



# Back to School 2021-2022 With COVID-19 October 7, 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](mailto:info@cmdhd.org)

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

[info@dhd10.org](mailto: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.

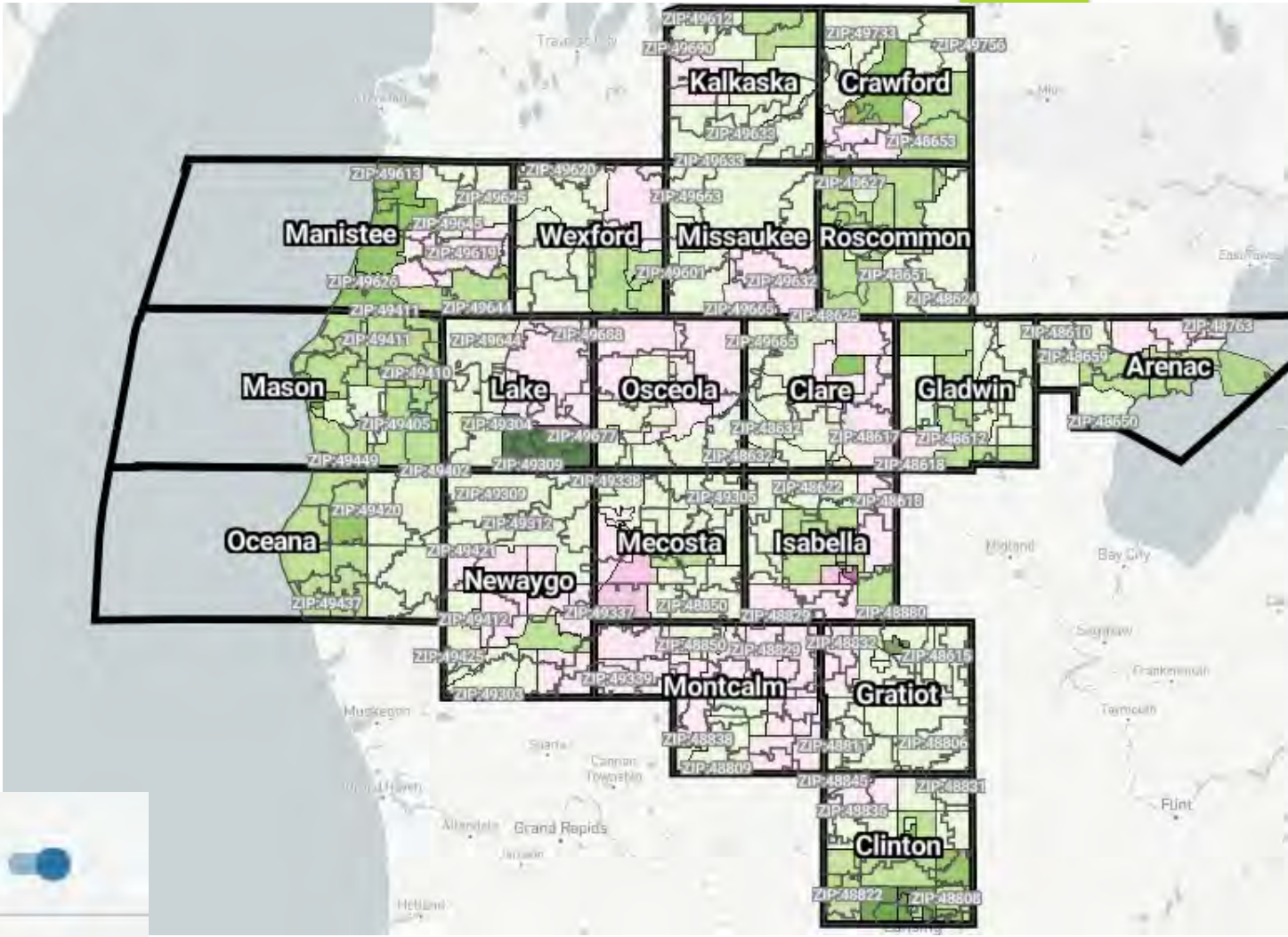
*Thank you!*



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

(we will not be doing data table any longer)





**Legend**

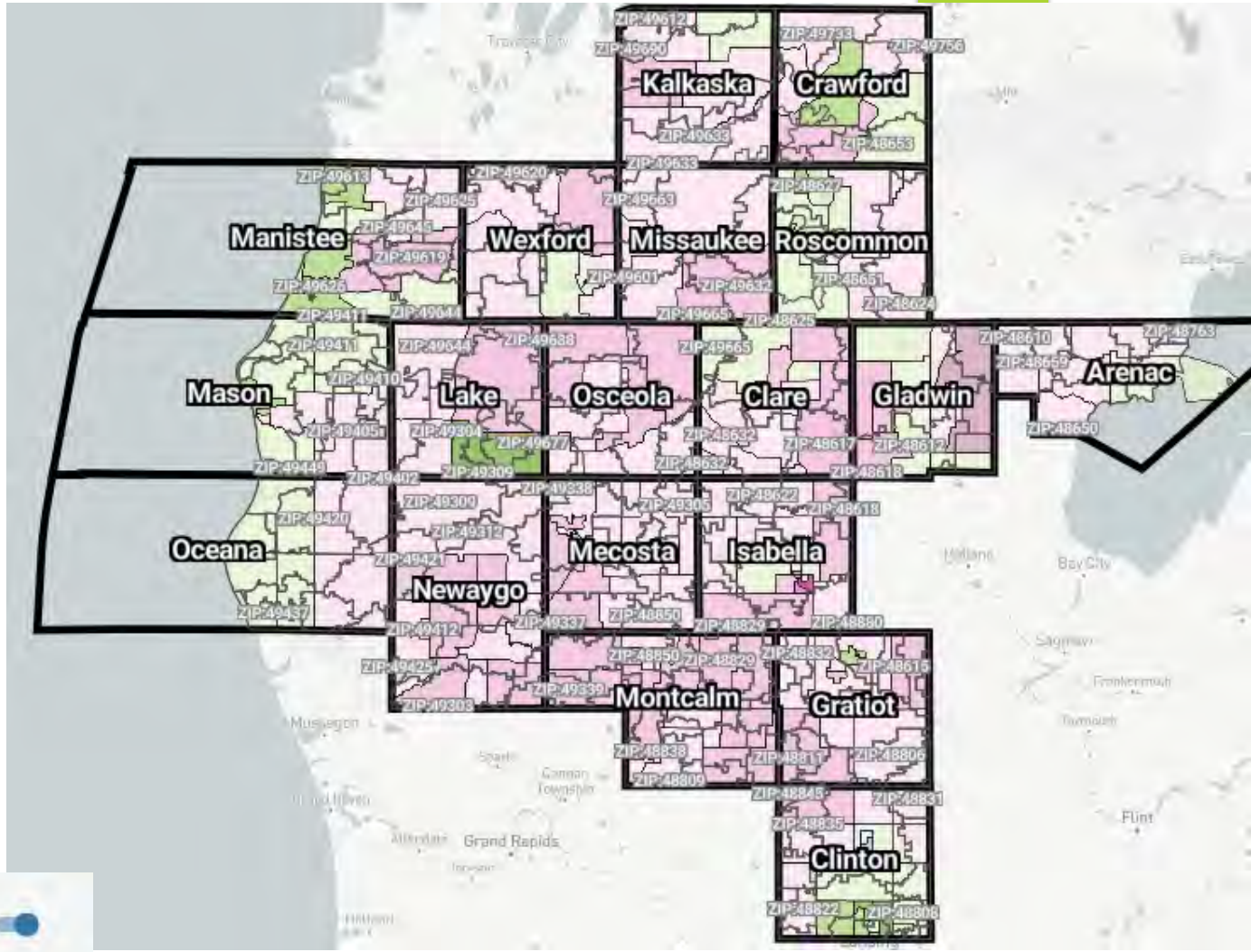
Map Color Coding:  
 Received 1 or More Dose (% Ages 16+) ▾

Zipcodes:  
 Hide ZIP Codes

---

Received 1 or more doses of an approved COVID-19 vaccine

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



**Legend**

Map Color Coding: Fully Vaccinated (% Population)

Zipcodes: Hide ZIP Codes

Received appropriate full number of doses of an approved COVID-19 vaccine

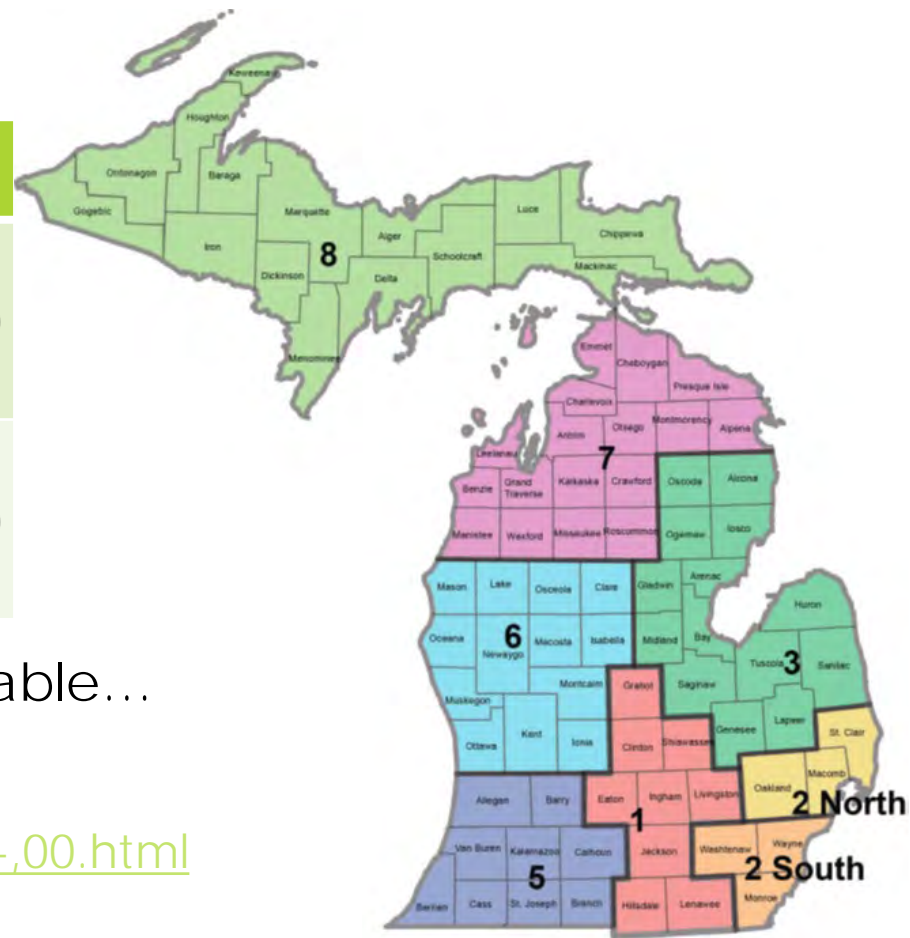
0-9%	10-19%	20-29%	30-39%	40-49%	50-59%	60-69%	70-79%	80-89%	>90%	<100 Population
<span style="color: red;">■</span>	<span style="color: #e91e63;">■</span>	<span style="color: #f080f0;">■</span>	<span style="color: #ffb6c1;">■</span>	<span style="color: #fce4ec;">■</span>	<span style="color: #fff9c4;">■</span>	<span style="color: #c8e6c9;">■</span>	<span style="color: #a5d6a7;">■</span>	<span style="color: #81c784;">■</span>	<span style="color: #4db6ac;">■</span>	<span style="color: #9e9e9e;">■</span>



# COVID-19 Pediatric Hospitalizations 10/6/2021

## Updated Monday, Wednesday & Friday

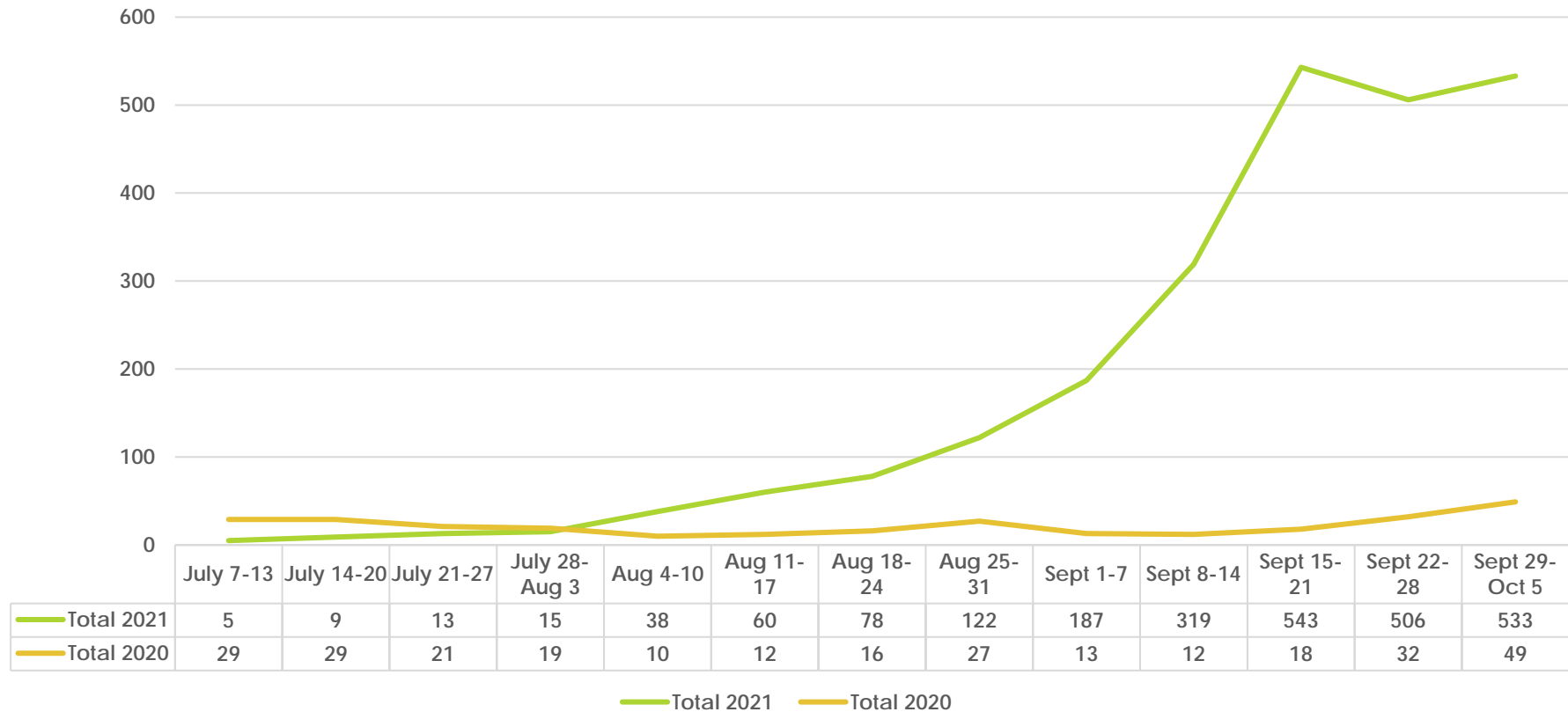
HCC Region	Region 1	Region 3	Region 6	Region 7
Hospitalized Peds Confirmed/Suspected	7 (was 0)	2	11 (was 9)	1 (was 0)
Hospitalized Ped Confirmed-Positive	5 (was 0)	2	9 (was 7)	1 (was 0)



Still working to find county by county data that is more reliable...

<https://www.michigan.gov/coronavirus/0,9753,7-406-98159-523641--,00.html>

# 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

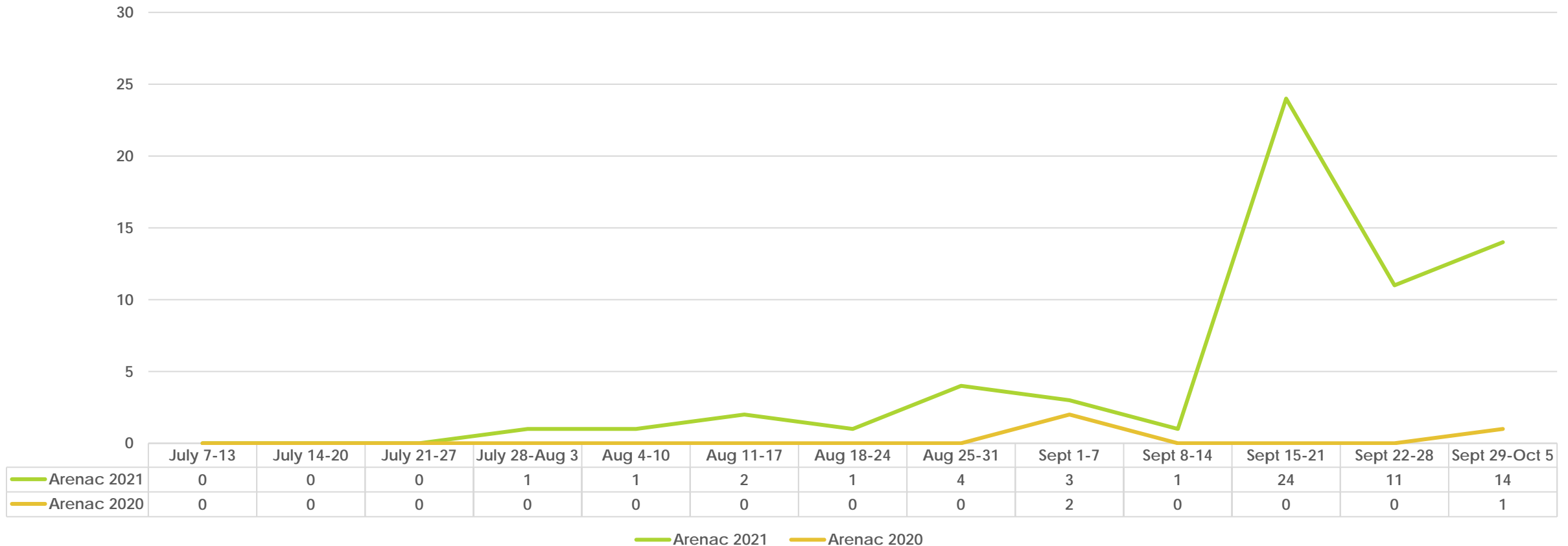
NOTE: The values on the vertical (y) axis are different for each county due to different numbers of cases

— IS 2021

— IS 2020

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

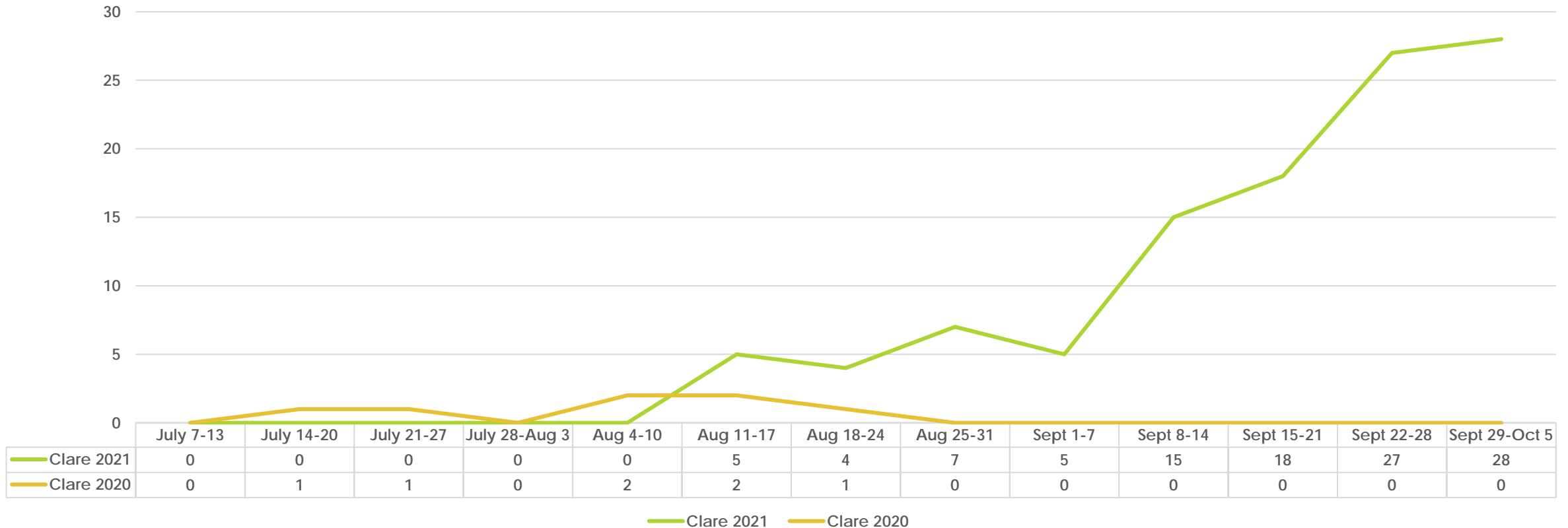
Arenac





# 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



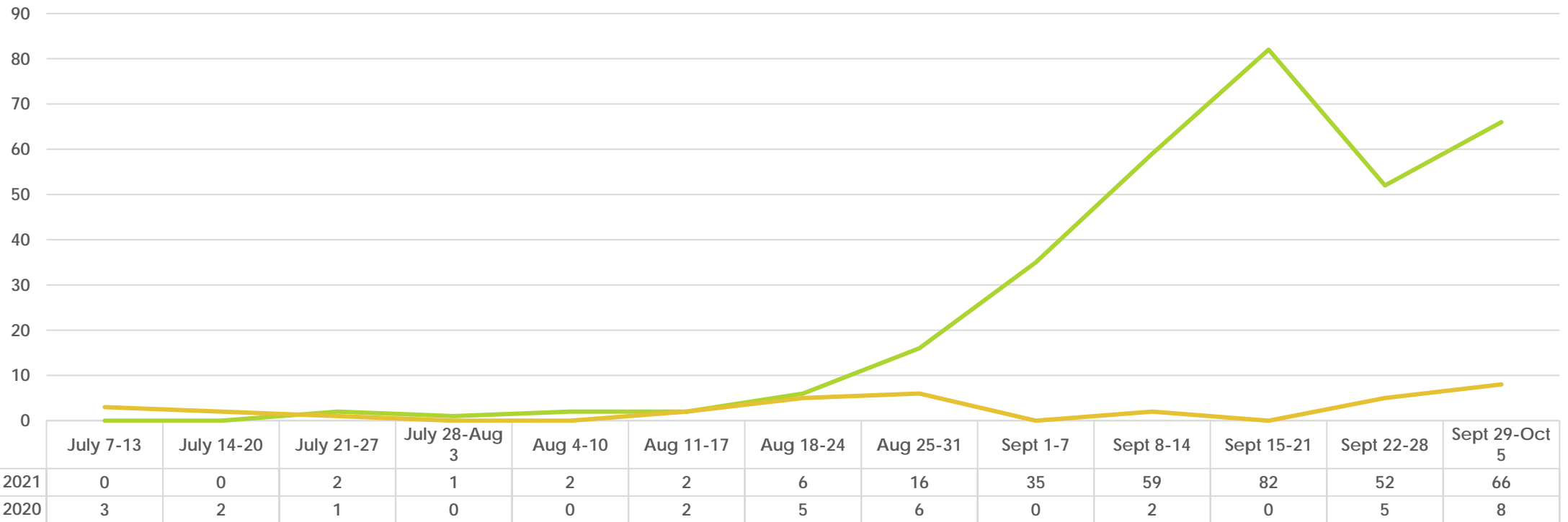
	July 7-13	July 14-20	July 21-27	July 28-Aug 3	Aug 4-10	Aug 11-17	Aug 18-24	Aug 25-31	Sept 1-7	Sept 8-14	Sept 15-21	Sept 22-28	Sept 29-Oct 5
Gladwin 2021	0	0	1	1	3	1	2	10	3	5	27	39	23
Gladwin 2020	0	0	0	1	0	1	0	0	0	0	0	0	0

— Gladwin 2021 — Gladwin 2020



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

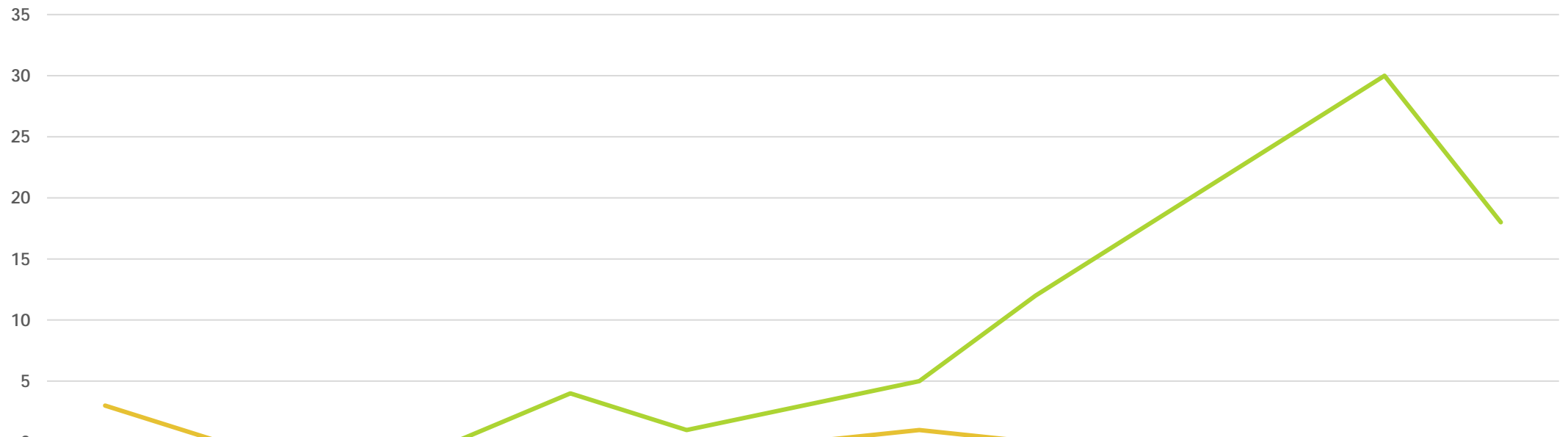
Isabella



Isabella 2021 Isabella 2020

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

## Osceola



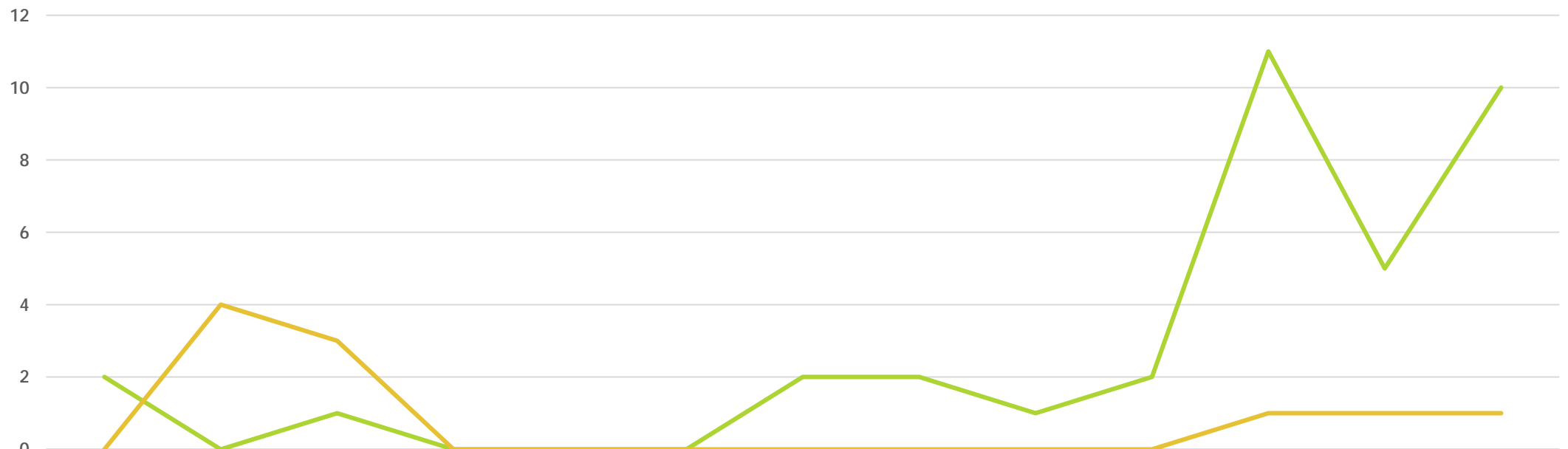
	July 7-13	July 14-20	July 21-27	July 28-Aug 3	Aug 4-10	Aug 11-17	Aug 18-24	Aug 25-31	Sept 1-7	Sept 8-14	Sept 15-21	Sept 22-28	Sept 29-Oct 5
Osceola 2021	0	0	0	0	4	1	3	5	12	18	24	30	18
Osceola 2020	3	0	0	0	0	0	0	1	0	0	0	0	0

Osceola 2021 Osceola 2020



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

## Roscommon

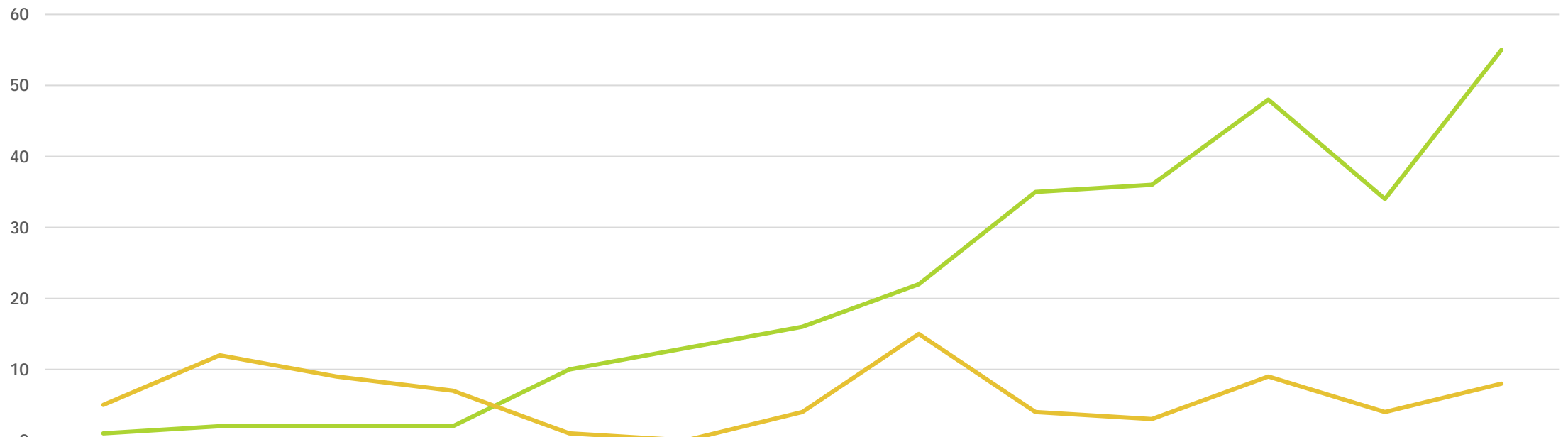


	July 7-13	July 14-20	July 21-27	July 28-Aug 3	Aug 4-10	Aug 11-17	Aug 18-24	Aug 25-31	Sept 1-7	Sept 8-14	Sept 15-21	Sept 22-28	Sept 29-Oct 5
Roscommon 2021	2	0	1	0	0	0	2	2	1	2	11	5	10
Roscommon 2020	0	4	3	0	0	0	0	0	0	0	1	1	1

— Roscommon 2021 — Roscommon 2020

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

## Clinton

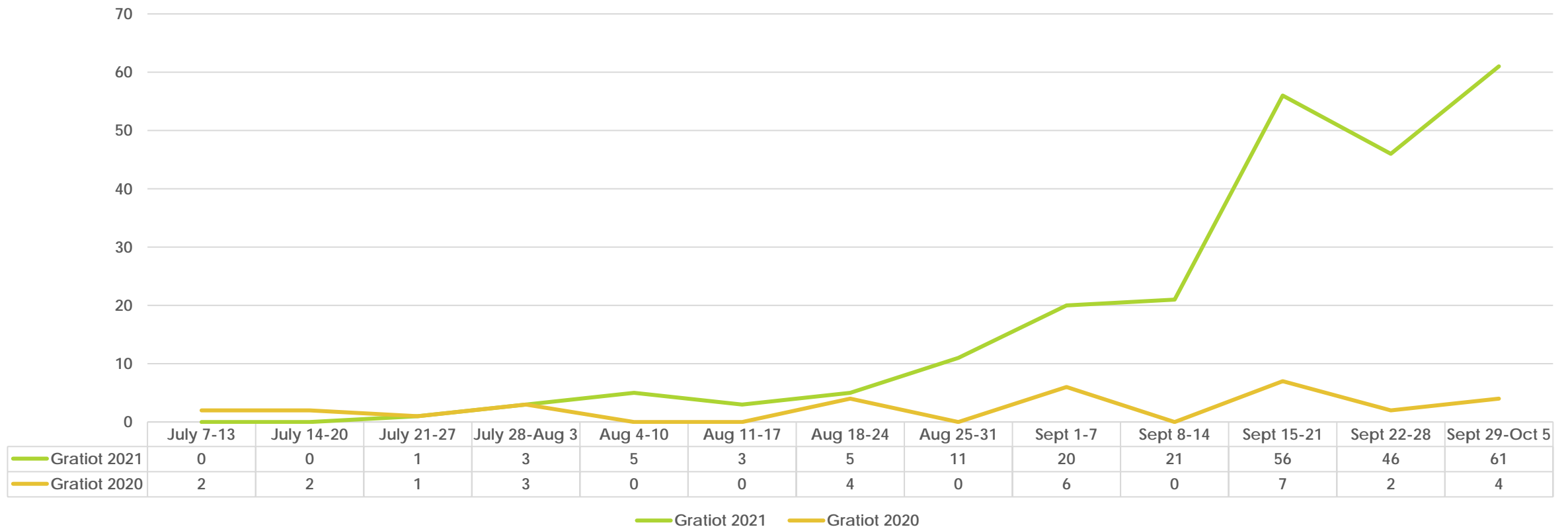


	July 7-13	July 14-20	July 21-27	July 28-Aug 3	Aug 4-10	Aug 11-17	Aug 18-24	Aug 25-31	Sept 1-7	Sept 8-14	Sept 15-21	Sept 22-28	Sept 29-Oct 5
Clinton 2021	1	2	2	2	10	13	16	22	35	36	48	34	55
Clinton 2020	5	12	9	7	1	0	4	15	4	3	9	4	8

Clinton 2021    Clinton 2020

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

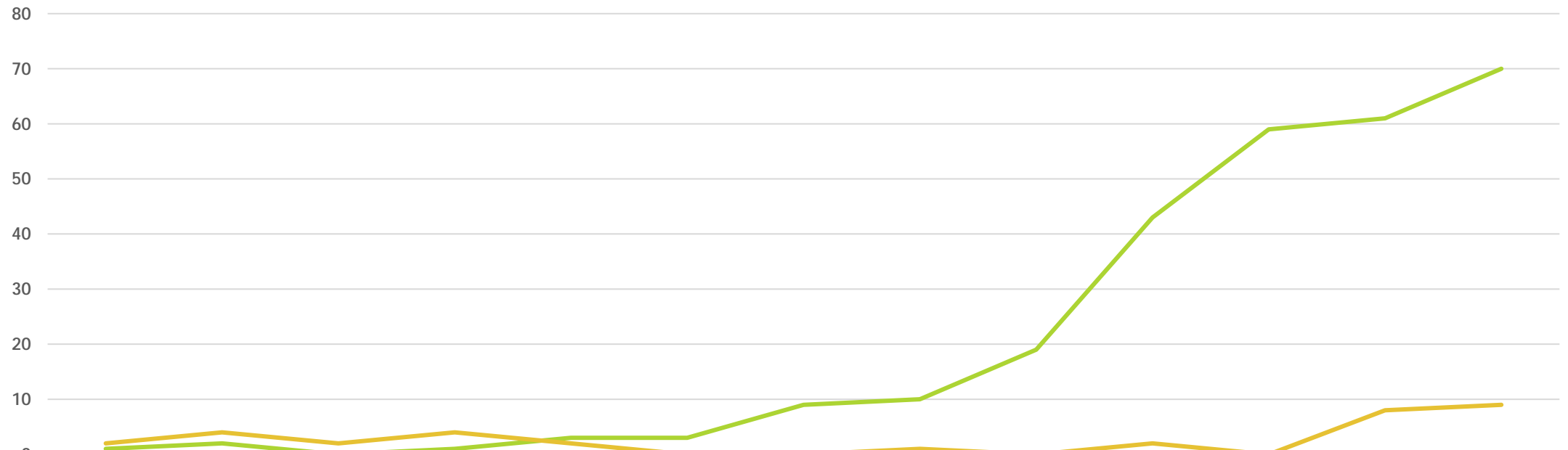
Gratiot





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

## Montcalm

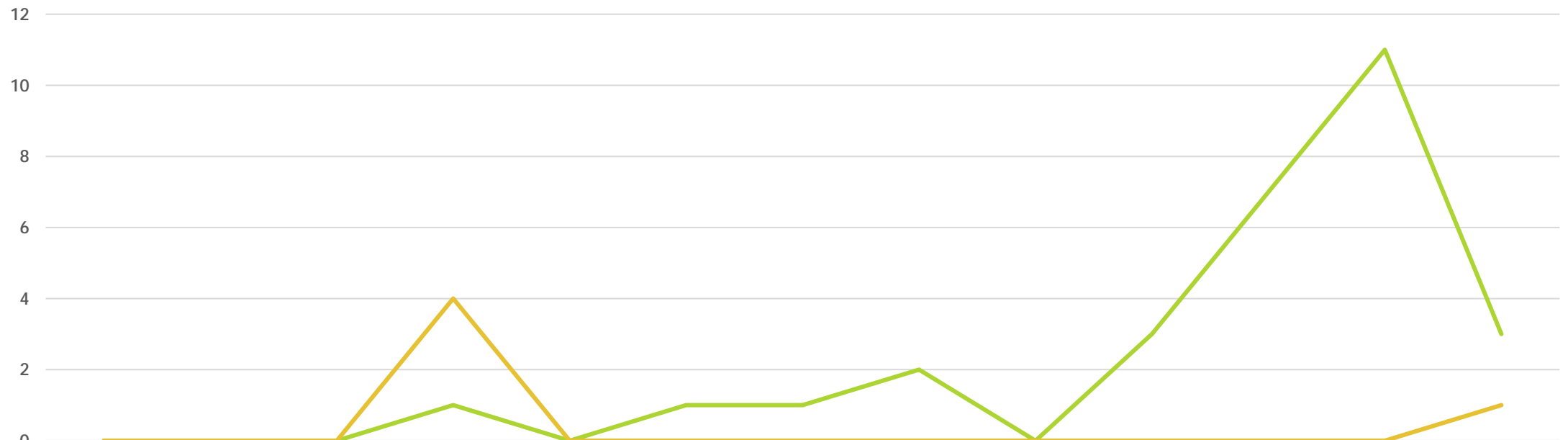


	July 7-13	July 14-20	July 21-27	July 28-Aug 3	Aug 4-10	Aug 11-17	Aug 18-24	Aug 25-31	Sept 1-7	Sept 8-14	Sept 15-21	Sept 22-28	Sept 29-Oct 5
Montcalm 2021	1	2	0	1	3	3	9	10	19	43	59	61	70
Montcalm 2020	2	4	2	4	2	0	0	1	0	2	0	8	9

Montcalm 2021 Montcalm 2020

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

Crawford

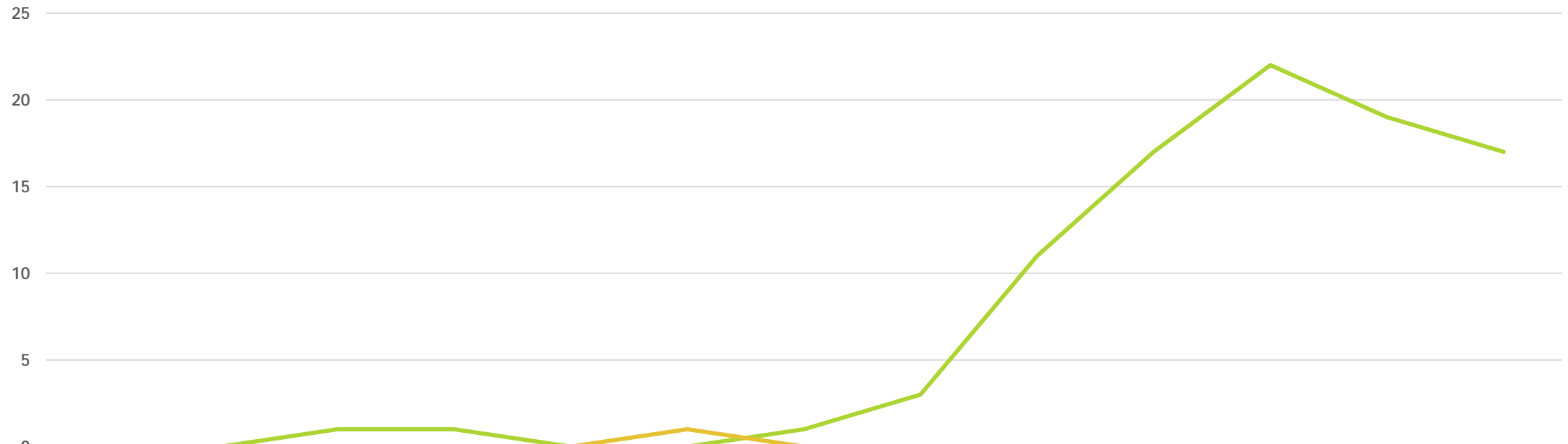


	July 7-13	July 14-20	July 21-27	July 28-Aug 3	Aug 4-10	Aug 11-17	Aug 18-24	Aug 25-31	Sept 1-7	Sept 8-14	Sept 15-21	Sept 22-28	Sept 29-Oct 5
Crawford 2021	0	0	0	1	0	1	1	2	0	3	7	11	3
Crawford 2020	0	0	0	4	0	0	0	0	0	0	0	0	1

— Crawford 2021 — Crawford 2020

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

## Kalkaska



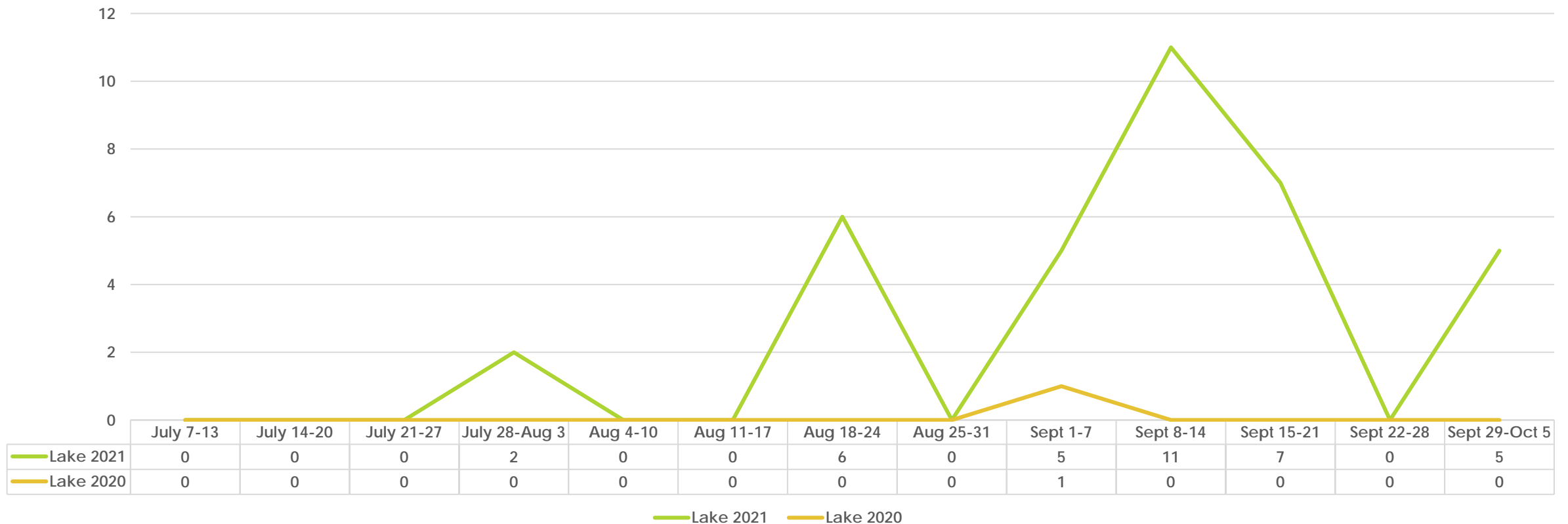
Kalkaska 2021	0	0	1	1	0	0	1	3	11	17	22	19	17
Kalkaska 2020	0	0	0	0	0	1	0	0	0	0	0	0	0

— Kalkaska 2021 — Kalkaska 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

## Manistee

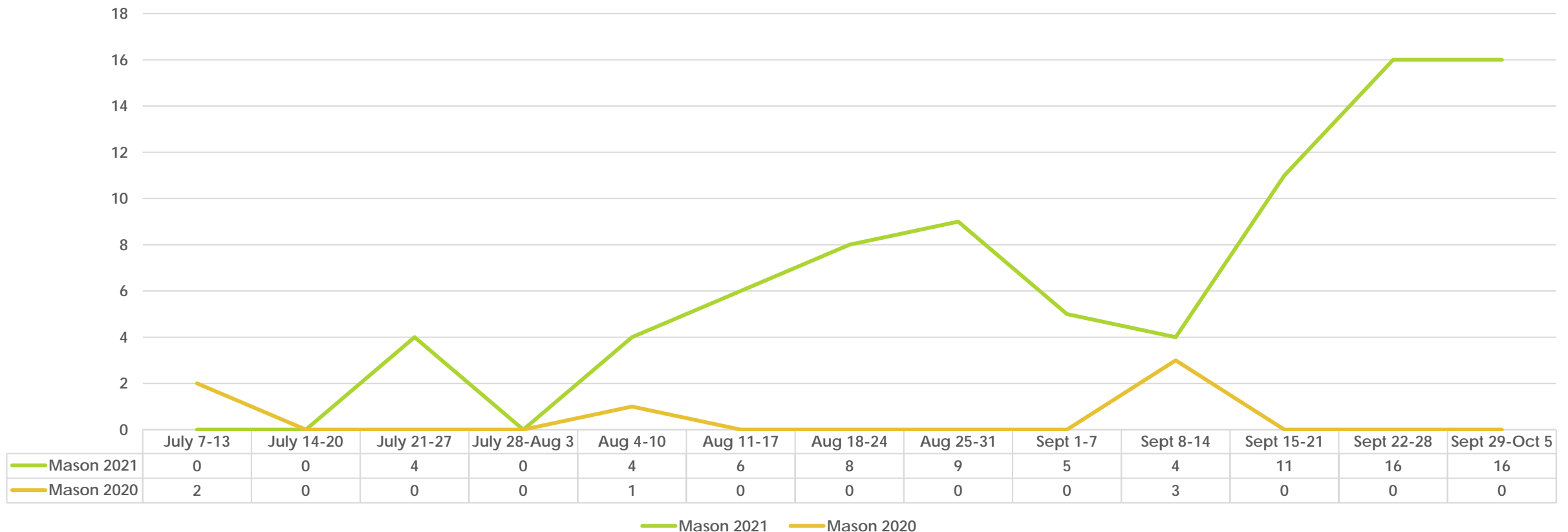


	July 7-13	July 14-20	July 21-27	July 28-Aug 3	Aug 4-10	Aug 11-17	Aug 18-24	Aug 25-31	Sept 1-7	Sept 8-14	Sept 15-21	Sept 22-28	Sept 29-Oct 5
Manistee 2021	0	0	0	0	2	7	0	2	3	5	1	7	8
Manistee 2020	0	0	0	0	2	0	0	0	0	0	0	1	2

Manistee 2021    Manistee 2020

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

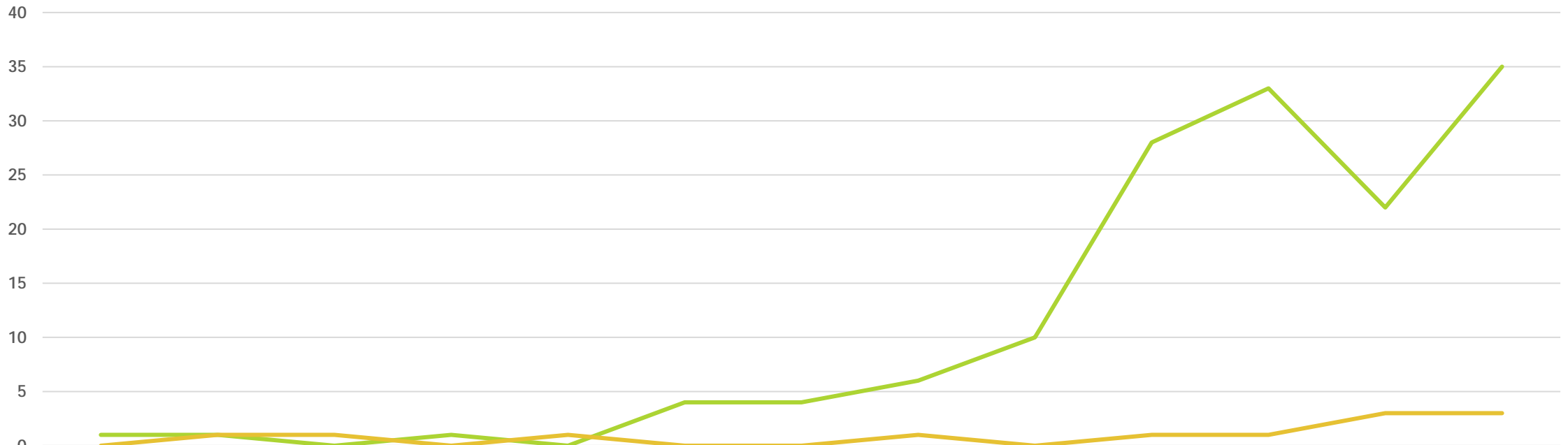
## Mason





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

## Mecosta

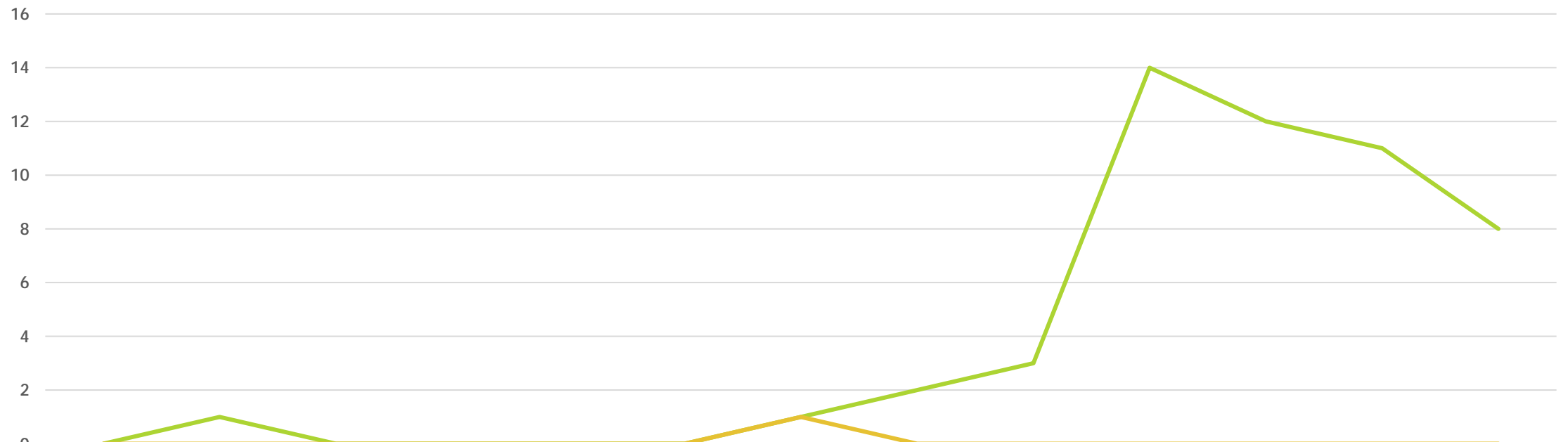


	July 7-13	July 14-20	July 21-27	July 28-Aug 3	Aug 4-10	Aug 11-17	Aug 18-24	Aug 25-31	Sept 1-7	Sept 8-14	Sept 15-21	Sept 22-28	Sept 29-Oct 5
Mecosta 2021	1	1	0	1	0	4	4	6	10	28	33	22	35
Mecosta 2020	0	1	1	0	1	0	0	1	0	1	1	3	3

— Mecosta 2021 — Mecosta 2020

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

## Missaukee

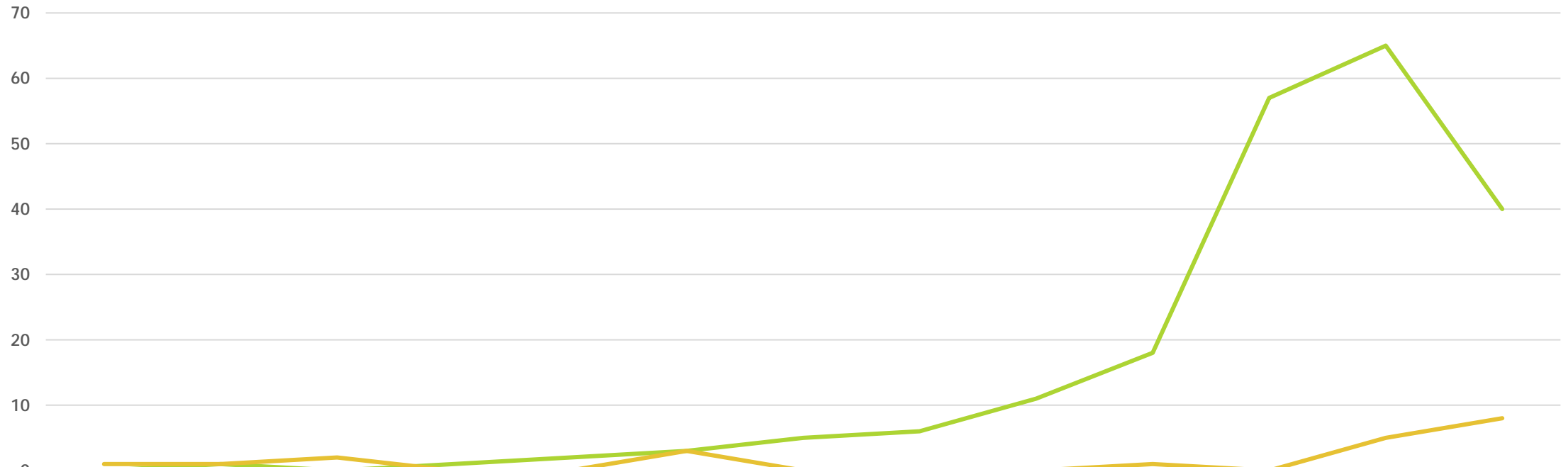


	July 7-13	July 14-20	July 21-27	July 28-Aug 3	Aug 4-10	Aug 11-17	Aug 18-24	Aug 25-31	Sept 1-7	Sept 8-14	Sept 15-21	Sept 22-28	Sept 29-Oct 5
Missaukee 2021	0	1	0	0	0	0	1	2	3	14	12	11	8
Missaukee 2020	0	0	0	0	0	0	1	0	0	0	0	0	0

Missaukee 2021 Missaukee 2020

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

Newaygo



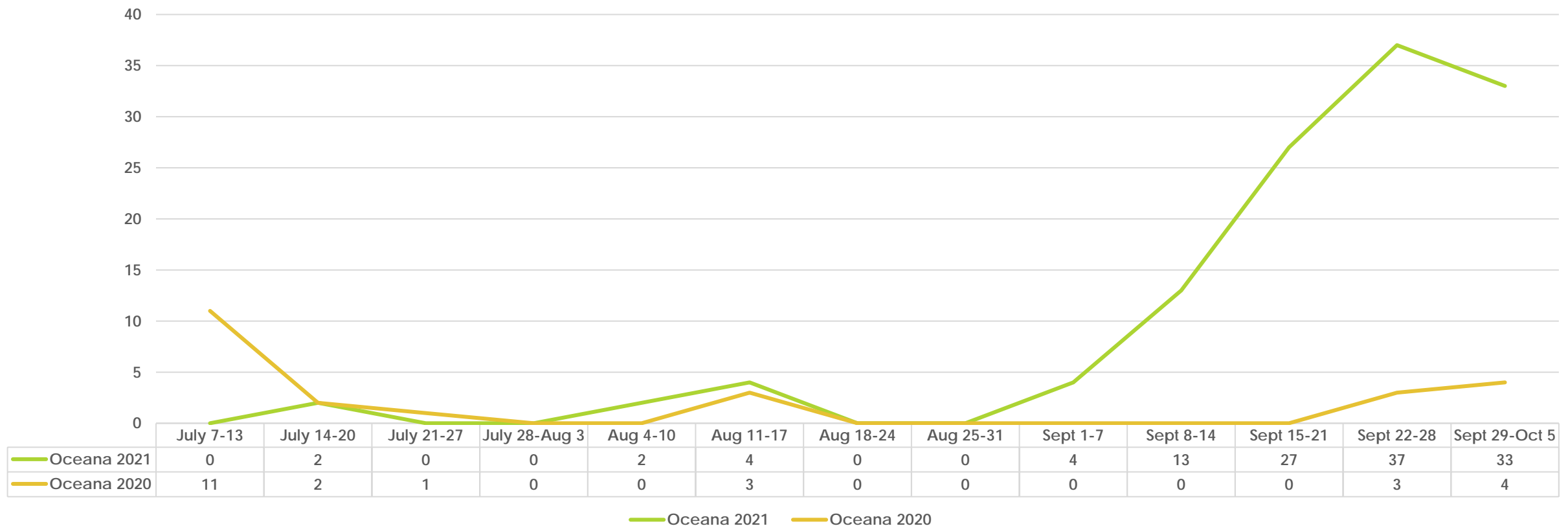
	July 7-13	July 14-20	July 21-27	July 28-Aug 3	Aug 4-10	Aug 11-17	Aug 18-24	Aug 25-31	Sept 1-7	Sept 8-14	Sept 15-21	Sept 22-28	Sept 29-Oct 5
Newaygo 2021	0	1	0	1	2	3	5	6	11	18	57	65	40
Newaygo 2020	1	1	2	0	0	3	0	0	0	1	0	5	8

— Newaygo 2021 — Newaygo 2020



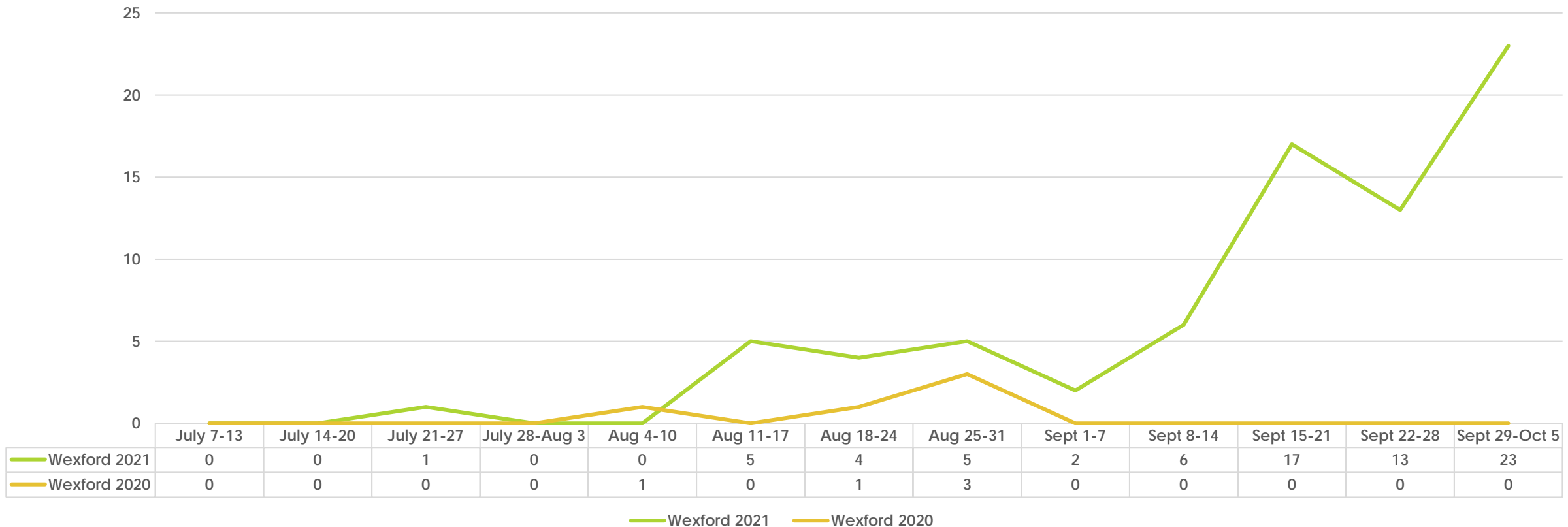
# COVID Cases 5-18 yrs. of age, weekly 2020 compared to 2021

## Oceana



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

## Wexford





# MI COVID Response Data and Modeling Update-October 5, 2021

[https://www.michigan.gov/coronavirus/0,9753,7-406-98163\\_98173\\_105123---,00.html](https://www.michigan.gov/coronavirus/0,9753,7-406-98163_98173_105123---,00.html)

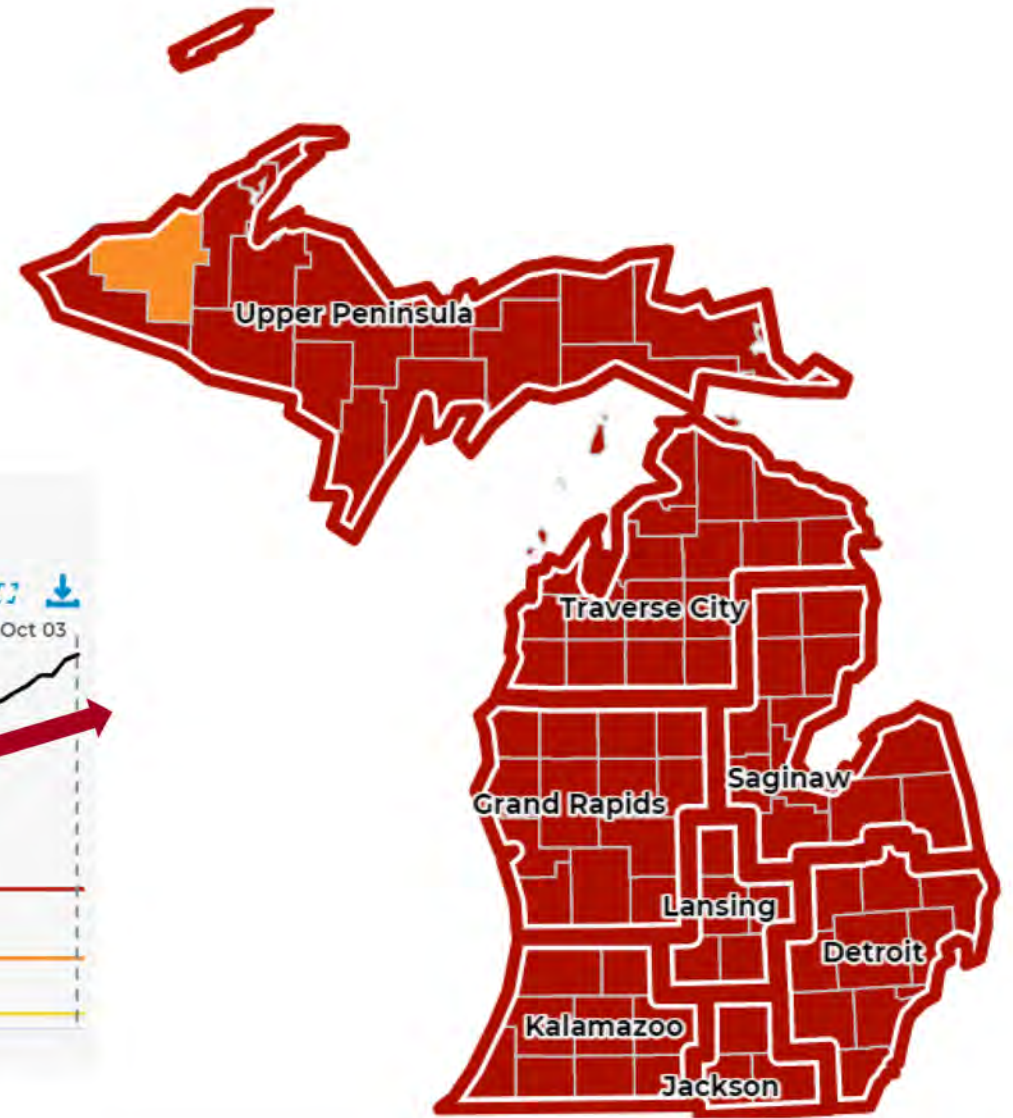
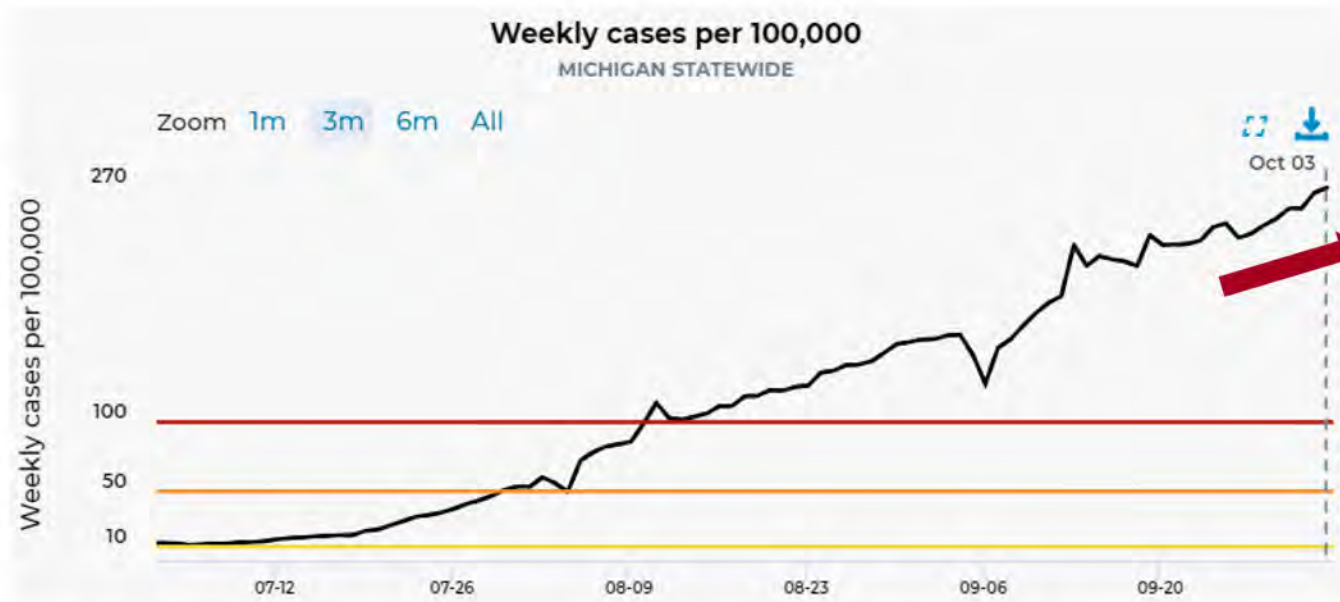
# Overview of Michigan

- ▶ Michigan remains at High Transmission
- ▶ Percent positivity (10.3%) increased for one week (8.8% last week)
- ▶ Case rate (258.9 cases/million) is increasing for three months (246.3 last week)
- ▶ 99% of positive tests available for sequencing in Michigan were Delta variant in the last 4 weeks
- ▶ Percent of inpatient beds occupied by individuals with COVID (8.0%) is increasing for 11 weeks (up from 7.4% last week)
- ▶ Death rate(2.8 deaths/million) is steady for one week (2.8 last week).
  - ▶ There were 194 COVID deaths between Sep 21-Sep 27



# Michigan at High Transmission Level

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



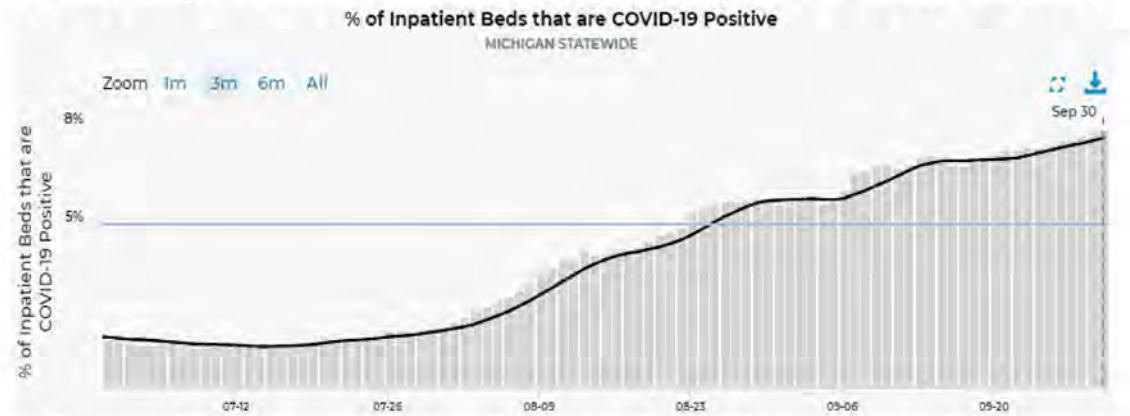
# Time Trends – Positivity, Case Rates, Hospitalizations, Deaths

➤ Early indicators show Delta surge may be slowing but burden remains high

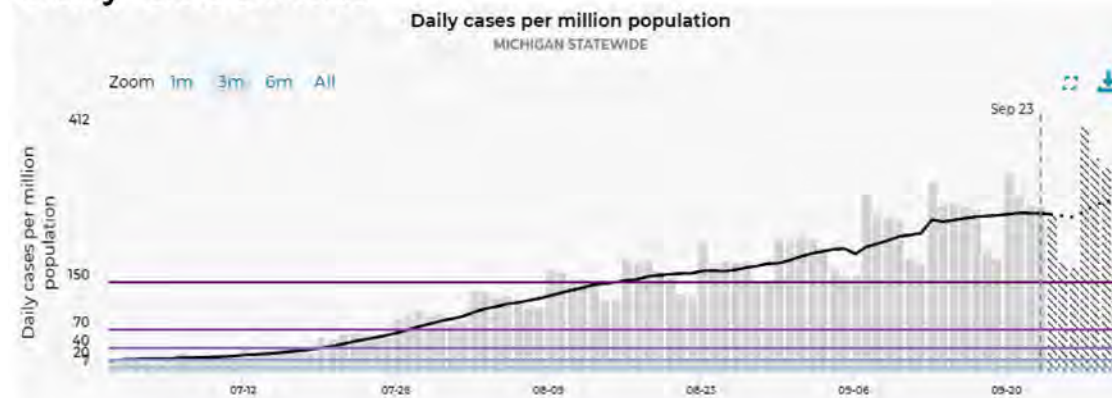
## Daily Positive Test Rate



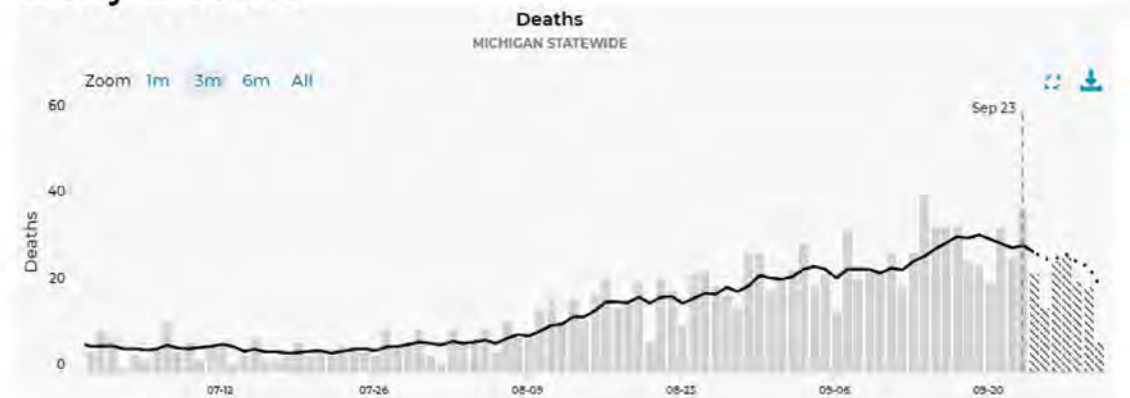
## Daily Inpatient Beds Occupied by COVID patients



## Daily Case Rate



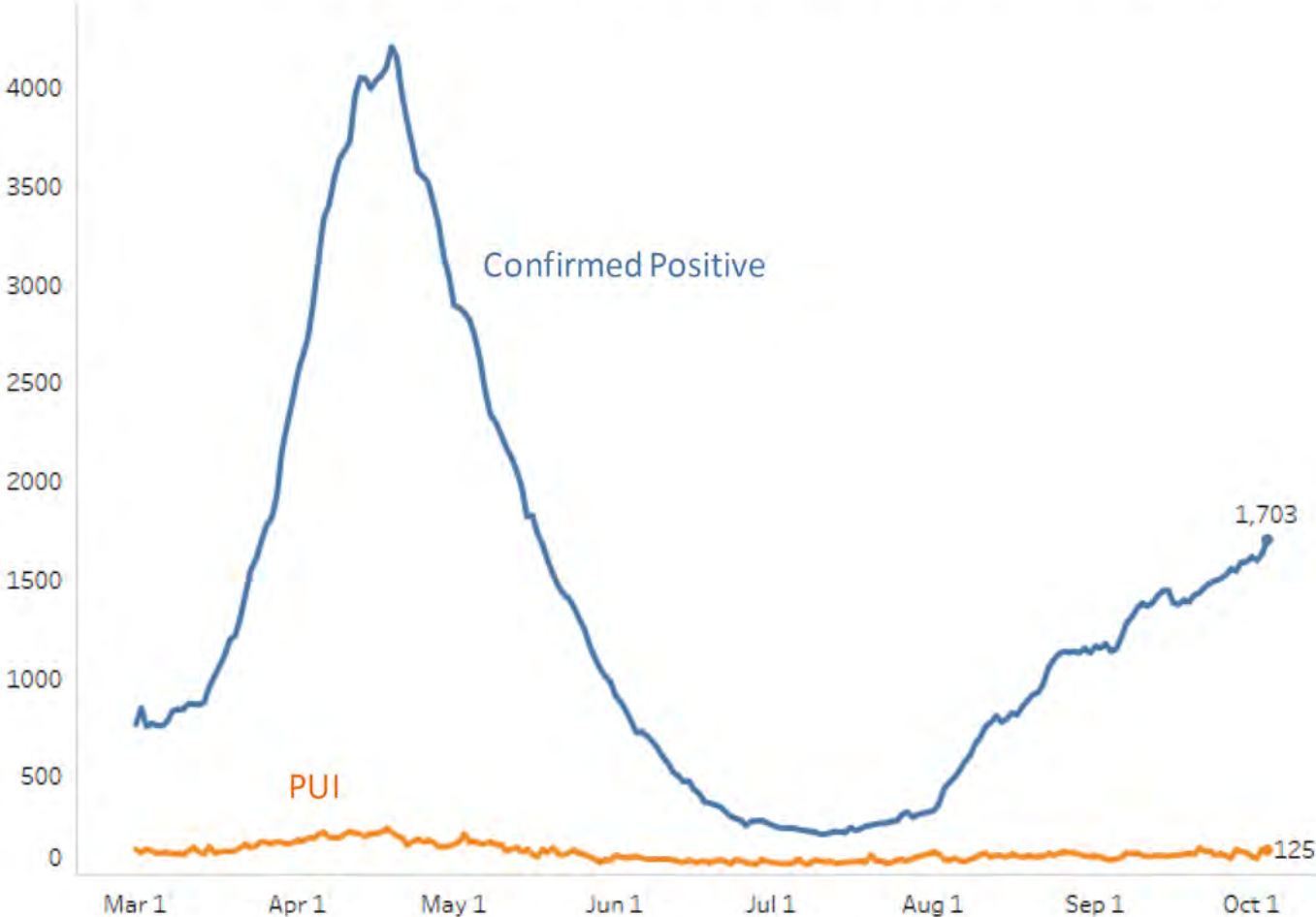
## Daily Deaths





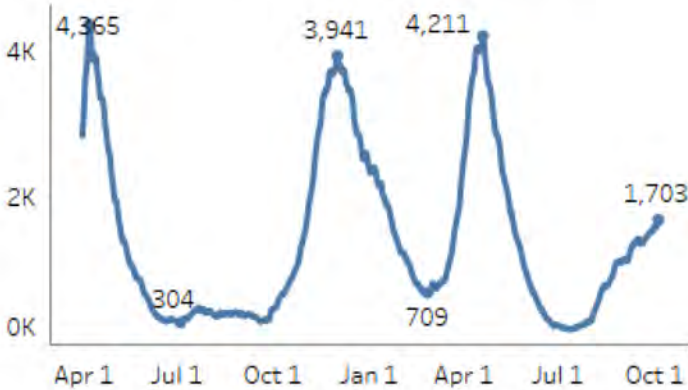
# Statewide Hospitalization Trends: Total COVID+ Census

Hospitalization Trends 3/1/2021 – 10/4/2021  
Confirmed Positive & Persons Under Investigation (PUI)



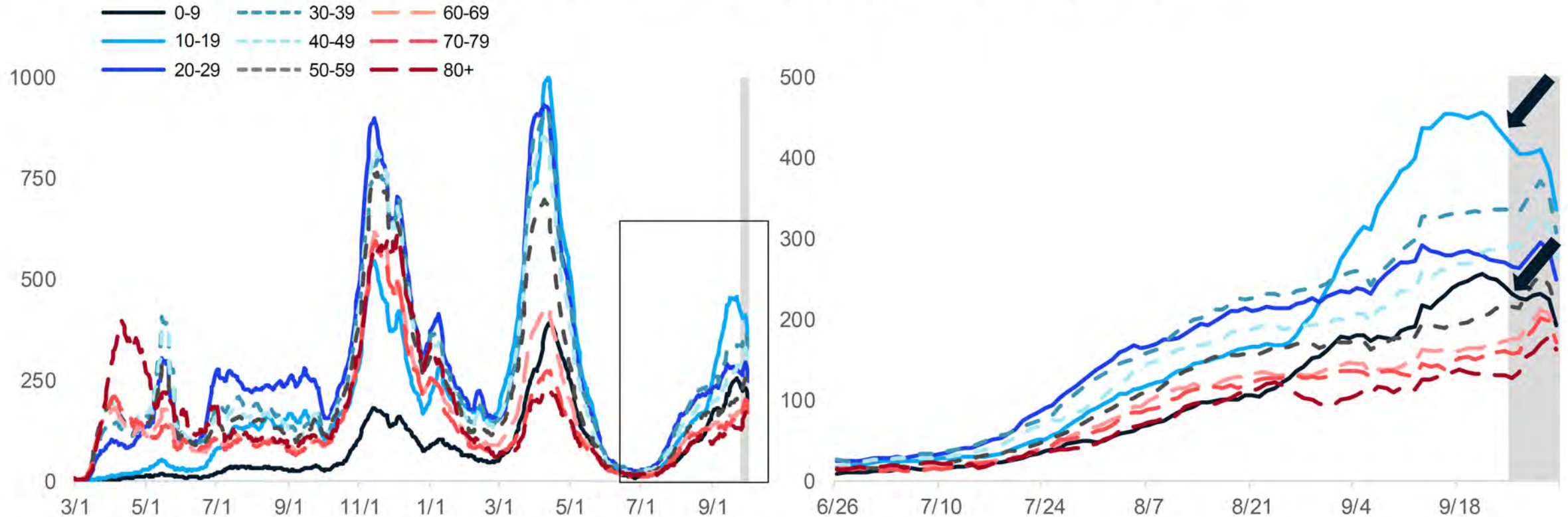
COVID+ census in hospitals has increased 10% from the previous week (previous week's increase was 9%)

Hospitalized COVID Positive Long Term Trend (beginning March 2020)



# Case Rate Trends by Age Group

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



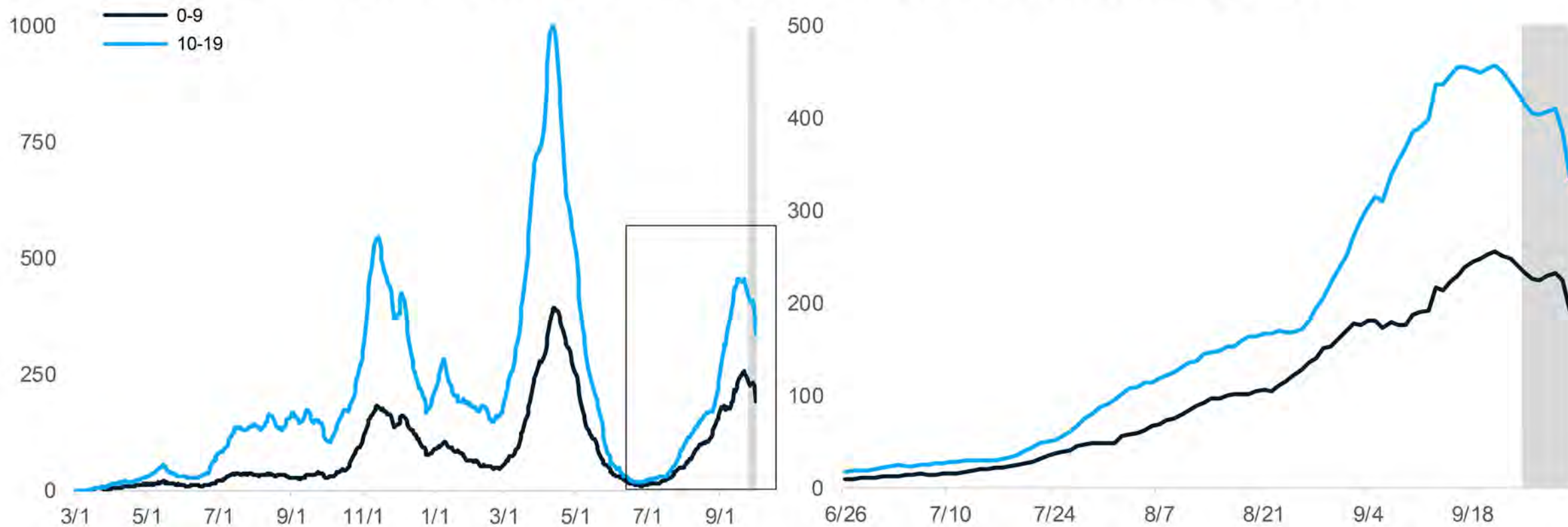
- Case rate trends for all age groups are slowing and are decreasing for some age groups
- Case rates for all age groups are between 135 and 415 cases per million (through 9/27)
- Case rates are highest for **10-19-year-olds** followed by 30-39, 40-49, 20-29, and **0-9**

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



# Case Rate Trends by Pediatric Age Group

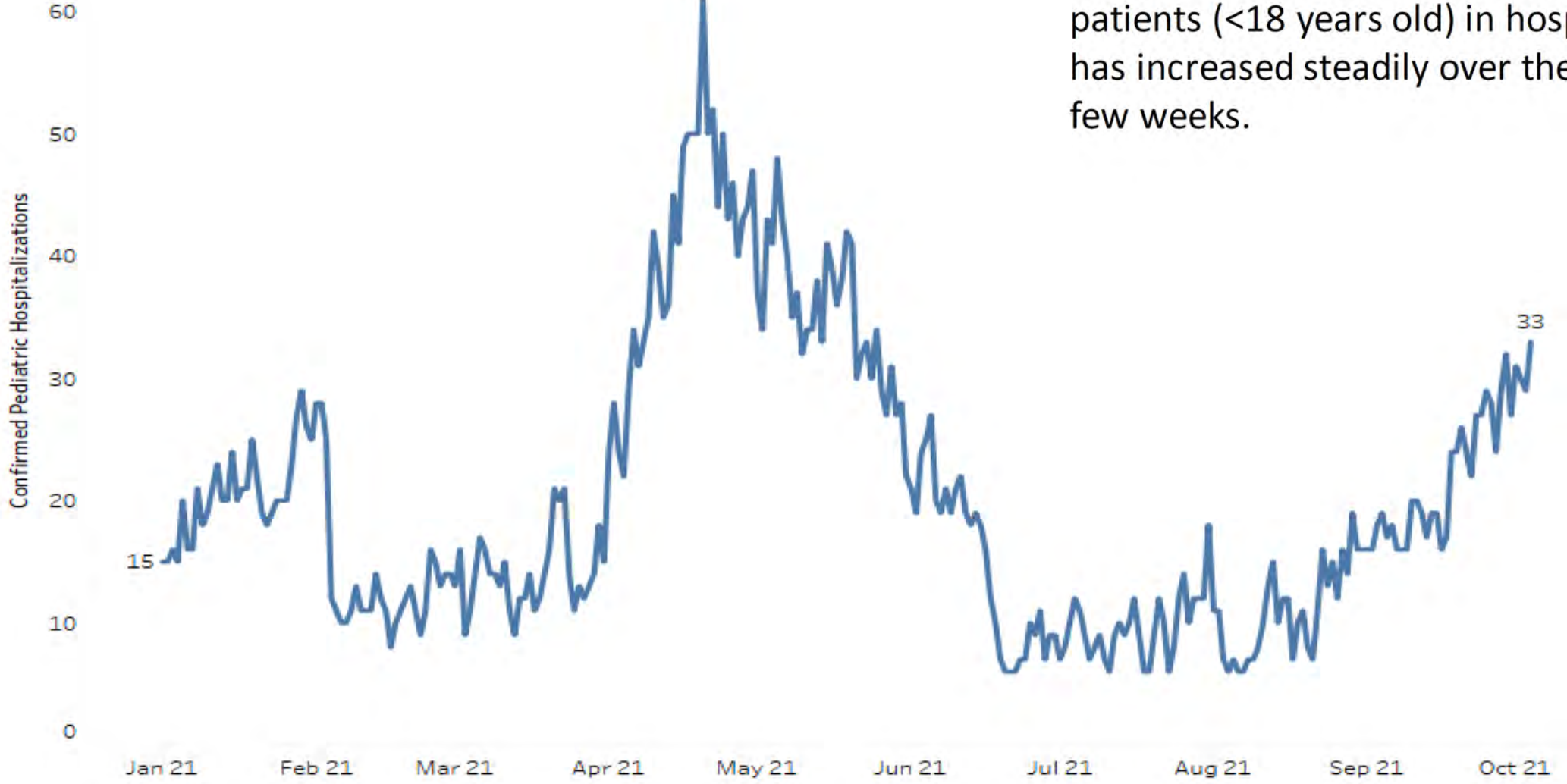
Daily new confirmed and probable cases per million by pediatric age group (7-day rolling average)



- Case rates for 0-9 and 10-19 are near or above Nov and Dec 2020 wave but not as high as the Spring 2021 wave
- Case trends for 0-9 and 10-19 increases have slowed and may be starting to decline (pending backfill)

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

# Statewide Hospitalization Trends: Pediatric COVID+ Census



The census of COVID+ Pediatric patients (<18 years old) in hospitals has increased steadily over the past few weeks.

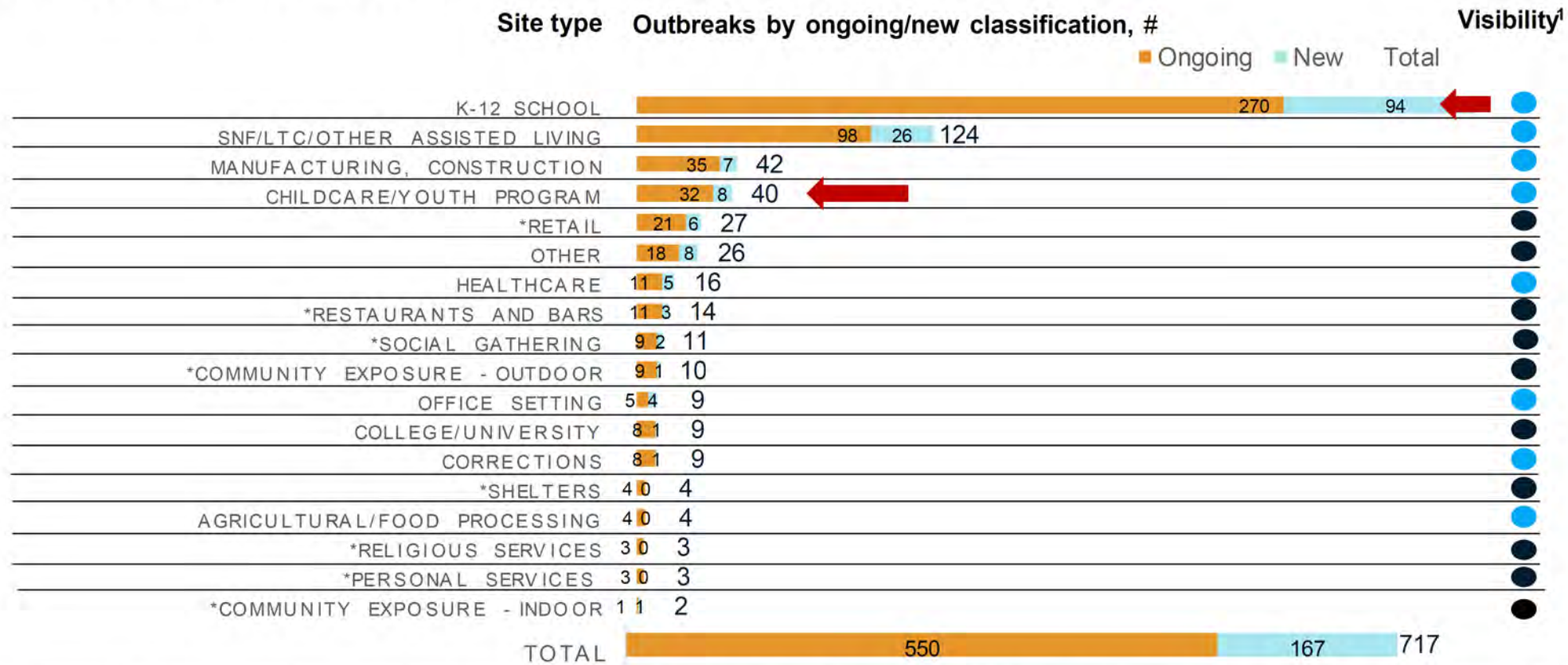
## Pediatric Data – US, as of September 30, 2021 (from AAP/CHA)

- ▶ To date, children represented 16.2% of all COVID-19 cases in the US (16 % last week)
- ▶ From 9/23/21 to 9/30/21 children represented **26.7%** of all cases in the US (same as last week)
- ▶ Over two weeks, 9/16/21 to 9/30/21, there was a 7% increase in the cumulated number of child COVID 19 cases (8% from 9/9/21 to 9/23/21)
- ▶ Among states reporting, children made up between 11.5 to 22.1% of total cumulated state tests (11.4 to 22% last week), and between 5.1% to 18.1% of children tested were tested positive (5% to 18% last week)
- ▶ Among states reporting, children ranged from 1.6% to 4.2% of their total cumulated hospitalizations (1.6% to 4.1% last week), and 0.1% to 1.9% of all their child COVID-19 cases resulted in hospitalization (0.1% to 2% last week)



# Number of Weekly Reported Outbreaks

Number of outbreak investigations by site type, week ending Sep 30



- Easier to identify outbreak
- Harder to identify outbreak

Total number of active outbreaks is **up 13%** from previous week, with 167 new outbreaks identified

K-12 schools reported the greatest number of new outbreaks and clusters (94) this week, and there were an additional 8 new outbreaks in childcare and youth programs for a total of 102 outbreaks in settings primarily with 0-19-year-olds. (61% of all known new outbreaks)

The next greatest number of new outbreaks was among SNF/LTC (26), followed by other (8), manufacturing/construction (7), retail (6), and eight other settings with at least 1 new outbreak in the last 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

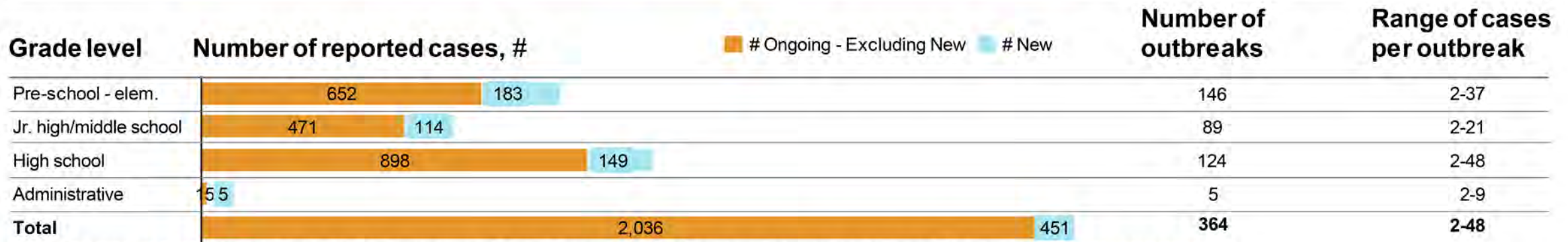
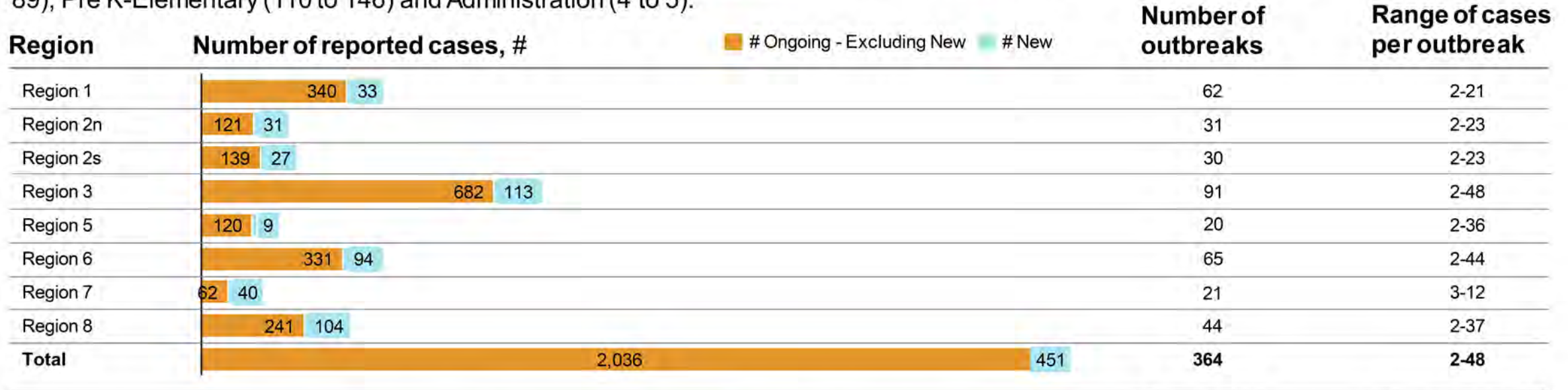
NOTE: Many factors, including the lack of ability to conduct effective contact tracing in certain settings, may result in significant underreporting of outbreaks. This chart does not provide a complete picture of outbreaks in Michigan and the absence of identified outbreaks in a particular setting in 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



# K-12 school clusters and outbreaks, recent and ongoing, week ending Sep 30

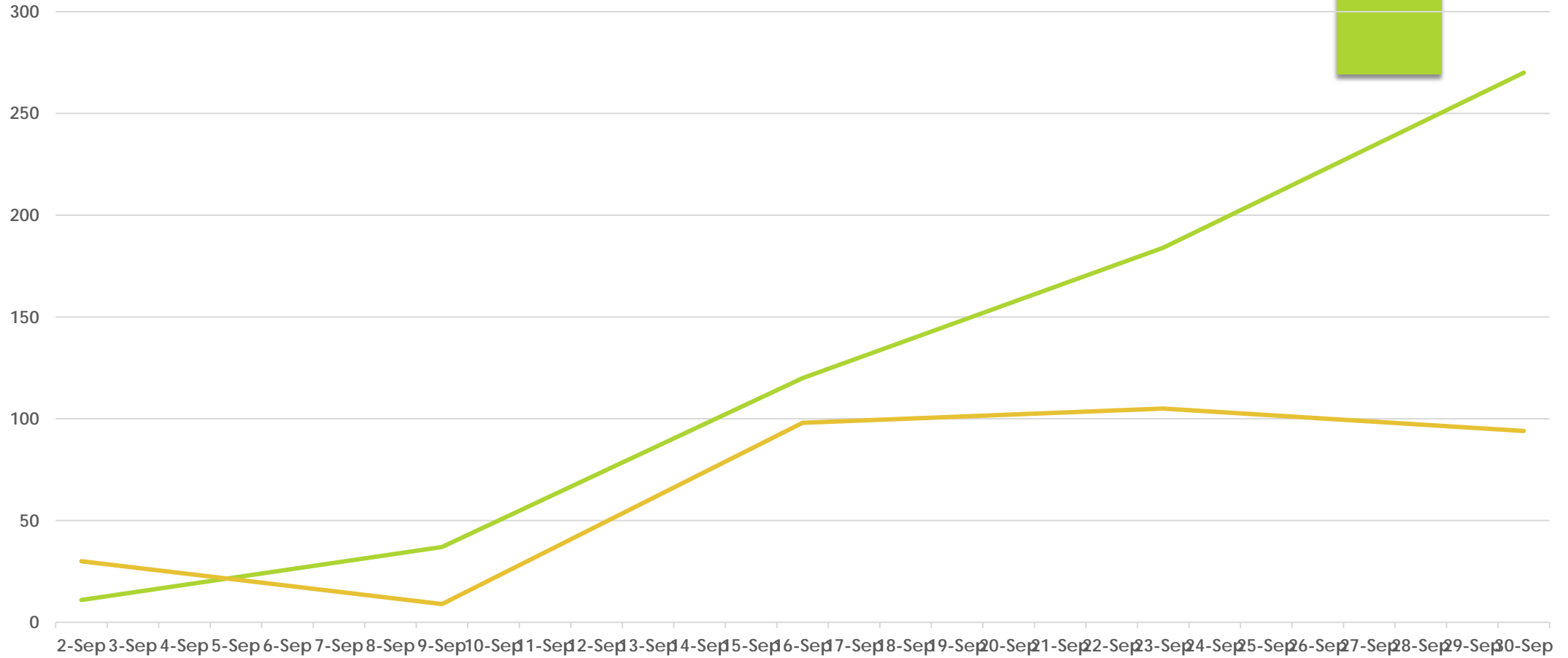
Number of reported outbreaks increased since last week (289 to 364), including increases in High Schools (107 to 123), Middle/Jr High (68 to 89), Pre K-Elementary (110 to 146) and Administration (4 to 5).



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

## Number of K-12 Outbreaks, Michigan



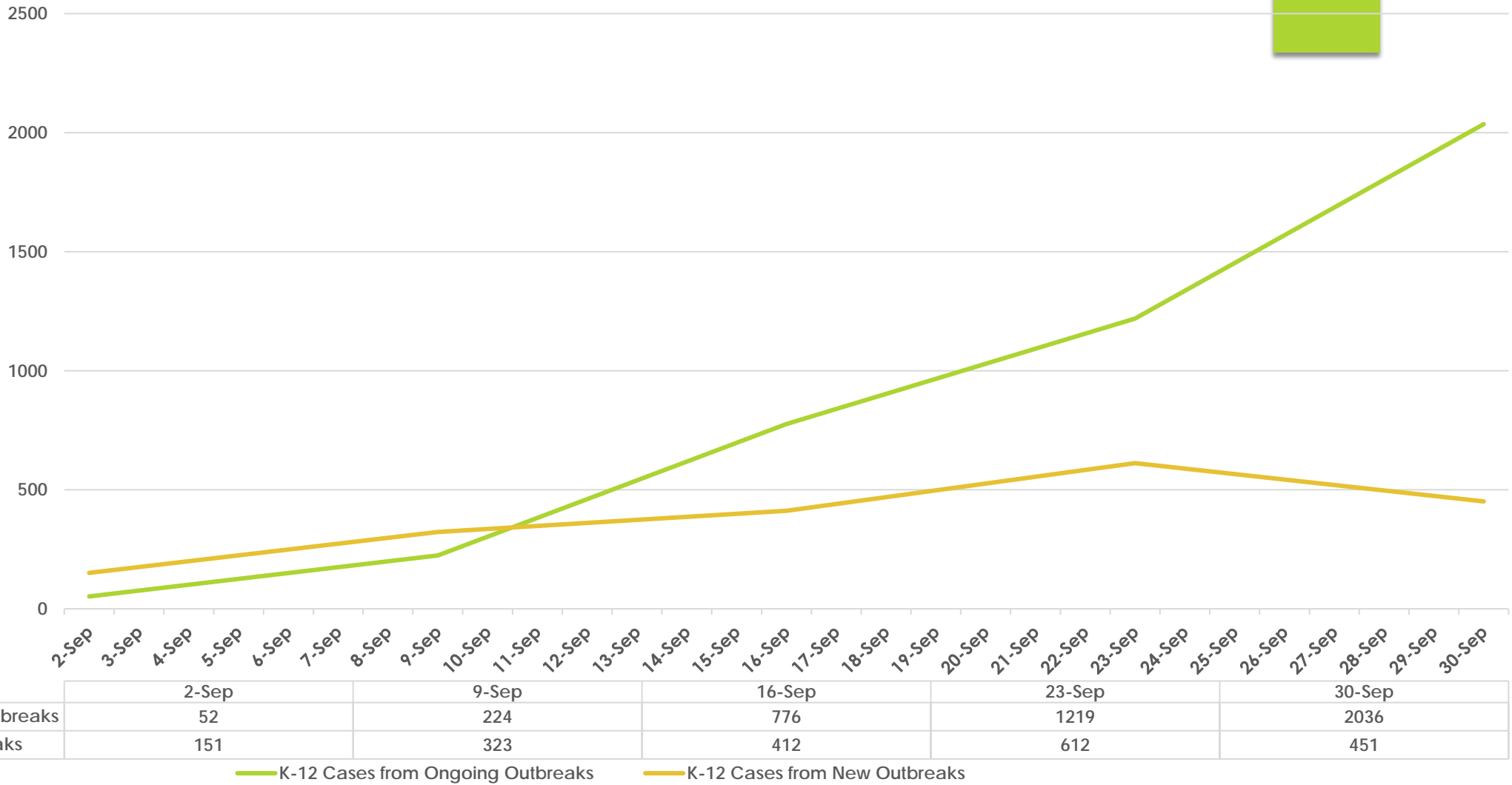
	2-Sep	9-Sep	16-Sep	23-Sep	30-Sep
K-12 Ongoing Outbreaks	11	37	120	184	270
K-12 New Outbreaks	30	9	98	105	94

— 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, Michigan

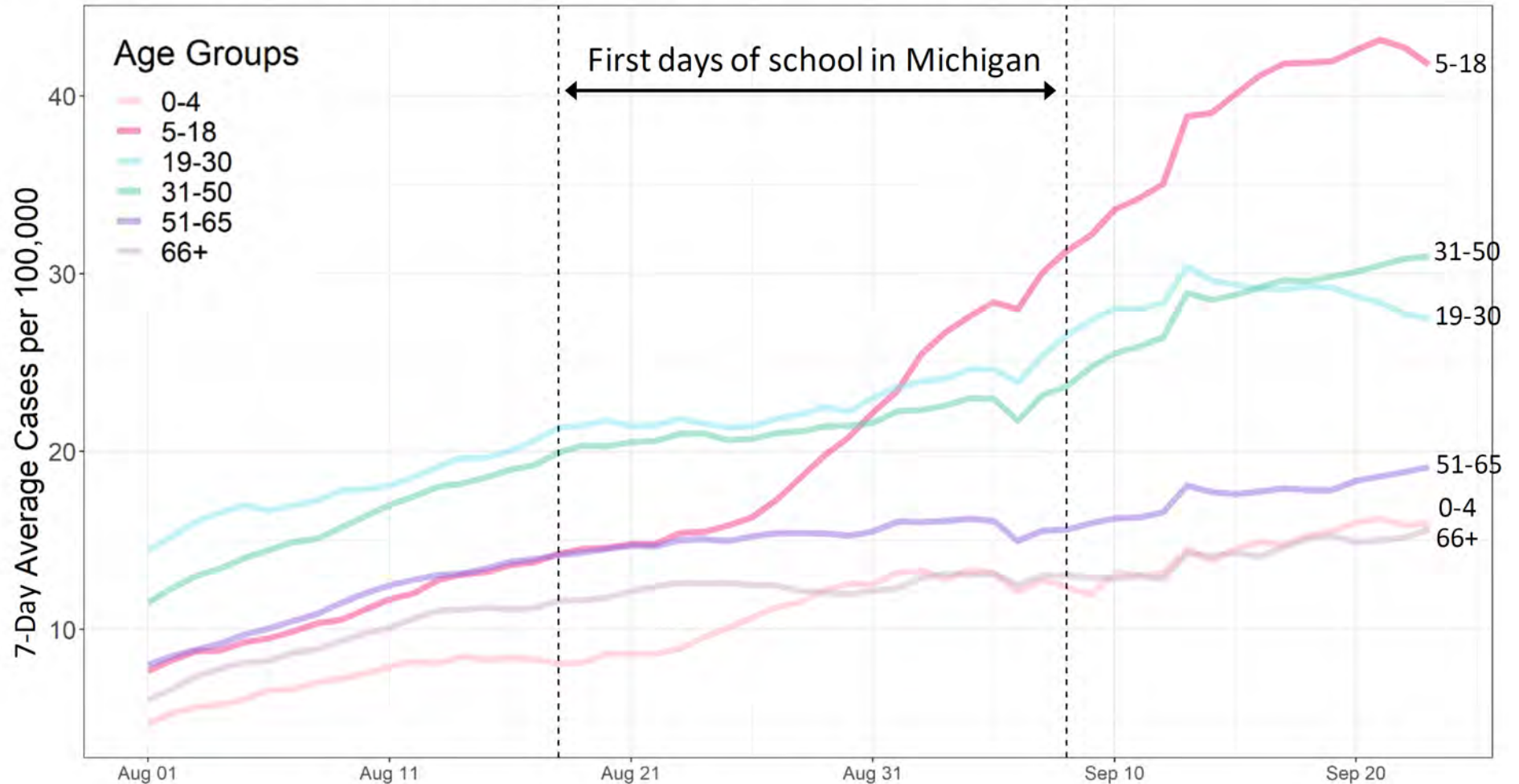


Definition of Educational Outbreak can be found [here](#).

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.

# A closer look: increases have been largest in the K-12 school aged population (5-18 year olds)

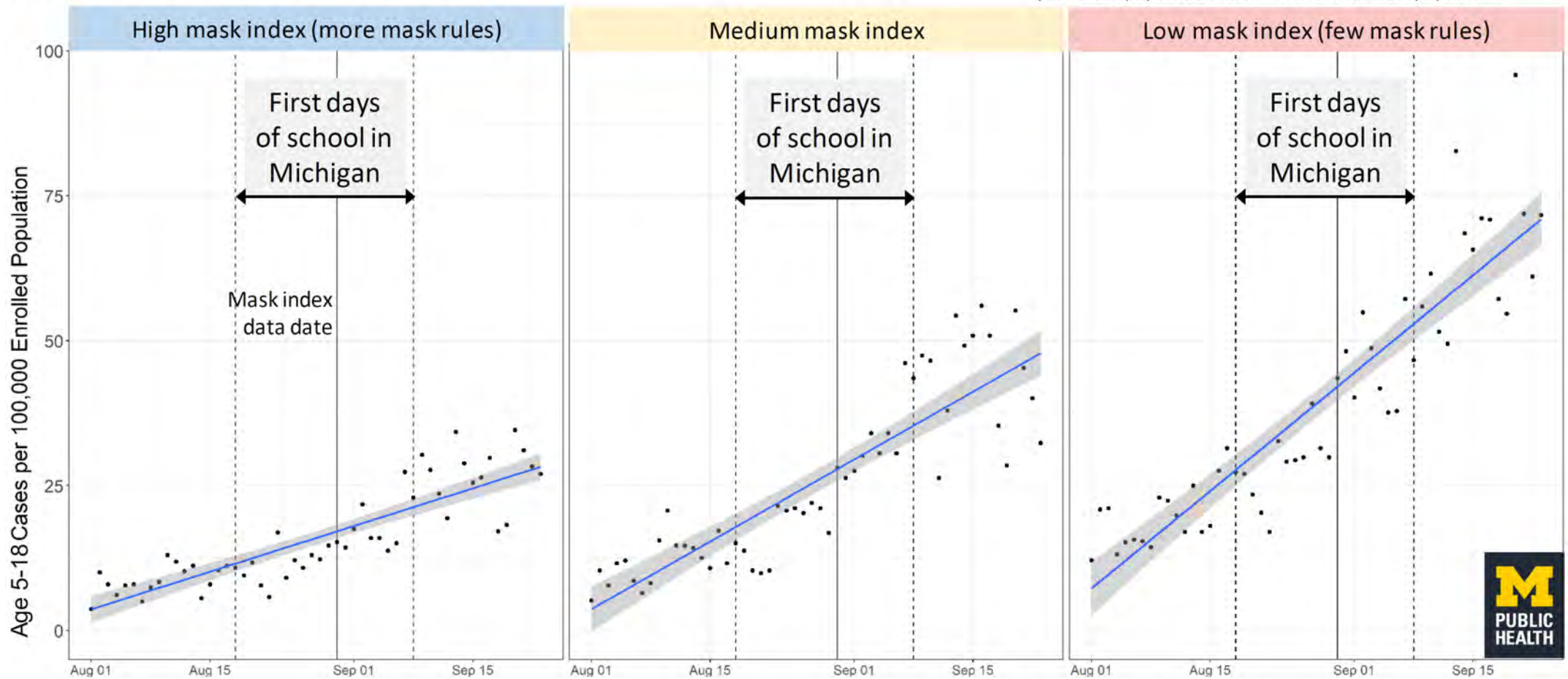
- School aged children (5-18 y) saw a rapid rise beginning over the school reopening period that has continued following back-to-school
- The largest increases during and following back-to-school have been among 5-18 year olds
- Young and middle-aged adults (19-50 y) make up the next highest case rates





# Districts with fewer mask rules during back-to-school saw higher case rates and faster case rises

High mask index = mask required for all grades; Medium = partial mask req. (tiered, some grades, based on vax status, staff only); Low = None or unknown. See Appendix for details. Blue line & shaded region is a linear trend fit. Data Sources: MDSS/MDHHS case data as of 10/1/2021 geocoded to school district, EOG School District Mask Policy Tracker as of 8/30/2021. Note: Cases are among all 5-18 year olds, population is the school-enrolled population.



THANKS FOR  
JOINING US!  
ANY  
QUESTIONS?

**Contacts:**

Jen Morse, MD, MPH, FAAFP

[jmorse@cmdhd.org](mailto:jmorse@cmdhd.org)

Cell: 989-802-2590

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

Steve Hall, R.S., M.S.

[shall@cmdhd.org](mailto:shall@cmdhd.org)

989-773-5921, Ext. 1421

[www.cmdhd.org](http://www.cmdhd.org)

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

Kevin Hughes, MA

[khughes@dhd10.org](mailto:khughes@dhd10.org)

(231) 876-3839

[www.dhd10.org](http://www.dhd10.org)

**For Montcalm, Gratiot, Clinton Counties**

Liz Braddock MS, RS

Cell: 616 302 6301

[lbraddock@mmdhd.org](mailto:lbraddock@mmdhd.org)

[www.mmdhd.org](http://www.mmdhd.org)