

# Ottawa County COVID-19 Epidemiology

January 19, 2022

*Data as of January 15, 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 35.5%, a near pandemic high. The goal is to be less than 8%.
  - Weekly case counts increased 14% (+84% two weeks ago), from 3,241 two weeks ago to 3,698 last week.
  - Cases among children increased 43% (+108% two weeks ago), from 442 two weeks ago to 633 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, 26% of all available beds and 43% 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.
  - All Ottawa County hospitals utilized Emergency Department diversion 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 have reached the highest levels of the pandemic to date; hospitalizations among children in Michigan remain elevated.**
- **Of Ottawa County residents aged 5+, 60.9% 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				
		18-Dec-21	25-Dec-21	1-Jan-22	8-Jan-22	15-Jan-22
Positivity (All Ages)	<8%	18.2%	18.0%	25.6%	34.8%	35.5%
Weekly Cases (All Ages)	<147	1154	913	1738	3241	3698
Weekly Cases in Children (0-17 years of age)	NA	214	149	213	442	633
Total COVID-19 Hospitalizations (All Ages)	0	56	40	17	5	4
Total Deaths (All Ages)	0	13	21	20	14	8
CDC Risk Transmission Level	Moderate	High	High	High	High	High

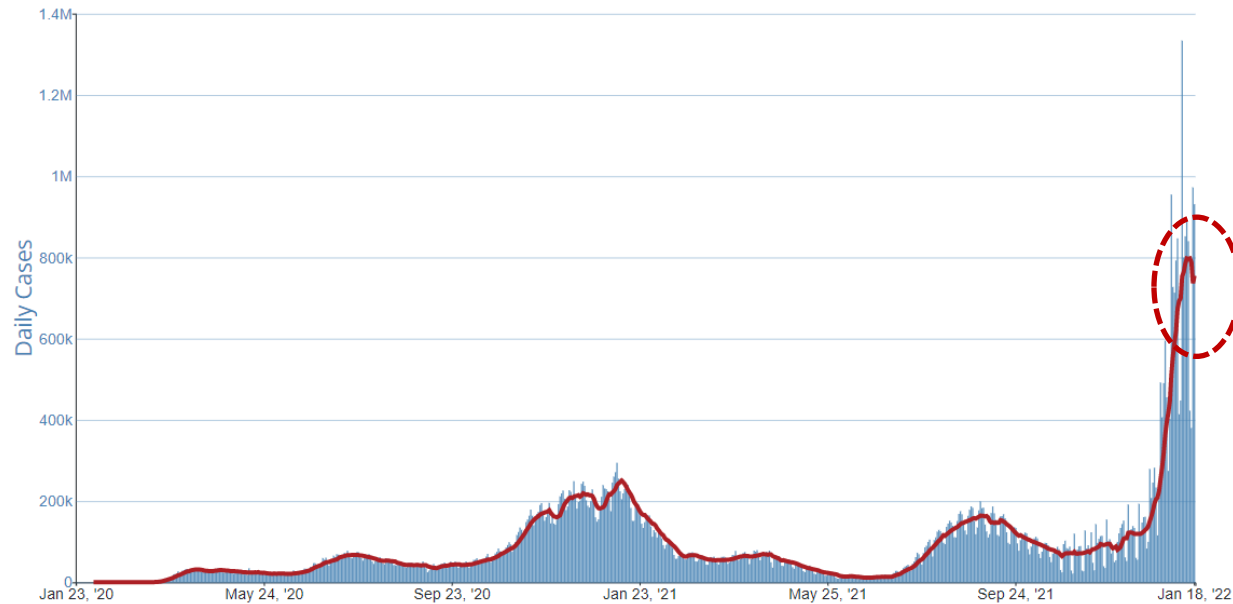
\*Test positivity data is currently unavailable due to technical issues being experienced by the MI Safe Start Map.

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

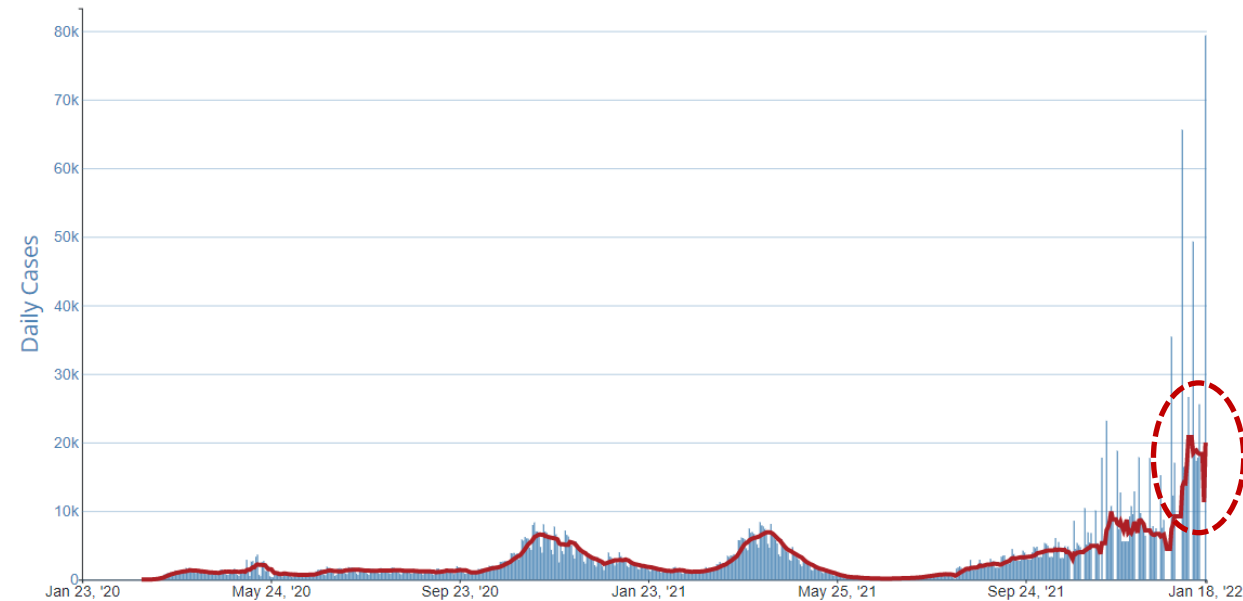
## USA

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

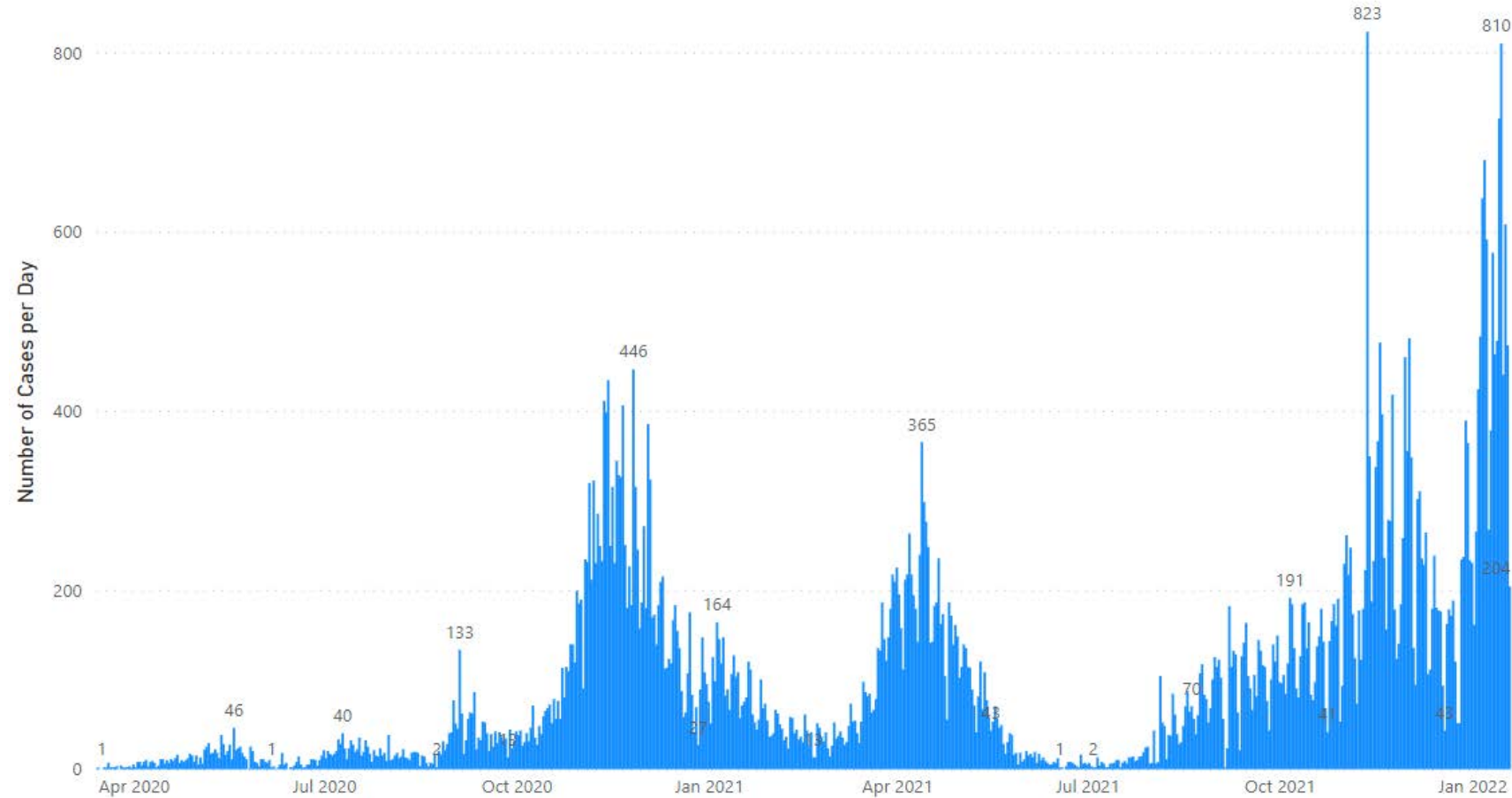


Daily case counts in Michigan and the US remain elevated and near pandemic highs.

# Case Trends in Ottawa County

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

Epidemiological Curve



Total Number of Cases  
**65,276**

← Currently the 7-day average is **534 cases per day**, higher than the 449 cases per day seen at a similar time last week.

**1 in every 33 people** in Ottawa County was counted as a case from January 1 – January 19, 2022.

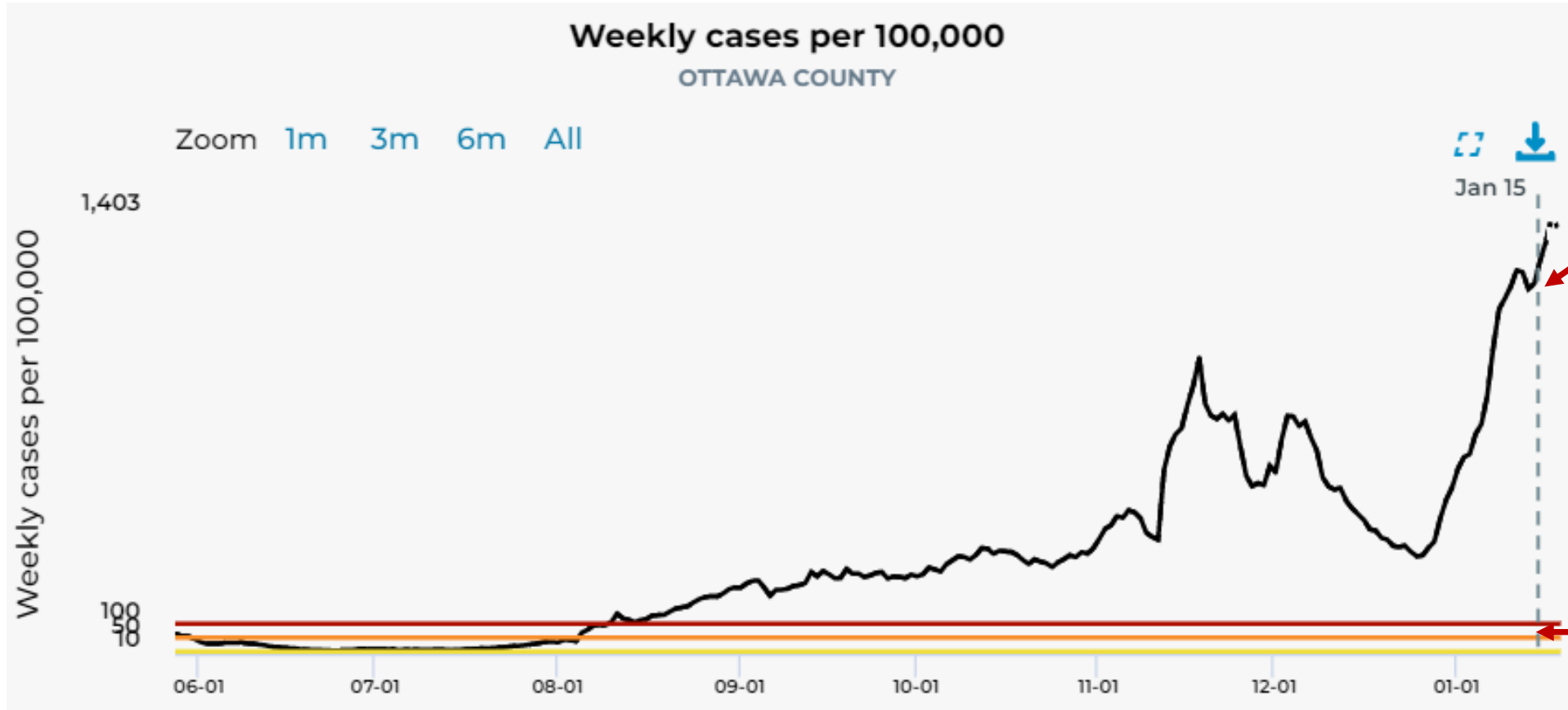
**Notes:** Use of at home tests likely reduces the number of positive tests reported to Public Health, resulting in an artificially deflated number of cases. Additionally, On November 12, 2021, MDHHS updated their database resulting in a backlog of cases being reported in one day.

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



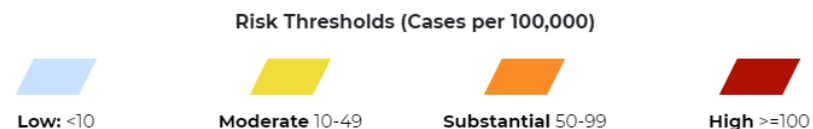
# Case Rates in Ottawa County – All Ages

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



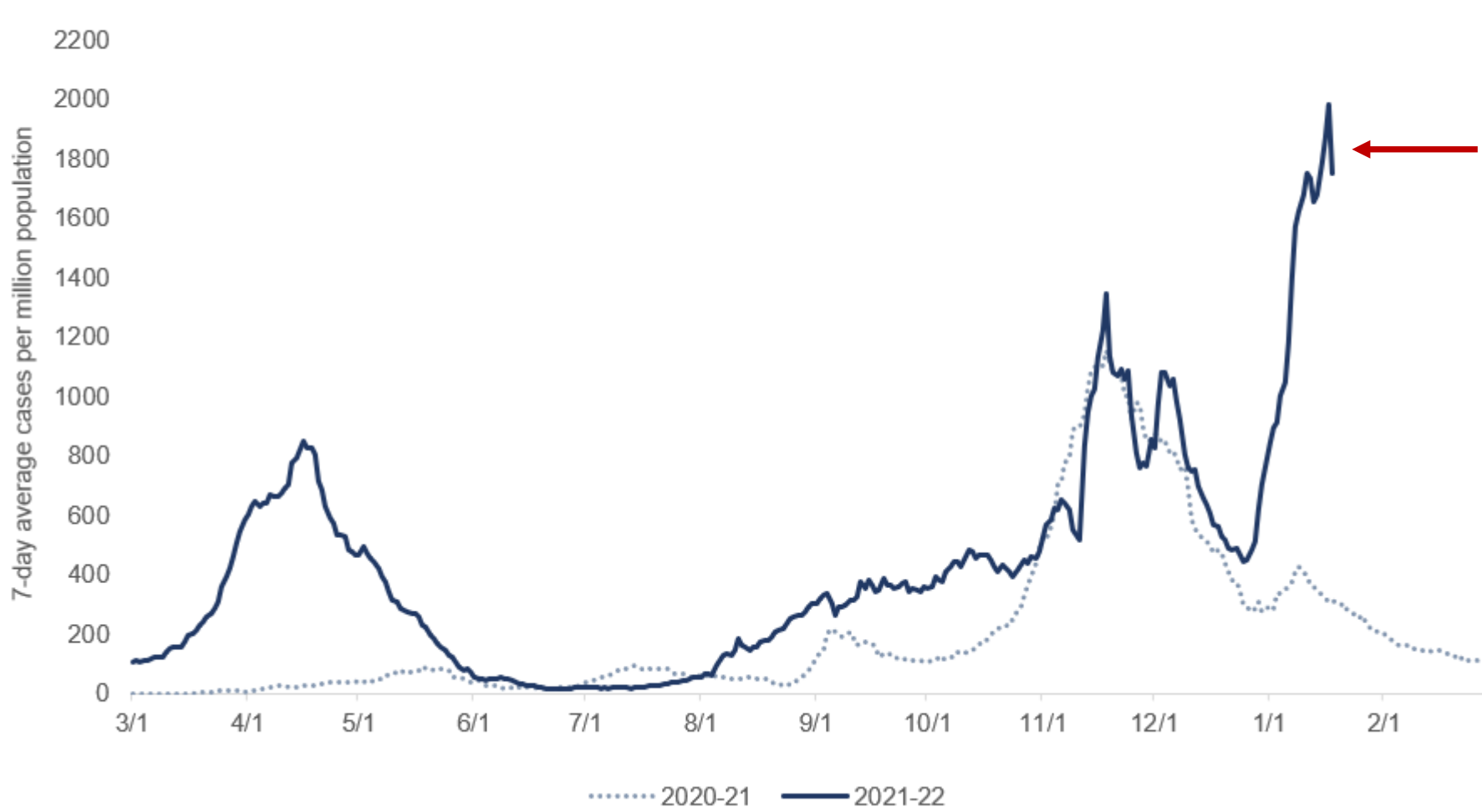
Case rates increased to 1,262 cases per week per 100,000 population (up from 1,081 the week prior). **This is a near pandemic high.**

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.

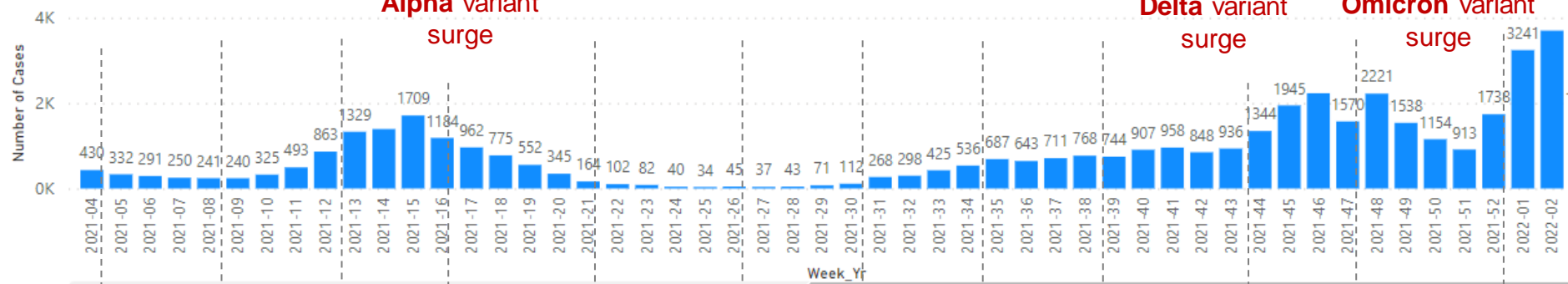
Source: Internal Data

Data through January 18, 2022



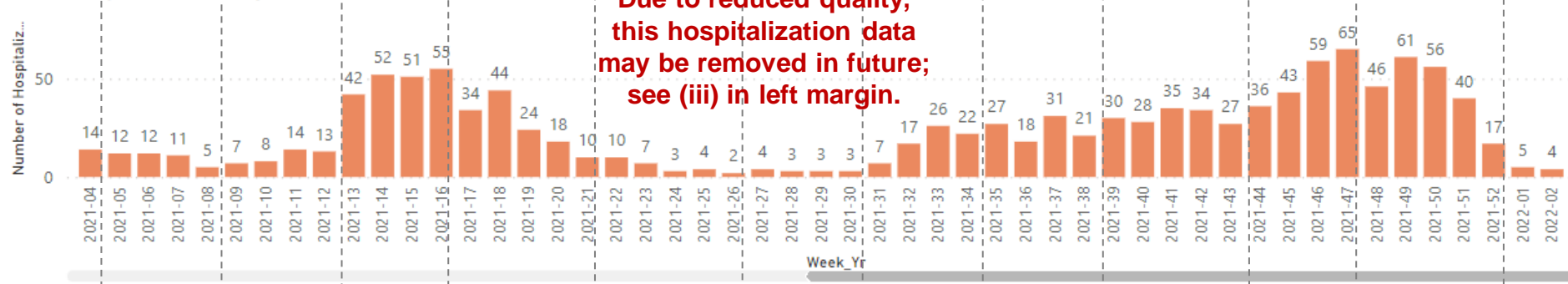
# Ottawa County - Cases, Hospitalizations, & Deaths by Week, All Ages

New Cases By Week of Referral



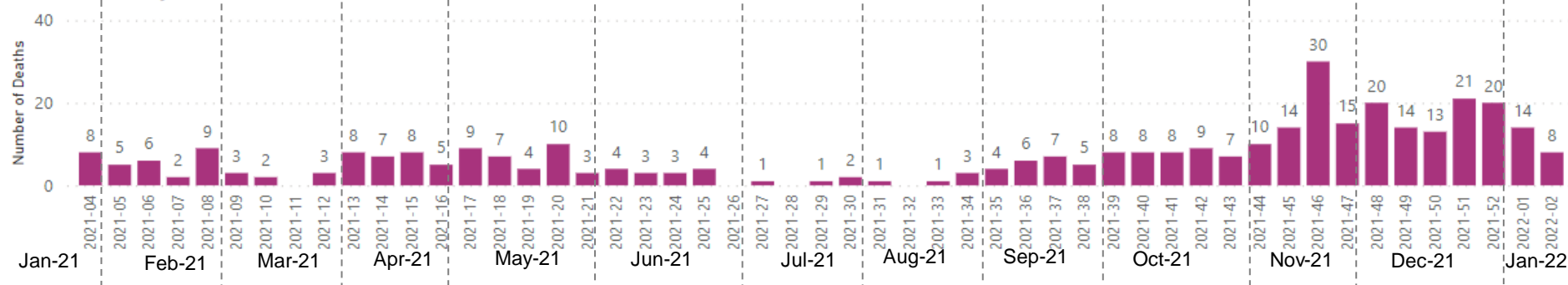
The weekly number of **cases increased 14%** from week 1 to week 2.

New Hospitalizations by Week of Admission



The weekly number of **hospitalizations** average of about **17** each week over the last month (**this is an underestimate, see item iii in the left margin**).

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 **16 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 decreasing availability of hospitalization data.**

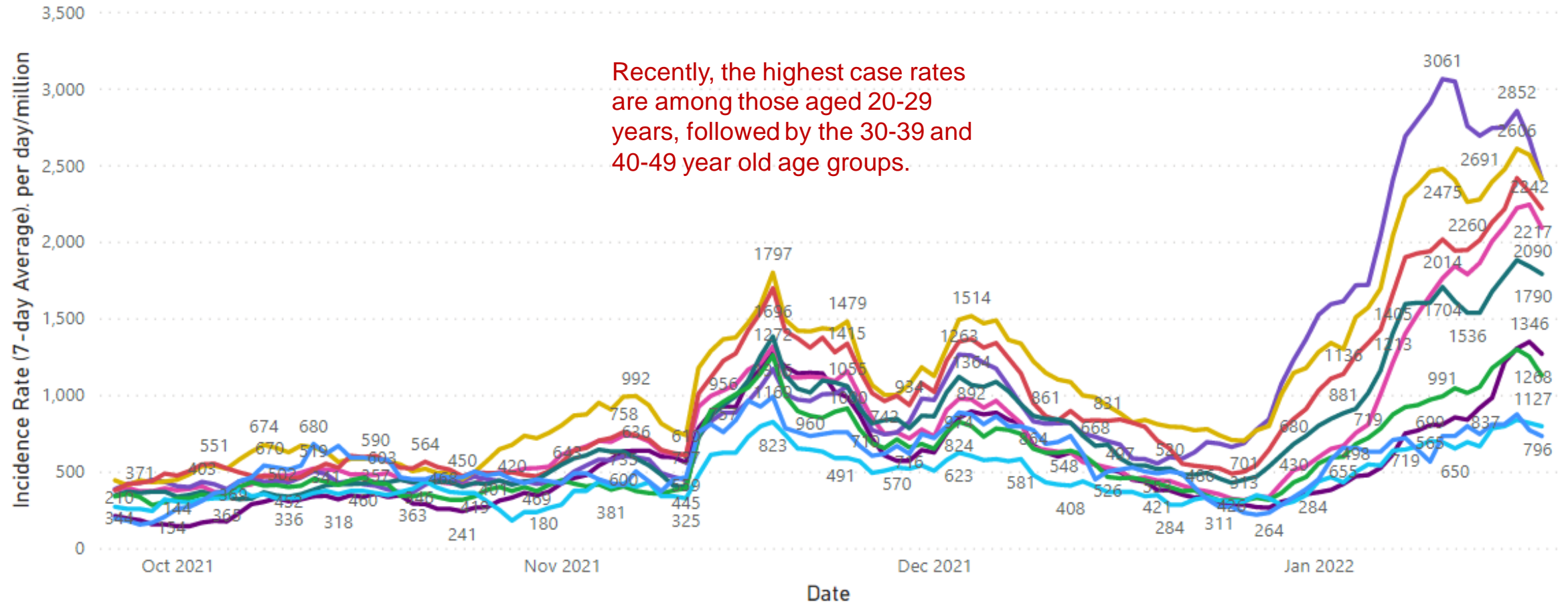
Source: Michigan Department of Health and Human Services, Michigan Disease Surveillance System

# Ottawa County - Case Rate Trends – by Age Decade

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

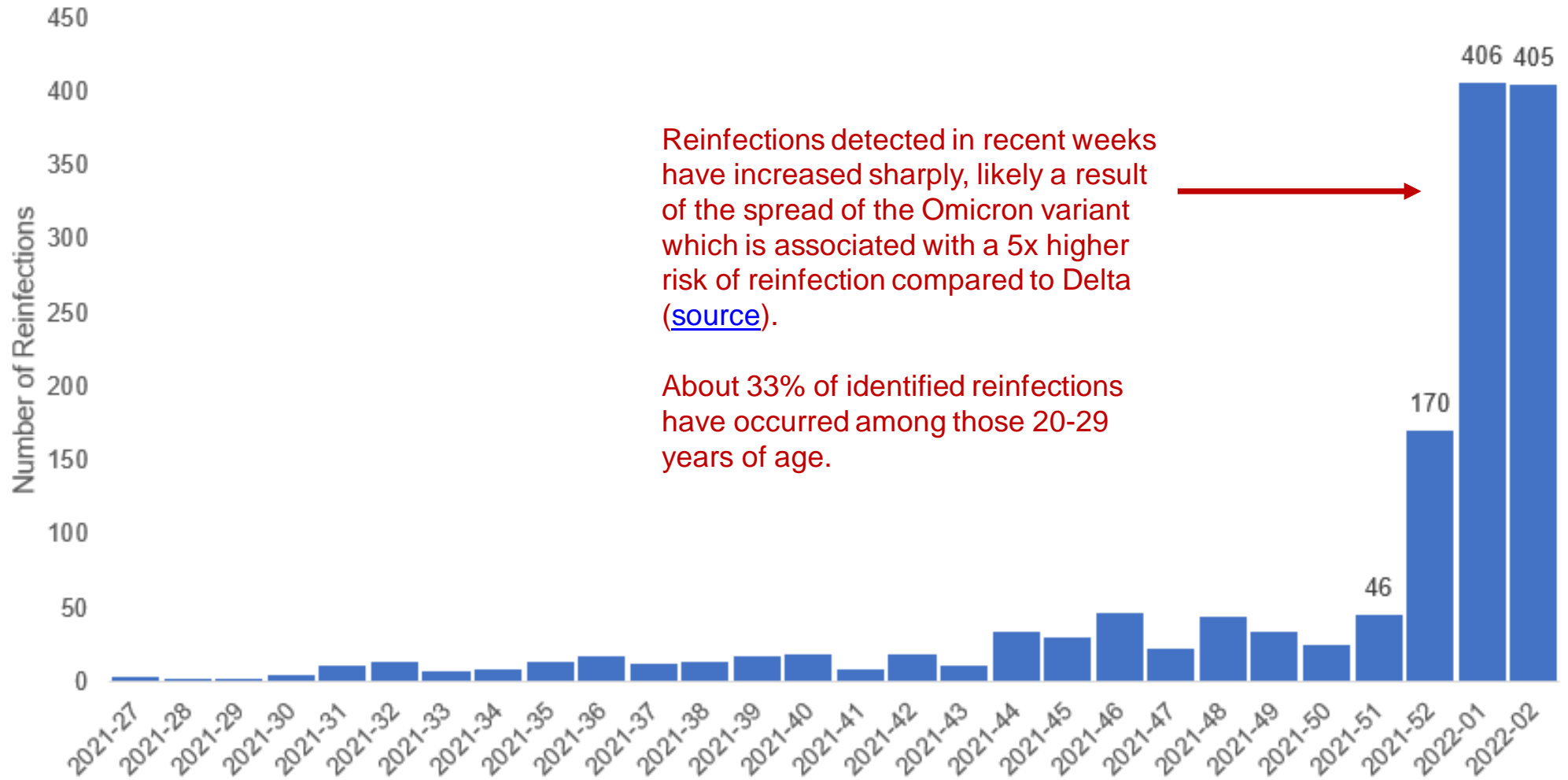
Incidence Rate (7-day Average)

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 – 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 19, 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	764	-19%	149	-30%	913	-21%
1-Jan-22	1525	100%	213	43%	1738	90%
8-Jan-22	2799	84%	442	108%	3241	86%
15-Jan-22	3065	10%	633	43%	3698	14%

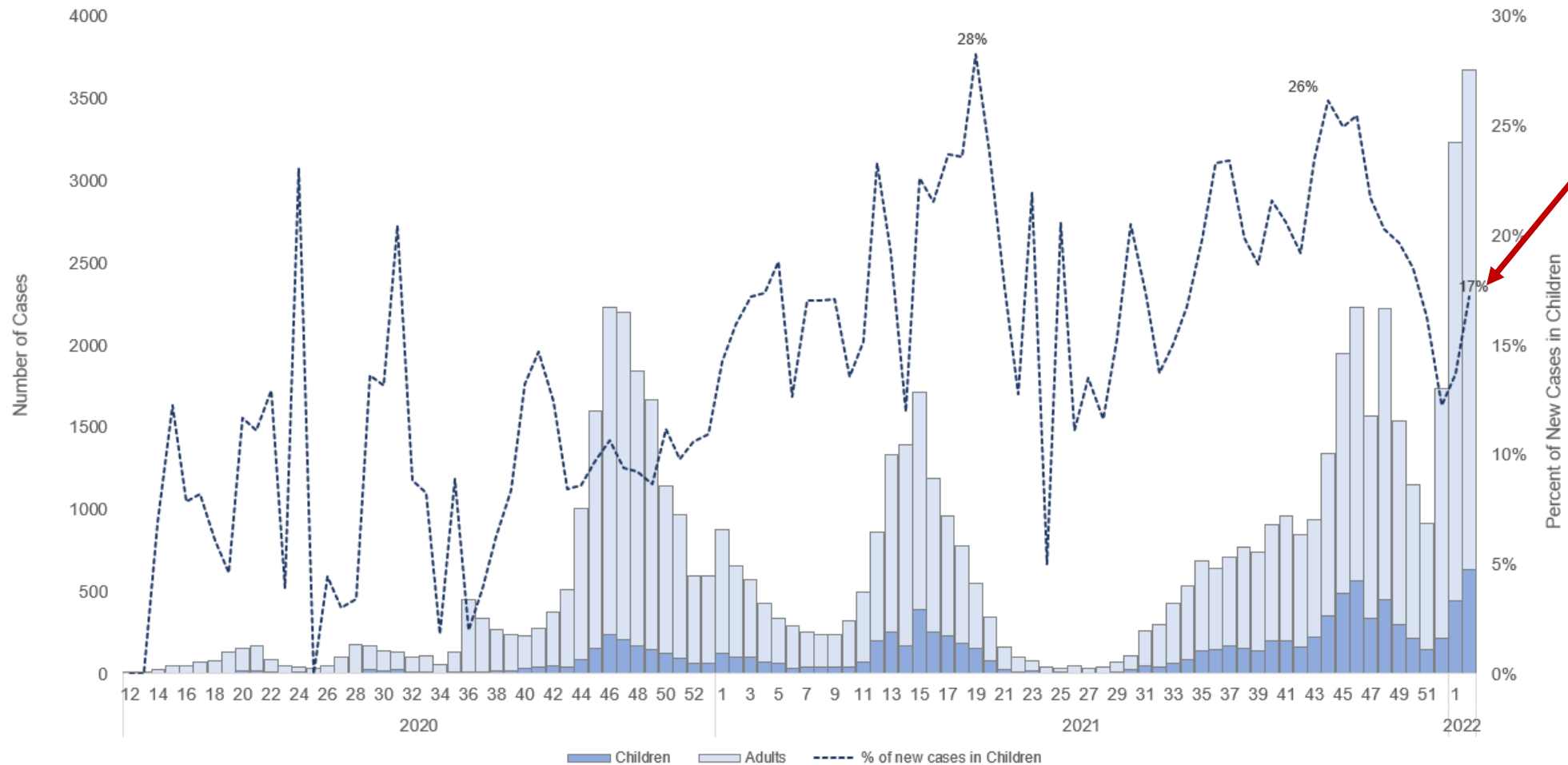
Weekly case counts among children increased 43% last week, and cases in adults increased 10%.

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 2 in 2022, children made up 17% of cases reported, lower than recent highs, but an increase compared to previous weeks.

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

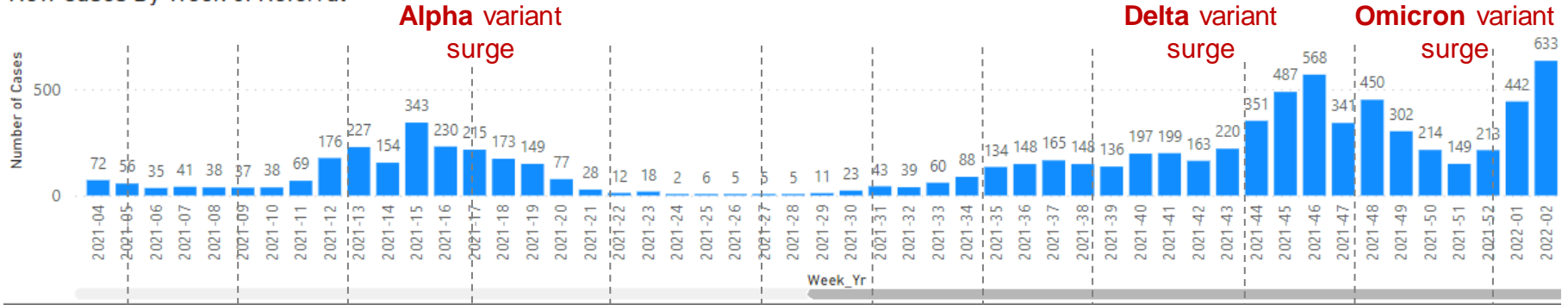
Source: Michigan Department of Health and Human Services, Michigan Disease Surveillance System; CDC Wonder 2020

Data through Week 2, 2022



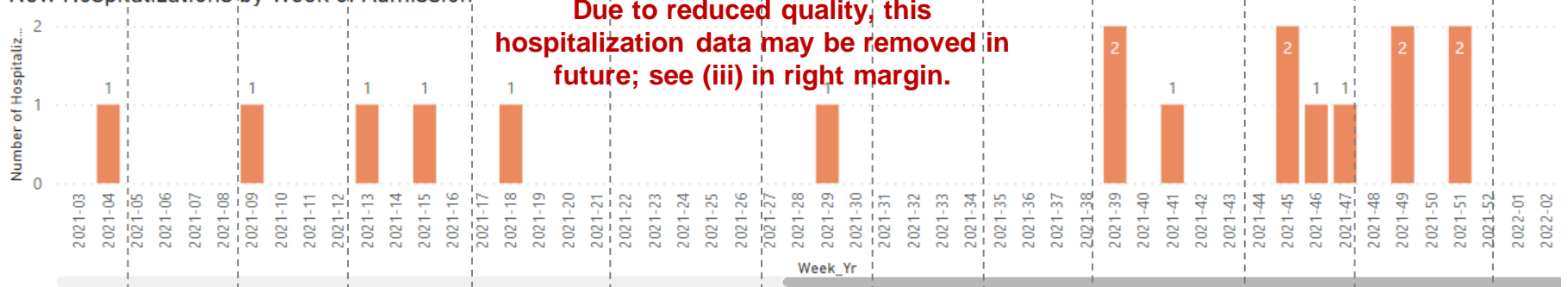
# Ottawa County - Cases, Hospitalizations, & Deaths by Week Among Children (0-17 years)

New Cases By Week of Referral



The weekly number of cases among children increased 43% from week 1 to week 2.

New Hospitalizations by Week of Admission

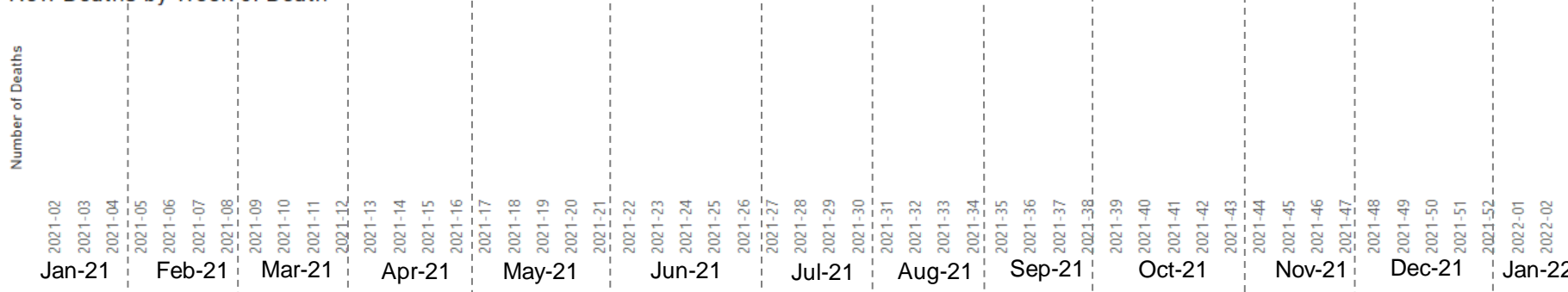


Due to reduced quality, this hospitalization data may be removed in future; see (iii) in right margin.

Hospitalizations are 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 decreasing availability of hospitalization data.

New Deaths by Week of Death



Through the 2020-2021 school year nearly all school-aged children were in environments with:

- universal masking
- cohorting
- online learning
- social distancing
- mandatory quarantine for all close contacts
- testing (for high school athletes)

These mitigation strategies likely reduced case counts and hospitalizations among children.

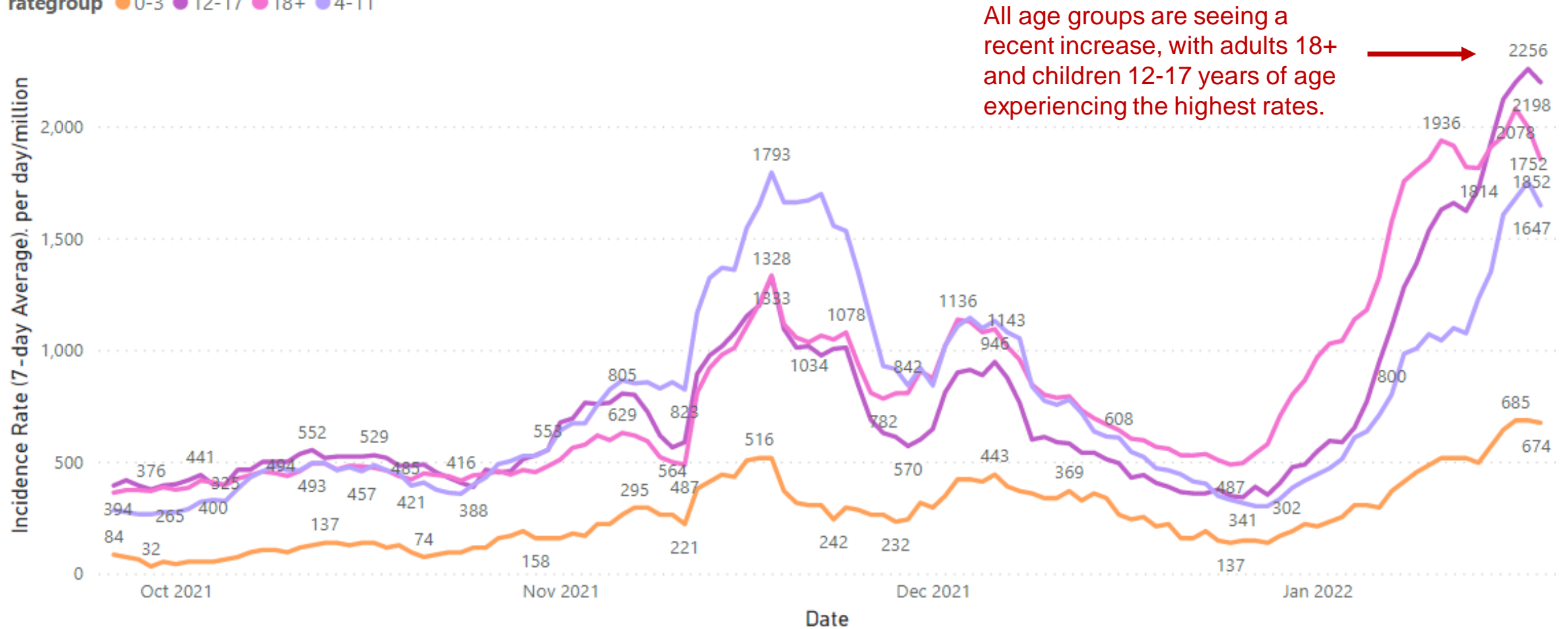
Source: Michigan Department of Health and Human Services, Michigan Disease Surveillance System

# Ottawa County - Case Rate Trends – by Age

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

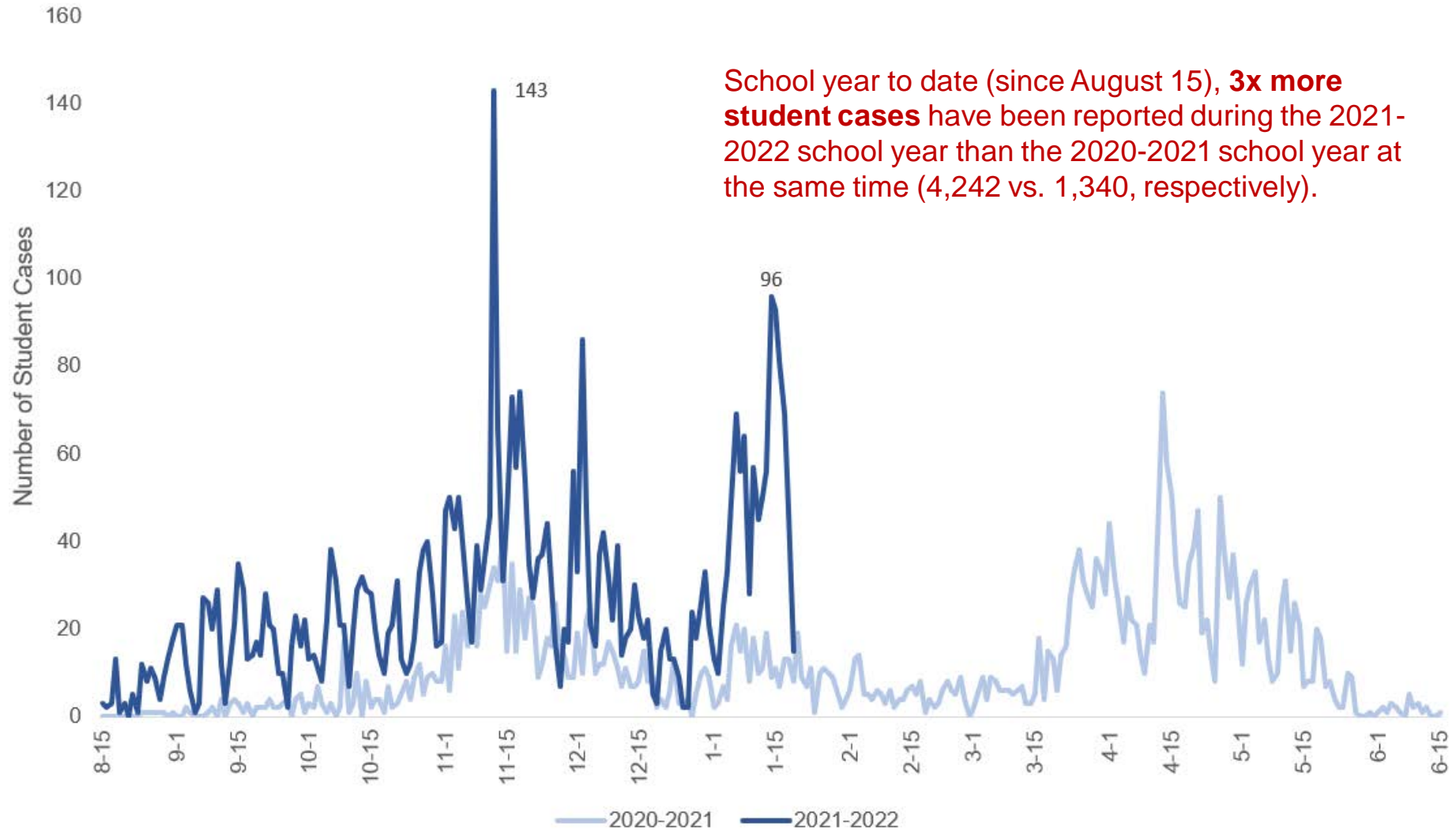
Incidence Rate (7-day Average)

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), **3x more student cases** have been reported during the 2021-2022 school year than the 2020-2021 school year at the same time (4,242 vs. 1,340, respectively).

**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.

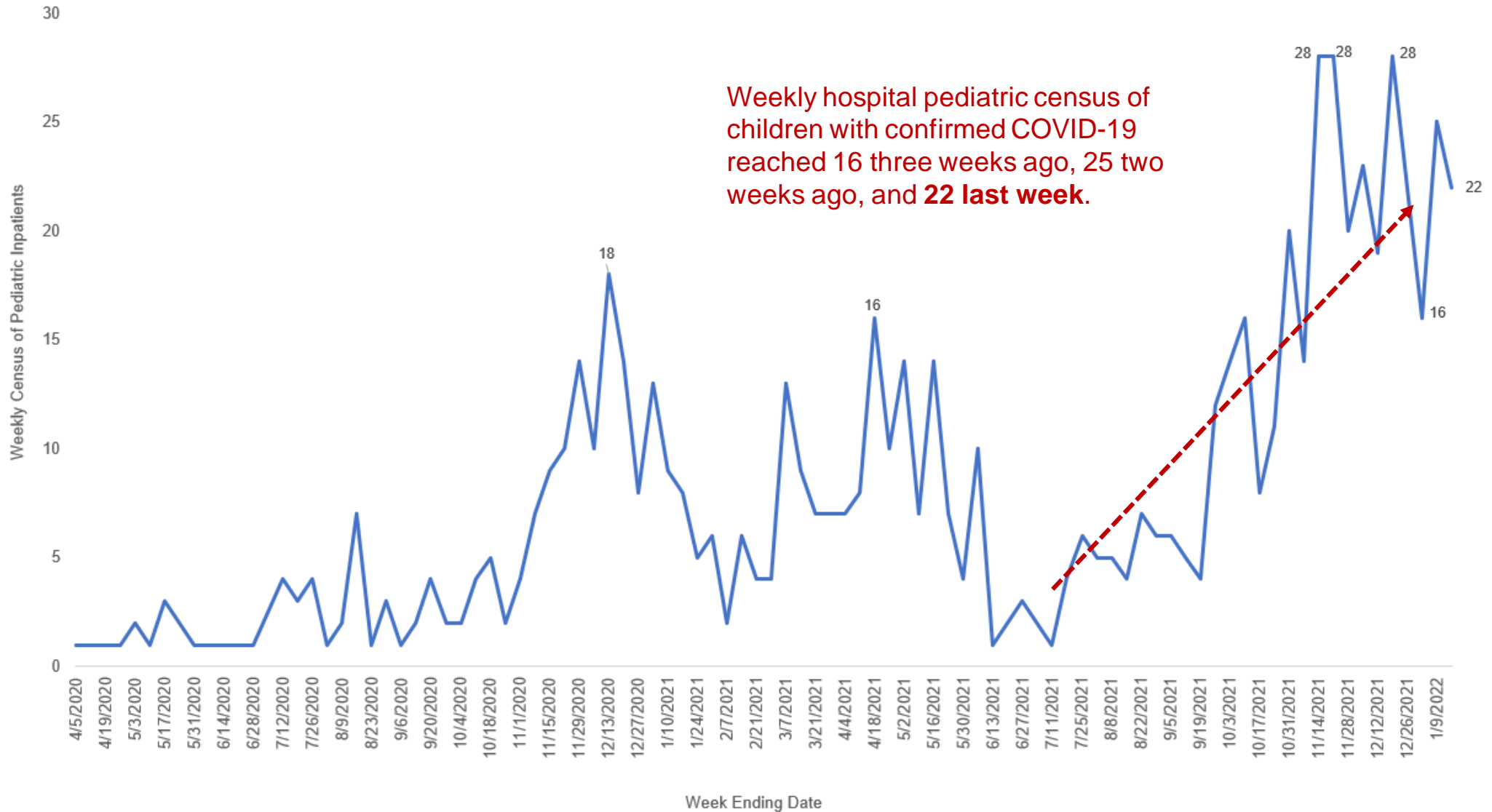
**Note:** Data may change as information is updated and methods are refined. Cases reported in 2022 will likely increase. The peak of 143 cases reported on November 12, 2021 is the result of a database update by MDHHS that reported a backlog of cases from the previous days.

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

Data through January 19, 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.

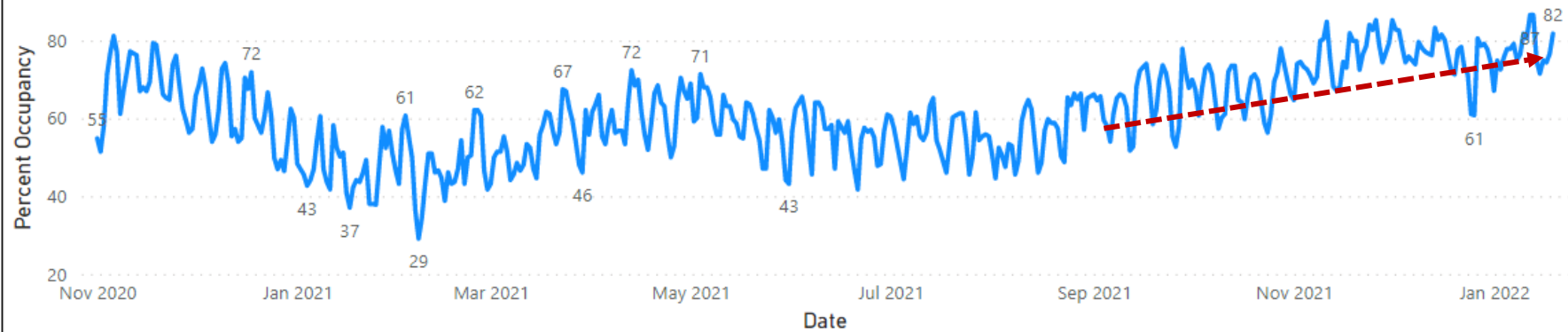
Data through January 16, 2022

# 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



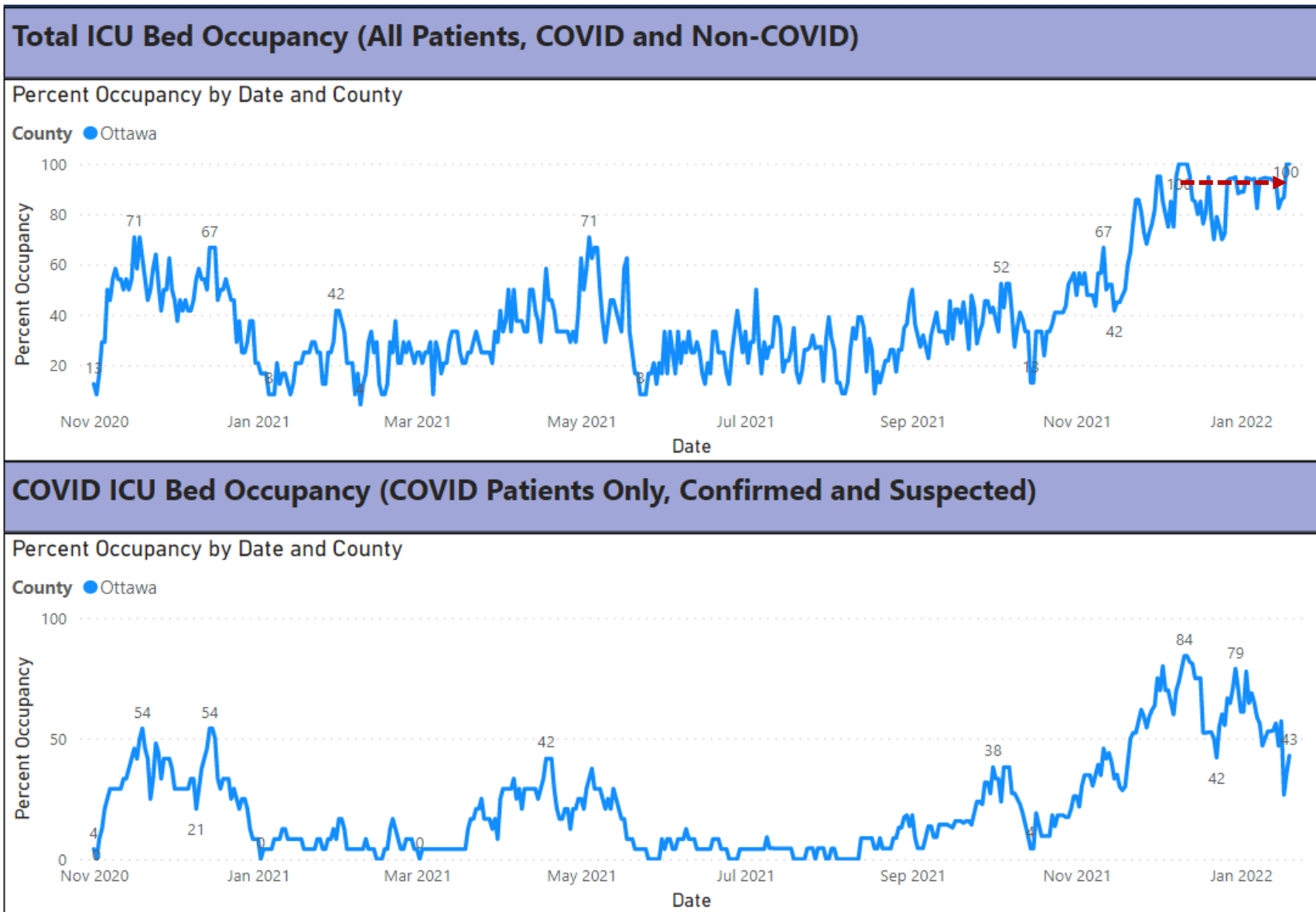
Total hospital bed occupancy **remains elevated**, as is the proportion of beds occupied by COVID-19 patients.

Currently **26%** of all inpatient beds are occupied by COVID-19 patients.

Source: EMResources

Data through January 19, 2022

# Ottawa County Hospital Capacity – ICU Beds



Overall ICU bed occupancy **remains elevated (100%)**.

The proportion of ICU beds occupied by COVID-19 patients also **remains elevated**. Currently, **43%** of all ICU beds are occupied by COVID-19 patients.

Data through January 19, 2022

Source: EMResources

# Pediatric Hospitalization Rates – USA, Georgia, Michigan



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

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

Accessed January 19, 2022

# Pediatric Hospitalization Rates – Select Midwest States

Ohio | 0 - 17 Years



Indiana | 0 - 17 Years



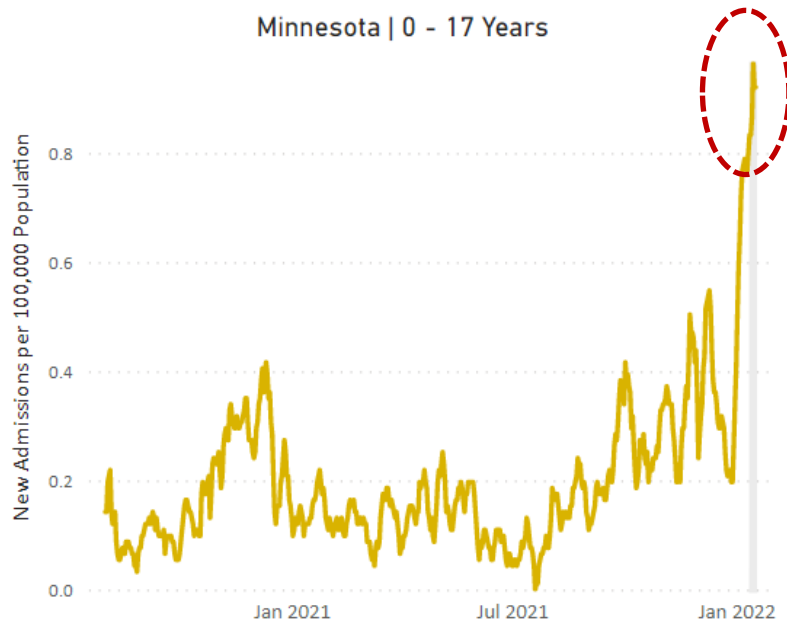
Illinois | 0 - 17 Years



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

# Pediatric Hospitalization Rates – Select Midwest States

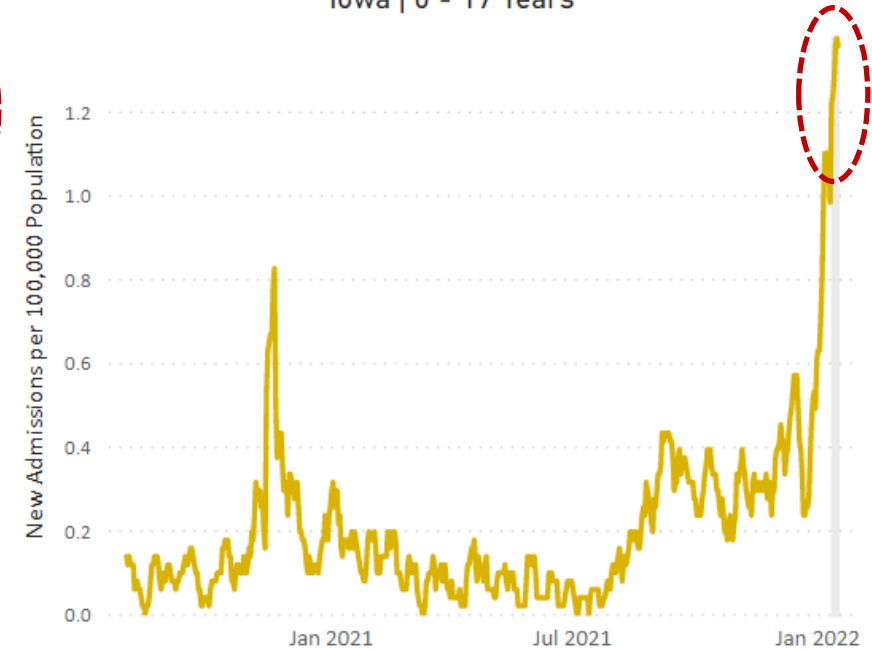
Minnesota | 0 - 17 Years



Wisconsin | 0 - 17 Years



Iowa | 0 - 17 Years



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

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

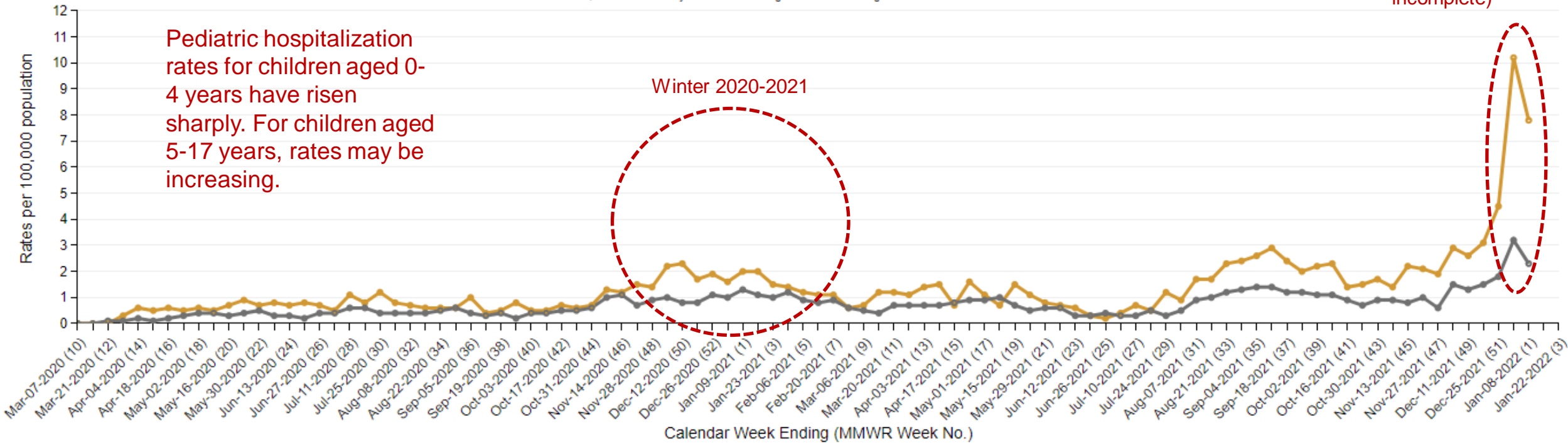
Accessed January 19, 2022

# Pediatric Hospitalization Rates by Age Group – USA

COVID-NET :: Entire Network :: 2020-21 :: Weekly Rate  
 To zoom, hold down Alt key and click and drag to create a rectangle. Double click to reset zoom.

Most recent data  
 (note that latest data may be incomplete)

Pediatric hospitalization rates for children aged 0-4 years have risen sharply. For children aged 5-17 years, rates may be increasing.



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.

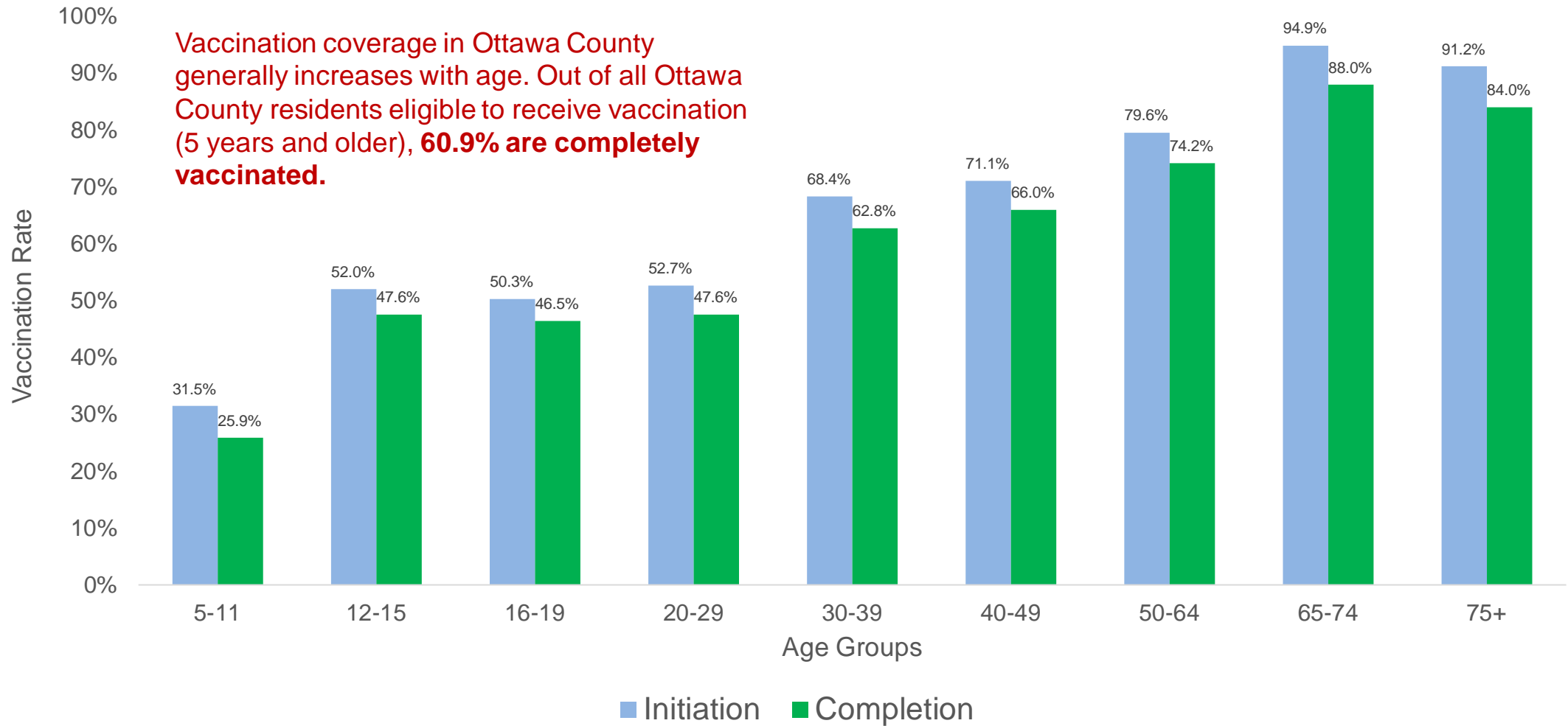
Starting MMWR week 48, MD data are temporarily removed from weekly rate calculations.

Source: <https://covid.cdc.gov/covid-data-tracker/#covidnet-hospitalization-network>

Accessed January 19, 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.

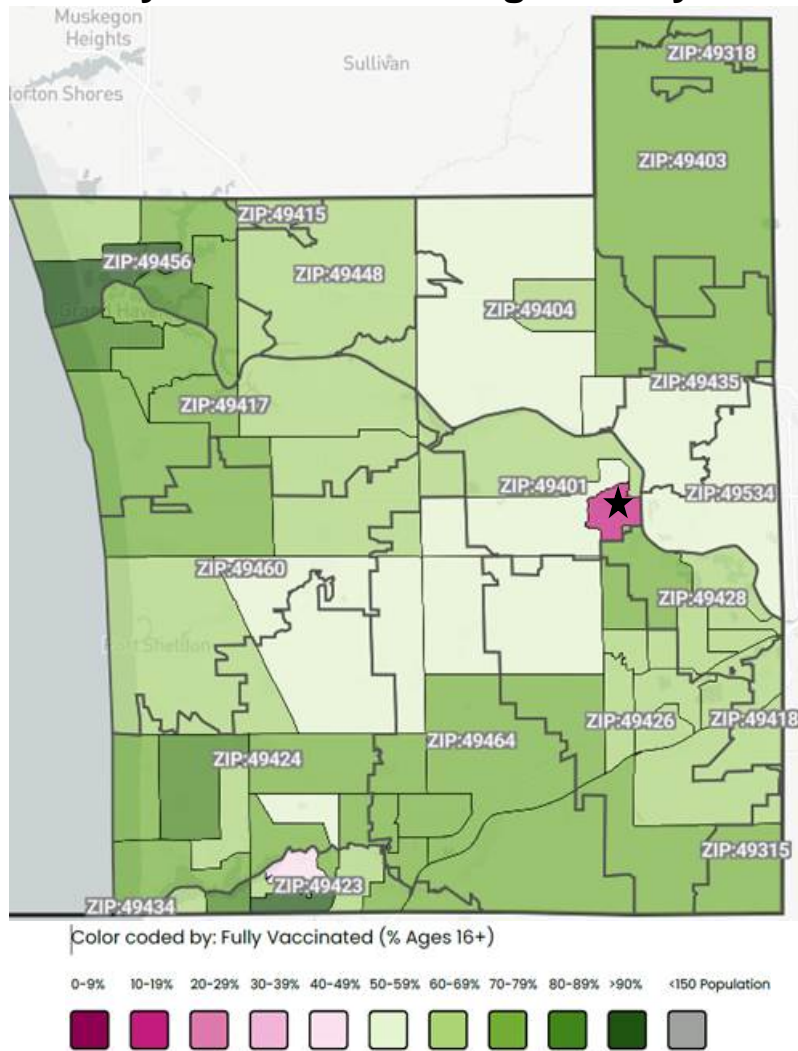
Source: [https://www.michigan.gov/coronavirus/0,9753,7-406-98178\\_103214\\_103272-547150--,00.html](https://www.michigan.gov/coronavirus/0,9753,7-406-98178_103214_103272-547150--,00.html)

Data through January 18, 2022

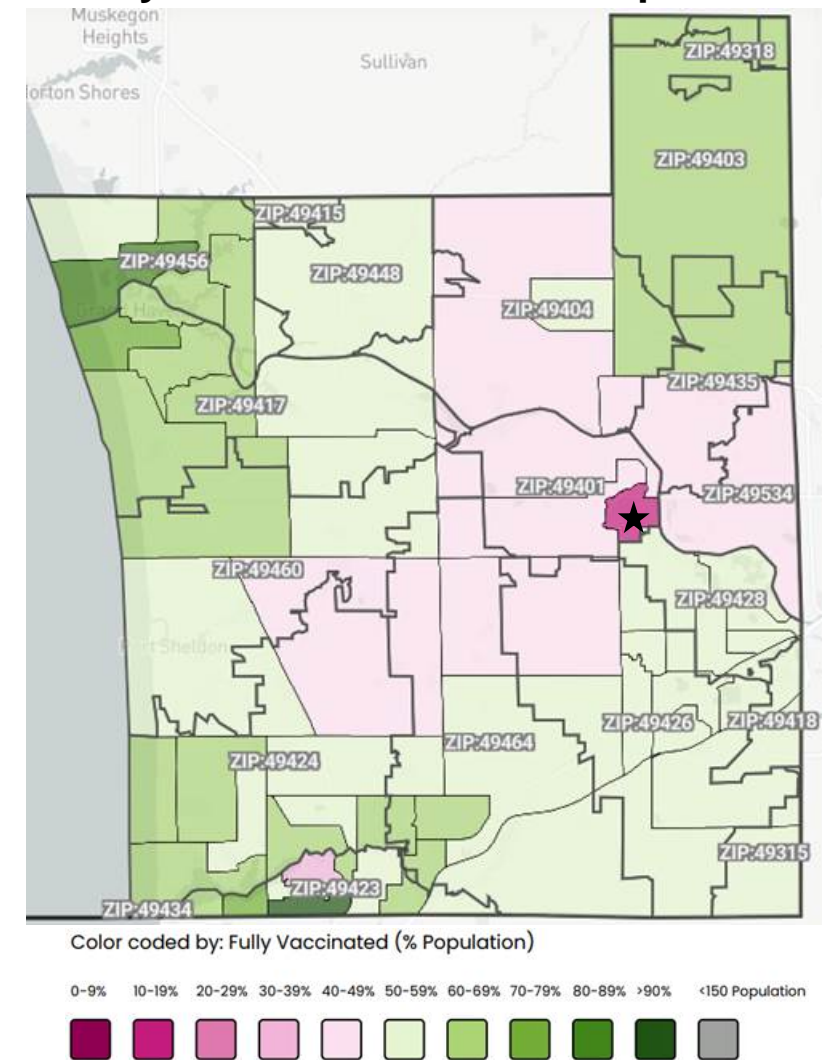


# Vaccination Coverage by Place of Residence

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 – January 15, 2022

Fully Vaccinated People (166,034 )		
Cases	Hospitalizations	Deaths
Percent of Cases in People Not Fully Vaccinated (31,887 / 43,499) <b>73.3%</b>	Percent of Hospitalizations in People Not Fully Vaccinated (986 / 1241) <b>79.5%</b>	Percent of Deaths in People Not Fully Vaccinated (237 / 344) <b>68.9%</b>
Total Cases Not Fully Vaccinated <b>31,887</b>	Total Hospitalized Not Fully Vaccinated <b>986</b>	Total Deaths Not Fully Vaccinated <b>237</b>
Total Breakthrough Cases <b>11,612</b>	Total Breakthrough Hospitalizations <b>255</b>	Total Breakthrough Deaths <b>107</b>
Percent of Fully Vaccinated People who Developed COVID-19 (11,612 / 166,034) <b>6.994%</b>	Percent of Fully Vaccinated People who were Hospitalized for COVID-19 (255 / 166,034) <b>0.154%</b>	Percent of Fully Vaccinated People who Died of COVID-19 (107 / 166,034) <b>0.064%</b>
Percent of Cases who were Fully Vaccinated (11,612 / 43,499) <b>26.7%</b>	Percent of Hospitalizations who were Fully Vaccinated (255 / 1241) <b>20.5%</b>	Percent of Deaths who were Fully Vaccinated (107 / 344) <b>31.1%</b>
Total Cases <b>43,499</b>	Total Hospitalizations <b>1241</b>	Total Deaths <b>344</b>

**As of late 2021, MDHHS discontinued interviewing Ottawa County cases, further decreasing availability of hospitalization data. Due to reduced data quality, hospitalization data in this figure may be removed in future.**

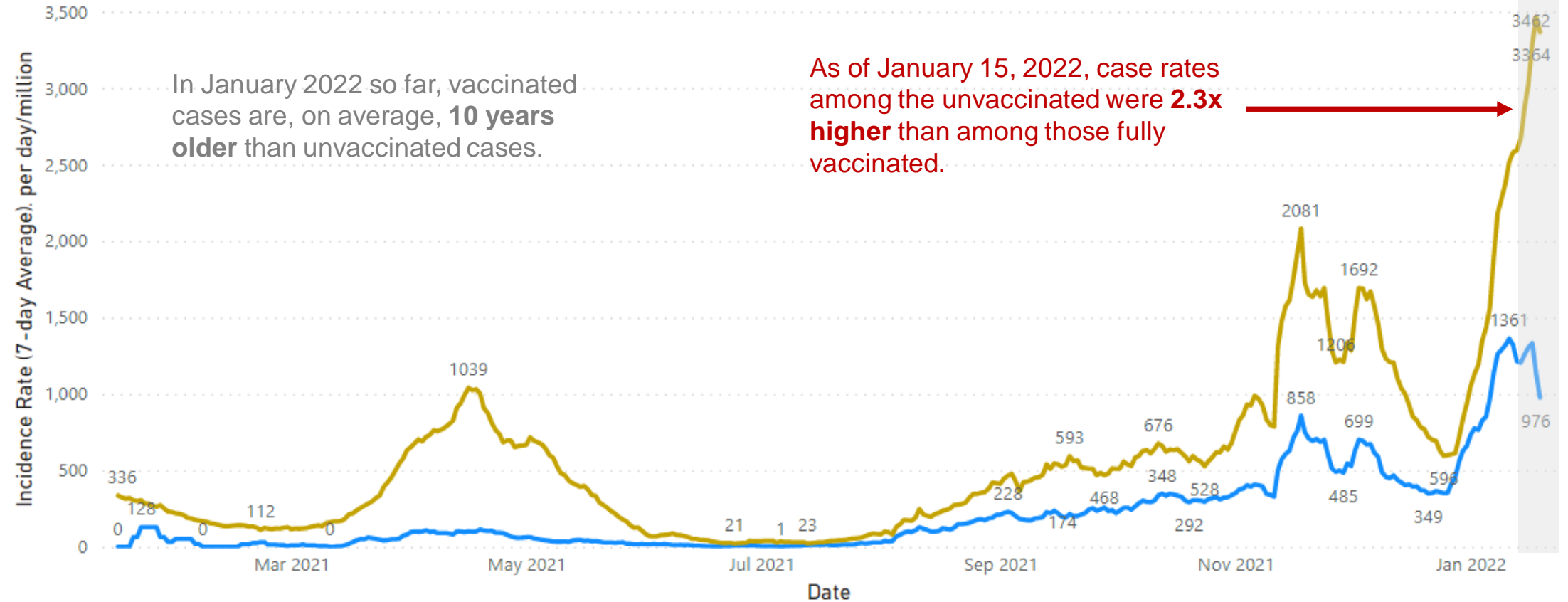
**Sources:**  
Michigan Department of Health and Human Services, Michigan Disease Surveillance System  
MDHHS COVID-19 Dashboard: [https://www.michigan.gov/coronavirus/0,9753,7-406-98178\\_103214\\_103272-547150--,00.html](https://www.michigan.gov/coronavirus/0,9753,7-406-98178_103214_103272-547150--,00.html)

# Ottawa County COVID-19 Vaccination Breakthrough Case Trends

Incidence Rate (7-day Average)

rategroup ● Fully Vaccinated ● Unvaccinated

Recent data may be incomplete



**Method:**

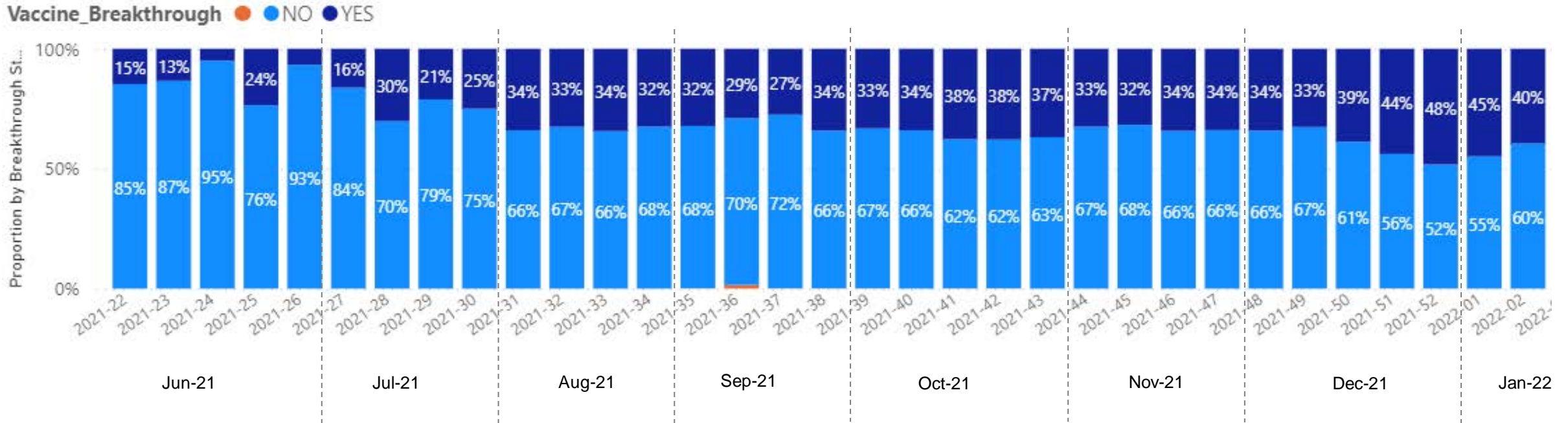
Daily case counts were obtained from the MDSS and summarized by referral date. Cases were compared to data from the State of Michigan immunization database to confirm COVID-19 vaccination status. Counts of persons completely vaccinated in Ottawa County were compiled from the Michigan COVID-19 vaccination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



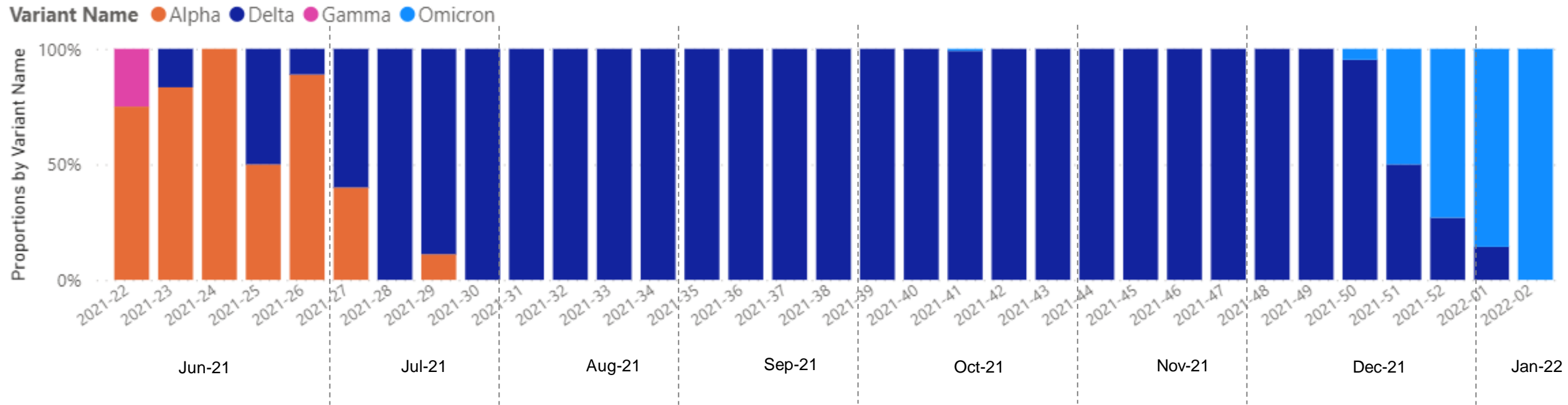
Through the Delta wave, which was most pronounced August through December of 2021, about 32% of all cases reported to public health were breakthrough cases. At the end of 2021 and into 2022, the proportion of vaccine breakthrough cases increased to roughly 45% of cases reported each week. Weekly breakthrough 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

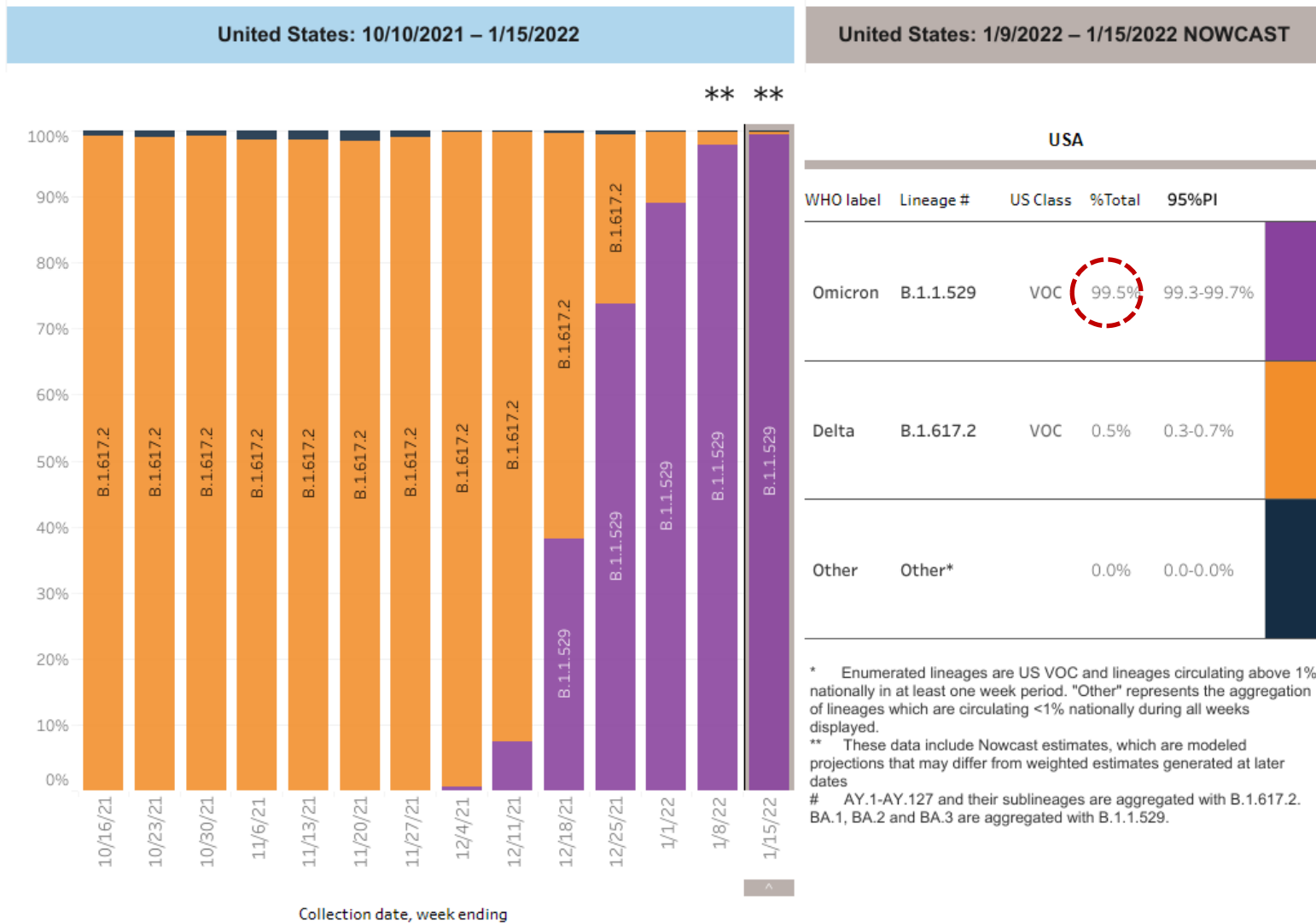


In June of 2021, most clinical samples\* submitted for variant testing came back as the **Alpha** variant. By the end of July 2021, all clinical samples tested were returned as the **Delta** variant. From late July through early December 2021 all clinical samples submitted for variant testing came back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

\* 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 **99.5%** of clinical samples collected in the United States as of January 15, 2022.

# 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 <sup>1</sup> that are positive during the past 7 days	0-4.99%	5-7.99%	8-9.99%	≥ 10.0%

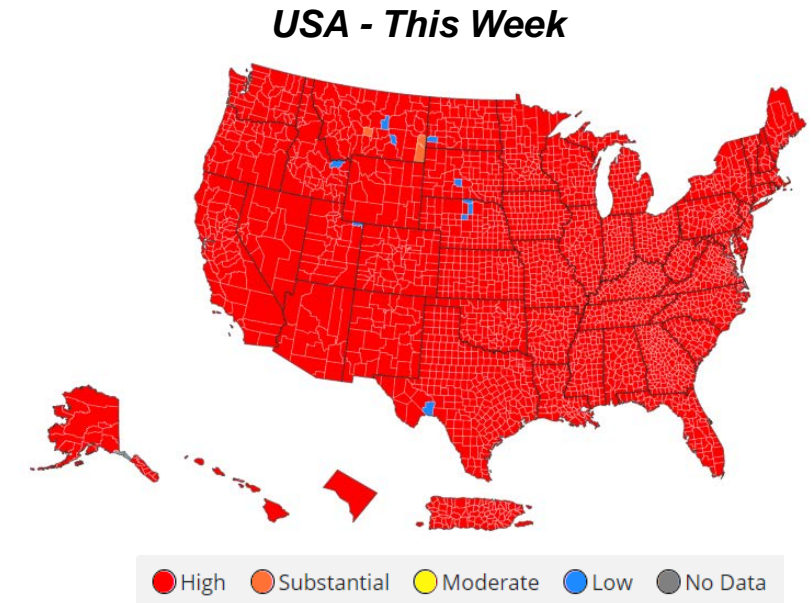
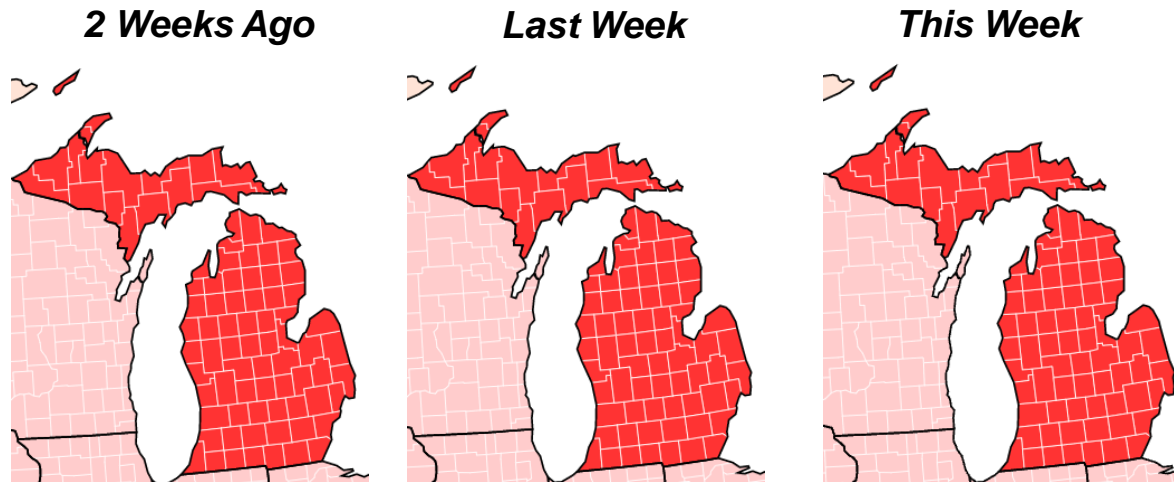
Ottawa's goal is to be in the Moderate category\*

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 **22+** weeks)
- Current Data:
  - Positivity = 34.52%
  - Case Rate = 761.4 cases per week per 100,000



Data through January 17, 2022  
for case rates and through  
January 15, 2022 for positivity.

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



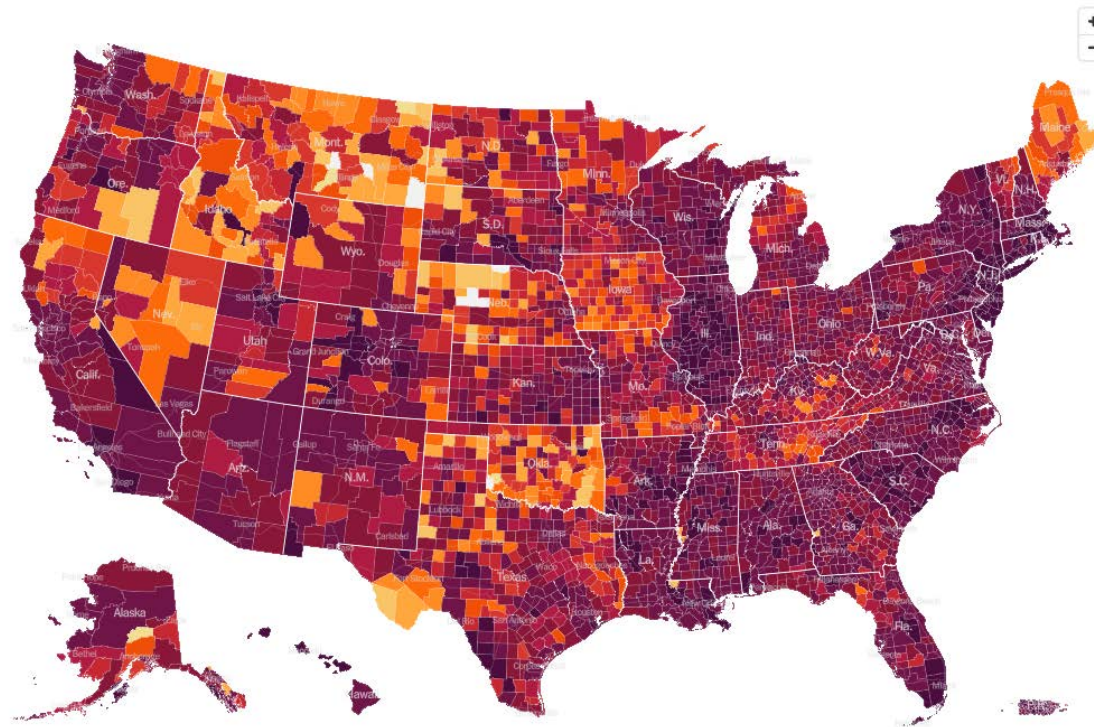
# COVID-19 Case Rates by County Across the US

*Last Week*

Hot spots

AVERAGE DAILY CASES PER 100,000 PEOPLE IN PAST WEEK

10 30 50 70 100 200 FEW OR NO CASES

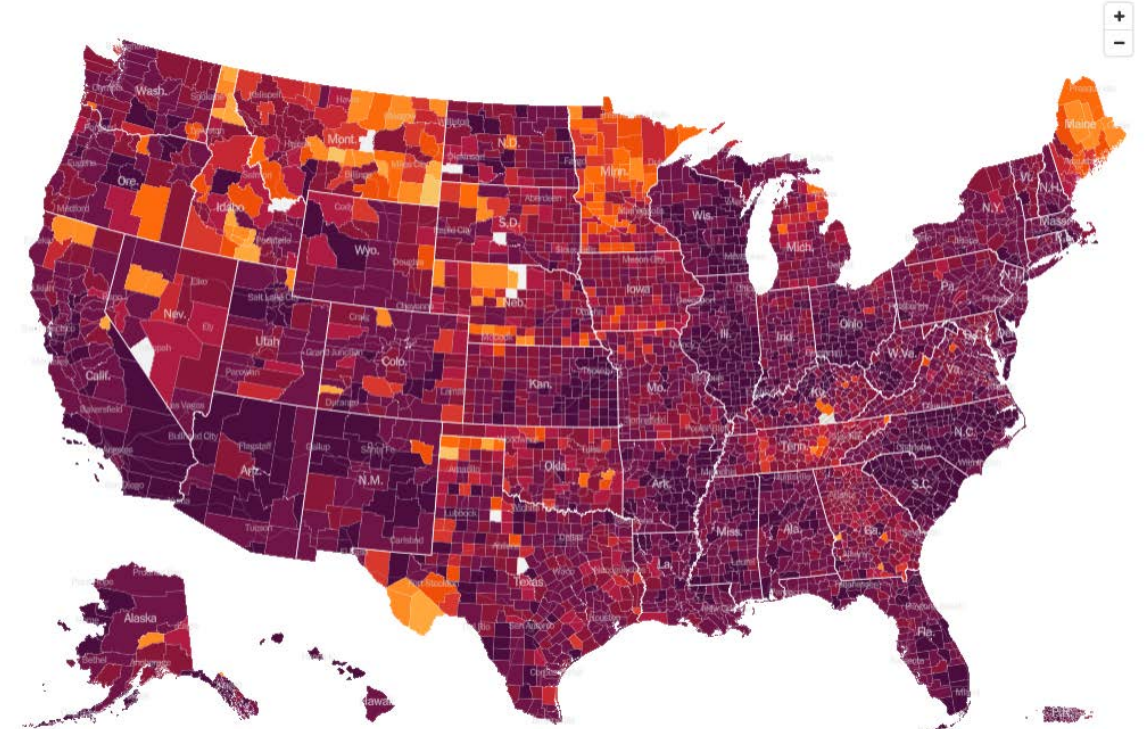


*This Week*

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 19, 2022

USA & MI

Spread

Children

Hospitalizations

Vaccinations

Variants

Risk Levels

Other

Media

Science  
Roundup



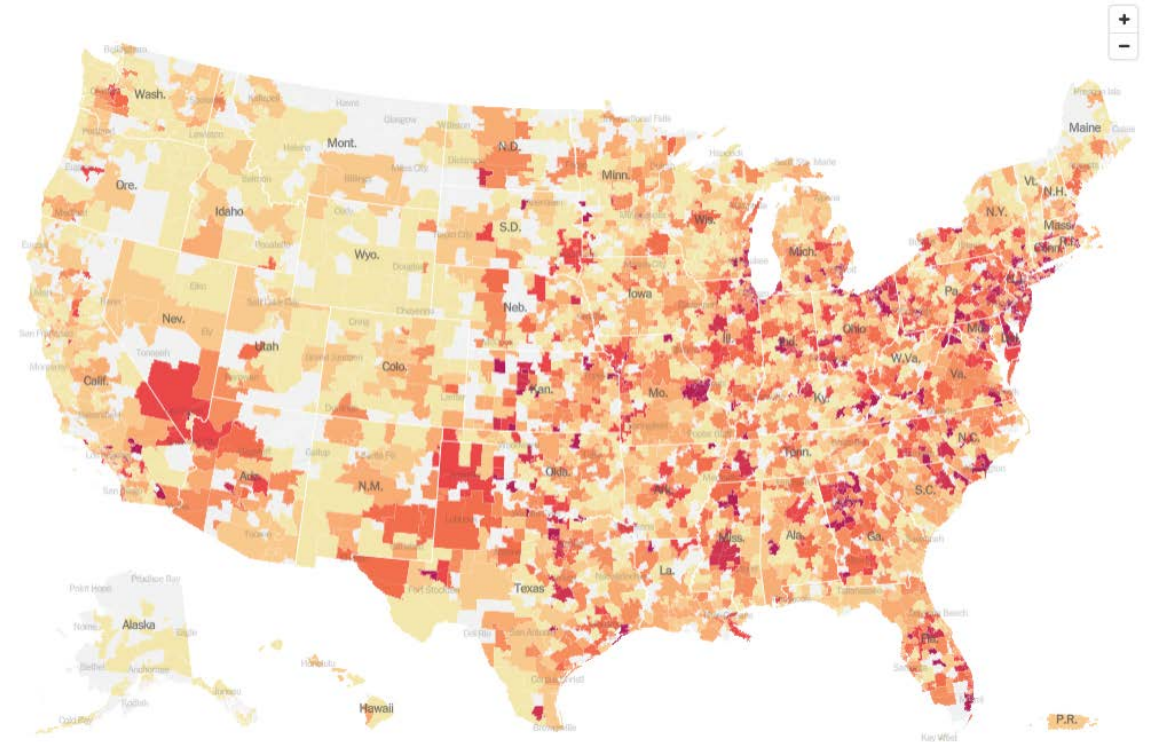
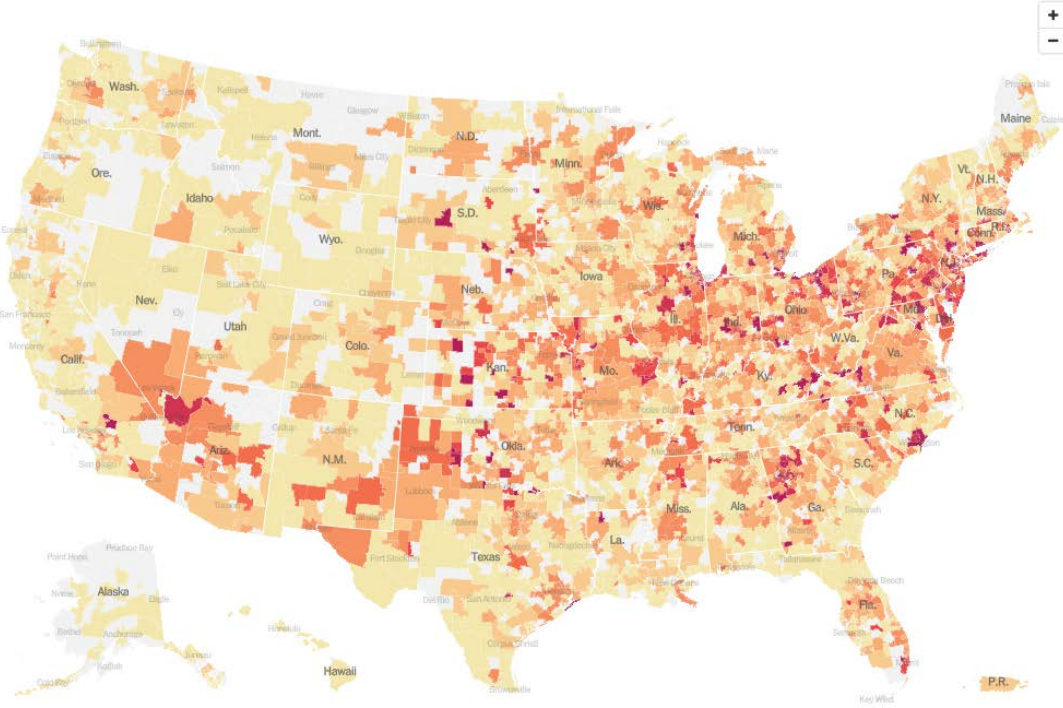
# COVID-19 Hospitalization Rates by County Across the US

*Last Week*

*This Week*

Current hospitalizations

Current hospitalizations



Hospitalization rates 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 19, 2022

USA & MI

Spread

Children

Hospitalizations

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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
  - West Ottawa Public plans to [remove universal mask rules starting January 24, 2022](#).

**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

## Ottawa, Kent counties pause jury trials amid surge in COVID cases

<https://www.fox17online.com/news/local-news/lakeshore/ottawa/ottawa-county-pauses-jury-trials-amid-surge-in-covid-cases>

## COVID-19 in sewage is new gauge on state dashboard

<http://greatlakesecho.org/2022/01/17/covid-19-in-sewage-is-new-gauge-on-state-dashboard/>

## 1 of every 100 Michiganders was hospitalized for COVID-19 in the past year, and other fast facts for 2021

<https://www.mlive.com/public-interest/2022/01/1-of-every-100-michiganders-was-hospitalized-for-covid-19-in-the-past-year-and-other-fast-facts-for-2021.html>

## Ottawa County updates school isolation, quarantine rules

<https://www.hollandsentinel.com/story/news/education/2022/01/12/ottawa-county-updates-school-isolation-quarantine-rules/9183577002/>

## Supreme Court blocks nationwide vaccine and testing mandate for large businesses, allows health care worker vaccine mandate to take effect

<https://www.cnn.com/2022/01/13/politics/supreme-court-vaccine-mandate-covid-19/index.html>

## At-home COVID test website launches early. How to order free testing kits from the government

<https://www.usatoday.com/story/money/2022/01/18/covid-test-website-free-tests/6564197001/>

# Science Roundup

Effectiveness of BNT162b2 Vaccine against Critical Covid-19 in Adolescents

<https://www.nejm.org/doi/full/10.1056/NEJMoa2117995>



A New England Journal of Medicine article showed Pfizer vaccination among adolescents aged 12-18 years was 94% effective at preventing hospitalization, and 98% effective at preventing ICU admission.

## Outcomes of SARS-CoV-2-Positive Youths Tested in Emergency Departments

<https://jamanetwork.com/journals/jamanetworkopen/fullarticle/2787931>



A global study found that among youth presenting to Emergency Departments and testing positive for COVID-19, 3.3% experienced a severe outcome within 14 days.

## Persistence of clinically relevant levels of SARS-CoV2 envelope gene subgenomic RNAs in non-immunocompromised individuals

[https://www.ijidonline.com/article/S1201-9712\(21\)01206-6/fulltext](https://www.ijidonline.com/article/S1201-9712(21)01206-6/fulltext)



A small study found that about 30% of those infected with COVID-19 may still be infectious after 5 days, and 10% after 10 days. The study was unable to identify unique clinical features for those that remained potentially infectious.

## COVID-19 self-isolation changes: scientific summary

[https://ukhsalibrary.koha-ptfs.co.uk/wp-content/uploads/sites/40/2022/01/20220110\\_Self-isolation\\_Scientific-Summary\\_Final-clean.pdf](https://ukhsalibrary.koha-ptfs.co.uk/wp-content/uploads/sites/40/2022/01/20220110_Self-isolation_Scientific-Summary_Final-clean.pdf)



A modelling report released by the United Kingdom Health Security Agency showed that 31.4% of people with COVID-19 may be infectious after 5 days, 15.8% after 7 days, and 5.1% at 10 days.