

# Ottawa County COVID-19 Epidemiology

August 04, 2022

*Data as of July 30, 2022, unless otherwise indicated.*

# Executive Summary

- **Transmission in the US and in Michigan may be increasing**
- **Ottawa County transmission signals are mixed**
  - This past week positivity **decreased** to 23.3%, from 26% two weeks ago.
  - Weekly case counts **decreased** 8% (+23% two weeks ago), from 482 two weeks ago to 444 last week.
  - Cases among children **decreased** 27% (+63% two weeks ago), from 62 two weeks ago to 45 last week.
  - COVID-19 wastewater signals in Ottawa County are **increasing** in Holland/Zeeland and Grand Haven/Spring Lake. Increases in Grand Haven/Spring Lake may be attributed to an influx of Coast Guard Festival attendees. Wastewater signals may be **decreasing** in Allendale.
  - Based on national data and local clinical variant sampling, the Omicron subvariant BA.5 likely predominates.
  - Ottawa's CDC Community Level is LOW.
- **Ottawa-area and regional hospitals have adequate capacity**
  - In Ottawa County, 6% of all available beds and 0% of all ICU beds are occupied by COVID-19 patients.\*
- **Pediatric hospitalization rates in the US are increasing, but are relatively low and stable in Michigan**
  - Regional pediatric hospitalization census remains low but may be increasing slightly.
- **Of Ottawa County residents aged 5+, 63.6% are fully 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.

# Limitations

- **Case Counts, Case Rates, and Test Positivity**

With the widescale availability of at-home antigen tests for COVID-19, which are not reported or included in public health surveillance data, the case counts and case rates in this report underestimate the true burden of this disease. However, it is expected that increasing and decreasing trends reflect the relative amount of transmission in the community.

- **Wastewater Surveillance**

Wastewater samples are collected from specific geographic sites in the county and may not reflect COVID-19 burden across the entire county population. However, increases and decreases in detected trends generally correlate with case rates, therefore wastewater readings are displayed alongside countywide incidence rates in this report.

# Ottawa County Metrics by Week

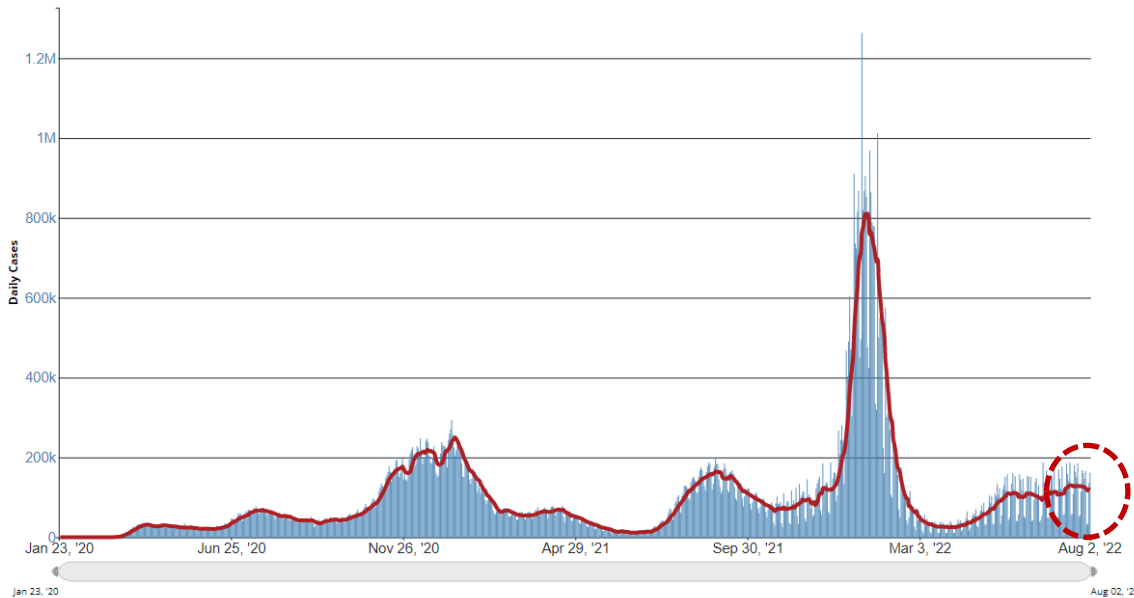
Metric	Goal	Week Ending				
		2-Jul-22	9-Jul-22	16-Jul-22	23-Jul-22	30-Jul-22
Positivity (All Ages)	NA	21.6%	19.7%	23.7%	26.0%	23.3%
Weekly Cases (All Ages)	<592	324	308	392	482	444
Weekly Cases in Children (0-17 years of age)	NA	32	34	38	62	45
Total Deaths (All Ages)	0	1	2	3	0	1
CDC COVID-19 Community Level (New)	Low	Low	Low	Low	Low	Low

Please note that with updated CDC Community Risk Transmission levels, metrics and/or metric thresholds/goals may change.

# Case Trends in the USA and Michigan

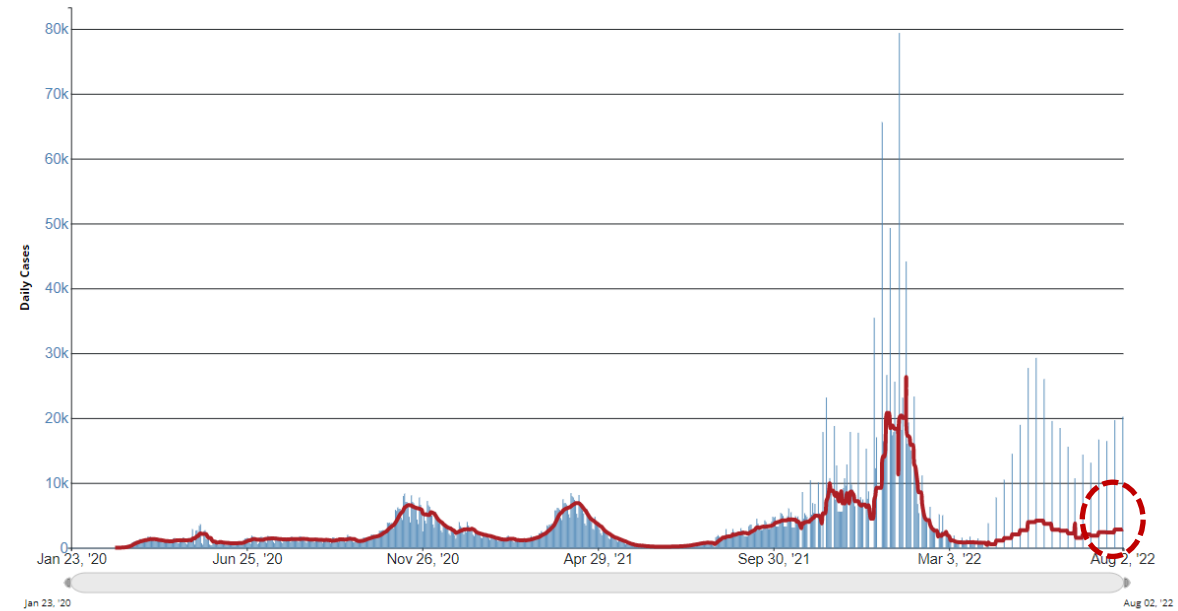
## USA

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 the US and Michigan remain lower than previous surges but may be increasing.

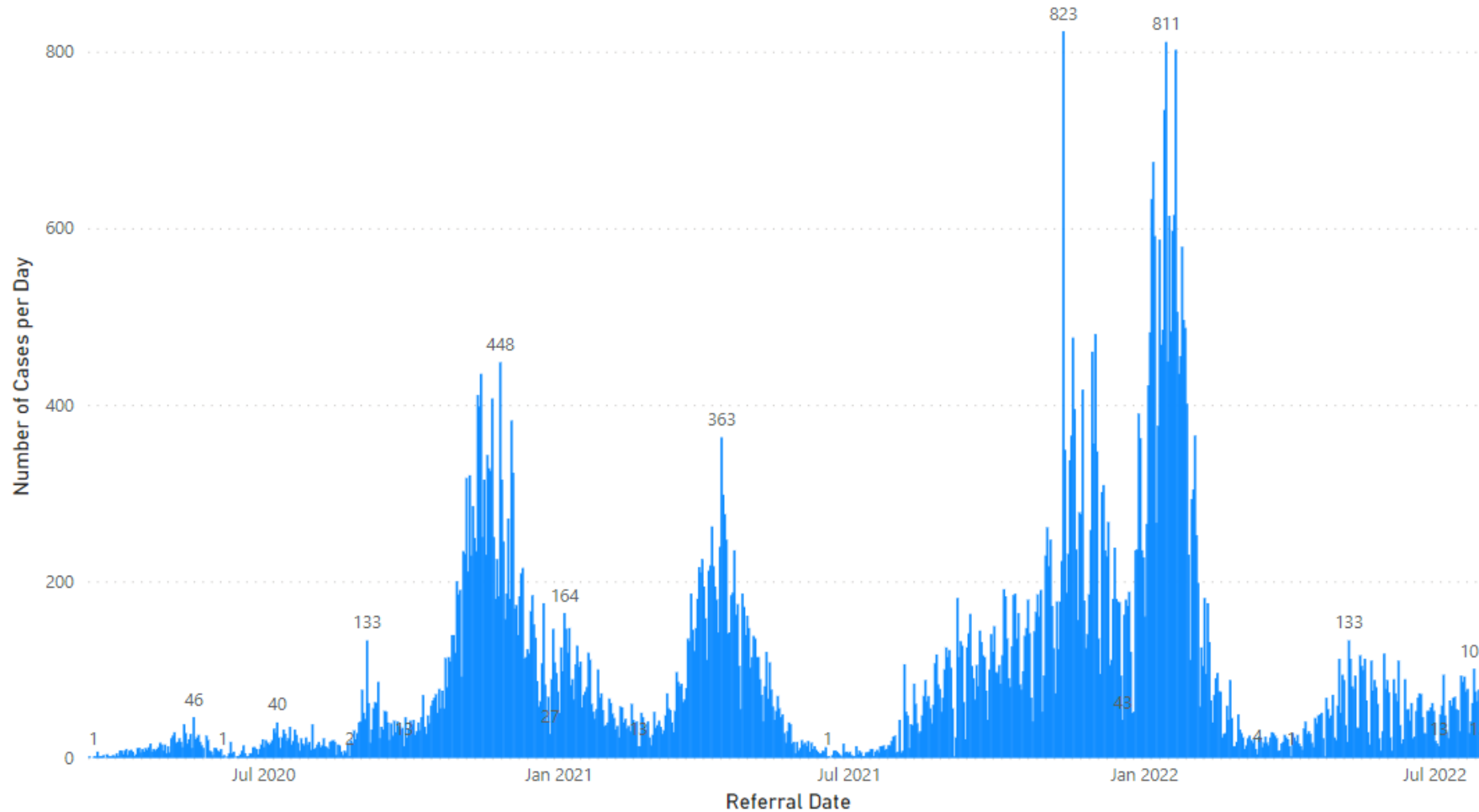
**Note:** Use of at home tests since late 2021 likely reduces the number of positive tests reported to Public Health, resulting in an artificially lower number of cases.  
**Source:** [https://covid.cdc.gov/covid-data-tracker/#trends\\_dailycases](https://covid.cdc.gov/covid-data-tracker/#trends_dailycases)

Data through Aug 02, 2022

# Case Trends in Ottawa County

COVID-19 Cases by Day, Ottawa County, March 15, 2020 – August 03, 2022

Epidemiological Curve



Total Number of Cases  
**81,224**

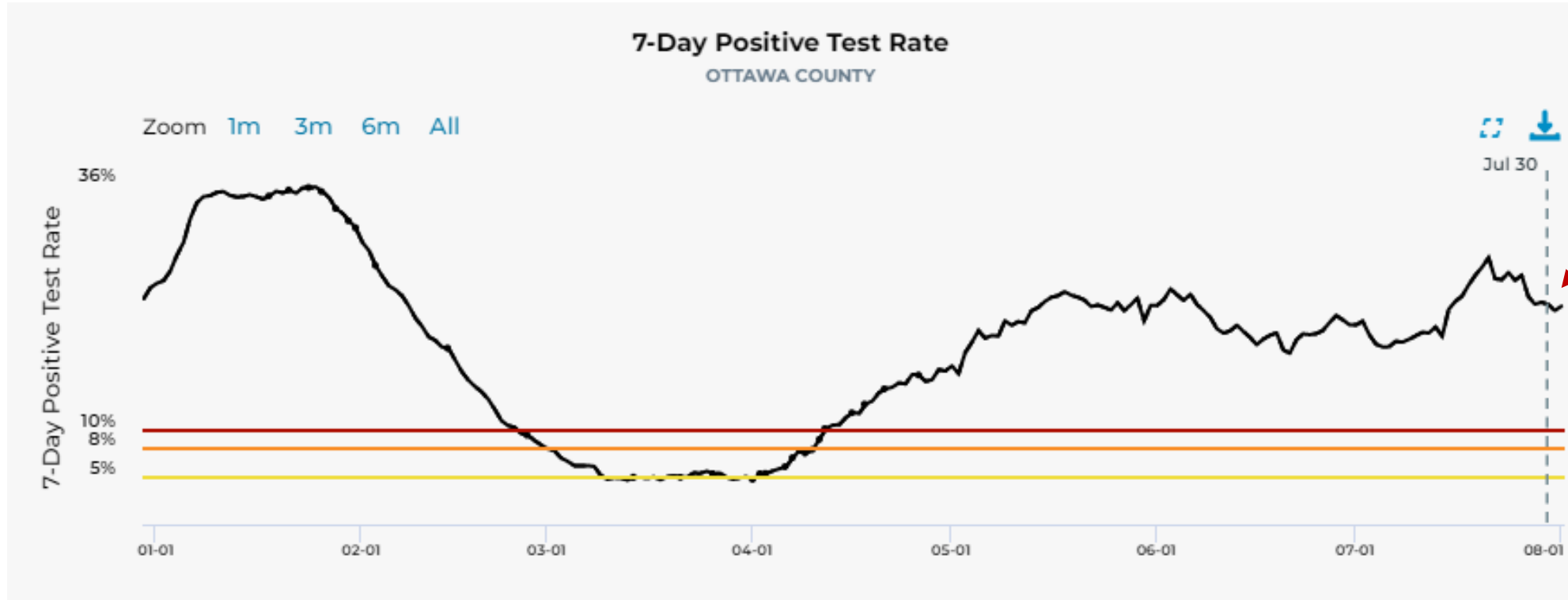
Currently, the 7-day average is just under **50 cases per day**, a **decrease** from the approximately **56 cases** seen two weeks ago.

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

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

# Test Positivity in Ottawa County

COVID-19 Cases by Day, Ottawa County, January 1, 2022 – July 30, 2022



Risk Thresholds (% Positive)



This visualization may change as CDC Community Transmission levels, metrics and/or metric thresholds/goals change.

**Note:** Testing data and can be found at the following sources: [Testing Results | Ottawa County Covid-19 Case Summary Data \(arcgis.com\)](#) & [MI Safe Start Map](#). Use of at-home tests since late 2021 likely reduces the number of positive tests reported to Public Health, resulting in an artificially lower number of cases.

**Source:** [MI Safe Start Map-Ottawa County](#)

USA & MI

Spread

Children

Hospitalizations

Vaccinations

Variants

Risk Levels

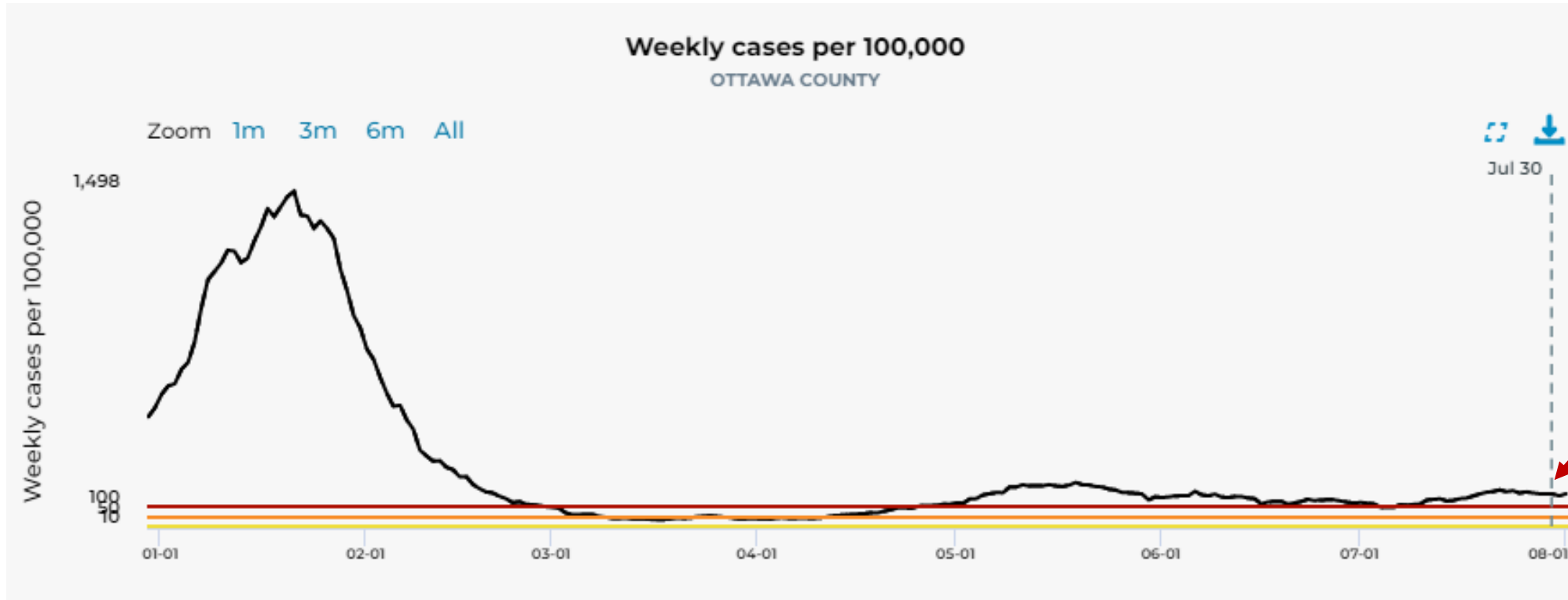
Other

Media

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# Case Rates in Ottawa County – All Ages

COVID-19 Cases by Day, Ottawa County, January 1, 2022 – July 30, 2022



Case rates trended at **151.8** cases per week per 100,000 population (**lower than 162.1** the week prior).

Risk Thresholds (Cases per 100,000)



Low: <10



Moderate 10-49



Substantial 50-99



High >=100

Please note that with updated CDC Community Transmission levels, metrics and/or metric thresholds/goals may change.

**Note:** Use of at home tests since late 2021 likely reduces the number of positive tests reported to Public Health, resulting in artificially lower rates.

**Source:** [MI Safe Start Map-Ottawa County](#)

USA & MI

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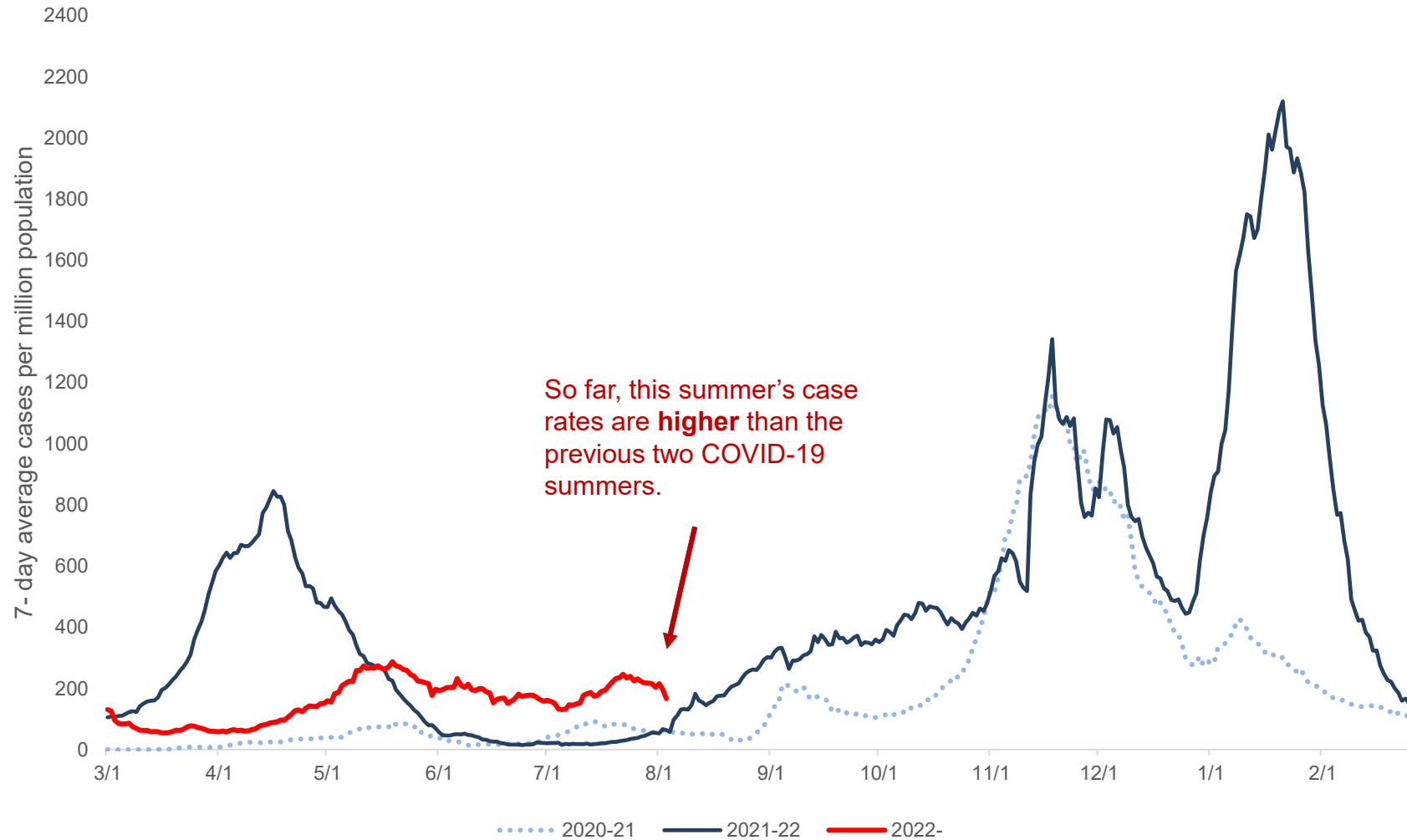
Other

Media

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# Ottawa County Time Trends – Annual Comparison of Case Rates



So far, this summer's case rates are **higher** than the previous two COVID-19 summers.



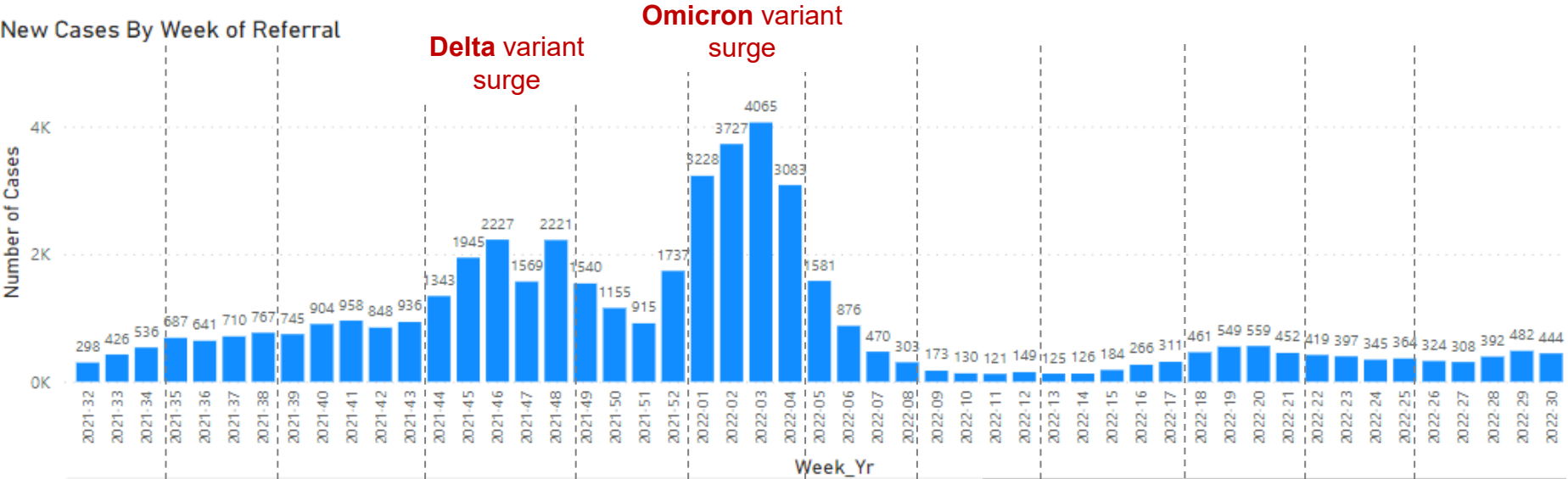
..... 2020-21    — 2021-22    — 2022-

**Note:** Use of at home tests since late 2021 likely reduces the number of positive tests reported to Public Health, resulting in artificially lower case rates.

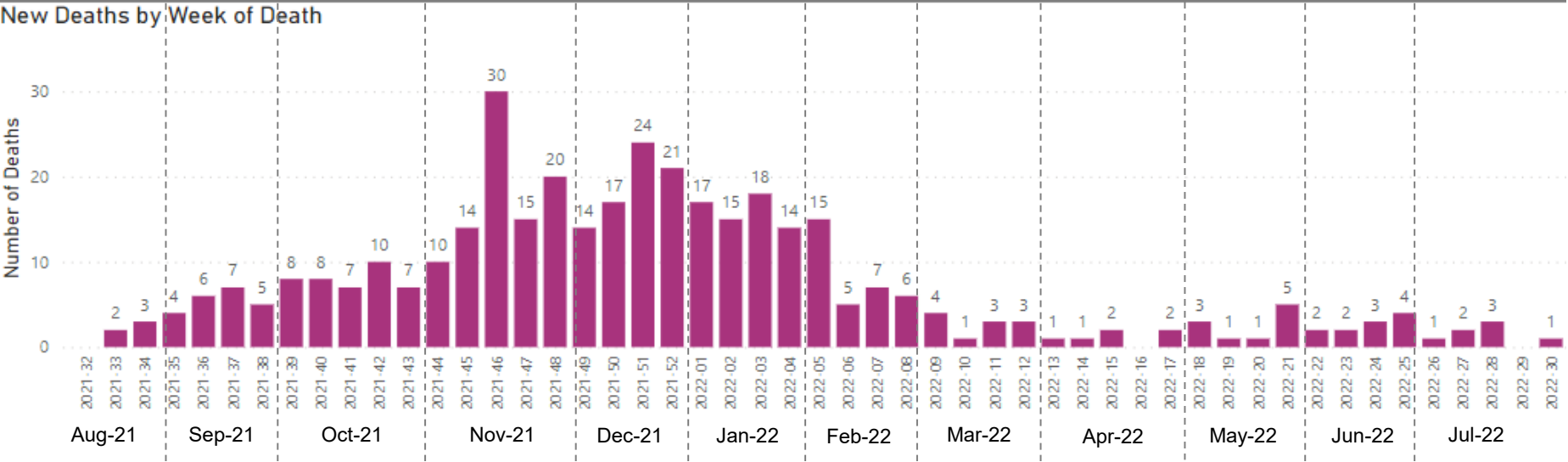
**Source:** Internal Data

Data through Aug 03, 2022

# Ottawa County – Cases & Deaths by Week, All Ages



The weekly number of **cases decreased 8%** from week 29 to week 30.



Weekly COVID-19 **deaths remain low**. The current weekly average number of deaths over the last 4 weeks is about **1-2 deaths per week**.

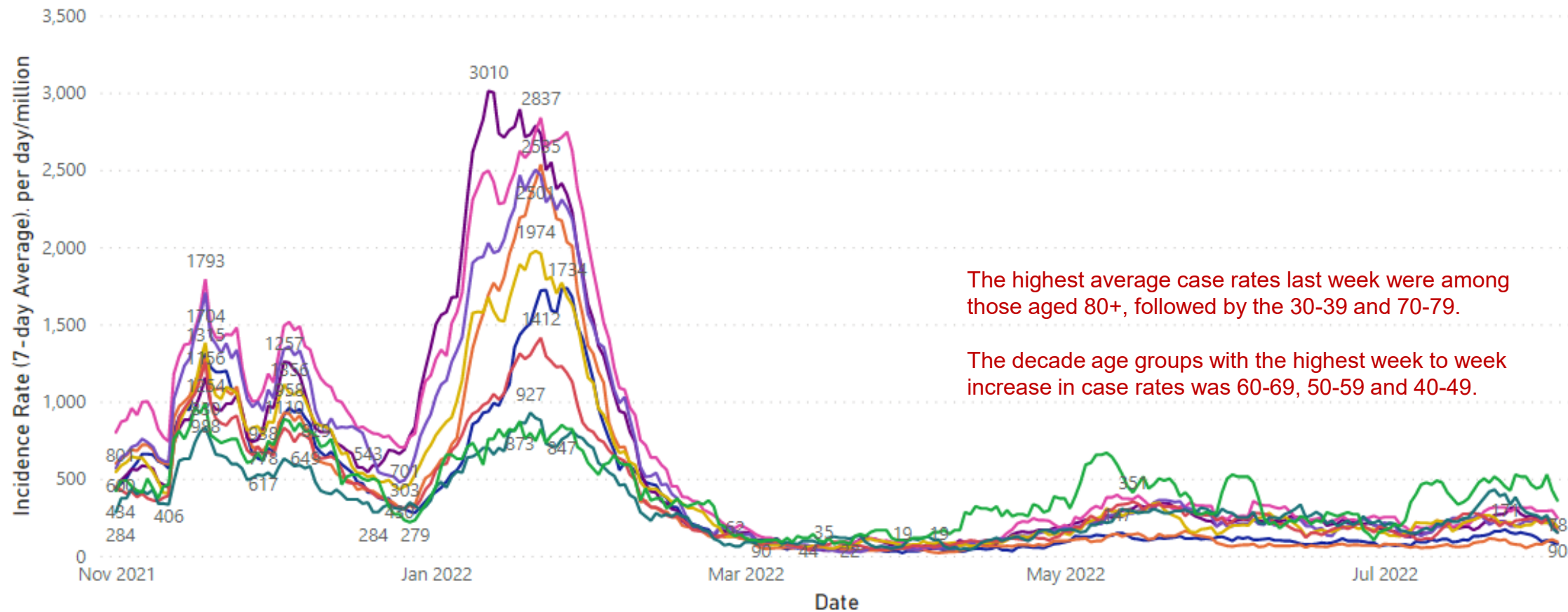
**Note:** Use of at home tests since late 2021 likely reduces the number of positive tests reported to Public Health, resulting in artificially lower number of cases.  
**Source:** Michigan Department of Health and Human Services, Michigan Disease Surveillance System

# Ottawa County Case Rate Trends by Age Decade

COVID-19 Case Rates by Age, November 2021 – August 03, 2022

Incidence Rate (7-day Average)

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



The highest average case rates last week were among those aged 80+, followed by the 30-39 and 70-79.

The decade age groups with the highest week to week increase in case rates was 60-69, 50-59 and 40-49.

**Note:** Use of at home tests since late 2021 likely reduces the number of positive tests reported to Public Health, resulting in artificially lower rates.

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

Data as of Aug 03, 2022

# Ottawa County Case Rate Trends by Age Decade

Daily new confirmed and probable cases per day per million by age group (daily average per week)  
 Week 30 (July 24, 2022 – July 30, 2022)

Age Decade (Years)	Average Daily Cases	Average Daily Case Rate	One Week % Rate Change
0-9	4.4	120.3	-24%
10-19	3.3	74.3	-26%
20-29	11.0	243.2	-8%
30-39	10.3	287.1	-9%
40-49	7.9	236.8	6%
50-59	8.0	229.3	8%
60-69	7.7	236.6	23%
70-79	5.4	263.0	-32%
80+	4.9	436.6	-10%

**Age groups with highest average case rates last week:**

1. 80+
2. 30-39
3. 70-79

**Age groups with largest week-over-week increase in case rates:**

1. 60-69
2. 50-59
3. 40-49

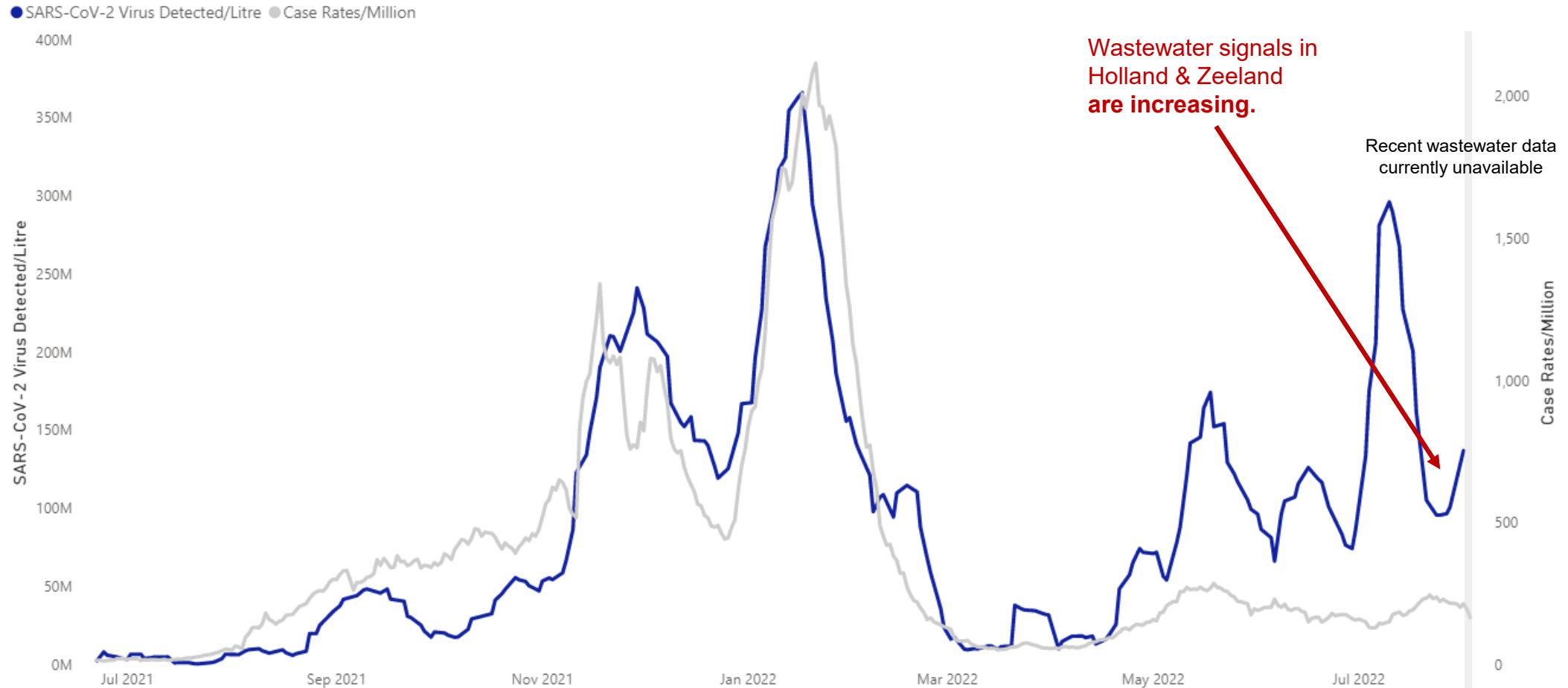
**Notes:** Average daily cases is calculated by summing the weekly total number of cases and dividing by seven. Cases counted in weeks of interest reflect referral date. Use of at home tests since late 2021 likely reduces the number of positive tests reported to Public Health, resulting in artificially lower rates.

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

Data as August 3, 2022

# Holland-Zeeland Wastewater Surveillance

SARS-CoV-2 Virus Detected/Litre by Sample Date With COVID-19 Case Rates/Million by Referral Date (7-Day Averages)



**Data Interpretation:** The **blue line** on the graph shows the 7-day average levels of SARS-CoV-2 virus (N2 markers) detected in wastewater sampled from treatment plants in Holland & Zeeland. The **gray line** on the graph represents the 7-day average COVID-19 case rates/million for all of Ottawa County by referral date.

**Notes:** Use of at home tests since late 2021 likely reduces the number of positive tests reported to Public Health, resulting in artificially deflated case rates. Display of wastewater data may change as analytical methods are refined. A data point from Zeeland collected June 23, 2022, was removed from data analysis as an extreme outlier.

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

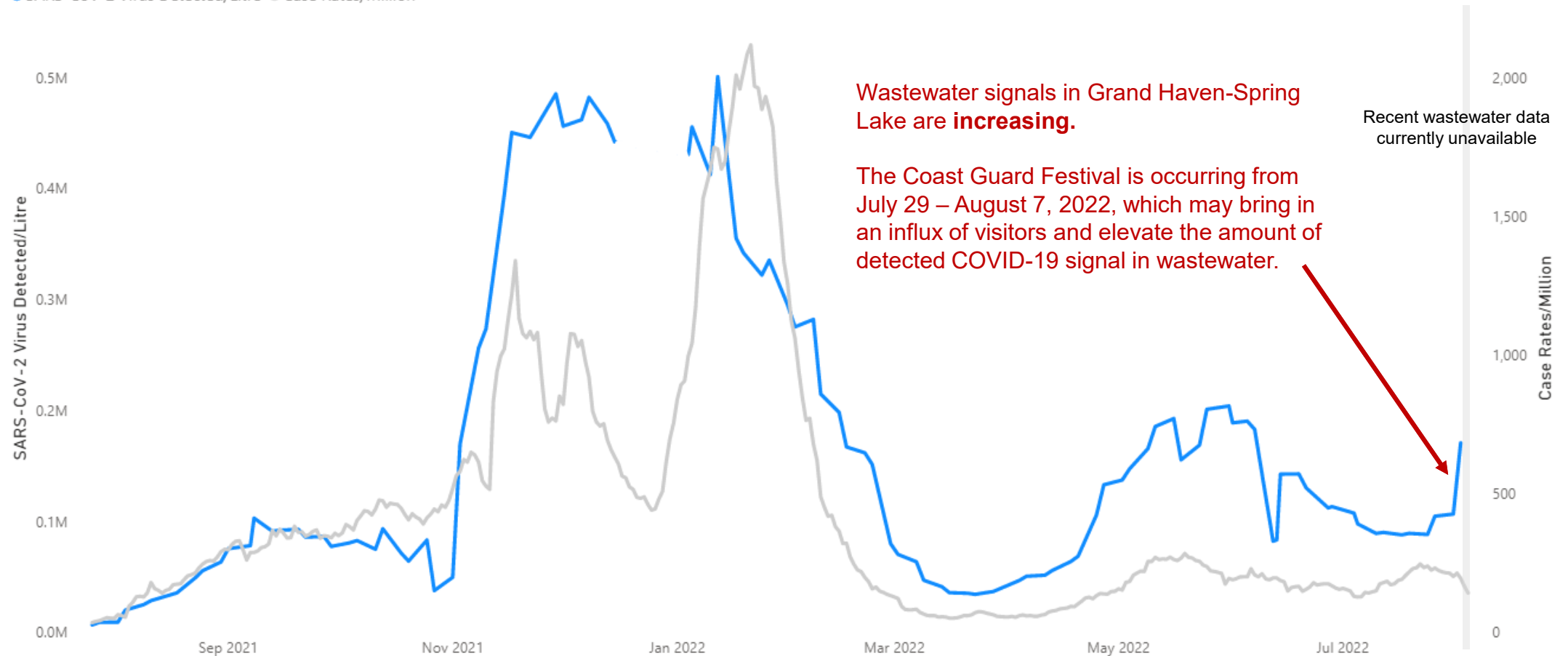
**Additional Information:** [Michigan COVID-19 Wastewater Surveillance Pilot Project \(arcgis.com\)](https://arcgis.com), [Coronavirus - Sentinel Wastewater Epidemiology Evaluation Project \(SWEEP\) \(michigan.gov\)](https://michigan.gov)

Data through August 1, 2022

# Grand Haven-Spring Lake Wastewater Surveillance

SARS-CoV-2 Virus Detected/Litre by Sample Date With COVID-19 Case Rates/Million by Referral Date (7-Day Averages)

● SARS-CoV-2 Virus Detected/Litre ● Case Rates/Million



**Data Interpretation:** The **blue line** on the graph shows the 7-day average levels of SARS-CoV-2 virus (N2 markers) detected in wastewater sampled from the treatment plant in Grand Haven-Spring Lake. The **gray line** on the graph represents the 7-day average COVID-19 case rates/million for all of Ottawa County by referral date.

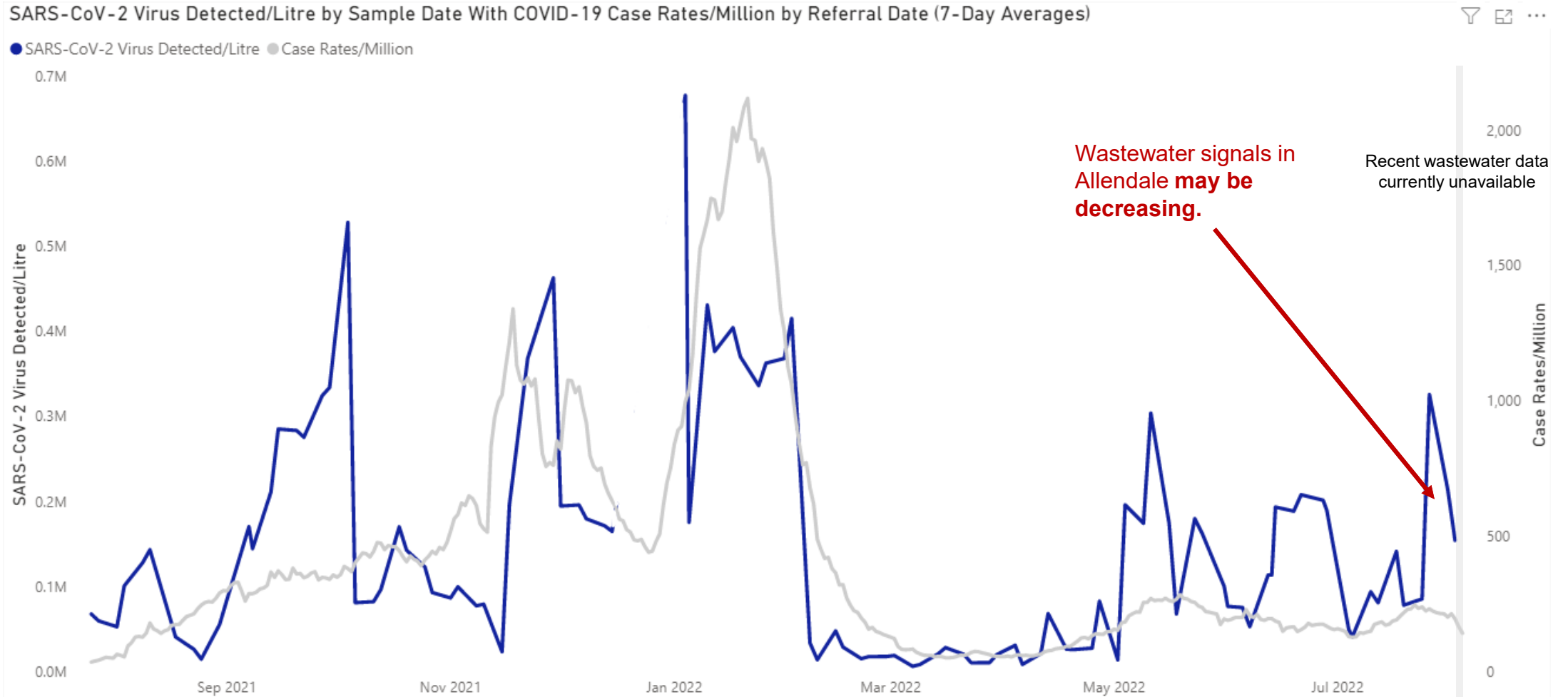
**Note:** Use of at home tests since late 2021 likely reduces the number of positive tests reported to Public Health, resulting in artificially deflated case rates. Display of wastewater data may change as analytical methods are refined.

**Source:** Grand Valley State University Annis Water Resources Institute as part of the MDHHS SEWER-Network, Richard Rediske, Ph.D. ([redisker@gvsu.edu](mailto:redisker@gvsu.edu))

**Additional Information:** [Michigan COVID-19 Wastewater Surveillance Pilot Project \(arcgis.com\)](https://arcgis.com), [Coronavirus - Sentinel Wastewater Epidemiology Evaluation Project \(SWEEP\) \(michigan.gov\)](https://michigan.gov)

Data through August 2, 2022

# Allendale Wastewater Surveillance



**Data Interpretation:** The **blue line** on the graph shows the 7-day average levels of SARS-CoV-2 virus (N2 markers) detected in wastewater sampled from the treatment plant in Allendale. The **gray line** on the graph represents the 7-day average COVID-19 case rates/million for all of Ottawa County by referral date.

**Note:** Use of at home tests since late 2021 likely reduces the number of positive tests reported to Public Health, resulting in artificially deflated case rates. Display of wastewater data may change as analytical methods are refined.

**Source:** Grand Valley State University Annis Water Resources Institute as part of the MDHHS SEWER-Network, Richard Rediske, Ph.D. ([redisker@gvsu.edu](mailto:redisker@gvsu.edu))

**Additional Information:** [Michigan COVID-19 Wastewater Surveillance Pilot Project \(arcgis.com\)](https://arcgis.com), [Coronavirus - Sentinel Wastewater Epidemiology Evaluation Project \(SWEEP\) \(michigan.gov\)](https://michigan.gov)

Data through August 2, 2022

USA & MI

Spread

Children

Hospitalizations

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Variants

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Other

Media

Science  
Roundup

# 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
21-May-22	496	1%	63	11%	559	2%
28-May-22	397	-20%	55	-13%	452	-19%
4-Jun-22	379	-5%	40	-27%	419	-7%
11-Jun-22	357	-6%	40	0%	397	-5%
18-Jun-22	314	-12%	31	-23%	345	-13%
25-Jun-22	331	5%	33	6%	364	6%
2-Jul-22	292	-12%	32	-3%	324	-11%
9-Jul-22	274	-6%	34	6%	308	-5%
16-Jul-22	354	29%	38	12%	392	27%
23-Jul-22	420	19%	62	63%	482	23%
30-Jul-22	399	-5%	45	-27%	444	-8%

Weekly case counts among **children decreased 27%** last week, and cases in **adults decreased 5%**.

Adults

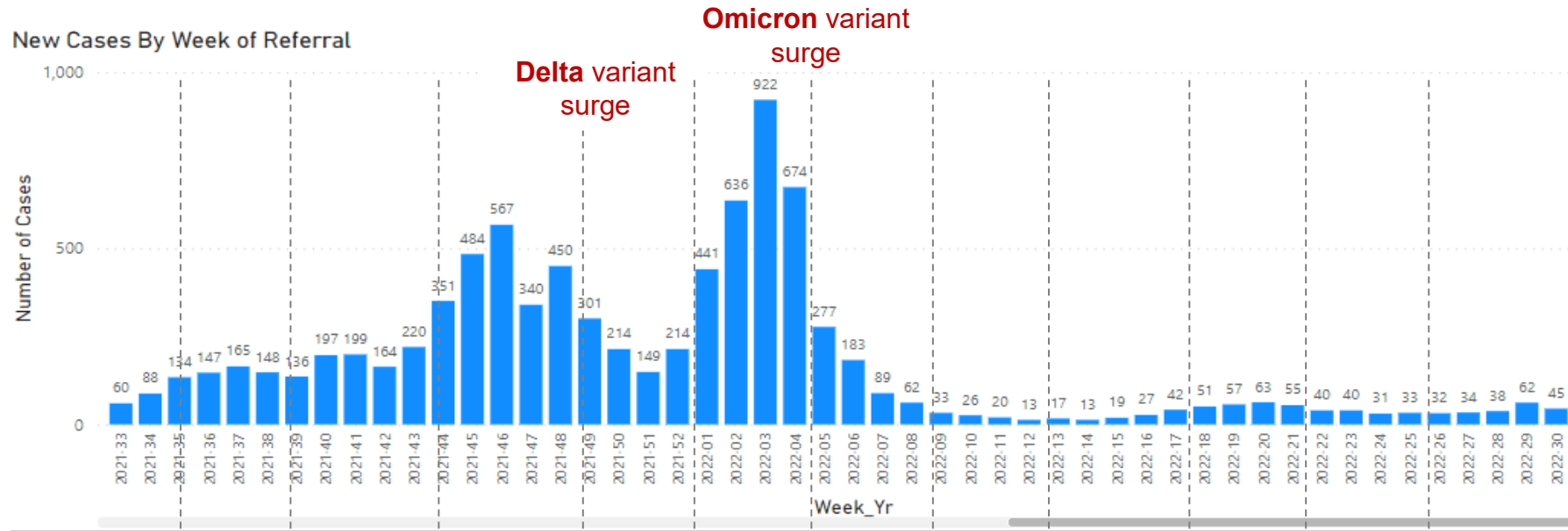
Children

**Note:** Use of at home tests since late 2021 likely reduces the number of positive tests reported to Public Health, resulting in an artificially lower number of cases.

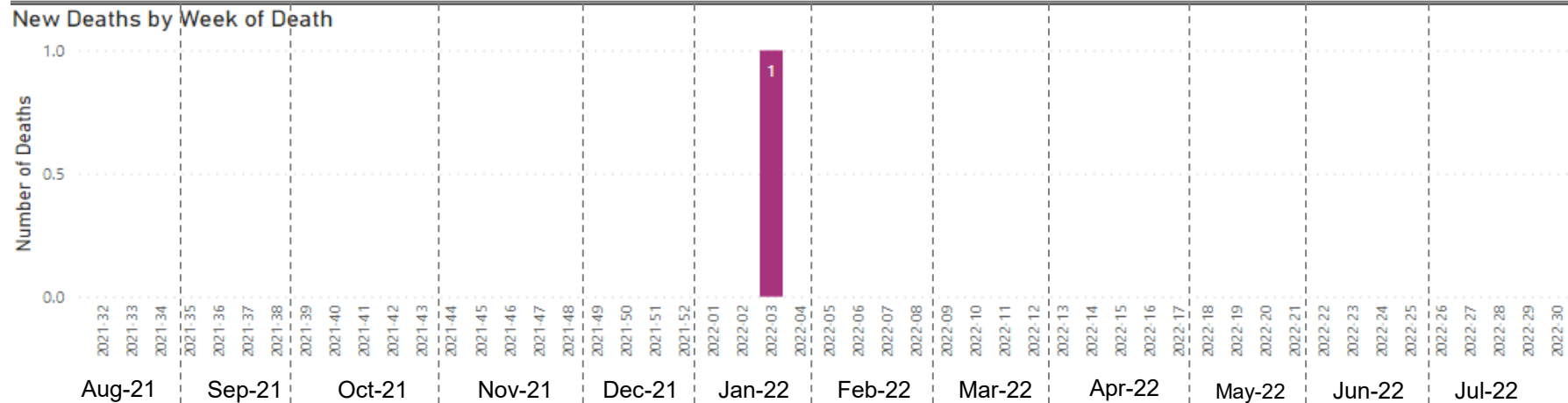
**Source:** Michigan Department of Health and Human Services, Michigan Disease Surveillance System



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



The weekly number of cases among children **decreased 27%** from week 29 to week 30.



The first COVID-19 associated death in a child occurred in January of 2022. The death was identified as a COVID-19 associated death in June of 2022, after the death certificate was completed.

**Note:** Use of at home tests since late 2021 likely reduces the number of positive tests reported to Public Health, resulting in artificially deflated case counts.

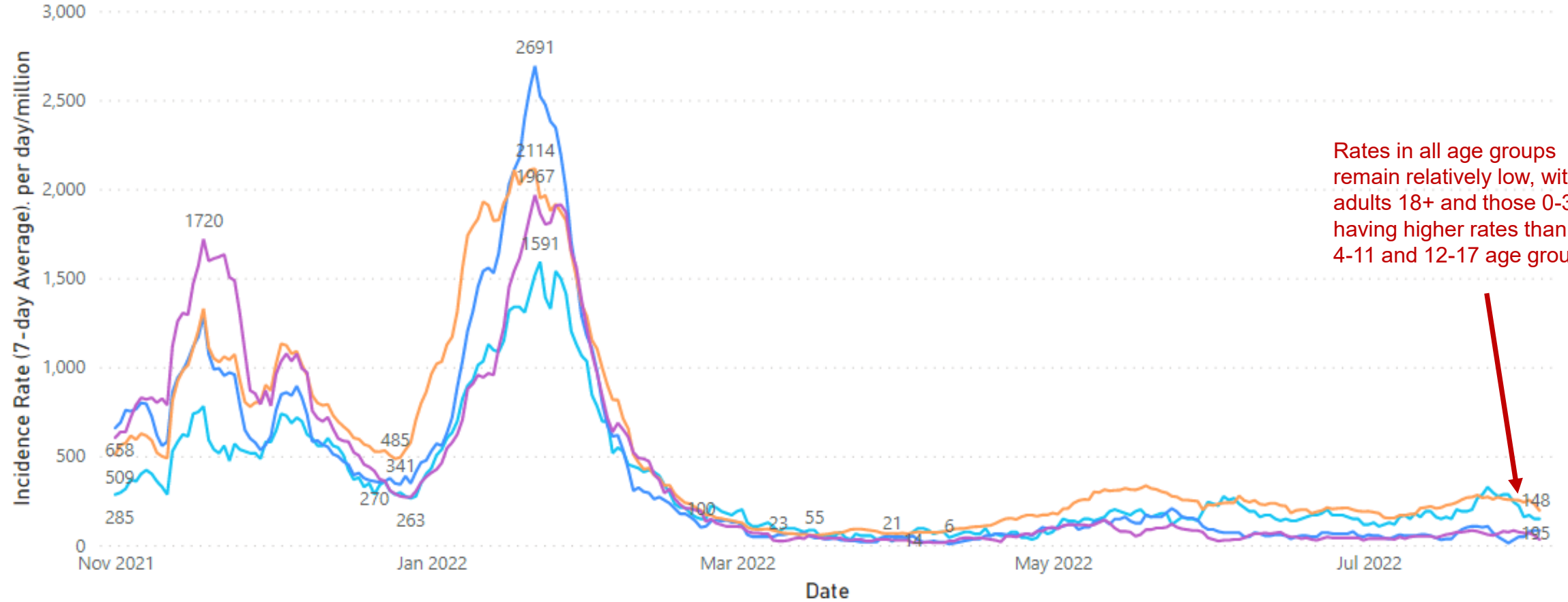
**Source:** Michigan Department of Health and Human Services, Michigan Disease Surveillance System

# Ottawa County - Case Rate Trends – by Age

COVID-19 Case Rates by Age, includes School-Aged, November 2021 – August 03, 2022

Incidence Rate (7-day Average)

rategroup ● 0-3 ● 12-17 ● 18+ ● 4-11



Rates in all age groups remain relatively low, with adults 18+ and those 0-3 having higher rates than the 4-11 and 12-17 age groups.

**Note:** Use of at home tests since late 2021 likely reduces the number of positive tests reported to Public Health, resulting in artificially deflated case rates.

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

Data as of Aug 03, 2022

USA & MI

Spread

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Risk Levels

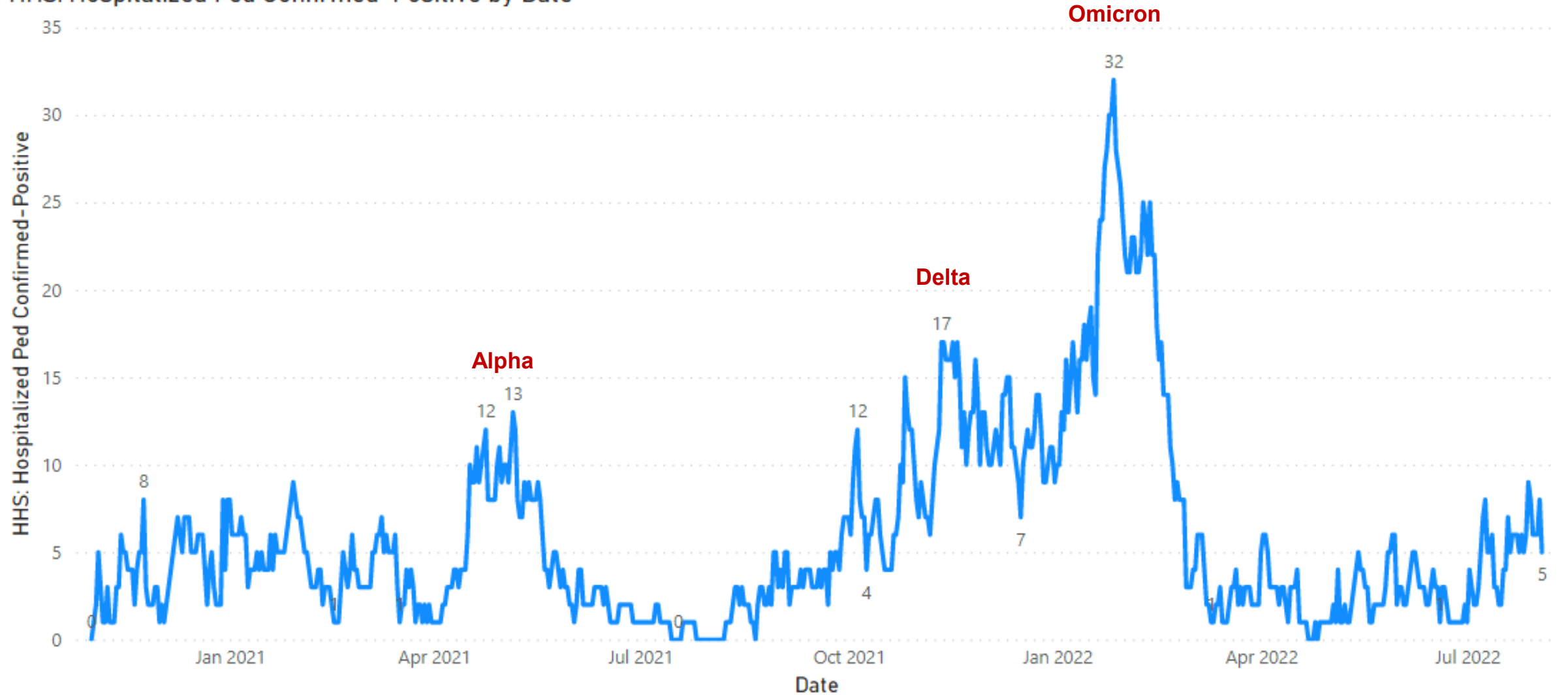
Other

Media

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# Daily Hospital Pediatric Census – West Michigan

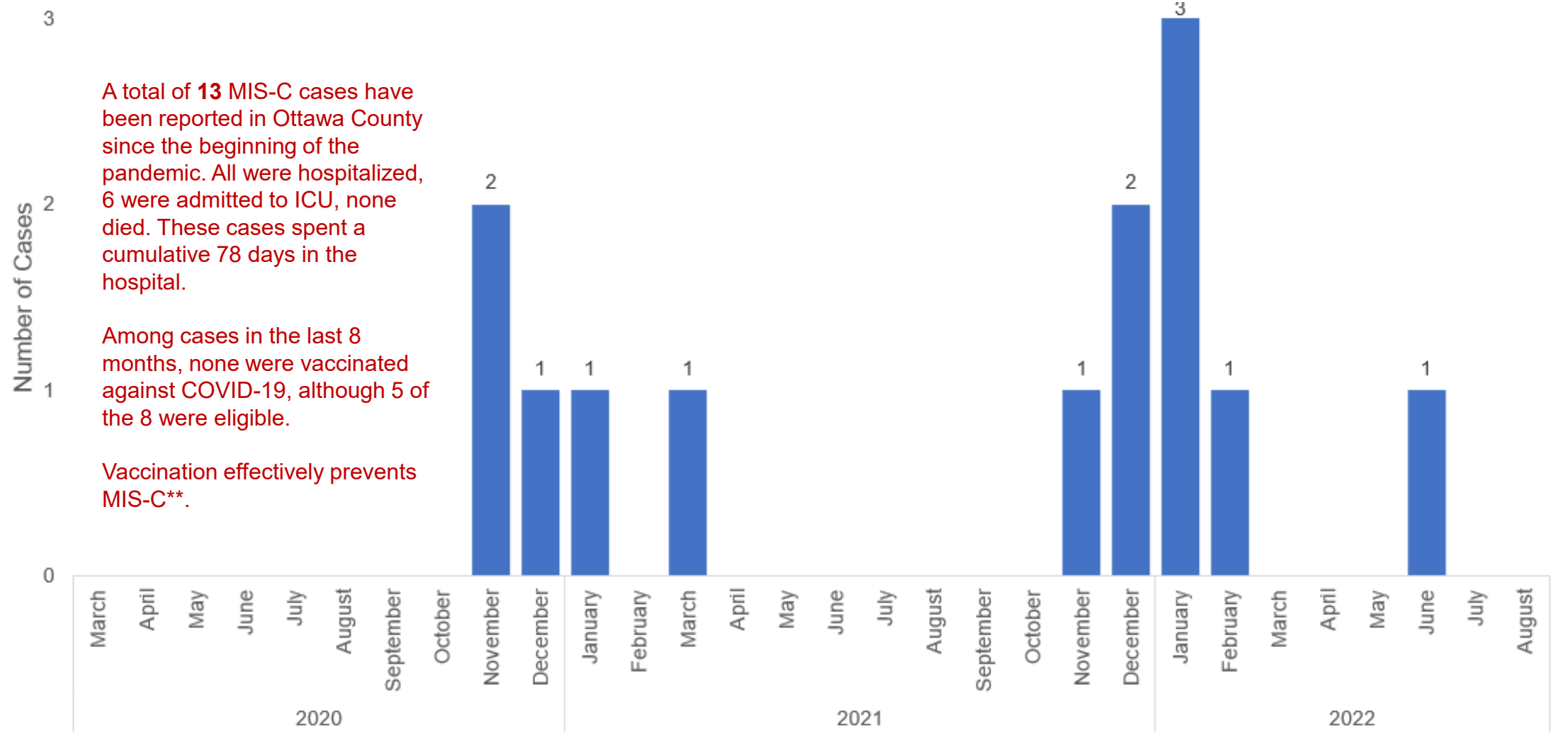
HHS: Hospitalized Ped Confirmed-Positive by Date



**Note:** Data above includes persons younger than 18 years of age with confirmed COVID-19 hospitalized at West Michigan hospitals. Patients may be listed in more than one day. Data may change as information is updated. Includes patients that reside in counties across the region, including Ottawa County.

Data through Aug 03, 2022

# Ottawa County MIS-C\* Cases by Month



A total of **13** MIS-C cases have been reported in Ottawa County since the beginning of the pandemic. All were hospitalized, 6 were admitted to ICU, none died. These cases spent a cumulative 78 days in the hospital.

Among cases in the last 8 months, none were vaccinated against COVID-19, although 5 of the 8 were eligible.

Vaccination effectively prevents MIS-C\*\*.

**Notes:** Includes confirmed and probable cases.

\*MIS-C is a rare but serious condition affecting children, associated with recent COVID-19 infection. For more details on MIS-C please visit: <https://www.cdc.gov/mis/index.html>

\*\*Sources: [MMWR](#) & [The Lancet](#)

Data through August 3, 2022

# Ottawa County Hospital Capacity – All Beds

## Hospital Inpatient Bed Occupancy - By County

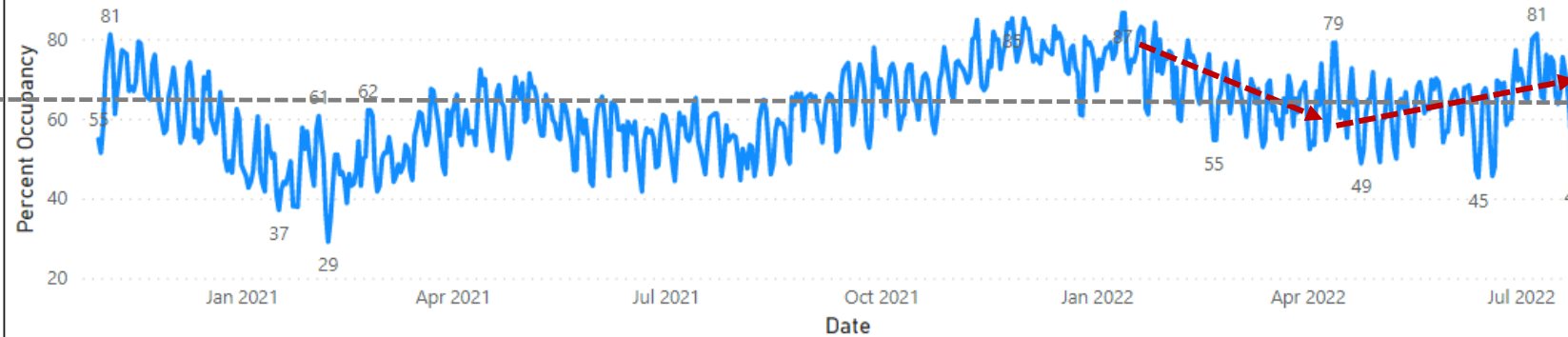
### Total Inpatient Bed Occupancy (All Patients, COVID and Non-COVID)

Pandemic Average

62%

Percent Occupancy by Date and County

County ● Ottawa



Total hospital bed occupancy is **above the pandemic average**.

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

12%

Percent Occupancy by Date and County

County ● Ottawa



Currently **6%** of all inpatient beds are occupied by COVID-19 patients.

Source: EMResources

Data through Aug 03, 2022

USA & MI

Spread

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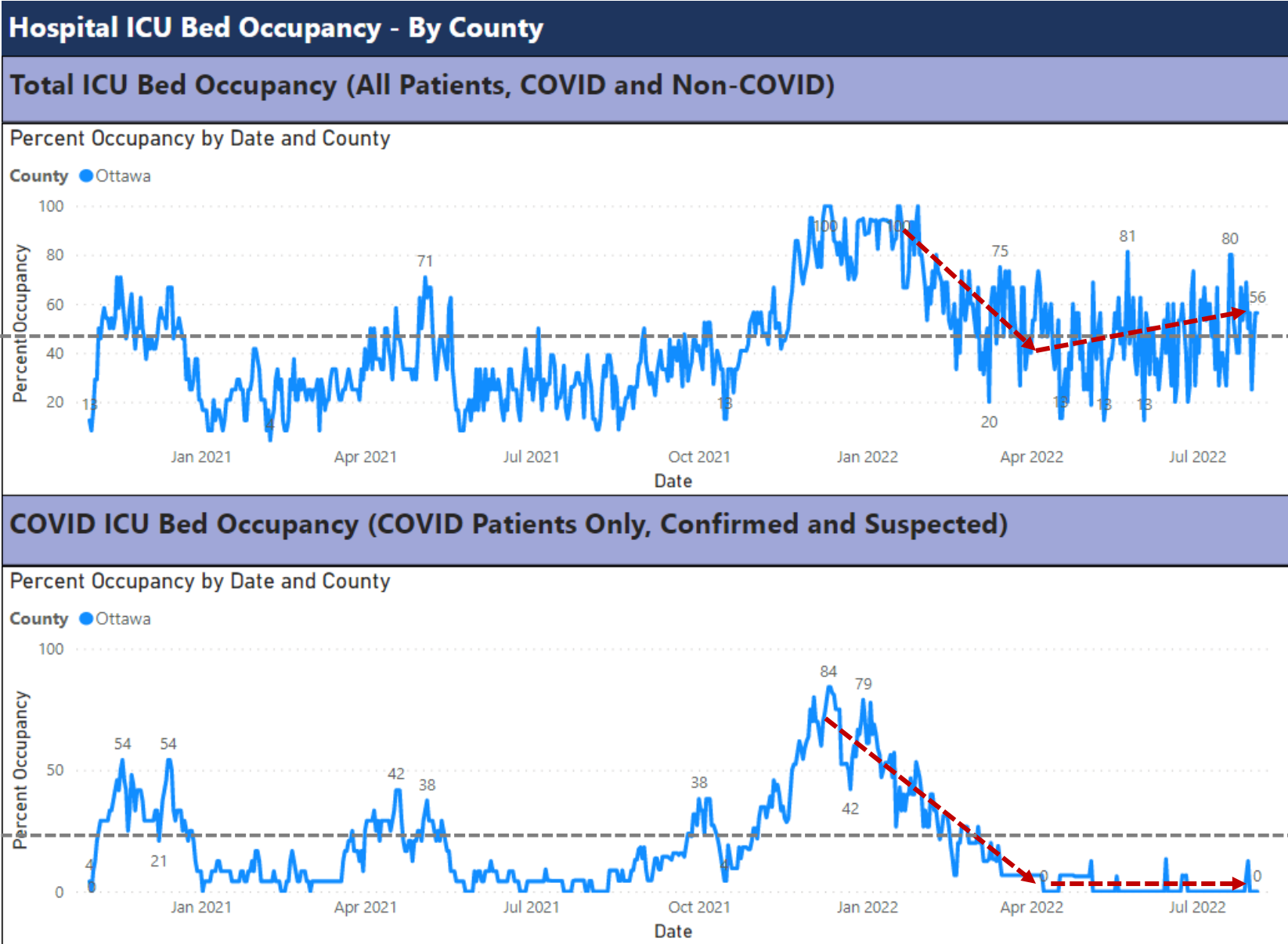
Risk Levels

Other

Media

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# Ottawa County Hospital Capacity – ICU Beds



Pandemic Average

42%

Total ICU bed occupancy is above the pandemic average

18%

The proportion of ICU beds occupied by COVID-19 patients is below the pandemic average. Currently, 0% of ICU beds are occupied by COVID-19 patients.

Source: EMResources

Data through Aug 03, 2022

# Ottawa County Age-Standardized Rates of COVID-19 Cases, Hospitalizations, & Deaths by Vaccination Status

Unvaccinated people aged 5 years and older had:

**2.8x**

Risk of Becoming a COVID-19 Case

**AND**

**6.0 x**

Risk of Dying from COVID-19

**5.4 x**

Risk of Being Hospitalized for COVID-19

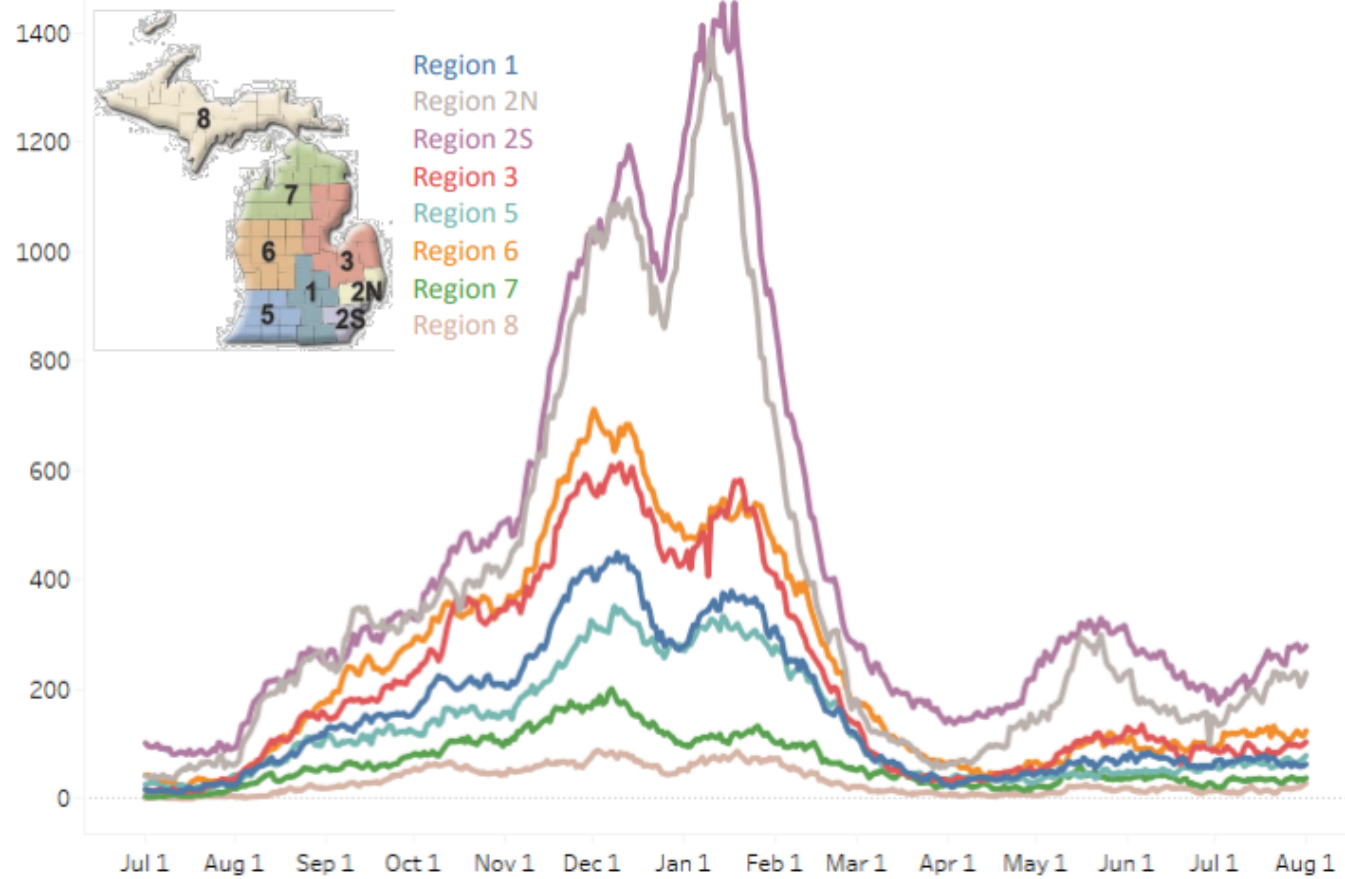
**in June 2022, compared to people vaccinated with at least a primary series.**

**Notes:** For comparison to the nation please see: <https://covid.cdc.gov/covid-data-tracker/#rates-by-vaccine-status>

**Methods:** Both probable and confirmed cases were included, denominators were obtained from CDC Wonder (2019), and standardized population is 2000 US population. Methods may be refined, resulting in updated data.

# Statewide Hospitalization Trends: Regional COVID+ Census

Hospitalization Trends 7/1/2021 – 8/1/2022  
Confirmed Positive by Region



This week hospitalizations have increased in all regions except for Region 1.

Regions 2N and 2S have greater than 100 hospitalizations/M. All other regions have less than 100 hospitalizations/M.

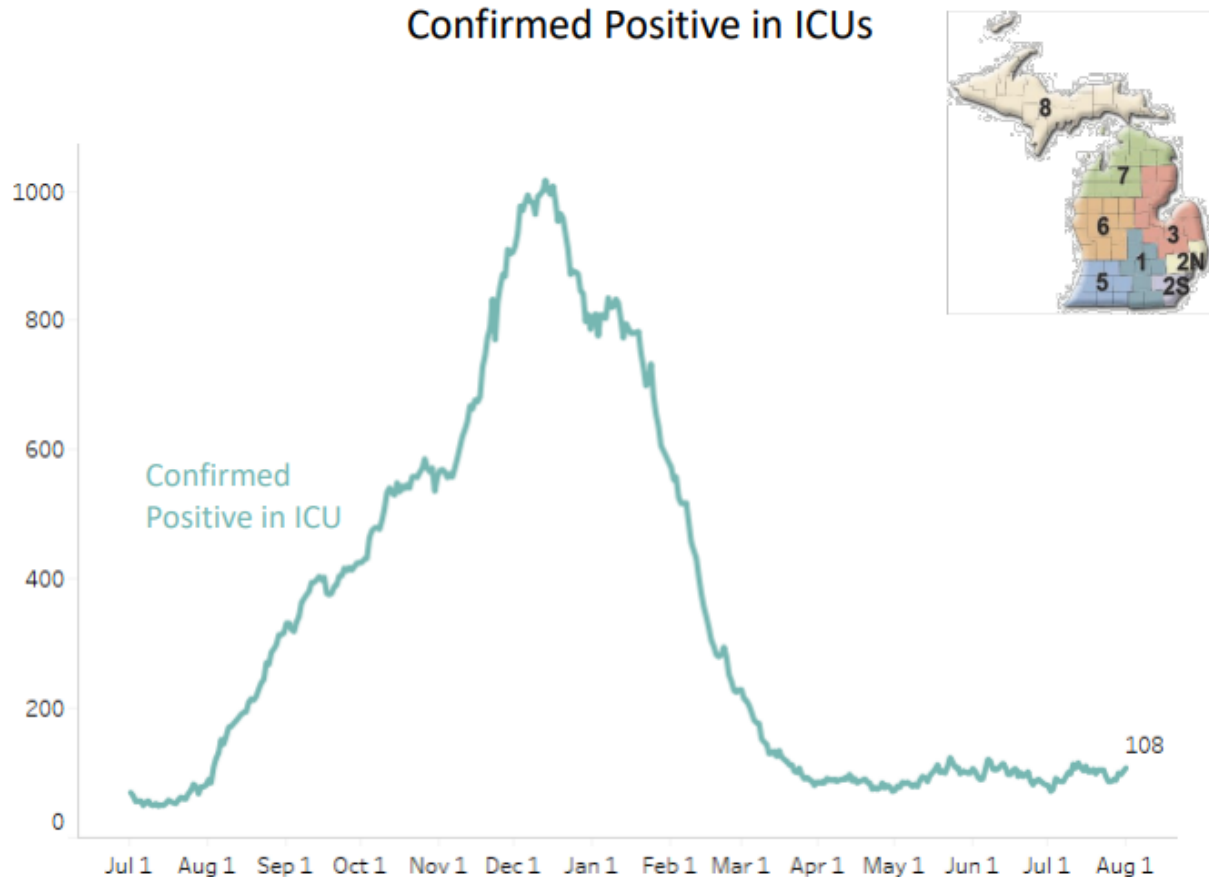
Region	COVID+ Hospitalizations (% Δ from last week)	COVID+ Hospitalizations / MM
Region 1	63 (-2%)	58/M
Region 2N	230 (4%)	104/M
Region 2S	279 (14%)	125/M
Region 3	104 (9%)	92/M
Region 5	79 (7%)	83/M
Region 6	124 (14%)	85/M
Region 7	38 (9%)	76/M
Region 8	28 (33%)	90/M

Source: MDHHS Data and Modelling: [MI COVID response Data and modeling update \(michigan.gov\)](https://www.michigan.gov/mdhhs/0,4570,7-323_7-324_7-325_7-326_7-327_7-328_7-329_7-330_7-331_7-332_7-333_7-334_7-335_7-336_7-337_7-338_7-339_7-340_7-341_7-342_7-343_7-344_7-345_7-346_7-347_7-348_7-349_7-350_7-351_7-352_7-353_7-354_7-355_7-356_7-357_7-358_7-359_7-360_7-361_7-362_7-363_7-364_7-365_7-366_7-367_7-368_7-369_7-370_7-371_7-372_7-373_7-374_7-375_7-376_7-377_7-378_7-379_7-380_7-381_7-382_7-383_7-384_7-385_7-386_7-387_7-388_7-389_7-390_7-391_7-392_7-393_7-394_7-395_7-396_7-397_7-398_7-399_7-400_7-401_7-402_7-403_7-404_7-405_7-406_7-407_7-408_7-409_7-410_7-411_7-412_7-413_7-414_7-415_7-416_7-417_7-418_7-419_7-420_7-421_7-422_7-423_7-424_7-425_7-426_7-427_7-428_7-429_7-430_7-431_7-432_7-433_7-434_7-435_7-436_7-437_7-438_7-439_7-440_7-441_7-442_7-443_7-444_7-445_7-446_7-447_7-448_7-449_7-450_7-451_7-452_7-453_7-454_7-455_7-456_7-457_7-458_7-459_7-460_7-461_7-462_7-463_7-464_7-465_7-466_7-467_7-468_7-469_7-470_7-471_7-472_7-473_7-474_7-475_7-476_7-477_7-478_7-479_7-480_7-481_7-482_7-483_7-484_7-485_7-486_7-487_7-488_7-489_7-490_7-491_7-492_7-493_7-494_7-495_7-496_7-497_7-498_7-499_7-500_7-501_7-502_7-503_7-504_7-505_7-506_7-507_7-508_7-509_7-510_7-511_7-512_7-513_7-514_7-515_7-516_7-517_7-518_7-519_7-520_7-521_7-522_7-523_7-524_7-525_7-526_7-527_7-528_7-529_7-530_7-531_7-532_7-533_7-534_7-535_7-536_7-537_7-538_7-539_7-540_7-541_7-542_7-543_7-544_7-545_7-546_7-547_7-548_7-549_7-550_7-551_7-552_7-553_7-554_7-555_7-556_7-557_7-558_7-559_7-560_7-561_7-562_7-563_7-564_7-565_7-566_7-567_7-568_7-569_7-570_7-571_7-572_7-573_7-574_7-575_7-576_7-577_7-578_7-579_7-580_7-581_7-582_7-583_7-584_7-585_7-586_7-587_7-588_7-589_7-590_7-591_7-592_7-593_7-594_7-595_7-596_7-597_7-598_7-599_7-600_7-601_7-602_7-603_7-604_7-605_7-606_7-607_7-608_7-609_7-610_7-611_7-612_7-613_7-614_7-615_7-616_7-617_7-618_7-619_7-620_7-621_7-622_7-623_7-624_7-625_7-626_7-627_7-628_7-629_7-630_7-631_7-632_7-633_7-634_7-635_7-636_7-637_7-638_7-639_7-640_7-641_7-642_7-643_7-644_7-645_7-646_7-647_7-648_7-649_7-650_7-651_7-652_7-653_7-654_7-655_7-656_7-657_7-658_7-659_7-660_7-661_7-662_7-663_7-664_7-665_7-666_7-667_7-668_7-669_7-670_7-671_7-672_7-673_7-674_7-675_7-676_7-677_7-678_7-679_7-680_7-681_7-682_7-683_7-684_7-685_7-686_7-687_7-688_7-689_7-690_7-691_7-692_7-693_7-694_7-695_7-696_7-697_7-698_7-699_7-700_7-701_7-702_7-703_7-704_7-705_7-706_7-707_7-708_7-709_7-710_7-711_7-712_7-713_7-714_7-715_7-716_7-717_7-718_7-719_7-720_7-721_7-722_7-723_7-724_7-725_7-726_7-727_7-728_7-729_7-730_7-731_7-732_7-733_7-734_7-735_7-736_7-737_7-738_7-739_7-740_7-741_7-742_7-743_7-744_7-745_7-746_7-747_7-748_7-749_7-750_7-751_7-752_7-753_7-754_7-755_7-756_7-757_7-758_7-759_7-760_7-761_7-762_7-763_7-764_7-765_7-766_7-767_7-768_7-769_7-770_7-771_7-772_7-773_7-774_7-775_7-776_7-777_7-778_7-779_7-780_7-781_7-782_7-783_7-784_7-785_7-786_7-787_7-788_7-789_7-790_7-791_7-792_7-793_7-794_7-795_7-796_7-797_7-798_7-799_7-800_7-801_7-802_7-803_7-804_7-805_7-806_7-807_7-808_7-809_7-810_7-811_7-812_7-813_7-814_7-815_7-816_7-817_7-818_7-819_7-820_7-821_7-822_7-823_7-824_7-825_7-826_7-827_7-828_7-829_7-830_7-831_7-832_7-833_7-834_7-835_7-836_7-837_7-838_7-839_7-840_7-841_7-842_7-843_7-844_7-845_7-846_7-847_7-848_7-849_7-850_7-851_7-852_7-853_7-854_7-855_7-856_7-857_7-858_7-859_7-860_7-861_7-862_7-863_7-864_7-865_7-866_7-867_7-868_7-869_7-870_7-871_7-872_7-873_7-874_7-875_7-876_7-877_7-878_7-879_7-880_7-881_7-882_7-883_7-884_7-885_7-886_7-887_7-888_7-889_7-890_7-891_7-892_7-893_7-894_7-895_7-896_7-897_7-898_7-899_7-900_7-901_7-902_7-903_7-904_7-905_7-906_7-907_7-908_7-909_7-910_7-911_7-912_7-913_7-914_7-915_7-916_7-917_7-918_7-919_7-920_7-921_7-922_7-923_7-924_7-925_7-926_7-927_7-928_7-929_7-930_7-931_7-932_7-933_7-934_7-935_7-936_7-937_7-938_7-939_7-940_7-941_7-942_7-943_7-944_7-945_7-946_7-947_7-948_7-949_7-950_7-951_7-952_7-953_7-954_7-955_7-956_7-957_7-958_7-959_7-960_7-961_7-962_7-963_7-964_7-965_7-966_7-967_7-968_7-969_7-970_7-971_7-972_7-973_7-974_7-975_7-976_7-977_7-978_7-979_7-980_7-981_7-982_7-983_7-984_7-985_7-986_7-987_7-988_7-989_7-990_7-991_7-992_7-993_7-994_7-995_7-996_7-997_7-998_7-999_800)



# Statewide Hospitalization Trends: ICU COVID+ Census

Hospitalization Trends 7/1/2021 – 8/1/2022  
Confirmed Positive in ICUs



Overall, the volume of COVID+ patients in ICUs has increased by 24% from last week. There are 108 COVID+ patients in ICU beds across the state.

ICU occupancy is at or below 85% in all regions. Region 8 has greater than 10% of ICU beds occupied by COVID+ patients. All other regions have fewer than 10% of ICU beds occupied by COVID+ patients

Region	Adult COVID+ in ICU (% Δ from last week)	ICU Occupancy	% of ICU beds COVID+
Region 1	7 (-13%)	84%	4%
Region 2N	30 (50%)	64%	5%
Region 2S	39 (18%)	78%	6%
Region 3	4 (33%)	84%	1%
Region 5	5 (-44%)	66%	3%
Region 6	8 (60%)	79%	4%
Region 7	8 (33%)	83%	6%
Region 8	7 (133%)	59%	11%

Source: MDHHS Data and Modelling: [MI COVID response Data and modeling update \(michigan.gov\)](https://michigan.gov/MDHHS/0,4570,7-293_15247_15248_15249_15250_15251_15252_15253_15254_15255_15256_15257_15258_15259_15260_15261_15262_15263_15264_15265_15266_15267_15268_15269_15270_15271_15272_15273_15274_15275_15276_15277_15278_15279_15280_15281_15282_15283_15284_15285_15286_15287_15288_15289_15290_15291_15292_15293_15294_15295_15296_15297_15298_15299_15300_15301_15302_15303_15304_15305_15306_15307_15308_15309_15310_15311_15312_15313_15314_15315_15316_15317_15318_15319_15320_15321_15322_15323_15324_15325_15326_15327_15328_15329_15330_15331_15332_15333_15334_15335_15336_15337_15338_15339_15340_15341_15342_15343_15344_15345_15346_15347_15348_15349_15350_15351_15352_15353_15354_15355_15356_15357_15358_15359_15360_15361_15362_15363_15364_15365_15366_15367_15368_15369_15370_15371_15372_15373_15374_15375_15376_15377_15378_15379_15380_15381_15382_15383_15384_15385_15386_15387_15388_15389_15390_15391_15392_15393_15394_15395_15396_15397_15398_15399_15400_15401_15402_15403_15404_15405_15406_15407_15408_15409_15410_15411_15412_15413_15414_15415_15416_15417_15418_15419_15420_15421_15422_15423_15424_15425_15426_15427_15428_15429_15430_15431_15432_15433_15434_15435_15436_15437_15438_15439_15440_15441_15442_15443_15444_15445_15446_15447_15448_15449_15450_15451_15452_15453_15454_15455_15456_15457_15458_15459_15460_15461_15462_15463_15464_15465_15466_15467_15468_15469_15470_15471_15472_15473_15474_15475_15476_15477_15478_15479_15480_15481_15482_15483_15484_15485_15486_15487_15488_15489_15490_15491_15492_15493_15494_15495_15496_15497_15498_15499_15500)

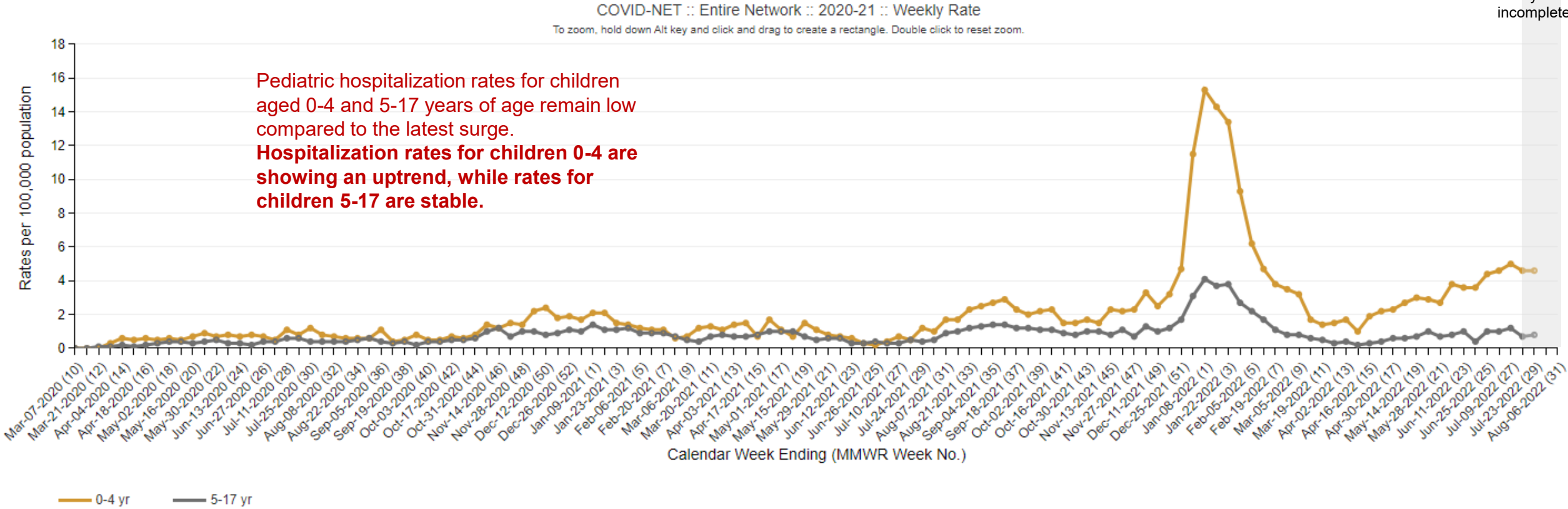
# Pediatric Hospitalization Rates – USA, Michigan



Pediatric hospitalization rates across the US continue increasing. **Rates in Michigan may also be increasing.**

# Pediatric Hospitalization Rates by Age Group – USA

Recent data may be incomplete



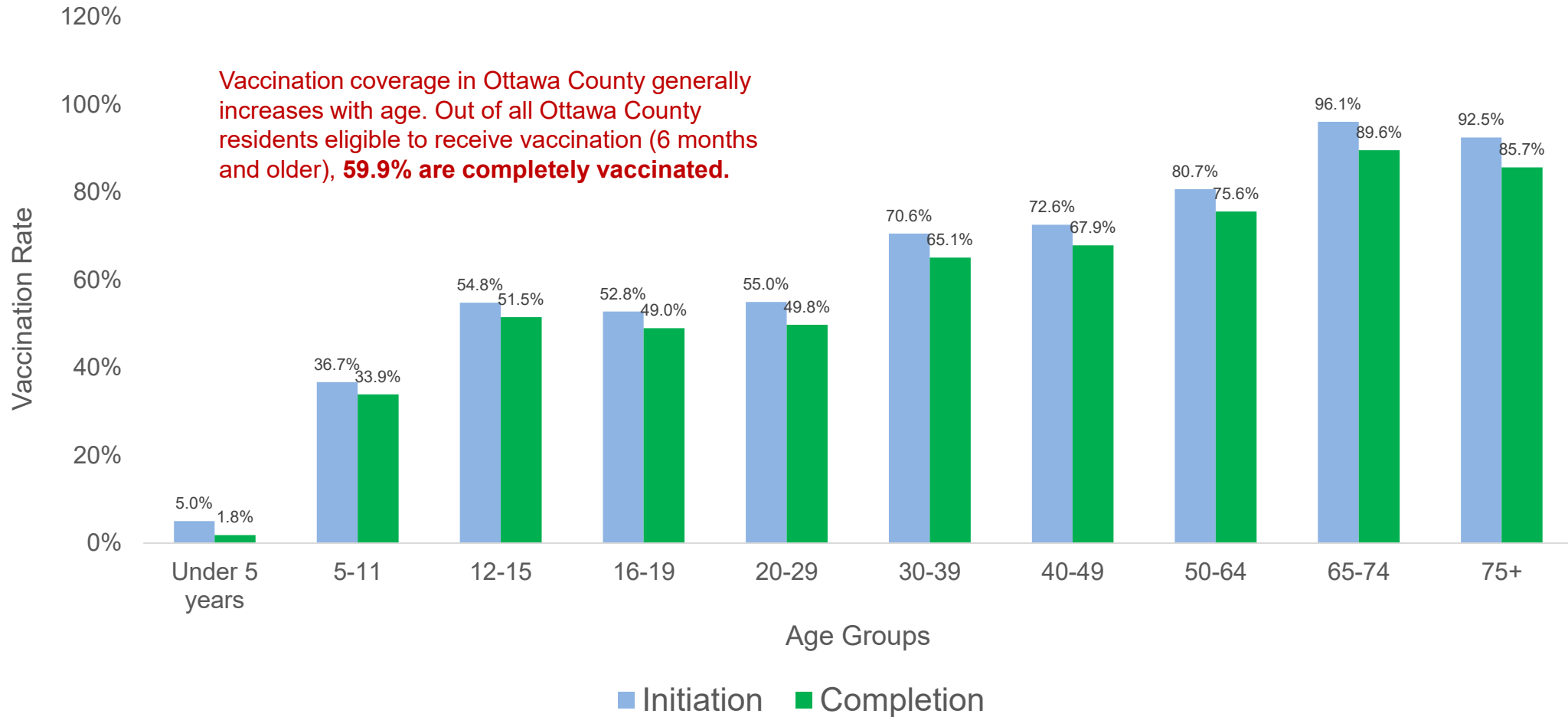
The Coronavirus Disease 2019 (COVID-19)-Associated Hospitalization Surveillance Network (COVID-NET) hospitalization data are preliminary and subject to change as more data become available. In particular, case counts and rates for recent hospital admissions are subject to lag. Lag for COVID-NET case 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 Aug 04, 2022

# Vaccination Coverage by Age



**Notes:**  
Completion is the percentage of people receiving at least 2 doses of Pfizer or Moderna or 1 dose of J&J.

**Source:** <https://www.michigan.gov/coronavirus/resources/covid-19-vaccine/covid-19-dashboard>

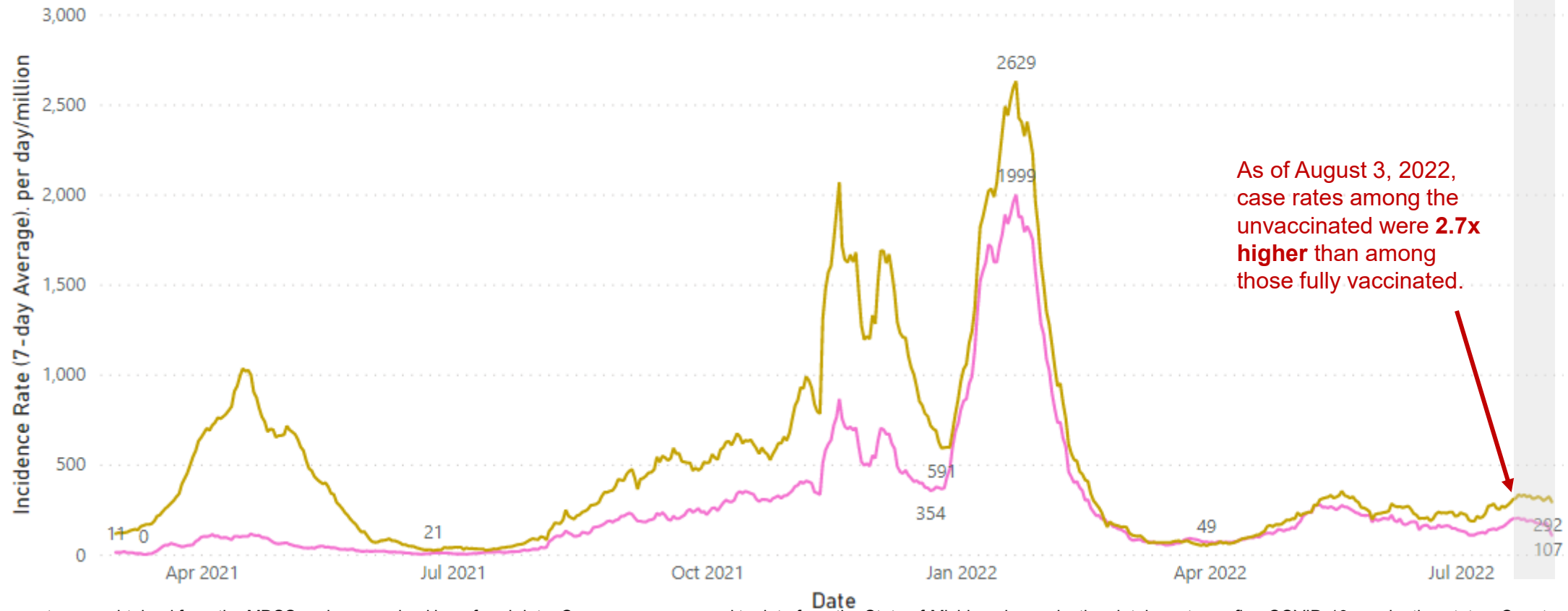
Data through August 3, 2022

# Ottawa County COVID-19 Vaccination Breakthrough Case Trends

Incidence Rate (7-day Average)

rategroup ● Fully Vaccinated ● Unvaccinated

Recent data may be incomplete



As of August 3, 2022, case rates among the unvaccinated were **2.7x higher** than among those 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. On December 22, 2021 this figure was updated to compare fully vaccinated and unvaccinated persons, to align more closely with [CDC data](https://www.cdc.gov/covid19/); partially vaccinated persons were excluded. Fully vaccinated is defined as 2 or more doses of an mRNA vaccination or at least one dose of J&J.

**Note:** Use of at home tests since late 2021 likely reduces the number of positive tests reported to Public Health, resulting in artificially deflated case rates. Children aged 6 months to 4 years to be included in future reports.

**Sources:**

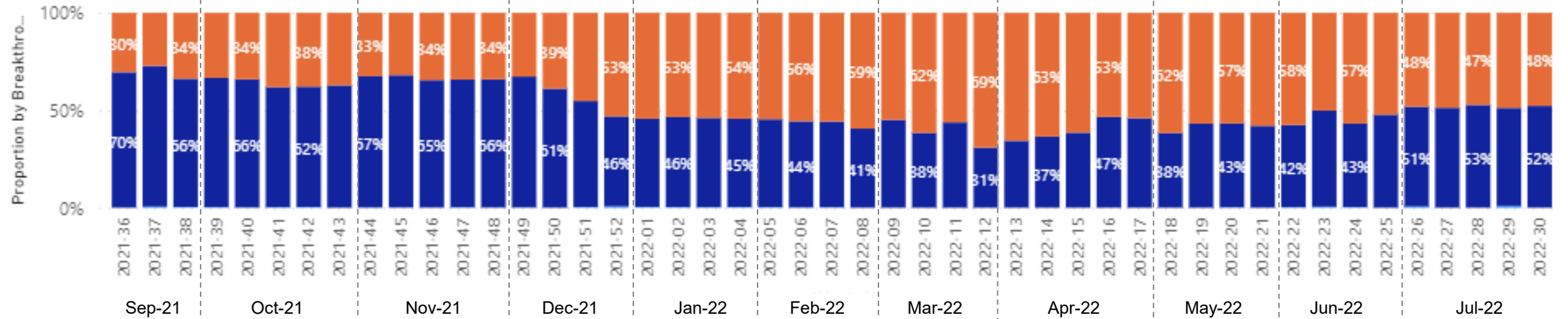
Michigan Department of Health and Human Services, Michigan Disease Surveillance System  
 MDHHS COVID-19 Dashboard: <https://www.michigan.gov/coronavirus/stats>

# Ottawa County COVID-19 Vaccination Breakthrough Case Trends

## By Week

Breakthrough Proportions by Week

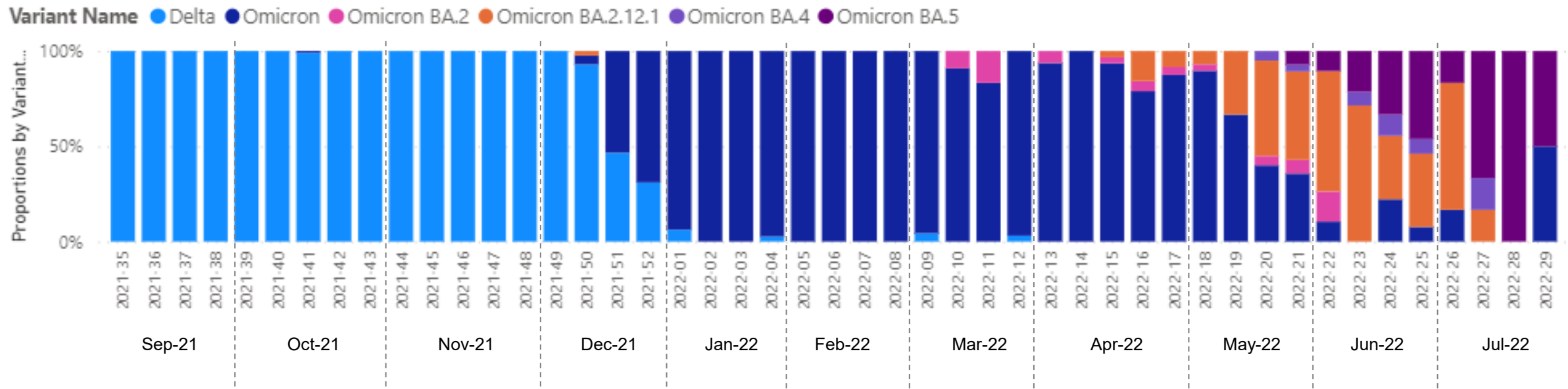
Vaccine\_Breakthrough ● NO ● YES



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 were identified as the **Alpha** variant. By the end of July 2021, all clinical samples tested were identified as the **Delta** variant and from late July through early December 2021, all clinical samples submitted for variant testing continued to be identified as the **Delta** variant. In mid-December 2021, the first **Omicron** positive sample was collected in an Ottawa County resident, and **Omicron** continues to be detected into 2022, with more recent additions of the **Omicron subvariants** BA.2.12.1 and BA.4/5 (first detected in clinical samples in late May 2022).

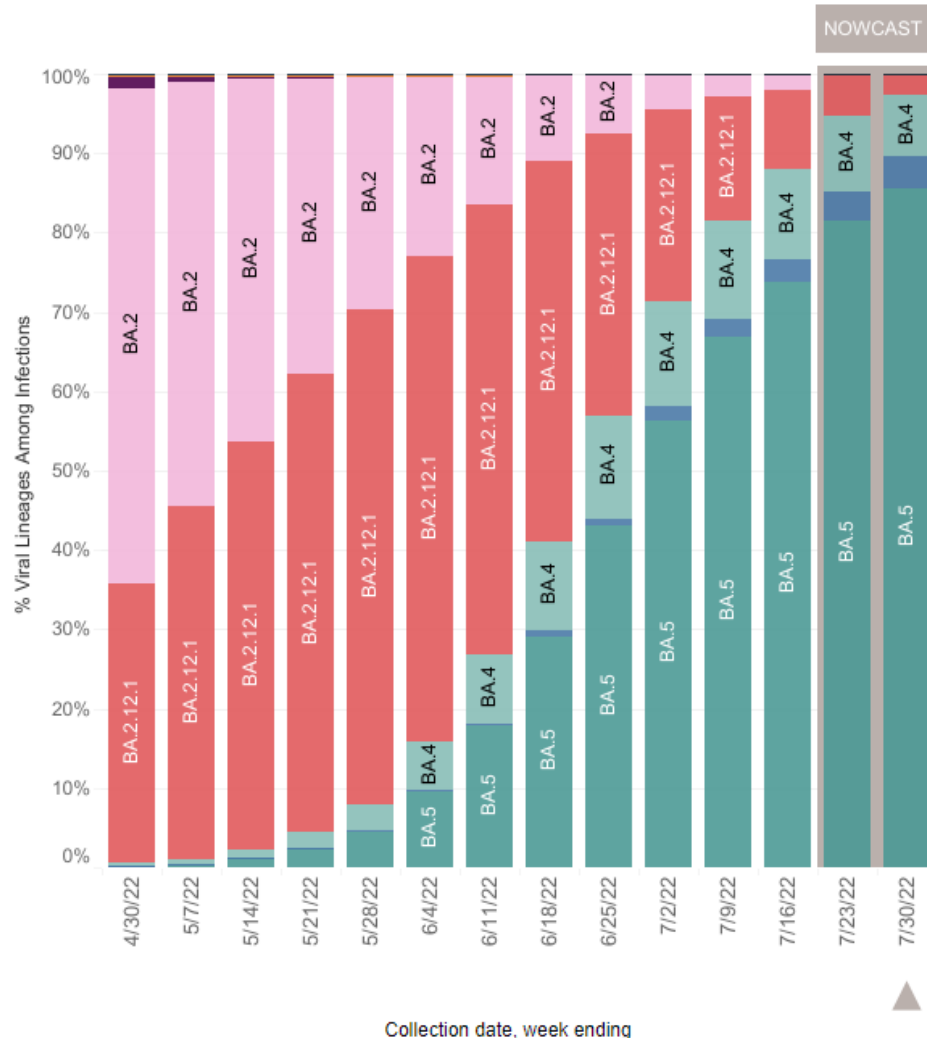
\* Swabs from Ottawa County residents that tested positive for COVID-19 by PCR; only a small proportion of all COVID-19 positive tests are tested for variants.

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

# Variants – Clinical Samples from Across the USA

United States: 4/24/2022 – 7/30/2022

United States: 7/24/2022 – 7/30/2022 NOWCAST



USA				
WHO label	Lineage #	US Class	%Total	95%PI
Omicron	BA.5	VOC	85.5%	83.8-87.0%
	BA.4	VOC	7.7%	7.0-8.5%
	BA.4.6	VOC	4.1%	3.2-5.4%
	BA.2.12.1	VOC	2.6%	2.4-2.8%
	BA.2	VOC	0.1%	0.1-0.1%
	B.1.1.529	VOC	0.0%	0.0-0.0%
	BA.1.1	VOC	0.0%	0.0-0.0%
Delta	B.1.617.2	VBM	0.0%	0.0-0.0%
Other	Other*		0.0%	0.0-0.0%

The **Omicron** variant and its subvariants are estimated to account for 100% of all clinical samples collected in the United States the week ending July 30, 2022.

Newer Omicron subvariants are circulating, with BA.5 emerging as the dominant variant.

\* Enumerated lineages are US VOC and lineages circulating above 1% nationally in at least one week period. "Other" represents the aggregation of lineages which are circulating <1% nationally during all weeks displayed.  
 \*\* These data include Nowcast estimates, which are modeled projections that may differ from weighted estimates generated at later dates  
 # AY.1-AY.133 and their sublineages are aggregated with B.1.617.2. BA.1, BA.3 and their sublineages (except BA.1.1 and its sublineages) are aggregated with B.1.1.529. For regional data, BA.1.1 and its sublineages are also aggregated with B.1.1.529, as they currently cannot be reliably called in each region. Except BA.2.12.1, BA.2 sublineages are aggregated with BA.2. Except BA.4.6, sublineages of BA.4 are aggregated to BA.4. Sublineages of BA.5 are aggregated to BA.5.

Collection date, week ending

Source: CDC: <https://covid.cdc.gov/covid-data-tracker/#variant-proportions>

Accessed Aug 04, 2022



# Variants – Wastewater Sampling – Holland/Zeeland

Y = Detected  
N = Not Detected

Sample Date	Site	Delta	Omicron
05/25/2022	North Holland	N	Y
05/26/2022	Zeeland	N	N
05/29/2022	North Holland	N	Y
05/30/2022	Zeeland	N	Y
06/01/2022	North Holland	N	Y
06/02/2022	Zeeland	Y	Y
06/05/2022	North Holland	Y	Y
06/06/2022	Zeeland	Y	Y
06/08/2022	North Holland	Y	Y
06/09/2022	Zeeland	Y	Y
06/16/2022	Zeeland	N	Y
06/16/2022	North Holland	N	Y
06/26/2022	North Holland	N	Y
06/27/2022	Zeeland	N	Y
06/29/2022	North Holland	N	Y
06/30/2022	Zeeland	N	Y
07/03/2022	North Holland	N	Y
07/04/2022	Zeeland	N	Y
07/06/2022	North Holland	NA	Y
07/10/2022	North Holland	N	Y
07/11/2022	Zeeland	N	Y
07/13/2022	North Holland	N	Y
07/14/2022	Zeeland	N	Y
07/21/2022	Zeeland	N	Y
07/21/2022	North Holland	N	Y

The **Delta** variant was consistently detected in Holland and Zeeland wastewater samples through all of November and December of 2021 (data not displayed here).

The **Omicron** variant has been detected in wastewater in Holland and Zeeland since early January 2022 (January through early May not displayed here), with renewed, frequent detection in May and through most of July.

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

# COVID-19 Community Levels

COVID-19 Community Levels – Use the Highest Level that Applies to Your Community				
New COVID-19 Cases Per 100,000 people in the past 7 days	Indicators	Low	Medium	High
Fewer than 200	New COVID-19 admissions per 100,000 population (7-day total)	<10.0	10.0-19.9	≥20.0
	Percent of staffed inpatient beds occupied by COVID-19 patients (7-day average)	<10.0%	10.0-14.9%	≥15.0%
200 or more	New COVID-19 admissions per 100,000 population (7-day total)	NA	<10.0	≥10.0
	Percent of staffed inpatient beds occupied by COVID-19 patients (7-day average)	NA	<10.0%	≥10.0%

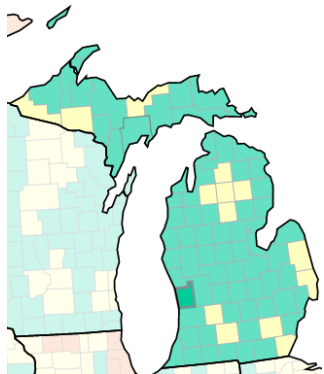
Note: The COVID-19 community level is determined by the higher of the new admissions and inpatient beds metrics, based on the current level of new cases per 100,000 population in the past 7 days.

Source: <https://www.cdc.gov/coronavirus/2019-ncov/science/community-levels.html>

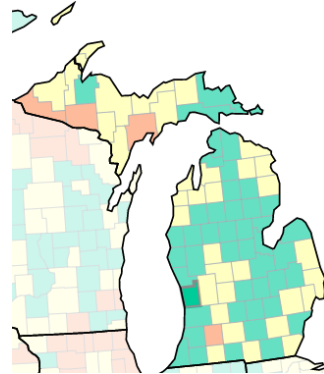
# CDC Community Levels – Ottawa County

- Current Community Level in Ottawa – **LOW**
- Current Data:
  - Case Rate (per 100k pop 7-day total) = **165.51**
  - COVID-19 Hospital Admissions (per 100K pop 7-day total) = **6.1**
  - COVID-19 Inpatient Hospital Bed Utilization (7-day average) = **5.2%**

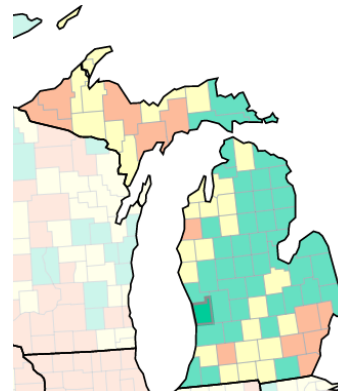
**2 Weeks Ago**



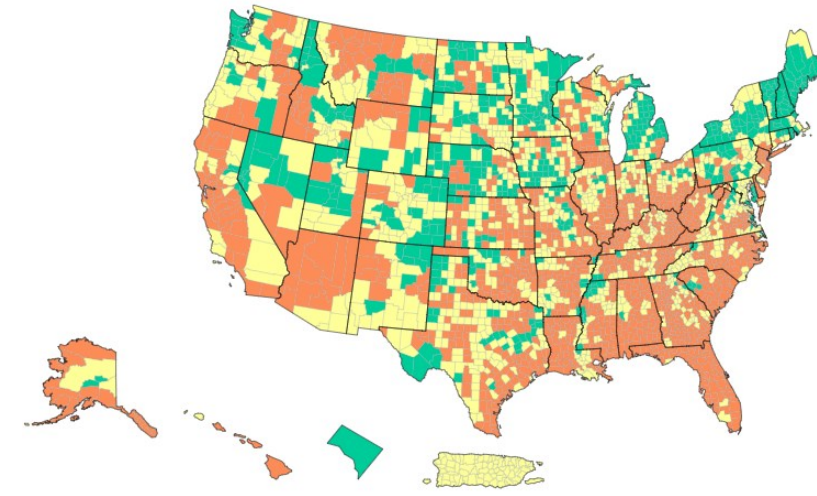
**Last Week**



**This Week**



**USA - This Week**



Legend

High

Low

Medium

Source: <https://www.cdc.gov/coronavirus/2019-ncov/your-health/covid-by-county.html>

Data updated by CDC  
on Aug 03, 2022

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*

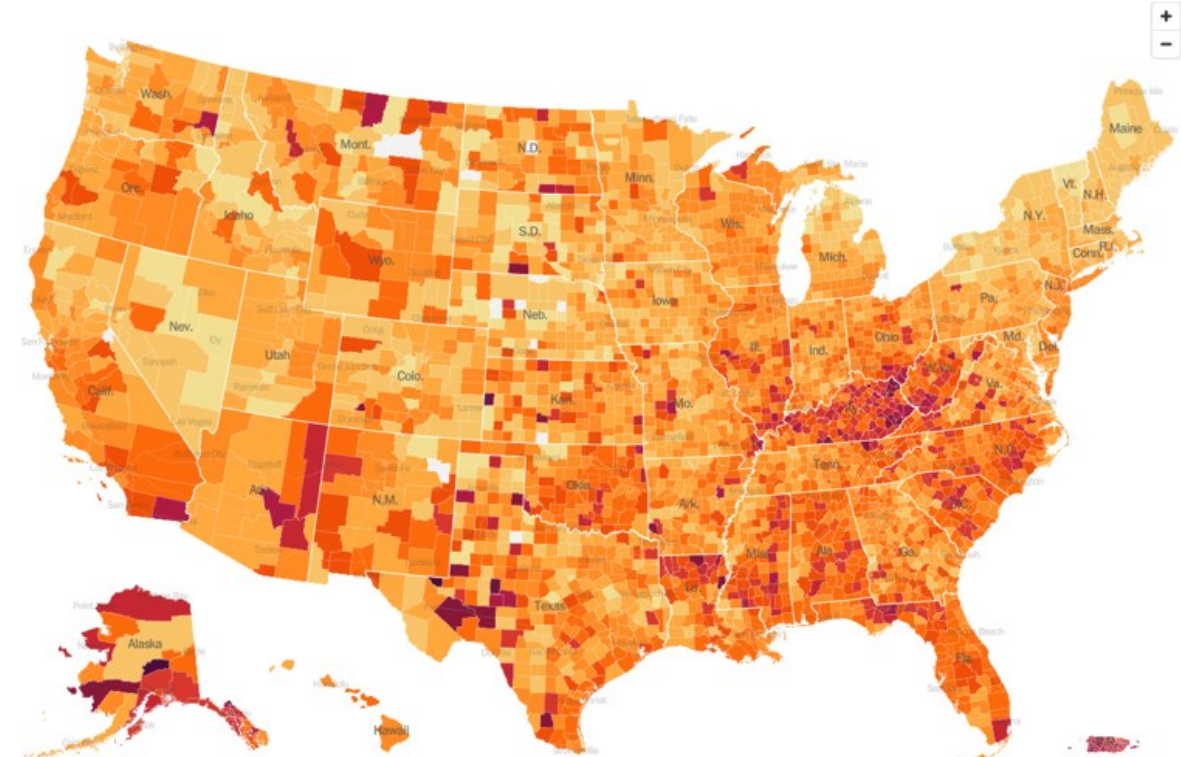
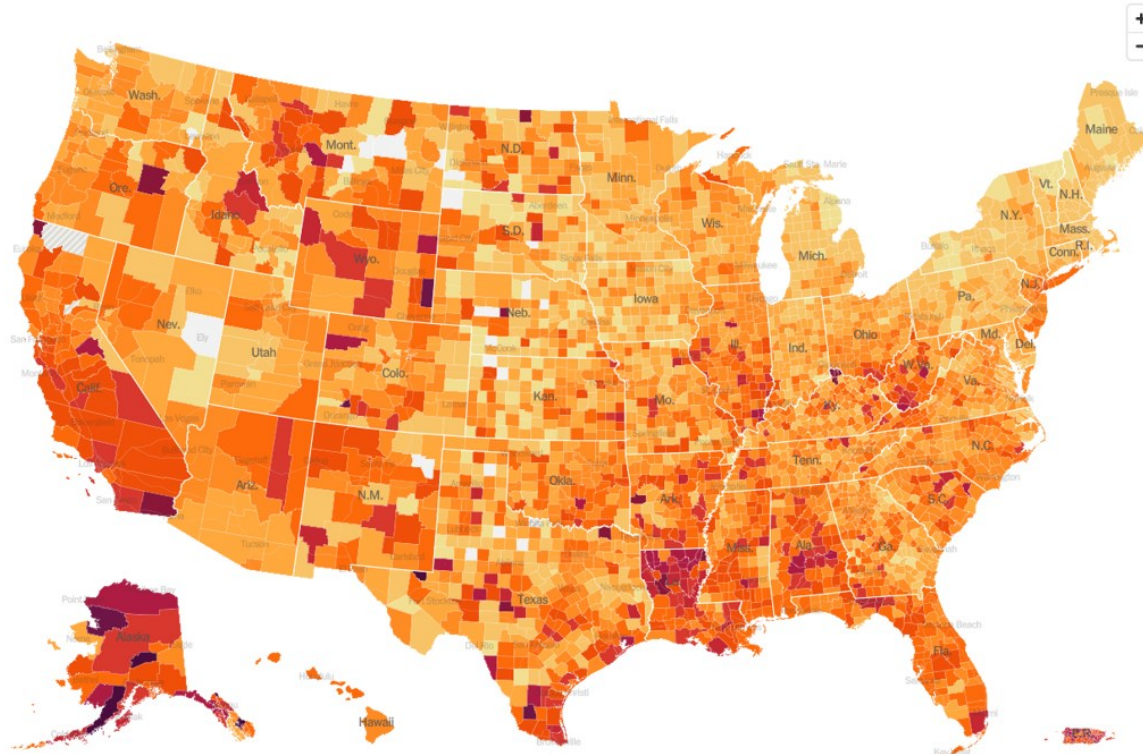
Hot spots

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



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 across the nation  
may be increasing.

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

Accessed Aug 04, 2022

USA & MI

Spread

Children

Hospitalizations

Vaccinations

Variants

Risk Levels

Other

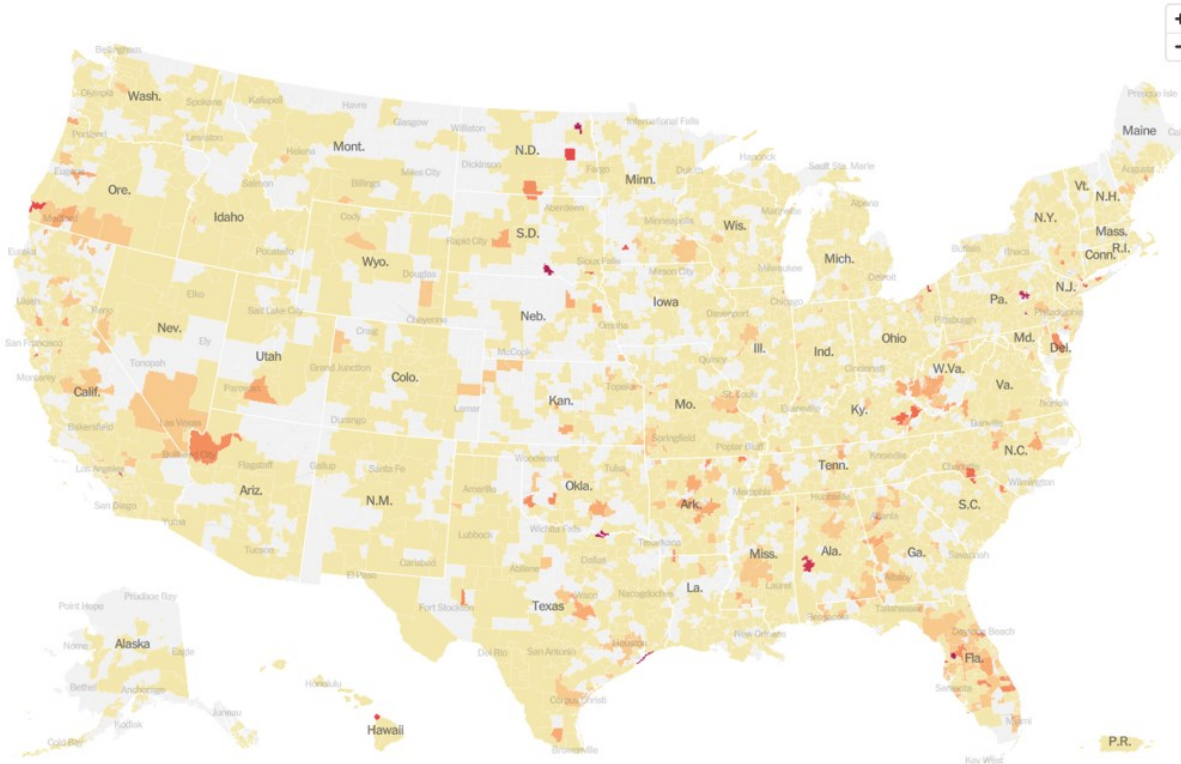
Media

Science  
Roundup

# COVID-19 Hospitalization Rates by County Across the US

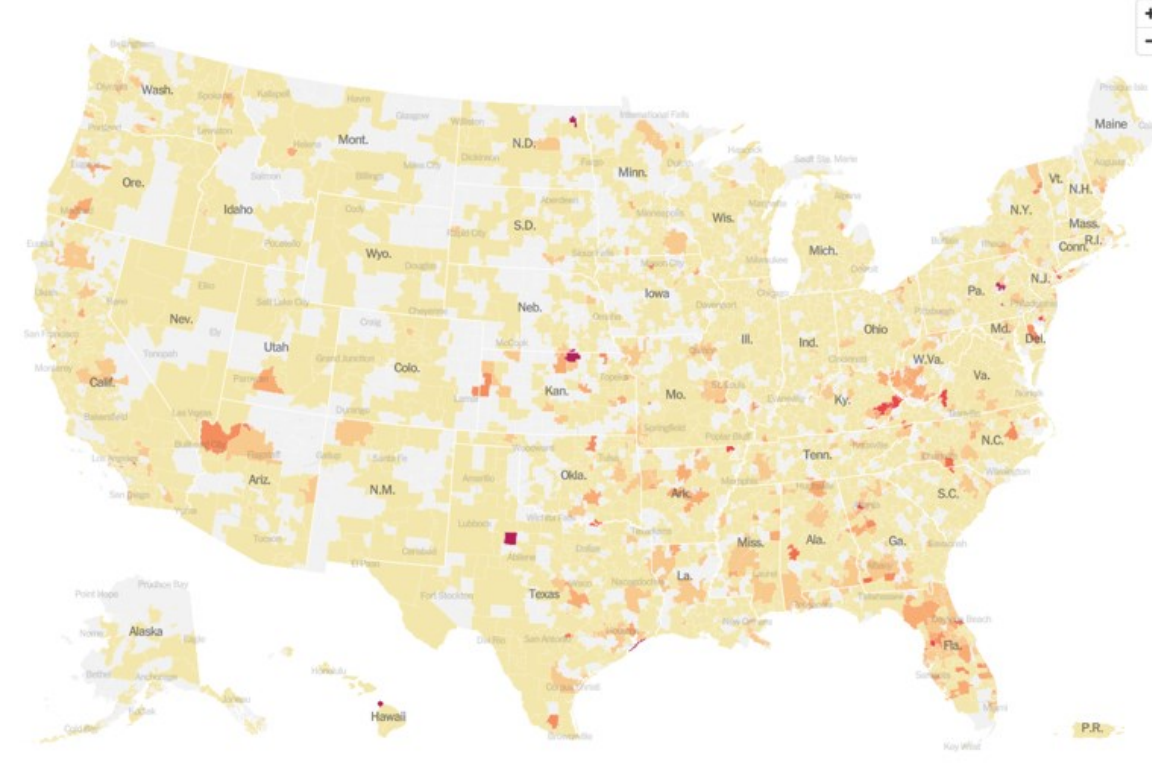
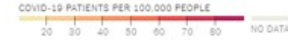
Last Week

Current hospitalizations



This Week

Current hospitalizations



Hospitalization rates remain relatively low across most of the nation, with increases in some areas.

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

Accessed Aug 03, 2022

USA & MI

Spread

Children

Hospitalizations

Vaccinations

Variants

Risk Levels

Other

Media

Science Roundup

# Treatment Options for Non-Hospitalized Adults With COVID-19

PATIENT DISPOSITION	PANEL'S RECOMMENDATIONS
<p>Does Not Require Hospitalization or Supplemental Oxygen</p>	<p>All patients should be offered symptomatic management (<b>AIII</b>).</p> <p>For patients who are at high risk of progressing to severe COVID-19,<sup>a</sup> use 1 of the following treatment options:</p> <p><b>Preferred Therapies</b> Listed in order of preference:</p> <ul style="list-style-type: none"> <li>• Ritonavir-boosted nirmatrelvir (Paxlovid)<sup>b,c</sup> (<b>AIIa</b>)</li> <li>• Remdesivir<sup>c,d</sup> (<b>BIIa</b>)</li> </ul> <p><b>Alternative Therapies</b> For use <i>ONLY</i> when neither of the preferred therapies are available, feasible to use, or clinically appropriate. Listed in alphabetical order:</p> <ul style="list-style-type: none"> <li>• Bebtelovimab<sup>e</sup> (<b>CIII</b>)</li> <li>• Molnupiravir<sup>c,f</sup> (<b>CIIa</b>)</li> </ul> <p>The Panel <b>recommends against</b> the use of dexamethasone<sup>g</sup> or other systemic corticosteroids in the absence of another indication (<b>AIII</b>).</p>
<p>Discharged From Hospital Inpatient Setting in Stable Condition and Does Not Require Supplemental Oxygen</p>	<p>The Panel <b>recommends against</b> continuing the use of remdesivir (<b>AIIa</b>), dexamethasone<sup>g</sup> (<b>AIIa</b>), or baricitinib (<b>AIIa</b>) after hospital discharge.</p>
<p>Discharged From Hospital Inpatient Setting and Requires Supplemental Oxygen</p> <p><i>For those who are stable enough for discharge but who still require oxygen<sup>h</sup></i></p>	<p>There is insufficient evidence to recommend either for or against the continued use of remdesivir or dexamethasone.</p>
<p>Discharged From ED Despite New or Increasing Need for Supplemental Oxygen</p> <p><i>When hospital resources are limited, inpatient admission is not possible, and close follow-up is ensured<sup>i</sup></i></p>	<p>The Panel recommends using dexamethasone 6 mg PO once daily for the duration of supplemental oxygen (dexamethasone use <b>should not exceed</b> 10 days) with careful monitoring for AEs (<b>BIII</b>).</p> <p>Since remdesivir is recommended for patients with similar oxygen needs who are hospitalized,<sup>j</sup> clinicians may consider using it in this setting. As remdesivir requires IV infusions for up to 5 consecutive days, there may be logistical constraints to administering remdesivir in the outpatient setting.</p>
<p><b>Rating of Recommendations:</b> A = Strong; B = Moderate; C = Weak  <b>Rating of Evidence:</b> I = One or more randomized trials without major limitations; IIa = Other randomized trials or subgroup analyses of randomized trials; IIb = Nonrandomized trials or observational cohort studies; III = Expert opinion</p>	

Source: <https://www.covid19treatmentguidelines.nih.gov/management/clinical-management/clinical-management-summary/>

For more information on COVID-19 risk factors, see the CDC webpage: [Underlying Medical Conditions Associated With Higher Risk for Severe COVID-19](#)

# COVID-19 News Headlines

## Michigan adds 20,713 cases, 106 deaths from COVID-19 over last week

[Michigan adds 20,713 cases, 106 deaths from COVID-19 over last week \(detroitnews.com\)](#)

## US stuck in a 'horrible plateau' of COVID-19 deaths, experts say. Here's why.

[COVID deaths: US stuck in 'horrible plateau,' experts say. Here's why. \(usatoday.com\)](#)

## Health department says despite the effects of the pandemic, the Ottawa County suicide rate has stabilized

[Health department says despite the effects of the pandemic, the Ottawa County suicide rate has stabilized | 1450 AM 99.7 FM WHTC | Holland](#)

## Southeast Michigan faces rising COVID cases and an uptick in Monkeypox cases

[Southeast Michigan faces rising COVID cases and an uptick in Monkeypox cases \(wxyz.com\)](#)

## CDC adds 3 places to its 'high' risk list for Covid-19

[CDC adds 3 places to its 'high' risk list for Covid-19 | CNN Travel](#)

# Science Roundup

## Disparities in distribution of COVID-19 vaccines across US counties: A geographic information system–based cross-sectional study

[Disparities in distribution of COVID-19 vaccines across US counties: A geographic information system–based cross-sectional study | PLOS Medicine](#)



Findings from this study conclude that healthcare facilities in counties with higher non-Hispanic Black compositions, in rural areas and in communities that were hit hardest were less likely to serve as COVID-19 vaccine administration locations. Although vaccine hesitancy may be a contributing factor, this study suggests that decreased access may be an overlooked barrier.

## Viral and Symptom Rebound in Untreated COVID-19 Infection

[Viral and Symptom Rebound in Untreated COVID-19 Infection | medRxiv](#)



This preprint study involving 568 participants found that 12% of participants infected with the SARS-CoV-2 virus had viral rebounding or symptom relapse. Of the study participants, viral rebounders (median age of 54) were older than non-rebounders who had a median age of 47 years old.

## Two-Year Prevalence and Recovery Rate of Altered Sense of Smell or Taste in Patients With Mildly Symptomatic COVID-19

[Two-Year Prevalence and Recovery Rate of Altered Sense of Smell or Taste in Patients With Mildly Symptomatic COVID-19 | Olfaction and Taste | JAMA Otolaryngology–Head & Neck Surgery | JAMA Network](#)



Results from this small study on prevalence and recovery rate of smell or taste dysfunction in pre-Omicron period showed that 88.2% of patients reporting a COVID-19–related smell or taste dysfunction completely recovered within 2 years.

## Patterns of Alcohol Consumption Among Individuals With Alcohol Use Disorder During the COVID-19 Pandemic and Lockdowns in Germany

[Patterns of Alcohol Consumption Among Individuals With Alcohol Use Disorder During the COVID-19 Pandemic and Lockdowns in Germany | Addiction Medicine | JAMA Network Open | JAMA Network](#)



Findings from a 5-month cohort study of 189 participants who met the criteria for Alcohol Use Disorder revealed no immediate negative association of lockdown measures with overall Alcohol Consumption.