

Ottawa County COVID-19 Epidemiology

December 1, 2021

Data as of November 27, 2021, unless otherwise indicated

Executive Summary

- **Transmission in both the US and Michigan is increasing**
- **Ottawa community transmission remains elevated**
 - Positivity remained elevated at 23.1% last week. The goal is to be less than 8%.
 - Weekly case counts in Ottawa decreased 30%, from 2,231 two weeks ago to 1,564 last week.
 - Cases among children decreased 41%, from 568 two weeks ago to 337 last week.
 - The decreases in case counts and rates through this report are likely an artifact of the Thanksgiving holiday; expect cases to remain high.
- **Ottawa area and regional hospitals are experiencing high numbers of COVID-19 patients**
 - In Ottawa County, 43% of all available beds and 75% of ICU beds are occupied by COVID-19 patients.*
 - Regional healthcare systems are extremely strained and asking for the community to take preventive action.
 - One regional healthcare system is receiving a federally assigned healthcare team to assist with surge capacity.
 - Ottawa County hospitals may be repurposing patient care areas and using adaptive staffing strategies.
- **Pediatric hospitalizations across the US may be increasing; hospitalizations among children in Michigan continue to increase.**
 - At a large West Michigan 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.
- **Of Ottawa County residents aged 5+, 56.8% 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.

Public Health Recommendations

- **Get vaccinated (start series or get booster)**
- **Stay home when sick & get tested**
- **Wear your mask in public indoor places**
- **Recent 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.

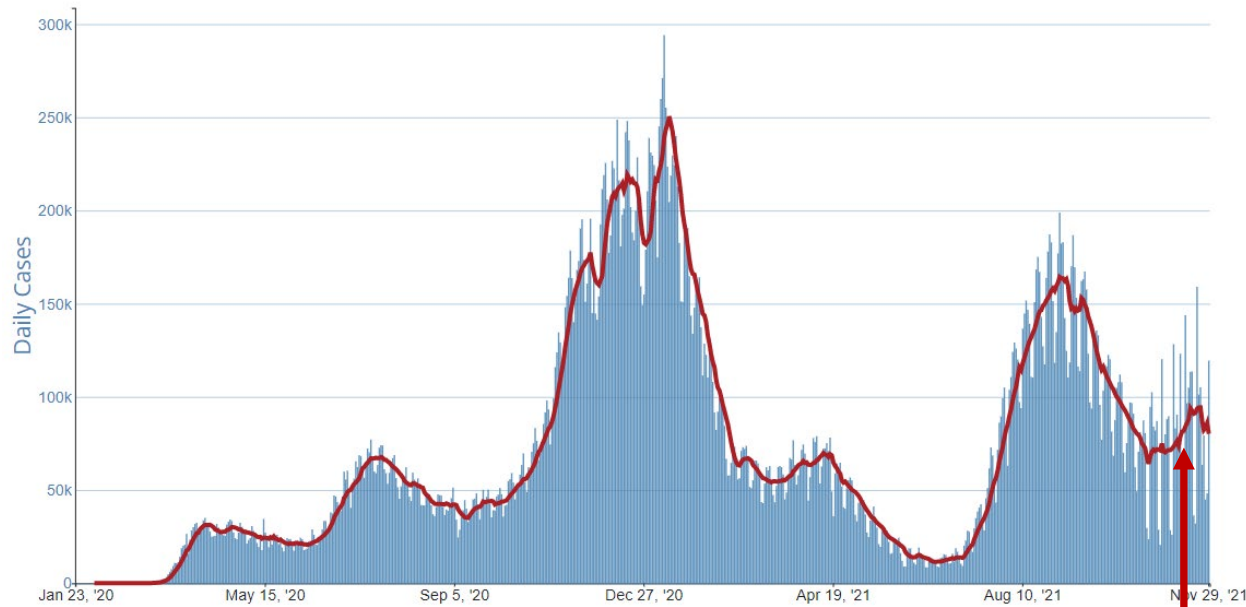
Ottawa County Metrics by Week

Metric	Goal	Week Ending				
		30-Oct-21	6-Nov-21	13-Nov-21	20-Nov-21	27-Nov-21
Positivity (All Ages)	<8%	17.3%	21.2%	25.5%	23.9%	23.1%
Weekly Cases (All Ages)	<147	935	1342	1948	2231	1565
Weekly Cases in Children (0-17 years of age)	NA	219	351	487	568	337
Total COVID-19 Hospitalizations (All Ages)	0	28	33	36	47	34
Total Deaths (All Ages)	0	7	8	14	21	4
CDC Risk Transmission Level	Moderate	High	High	High	High	High

Case Trends in the USA and Michigan

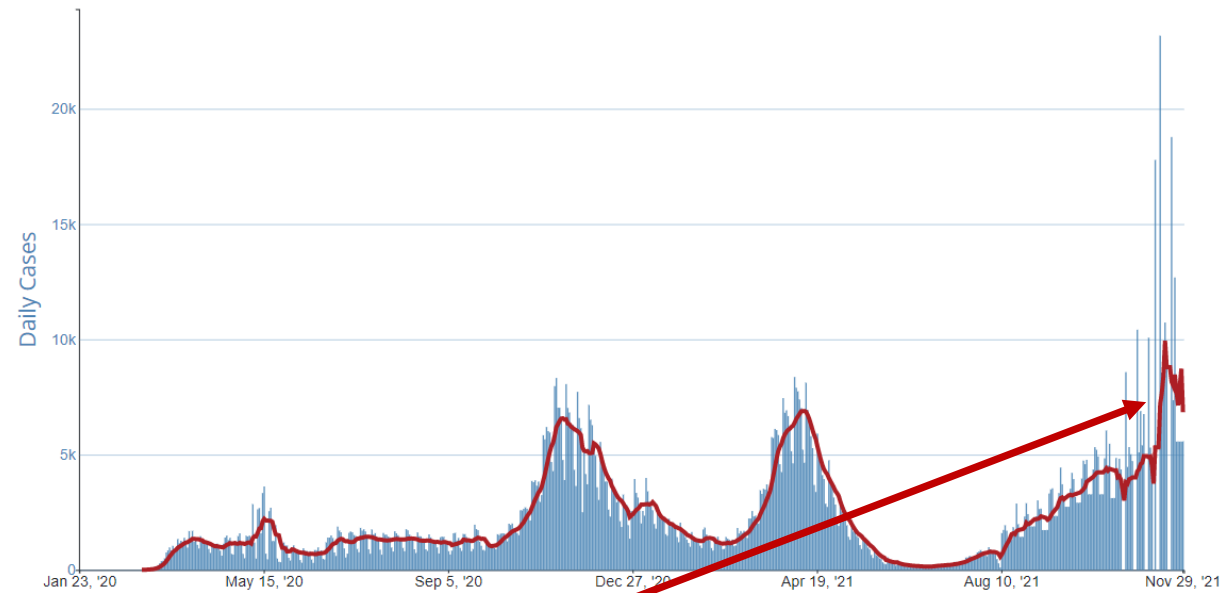
USA

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

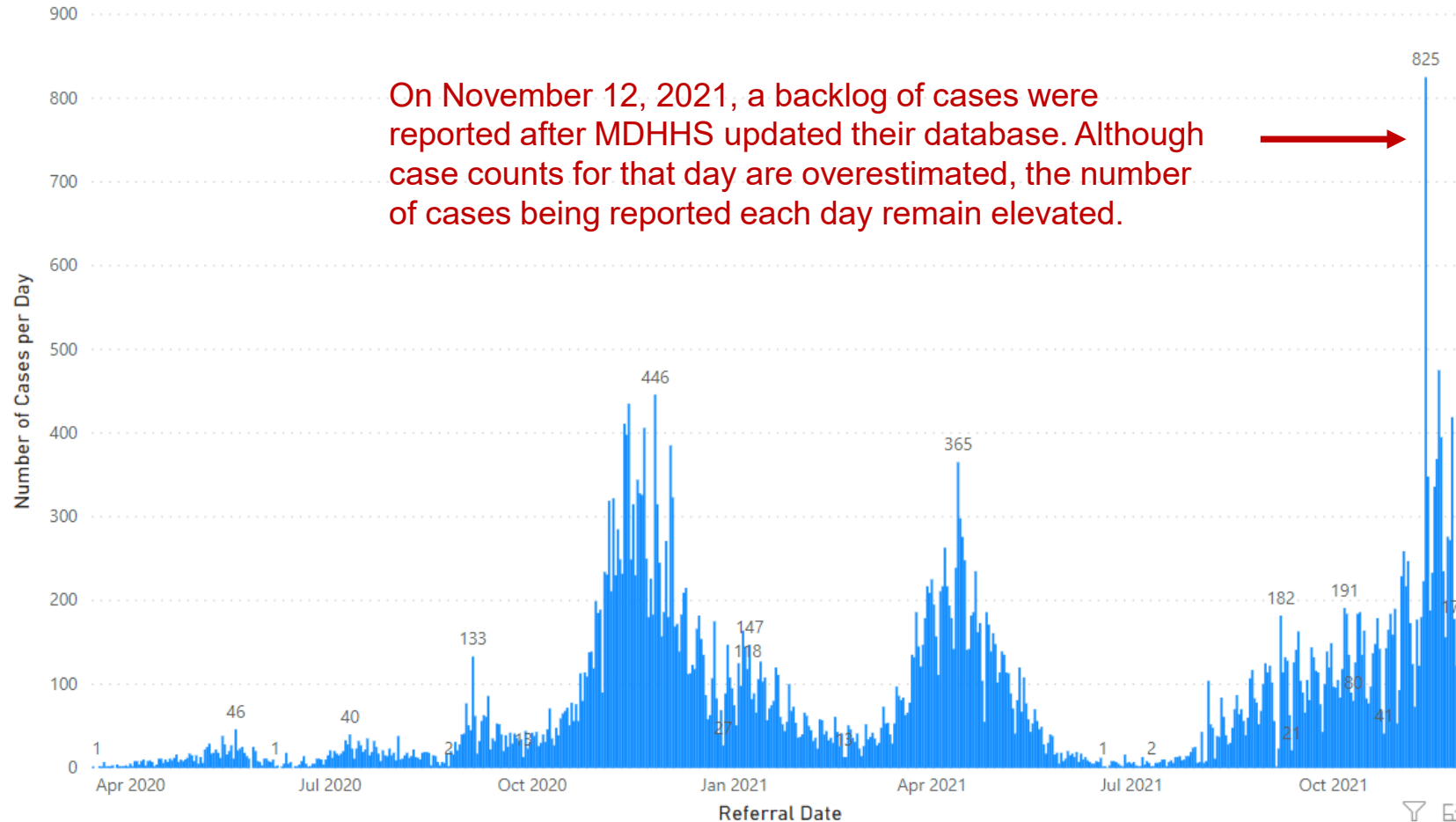


Both the US and Michigan are experiencing increasing trends.

Case Trends in Ottawa County

COVID-19 Cases by Day, Ottawa County, March 15, 2020 – December 1, 2021

Epidemiological Curve



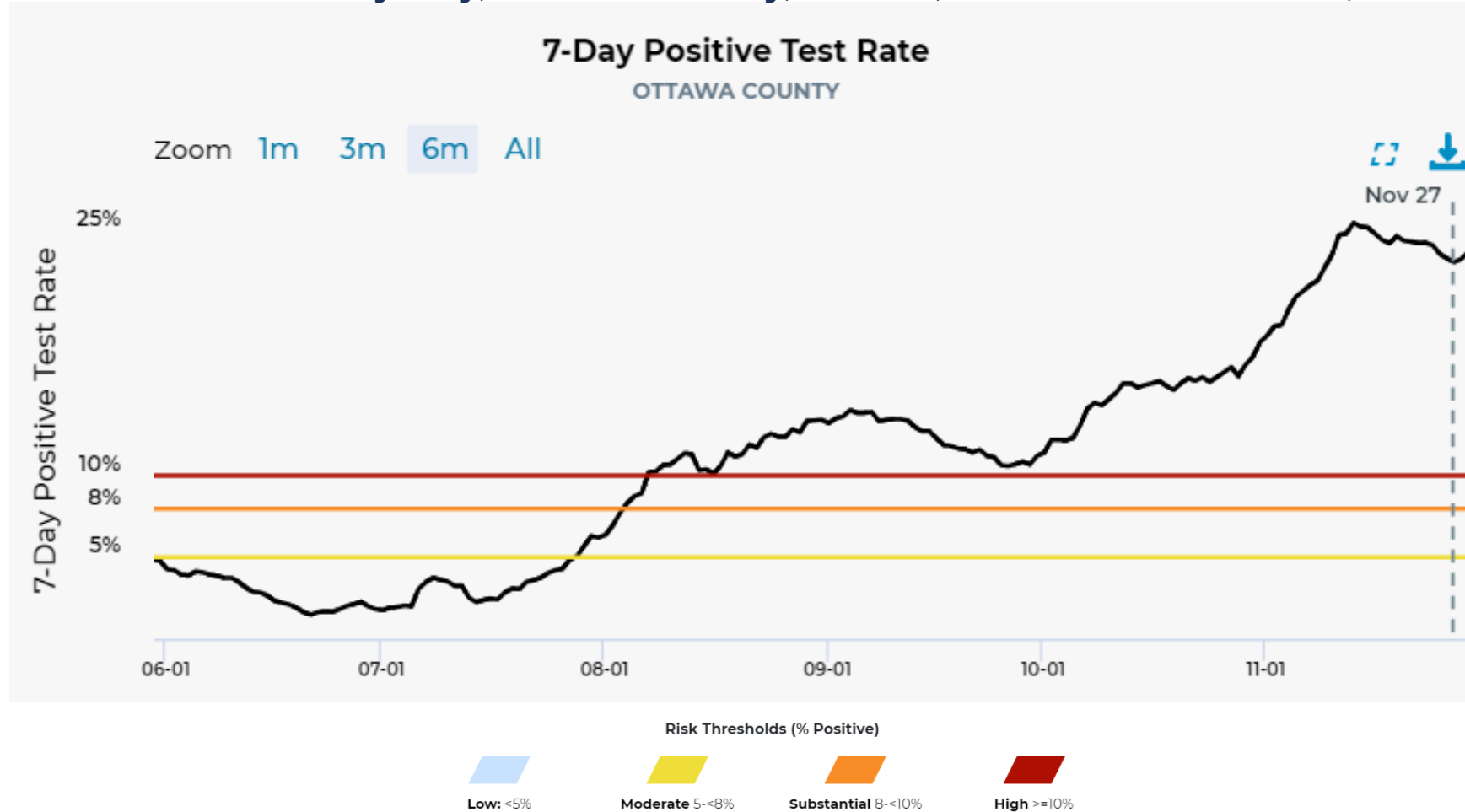
Total Number of Cases
50,117

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. 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 – November 27, 2021



Test positivity reached 23.1% on November 27, 2021.

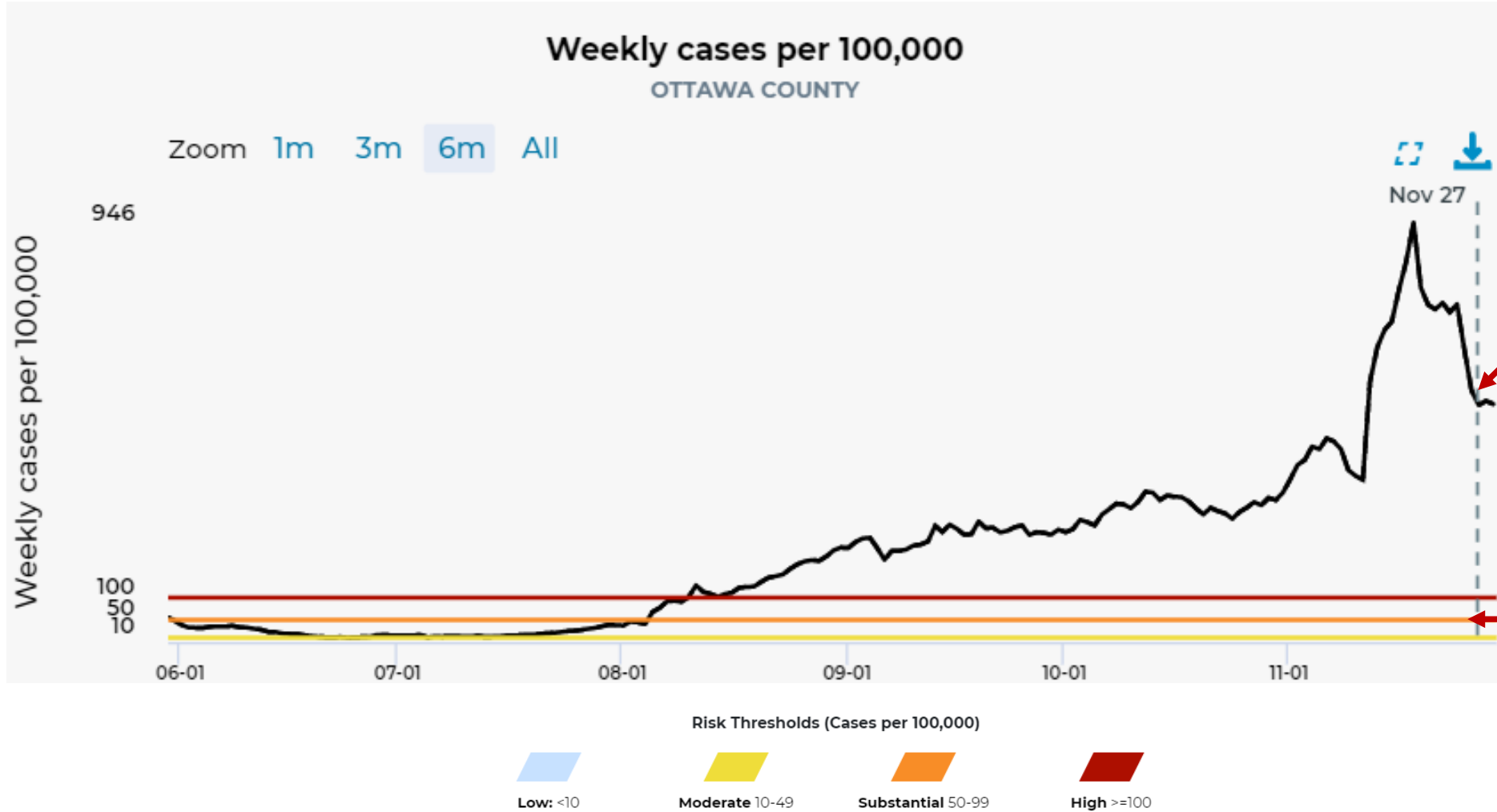
The goal is to have less than 8% of tests coming back positive.

Note: Testing in Ottawa County has remained stable with at least 6000-8000 tests conducted each week over the last 3.5 months; however, in recent weeks testing has increased to 8000-9000 tests each week: [Testing Results | Ottawa County Covid-19 Case Summary Data \(arcgis.com\)](#)

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 27, 2021

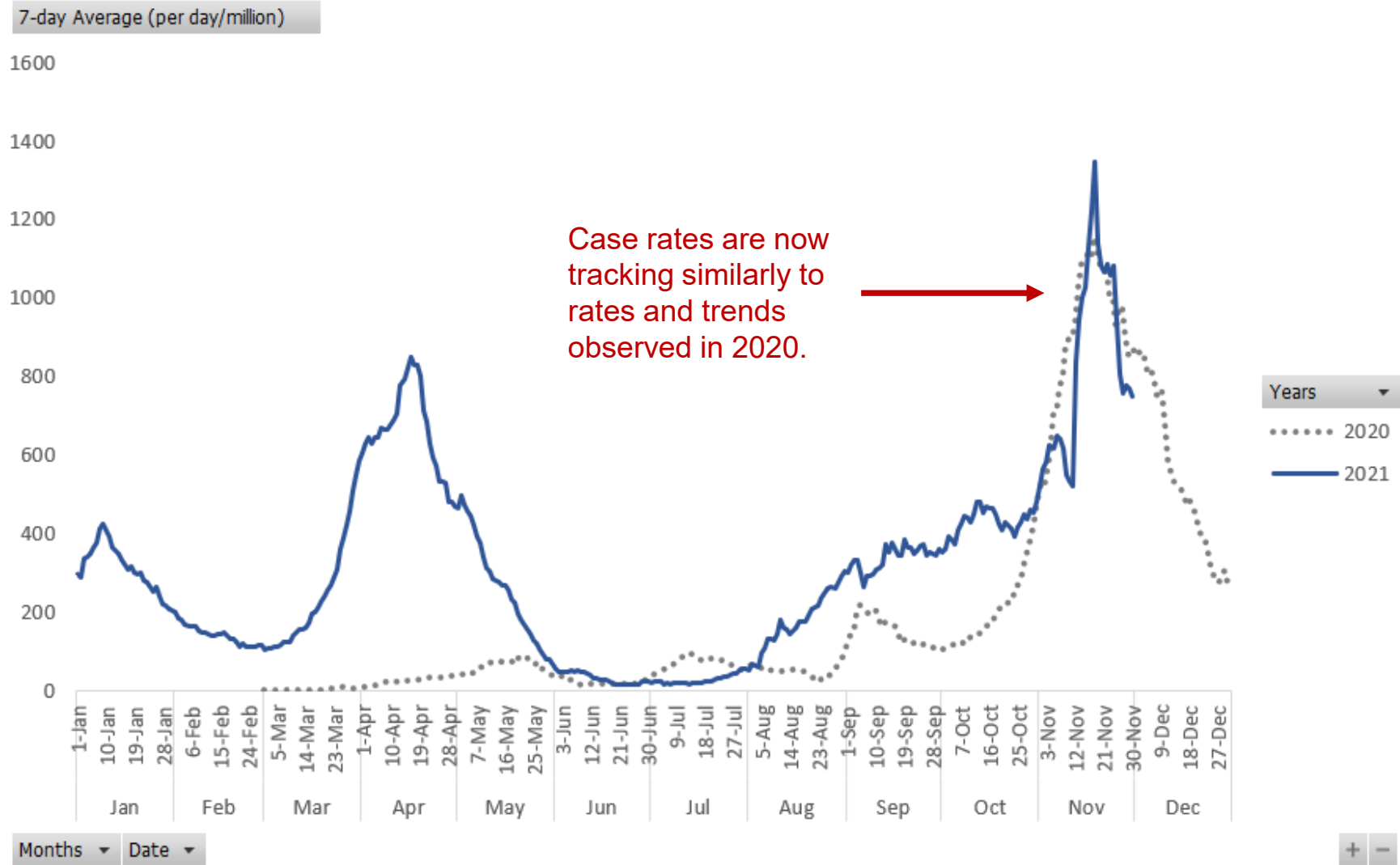


Case rates decreased to 535 cases per week per 100,000 population (down from 757 the week prior).

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

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

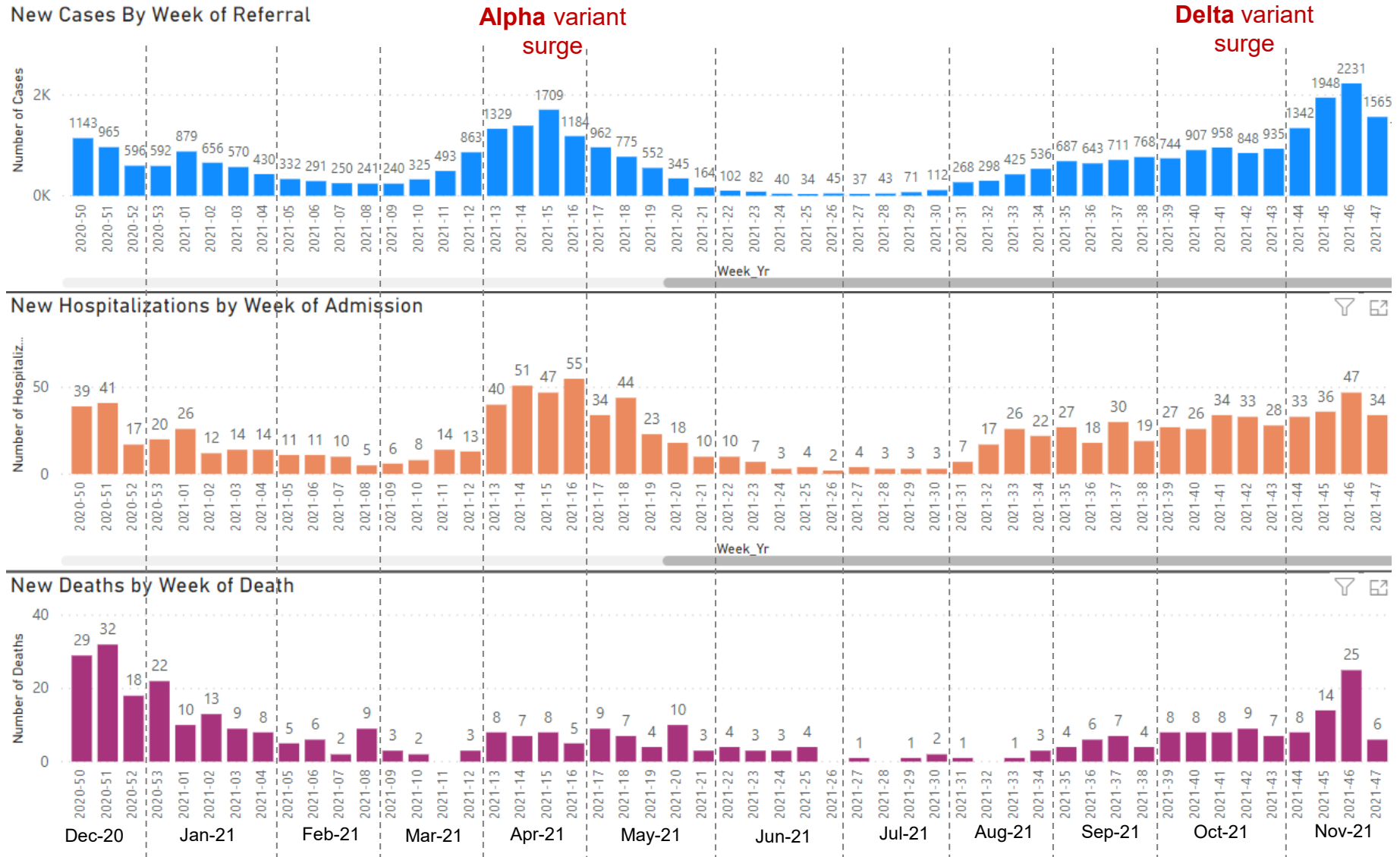
Ottawa County Time Trends – Annual Comparison



Source: Internal Data

Data through November 30, 2021

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



The weekly number of **cases decreased 30%** last week.

The weekly number of **hospitalizations** has been increasing with an average of about **38 cases hospitalized** each week over the last month.

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 **13 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%	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	1461	47%	487	39%	1948	45%
20-Nov-21	1663	14%	568	17%	2231	15%
27-Nov-21	1228	-26%	337	-41%	1565	-30%

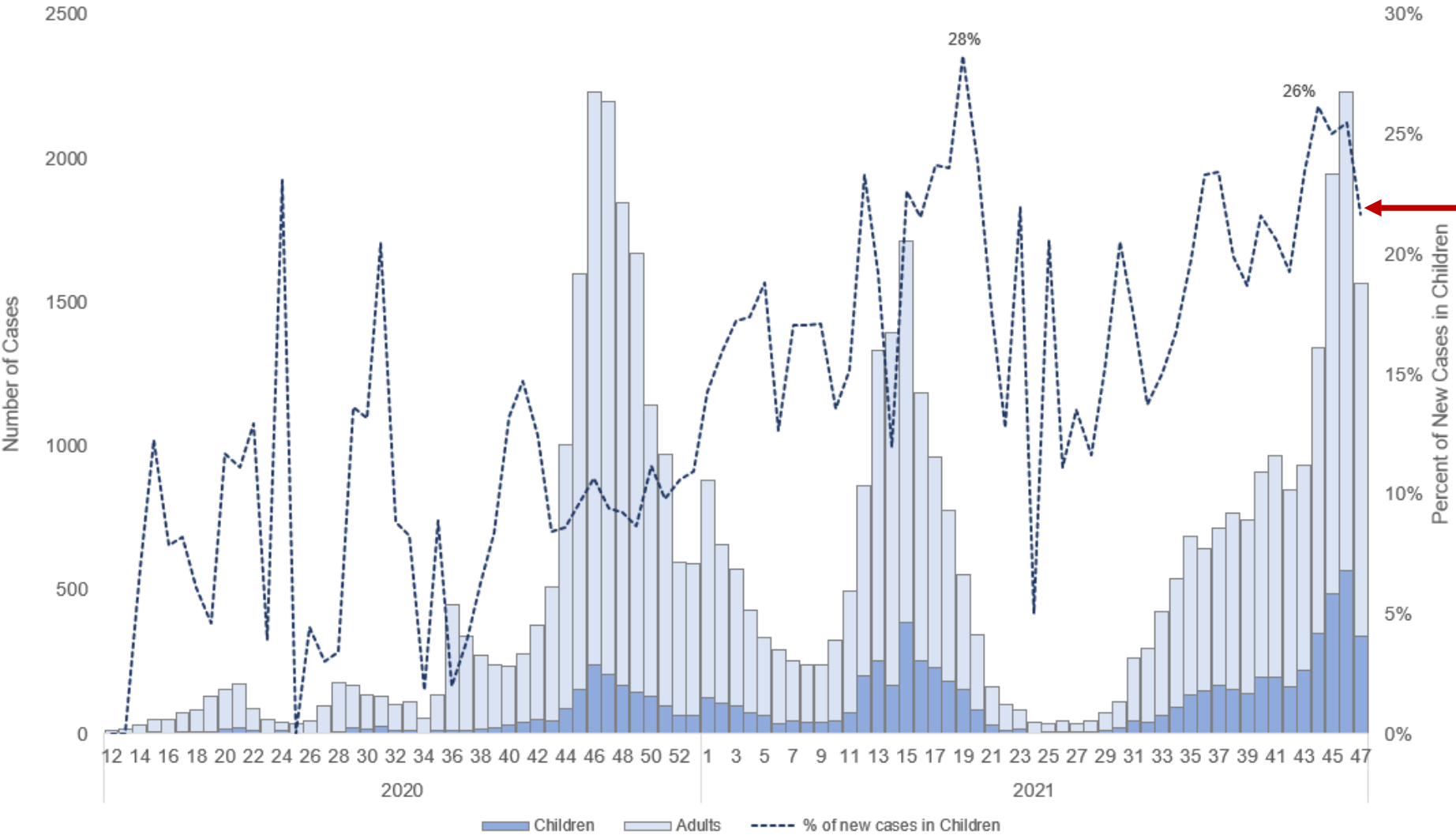
Adults

Children

Weekly case counts among children decreased 41% last week, and cases in adults decreased 26%.

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

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



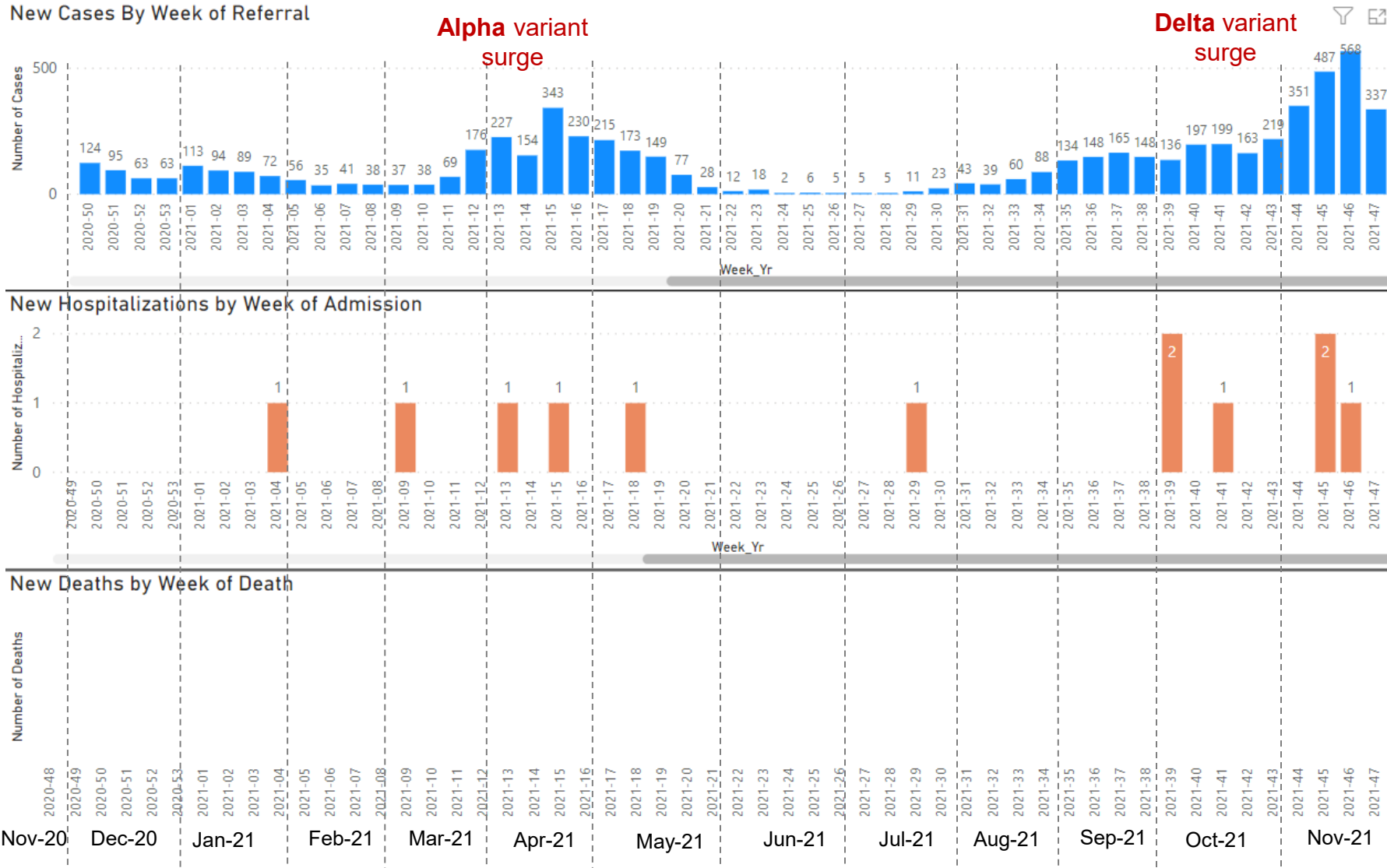
Children make up a large proportion of cases reported. This past week, **21.5% of cases were in children.**

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 47, 2021

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



The weekly number of cases among children **decreased 41%** in the last 2 full weeks.

Hospitalizations are likely **underestimated** because:

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

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)

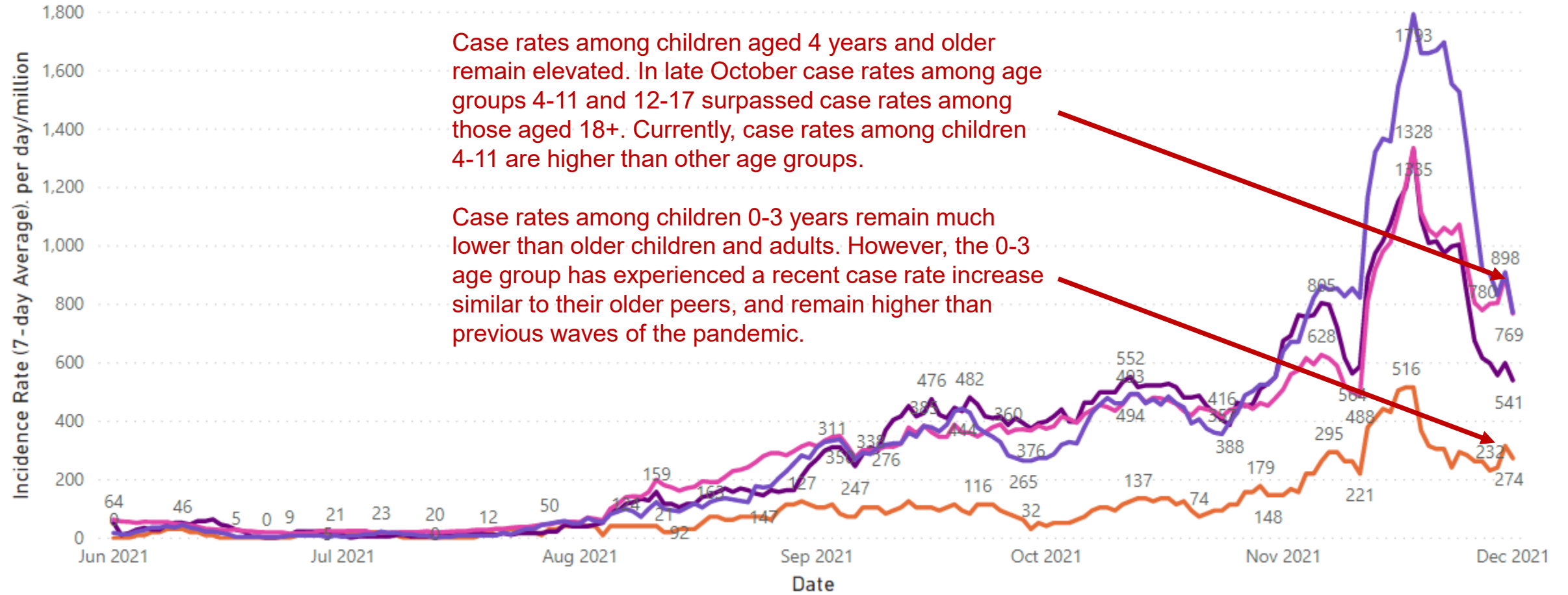
These mitigation strategies likely reduced case counts and hospitalizations among children.

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

Ottawa County - Case Rate Trends – by Age

Incidence Rate (7-day Average)

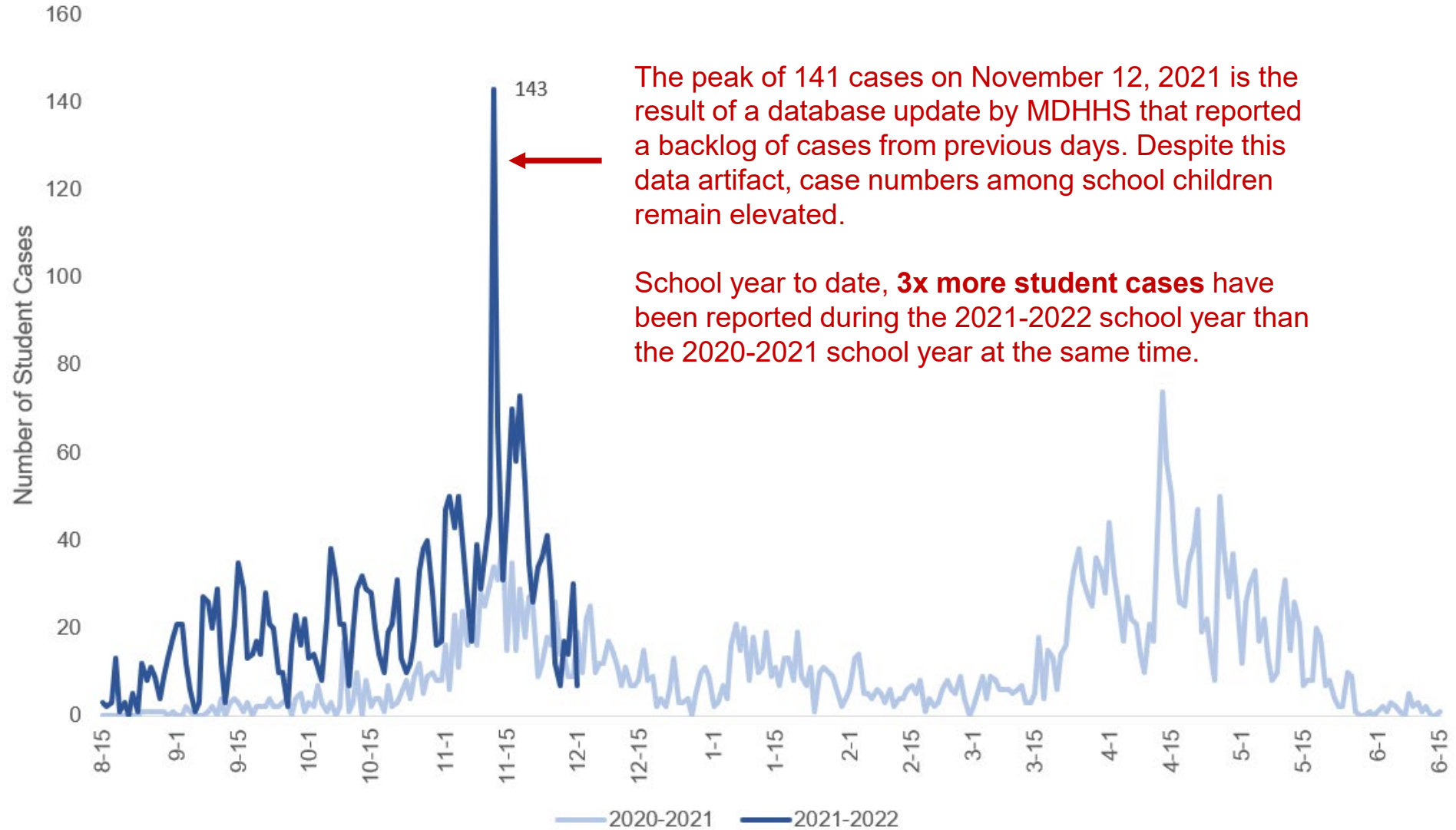
rategroup ● 0-3 ● 12-17 ● 18+ ● 4-11



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

Data as of December 1, 2021

Ottawa County Cases in PreK-12 School Students



The peak of 141 cases on November 12, 2021 is the result of a database update by MDHHS that reported a backlog of cases from previous days. Despite this data artifact, case numbers among school children remain elevated.

School year to date, **3x more student cases** have been reported during the 2021-2022 school year than the 2020-2021 school year at the same time.

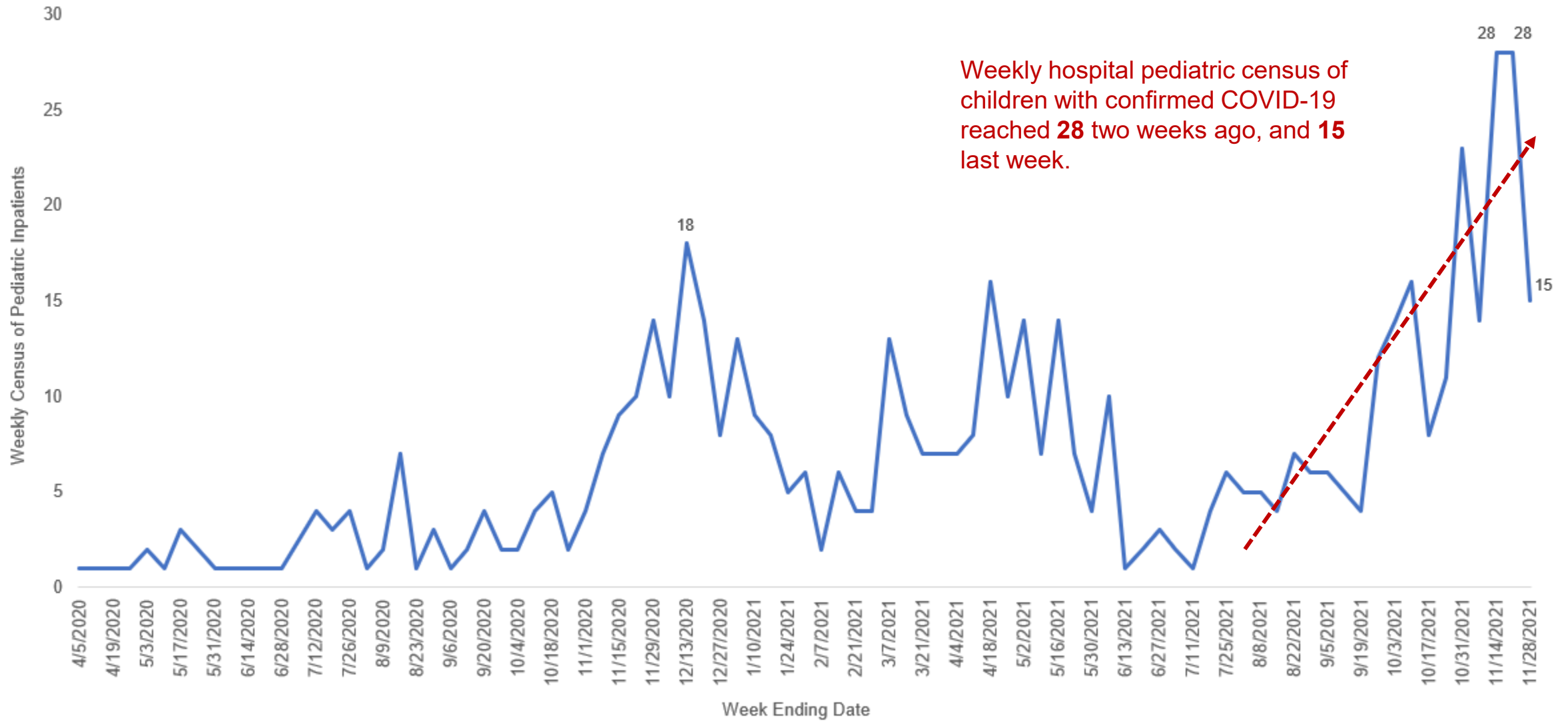
Method: Includes PreK-12 students known to attend a school in Ottawa County who are classified as a confirmed or probable case of COVID-19.

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 December 1, 2021

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.

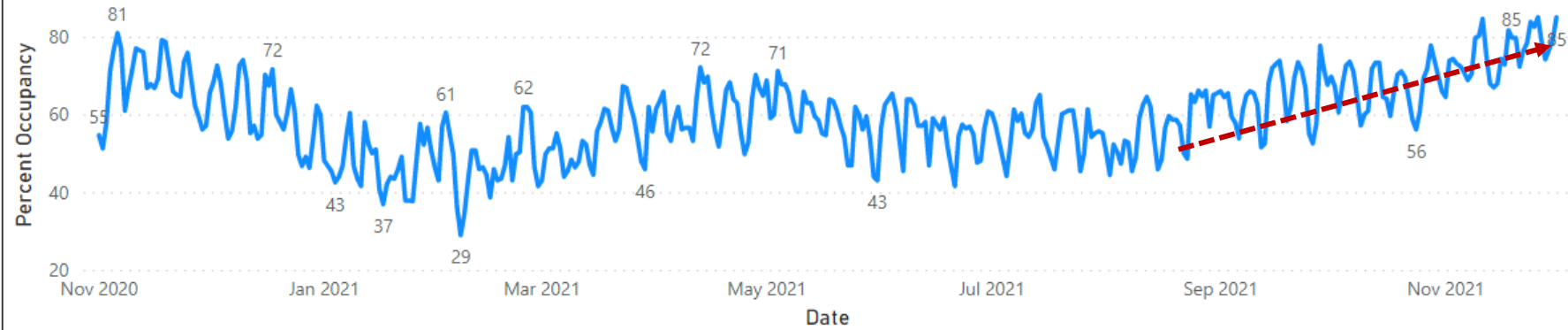
Data through November 28, 2021

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

Currently **43%** of all inpatient beds are occupied by COVID-19 patients.

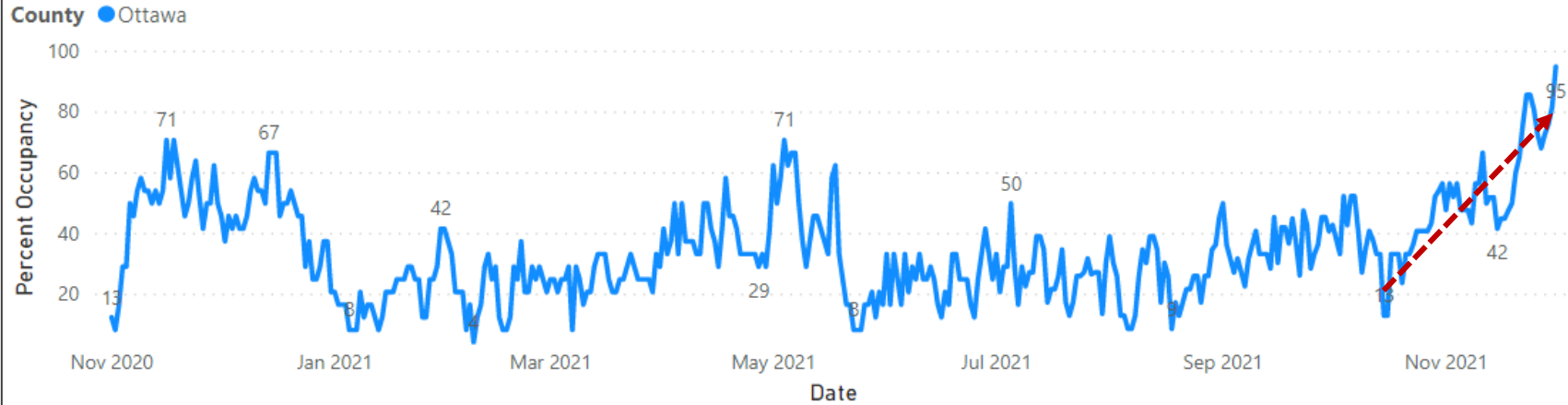
Source: EMResources

Data through December 1, 2021

Ottawa County Hospital Capacity – ICU Beds

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

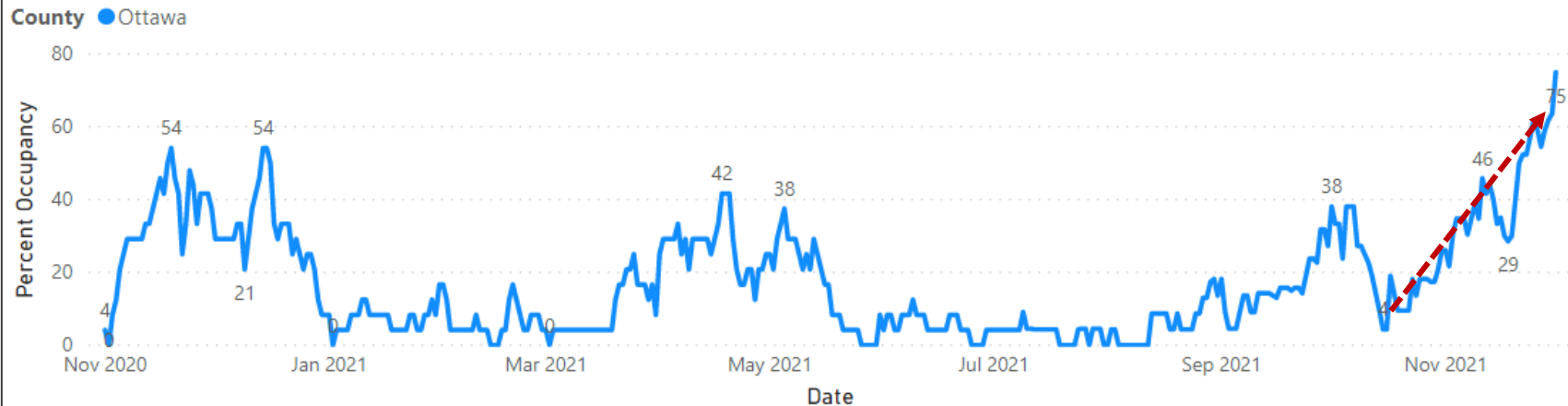
Percent Occupancy by Date and County



Overall ICU bed occupancy **has reached the highest level of the pandemic.**

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

Percent Occupancy by Date and County



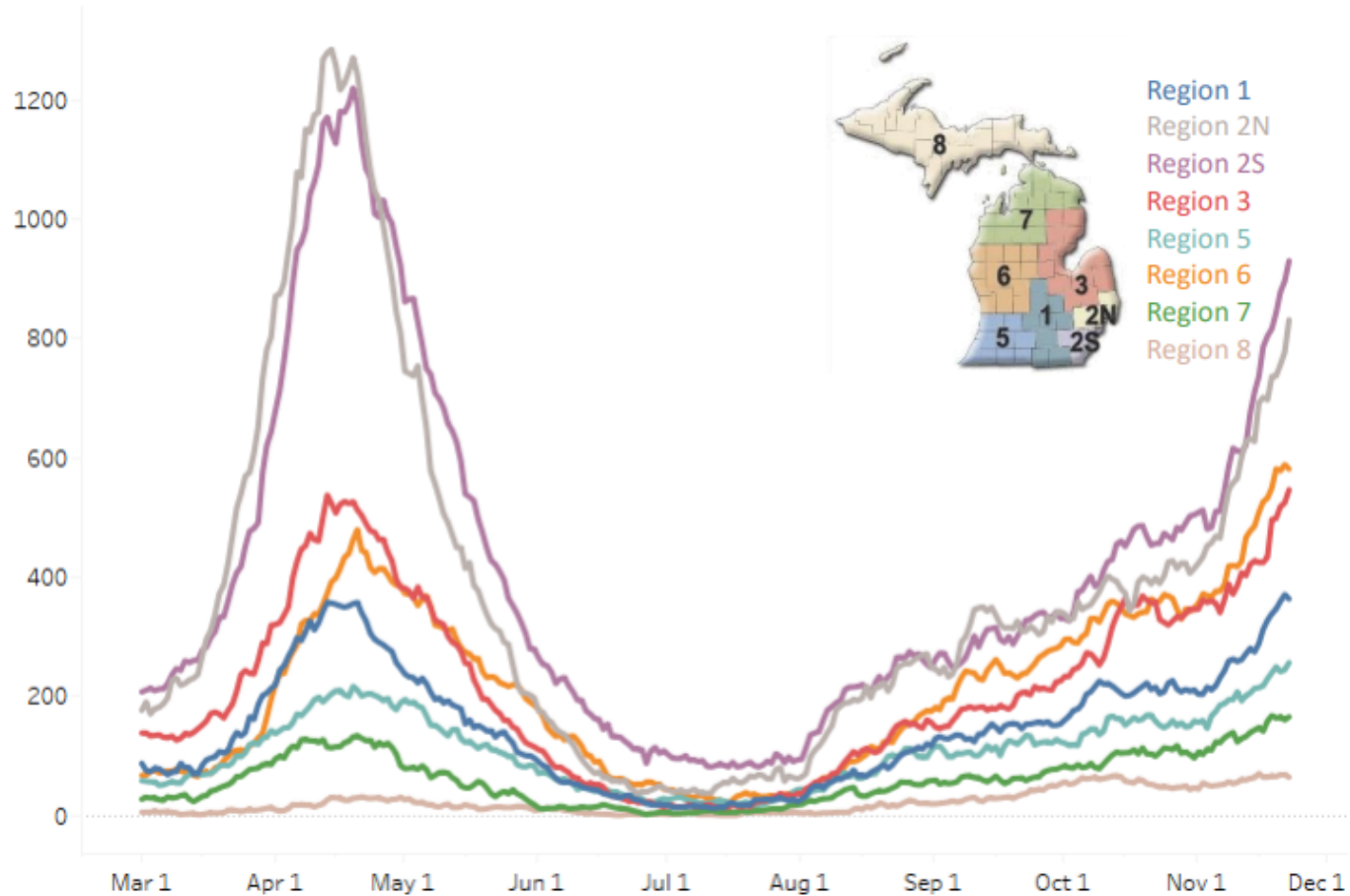
The proportion of ICU beds occupied by COVID-19 patients is **increasing**. Currently, **75%** of ICU beds are occupied by COVID-19 patients, **the highest level of the pandemic.**

Source: EMResources

Data through December 1, 2021

Statewide Hospitalization Trends: Regional COVID+ Census

Hospitalization Trends 3/1/2021 – 11/22/2021
Confirmed Positive by Region



The census of hospitalized COVID+ patients has increased across all regions except Region 8. All Regions outside the Southeast have exceeded their spring wave peaks (Regions 1,3,5,6,7,8)

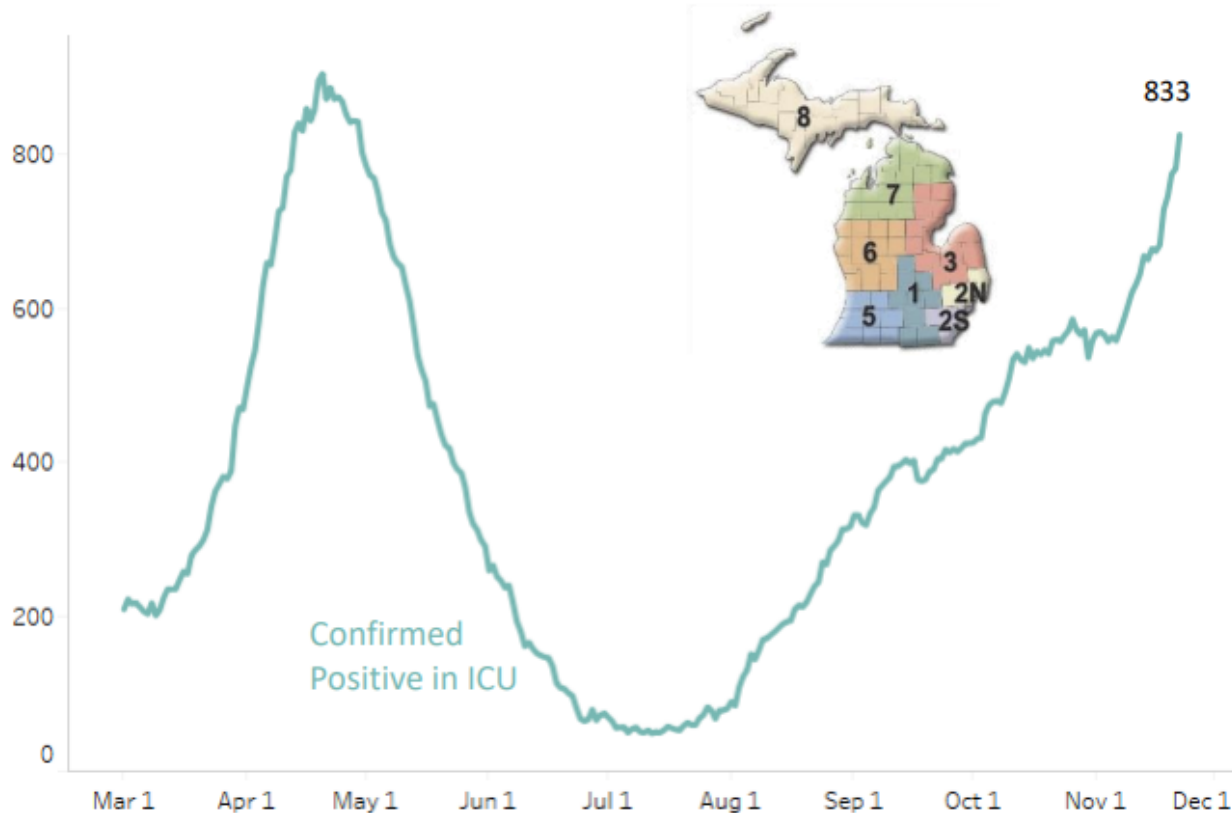
6 regions now have greater than 300/Million population hospitalized. Regions 2S and 3 now have greater than 400/Million population hospitalized.

Region	COVID+ Hospitalizations (% Δ from last week)	COVID+ Hospitalizations / MM
Region 1	363 (26%)	336/M
Region 2N	831 (20%)	375/M
Region 2S	930 (26%)	417/M
Region 3	546 (28%)	482/M
Region 5	256 (20%)	269/M
Region 6	581 (14%)	396/M
Region 7	165 (18%)	330/M
Region 8	64 (-8%)	206/M

Source: MDHHS Data and Modelling: https://www.michigan.gov/documents/coronavirus/20211116_Data_and_modeling_update_vMEDIA_741480_7.pdf

Statewide Hospitalization Trends: ICU COVID+ Census

Hospitalization Trends 3/1/2021 – 11/22/2021
Confirmed Positive in ICUs



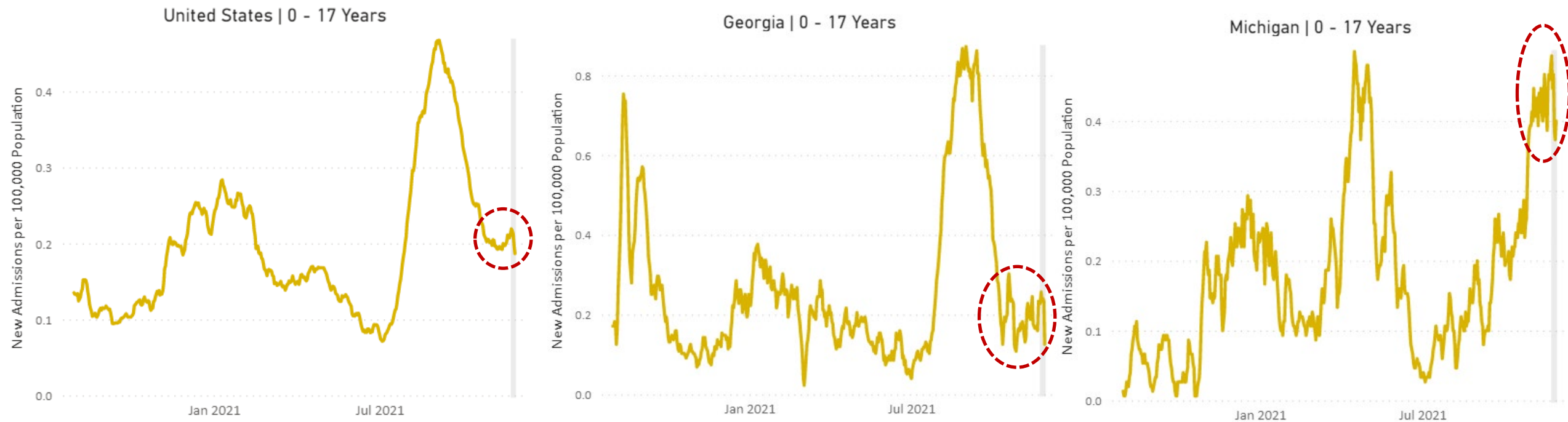
Overall, the census of COVID+ patients in ICUs has increased 23% from last week. ICU census is now >90% of the spring peak.

Regions 1, 2S, 3, 6, and 7 have overall adult ICU occupancy greater than or equal to 85%. Regions 1, 6 and 7 have greater than 40% of their adult ICU beds occupied with COVID+ patients.

Region	Adult COVID+ in ICU (% Δ from last week)	Adult ICU Occupancy	% of Adult ICU beds COVID+
Region 1	85 (23%)	90%	43%
Region 2N	142 (19%)	76%	25%
Region 2S	188 (29%)	88%	27%
Region 3	125 (17%)	92%	36%
Region 5	56 (22%)	77%	29%
Region 6	144 (24%)	89%	48%
Region 7	69 (47%)	90%	49%
Region 8	24 (26%)	73%	38%

Source: MDHHS Data and Modelling: https://www.michigan.gov/documents/coronavirus/20211116_Data_and_modeling_update_vMEDIA_741480_7.pdf

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 much lower rates than recent peaks. Michigan pediatric hospitalization rates continue to remain elevated at pandemic highs.

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

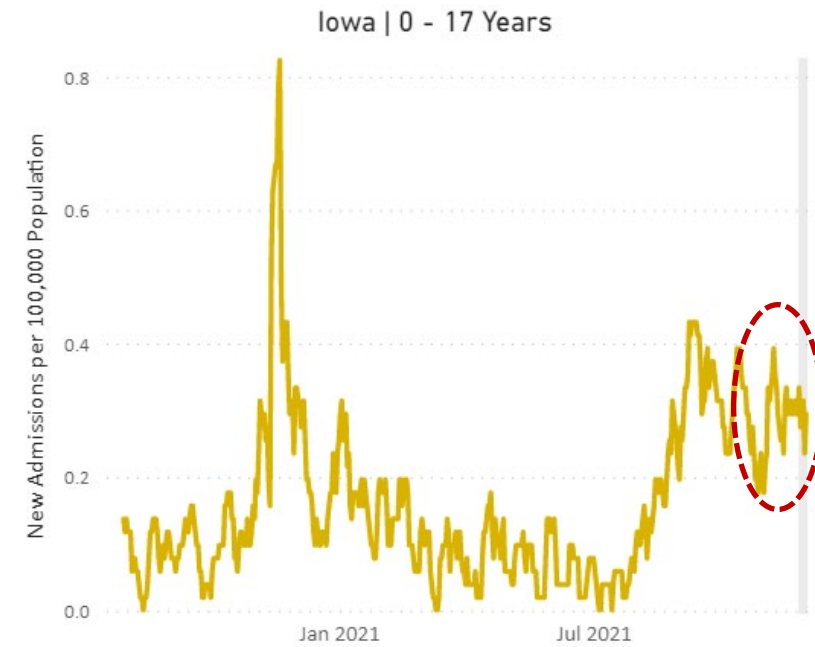
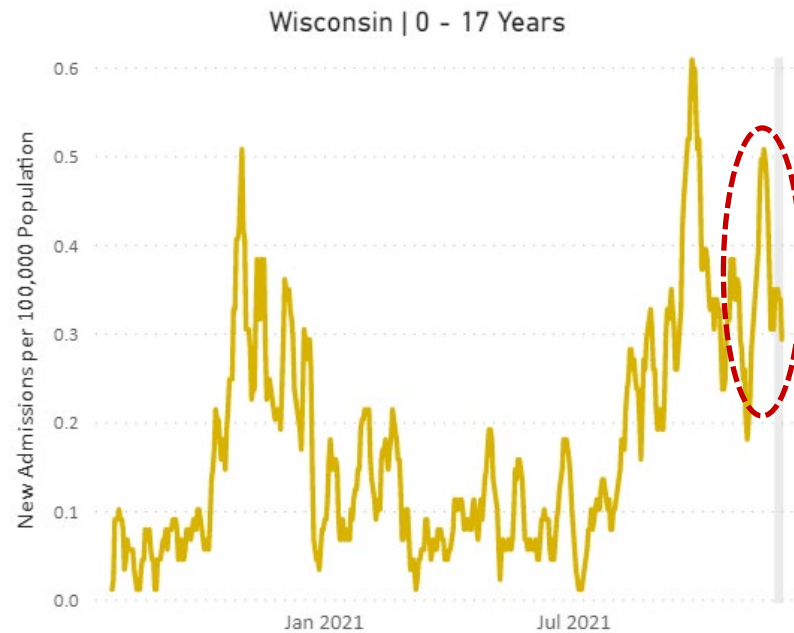
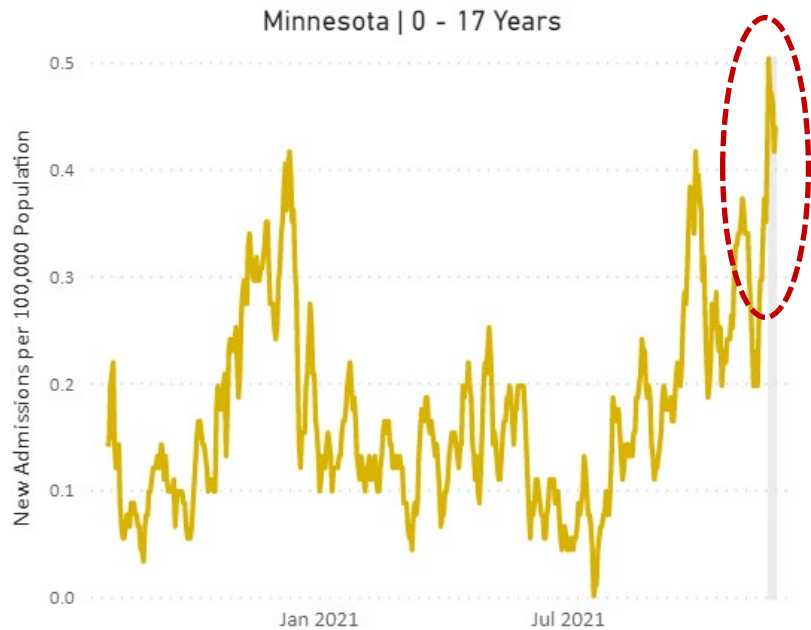
Accessed November 30, 2021

Pediatric Hospitalization Rates – Select Midwest States



Pediatric hospitalization rates in some states across the Midwest are elevated. Ohio may be decreasing. Indiana has plateaued while Illinois pediatric hospitalization rates may be rebounding.

Pediatric Hospitalization Rates – Select Midwest States



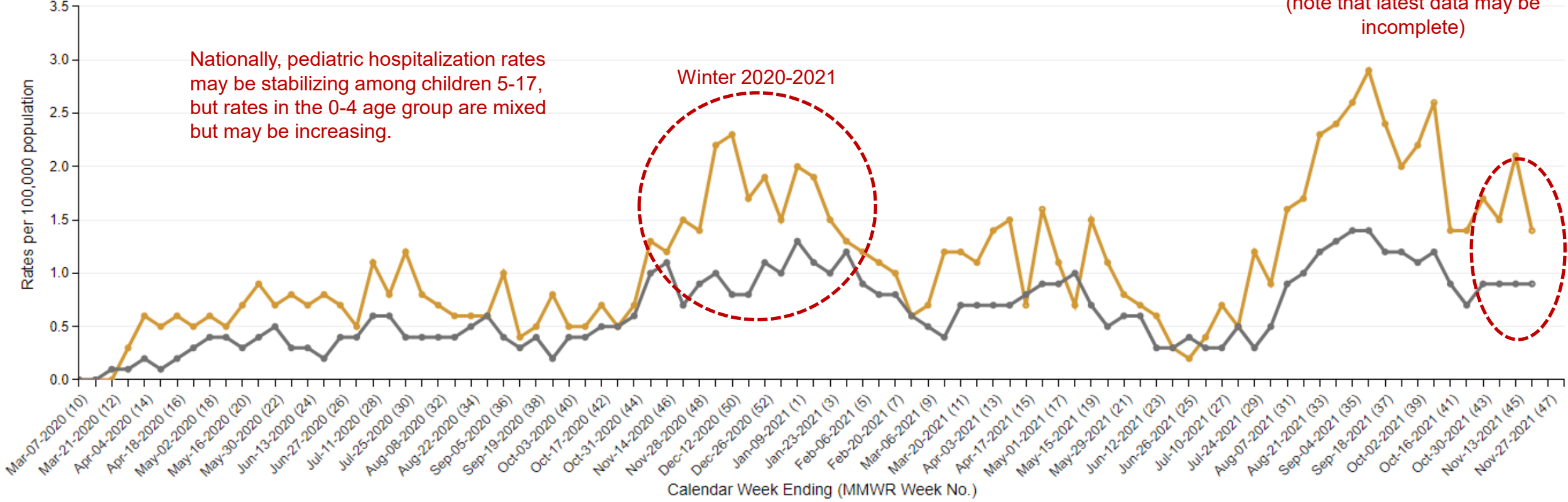
Pediatric hospitalization rates in Minnesota have reached pandemic highs, Wisconsin rates are mixed, and Iowa continues showing a general plateau.

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

Accessed December 1, 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.

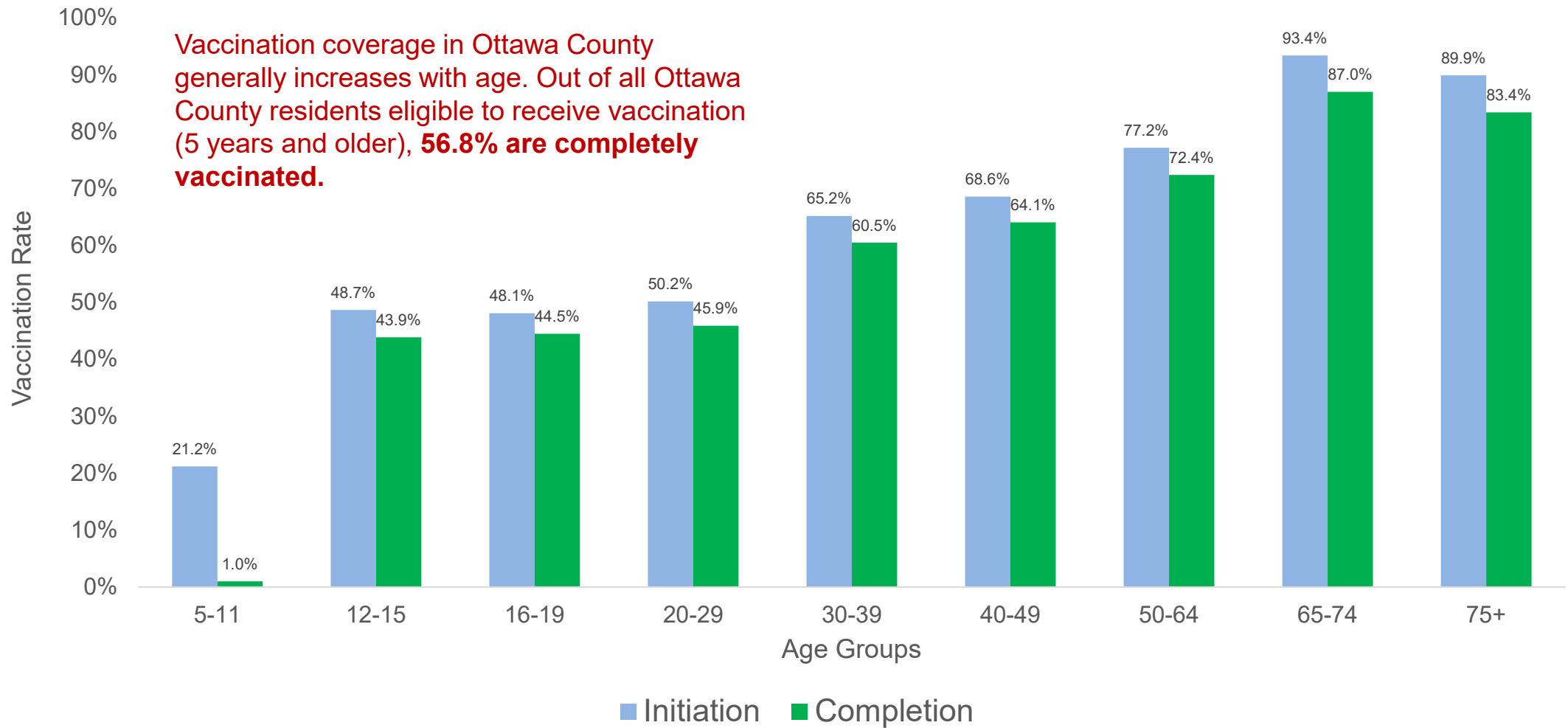


The Coronavirus Disease 2019 (COVID-19)-Associated Hospitalization Surveillance Network (COVID-NET) hospitalization data are preliminary and subject to change as more data become available. In particular, case counts and rates for recent hospital admissions are subject to lag. As data are received each 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 23, 2021

Vaccination Coverage by Age



Note:

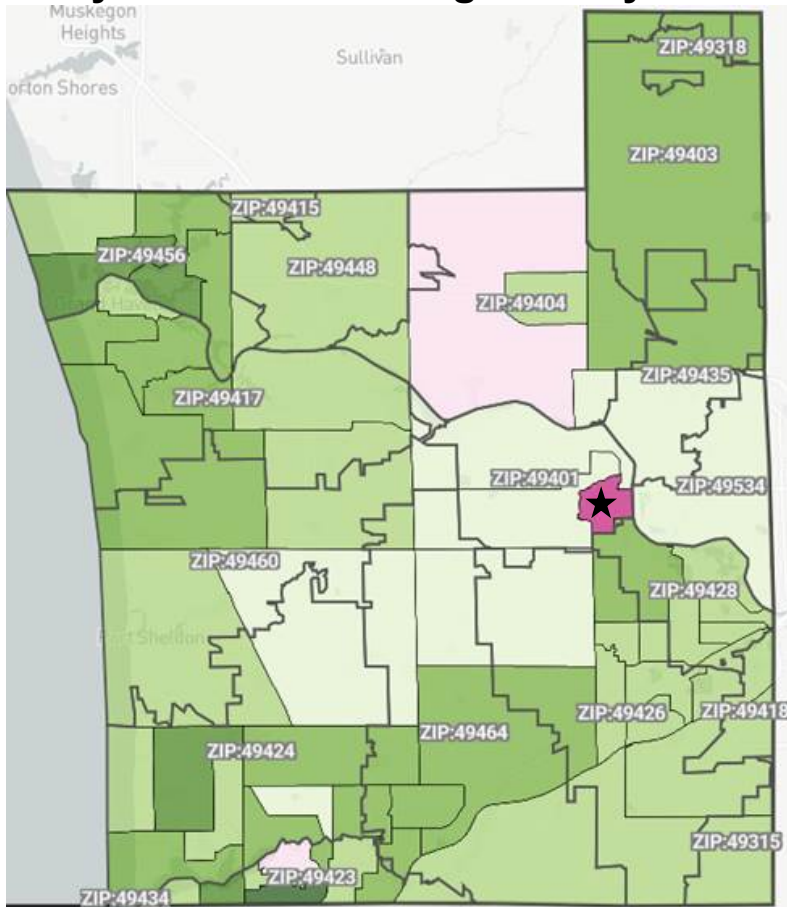
Completion is the percentage of people receiving 2 doses of Pfizer or Moderna or 1 dose of J&J.

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

Data through November 30, 2021

Vaccination Coverage by Place of Residence

Fully vaccinated: % Ages 16+ years

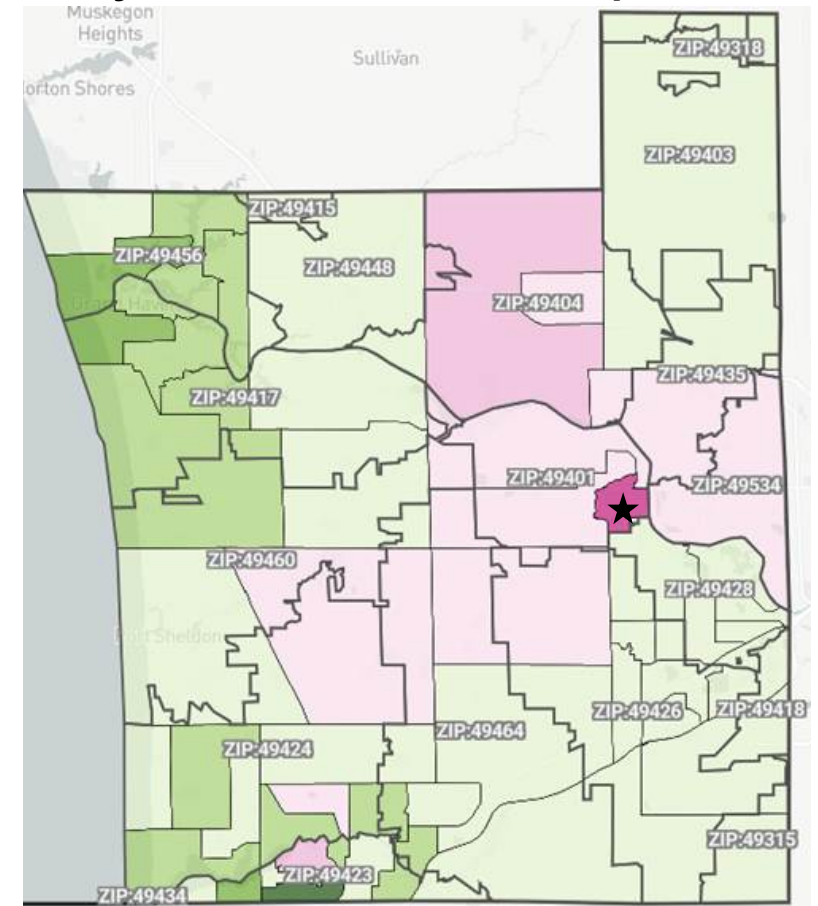


Color coded by: Fully Vaccinated (% Ages 16+)

0-9% 10-19% 20-29% 30-39% 40-49% 50-59% 60-69% 70-79% 80-89% >90% <150 Population



Fully vaccinated: % Total Population



Color coded by: Fully Vaccinated (% Population)

0-9% 10-19% 20-29% 30-39% 40-49% 50-59% 60-69% 70-79% 80-89% >90% <150 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.

Source: MI-Lighthouse Internal Dashboard

Cumulative Cases by Vaccination Status, Ottawa County, January 15, 2021 – November 27, 2021

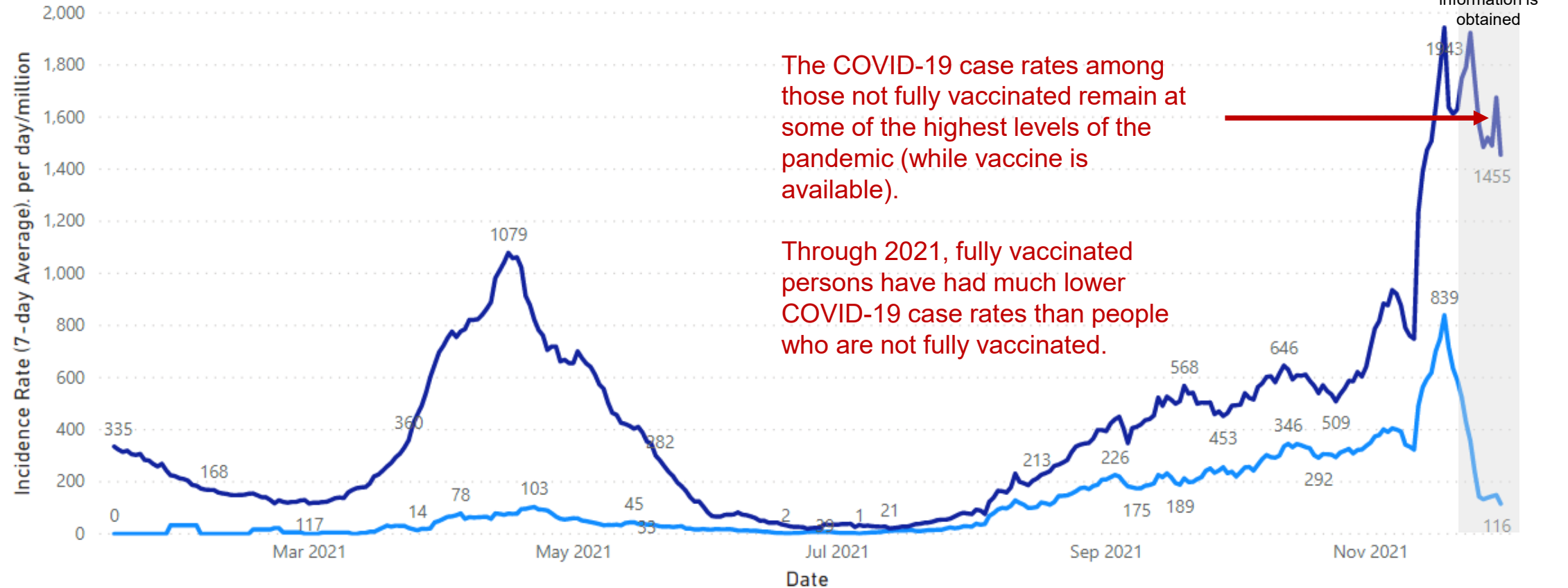
Fully Vaccinated People (154,833)		
Cases	Hospitalizations	Deaths
Percent of Cases in People Not Fully Vaccinated (23,717 / 28,922) 82.0%	Percent of Hospitalizations in People Not Fully Vaccinated (750 / 941) 79.7%	Percent of Deaths in People Not Fully Vaccinated (164 / 222) 73.9%
Total Cases Not Fully Vaccinated 23,717	Total Hospitalized Not Fully Vaccinated 750	Total Deaths Not Fully Vaccinated 164
Total Breakthrough Cases 5,205	Total Breakthrough Hospitalizations 191	Total Breakthrough Deaths 58
Percent of Fully Vaccinated People who Developed COVID-19 (5,205 / 154,833) 3.362%	Percent of Fully Vaccinated People who were Hospitalized for COVID-19 (191 / 154,833) 0.123%	Percent of Fully Vaccinated People who Died of COVID-19 (58 / 154,833) 0.037%
Percent of Cases who were Fully Vaccinated (5,205 / 28,922) 18.0%	Percent of Hospitalizations who were Fully Vaccinated (191 / 941) 20.3%	Percent of Deaths who were Fully Vaccinated (58 / 222) 26.1%
Total Cases 28,922	Total Hospitalizations 941	Total Deaths 222

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



The COVID-19 case rates among those not fully vaccinated remain at some of the highest levels of the pandemic (while vaccine is available).

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

Method:

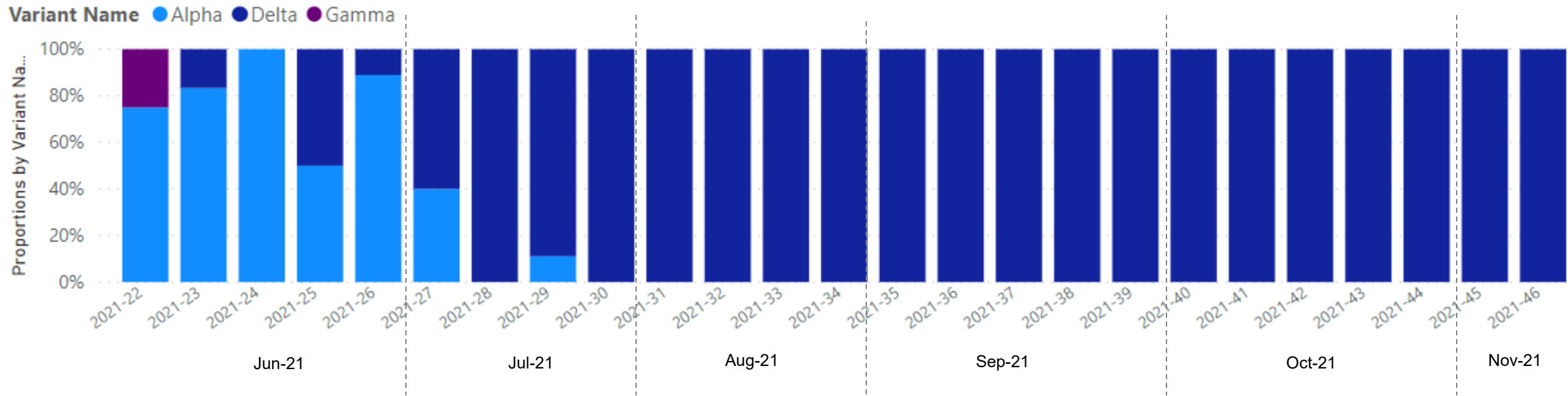
Daily case counts were obtained from the MDSS and summarized by referral date. Cases were compared to data from the State of Michigan immunization database to confirm COVID-19 vaccination status. Counts of persons completely vaccinated in Ottawa County were compiled from the Michigan COVID-19 vaccination dashboard. The total population denominator was obtained from CDC Wonder; the 2019 population estimate was used. Daily COVID-19 case rates were calculated and averaged over the previous 7 days; a rate of cases per day per million population was used. Cases ineligible for vaccination are included in this data.

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



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
10/11/2021	Zeeland	N	N	N	N	Y	N
10/17/2021	North Holland	Y	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
10/21/2021	Zeeland	N	N	N	N	Y	N
10/24/2021	North Holland	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
10/31/2021	North Holland	N	N	N	N	Y	N
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

Y = Detected
N = Not Detected

The **Delta** variant was consistently detected in Holland and Zeeland wastewater samples through all October and most of November 2021, with no other variants detected in that same time frame. This data indicate that Delta remains the dominant variant in Ottawa County; there is little evidence of Delta being supplanted by a competing variant at this time.

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*

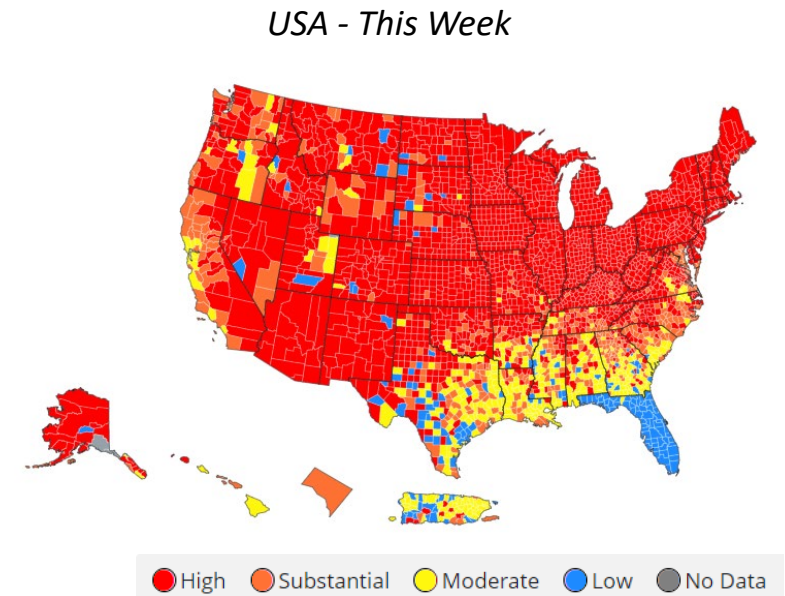
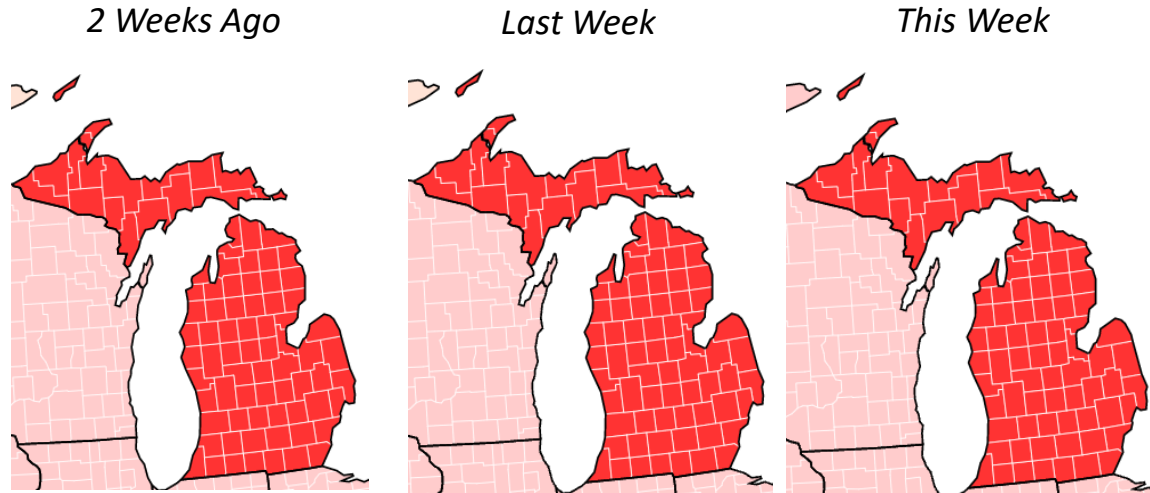
Ottawa is in the High category right now

*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 **15+** weeks)
- Current Data:
 - Positivity = 22.72%
 - Case Rate = 554.43 cases per week per 100,000



Data through November 27, 2021
for positivity and November 29,
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

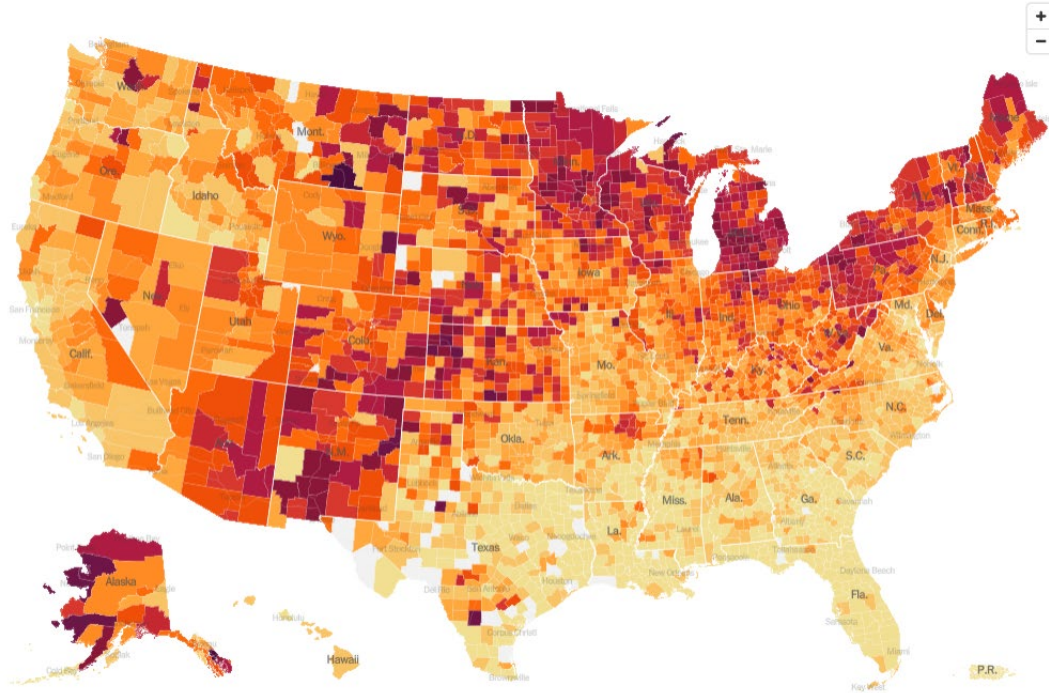
Science
Roundup

COVID-19 Case Rates by County Across the US

Last Week

Hot spots

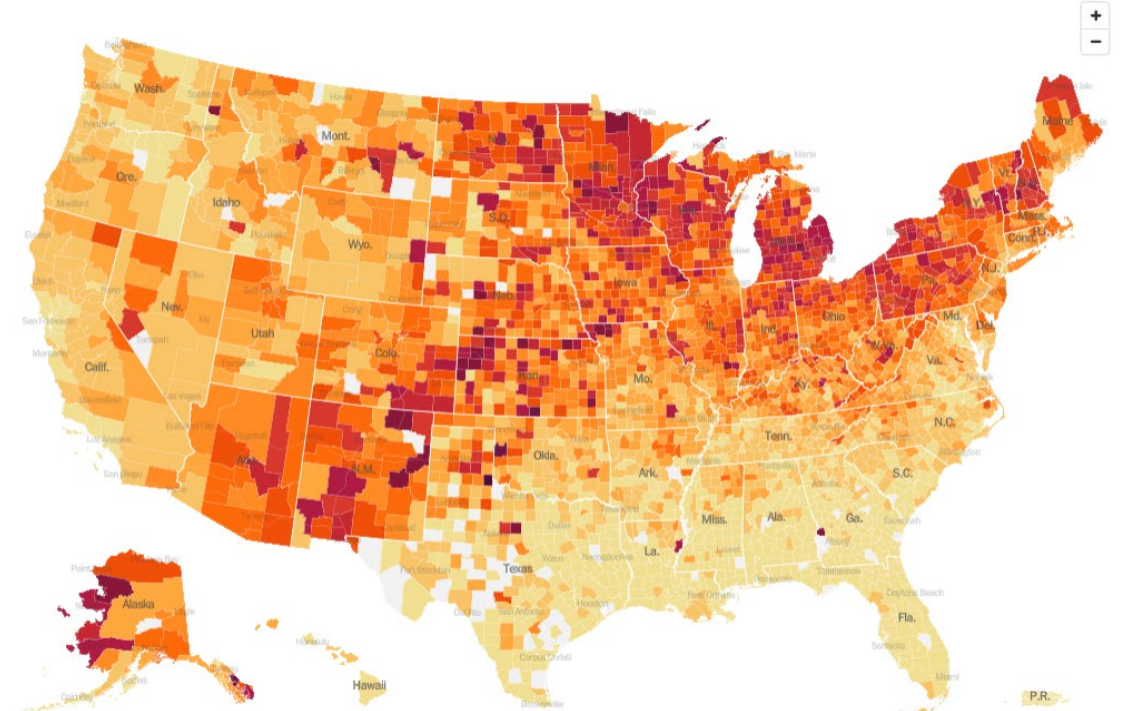
AVERAGE DAILY CASES PER 100,000 PEOPLE IN PAST WEEK
10 30 50 70 100 200 FEW OR NO CASES



This Week

Hot spots

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



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

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

Accessed December 1, 2021

USA & MI

Spread

Children

Hospitalizations

Vaccinations

Variants

Risk Levels

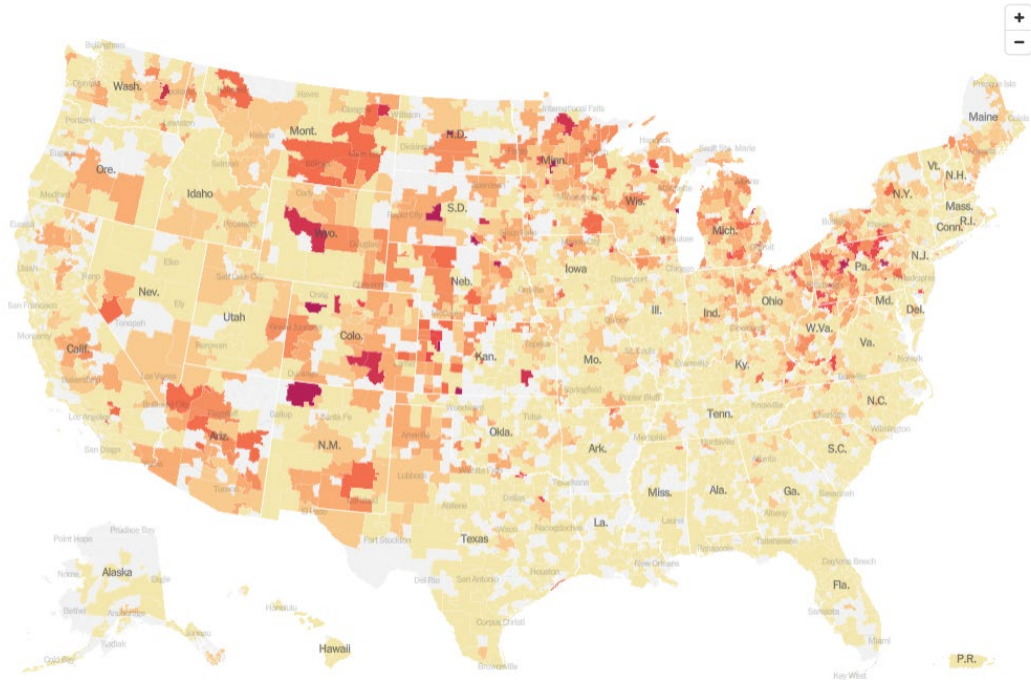
Other

Media

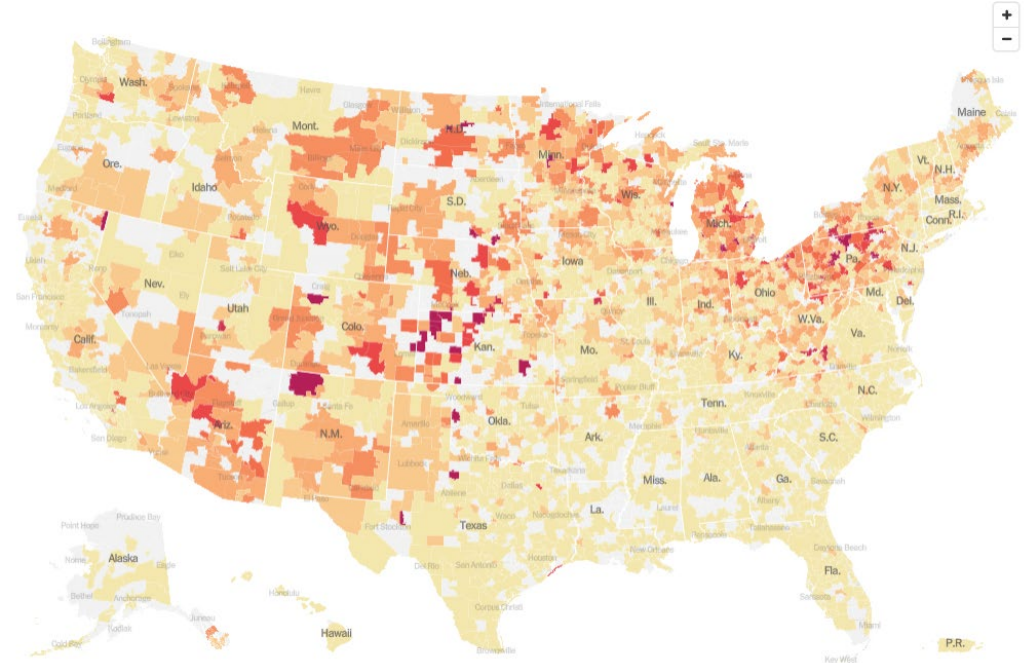
Science
Roundup

COVID-19 Hospitalization Rates by County Across the US

Last Week



This Week



Hospitalization rates continue to improve in the South and Appalachia, while some western states are experiencing elevated hospitalization rates. Pockets of Colorado, Kansas, New Mexico, Arizona and Pennsylvania are also seeing elevated hospitalizations. More areas in Michigan are seeing higher hospitalization rates this week.

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

Accessed December 1, 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 and Kent County's PreK-6 mask mandate is scheduled for rescinding on January 2, 2022. Kalamazoo County plans to rescind their school mask order on December 17 and Genesee County on December 22, 2021.

COVID-19 News Headlines

Spectrum Health adds new visitor restrictions amid COVID surge

<https://www.hollandsentinel.com/story/news/coronavirus/2021/11/23/spectrum-health-adds-new-visitor-restrictions-amid-covid-surge/8732179002/>

This COVID-19 surge is ‘worse, more challenging’ for hospitals, Kent County’s top health official says

<https://www.mlive.com/news/grand-rapids/2021/11/this-covid-19-surge-is-worse-more-challenging-for-hospitals-kent-countys-top-health-official-says.html>

COVID-19 transmission in Allegan County at fastest rate since the start of the pandemic

<https://community99.com/covid-19-transmission-in-allegan-county-at-fastest-rate-since-the-start-of-the-pandemic/>

Feds to send staff to Michigan hospitals to treat COVID-19 patients as pandemic rages

<https://news.yahoo.com/feds-send-staff-michigan-hospitals-170026885.html>

Ambulances divert to other medical facilities as COVID pushes hospitals to max capacity

<https://www.fox17online.com/news/local-news/ambulances-are-being-told-to-divert-because-some-area-hospitals-are-full>

FDA advisory panel narrowly endorses Merck’s oral Covid treatment pill, despite reduced efficacy and safety questions

<https://www.cnbc.com/2021/11/30/fda-advisory-panel-narrowly-endorses-mercks-oral-covid-treatment-pill-despite-reduced-efficacy.html>

Science Roundup

Elapsed time since BNT162b2 vaccine and risk of SARS-CoV-2 infection: test negative design study

<https://www.bmj.com/content/375/bmj-2021-067873>

← A large study out of Israel showed that the Pfizer vaccine series may wane over time.

Antibody titers before and after booster doses of SARS-CoV-2 mRNA vaccines in healthy adults

<https://www.medrxiv.org/content/10.1101/2021.11.19.21266555v1.full.pdf>

← A small preprint study out of Northwestern University (Chicago, IL) suggests that antibody response after Pfizer booster is strong and may exceed levels induced by infection-induced immunity.

Odds of Testing Positive for SARS-CoV-2 Following Receipt of 3 vs 2 Doses of the BNT162b2 mRNA Vaccine

<https://jamanetwork.com/journals/jamainternalmedicine/fullarticle/2786890>

← Another study out of Israel showed a reduction in the odds of testing positive for COVID-19 after receiving a Pfizer booster, compared to those receiving only 2 doses of the primary series.