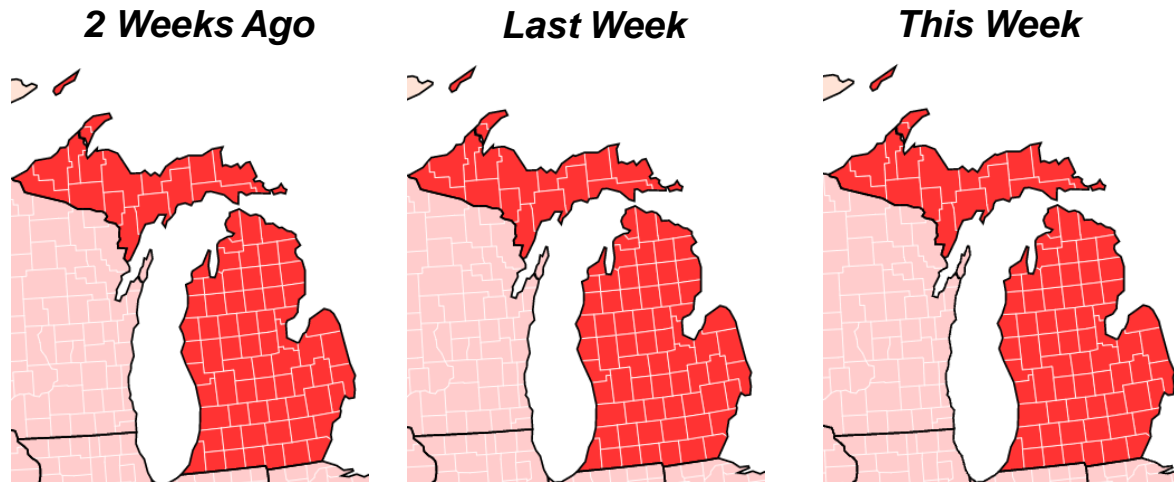
Ottawa's goal is to be in the Moderate category*

Ottawa is in the High category right now

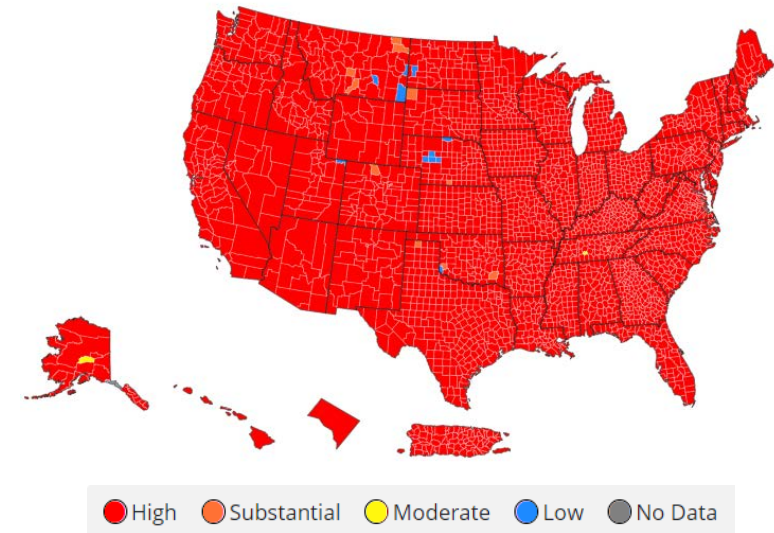
Source: <https://covid.cdc.gov/covid-data-tracker/#county-view>

CDC Community Transmission Risk Levels – Ottawa County

- Current Risk Level in Ottawa – **HIGH** (for last **21+** weeks)
- Current Data:
 - Positivity = 33.75%
 - Case Rate = 1,126.68 cases per week per 100,000



USA - This Week

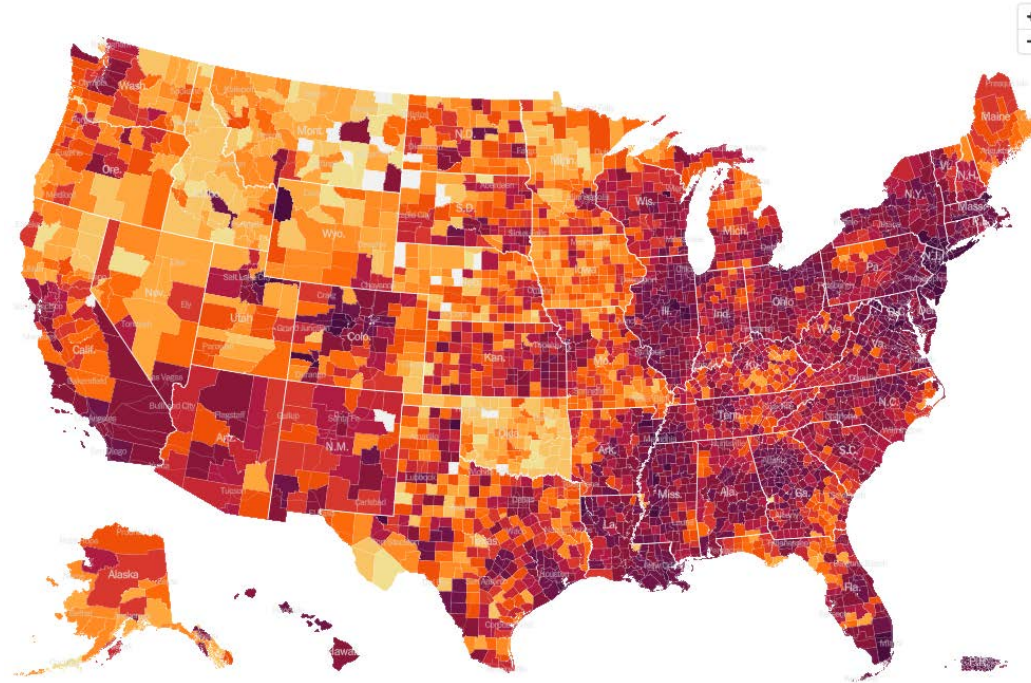


Data through January 10, 2022
for case rates and through
January 8, 2022 for positivity.

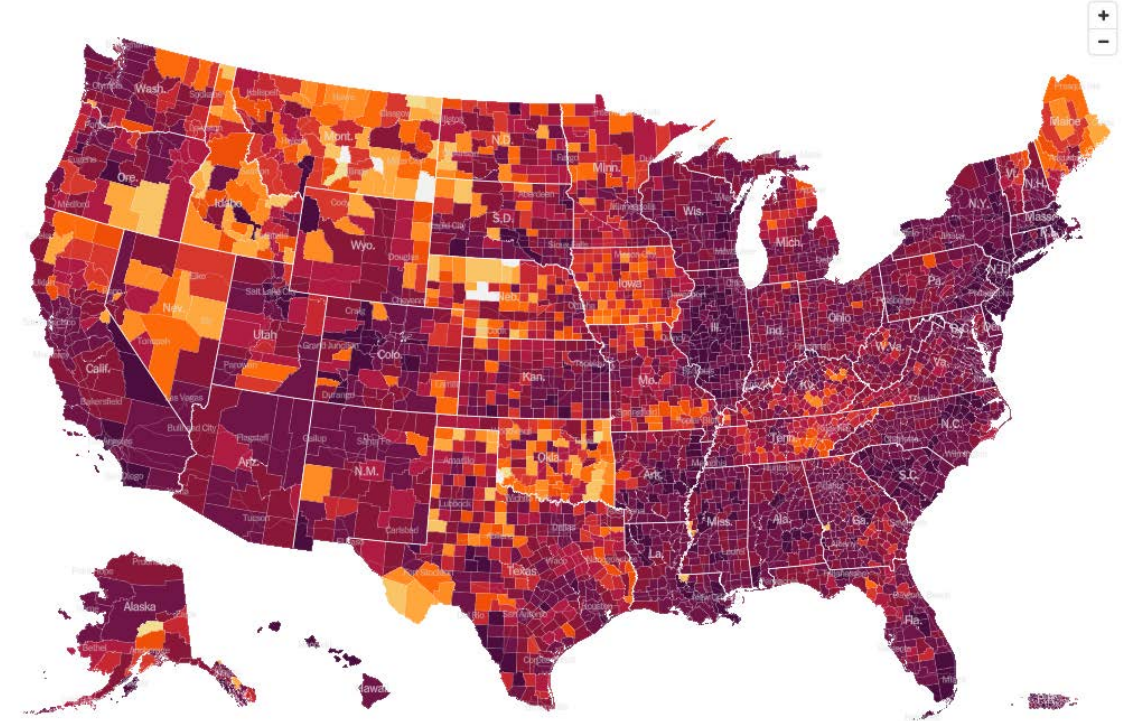
Source: <https://covid.cdc.gov/covid-data-tracker/#county-view>

COVID-19 Case Rates by County Across the US

Last Week



This Week



Case rates are worsening across the nation. Almost every state has seen a recent increase in case rates.

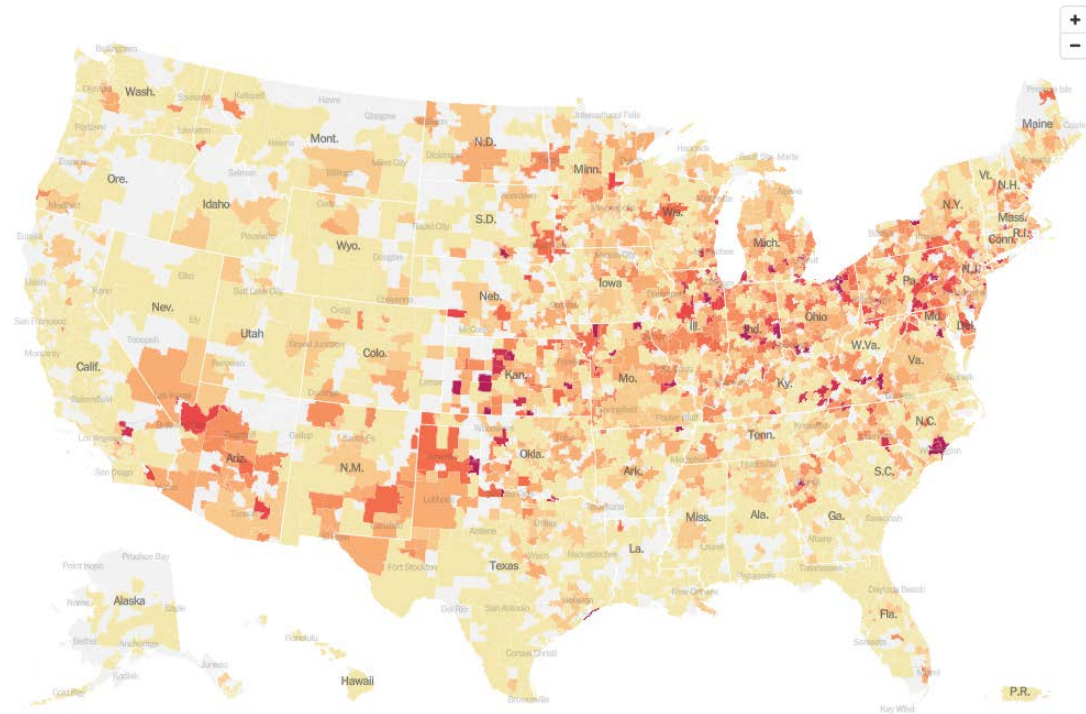
Source: <https://www.nytimes.com/interactive/2021/us/covid-cases.html>

Accessed January 12, 2022

COVID-19 Hospitalization Rates by County Across the US

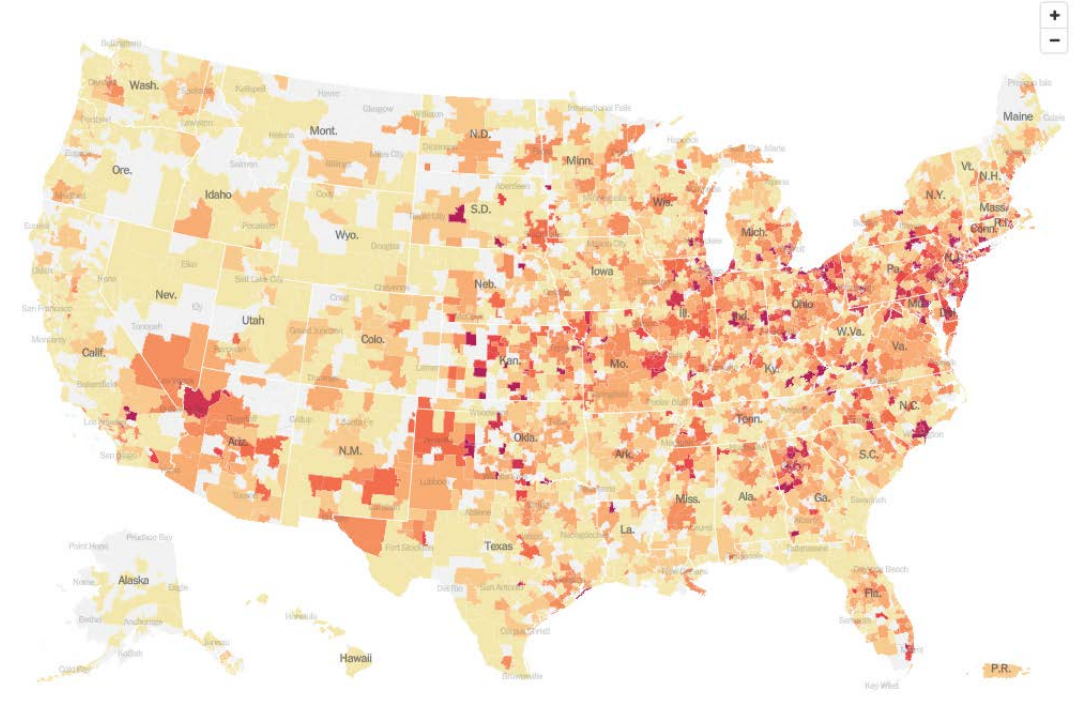
Last Week

Current hospitalizations



This Week

Current hospitalizations



Hospitalization rates are increasing in many states across the nation.

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

Accessed January 12, 2022

USA & MI

Spread

Children

Hospitalizations

Vaccinations

Variants

Risk Levels

Other

Media

Science Roundup

States and Michigan Counties with School Masking Requirements

- **States/Districts (18):** California, Connecticut, Delaware, Hawaii, Illinois, Louisiana, Maryland, Massachusetts, New Mexico, New Jersey, New York, Nevada, Oregon, Pennsylvania, 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 (5):**
 - Holland Public, West Ottawa Public, Black River, Grand Haven Public, & Spring Lake Public

Note: Lists may not be comprehensive.

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

COVID-19 News Headlines

Michigan gets antiviral medications to treat COVID-19, 5th federal medical hospital team

<https://news.yahoo.com/michigan-gets-antiviral-medications-treat-170018153.html>

New COVID-19 cases in Ottawa County nearly double last week's

<https://www.hollandsentinel.com/story/news/coronavirus/2022/01/09/new-covid-19-cases-ottawa-county-nearly-double-last-weeks/9129512002/>

Nursing staff struggling as COVID surges across area hospitals

<https://www.youtube.com/watch?app=desktop&v=dZ8CeDV-xo4>

Holland Hospital implements visitor restrictions amid COVID-19 surge

<https://www.fox17online.com/news/coronavirus/holland-hospital-implements-visitor-restrictions-amid-covid-19-surge>

Official predicts 'most people are going to get covid' as global cases reach new high

<https://www.washingtonpost.com/nation/2022/01/11/covid-omicron-variant-live-updates/>

U.S. breaks COVID-19 hospitalization record at over 132,000 as Omicron surges

<https://www.reuters.com/world/us/us-breaks-covid-19-hospitalization-record-omicron-surges-2022-01-10/>

Science Roundup

Risk Factors for Severe COVID-19 Outcomes Among Persons Aged ≥ 18 Years Who Completed a Primary COVID-19 Vaccination Series — 465 Health Care Facilities, United States, December 2020–October 2021

https://www.cdc.gov/mmwr/volumes/71/wr/mm7101a4.htm?s_cid=mm7101a4_w

← A large CDC-published study showed that risk for severe COVID-19 outcomes was higher for adults with immunosuppression, various chronic conditions, diabetes, and/or being older than 65 years of age.

Effectiveness of BNT162b2 (Pfizer–BioNTech) mRNA Vaccination Against Multisystem Inflammatory Syndrome in Children Among Persons Aged 12–18 Years — United States, July–December 2021

https://www.cdc.gov/mmwr/volumes/71/wr/mm7102e1.htm?s_cid=mm7102e1_w

← Another recent CDC study found 2 doses of Pfizer vaccine was highly effective at preventing MIS-C in people 12-18 years of age.

Active epidemiological investigation on SARS-CoV-2 infection caused by Omicron variant (Pango lineage B.1.1.529) in Japan: preliminary report on infectious period

<https://www.niid.go.jp/niid/en/2019-ncov-e/10884-covid19-66-en.html>

← A very small report (not peer-reviewed) out of Japan suggests that less than 20% of Omicron cases are infectious after day 6 after symptom onset.

Lottery-Based Incentives and COVID-19 Vaccination Rates in the US

<https://jamanetwork.com/journals/jamainternalmedicine/fullarticle/2787782>

← A research letter published in JAMA showed that there was no evidence vaccine lottery incentive programs in the US were associated with increased COVID-19 vaccination rates.

Incidence of COVID-19 reinfection among Midwestern healthcare employees

<https://journals.plos.org/plosone/article?id=10.1371/journal.pone.0262164>

← A research article published in PLOS ONE showed higher risk of COVID-19 reinfection among healthcare workers working in clinical environments.