



Back to School 2021-2022 With COVID-19 December 2, 2021

Jennifer Morse, MD, MPH, FAAFP

Medical Director

CMDHD/MMDHD/DHD#10

This meeting is for School and Health Department Staff

We have limited time to cover all our topics. The slides and recordings will be available on our websites within 1-3 days.

<https://www.dhd10.org/coronavirus/school-guidance/>

<https://www.mmdhd.org/covid-schools/>

<https://www.cmdhd.org/novelschools>

If you have questions, please send them to:

For Roscommon, Osceola, Clare, Gladwin, Arenac, Isabella Counties:

info@cmdhd.org

For Missaukee, Crawford, Kalkaska, Wexford, Lake, Mason, Manistee, Oceana, Newaygo, Mecosta Counties:

info@dhd10.org

For Montcalm, Gratiot, Clinton Counties:

<https://www.mmdhd.org/contact/>



Please make sure the information shared today is passed along to others who may need it, such as school COVID-19 liaisons, school secretaries, school nurses, etc.

Thank you!

Due to the holidays and breaks:

NO WEEKLY MEETINGS ON:

- THURSDAY DECEMBER 23RD
- THURSDAY DECEMBER 30TH

MDHHS issues face mask Public Health Advisory due to rising flu and COVID-19 cases

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

- 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 gathering.

Public Health Advisory Issued 11/9/21

- While vaccination continues to be the most important public health action to end the COVID-19 pandemic, the surge in cases across Michigan has prompted the Michigan Department of Health and Human Services (MDHHS) to issue a public health advisory.
- Michigan is presently experiencing another wave of infection driven by the Delta variant, which is estimated to be twice as infectious as the original strain. The greatly increased infectiousness of the Delta variant has driven sharp increases in COVID-19 infections among both adults and children. In addition to COVID-19, Michigan is experiencing an uptick in cases of other respiratory illnesses, including influenza and respiratory syncytial virus (RSV). The widespread use of face masks would significantly reduce the spread of these viruses.

Learn more about masking at Michigan.gov/MaskUp.



PUBLIC HEALTH ADVISORY

All Michiganders, regardless of vaccination status, should wear a mask in indoor public settings

MDHHS issues face mask Public Health Advisory due to rising flu and COVID-19 cases

Recommends all Michiganders, regardless of vaccination status, wear a mask in indoor public settings. Face mask advisory will remain in effect until further notice.



MDHHS issues face mask Public Health Advisory due to rising flu and COVID-19 cases

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

- 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 gathering.

Learn more about masking at Michigan.gov/MaskUp.



Testing Reminders from MDHHS

- ▶ When schools contact LHDs for testing support we ask that LHDs only support the immediate need and direct the school to this form to order tests from their ISD: [School Ordering form](#)
- ▶ **Test Ordering Information:**
 - ▶ Please allow up to two weeks for processing and shipment. If an outbreak is occurring and tests are needed immediately, this should be indicated on the ordering form and the request will be elevated.
 - ▶ Orders should be placed for no more than a 1-month supply at a time. There are testing supply constraints and the current supplies that MDHHS will be distributing have a shelf life of 4-5 months. To ensure tests are used and provided to all vulnerable populations' requests must only be based on projected needs for the month. **Expiration dates:** Please use the lot number on the box of tests to identify the correct expiration date. (Lot numbers on individual tests are used by Abbott internally)
- ▶ **Reporting remains a federal requirement.** All tests administered must be reported daily through the MDHHS antigen reporting portal (not directly to the LHD), found here [Michigan Antigen Testing Results](#)
- ▶ **Lost Reagent (Abbott):**
 - ▶ If a bottle of reagent is lost or missing, sites may contact [Abbott Technical Support](#) through the form link or by phone at **1-800-366-8020**, to request a replacement bottle. We are unaware of the time required for Abbott to process these requests so if you need tests quickly you may ask MDHHS (or your ISD) for a replacement box which will include more tests and reagent while you are waiting for Abbott's shipment.

Testing in Schools Update Regional Call

School testing update from Major Len Uller Tuesday, December 7, 2021
11:00 AM-11:30 AM

Join on your computer or mobile app

[Click here to join the meeting](#)

Or call in (audio only)

[+1 248-509-0316,,325357704#](#) United States, Pontiac

Phone Conference ID: 325 357 704#

[Find a local number](#) | [Reset PIN](#)

[Learn More](#) | [Meeting options](#)

5 Tips for a Healthy Holiday Season

The holidays are right around the corner! While we look forward to embracing the spirit of the season by spending time with friends, family, and loved ones, the following tips can help ensure a happy and healthy holiday season.



- 1 Get vaccinated or a booster if eligible**

The Centers for Disease Control and Prevention (CDC) recommends COVID-19 vaccines for adults and children age 5 and older, and booster doses for some people — including all Johnson & Johnson recipients and some Pfizer and Moderna recipients (people age 65 and older, and adults at high risk due to medical conditions or high exposure). This is the most effective way to protect yourself against the virus and keep your community and loved ones safe.
- 2 Follow local and state guidelines**



COVID-19 guidelines and requirements vary across the country, and across businesses. The CDC recommends tracking local transmission rates to make a plan to stay safe and healthy. If you are traveling during the holidays, check state and local regulations because they may differ from your community. Before you make a dinner reservation, get tickets to see a play, or participate in another public activity, check the establishment's requirements in advance to know if you should wear a mask or bring proof of vaccination.
- 3 Take precautions indoors**

Whether you're shopping for gifts or groceries, stores are often busier during the holidays. In areas of substantial and high transmission, the CDC recommends that everyone, regardless of vaccination status, wears a mask in public indoor settings to help prevent the spread of the virus. Crowded and poorly ventilated indoor spaces can increase the risk of being exposed to COVID-19—so take extra precautions in these spaces, or try contactless or off-peak hours shopping.

Public Health Communications COLLABORATIVE

HMA HEALTH ACTION ALLIANCE

For more information, visit the [Centers for Disease Control and Prevention](https://www.cdc.gov)



- 4 Choose outdoor spaces when possible**

Celebrating outdoors is safer than indoors. Whenever possible, move holiday gatherings or festivities outside. For example, you may be able to enjoy outdoor dining options or other seasonal outdoor activities, like ice skating or watching holiday light shows from the comfort of your car.
- 5 Stay at home if you are feeling sick**

Along with taking steps to prevent the spread of COVID-19, remember that it is cold and flu season. As busy as the holiday season can be, if you're not feeling well, you should not go shopping or attend gatherings. Help protect your loved ones, co-workers, and others by canceling your plans, wearing a mask, and staying home if you are sick.

Conversations about COVID-19 Vaccines

If you are hosting a holiday gathering at home or somewhere else, it may be helpful to communicate with your guests in advance about your COVID-19 ground rules and the precautions you are taking. Having conversations about COVID-19 vaccines may feel difficult, but it can help keep you and others safe. Check out these tips to help you have conversations about COVID-19 vaccines.

- Listen more than you talk: Make it a conversation, not a debate, and share information that you think is most important.
- Lead with empathy: If someone has questions about the vaccine, try to be understanding and helpful rather than dismissive.
- Facts are important: COVID-19 vaccines are safe and highly effective. [Here are helpful talking points](#) that highlight facts and plain language when explaining the importance of vaccination and COVID-19 precautions.
- Be inviting and authentic: Share stories about why you and your friends or loved ones are vaccinated and celebrate others who have taken this step.

Adapted from [Health Action Alliance's Tips for a Conversation about COVID-19 Vaccines](#)

Public Health Communications COLLABORATIVE

HMA HEALTH ACTION ALLIANCE


For more information, visit the [Centers for Disease Control and Prevention](https://www.cdc.gov)

Recent School Violence in Michigan

- ▶ Michigan School Health Coordinators Association (MISHCA): <https://mishca.org/2021/12/01/resources-to-support-safety-after-a-crisis/>
- ▶ School Shooting Resources - <https://www.nctsn.org/what-is-child-trauma/trauma-types/terrorism-and-violence/school-shooting-resources>
- ▶ Talking to Children About Violence: Tips for Parents and Teachers - <https://www.nasponline.org/resources-and-publications/resources-and-podcasts/school-safety-and-crisis/school-violence-resources/talking-to-children-about-violence-tips-for-parents-and-teachers>
- ▶ Helping Your Children Manage Distress in the Aftermath of a Shooting - <https://www.apa.org/topics/gun-violence-crime/shooting-aftermath>
- ▶ Parent Guidelines for Helping Youth After the Recent Shooting - <https://www.nctsn.org/resources/parent-guidelines-helping-youth-after-recent-shooting>
- ▶ Discussing Difficult Situations With Your Children - Family Resources - <https://www.pta.org/home/family-resources/health/Emotional-Health/Discussing-Difficult-Situations-With-Your-Children>
- ▶ **OK2Say: Report tips confidentially on criminal activities or potential harm directed at students, school employees, or schools** <https://www.michigan.gov/ok2say/>

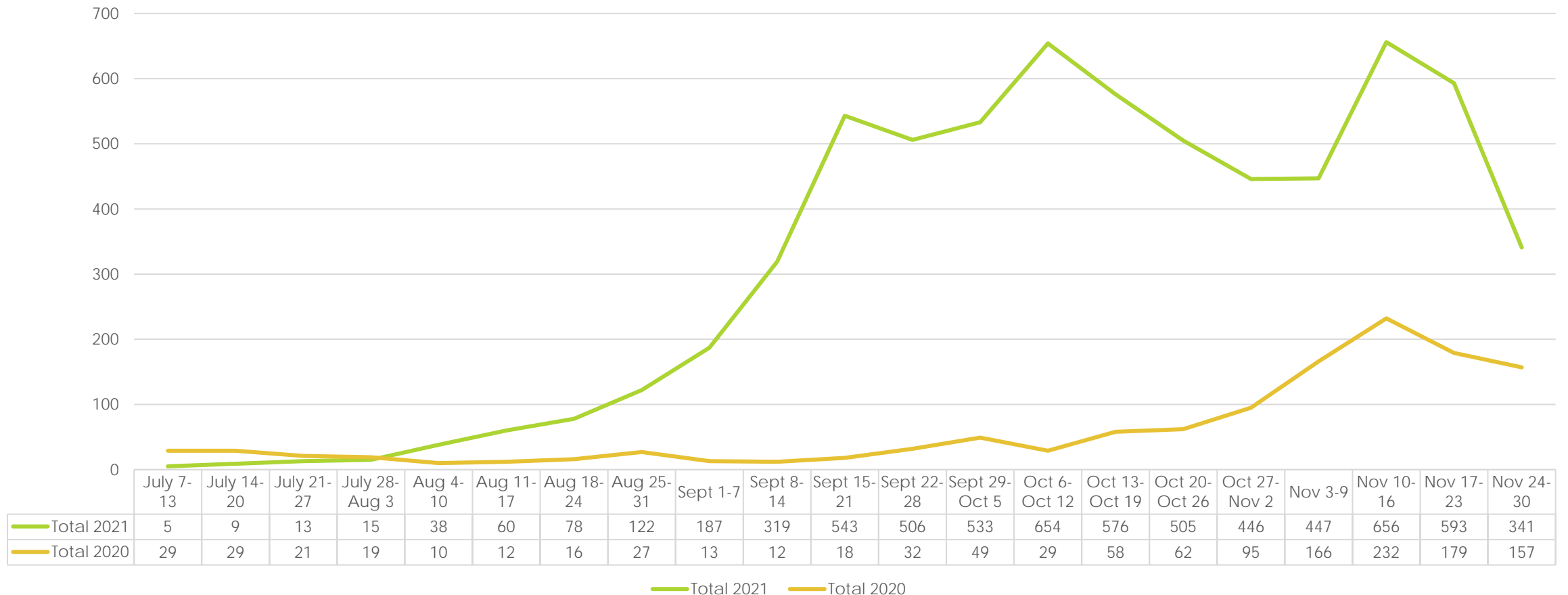


See the most up to date data at
<https://www.mistartmap.info/>



NOTE: Data this week may be artificially LOW due to decreased testing and delays in resulting of test results as result of holiday weekend

19 Counties of MMDHD/DHD#10/CMDHD COVID Cases 5-18 yrs. of age, weekly, 2020 compared to 2021



County by County Comparisons COVID Cases 5-18 yrs. of age, weekly, 2020 compared to 2021

NOTE: The values on the vertical (y) axis are different for each county due to different numbers of cases

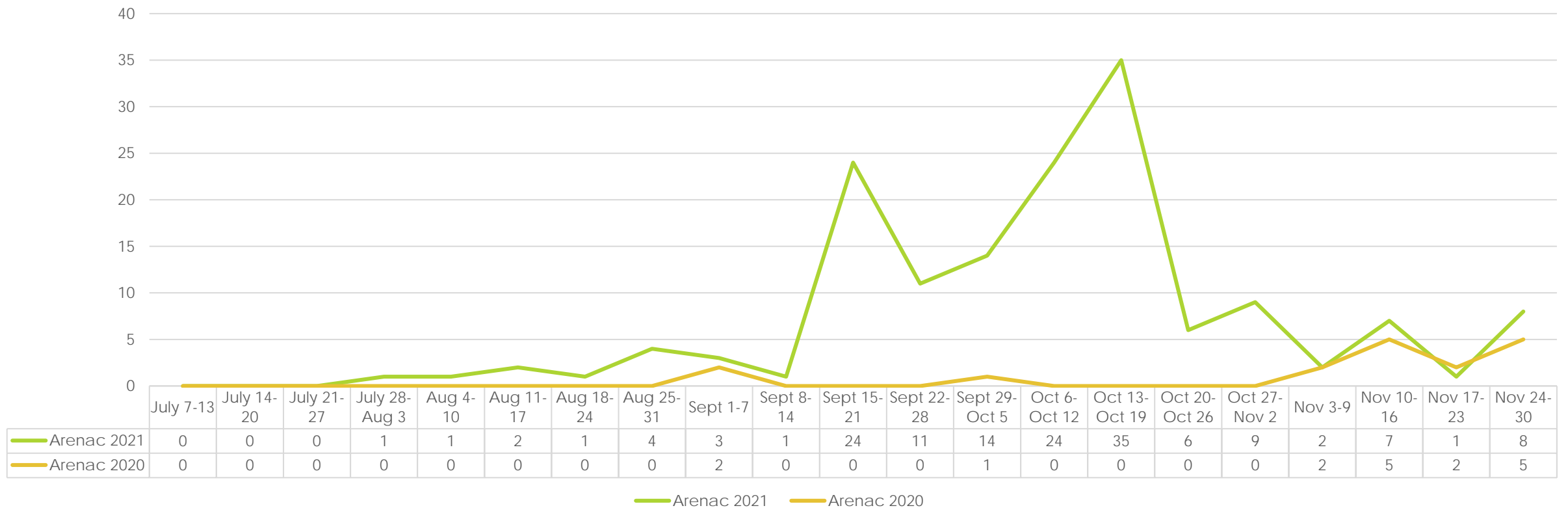
— IS 2021

— IS 2020

CMDHD

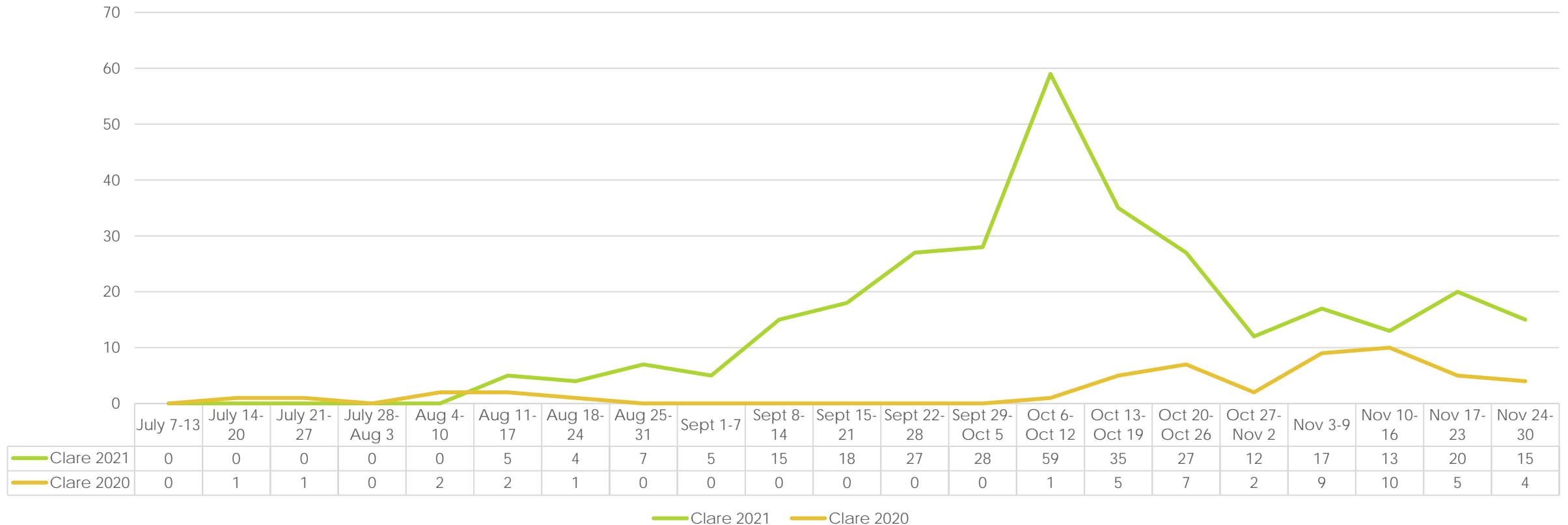
COVID Cases 5-18 yrs. of age, weekly 2020 compared to 2021

Arenac



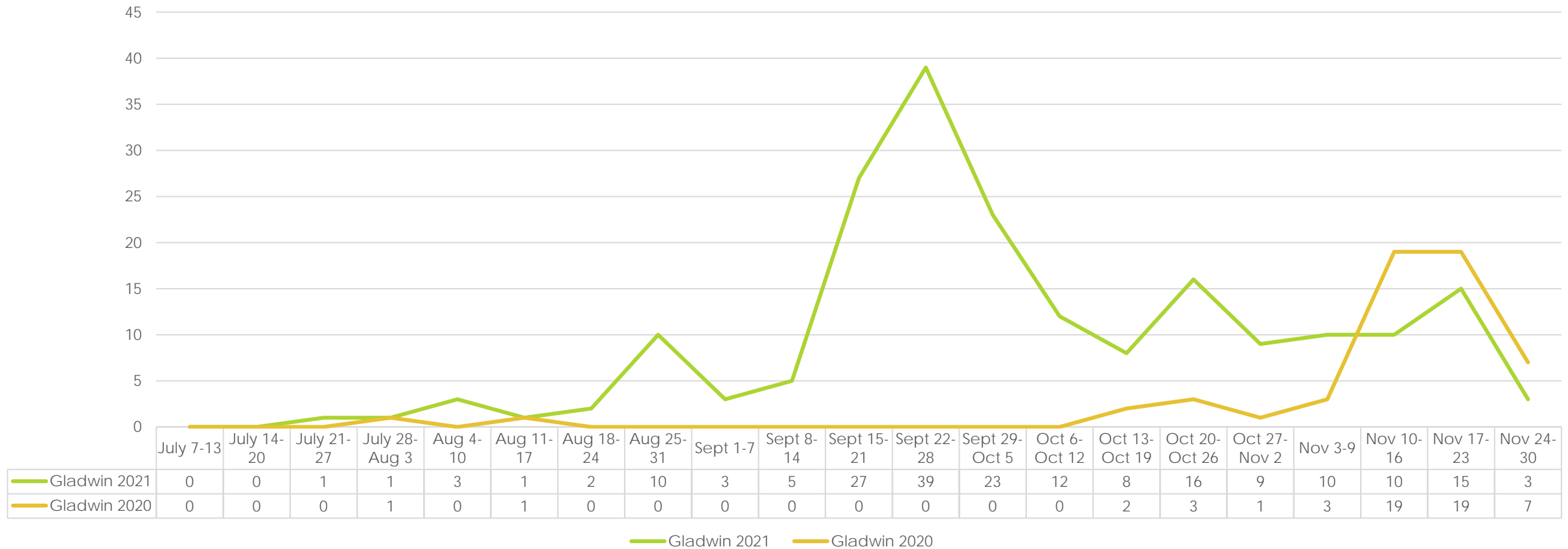
COVID Cases 5-18 yrs. of age, weekly 2020 compared to 2021

Clare



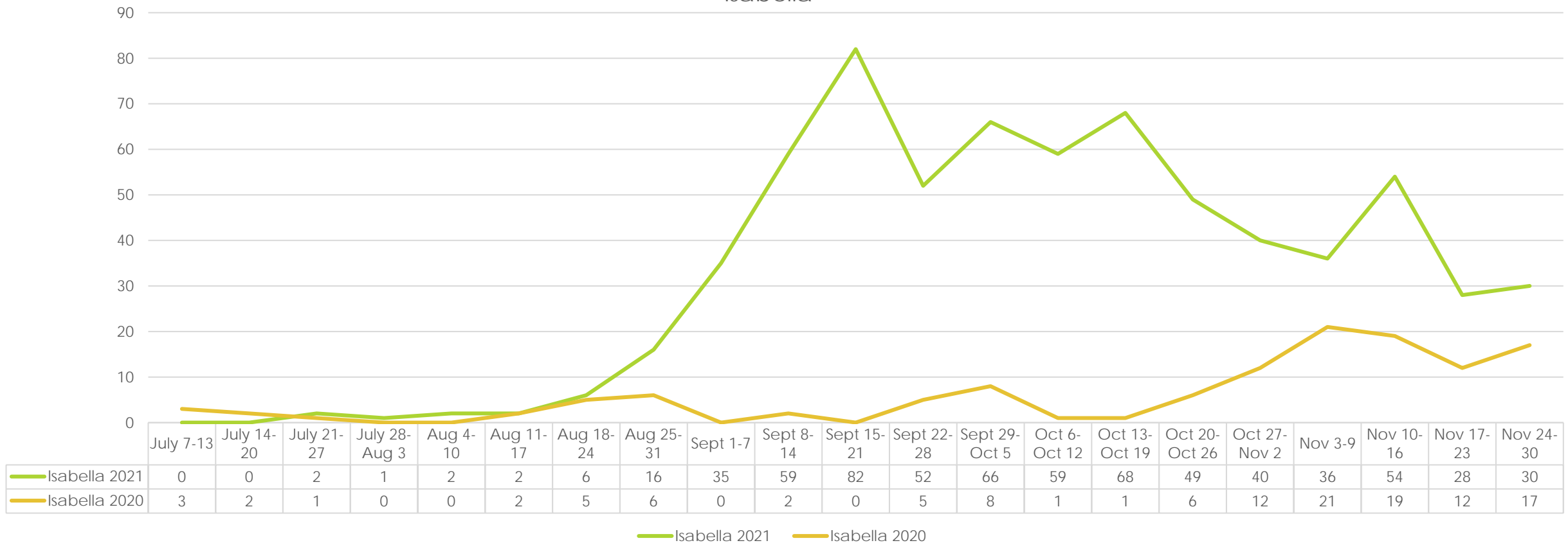
COVID Cases 5-18 yrs. of age, weekly 2020 compared to 2021

Gladwin



COVID Cases 5-18 yrs. of age, weekly 2020 compared to 2021

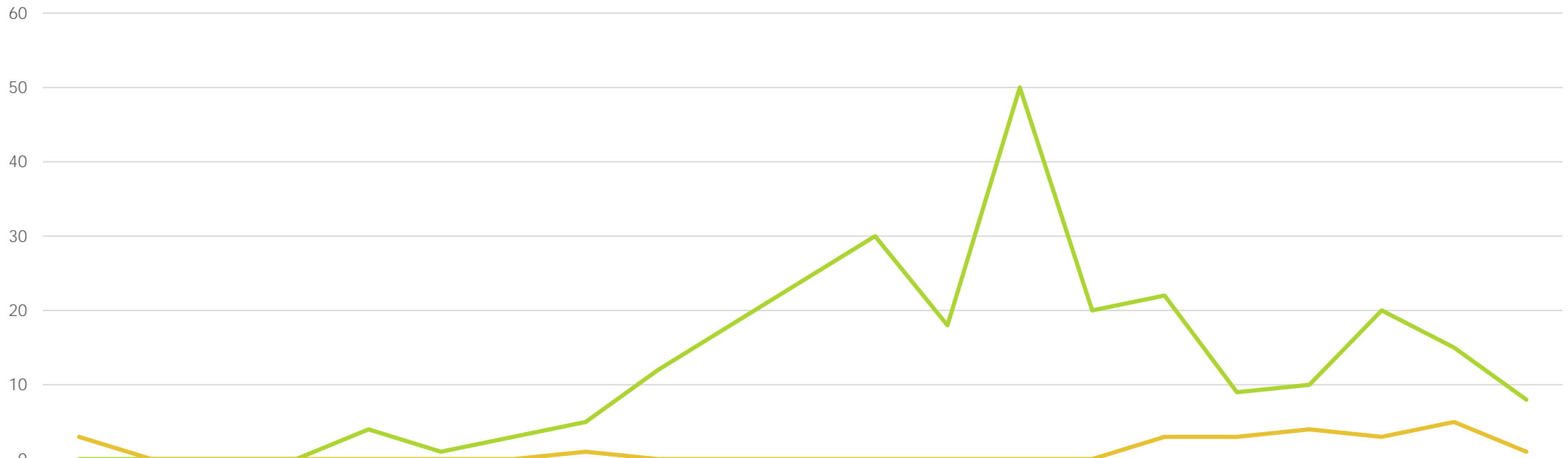
Isabella



Isabella 2021 Isabella 2020

COVID Cases 5-18 yrs. of age, weekly 2020 compared to 2021

Osceola

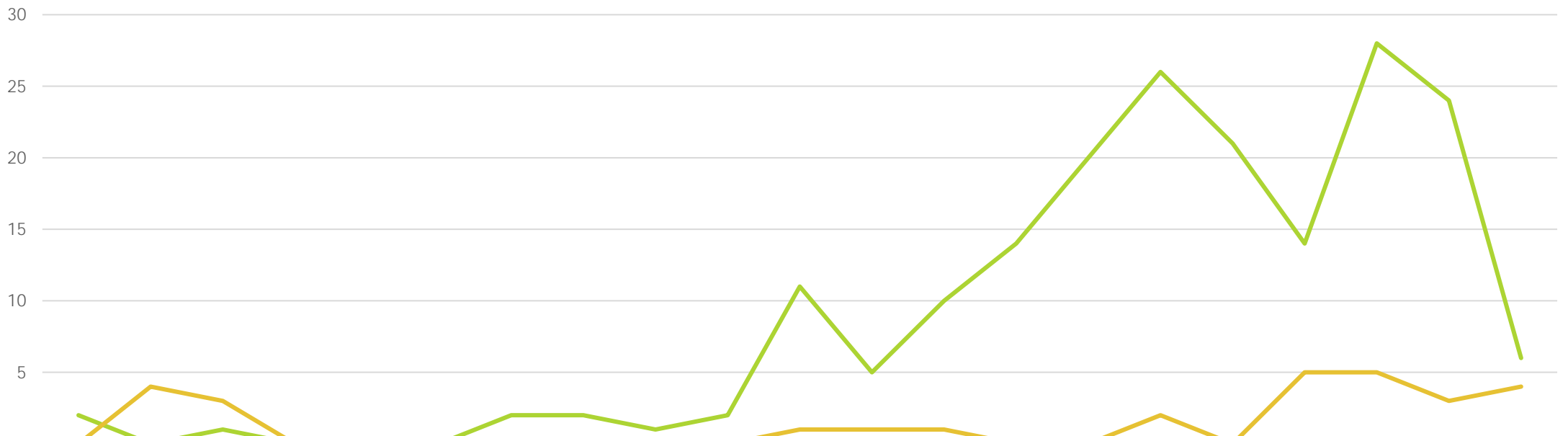


	July 7-13	July 14-20	July 21-27	July 28-Aug 3	Aug 4-10	Aug 11-17	Aug 18-24	Aug 25-31	Sept 1-7	Sept 8-14	Sept 15-21	Sept 22-28	Sept 29-Oct 5	Oct 6-12	Oct 13-19	Oct 20-26	Oct 27-Nov 2	Nov 3-9	Nov 10-16	Nov 17-23	Nov 24-30
Osceola 2021	0	0	0	0	4	1	3	5	12	18	24	30	18	50	20	22	9	10	20	15	8
Osceola 2020	3	0	0	0	0	0	0	1	0	0	0	0	0	0	0	3	3	4	3	5	1

Osceola 2021 Osceola 2020

COVID Cases 5-18 yrs. of age, weekly 2020 compared to 2021

Roscommon



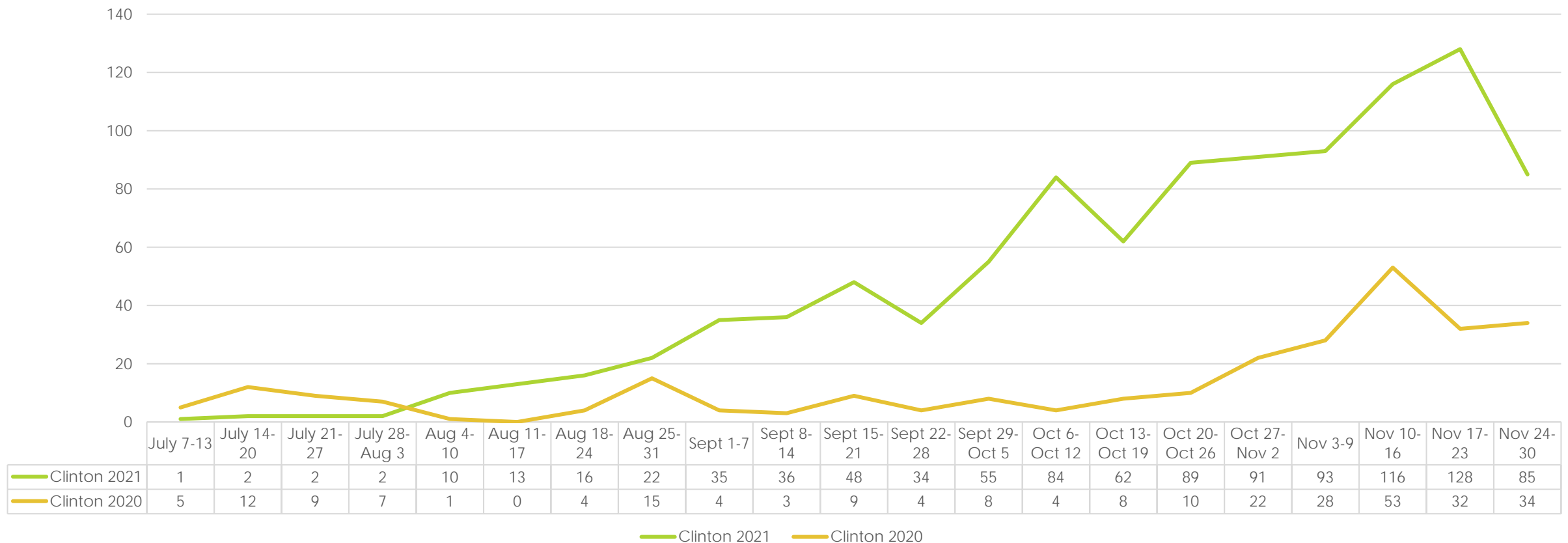
	July 7-13	July 14-20	July 21-27	July 28-Aug 3	Aug 4-10	Aug 11-17	Aug 18-24	Aug 25-31	Sept 1-7	Sept 8-14	Sept 15-21	Sept 22-28	Sept 29-Oct 5	Oct 6-12	Oct 13-19	Oct 20-26	Oct 27-Nov 2	Nov 3-9	Nov 10-16	Nov 17-23	Nov 24-30
Roscommon 2021	2	0	1	0	0	0	2	2	1	2	11	5	10	14	20	26	21	14	28	24	6
Roscommon 2020	0	4	3	0	0	0	0	0	0	0	1	1	1	0	0	2	0	5	5	3	4

— Roscommon 2021 — Roscommon 2020

MMDHD

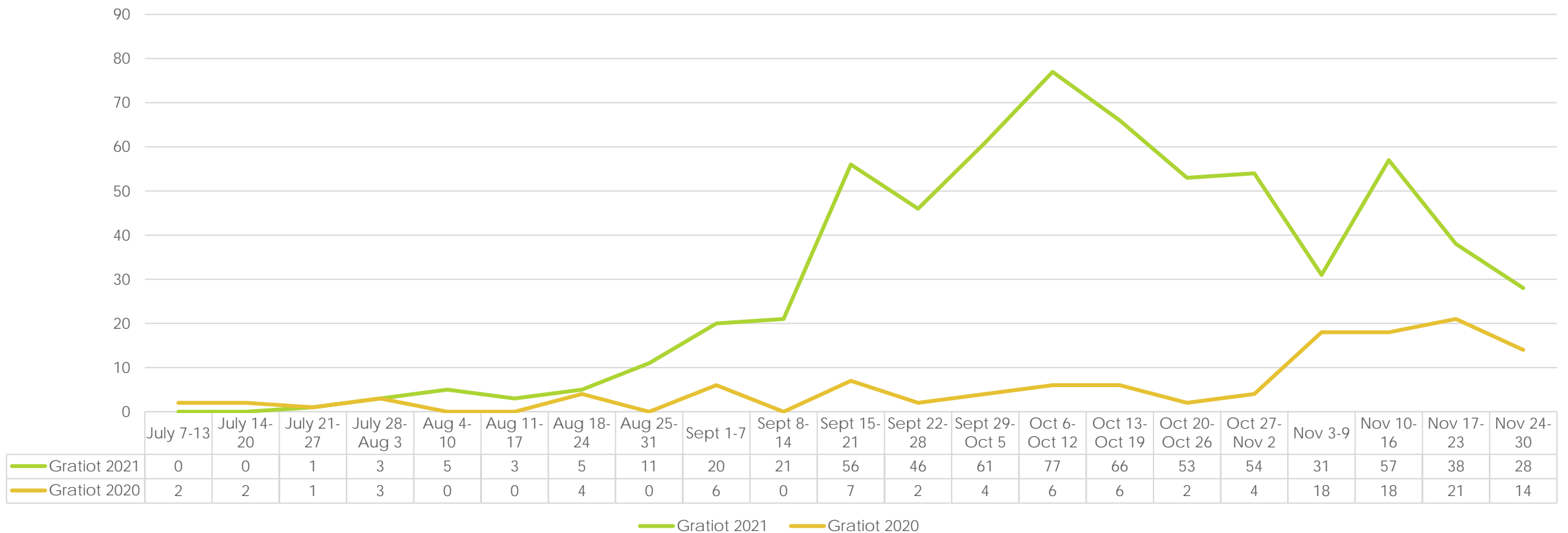
COVID Cases 5-18 yrs. of age, weekly 2020 compared to 2021

Clinton



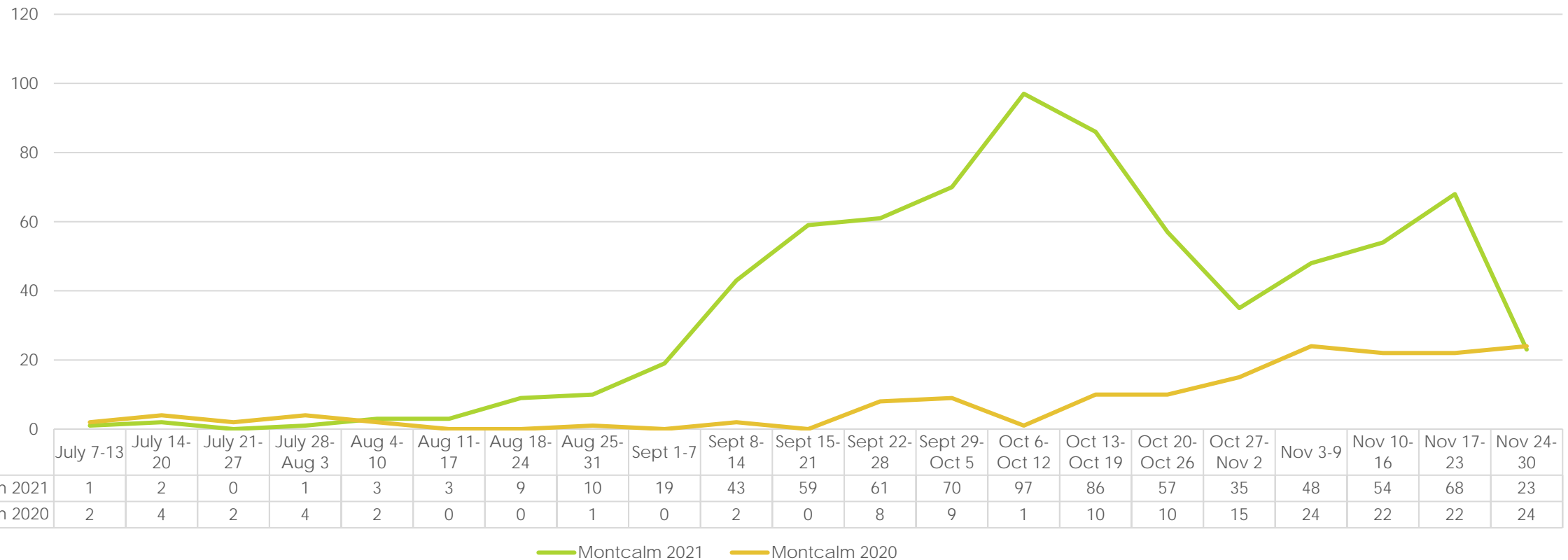
COVID Cases 5-18 yrs. of age, weekly 2020 compared to 2021

Gratiot



COVID Cases 5-18 yrs. of age, weekly 2020 compared to 2021

Montcalm



DHD10

COVID Cases 5-18 yrs. of age, weekly 2020 compared to 2021

Crawford

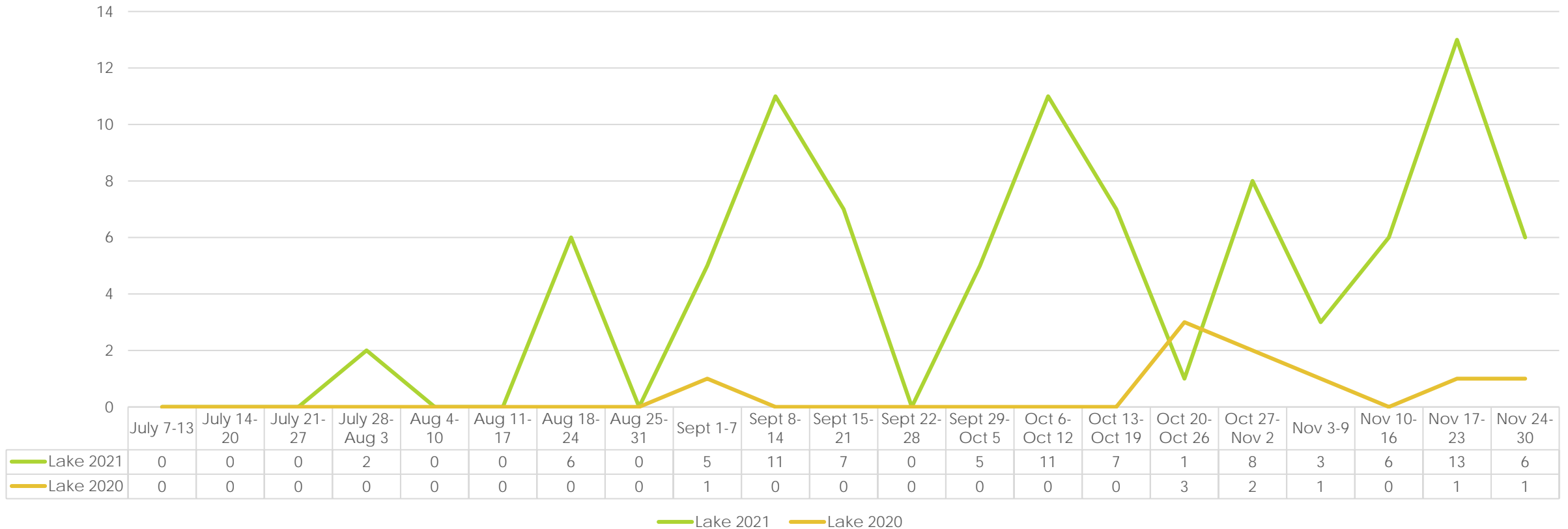


	July 7-13	July 14-20	July 21-27	July 28-Aug 3	Aug 4-10	Aug 11-17	Aug 18-24	Aug 25-31	Sept 1-7	Sept 8-14	Sept 15-21	Sept 22-28	Sept 29-Oct 5	Oct 6-12	Oct 13-19	Oct 20-26	Oct 27-Nov 2	Nov 3-9	Nov 10-16	Nov 17-23	Nov 24-30
Crawford 2021	0	0	0	1	0	1	1	2	0	3	7	11	3	13	11	12	10	16	13	24	20
Crawford 2020	0	0	0	4	0	0	0	0	0	0	0	0	1	1	0	0	1	1	5	6	4

— Crawford 2021 — Crawford 2020

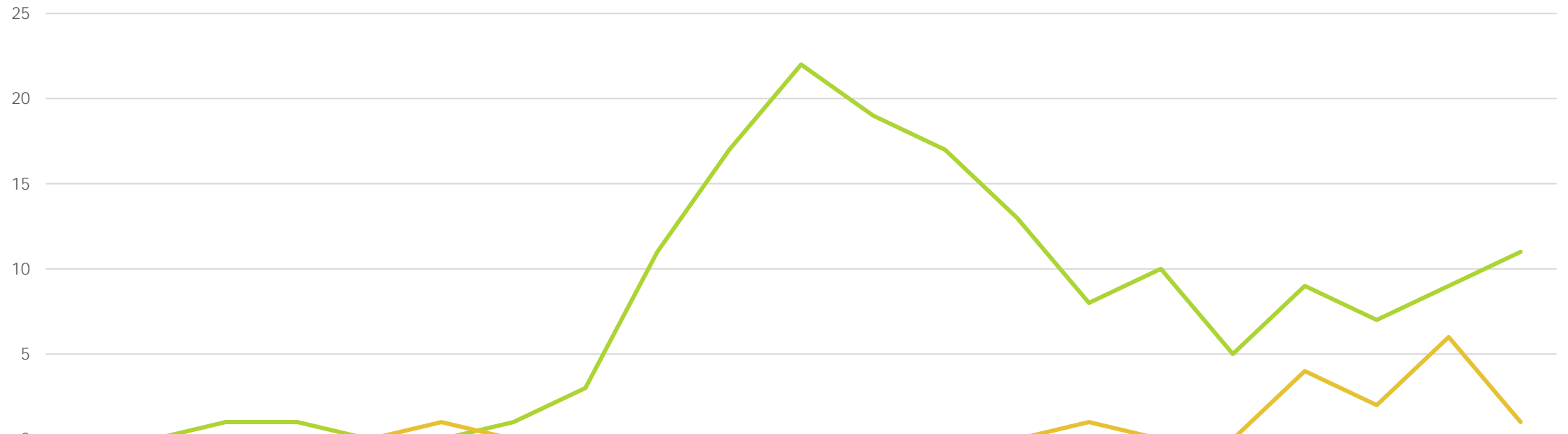
COVID Cases 5-18 yrs. of age, weekly 2020 compared to 2021

Lake



COVID Cases 5-18 yrs. of age, weekly 2020 compared to 2021

Kalkaska

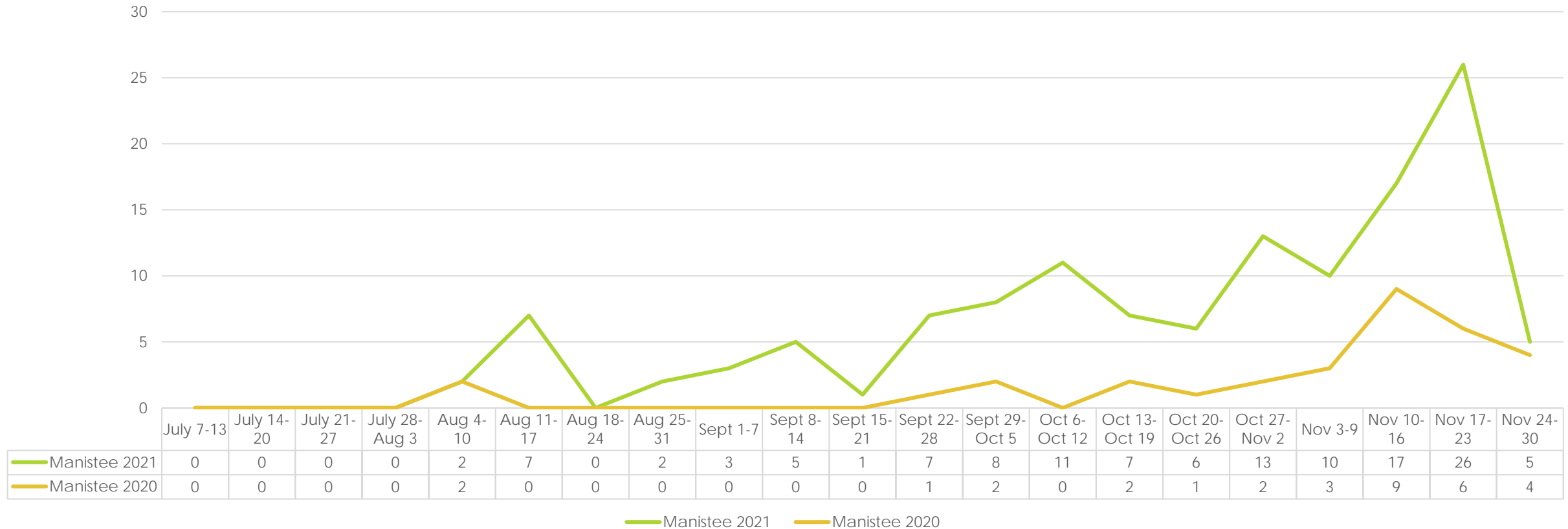


	July 7-13	July 14-20	July 21-27	July 28-Aug 3	Aug 4-10	Aug 11-17	Aug 18-24	Aug 25-31	Sept 1-7	Sept 8-14	Sept 15-21	Sept 22-28	Sept 29-Oct 5	Oct 6-12	Oct 13-19	Oct 20-26	Oct 27-Nov 2	Nov 3-9	Nov 10-16	Nov 17-23	Nov 24-30
Kalkaska 2021	0	0	1	1	0	0	1	3	11	17	22	19	17	13	8	10	5	9	7	9	11
Kalkaska 2020	0	0	0	0	0	1	0	0	0	0	0	0	0	0	1	0	0	4	2	6	1

— Kalkaska 2021 — Kalkaska 2020

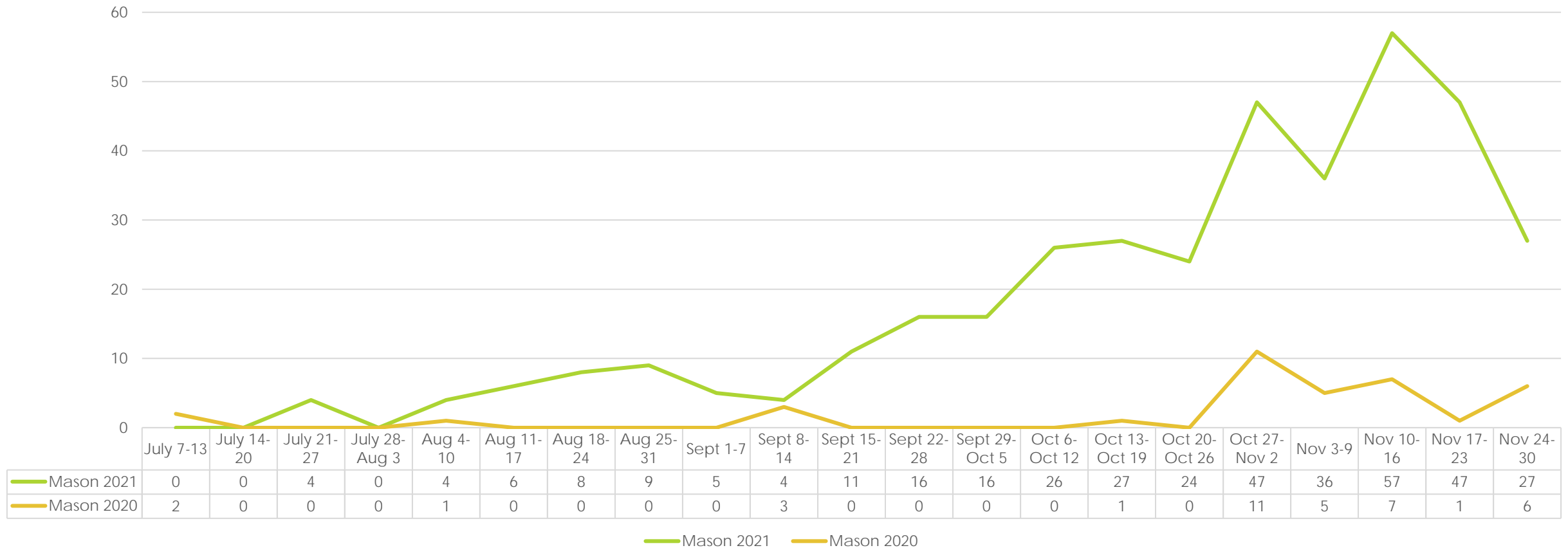
COVID Cases 5-18 yrs. of age, weekly 2020 compared to 2021

Manistee



COVID Cases 5-18 yrs. of age, weekly 2020 compared to 2021

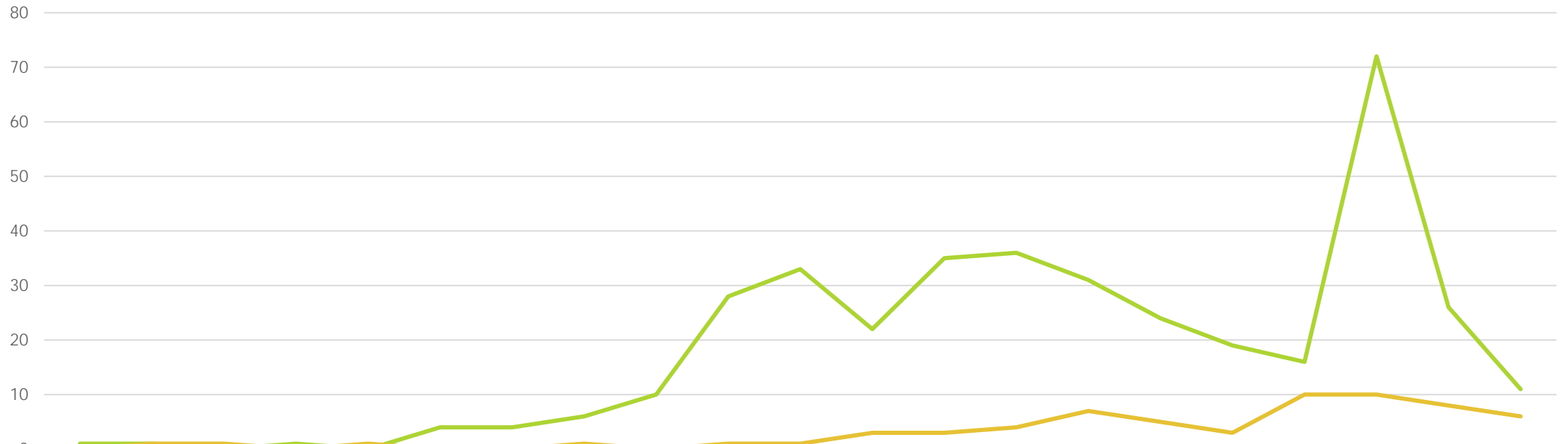
Mason



Mason 2021 Mason 2020

COVID Cases 5-18 yrs. of age, weekly 2020 compared to 2021

Mecosta

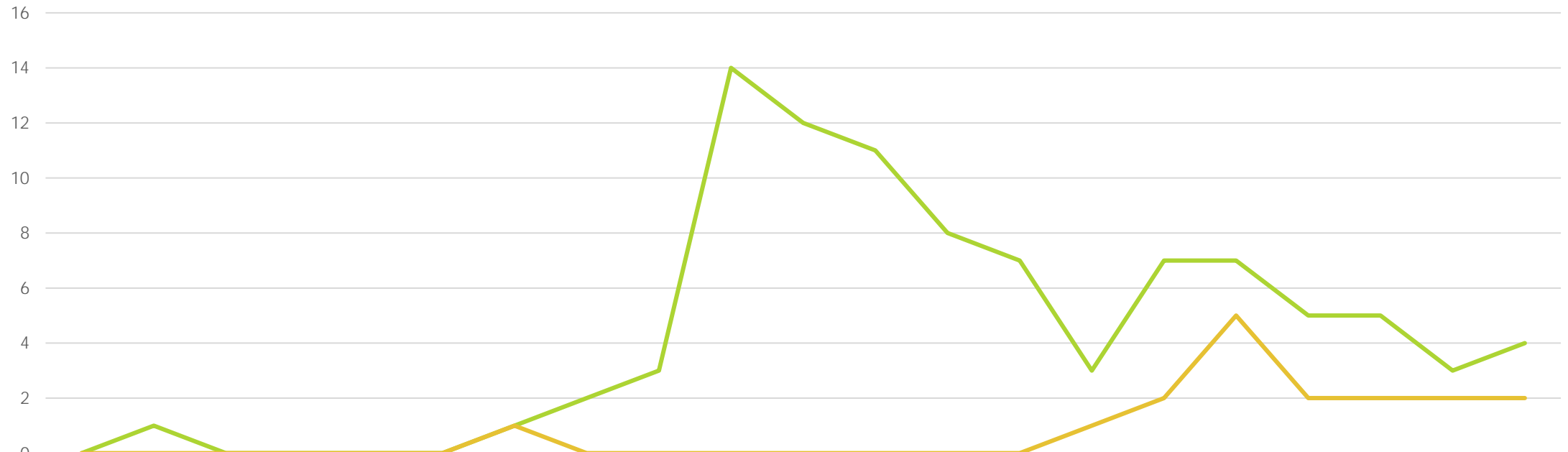


	July 7-13	July 14-20	July 21-27	July 28-Aug 3	Aug 4-10	Aug 11-17	Aug 18-24	Aug 25-31	Sept 1-7	Sept 8-14	Sept 15-21	Sept 22-28	Sept 29-Oct 5	Oct 6-12	Oct 13-19	Oct 20-26	Oct 27-Nov 2	Nov 3-9	Nov 10-16	Nov 17-23	Nov 24-30
Mecosta 2021	1	1	0	1	0	4	4	6	10	28	33	22	35	36	31	24	19	16	72	26	11
Mecosta 2020	0	1	1	0	1	0	0	1	0	1	1	3	3	4	7	5	3	10	10	8	6

Mecosta 2021 Mecosta 2020

COVID Cases 5-18 yrs. of age, weekly 2020 compared to 2021

Missaukee

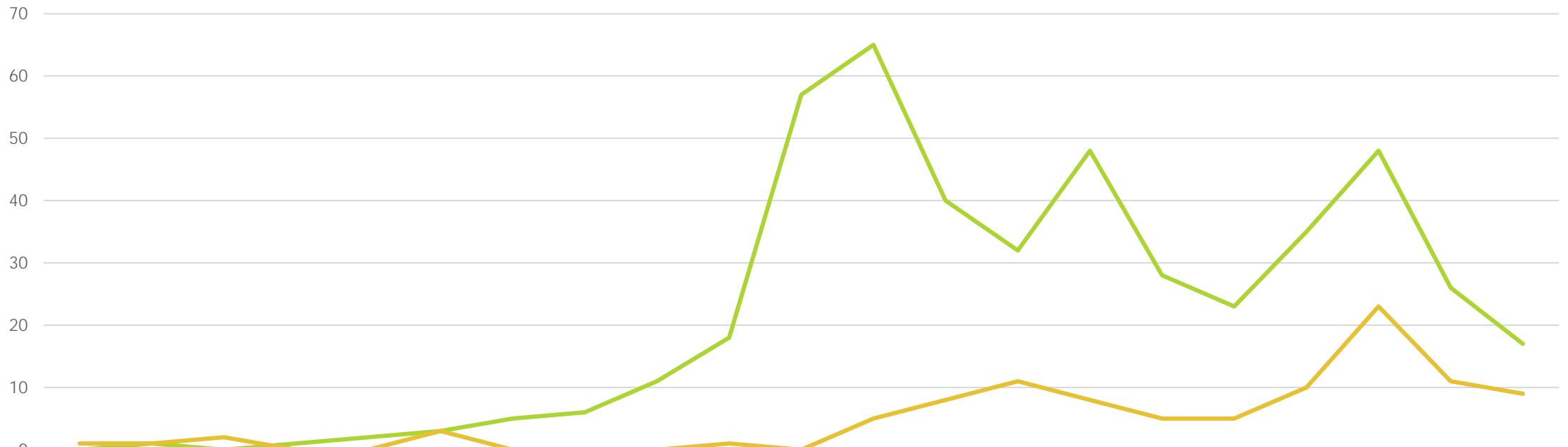


	July 7-13	July 14-20	July 21-27	July 28-Aug 3	Aug 4-10	Aug 11-17	Aug 18-24	Aug 25-31	Sept 1-7	Sept 8-14	Sept 15-21	Sept 22-28	Sept 29-Oct 5	Oct 6-12	Oct 13-19	Oct 20-26	Oct 27-Nov 2	Nov 3-9	Nov 10-16	Nov 17-23	Nov 24-30
Missaukee 2021	0	1	0	0	0	0	1	2	3	14	12	11	8	7	3	7	7	5	5	3	4
Missaukee 2020	0	0	0	0	0	0	1	0	0	0	0	0	0	0	1	2	5	2	2	2	2

Missaukee 2021 Missaukee 2020

COVID Cases 5-18 yrs. of age, weekly 2020 compared to 2021

Newaygo

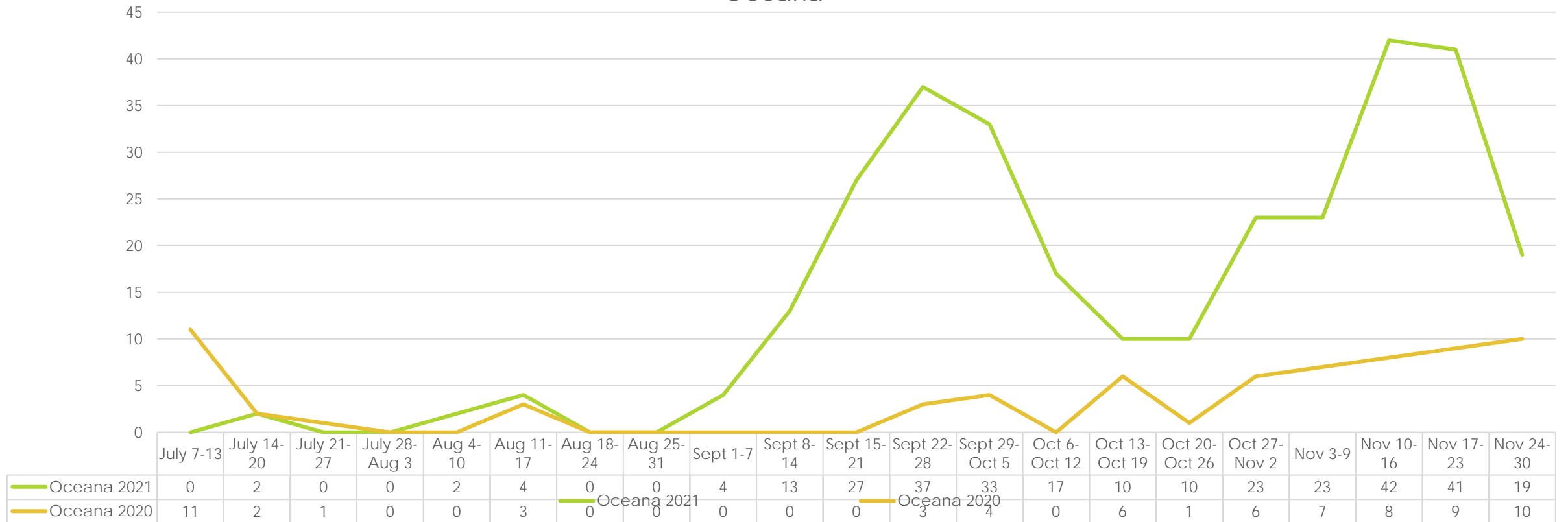


	July 7-13	July 14-20	July 21-27	July 28-Aug 3	Aug 4-10	Aug 11-17	Aug 18-24	Aug 25-31	Sept 1-7	Sept 8-14	Sept 15-21	Sept 22-28	Sept 29-Oct 5	Oct 6-Oct 12	Oct 13-Oct 19	Oct 20-Oct 26	Oct 27-Nov 2	Nov 3-9	Nov 10-16	Nov 17-23	Nov 24-30
Newaygo 2021	0	1	0	1	2	3	5	6	11	18	57	65	40	32	48	28	23	35	48	26	17
Newaygo 2020	1	1	2	0	0	3	0	0	0	1	0	5	8	11	8	5	5	10	23	11	9

— Newaygo 2021 — Newaygo 2020

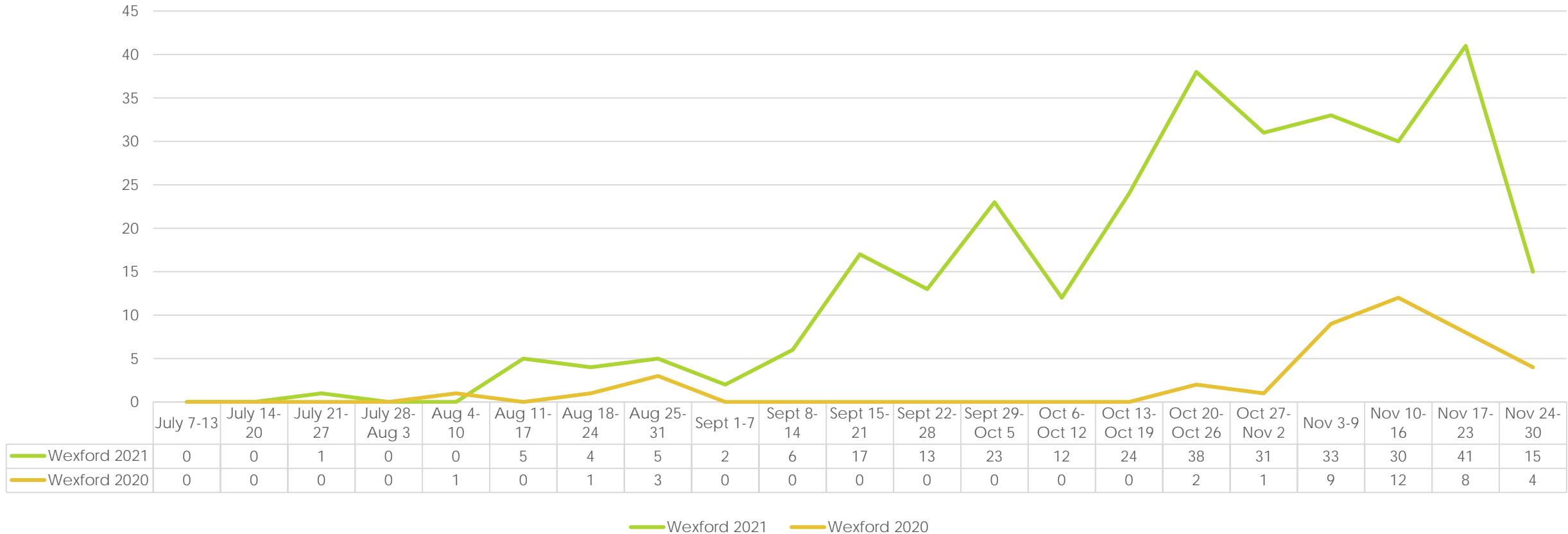
COVID Cases 5-18 yrs. of age, weekly 2020 compared to 2021


Oceana



COVID Cases 5-18 yrs. of age, weekly 2020 compared to 2021

Wexford





MI COVID Response Data and Modeling Update-November 30, 2021

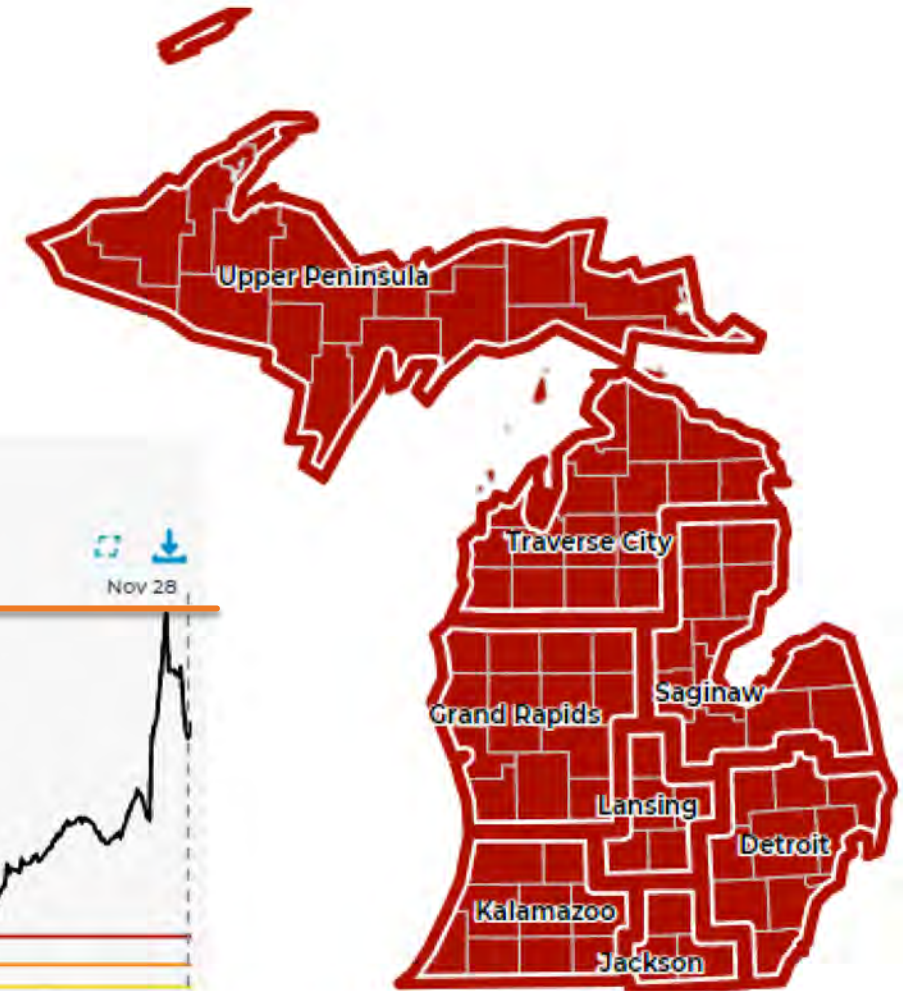
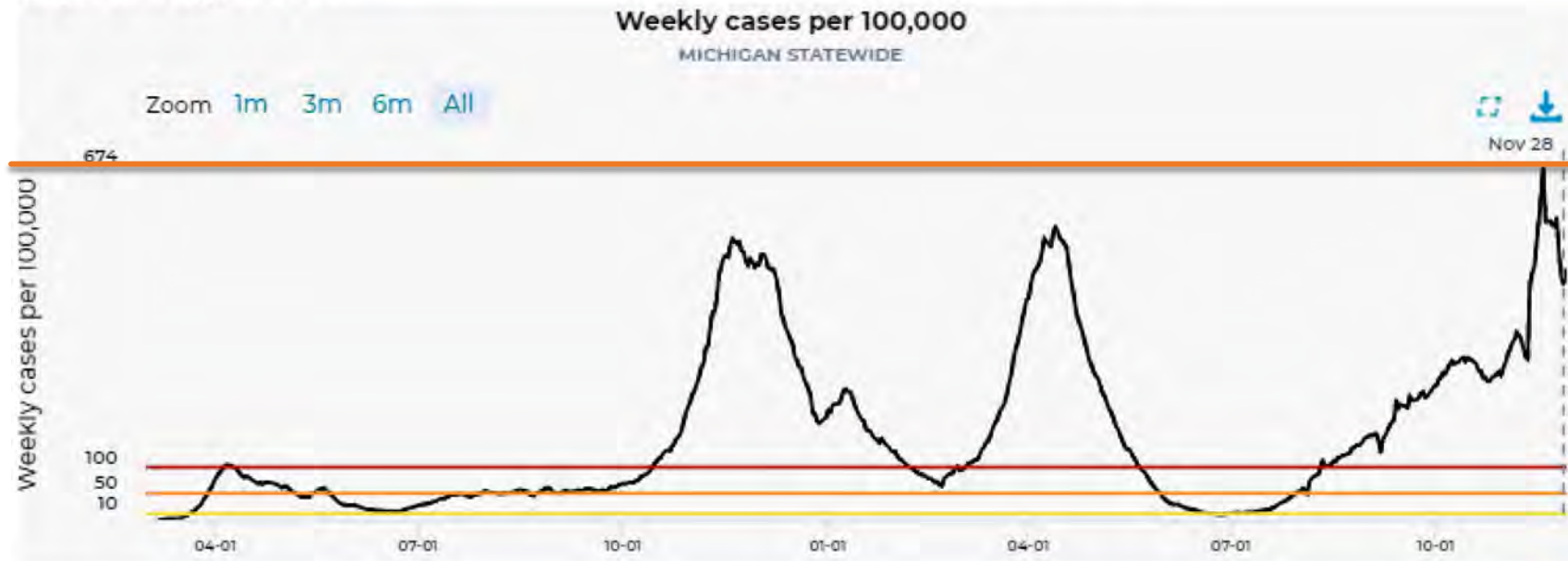
https://www.michigan.gov/coronavirus/0,9753,7-406-98163_98173_105123---,00.html

Overview of Michigan

- ▶ Michigan remains at High Transmission
- ▶ Percent positivity (18.9%) is increasing (up from 17.4 % last week)
- ▶ Case rate(556.9 cases/million) is increasing for one month (519.7 cases/million prior week)
- ▶ In the last 7 days, Michigan reported the second most cases and case rate in USA
- ▶ Cases among pediatric populations < 12 years have increased 2.6% since last week
- ▶ Percent of inpatient beds occupied by individuals with COVID (20.0%) is increasing for 18 weeks (up from 17.2% last week)
- ▶ In the last 7 days, no other state or territory has reported a higher inpatient bed utilization than Michigan (last week: highest) and 7th highest adult ICU bed utilization (6th highest last week)
- ▶ Daily pediatric hospital census are slightly decreased from last week but are near 2021 highs
- ▶ Death rate(6.3 deaths/million) is increasing for one week (5.8 last week). There were 439 COVID deaths between Nov 16-Nov 22
- ▶ Michigan has the 6th highest number of deaths (8th highest last week), and 14th highest death rate (24th highest last week) in the last 7 days

Michigan experiencing highest daily case count of pandemic

[Dashboard](#) | [CDC](#) | [MI Start Map](#) for most recent data by reporting date



Referrals declined over the holiday weekend

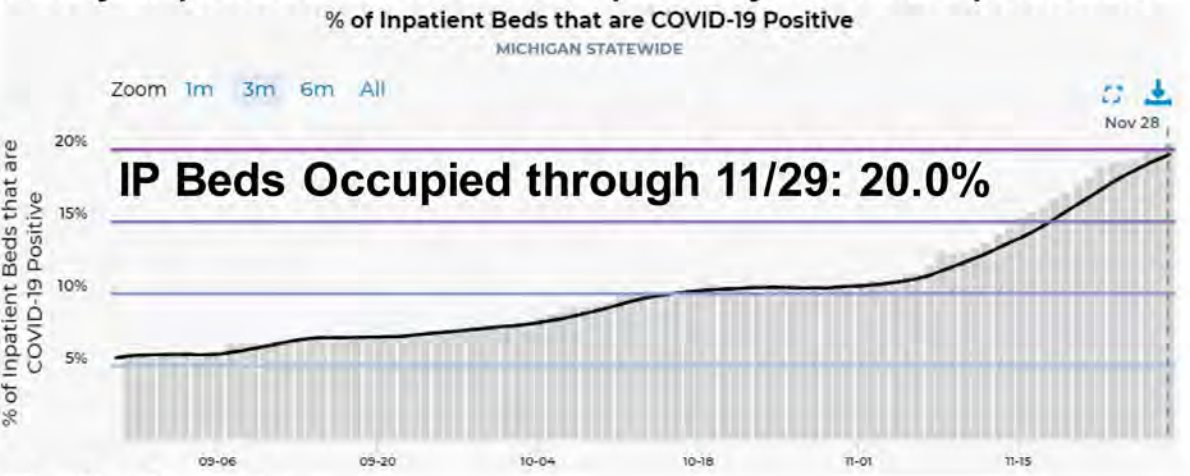
Time Trends – Positivity, Case Rates, Hospitalizations, Deaths

➤ Core COVID-19 indicators show that transmission is increasing, and burden remains high in Michigan

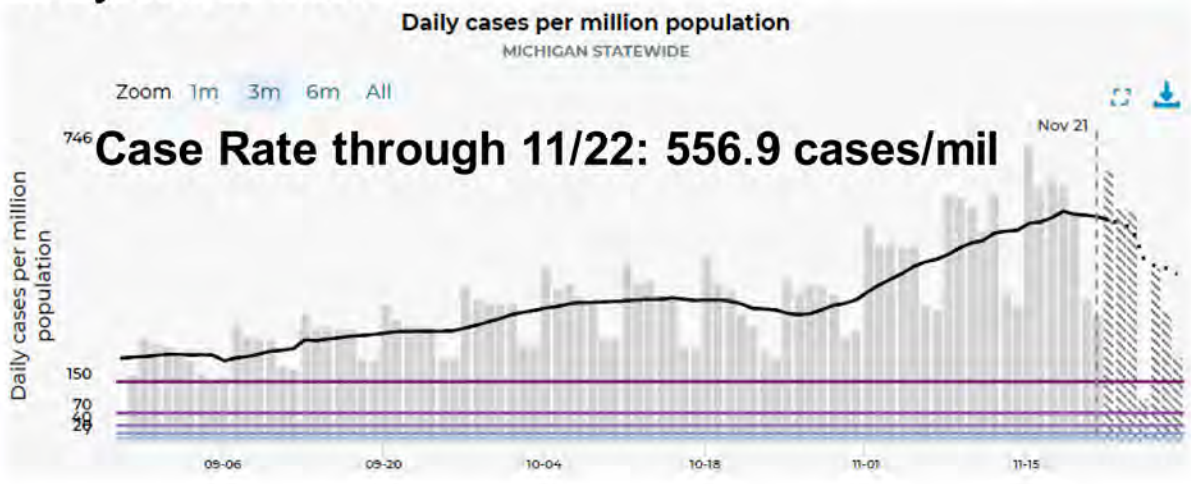
Daily Positive Test Rate



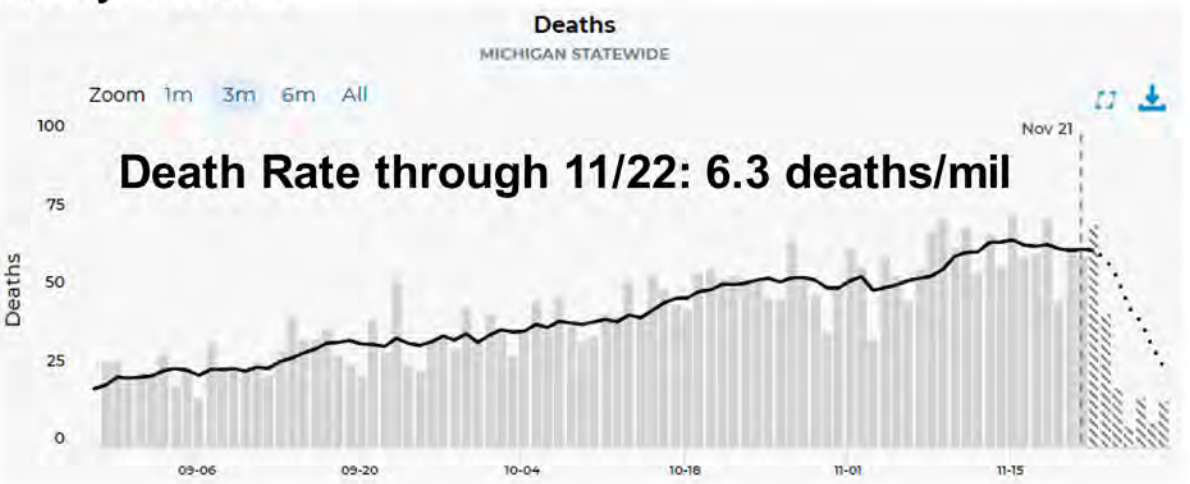
Daily Inpatient Beds Occupied by COVID patients



Daily Case Rate



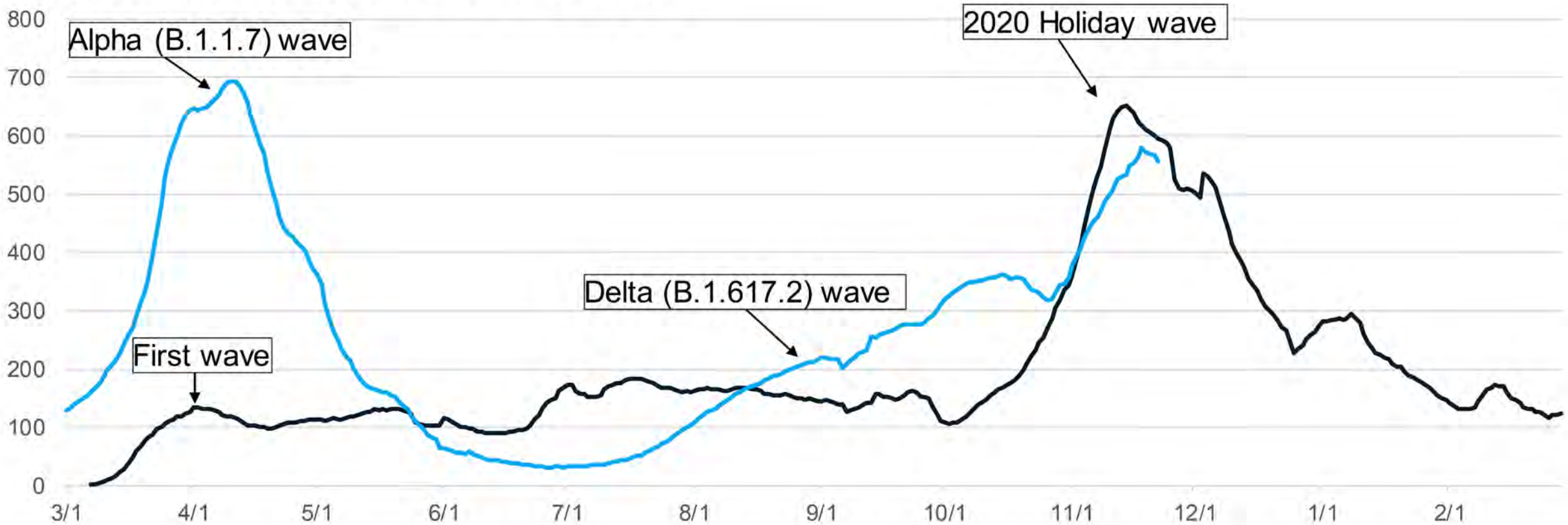
Daily Deaths



Time Trends – Annual Comparison

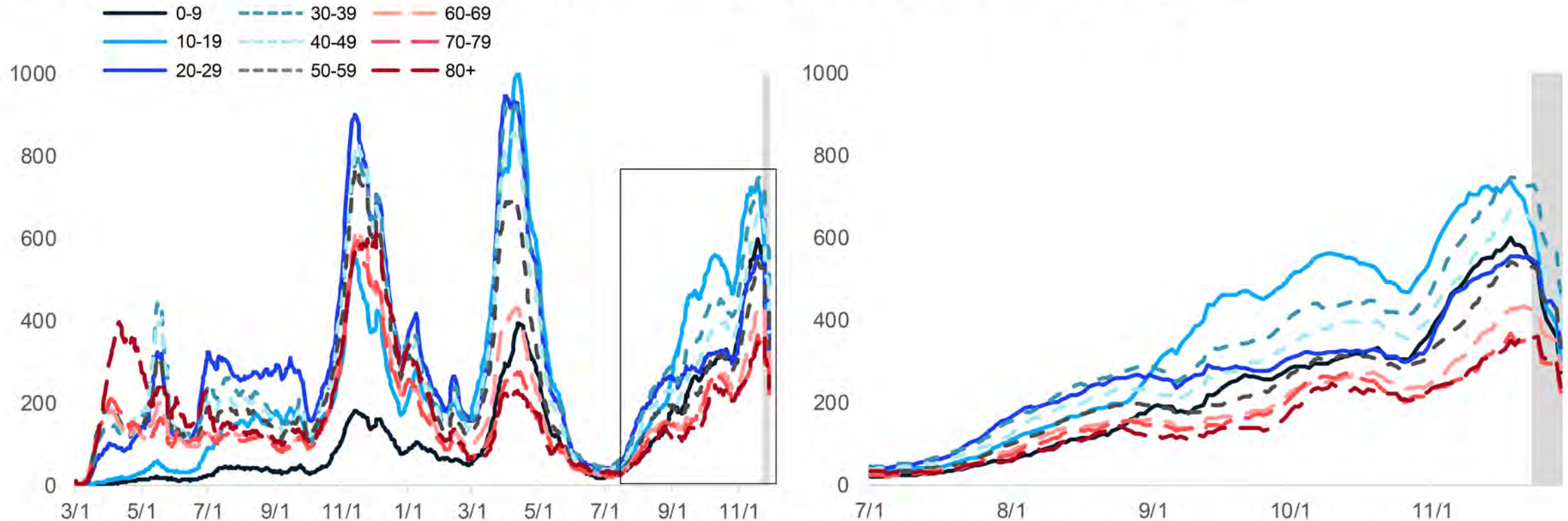
- Case rates are now at the same level as this time last year (by onset date).
- Trend is roughly following exponential curve we experienced as last fall.

7- day rolling average of Rates 2020 vs 2021



Case Rate Trends by Age Group

Daily new confirmed and probable cases per million by age group (7-day rolling average)



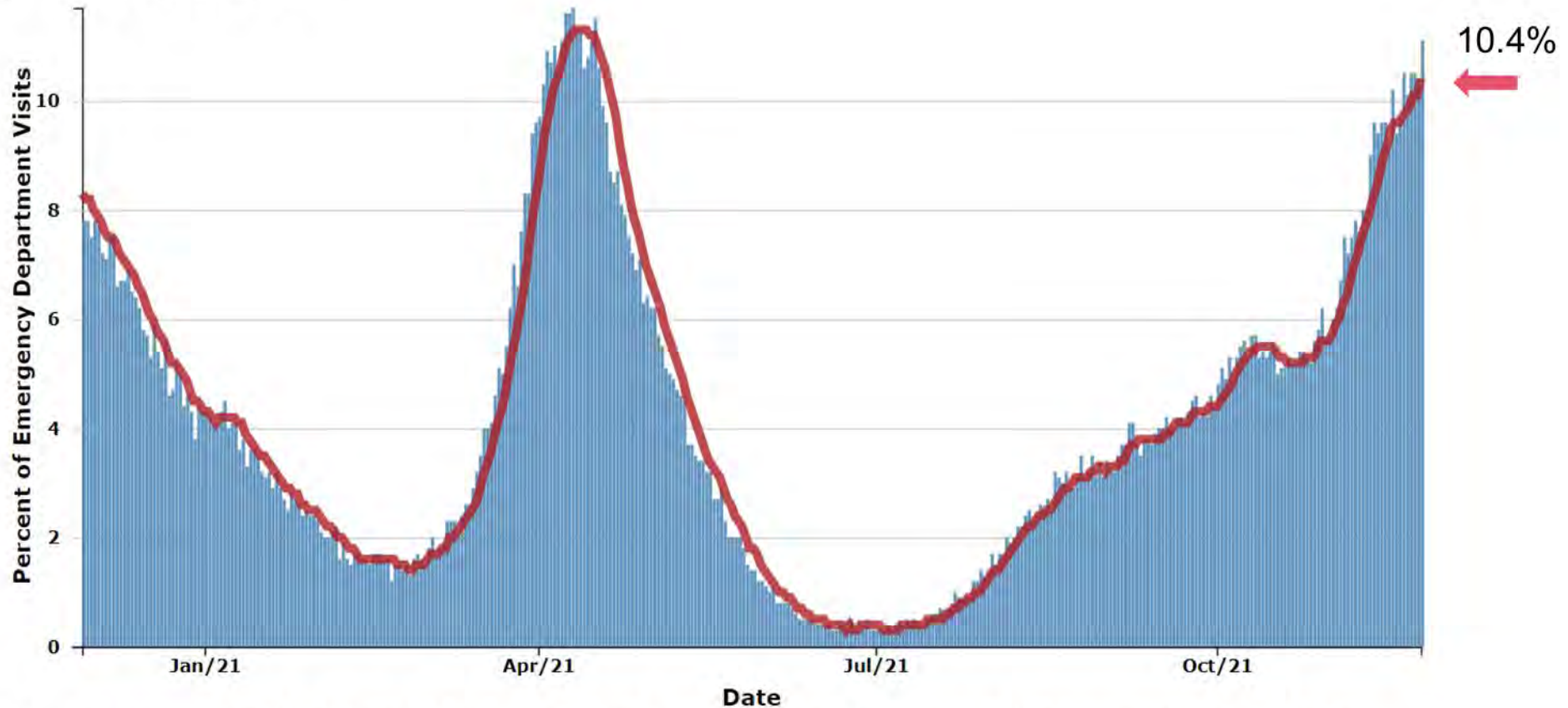
- Case rate trends for most age groups are increasing but trends are impacted holiday
- Case rates by onset date for all age groups are between 350 and 725 cases per million (through 11/22)
- Case counts and case rates are highest for 30-39-year-olds this week

Note: Case information sourced from MDHHS and reflects date of onset of symptoms
Source: MDHHS – Michigan Disease Surveillance System

Healthcare Capacity and COVID Severity

- ▶ Emergency Department visits, Hospital Admissions, and Hospital Census for COVID are all increasing
 - ▶ 10.4% of ED visits are for COVID diagnosis (up from 9.3% last week)
 - ▶ Hospital admissions for most age groups are plateaued week
 - ▶ Hospital census has increased 13% since last week (vs. 21% increase week prior)
 - ▶ Volume of COVID-19 patients in intensive care has increased 8% (vs. 23% increase last week)
- ▶ Death rate is 6.8 daily deaths/million residents over last 7 days (Last week: 5.8 deaths/million)
 - ▶ In the past 30 days, the proportion of deaths among those over 60 is steadily increasing

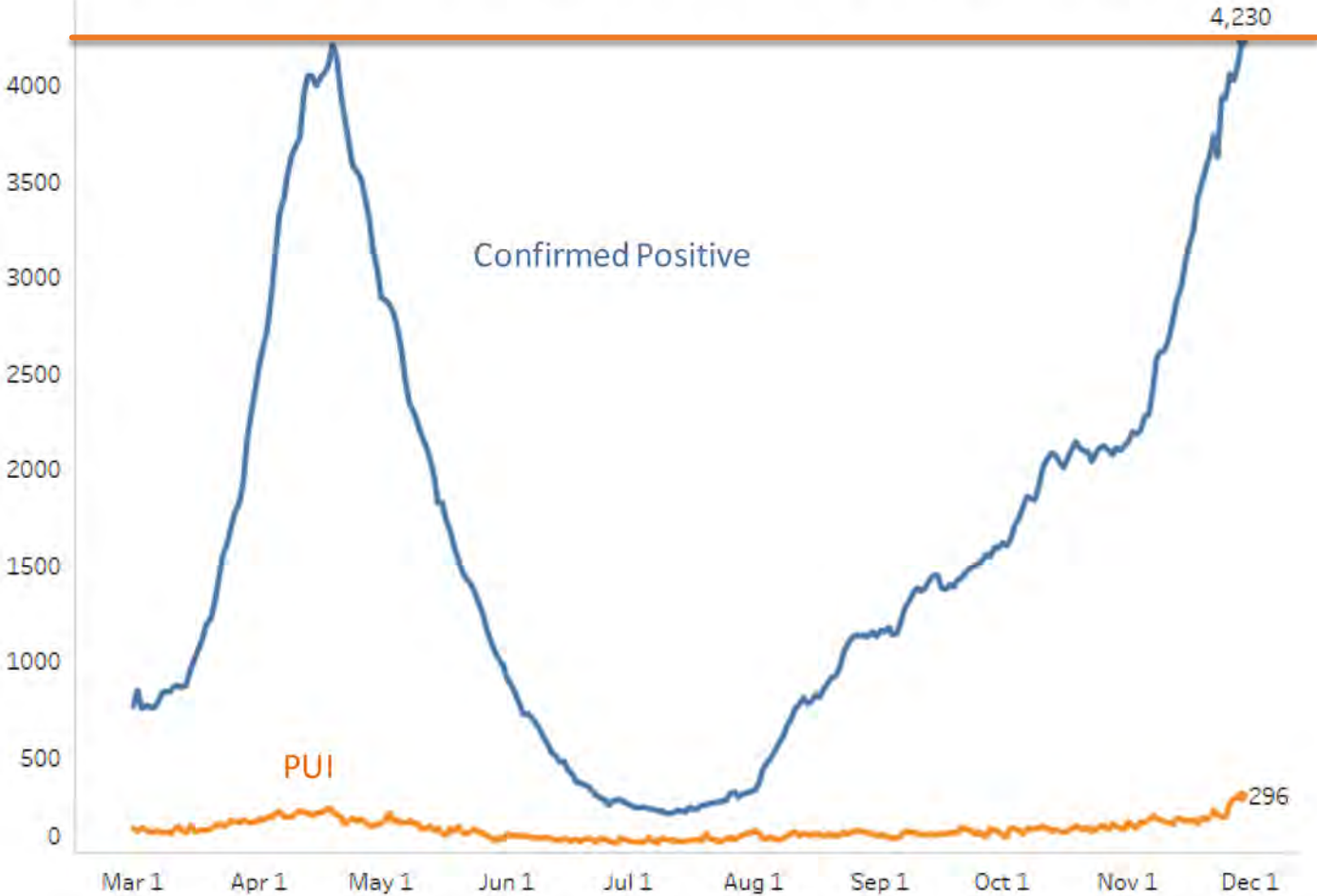
Michigan Trends in Emergency Department (ED) Visits for Diagnosed COVID-19



- Trends for ED visits have increased to 10.4% since last week (up from 9.3%), and are near Alpha surge high of 11.3%
- Trends for all age groups are increasing
- Over past week, those 50-64 years saw highest number of avg. daily ED CLI visits (13.8%), but those between 40+ all above state average

Statewide Hospitalization Trends: Total COVID+ Census

Hospitalization Trends 3/1/2021 – 11/29/2021
Confirmed Positive & Persons Under Investigation (PUI)



The COVID+ census in hospitals has increased by 13% in the past week (previous week was 21% growth).

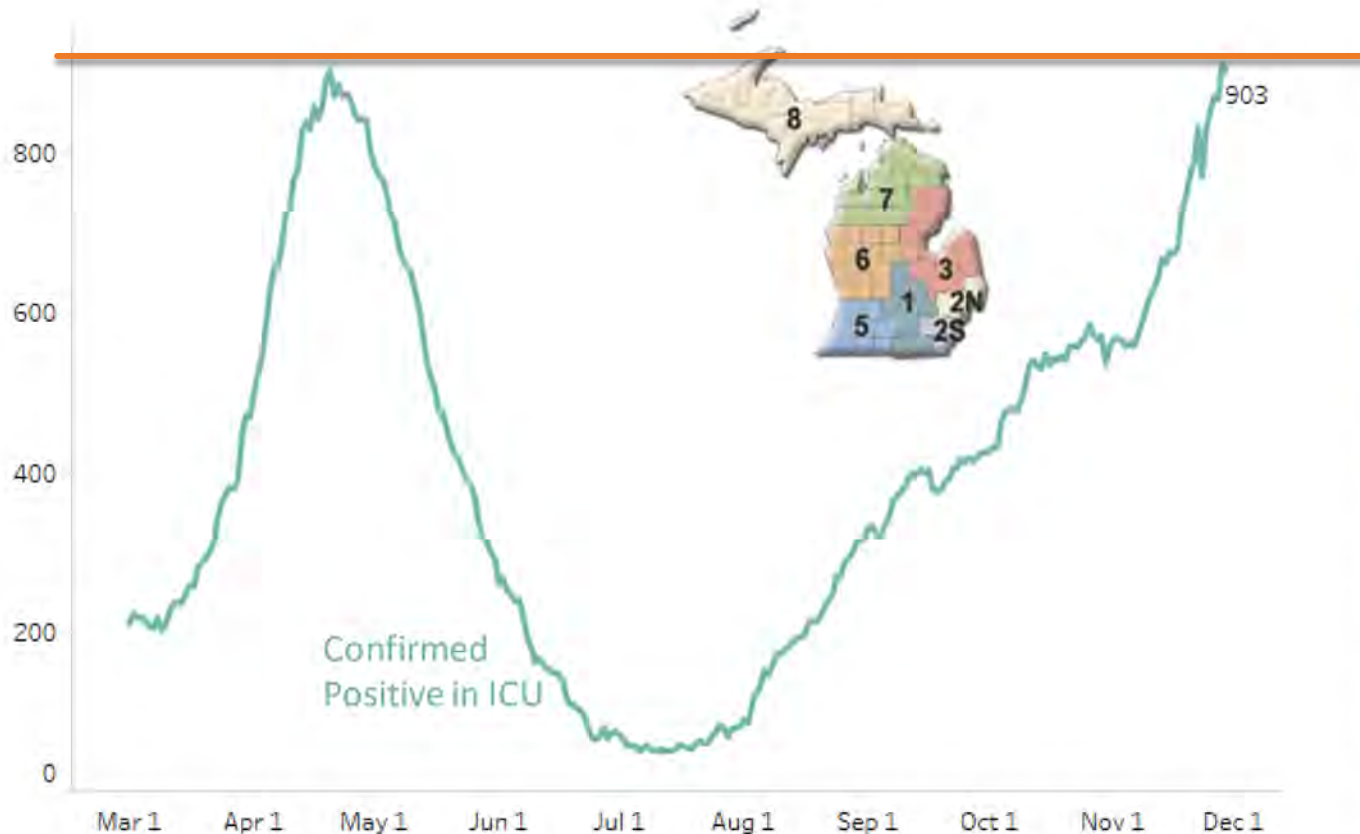
The current wave’s hospitalizations have exceeded peaks of the winter 2020 and spring 2021 waves and are approaching the spring 2020 wave peak (4,365).

Hospitalized COVID Positive Long Term Trend (beginning March 2020)



Statewide Hospitalization Trends: ICU COVID+ Census

Hospitalization Trends 3/1/2021 – 11/29/2021
Confirmed Positive in ICUs

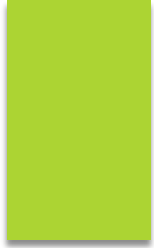


Overall, the census of COVID+ patients in ICUs has increased 8% from last week. COVID+ ICU census has surpassed the spring 2021 peak.

Regions 1, 2S, 3, 6, and 7 have overall adult ICU occupancy greater than 85%, with Regions 1, 3, 6 above 90% occupancy. Regions 1, 6, 7 and 8 have more than 40% of adult ICU beds filled with COVID+ patients. Region 6 has >50% of 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	100 (18%)	94%	49%
Region 2N	166 (17%)	83%	29%
Region 2S	200 (6%)	89%	28%
Region 3	128 (2%)	92%	37%
Region 5	61 (9%)	79%	36%
Region 6	157 (15%)	91%	53%
Region 7	63 (-9%)	86%	44%
Region 8	28 (17%)	62%	44%

Michigan Hospital Association (MHA) has found that three out of four COVID patients currently hospitalized are unvaccinated (76%), 87% of COVID ICU patients are unvaccinated and 88% of COVID ventilator patients are unvaccinated.



MICHIGAN COVID-19 HOSPITAL SNAPSHOT

Monday, Nov. 29, 2021



87% of COVID-19 ICU patients are unvaccinated.

**This figure represents MHA-member hospital and health system data.*



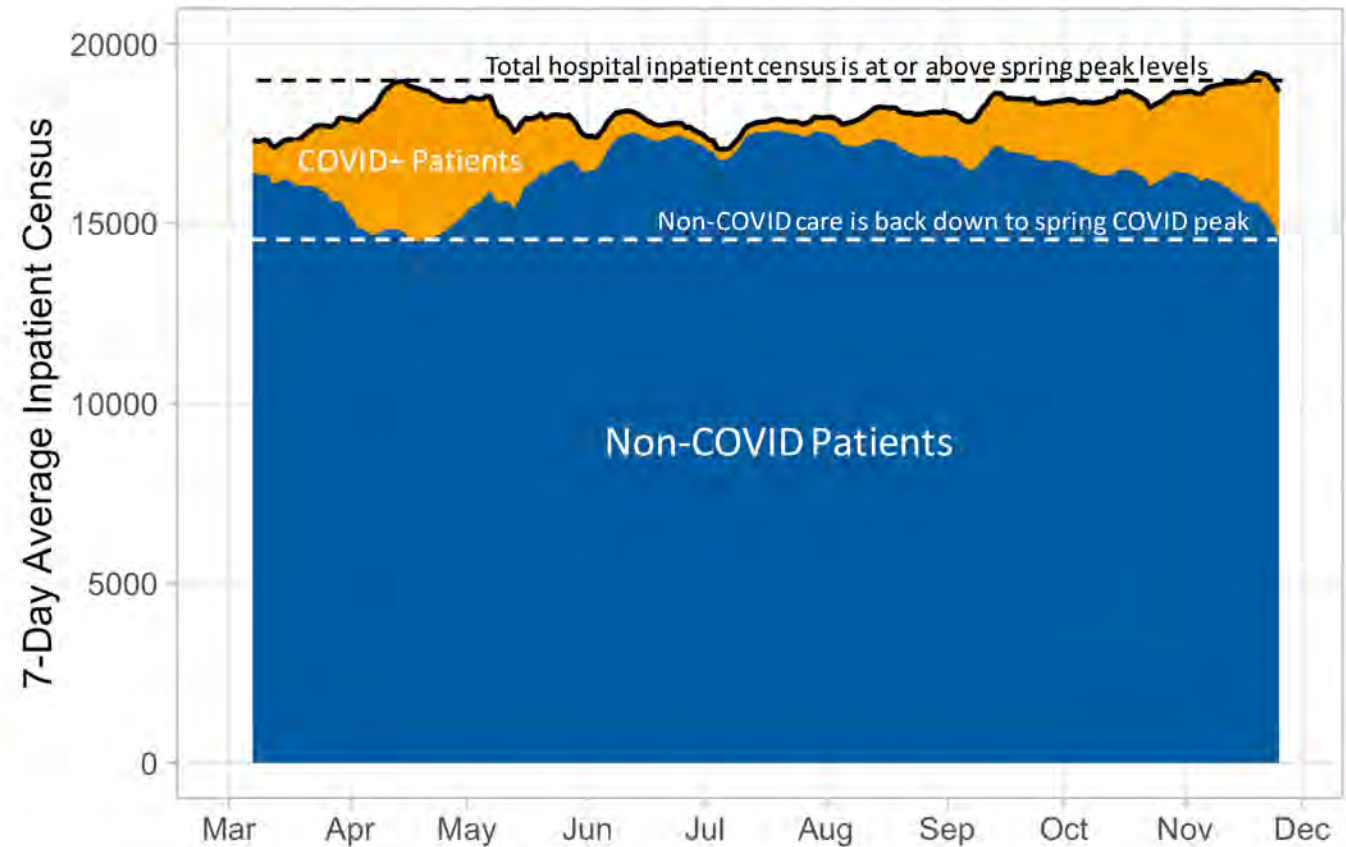
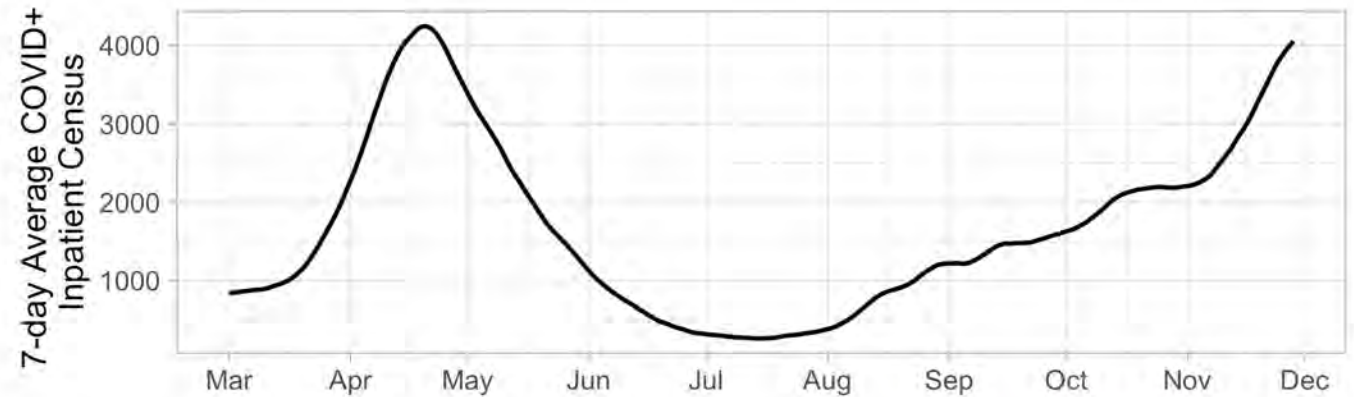
Press Release today, [Unvaccinated COVID patients NR.pdf](#)

Hospital census is at spring peak levels and is rising

- Cases and COVID+ census are rising
- Non-COVID care has been reduced back to spring peak levels (white dashed line)
- Together, overall inpatient census is at or above spring peak levels (black dashed line) but has been high for longer
- Likely to increase further if COVID and flu continue to grow

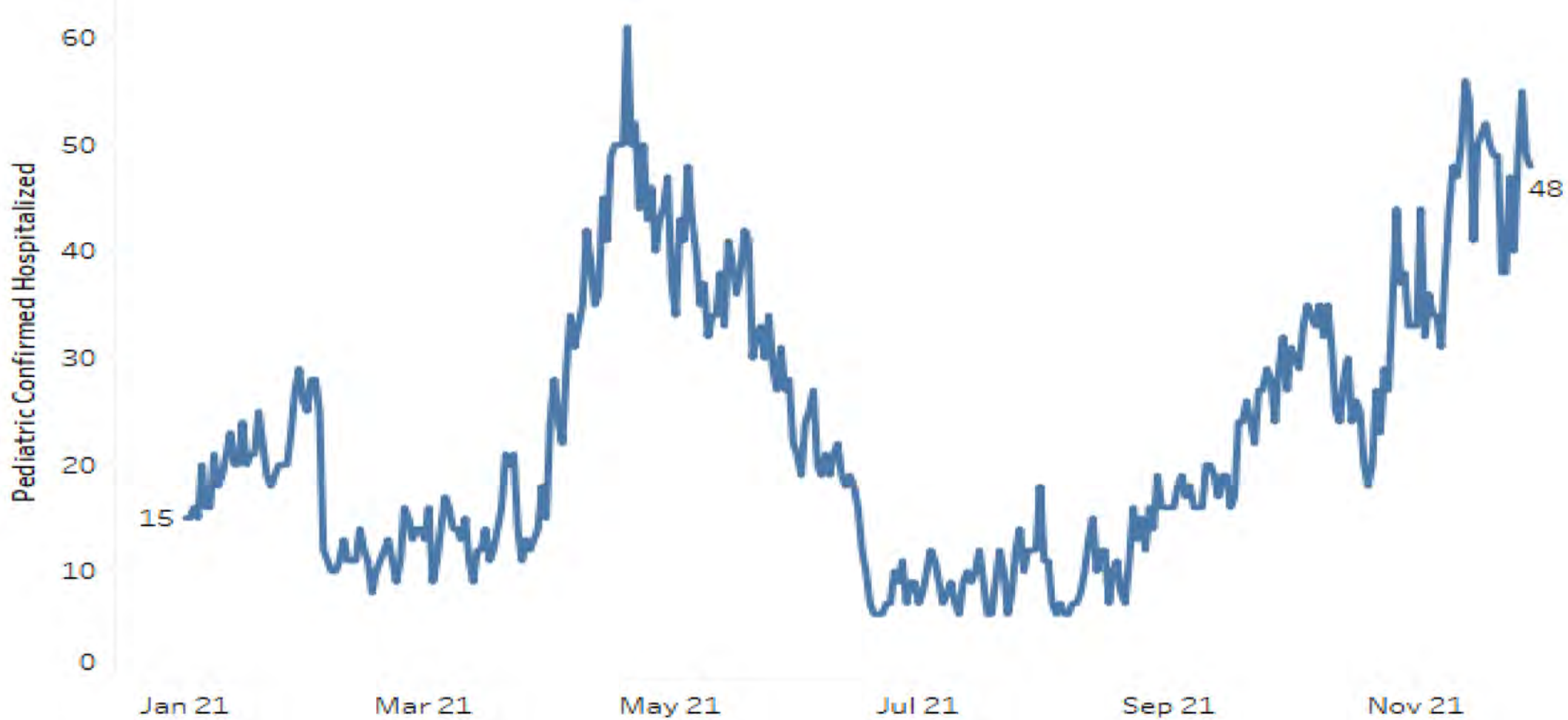


Data Sources: MDSS (case data as of 9/15/21), HHS Protect (hospital [admissions](#) and [inpatient census](#) data through 9/14/2021). New articles: [Munson](#), [Spectrum](#)



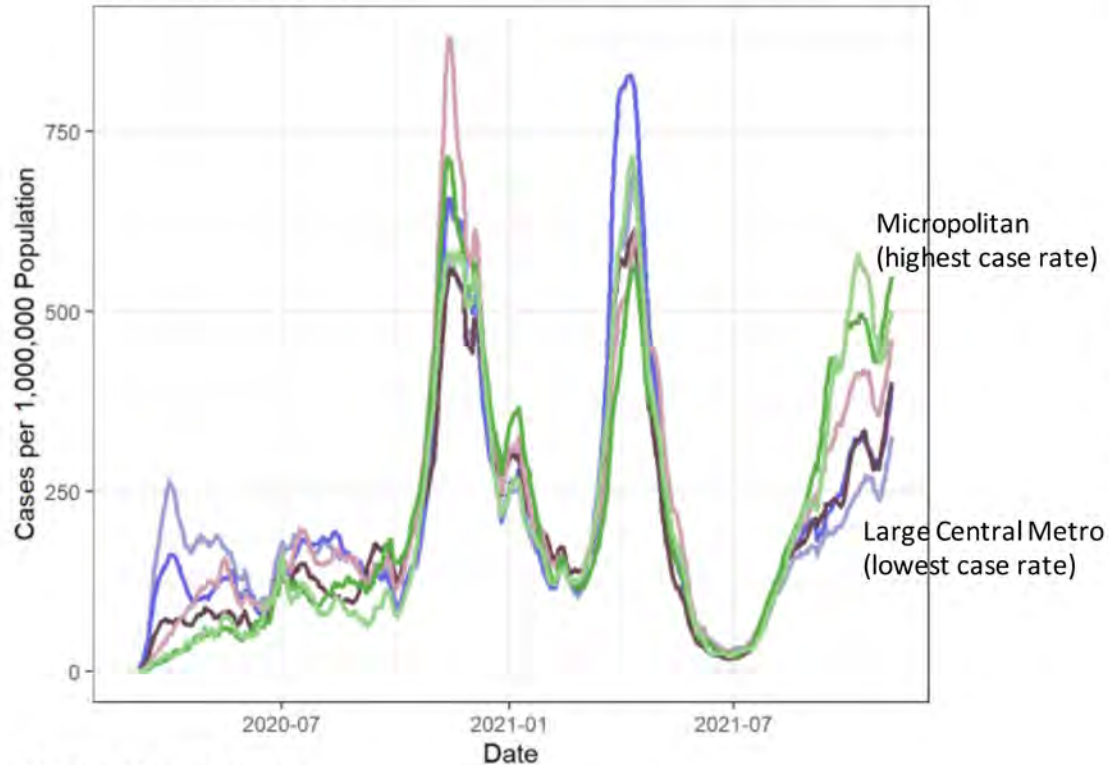
Statewide Hospitalization Trends: Pediatric COVID+ Census

Hospitalization Trends 1/1/2021 – 11/29/2021
Pediatric Hospitalizations, Confirmed + PUI

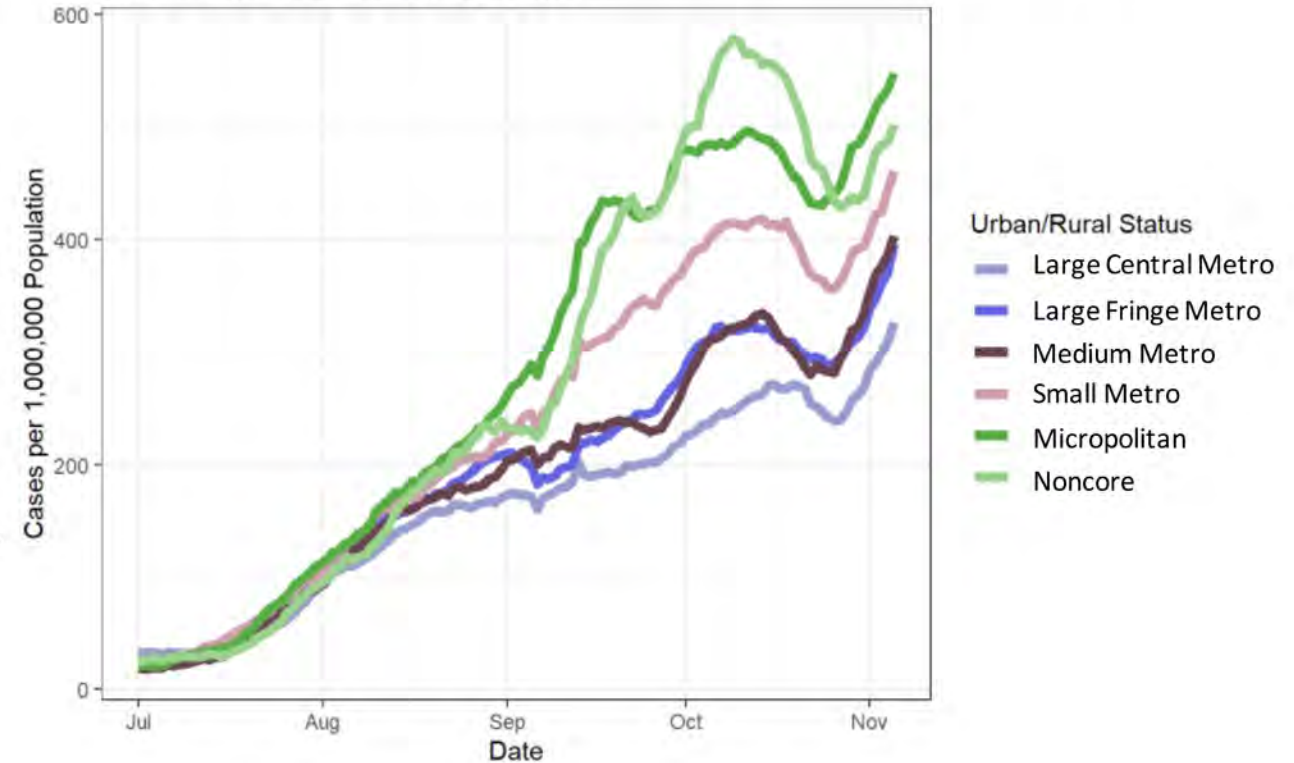


Average Daily Case Rates per Million Population by County Urbanicity Classification

Seven Day Average Daily New COVID-19 Cases per 1,000,000 Population by Rural/Urban Status



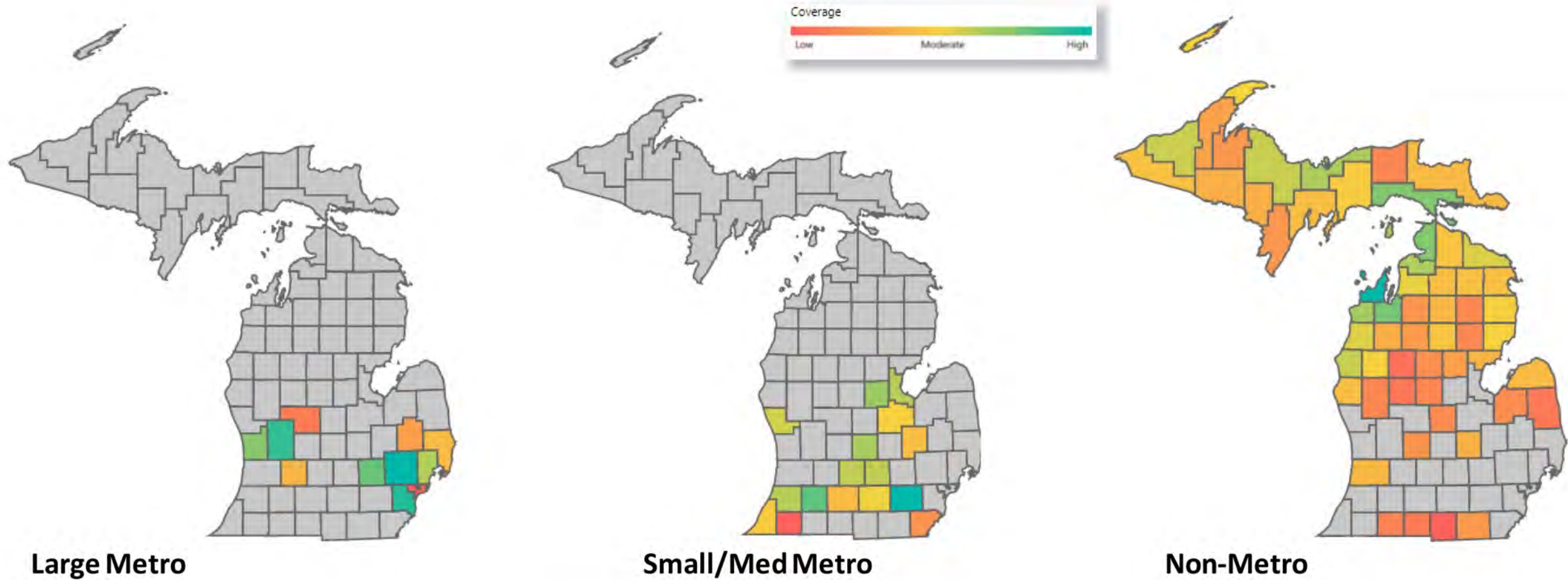
Seven Day Average Daily New COVID-19 Cases per 1,000,000 Population by Rural/Urban Status, Since July 1, 2021



Key Messages

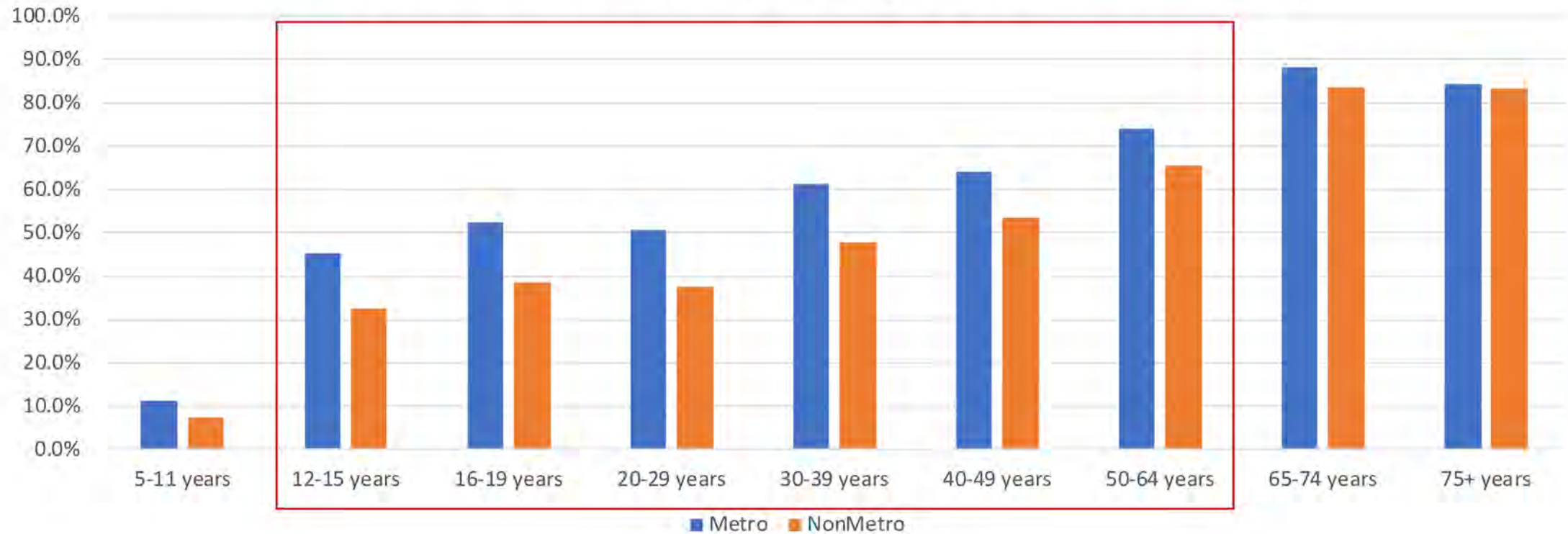
- Counties at all levels of urbanicity are experiencing increases in case rate
- A gradient with the most populous counties have lower rates than the least populous counties with the highest reported case rates

There is a Range of Vaccine Coverage Regardless of Urban/Rural Classification



Older Adults in Rural Areas Have Similar Vaccination Coverage, but Younger Ages Have Lower Coverage

County Level Vaccination Coverage by age group and Urban/Rural Status



Key Messages

- Vaccine coverage increases with older age, but vaccine coverage is lower in non-metro counties compared with metro counties
- Disparities in vaccine coverage within age groups is greater for younger ages

Cumulative COVID-19 Cases by Vaccination Status, Michigan, Jan 15 – Nov 19

Fully Vaccinated People (5,107,217)		
Cases	Hospitalization	Deaths
Percent of Cases In People Not Fully Vaccinated (630,878 / 734,959) 85.8%	Percent of Hospitalizations In People Not Fully Vaccinated (15,907 / 18,277) 87.0%	Percent of Deaths In People Not Fully Vaccinated (7,404 / 8,574) 86.4%
630,878 Total Cases Not Fully Vaccinated	15,907 Total Hospitalized Not Fully Vaccinated	7,404 Total Deaths Not Fully Vaccinated
Total Breakthrough Cases 104,081	Total Breakthrough Hospitalizations 2,370	Total Breakthrough Deaths 1,170
2.038% Percent of Fully Vaccinated People who Developed COVID-19 (104,081 / 5,107,217)	0.046% Percent of Fully Vaccinated People Who Were Hospitalized for COVID-19 (2,370 / 5,107,217)	0.023% Percent of Fully Vaccinated People Who Died of COVID-19 (1,170 / 5,107,217)
14.2% Percent of Cases Who Were Fully Vaccinated (104,081 / 734,959)	13.0% Percent of Hospitalizations Who Were Fully Vaccinated (2,370 / 18,277)	13.6% Percent of Deaths Who Were Fully Vaccinated (1,170 / 8,574)
Total Cases: 734,959	Total Hospitalizations: 18,277	Total Deaths: 8,574

Michigan Disease Surveillance System may underestimate the frequency of COVID-19 hospitalizations:

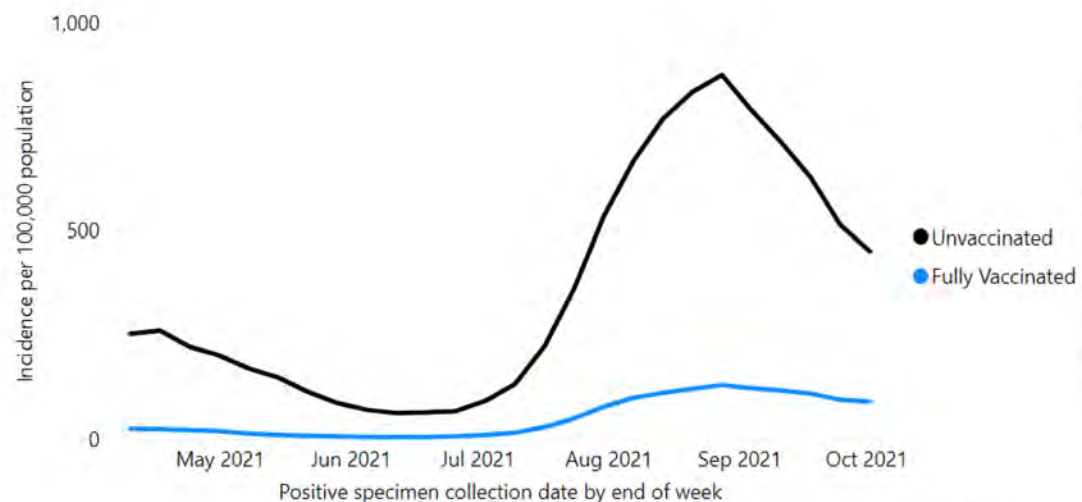
- Case investigation and follow-up is more difficult for individuals who get hospitalized (e.g., they are too ill to speak to investigators, don't answer their phone, or otherwise).
- These hospitalizations include individuals who are hospitalized for issues other than COVID-19 (the same as breakthrough COVID-19).
- Individuals who get hospitalization will lag after infection and may occur after case investigation.



National Age-Standardized Rates of COVID-19 Cases and Deaths by Vaccination Status

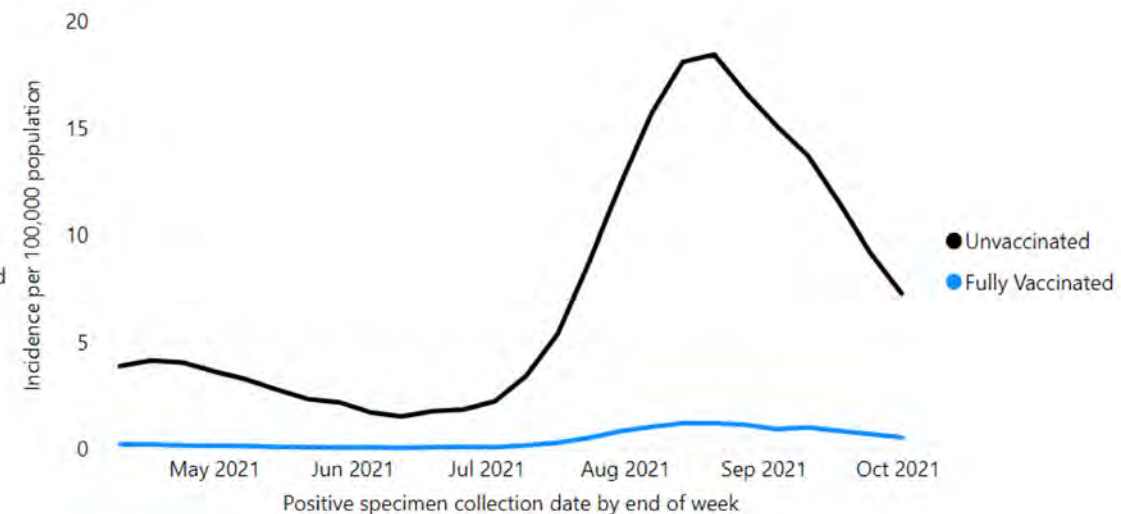
Rates of COVID-19 Cases by Vaccination Status

April 04 - October 02, 2021 (24 U.S. jurisdictions)



Rates of COVID-19 Deaths by Vaccination Status

April 04 - October 02, 2021 (20 U.S. jurisdictions)



In September, unvaccinated persons had:

5.8X

Risk of Testing Positive for COVID-19

AND

14X

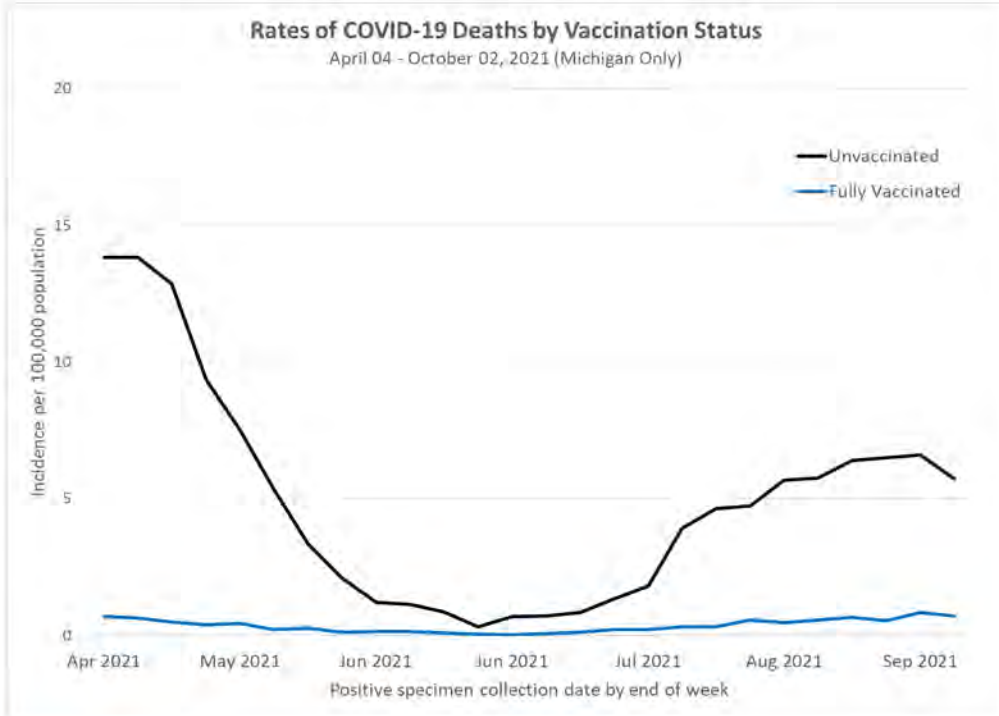
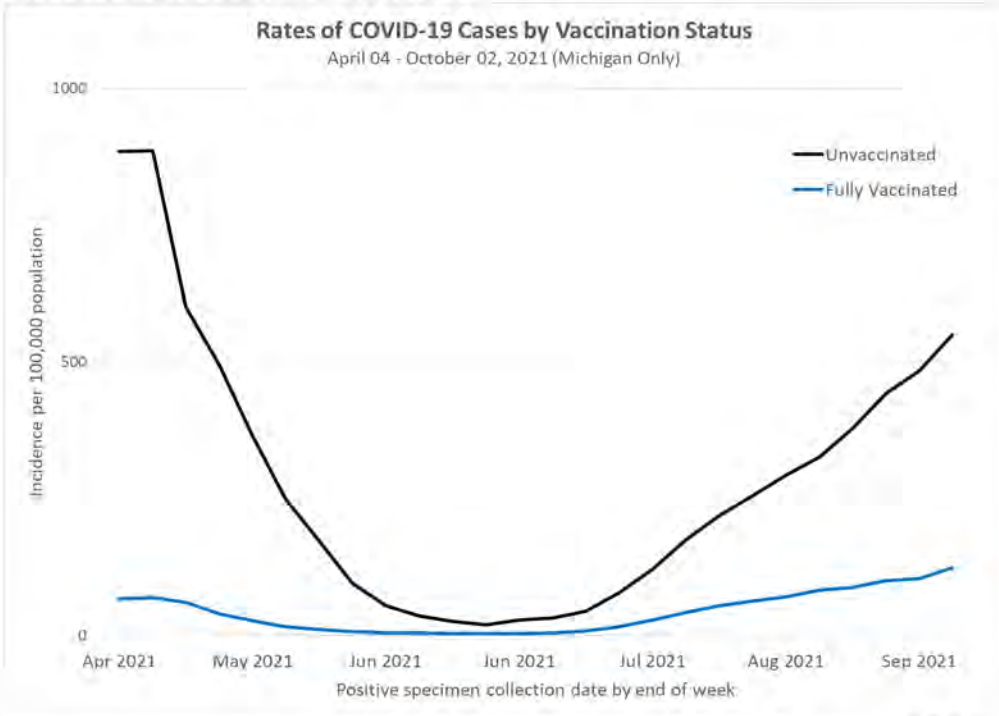
Risk of Dying from COVID-19

compared to fully vaccinated persons

Footnotes: Incidence rates were age-standardized using the 2000 U.S. Census standard population; and rates are not adjusted for time since vaccination, underlying conditions, or other demographic factors besides age. | Incidence rate ratios for the past one month were calculated by dividing the average weekly incidence rates among unvaccinated people by that among fully vaccinated people.



Michigan Age-Standardized Rates of COVID-19 Cases and Deaths by Vaccination Status



In September, unvaccinated persons had:

4.4 X
Risk of Testing Positive for COVID-19

AND

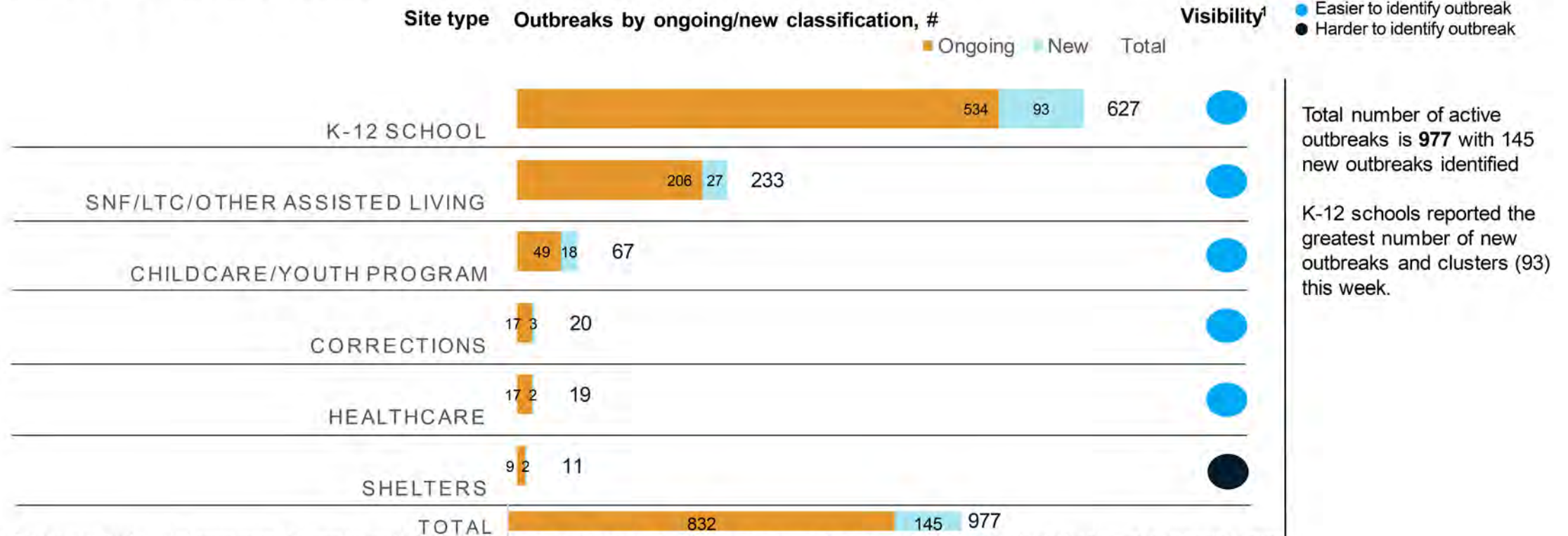
9.3 X
Risk of Dying from COVID-19

compared to fully vaccinated persons

Footnotes: Incidence rates were age-standardized using the 2000 U.S. Census standard population; and rates are not adjusted for time since vaccination, underlying conditions, or other demographic factors besides age. Incidence rate ratios for the past one month were calculated by dividing the average weekly incidence rates among unvaccinated people by that among fully vaccinated people.

Number of Weekly Reported Outbreaks: *New Format*

Number of outbreak investigations by site type, week ending Nov 24



Total number of active outbreaks is **977** with 145 new outbreaks identified

K-12 schools reported the greatest number of new outbreaks and clusters (93) this week.

1. Based on a setting's level of control and the extent of time patrons/residents spend in the particular setting, different settings have differing levels of ability to ascertain whether a case derived from that setting

NOTE: Many factors, including the lack of ability to conduct effective contact tracing in certain settings, may result in significant underreporting of outbreaks. This chart does not provide a complete picture of outbreaks in Michigan and the absence of identified outbreaks in a particular setting in no way provides evidence that, in fact, that setting is not having outbreaks.

NOTE (10/4): MDHHS adopted the new [CSTE school cluster and outbreak definition](#) which impacts how transmissions within school-sponsored settings are reported to the health department

NOTE (11/22): The local health department weekly outbreak reporting survey was streamlined to focus on congregate settings where patients/staff might be more at risk for infection and/or experience severe outcomes from infection. This was in an effort to prioritize limited local health department capacity to populations for which the biggest public health impact could be made.

K-12 school clusters and outbreaks, recent and ongoing, week ending Nov 24

Number of reported outbreaks/clusters increased since last week (610 to 627), with increases in Pre K-Elementary (315 to 343). Declines in Middle/Jr High (146 to 142), and High Schools decreased (148 to 141). Administration is steady (at 1).

Region	Number of reported cases, #	# Ongoing - Excluding New	# New	Number of outbreaks	Range of cases per outbreak
Region 1	1,681	63		138	2-71
Region 2n	420	47		71	3-43
Region 2s	573	90		61	2-46
Region 3	2,502	374		159	3-88
Region 5	201	18		36	3-19
Region 6	694	64		100	2-48
Region 7	264	44		28	2-37
Region 8	596	11		34	3-51
Total	6,931	711		627	2-88

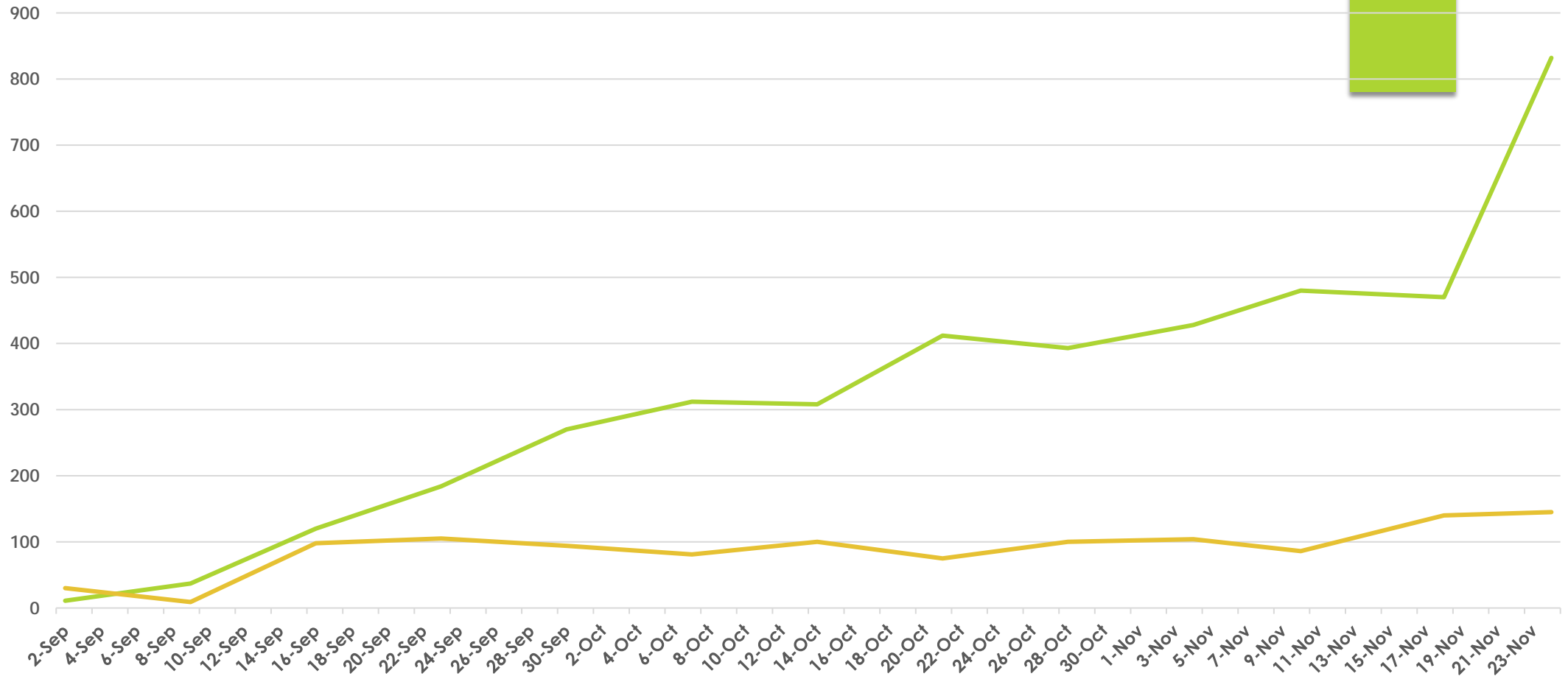
Grade level	Number of reported cases, #	# Ongoing - Excluding New	# New	Number of outbreaks	Range of cases per outbreak
Pre-school - elem.	2,799	351		343	2-56
Jr. high/middle school	1,674	82		142	2-69
High school	2,454	278		141	3-88
Administrative	4	0		1	4
Total	6,931	711		627	2-88

Many factors, including the lack of ability to conduct effective contact tracing in certain settings, may result in significant underreporting of outbreaks. This chart does not provide a complete picture of outbreaks in Michigan and the absence of identified outbreaks in a particular setting in no way provides evidence that, in fact, that setting is not having outbreaks.

NOTE (10/4): MDHHS adopted the new [CSTE school cluster and outbreak definition](#) which impacts how transmissions within school-sponsored settings are reported to the health department

Source: LHD Weekly Sitreps

Number of K-12 Outbreaks



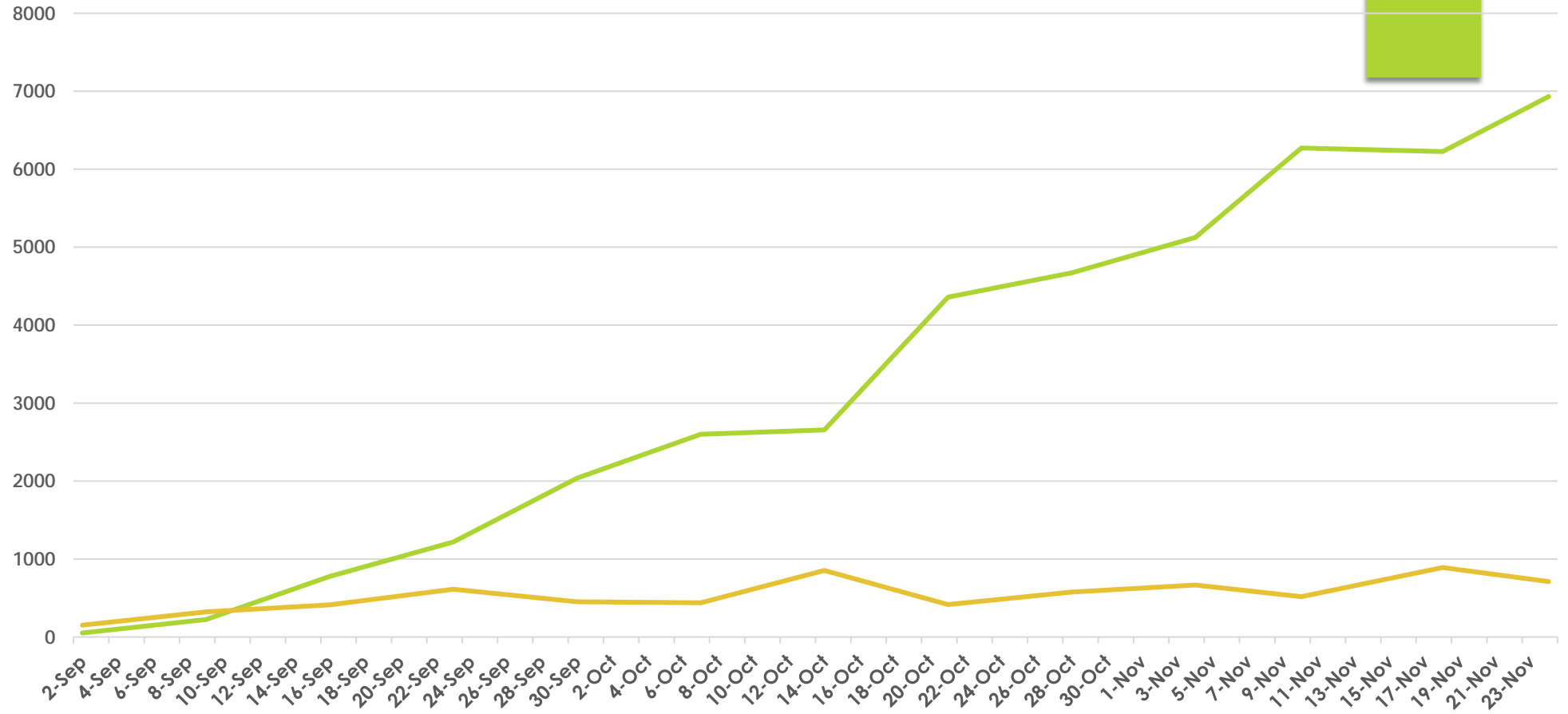
	2-Sep	9-Sep	16-Sep	23-Sep	30-Sep	7-Oct	14-Oct	21-Oct	28-Oct	4-Nov	10-Nov	18-Nov	24-Nov
K-12 Ongoing Outbreaks	11	37	120	184	270	312	308	412	393	428	480	470	832
K-12 New Outbreaks	30	9	98	105	94	81	100	75	100	104	86	140	145

— K-12 Ongoing Outbreaks
 — K-12 New Outbreaks

Definition of Educational Outbreak can be found [here](#).

Ongoing outbreaks are those that had already been identified in previous weeks but have had at least one new associated case reported to the local health department in the last 28 days.

Number of Cases in K-12 Outbreaks



	2-Sep	9-Sep	16-Sep	23-Sep	30-Sep	7-Oct	14-Oct	21-Oct	28-Oct	4-Nov	10-Nov	18-Nov	24-Nov
K-12 Cases from Ongoing Outbreaks	52	224	776	1219	2036	2600	2656	4359	4670	5124	6271	6226	6931
K-12 Cases from New Outbreaks	151	323	412	612	451	439	854	416	576	666	518	891	711

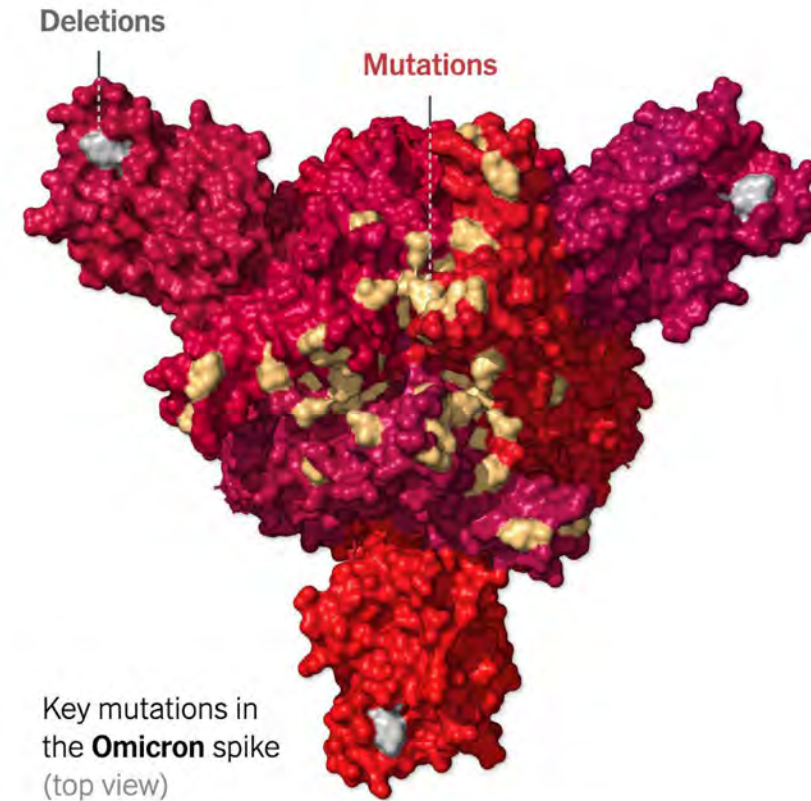
— K-12 Cases from Ongoing Outbreaks
 — K-12 Cases from New Outbreaks

Definition of Educational Outbreak can be found [here](#).

Ongoing outbreaks are those that had already been identified in previous weeks but have had at least one new associated case reported to the local health department in the last 28 days.

Omicron B.1.1.529

Omicron carries about [50 mutations not seen in combination before](#), including more than 30 mutations on the spike protein that the coronavirus uses to attach to cells.



Omicron's spike protein has several mutations that are found in other variants of concern and that are thought to make the virus more infectious, including [D614G](#), [N501Y](#) and [K417N](#).

SARS-CoV-2 Variants by Country/Area

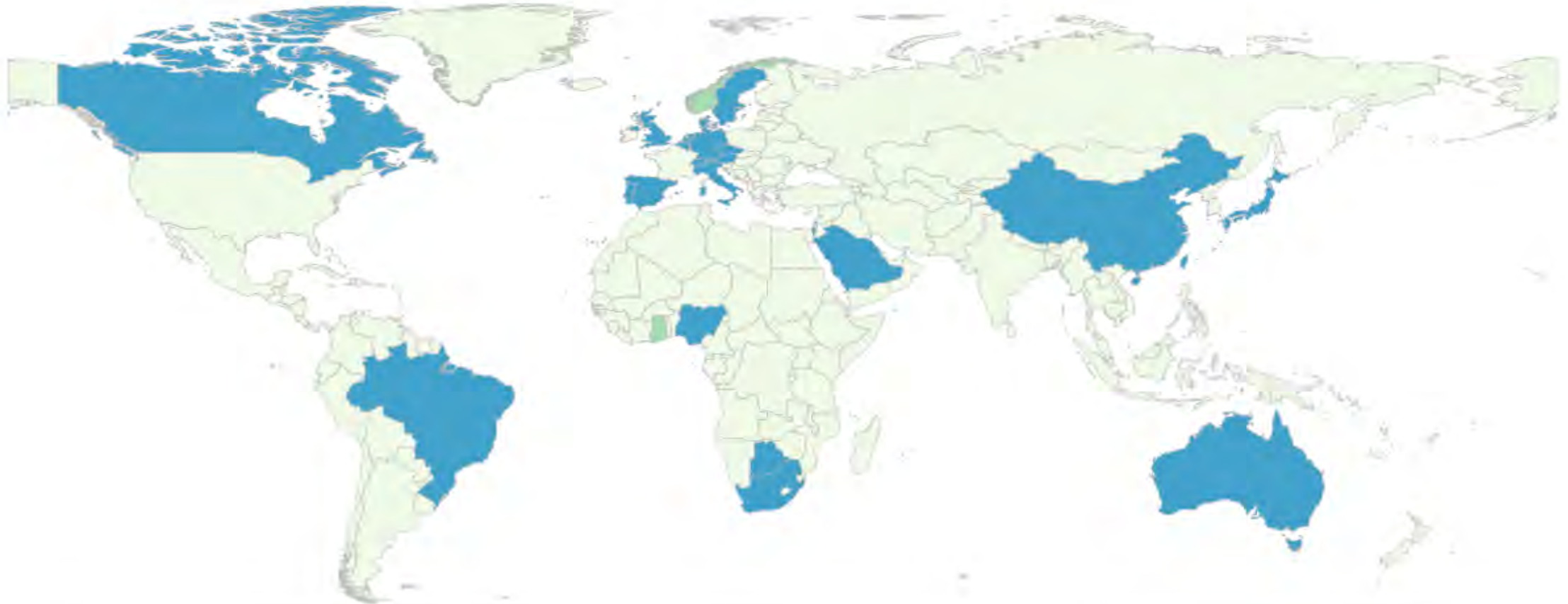
Data updated on 2021-12-01

Variant

Omicron (B.1.1.5... ▾)

Verification	Number of Locations
Verified	22
Unverified	3
Total	25

The map shows which countries have reported variants of SARS-CoV-2, as defined by the World Health Organization (WHO). Country specific designations of notable variants may differ. Because of differences in detection and reporting, variants could be present in some countries that have not yet reported them. The lack of reporting does not indicate the variant is absent in that country. Labels assigned by WHO are presented. Variant names in parentheses are according to the dynamic nomenclature guidelines implemented in Pango. Data were provided by the World Health Organization (WHO) Variant Tracker. For more information on variants, please see <https://www.cdc.gov/coronavirus/2019-ncov/cases-updates/variant-surveillance.html>



Omicron

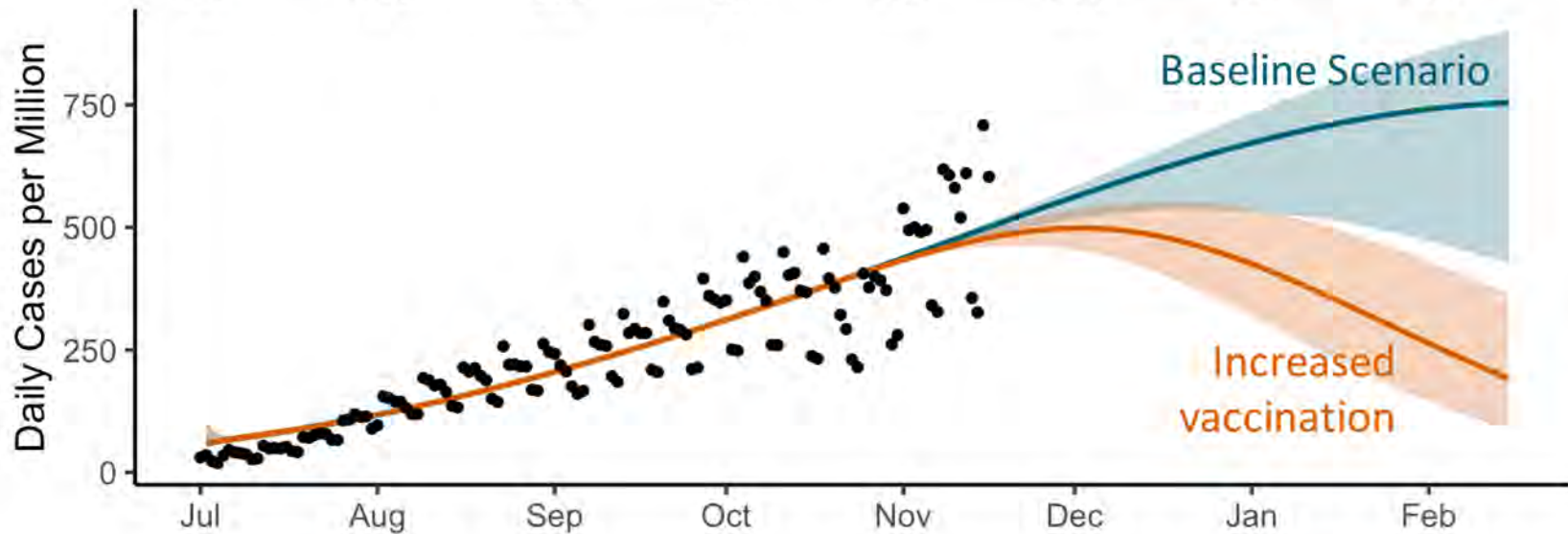
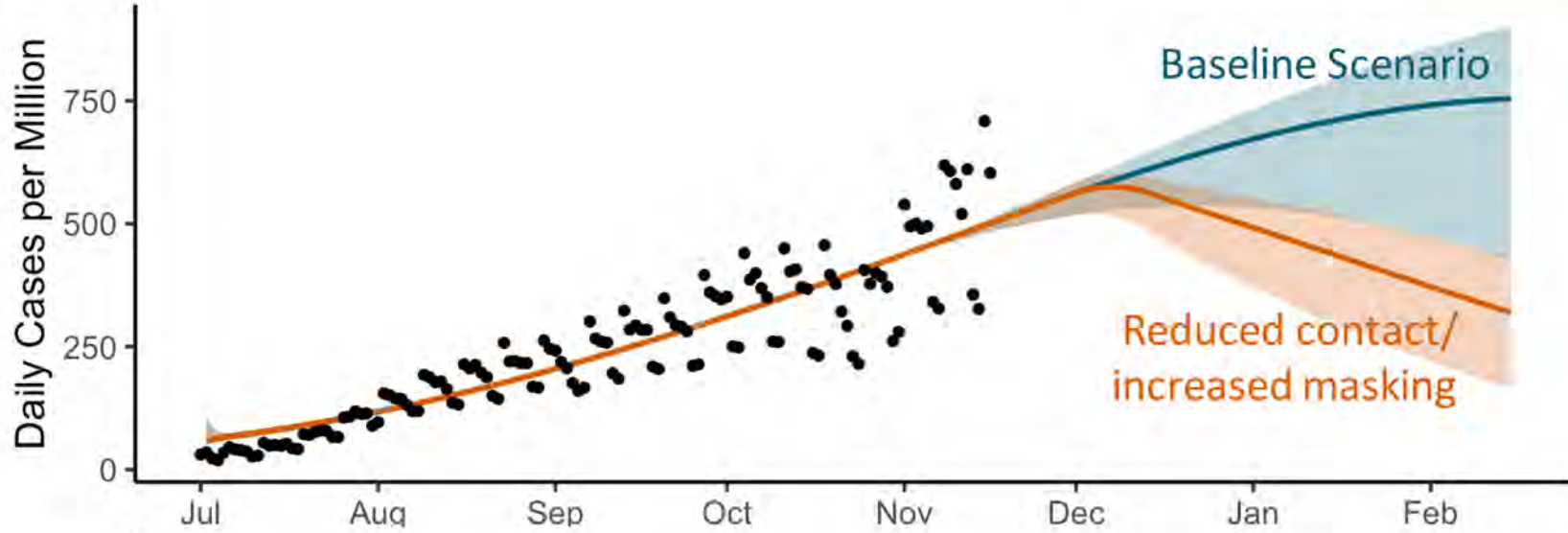
	Omicron
Transmissibility	Likely increased
Severity	Mild illness reported in young, healthy individuals. Severity will need to be assessed on a population basis.
Prior infection	Possible increased risk of reinfection
Effectiveness of vaccines	Studies underway. Current vaccines protective against infection, severe disease and death from widely circulating strains.
Effectiveness of tests	PCR detects infection. Antigen manufacturers have released statements on test effectiveness.
Effectiveness of therapeutics	Steroids and IL6 receptor blockers still useful in severe COVID-19. Studies needed on mAB and other antivirals.

Web Site With Info on Tests and Variants

- ▶ PCR: <https://www.path.org/programs/diagnostics/covid-dashboard-implications-variants-covid-19-molecular-test-detection/>
- ▶ Antigen: <https://www.path.org/programs/diagnostics/covid-dashboard-implication-variants-covid-19-antigen-test-detection/>

Cases projected to continue rising if contact, masking, and vaccination remain unchanged—but can decrease if we increase prevention efforts

- Model projections: continued increase if no change to contact patterns or vaccination (blue)
- With intervention (orange): cases are projected to decrease if either:
 - Top: masking increases and/or contact rates decrease, or
 - Bottom: vaccination increases to reach **60% of the overall population by Jan 1**
- **Increased prevention efforts could prevent an estimated 108,000 – 155,000 cases, 11,000 – 16,000 hospitalizations and 1,200 – 1,900 deaths over December and January**



Contact reduction scenarios (orange, top plot) assume 20% reduction in effective contact by Dec 15 due to masking, distancing, and/or reduced social contact. Shaded regions: best 50% of estimates, line: best fit estimate. Outcomes prevented based on best fit estimates. Data sources: MDSS case and death data, HHS Protect hospital data, and Tiberius vaccine coverage data by age group.

UM Student Influenza Cases

- 745 cases from October 6 through November 19.
- Subtype identified as A(H3N2)
- Percent positivity: 24%
- Vaccination ~26%.
- Influenza vaccine coverage is lower than last year in all age groups, including 18-24 year olds.
- This is among early outbreaks around the US after no influenza spread since March of 2020.

TAKE 3 ACTIONS TO FIGHT FLU

Influenza (flu) is a contagious disease that can be serious. Every year, millions of people get sick, hundreds of thousands are hospitalized, and thousands to tens of thousands of people die from flu. CDC urges you to take the following actions to protect yourself and others from flu.

GET YOURSELF AND YOUR FAMILY VACCINATED!

A yearly flu vaccine is the first and most important step in protecting against flu viruses.

Everyone 6 months or older should get an annual flu vaccine. Protect Yourself. Protect Your Family. Get Vaccinated. #FightFlu

STOP THE SPREAD

Take everyday preventive actions to help stop the spread of flu viruses!

Avoid close contact with sick people, avoid touching your eyes, nose, and mouth, cover your coughs and sneezes, wash your hands often (with soap and water).

ASK YOUR DOCTOR ABOUT FLU ANTIVIRALS

Take antiviral drugs if your doctor prescribes them!

Antiviral drugs can be used to treat flu illness and can make illness milder and shorten the time you are sick.

WWW.CDC.GOV/FLU #FIGHT FLU

Influenza has historically led to substantial strain on healthcare systems.

2017-2018 Flu Season: Burden and Burden Averted by Vaccination

During the 2017-2018 season, CDC estimates flu caused:

45
million
flu illnesses

810,000
flu hospitalizations

61,000
flu deaths

This severe season could have been worse without flu vaccines.

Even in years with high influenza transmission, vaccine prevents many hospitalizations and deaths

Approximately 40% of the U.S. population chose to get a flu vaccine during the 2017-2018 flu season, and this prevented an estimated:

6.2
million
flu illnesses



More than twice the number of registered nurses in the U.S.

91,000
hospitalizations



About the number of people who can fit in the Rose Bowl stadium in Pasadena, CA

5,700
deaths



More than the number of children born in the U.S. every 12 hours

Imagine the impact if more Americans chose to get a flu vaccine. Many more flu illnesses, flu hospitalizations and flu deaths could be prevented.

The estimated for the 2017-2018 influenza season are preliminary pending additional data from the season.

Due to the holidays and breaks:

NO WEEKLY MEETINGS ON:

- THURSDAY DECEMBER 23RD
- THURSDAY DECEMBER 30TH