

Ottawa County COVID-19 Epidemiology

November 11, 2021

Data as of November 6, 2021, unless otherwise indicated

Executive Summary

- **The US may be plateauing, while Michigan continues to increase**
- **Ottawa community transmission continues to increase**
 - Positivity increased to 21% last week. The goal is to be less than 8%*.
 - Weekly case counts in Ottawa increased 42%, from 942 two weeks ago to 1,334 last week.
 - Cases among children increased 54%, from 222 two weeks ago to 341 last week.
- **Ottawa area and regional hospitals continue to see many COVID-19 patients**
 - In Ottawa County, 21% of all available beds are occupied by COVID-19 patients.**
 - About 39% of Ottawa County ICU beds are occupied by COVID-19 patients.**
 - At a large regional healthcare system, weekly hospital census for children with COVID-19 reached the highest level seen through the pandemic two weeks ago, and remained elevated last week.
 - Staffing remains a challenge for many health systems.
 - In recent weeks more Ottawa County hospitals are reporting strain.
- **Pediatric hospitalizations across the US are improving, but hospitalizations among children in Michigan continue to increase.**
- **Of Ottawa County residents aged 12+, 62% are completely vaccinated**

*After further analysis of Ottawa County case rate data, positivity data, and CDC Community Transmission Levels, on October 8, 2021, the Ottawa County Department of Public Health (OCDPH) relaxed one of the criteria that may be used to rescind the current school mask order. The criterion that set a threshold of a CDC Community Transmission Level of Low for 7 consecutive days was changed to a threshold of Moderate for 14 consecutive days.

**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.

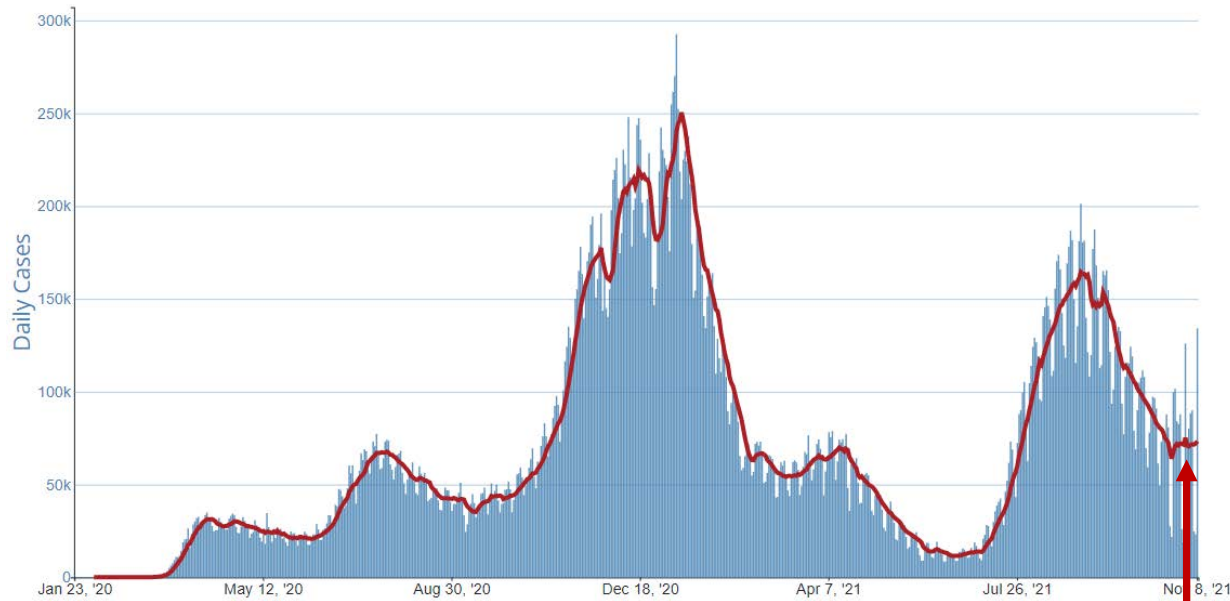
Ottawa County Metrics by Week

Metric	Goal	Week Ending				
		9-Oct-21	16-Oct-21	23-Oct-21	30-Oct-21	6-Nov-21
Positivity (All Ages)	<8%	14.0%	16.0%	16.0%	17.3%	21.2%
Weekly Cases (All Ages)	<147	912	967	857	942	1334
Weekly Cases in Children (0-17 years of age)	NA	198	200	165	222	341
Total COVID-19 Hospitalizations (All Ages)	0	26	34	33	27	23
Total Deaths (All Ages)	0	8	9	9	7	5
CDC Risk Transmission Level	Moderate	High	High	High	High	High

Case Trends in the USA and Michigan

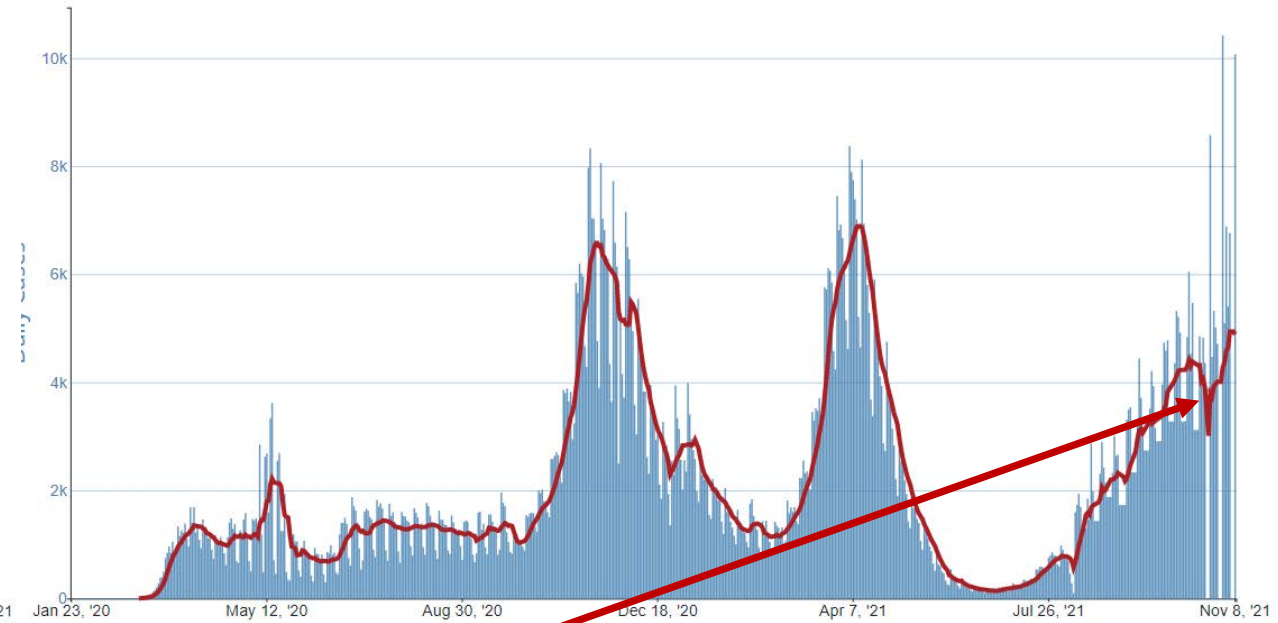
USA

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

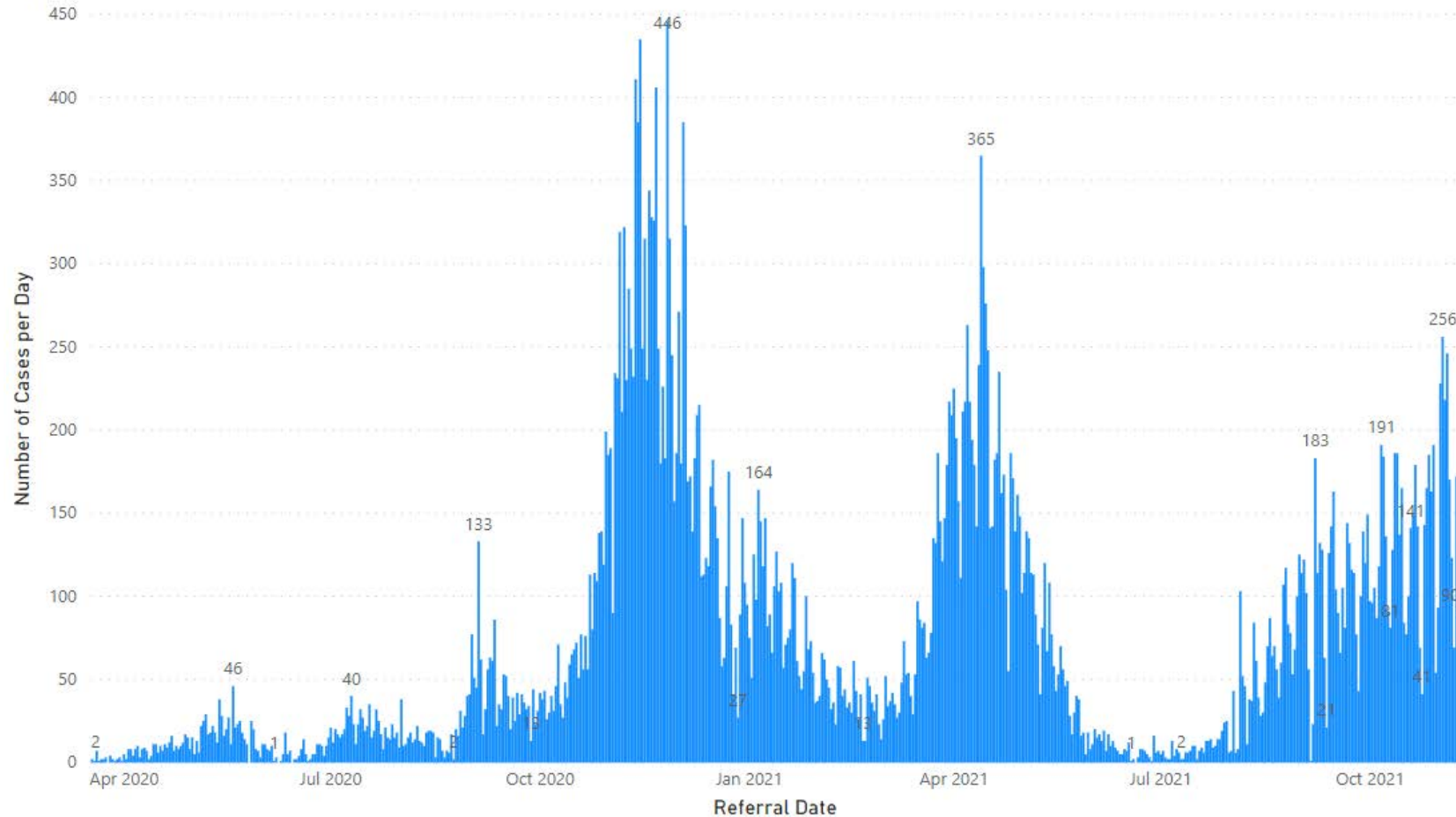


The US has plateaued while Michigan continues trending up.

Case Trends in Ottawa County

COVID-19 Cases by Day, Ottawa County, March 15, 2020 – November 9, 2021

Epidemiological Curve



Total Number of Cases
43,635

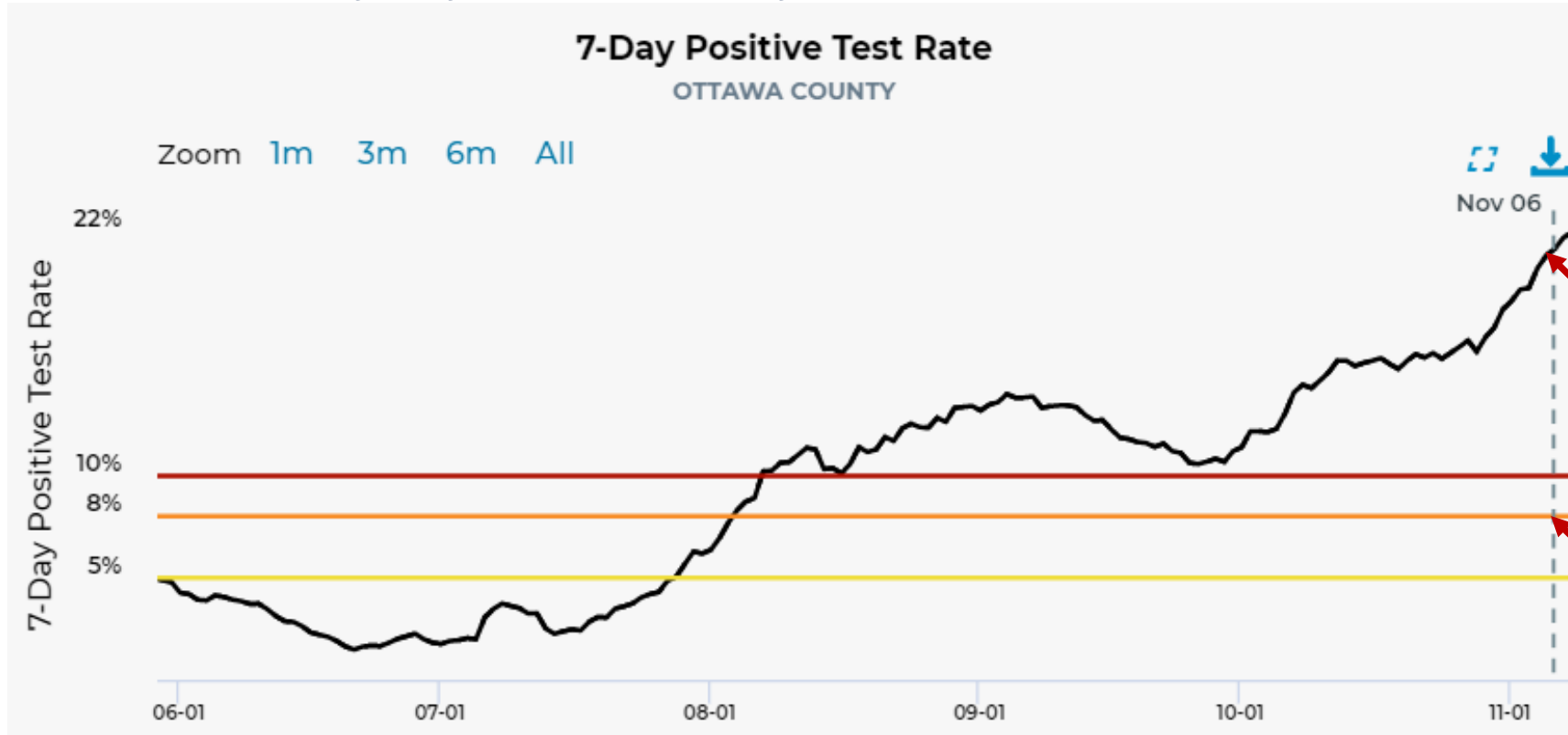
Currently the 7-day average is **155 cases per day**, higher than the 147 cases per day seen at a similar time last week. From week to week, cases **increased 42%** over the last 2 full weeks.

Note: As of November 2021, reports from local stores of a large grocery chain and a national pharmacy chain indicate that supplies of at-home COVID-19 tests remain in high demand. 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, OCDPH has received reports of parents refusing COVID-19 testing for their children ill with respiratory symptoms, which may further deflate case data.

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 – November 6, 2021



Test positivity reached 21.2% on November 6, 2021.

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

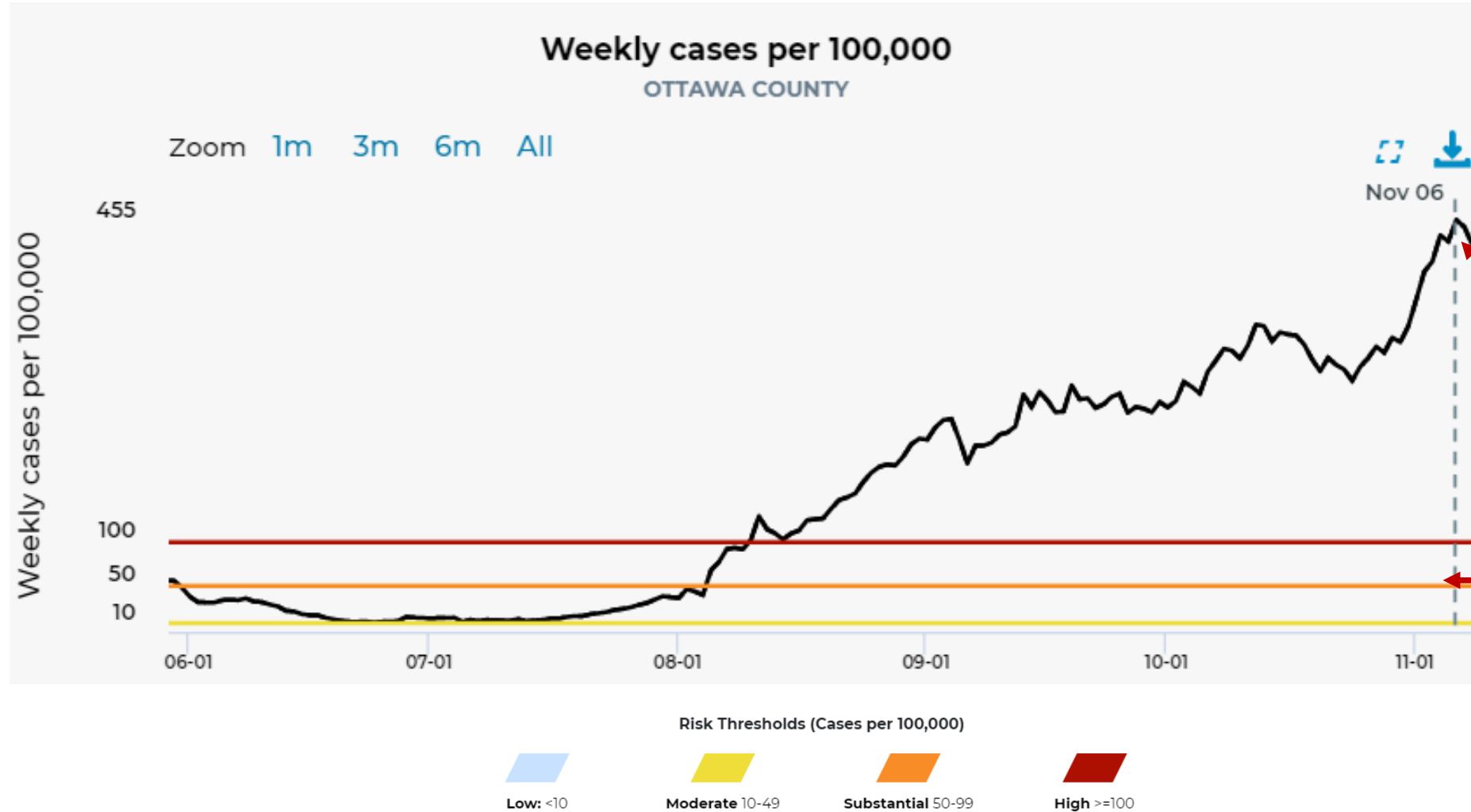


Note: Testing in Ottawa County has remained stable with 6000-8000 tests conducted each week over the last 3 months: [Testing Results | Ottawa County Covid-19 Case Summary Data \(arcgis.com\)](https://www.arcgis.com)

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 – November 6, 2021



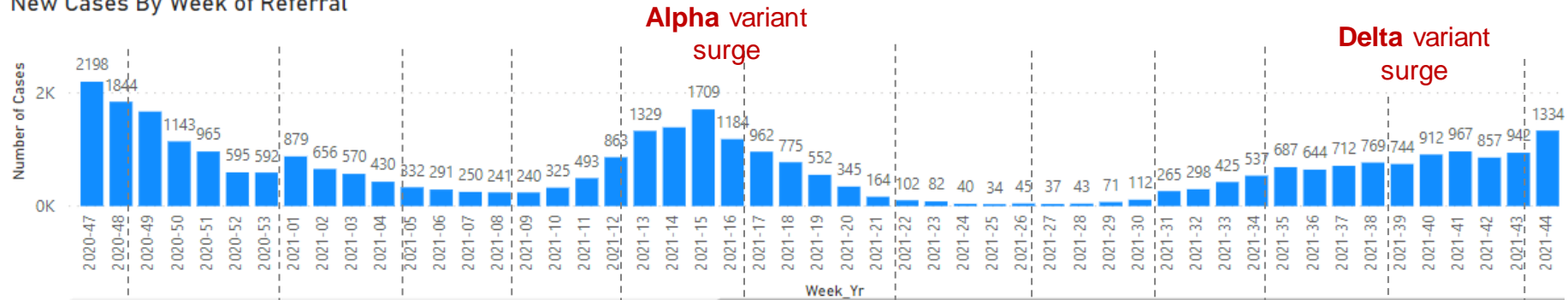
Case rates increased to 455 cases per week per 100,000 population.

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>

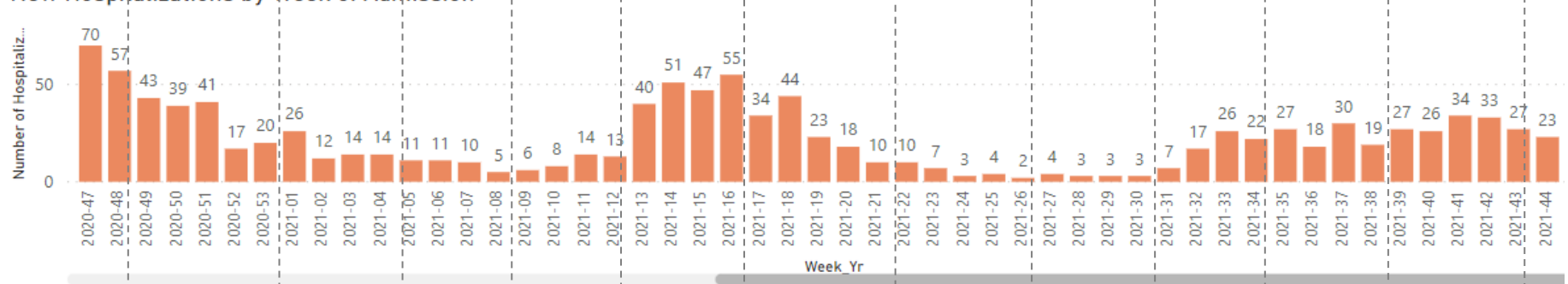
Ottawa County - Cases, Hospitalizations, & Deaths by Week, All Ages

New Cases By Week of Referral



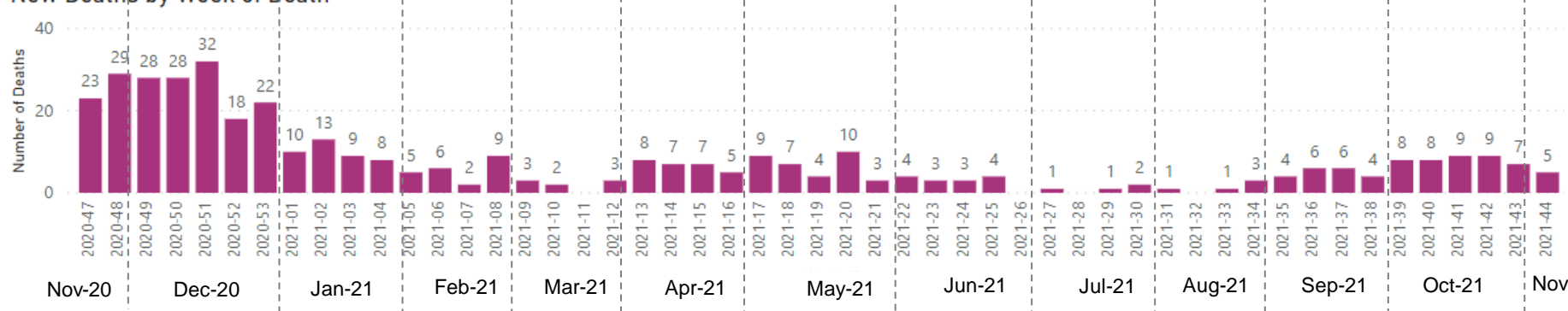
The weekly number of **cases** increased 42% last week.

New Hospitalizations by Week of Admission



The weekly number of **hospitalizations** has been increasing with an average of about **29 cases hospitalized** each week over the last month.

New Deaths by Week of Death



Weekly COVID-19 **deaths** are reaching levels experienced in the spring 2021 wave. Current weekly average of deaths over the last 4 weeks stands at about **7-8 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.

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
3-Jul-21	40		5		45	
10-Jul-21	32	-20%	5	0%	37	-18%
17-Jul-21	38	19%	5	0%	43	16%
24-Jul-21	60	58%	11	120%	71	65%
31-Jul-21	89	48%	23	109%	112	58%
7-Aug-21	224	152%	43	87%	267	138%
14-Aug-21	259	16%	39	-9%	298	12%
21-Aug-21	365	41%	60	54%	425	43%
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%	198	46%	912	23%
16-Oct-21	765	7%	200	1%	967	6%
23-Oct-21	692	-10%	165	-18%	857	-11%
30-Oct-21	720	4%	222	35%	942	10%
6-Nov-21	816	13%	341	54%	1334	42%

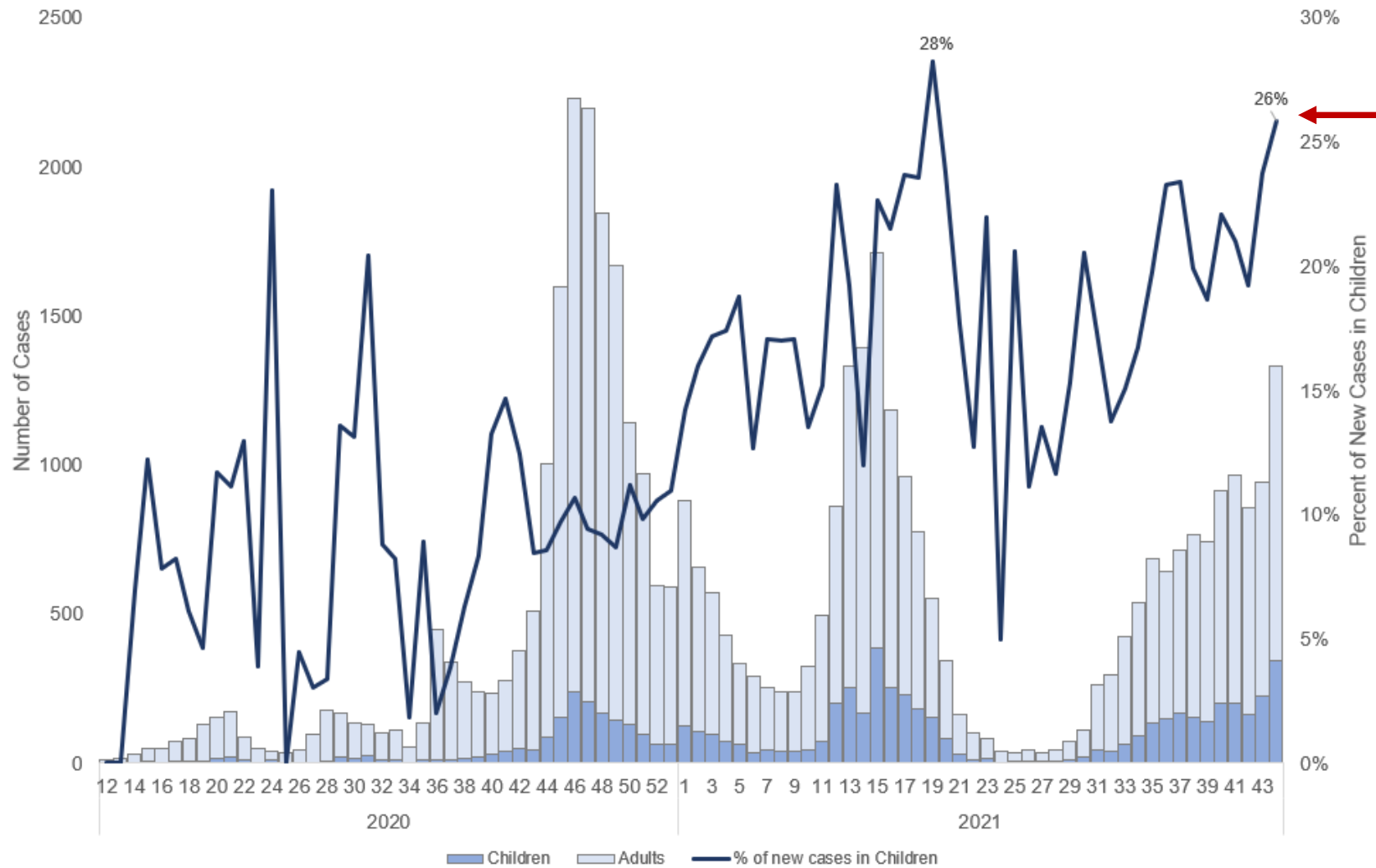
Adults

Children

Weekly case counts among children increased 54% last week, and cases in adults increased 13%.

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

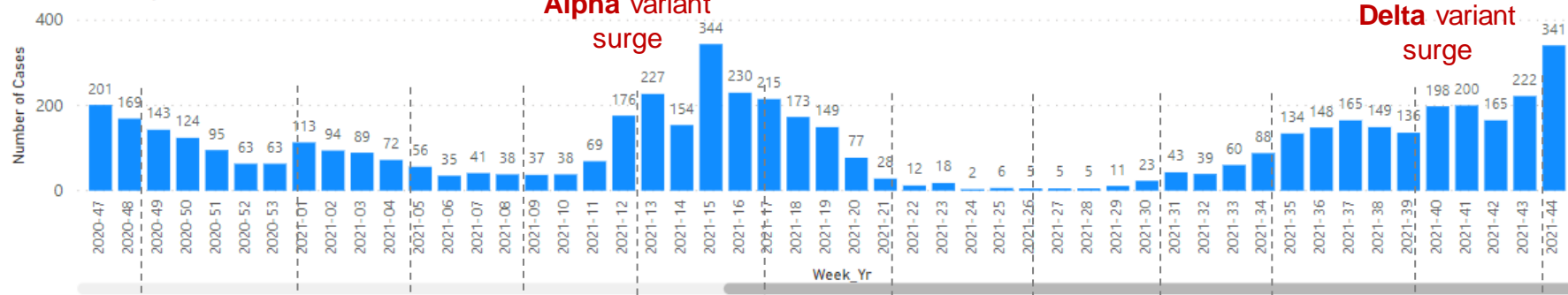
Ottawa County Weekly Case Counts and % in Children (0-17)



Children make up an increasing proportion of cases reported. This past week, **26% of cases were in children**, the second highest of any week through the entire pandemic.

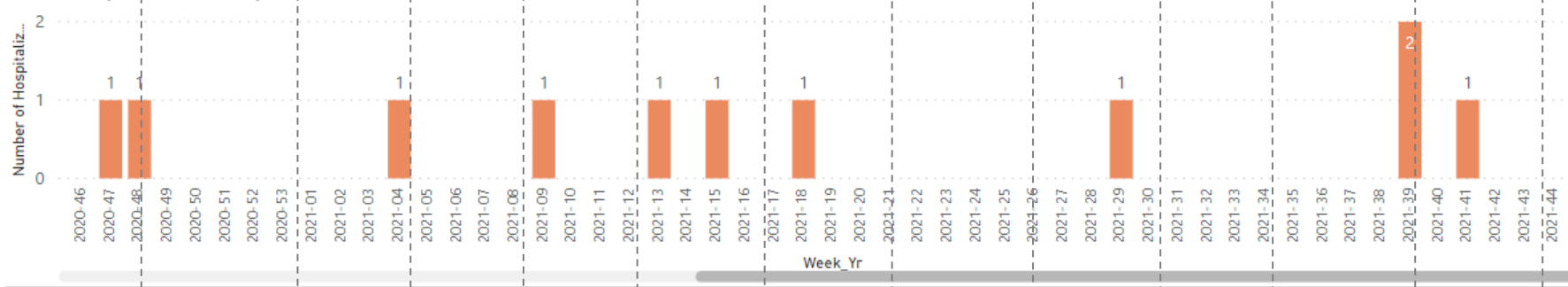
Ottawa County - Cases, Hospitalizations, & Deaths by Week Among Children (0-17 years)

New Cases By Week of Referral



The weekly number of cases among children **increased 54%** in the last 2 full weeks.

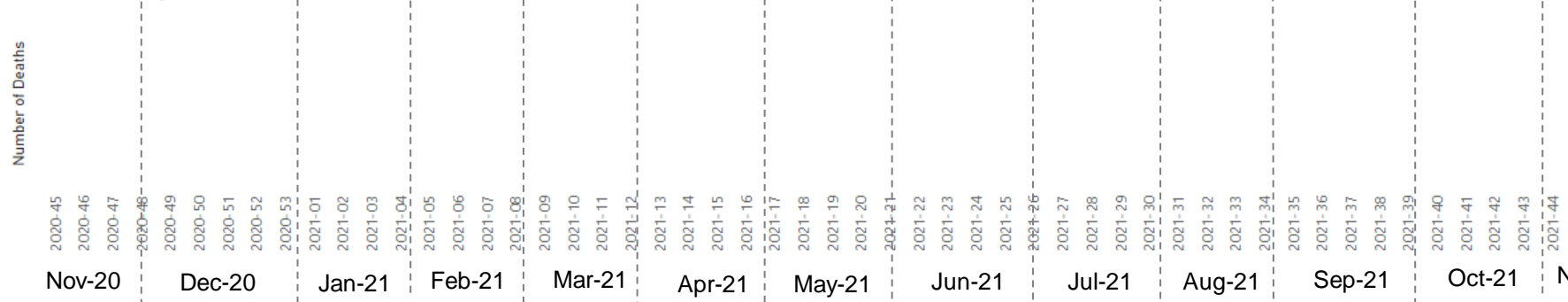
New Hospitalizations by Week of Admission



Hospitalizations are likely **underestimated** because:

- (i) Hospitalization status is obtained only by manual review, and
- (ii) Hospitalization may occur after public health interview.

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.

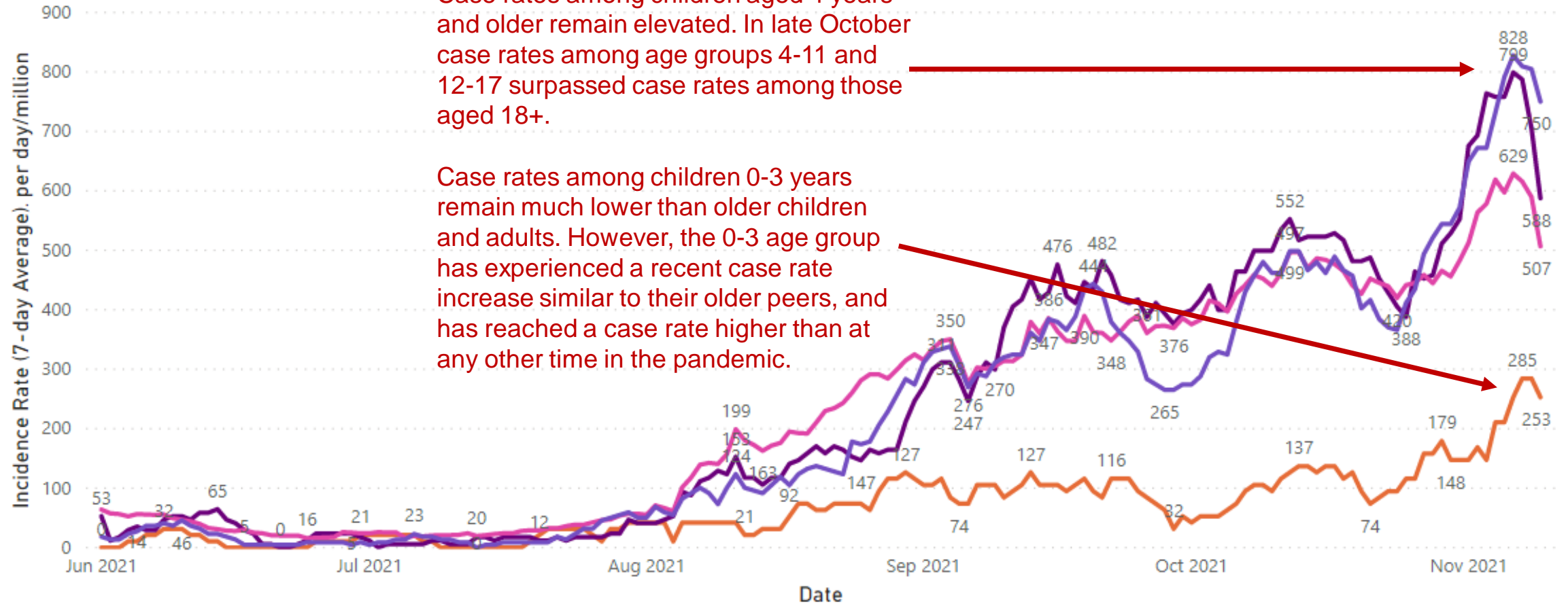
Source: Michigan Department of Health and Human Services, Michigan Disease Surveillance System

Ottawa County - Case Rate Trends – by Age

COVID-19 Case Rates by Age, includes School-Aged, June 2021 – November 9, 2021

Incidence Rate (7-day Average)

rategroup ● 0-3 ● 12-17 ● 18+ ● 4-11



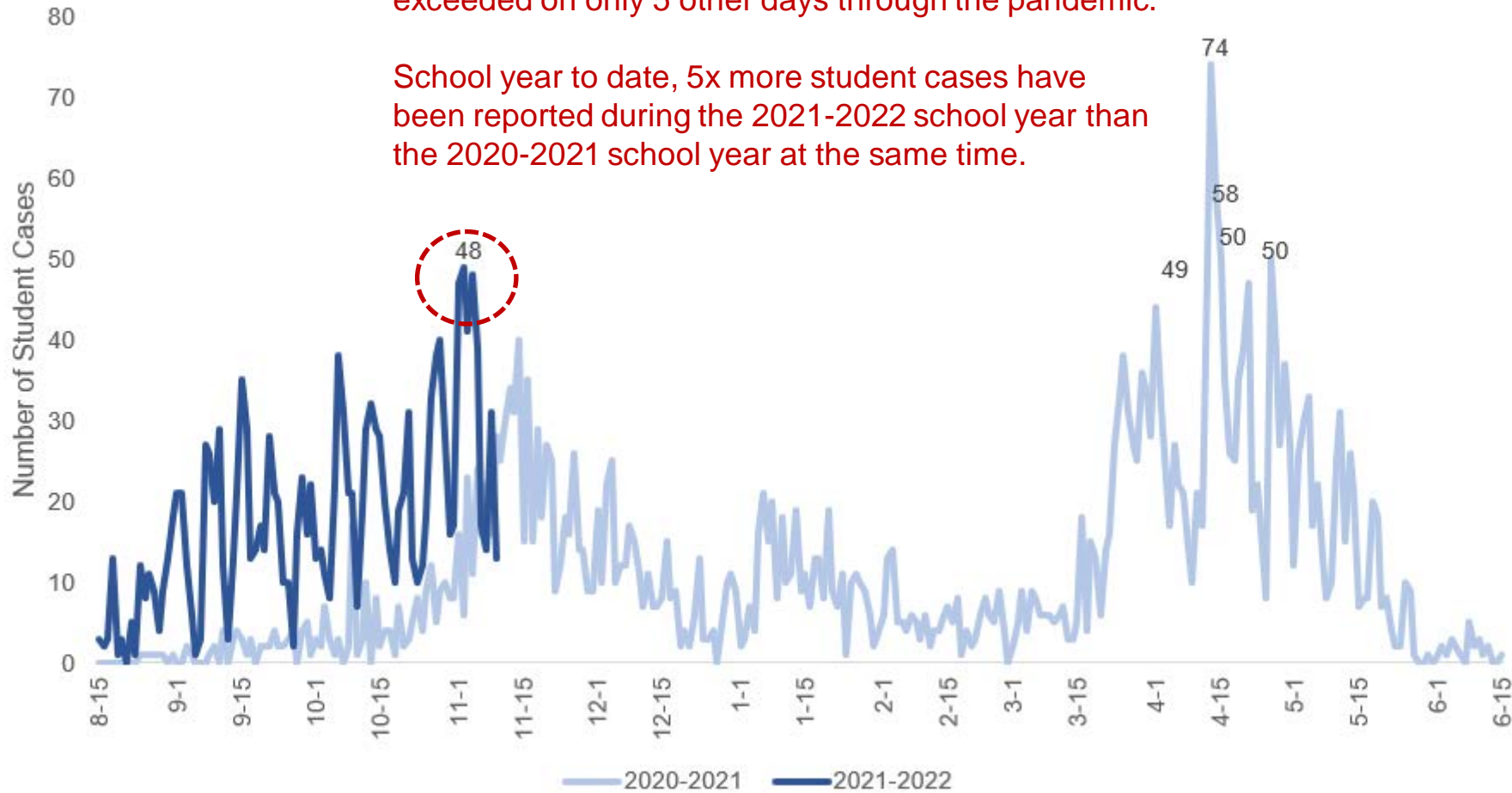
Source: Michigan Department of Health and Human Services, Michigan Disease Surveillance System

Data as of November 9, 2021

Ottawa County Cases in PreK-12 School Students

One day last week reached 48 PreK-12 students reported in a day (red circle), a number attained or exceeded on only 5 other days through the pandemic.

School year to date, 5x more student cases have been reported during the 2021-2022 school year than the 2020-2021 school year at the same time.



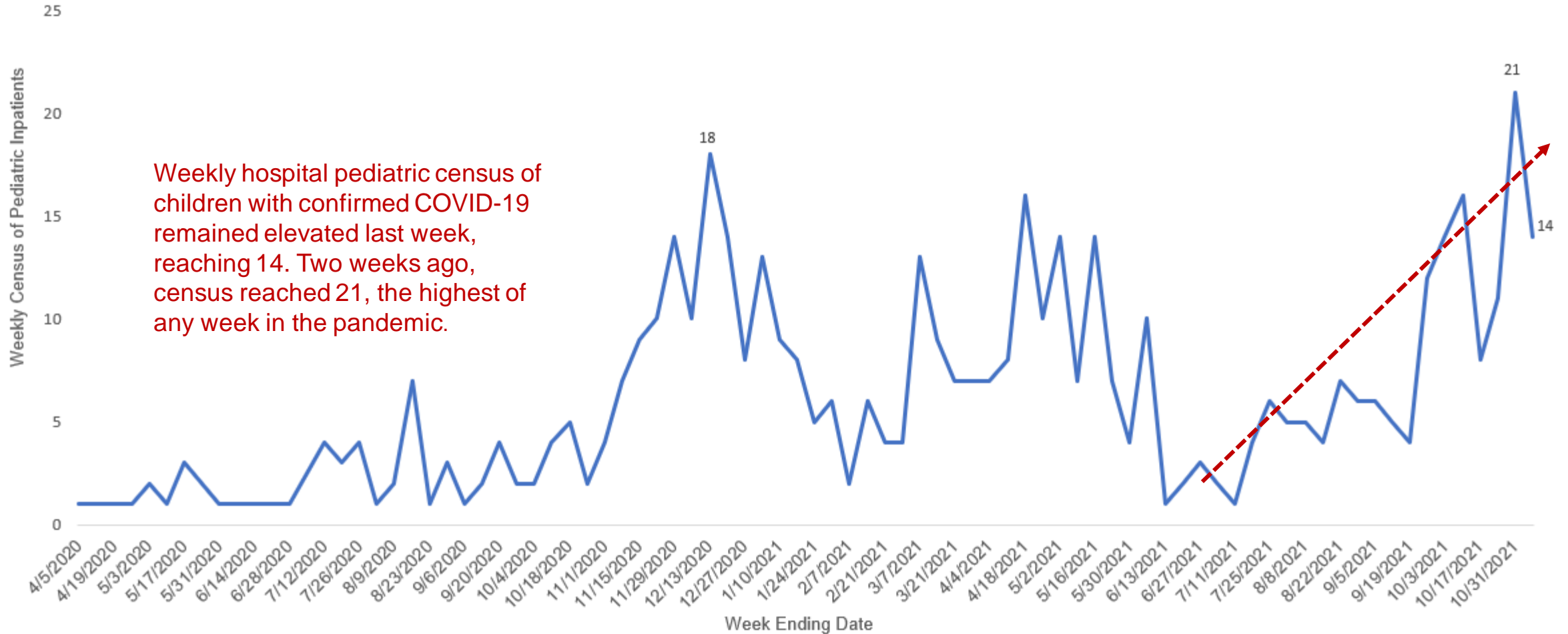
Method: Includes PreK-12 students known to attend a school in Ottawa County who are classified as a confirmed or probable case of COVID-19.

Note: Data may change as information is updated and methods are refined. Cases reported in 2021 will likely increase.

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

Data through November 9, 2021

Weekly Hospital Pediatric Census – A Regional Healthcare System



Weekly hospital pediatric census of children with confirmed COVID-19 remained elevated last week, reaching 14. Two weeks ago, census reached 21, the highest of any week in the pandemic.

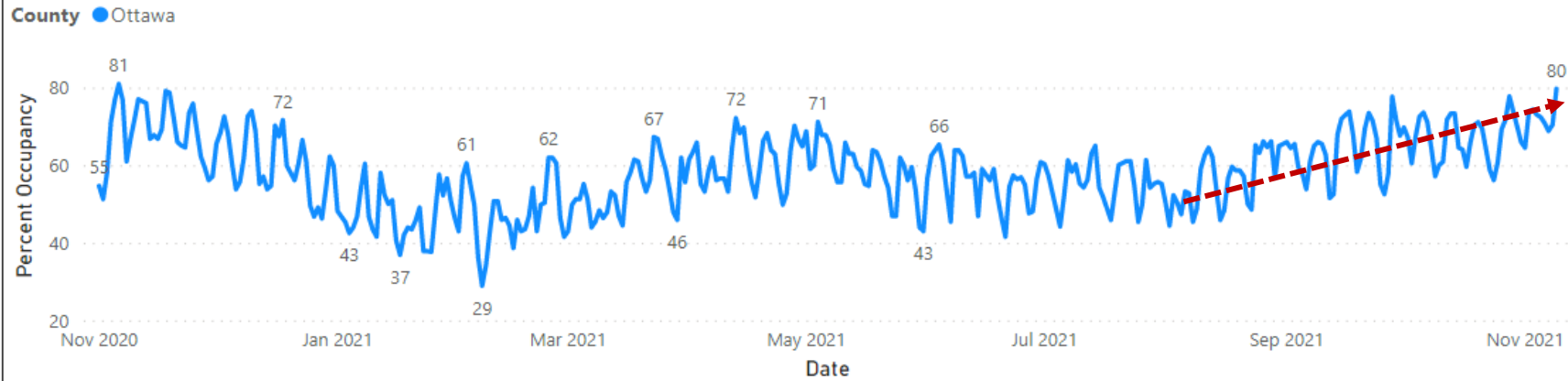
Note: Data above includes persons younger than 18 years of age with confirmed COVID-19 hospitalized at a large regional healthcare system. Patients may be listed in more than one week. Data may change as information is updated.

Data through November 7, 2021

Ottawa County Hospital Capacity – All Beds

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

Percent Occupancy by Date and County



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

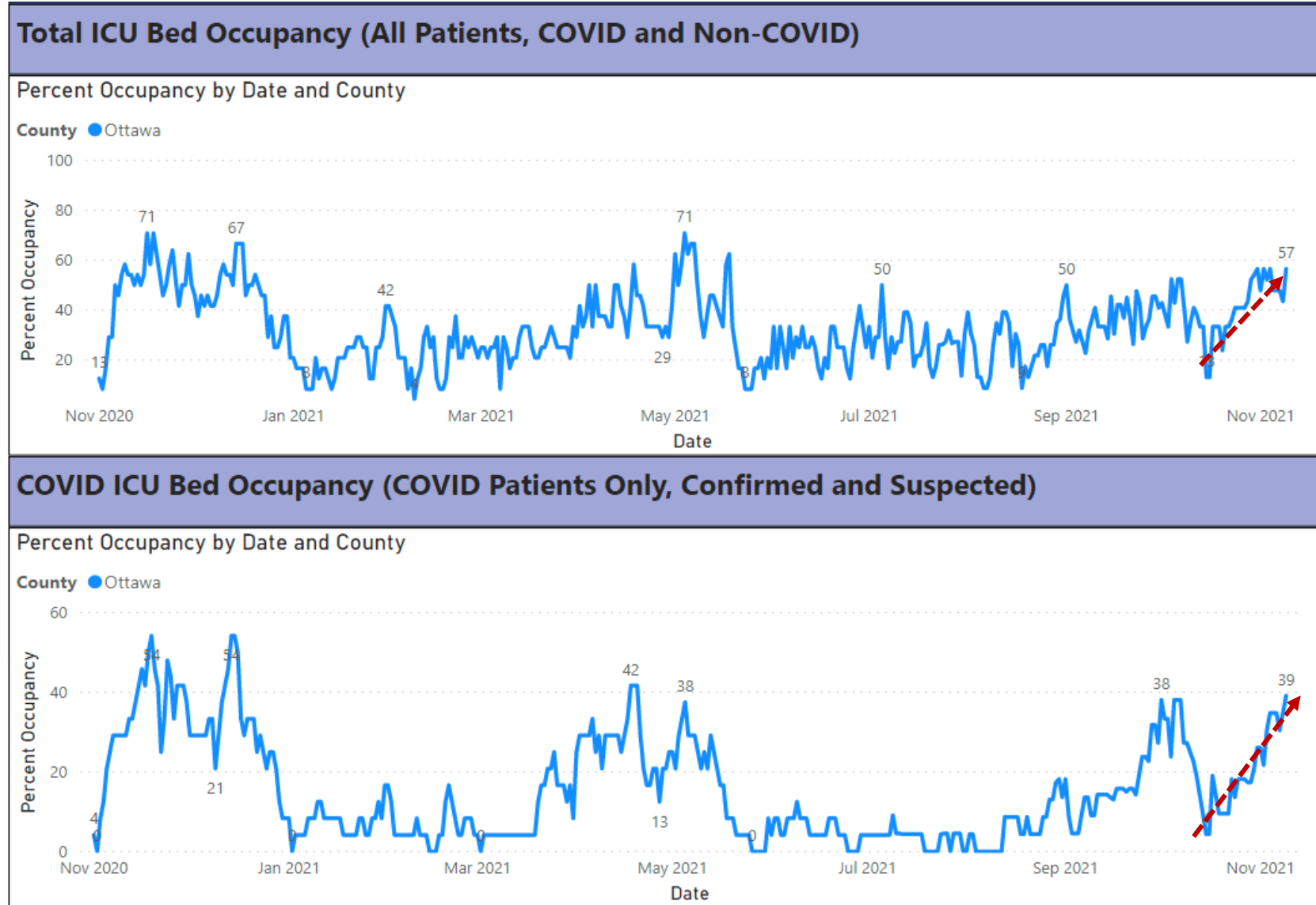
Percent Occupancy by Date and County



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

Currently **21%** of all inpatient beds are occupied by COVID-19 patients.

Ottawa County Hospital Capacity – ICU Beds



Overall ICU bed occupancy is **increasing**.

The proportion of ICU beds occupied by COVID-19 patients is **increasing**. Currently, **39%** of ICU beds are occupied by COVID-19 patients.

Source: EMResources

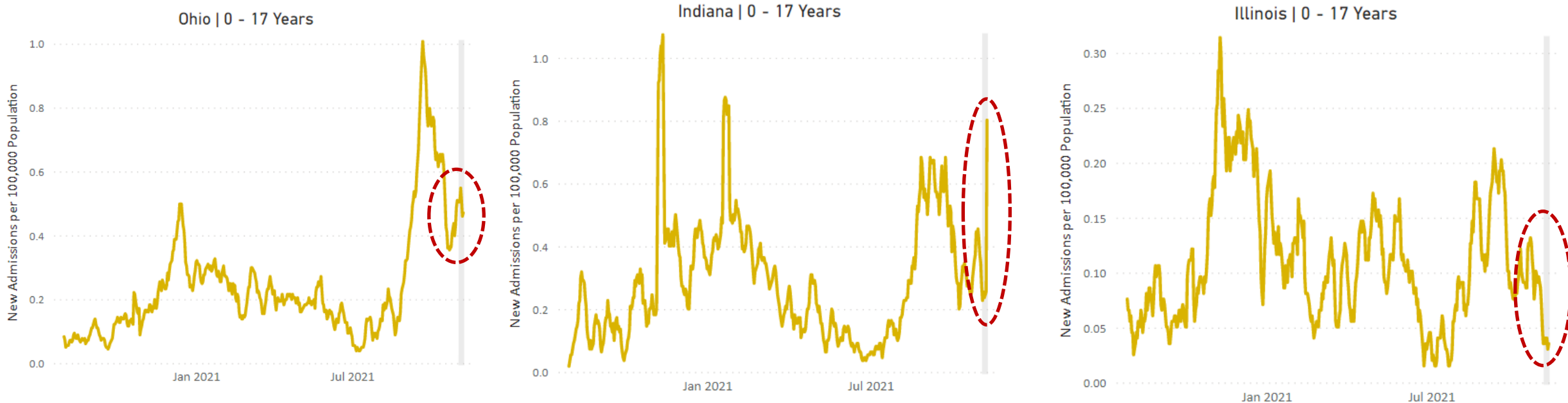
Data through November 9, 2021

Pediatric Hospitalization Rates – USA, Georgia, Michigan



Pediatric hospitalization rates across the United States may be rebounding after a substantial decline. Most southern states (such as Georgia) have decreased substantially. Michigan pediatric hospitalization rates continue to increase, reaching some of the highest rates experienced through the entire pandemic.

Pediatric Hospitalization Rates – Select Midwest States

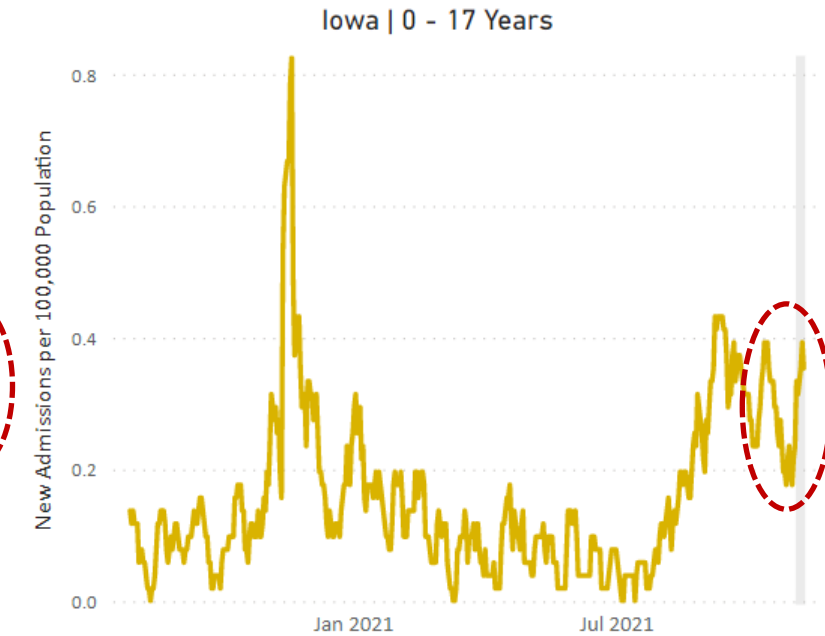
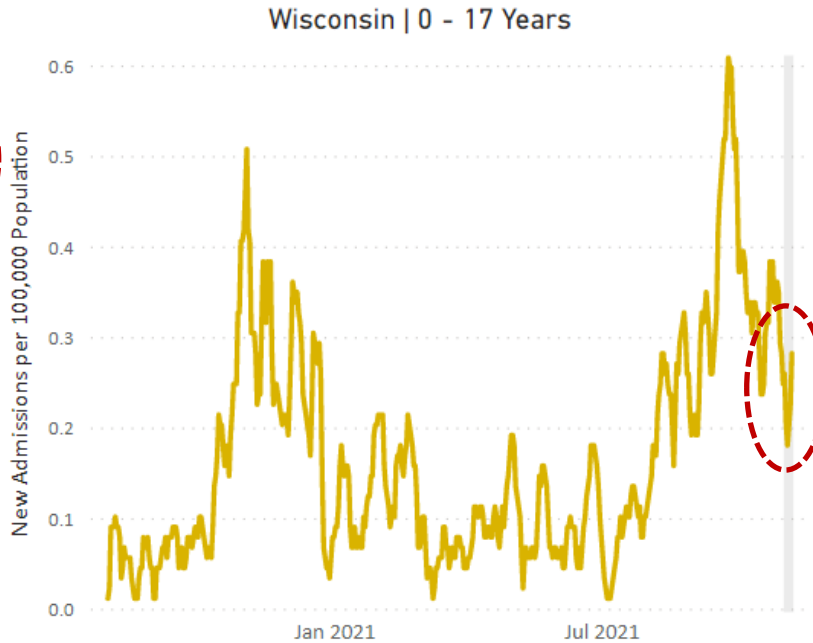
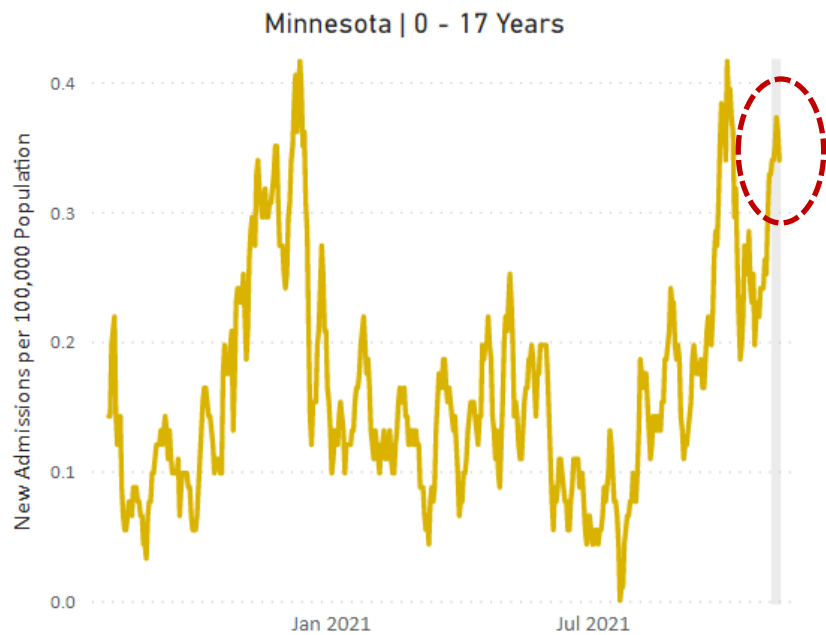


Pediatric hospitalization rates in some states across the Midwest are elevated. Ohio remains higher than usual and is showing a recent rebound. Indiana may be increasing but Illinois pediatric hospitalization rates continue to decline.

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

Accessed November 9, 2021

Pediatric Hospitalization Rates – Select Midwest States



Pediatric hospitalization rates in Minnesota, and Wisconsin remain elevated, with Iowa showing signs of rebound.

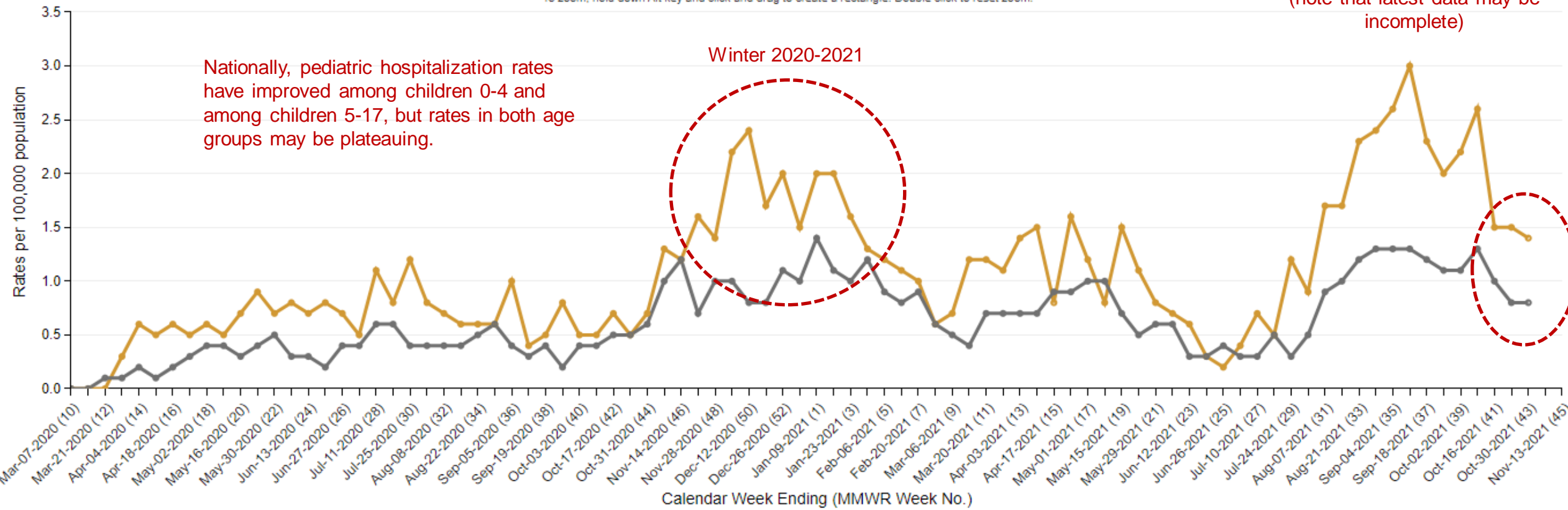
Source: <https://covid.cdc.gov/covid-data-tracker/#new-hospital-admissions>

Accessed November 9, 2021

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)

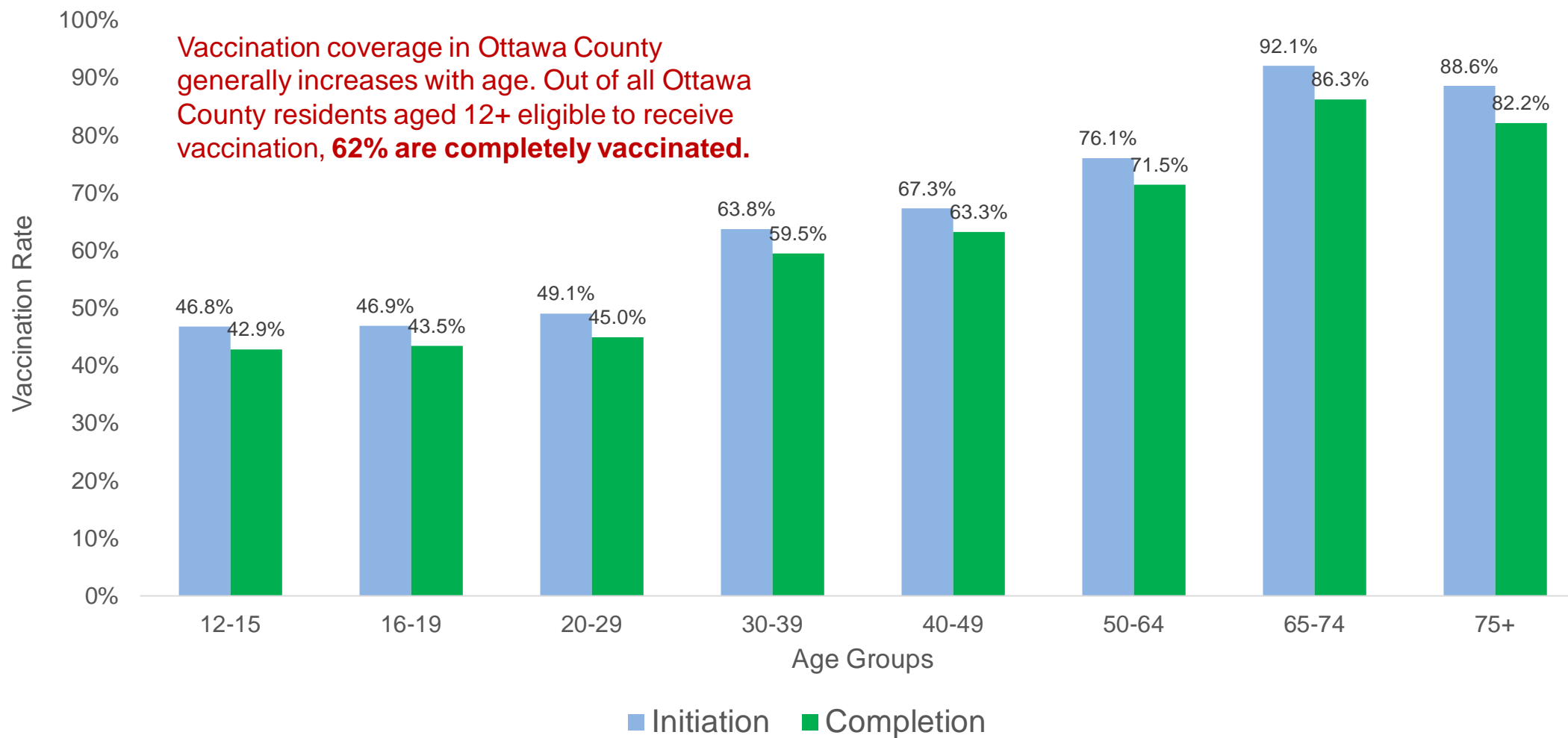


The Coronavirus Disease 2019 (COVID-19)-Associated Hospitalization Surveillance Network (COVID-NET) hospitalization data are preliminary and subject to change as more data become available. In particular, case counts and rates for recent hospital admissions are subject to lag. As data are received each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

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

Accessed November 9, 2021

Vaccination Coverage by Age



Note: The previously posted vaccination rate goal of 70% was removed from this illustration. As more transmissible COVID-19 variants emerge, vaccination rates higher than 70% are likely needed to slow COVID-19 transmission in the community.

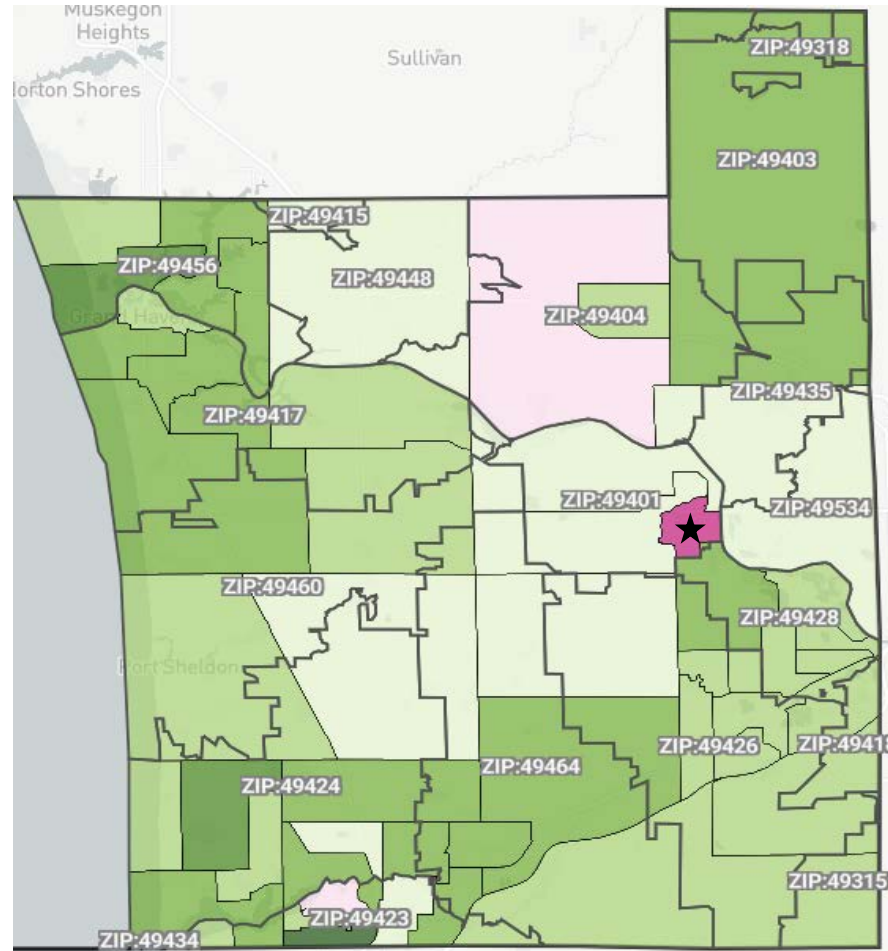
Source: https://www.michigan.gov/coronavirus/0,9753,7-406-98178_103214_103272-547150--,00.html

Data through November 6, 2021

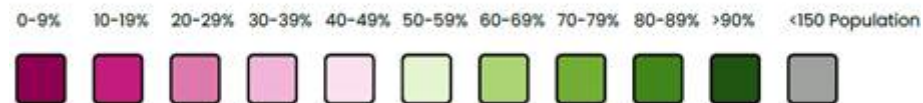
Vaccination Coverage by Place of Residence

Fully vaccinated: % Ages 16+ years

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



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



★ 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.

Source: MI-Lighthouse Internal Dashboard

Cumulative Cases by Vaccination Status, Ottawa County, January 15, 2021 – November 6, 2021

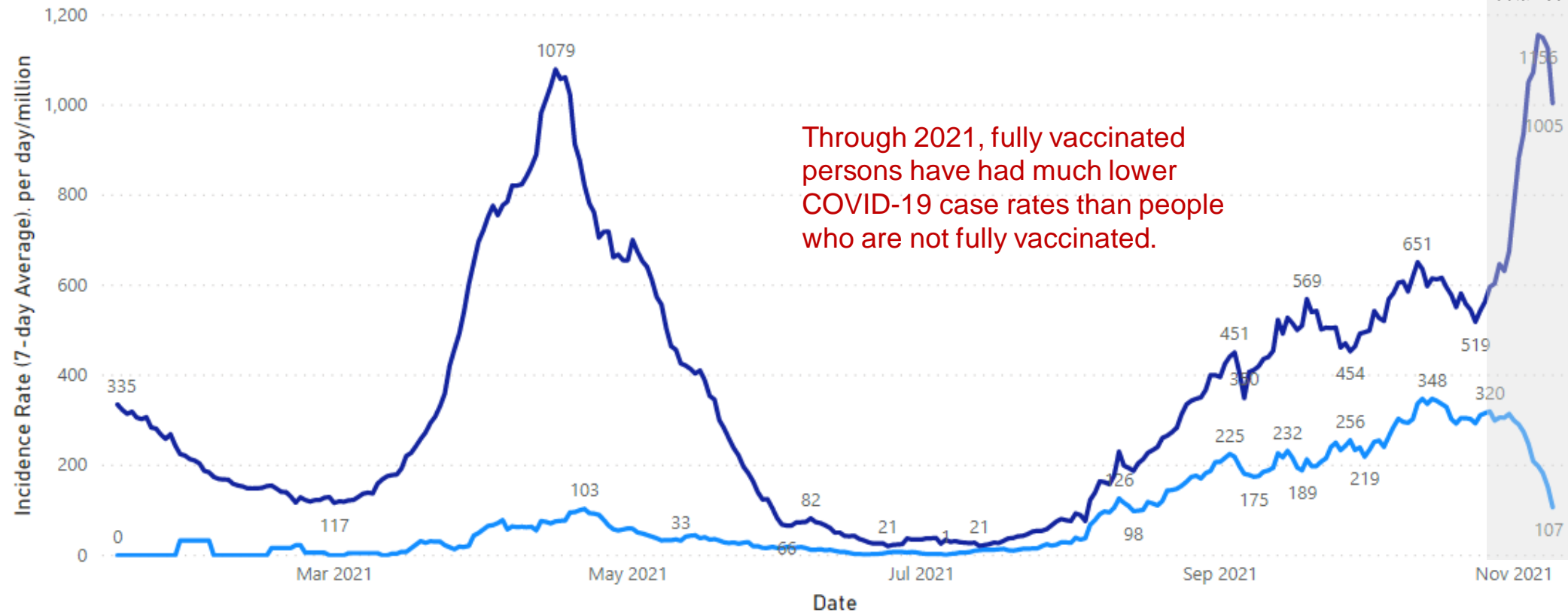
Fully Vaccinated People (152,499)		
Cases	Hospitalizations	Deaths
Percent of Cases in People Not Fully Vaccinated (19,748 / 23,271) 84.9%	Percent of Hospitalizations in People Not Fully Vaccinated (661 / 814) 81.2%	Percent of Deaths in People Not Fully Vaccinated (135 / 176) 76.7%
Total Cases Not Fully Vaccinated 19,748	Total Hospitalized Not Fully Vaccinated 661	Total Deaths Not Fully Vaccinated 135
Total Breakthrough Cases 3,523	Total Breakthrough Hospitalizations 153	Total Breakthrough Deaths 41
Percent of Fully Vaccinated People who Developed COVID-19 (3,523 / 152,499) 2.310%	Percent of Fully Vaccinated People who were Hospitalized for COVID-19 (153 / 152,499) 0.100%	Percent of Fully Vaccinated People who Died of COVID-19 (41 / 152,499) 0.027%
Percent of Cases who were Fully Vaccinated (3,523 / 23,271) 15.1%	Percent of Hospitalizations who were Fully Vaccinated (153 / 814) 18.8%	Percent of Deaths who were Fully Vaccinated (41 / 176) 23.3%
Total Cases 23,271	Total Hospitalizations 814	Total Deaths 176

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 ● Not Fully Vaccinated



Through 2021, fully vaccinated persons have had much lower COVID-19 case rates than people who are not fully vaccinated.

Data in shaded area may be updated as new information is obtained

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.

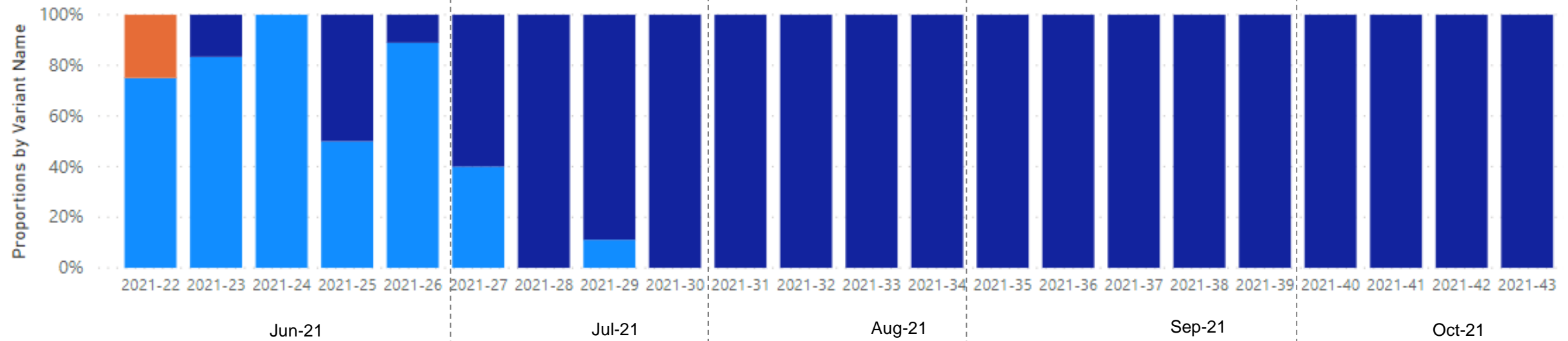
Sources:

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



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. Since late July 2021 all clinical samples submitted for variant testing came back positive for the **Delta** variant, indicating that **Delta** remains the predominate variant in Ottawa County. Currently, there is little local evidence of any newly emerging variant.

* Swabs from Ottawa County residents that tested positive for COVID-19 by PCR

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

Variants – Wastewater Sampling – Holland/Zeeland

Sample Date	Site	Wuhan (parental)	Alpha	Beta	Gamma	Delta	Epsilon
9/2/2021	North Holland	Y	N	N	N	N	N
9/3/2021	Zeeland	N	N	N	N	Y	N
9/6/2021	North Holland	Y	N	N	N	Y	N
9/7/2021	Zeeland	N	N	N	N	N	N
9/9/2021	North Holland	N	N	N	N	Y	N
9/10/2021	Zeeland	N	N	N	N	Y	N
9/14/2021	Zeeland	N	N	N	N	Y	N
9/16/2021	North Holland	N	N	N	N	N	N
9/21/2021	Zeeland	N	N	N	N	Y	N
9/22/2021	North Holland	N	N	N	N	N	N
9/23/2021	Zeeland	N	N	N	N	Y	N
9/26/2021	North Holland	Y	N	N	N	Y	N
9/29/2021	North Holland	N	N	N	N	Y	N
9/30/2021	Zeeland	N	N	N	N	Y	N
10/3/2021	North Holland	Y	N	N	N	Y	N
10/4/2021	Zeeland	N	N	N	N	Y	N
10/6/2021	North Holland	N	N	N	N	N	N
10/7/2021	Zeeland	N	N	N	N	Y	N
10/10/2021	North Holland	N	N	N	N	Y	N
10/17/2021	North Holland	Y	N	N	N	Y	N
10/11/2021	Zeeland	N	N	N	N	Y	N
10/18/2021	Zeeland	N	N	N	N	Y	N
10/20/2021	North Holland	Y	N	N	N	N	N
10/24/2021	North Holland	N	N	N	N	Y	N
10/21/2021	Zeeland	N	N	N	N	Y	N
10/25/2021	Zeeland	N	N	N	N	Y	N
10/27/2021	North Holland	N	N	N	N	Y	N
10/28/2021	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 September and October 2021, with no other variants detected in that same time frame. This data indicate that Delta remains the dominant variant in Ottawa County; with little evidence of Delta being supplanted by a competing variant.

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*

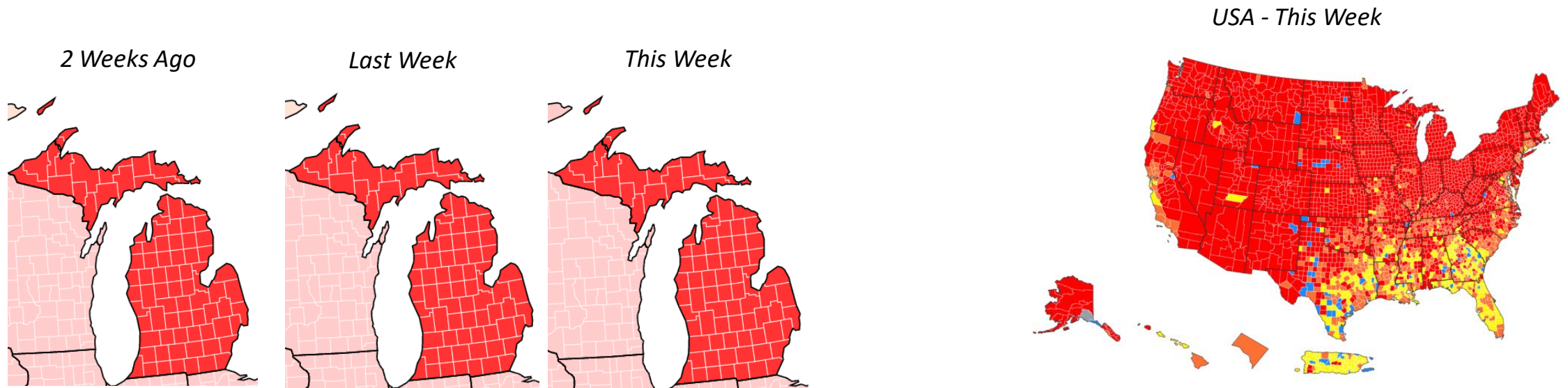
Ottawa is in the High category right now

*After further analysis of Ottawa County case rate data, positivity data, and CDC Community Transmission Levels, on October 8, 2021 the Ottawa County Department of Public Health (OCDPH) relaxed one of the criteria that may be used to rescind the current school mask order. The criterion that set a threshold of a CDC Community Transmission Level of Low for 7 consecutive days was changed to a threshold of Moderate for 14 consecutive days.

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 **12+** weeks)
- Current Data:
 - Positivity = 19.71%
 - Case Rate = 448.55 cases per week per 100,000



Data through November 6, 2021
for positivity and November 8,
2021 for case rates

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

USA & MI

Spread

Children

Hospitalizations

Vaccinations

Variants

Risk Levels

Other

Media

Science
Roundup

COVID-19 Case Rates by County Across the US

Last Week

This Week

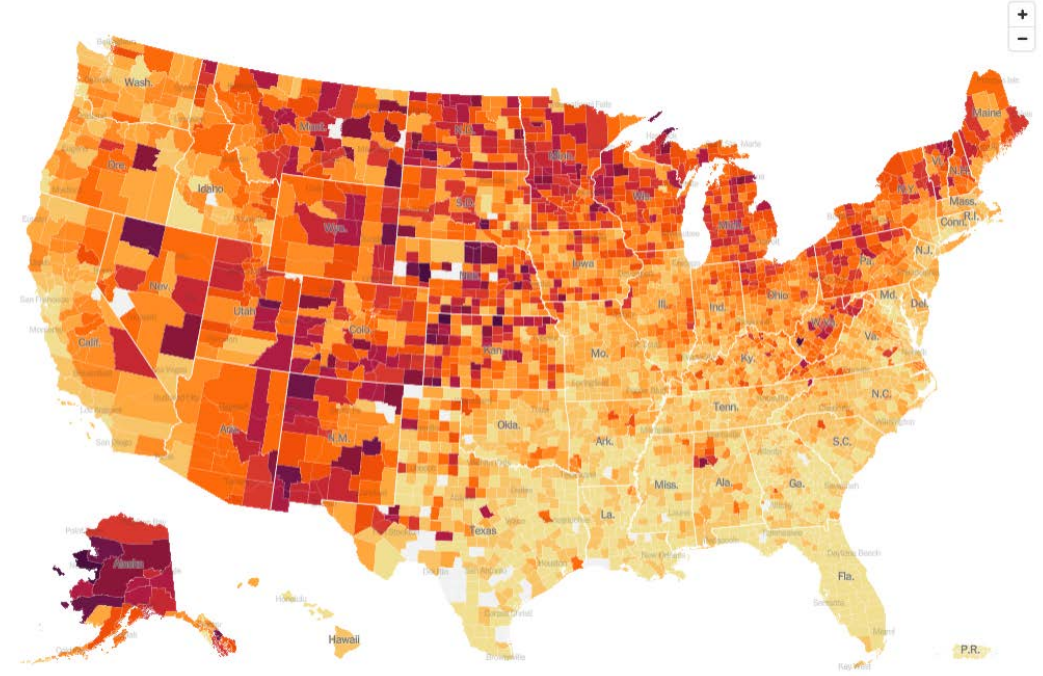
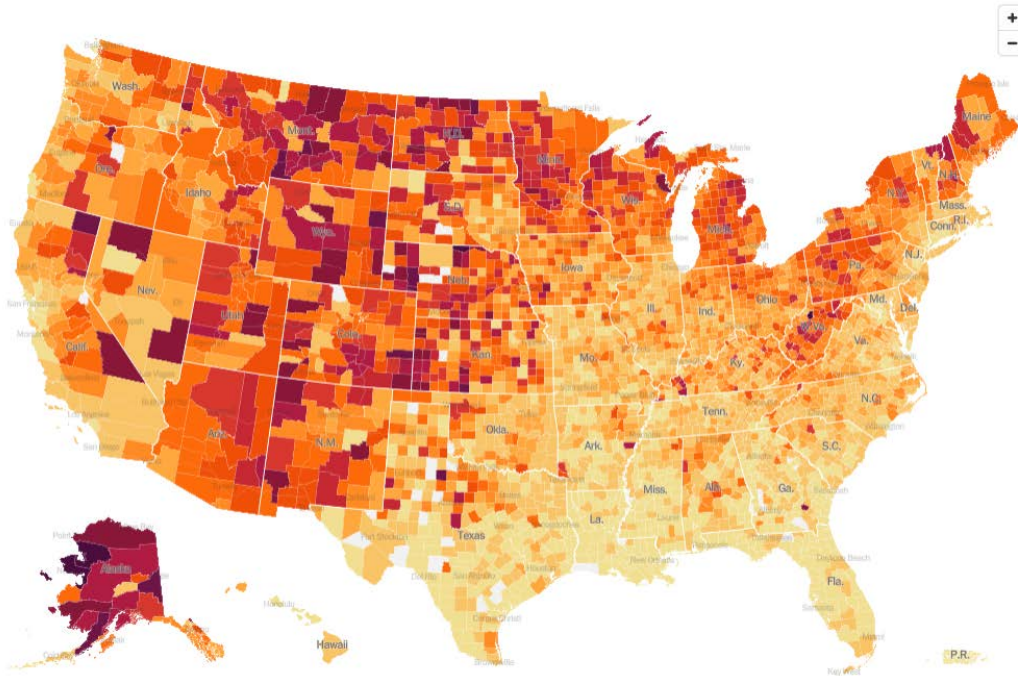
Hot spots

AVERAGE DAILY CASES PER 100,000 PEOPLE IN PAST WEEK
10 30 50 70 100 250 FEW OR NO CASES



Hot spots

AVERAGE DAILY CASES PER 100,000 PEOPLE IN PAST WEEK
10 30 50 70 100 250 FEW OR NO CASES



Case rates in the deep South have improved substantially and Appalachia remains stable. Many Western states, Alaska, the upper Midwest, and New England are experiencing elevated case rates.

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

Accessed November 10, 2021

USA & MI

Spread

Children

Hospitalizations

Vaccinations

Variants

Risk Levels

Other

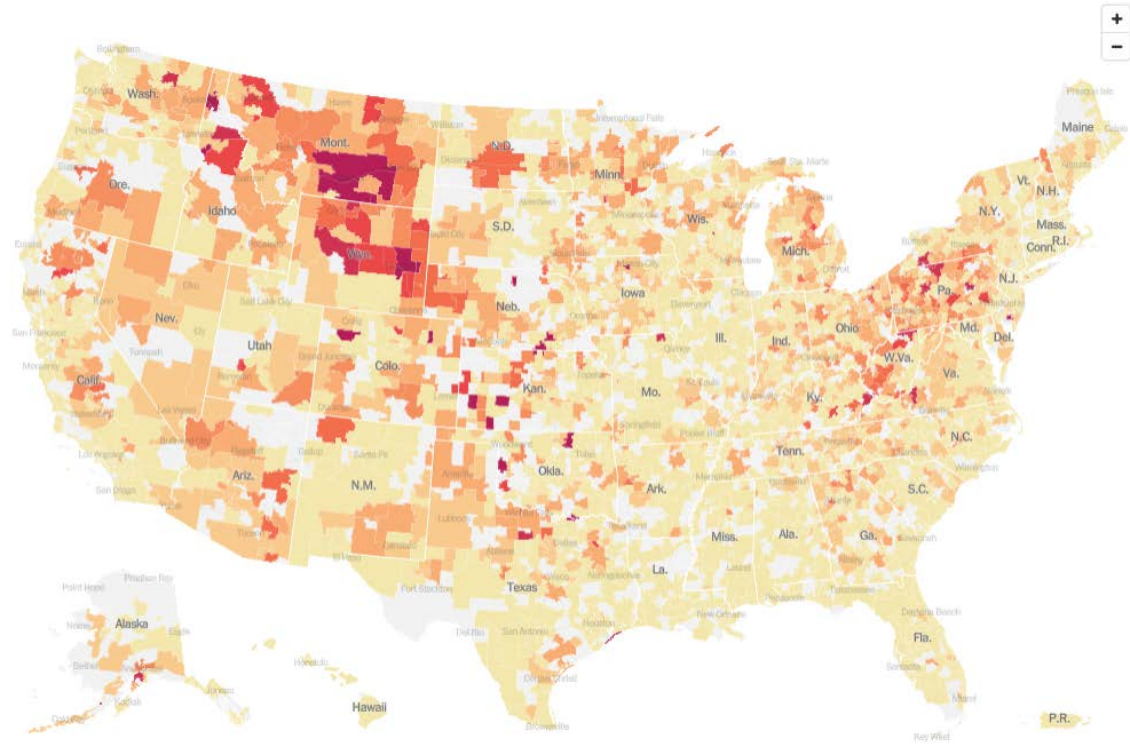
Media

Science Roundup

COVID-19 Hospitalization Rates by County Across the US

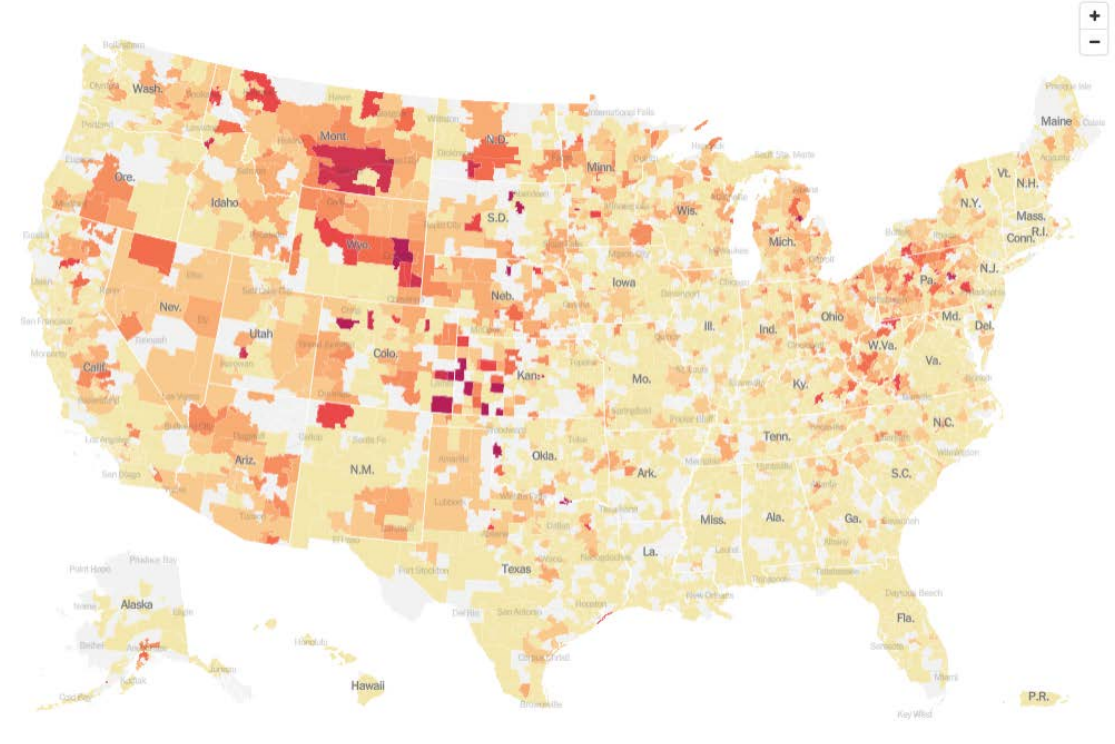
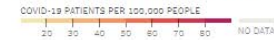
Last Week

Current hospitalizations



This Week

Current hospitalizations



Hospitalization rates continue to improve in the South and Appalachia, while some western states – particularly Montana and Wyoming – are experiencing elevated hospitalization rates. Pockets of Colorado and western Kansas are also seeing elevated hospitalizations.

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

Accessed November 10, 2021

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 (15):**
 - **PreK/K-6:** Kalamazoo, Kent, Marquette, Ottawa
 - **K-12:** Antrim, Benzie, Charlevoix, Emmet, Genesee, Ingham, Leelanau, Oakland, Otsego, Washtenaw, and Wayne
- **Rescinded County Mask Mandates (6):**
 - Allegan, Barry, Berrien, Eaton, Iron, Dickinson

Notes: List may not be comprehensive; because children aged 5-11 years are now eligible for vaccination, Ottawa County's PreK-6 mask mandate is scheduled for rescinding in early January 2022.

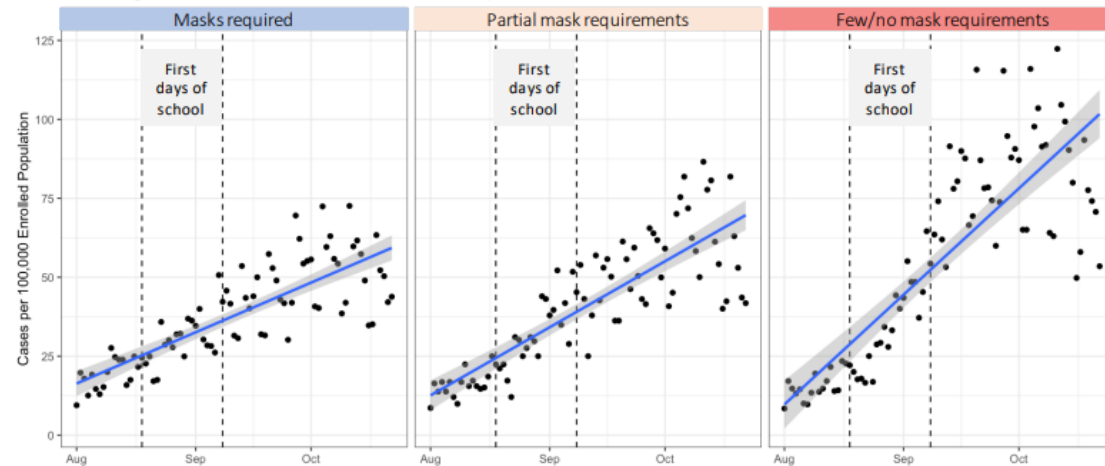
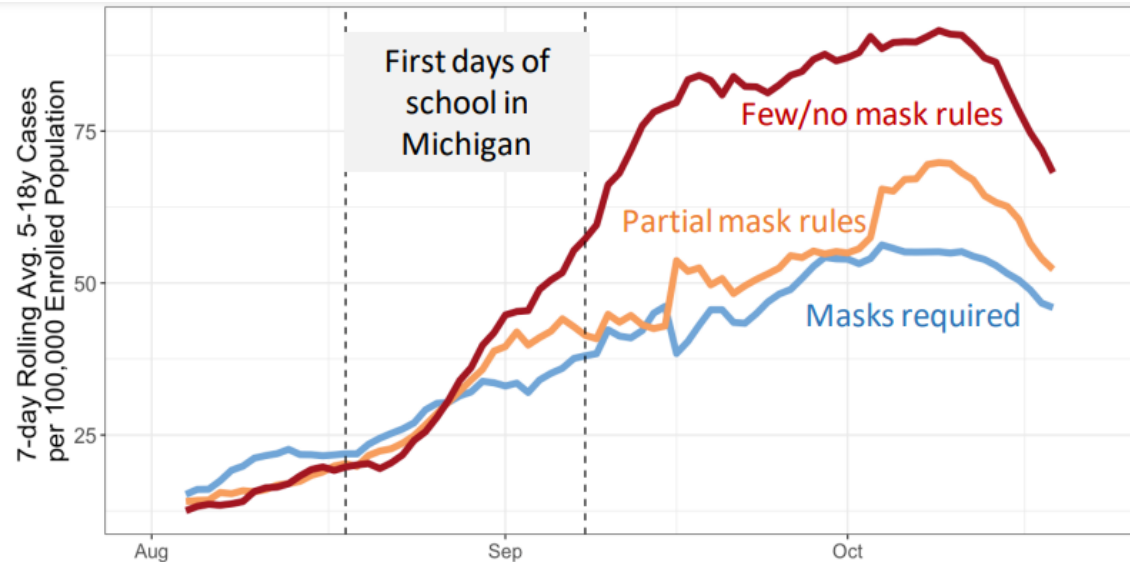
MDHHS Evaluation Shows Higher Case Rates in School Districts with Fewer Mask Rules

Districts without mask requirements are experiencing higher case rates

- 5–18-year-old school population case rates are higher and rose faster in districts without mask requirements
- Districts with complete or partial mask requirements have seen lower case rates with slower increases
- Note districts may change categories as mask rules change
- Note that districts with mask rules may also have other prevention measures (vaccination, testing, etc.) that reduce transmission levels



Masks required = mask required for all grades; Partial mask req. = tiered, some grades, based on vax status, staff only; Few/no req. = no req. or buses only. Blue line & shaded region is a linear trend fit. Data Sources: MDSS/MDHHS case data as of 10/29/21 geocoded to school district, EOG School District Mask Policy Tracker data. Note: Cases are among all 5-18 year olds, population is the school-enrolled population.



Source: https://www.michigan.gov/documents/coronavirus/20211102_Data_and_modeling_update_vFINAL_740237_7.pdf

COVID-19 News Headlines

GV continues to keep confirmed COVID-19 cases low as holiday season approaches

<https://lanthorn.com/85772/news/gv-continues-to-keep-confirmed-covid-19-cases-low-as-holiday-season-approaches/>

COVID vaccine clinics for kids set up ahead of Ottawa County's lifting of school mask order

<https://www.mlive.com/news/grand-rapids/2021/11/covid-vaccine-clinics-for-kids-set-up-ahead-of-ottawa-countys-lifting-of-school-mask-order.html>

CORONAVIRUS

Ottawa County will lift mask mandate Jan. 2, 2022, as vaccine receives approval for kids

<https://www.hollandsentinel.com/story/news/coronavirus/2021/11/05/pfizer-covid-vaccine-approval-ottawa-county-mask-order/6281815001/>

Pfizer Says Covid-19 Pill Cuts Hospitalization and Death Risk by Nearly 90 Percent

Though vaccines are still the best line of defense against the virus, the antiviral drug could help high-risk Americans once symptoms appear

<https://www.smithsonianmag.com/smart-news/pfizer-says-covid-19-pill-cuts-hospital-and-death-risk-by-nearly-90-percent-180979025/>

Science Roundup

Effectiveness of a third dose of the BNT162b2 mRNA COVID-19 vaccine for preventing severe outcomes in Israel: an observational study

[https://www.thelancet.com/journals/lancet/article/PIIS0140-6736\(21\)02249-2/fulltext](https://www.thelancet.com/journals/lancet/article/PIIS0140-6736(21)02249-2/fulltext)

← A study out of Israel found that a third dose of the Pfizer vaccine may reduce the risk of severe outcomes compared to having only 2 doses of Pfizer vaccine.

Epidemiology of COVID-19 in Children Aged 5 – 11 years

[PowerPoint Presentation \(cdc.gov\)](#)

← Although not a peer-reviewed study, this presentation given by CDC at the November 2 ACIP meeting offers useful summary information on COVID-19 seroprevalence, deaths by age among children, and MIS-C.

Evaluation of the BNT162b2 Covid-19 Vaccine in Children 5 to 11 Years of Age

<https://www.nejm.org/doi/full/10.1056/NEJMoa2116298?s=04&fbclid=IwAR0Sx-r4O0fUaPGNTqbwy9kYdGvFlpy9e7mtATBtMmHflkWWFKQ-FK8xSu8>

← Clinical trial studies for use of the Pfizer vaccine in children aged 5-11 years showed a lower dose than used in persons aged 12+ provided adequate immune response, there was a favorable safety profile, and completion of the 2-dose series demonstrated 90.7% efficacy.