

MDHHS PRESS BRIEFING

# COVID-19 DATA UPDATE

November 18, 2020

**Note:** All data is as of November 14, unless otherwise noted. Data are subject to change.



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Michigan Department of Health  
and Human Services**

## Executive summary

CDC COVID Data Tracker indicates that Michigan has recorded the **6<sup>th</sup> highest number of cases (↔)** , **5<sup>th</sup> highest number of deaths (↑2)**, **20<sup>th</sup> highest case rate (↔)**, and **10<sup>th</sup> highest death rate (↑7)** in the last 7 days

According to Becker's Hospital Review, Michigan has the **10<sup>th</sup> highest hospitalization rate as a percent of total beds (↑3)**, and **6<sup>th</sup> highest number of COVID patients in the ICU (↔)**

**Case rates** (512.9), **percent positivity** (12.5%), and **coronavirus like illness** (CLI) are all increasing for seven or more weeks

Case rates are growing exponentially throughout the state of Michigan and all MERC regions are at or above 350 cases per million

**More than 15% of available inpatient beds are filled with COVID patients** and state trends for hospitalizations for COVID continue to increase exponentially for the previous 5 weeks

There were **298 deaths** (↑146) during the week of Nov 1-Nov 7 and the state death rate is **5.2 deaths per million people**

**Daily diagnostic testing (PCR) averaged 53.5K per day** over the last week and daily the state rate is **6,005.3 tests/million people**

## Comparison across states: Summary

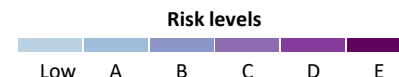
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What we see today:

- 50 states seeing increasing 2-week case trends (up from 47 last week)
- 43 states (stable vs. 44) with significant outbreaks (high/increasing cases, increasing/high positivity increasing/high hospitalizations over 2 weeks (>100 per M))
- South Dakota, North Dakota, Nebraska, Illinois, Montana have highest per capita hospitalized patient numbers
- Most rapid 2-week case growth: VT, LA, NH, MN, ME, OK
- Midwest:
  - Wisconsin with continued rising hospitalizations (390/M), cases (1150/M)
  - Indiana now exceeding Wisconsin in hospitalizations (410/M), cases (~900/M) – exceeded spring peak
  - Illinois shows rapid growth in hospitalizations (440/M) and cases (>950/M)– exceeded spring peak
  - Ohio with growing hospitalizations (290/M) and cases (600/M), positivity – far above spring levels
  - Michigan with rapid rise in hospitalizations (315/M) and cases (>600/M) - 75% of spring peak

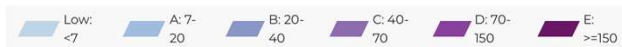
# Confirmed and probable case indicators

Table Date: 2020-11-11, 7 days from date table was produced (2020-11-7)



	MERC Region Number	Public Health Region	Overall Risk Level	Absolute cases (per million)	CDC Case Trend	Average percent positivity	Positivity trend	Tests per million	Weekly % CLI cases	Weekly % CLI cases trend	% inpatient beds occupied by COVID-19 cases	Absolute deaths (per million)	Death trend
Detroit	1	2N + 2S	E	418.8	elevated incidence growth	12.5	Increase - 6wk	5093.4	1.2	Increase - 4wk	13.4	2.8	Increase - 2wk
Grand Rapids	2	6	E	756.8	elevated incidence growth	14.2	Increase - 7wk	7520.3	2.0	Increase - 4wk	17.6	8.0	Increase - 4wk
Kalamazoo	3	5	E	629.6	elevated incidence plateau	15.1	Increase - 8wk	6136.1	1.8	Increase - 3wk	18.6	7.5	Increase - 4wk
Saginaw	4	3	E	609.1	elevated incidence plateau	13.1	Increase - 6wk	5351.8	1.0	Increase - 1wk	18.4	8.6	Increase - 2wk
Lansing	5	1	E	459.9	elevated incidence growth	11.1	Increase - 3wk	6396.7	0.5	Increase - 3wk	15.6	5.1	Increase - 1wk
Traverse City	6	7	E	349.4	elevated incidence plateau	9.5	Increase - 6wk	3934.4	2.0	Decrease - 1wk	10.5	9.7	Increase - 1wk
Jackson	7	1	E	423.6	elevated incidence growth	10.0	Increase - 3wk	8549.3	0.4	Decrease - 1wk	14.0	3.8	<20 wkly deaths
Upper Peninsula	8	8	E	790.9	elevated incidence plateau	9.1	Increase - 2wk	10055.0	1.7	Increase - 2wk	15.6	13.6	Increase - 1wk
Michigan			E	512.9	elevated incidence growth	12.5	Increase - 7wk	6005.3	1.3	Increase - 9wk	14.7	5.2	Increase - 8wk

## Cases



## Positivity



1. Epidemic curve classification based on two-week incidence slope. Data omits most recent week to account for lag period.

# COVID-19 Spread

Positivity continues to increase statewide and within all regions

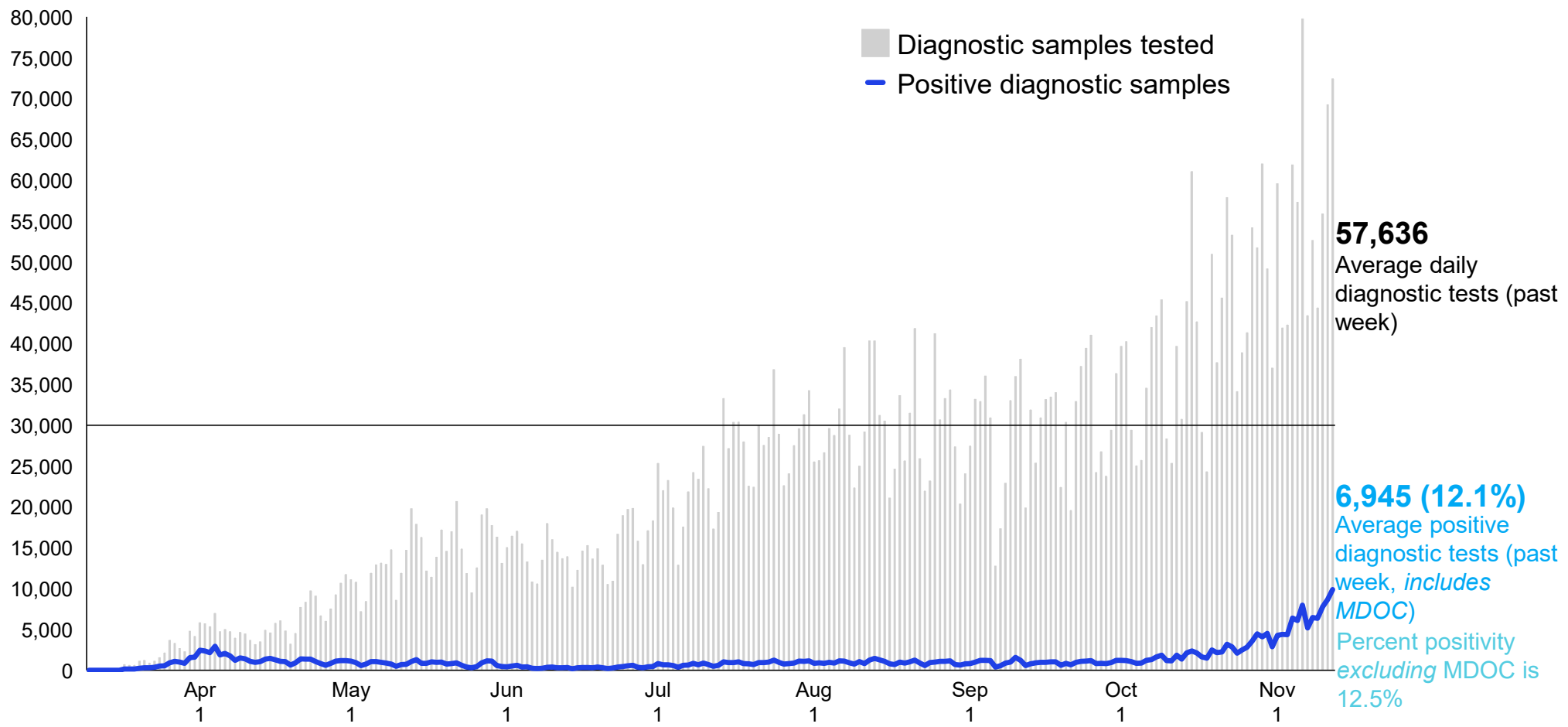
- Testing has also increased in the state
- Testing has increased 89% since October 1 whereas positivity increased 290%

Cases and deaths continue to increase at an exponential pace

- Since October 1, the state case rate has increased 425% to the highest rates to date
- Cases and deaths are rising in all age groups, races, and ethnicities

Number of outbreaks continue to rise, particularly in long-term care facilities, schools and sports, in-person workplace, and restaurants/bars

# Daily diagnostic tests and positive diagnostic tests, by message date



## Daily tests

State	Avg. daily tests
1. California	136.5K
2. New York	124.8K
3. Illinois	77.4K
4. Texas	74.8K
<b>5. Michigan</b>	<b>57.6K</b>
6. Ohio	44.9K
7. New Jersey	38.1K
8. North Carolina	33.3K
9. Alaska	32.9K
10. Tennessee	27.7K
11. Connecticut	25.6K
12. Florida	25.2K
13. South Carolina	18.2K
14. Washington	17.8K
15. Virginia	17.8K
16. Arizona	17.7K
17. Pennsylvania	17.2K
18. Massachusetts	16.5K
19. Georgia	16.3K
20. Arkansas	16.2K
21. Wisconsin	15.1K
22. Minnesota	14.8K
23. Kentucky	14.4K
24. Colorado	13.6K
25. Indiana	13.1K
26. Louisiana	11.0K
27. Oklahoma	10.6K
28. Alabama	10.4K

## Weekly % of pop. tested

State	Weekly % tested
1. Alaska	5.36%
2. Connecticut	5.03%
3. New York	4.49%
4. Illinois	4.27%
<b>5. Michigan</b>	<b>4.04%</b>
6. District of Columbia	3.76%
7. Arkansas	3.76%
8. West Virginia	3.24%
9. New Mexico	3.01%
10. New Jersey	3.00%
11. Tennessee	2.84%
12. Maine	2.73%
13. Ohio	2.69%
14. Montana	2.59%
15. South Carolina	2.47%
16. California	2.42%
17. Kentucky	2.26%
18. North Carolina	2.22%
19. Rhode Island	1.97%
20. Oklahoma	1.88%
21. Minnesota	1.84%
22. Wisconsin	1.82%
23. Texas	1.81%
24. Utah	1.80%
25. Arizona	1.70%
26. Massachusetts	1.68%
27. Louisiana	1.66%
28. Colorado	1.65%

## Percent positive

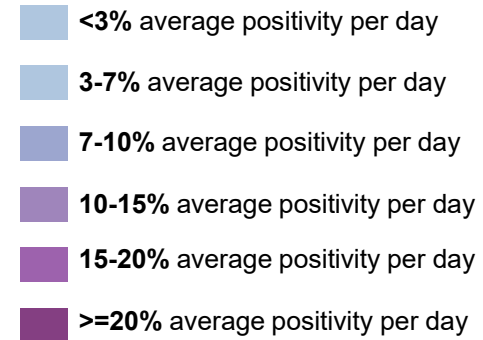
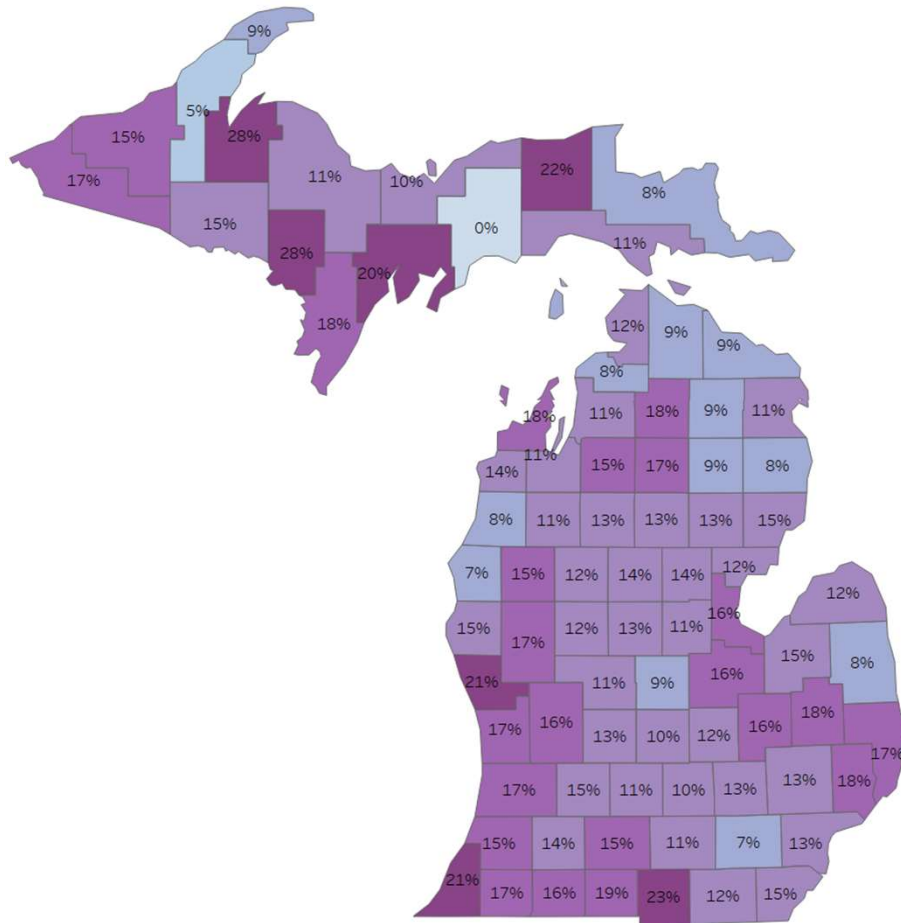
State	% positive
1. New York	2.5%
2. Maine	2.6%
3. District of Columbia	2.6%
4. California	4.2%
5. Connecticut	4.3%
6. Louisiana	5.0%
7. Vermont	5.5%
8. South Carolina	5.8%
9. New Jersey	6.1%
10. West Virginia	6.3%
11. North Carolina	6.4%
12. Washington	6.8%
13. Virginia	7.5%
14. Alaska	7.6%
15. Georgia	8.2%
16. New Hampshire	9.3%
17. Texas	9.6%
18. Ohio	10.3%
19. Massachusetts	10.7%
20. Tennessee	11.1%
21. New Mexico	11.6%
22. Maryland	11.9%
23. Kentucky	12.0%
<b>24. Michigan</b>	<b>12.1%</b>
25. Arkansas	12.3%
26. Oregon	12.5%
27. Illinois	12.9%
28. Delaware	13.0%

Week ending 11/7/2020 (Michigan average uses most recent MAG data and includes all tests, including MDOC and "Region Unknown")

SOURCE: Numerical Data – MDSS, COVID Tracking Project, U.S. Census Bureau.



## Positivity by county, 11/8-11/14



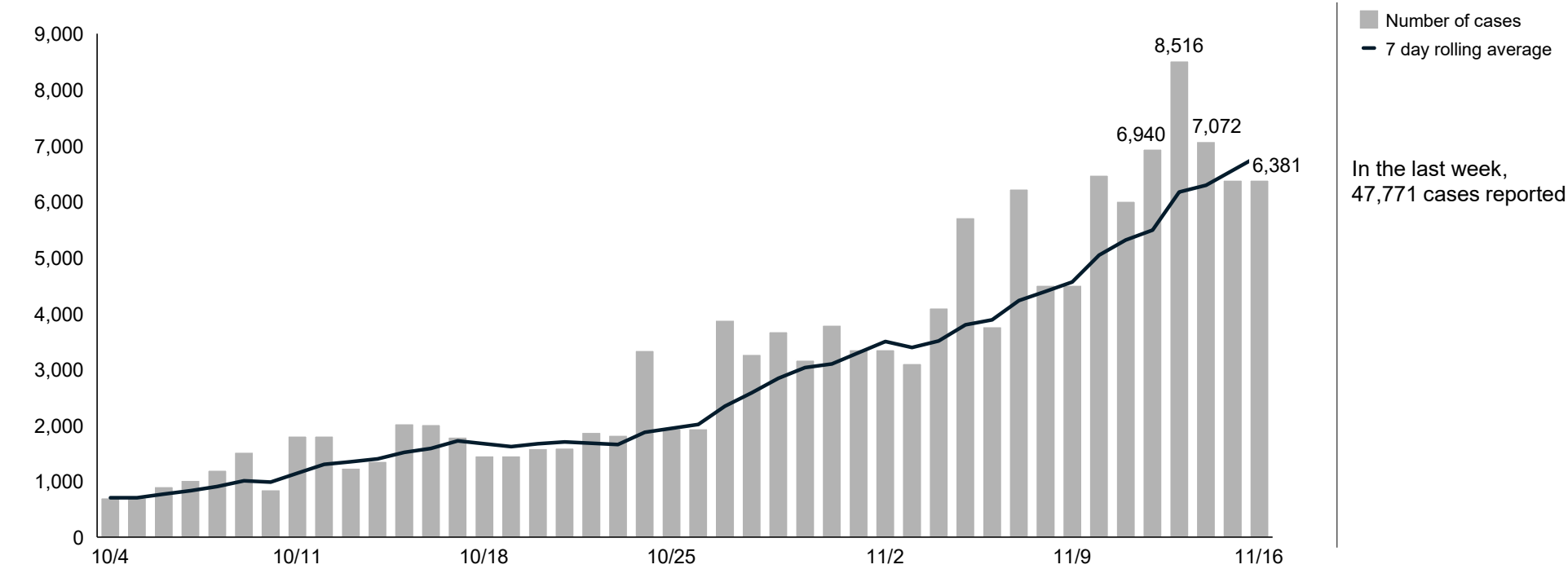
### Updates since last week:

Most counties averaged 10%-20% positivity over the last week

Note: Cases information sourced from MDHHS and reflects date of onset of symptoms (refers to confirmed and probable cases)  
Source: SEOC Testing Results

# Confirmed COVID-19 cases by report date: State of Michigan

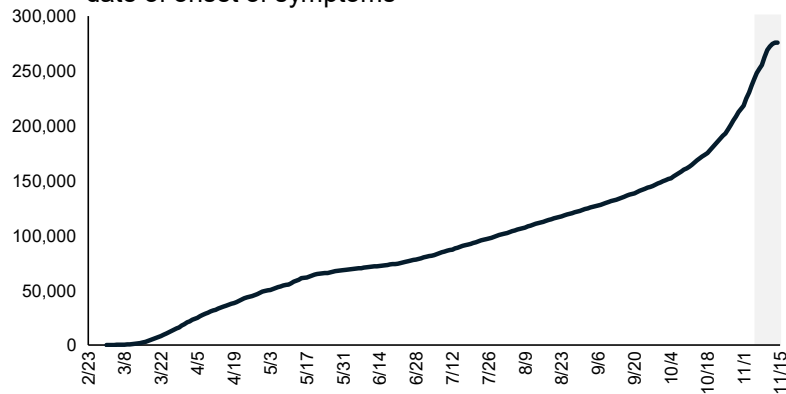
Confirmed cases reported on prior day (7-day rolling average)



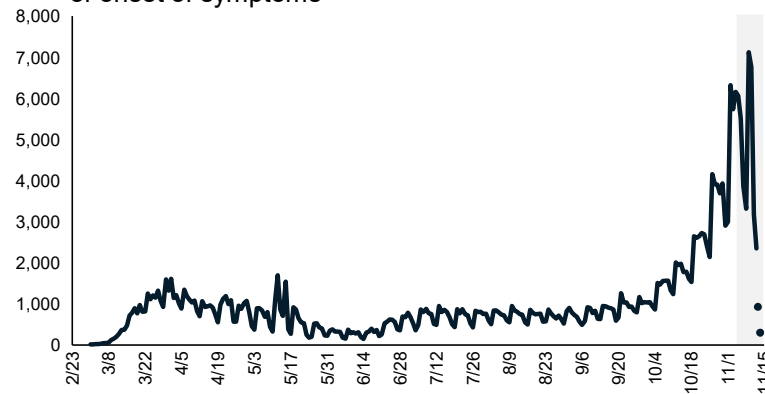
Source: MDHHS – Michigan Disease Surveillance System

# COVID-19 cases and deaths by onset date: State of Michigan

**Cumulative confirmed and probable cases, by date of onset of symptoms**



**New confirmed and probable cases, by date of onset of symptoms**

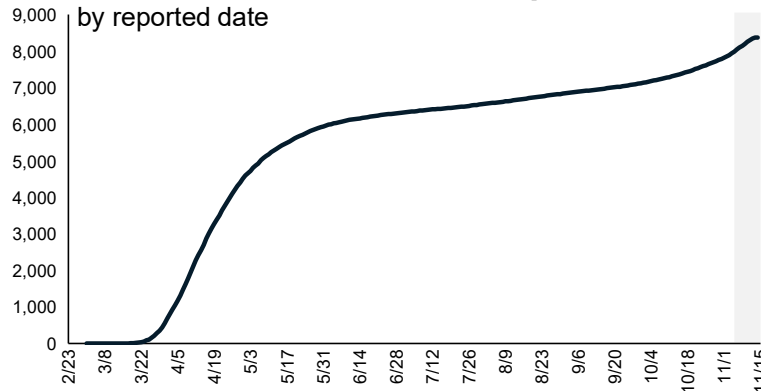


**Updates since last week:**

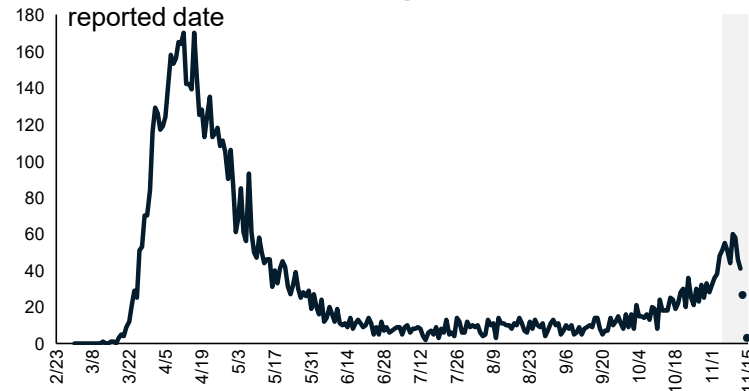
Exponential growth in cases continues

Current daily case rate is over 5x the rate from early October

**Cumulative confirmed and probable deaths, by reported date**



**New confirmed and probable deaths, by reported date**



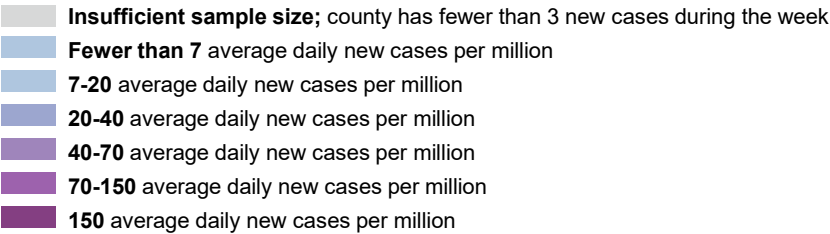
**Updates since last week:**

Current deaths are a lagging indicator of cases and are continuing to climb.

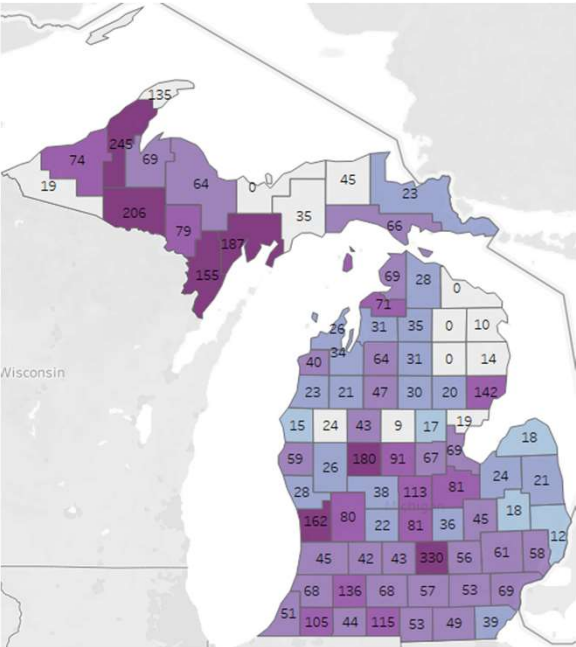
The current number of deaths is over 4x the amount of deaths in October

Note: Cases information sourced from MDHHS and reflects date of onset of symptoms (refers to lab-confirmed cases). Case spike on 5/12 is a result of batch of test results, not all of which have onset date of symptoms completed  
Source: MDHHS – Michigan Disease Surveillance System

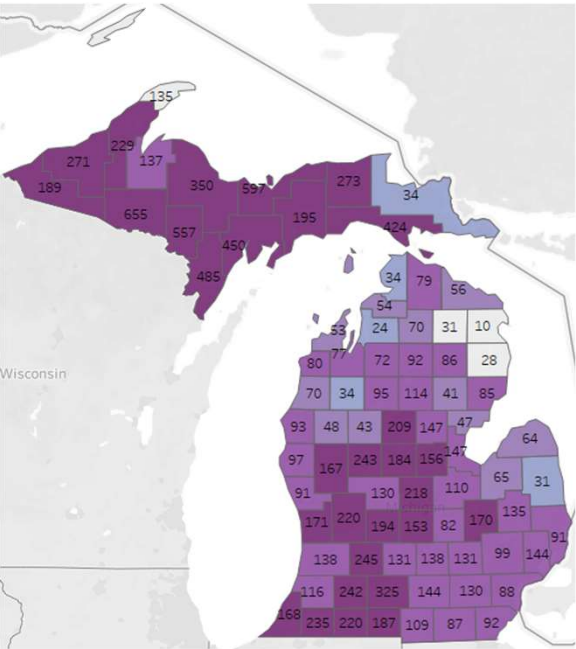
# Average daily new confirmed and probable cases per million residents



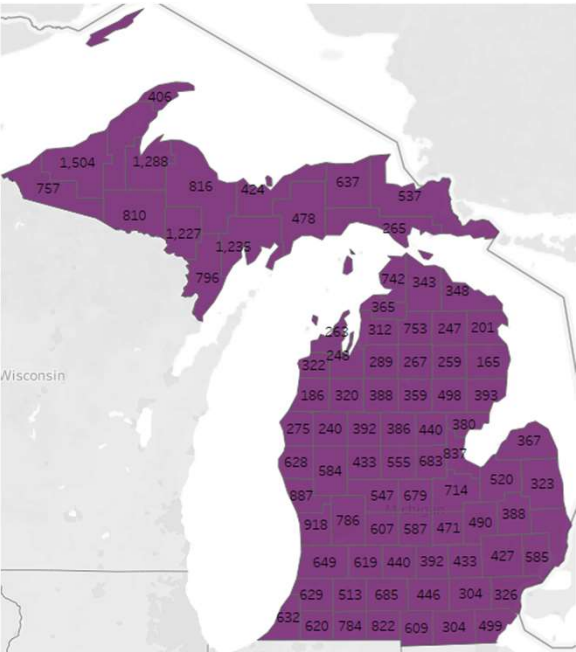
9/6-9/12



10/4-10/10



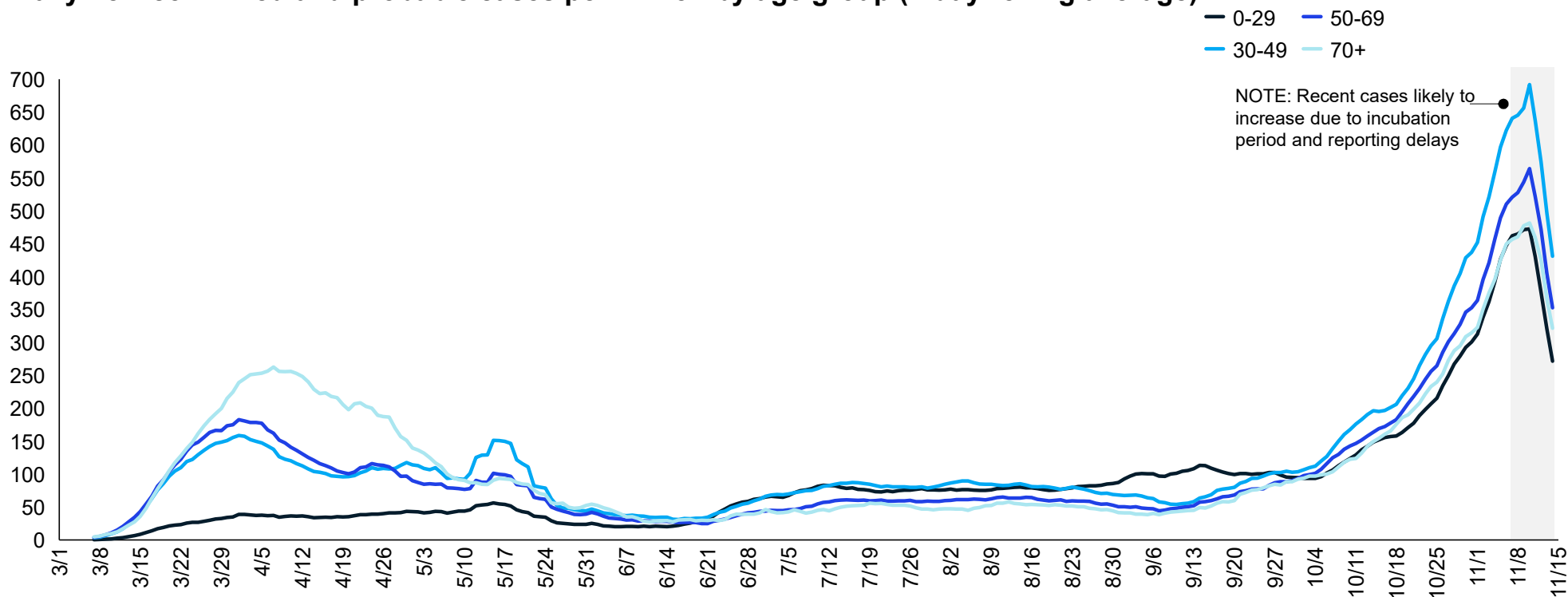
11/8-11/14



Note: Cases information sourced from MDHHS and reflects date of onset of symptoms (refers to confirmed and probable cases)  
 Note: Data as of 11/11/2020  
 Source: MDHHS – Michigan Disease Surveillance System

# Average daily new cases per million residents, by age group

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

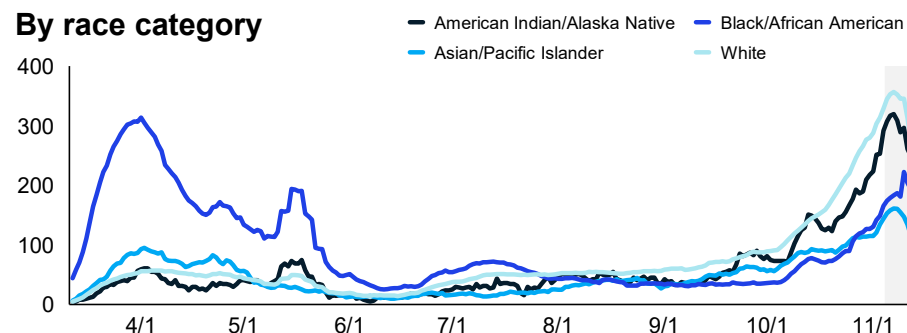


30-49 age group continues to have the highest cases per million, though cases per million have increased for all age groups

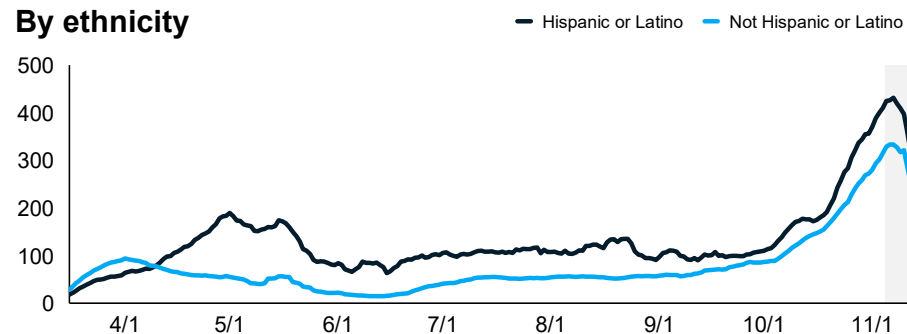
# Average daily new cases per million people by race and ethnicity

Daily new confirmed and probable cases per million (7 day rolling average)

## By race category

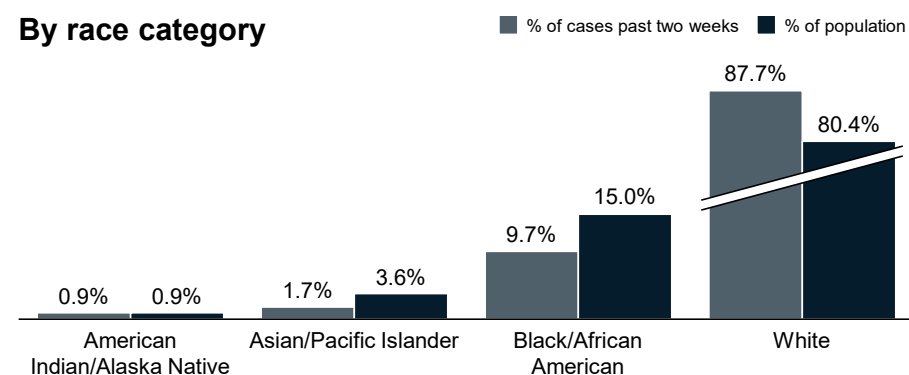


## By ethnicity

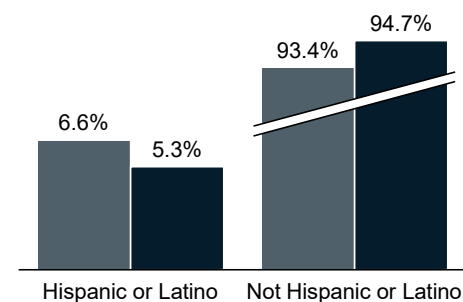


Past two weeks confirmed and probable cases vs. population, % of total

## By race category



## By ethnicity



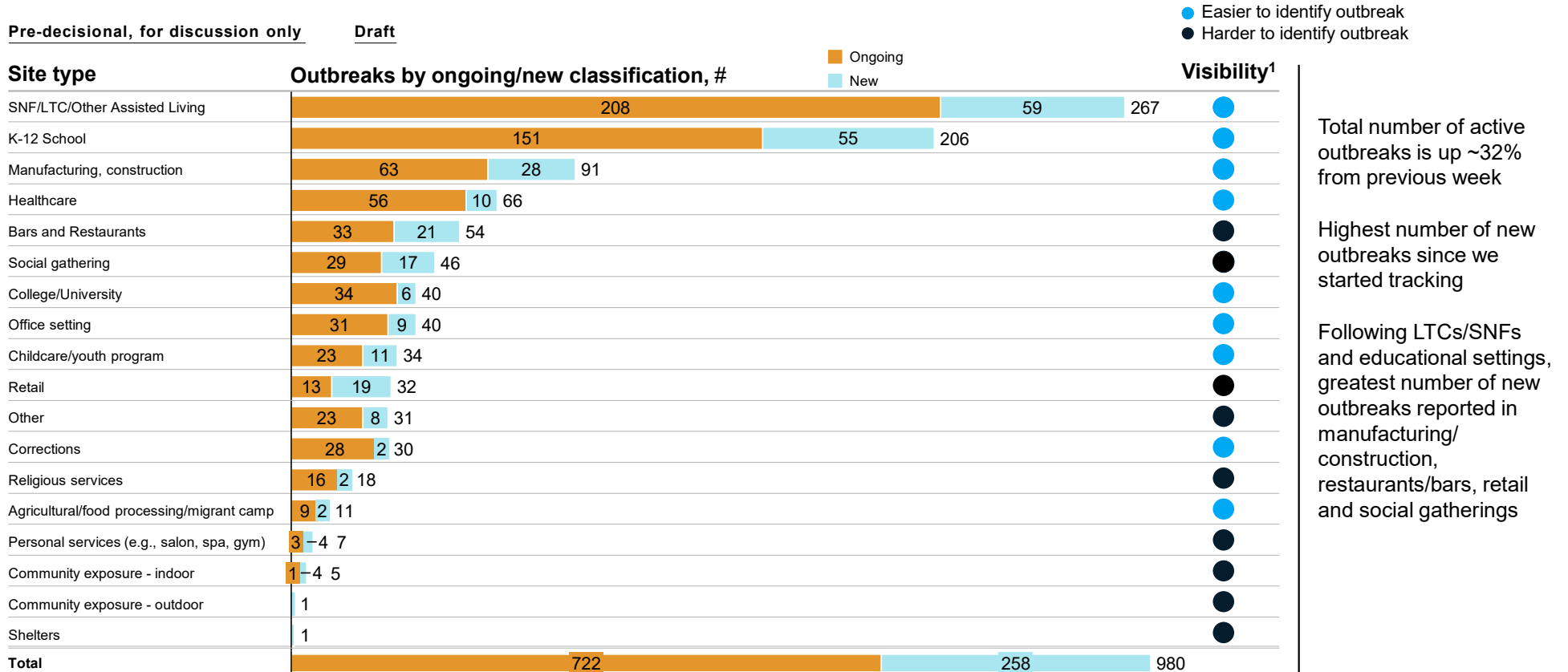
Note: Cases information sourced from MDHHS and reflects date of onset of symptoms; note that Multiple Races, Other, and Unknown race/ethnicity are not included in calculations

Source: MDHHS – Michigan Disease Surveillance System

# Number of outbreak investigations by site type, week ending Nov 13

Pre-decisional, for discussion only

Draft



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.

Source: LHD Weekly Sitreps

## K-12 school outbreaks, recent and ongoing, week ending November 13

Region	Number of reported cases, #	# Ongoing - Excluding New	# New	Number of outbreaks	Range of cases per outbreak
Region 1	60 14 74			24	1-13
Region 2n	45 1 46			30	2-5
Region 2s	83 19 102			19	2-22
Region 3	102 12 114			32	1-10
Region 5	68 6 74			18	2-9
Region 6	260 59 319			42	2-40
Region 7	32 10 42			11	2-14
Region 8	87 23 110			24	2-20
<b>Total</b>	737 144 881			<b>200</b>	<b>1-40</b>

Grade level	Number of reported cases, #	Number of outbreaks	Range of cases per outbreak
Pre-school - elem	169 25 194	70	1-10
Jr. high/middle	104 18 122	33	2-14
High	464 101 565	97	2-40
<b>Total</b>	737 144 881	<b>200</b>	<b>1-40</b>

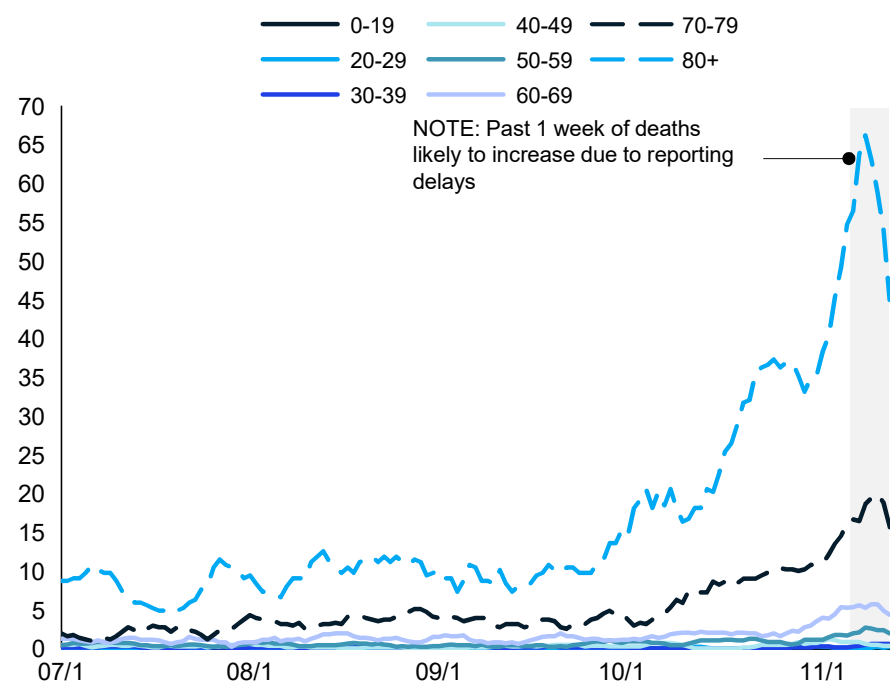
Many factors, including the lack of ability to conduct effective contact tracing in certain settings, may result in significant underreporting of outbreaks. This chart does not provide a complete picture of outbreaks in Michigan and the absence of identified outbreaks in a particular setting in no way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

Source: LHD Weekly Sitreps

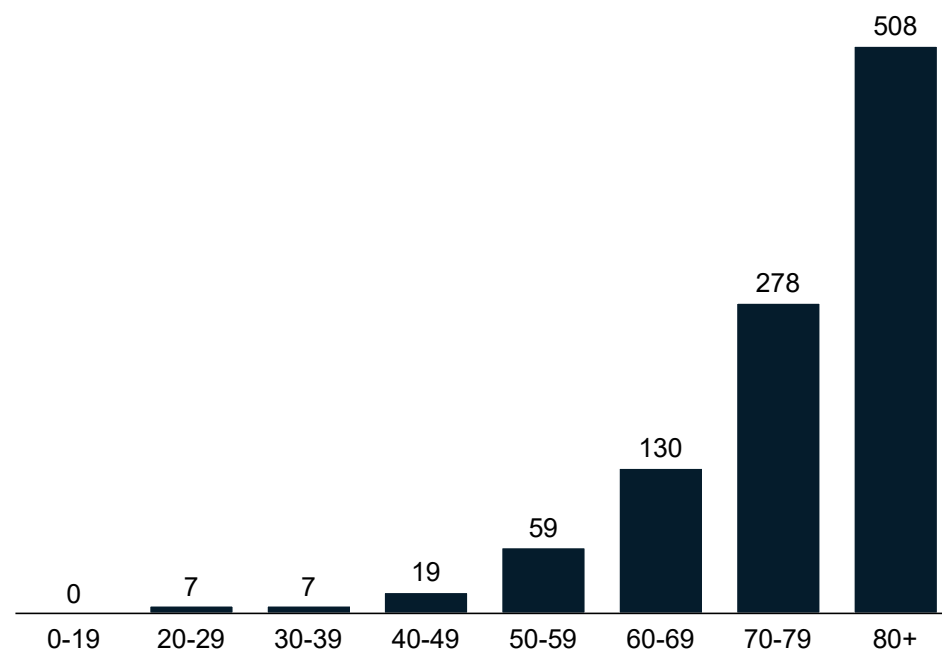


## Average and total new deaths, by age group

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



Total new confirmed and probable deaths by age group (past 30 days, ending 11/12)



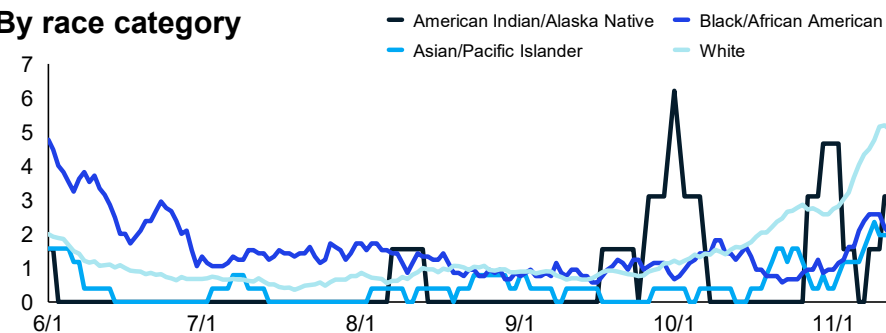
Note: Cases information sourced from MDHHS and reflects date of report

Source: MDHHS – Michigan Disease Surveillance System

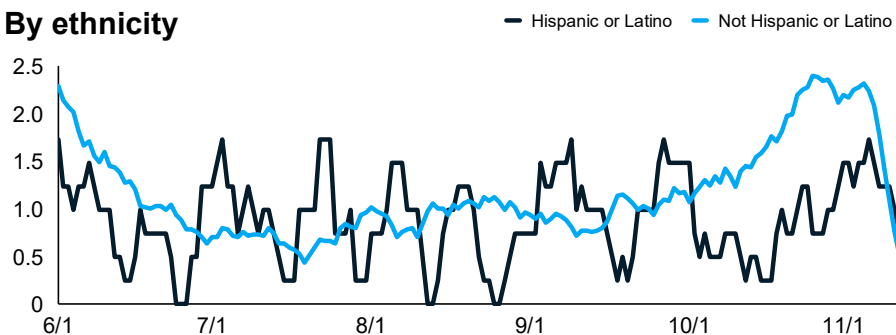
# Average daily new deaths per million people by race and ethnicity

Daily new confirmed and probable deaths per million (7 day rolling average)

By race category



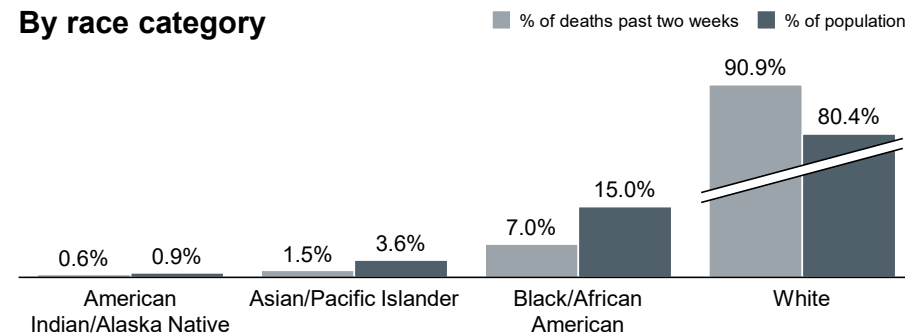
By ethnicity



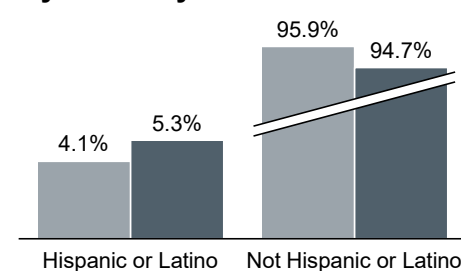
Note: Multiple Races, Other, and Unknown race/ethnicity are not included in calculations  
Source: MDHHS – Michigan Disease Surveillance System

Past two weeks confirmed and probable deaths vs. population, % of total

By race category



By ethnicity



## COVID-19 and Healthcare Capacity

Since September, COVID-19-like illness has gone from < 2% to > 7% of the emergency department visits

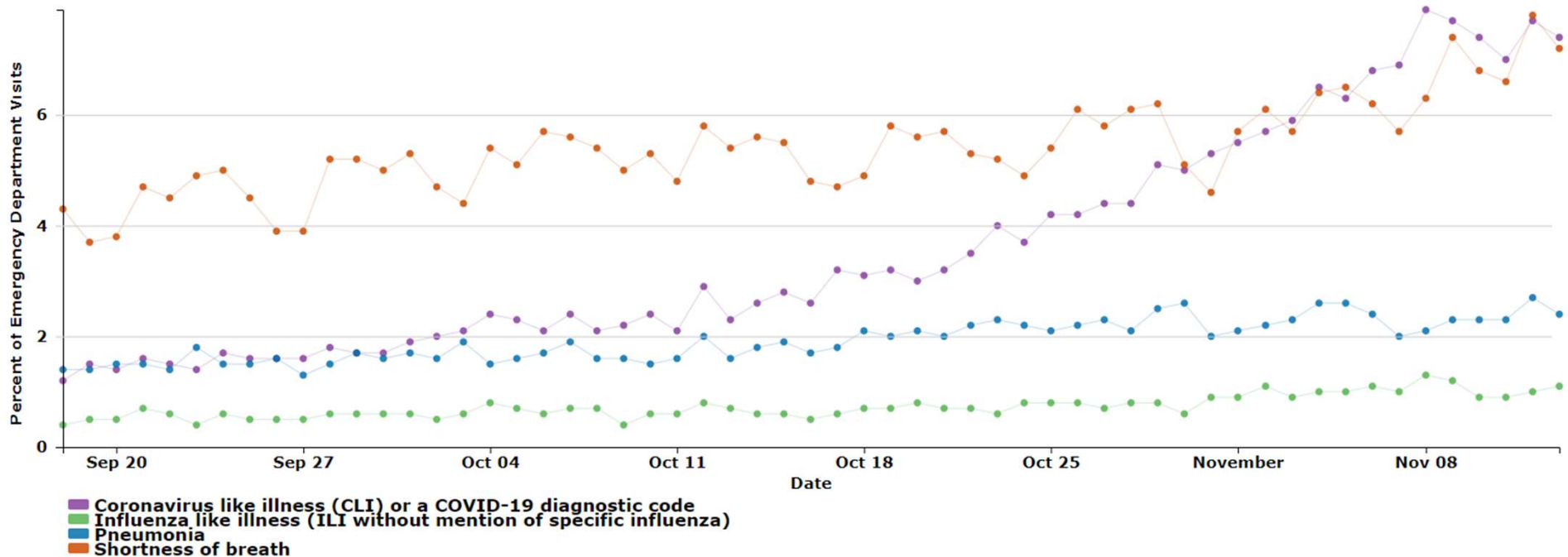
Hospitalizations and ICU utilization are increasing

- Double rate of 2.5-3 weeks

Five of eight regions are over 30% of Adult ICU beds occupied with COVID+ patients

# Michigan Trends in Emergency Department Visits for COVID-19-Like Illness (CLI)

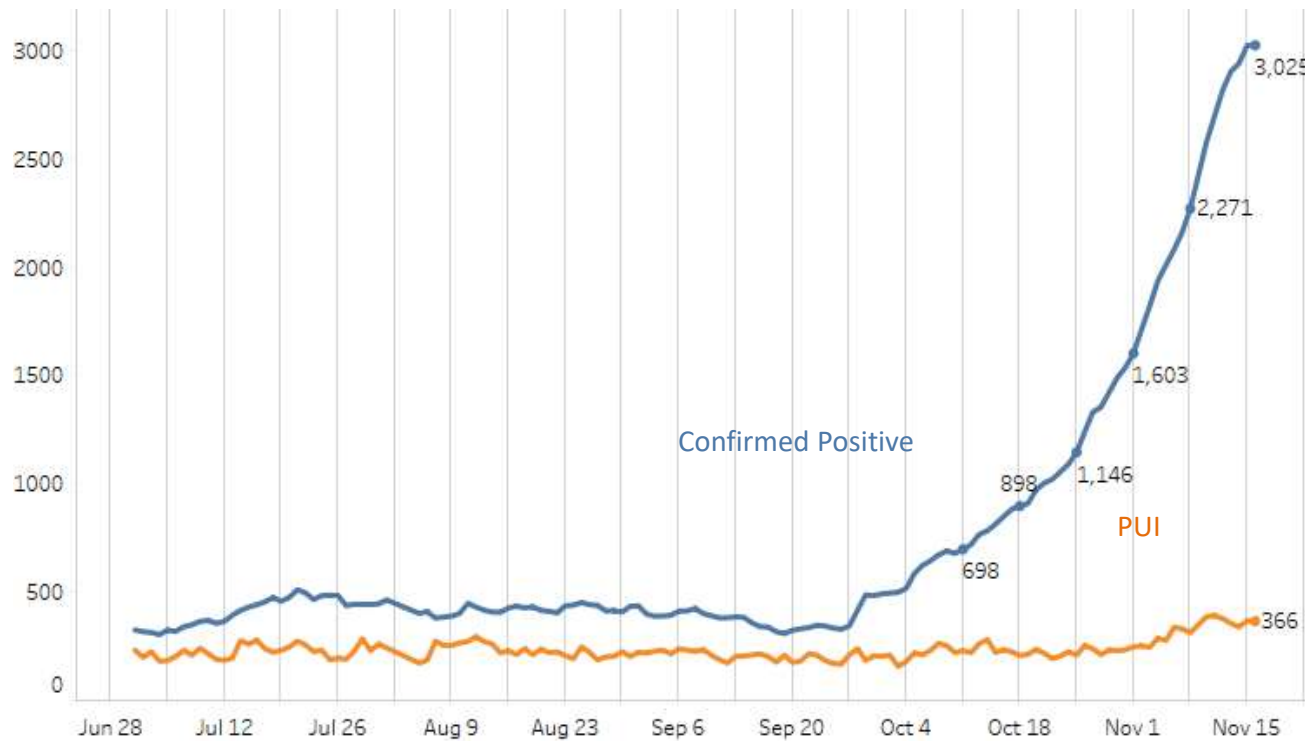
Percentage of ED visits by syndrome in Michigan: COVID-19-Like Illness, Shortness of Breath, Pneumonia, and Influenza-Like Illness



Source: <https://covid.cdc.gov/covid-data-tracker/#ed-visits>

# Statewide Hospitalization Trends: Total COVID+ Census

Hospitalization Trends 7/1/2020 – 11/15/2020  
Confirmed Positive

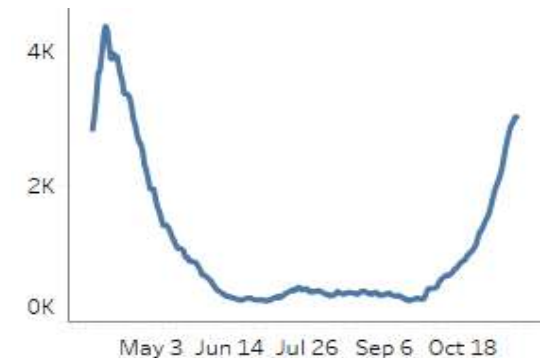


This week, hospital COVID+ census is 33% higher than last week.

We are now at ~75% of our spring peak levels, though now these hospitalizations are spread across the regions.

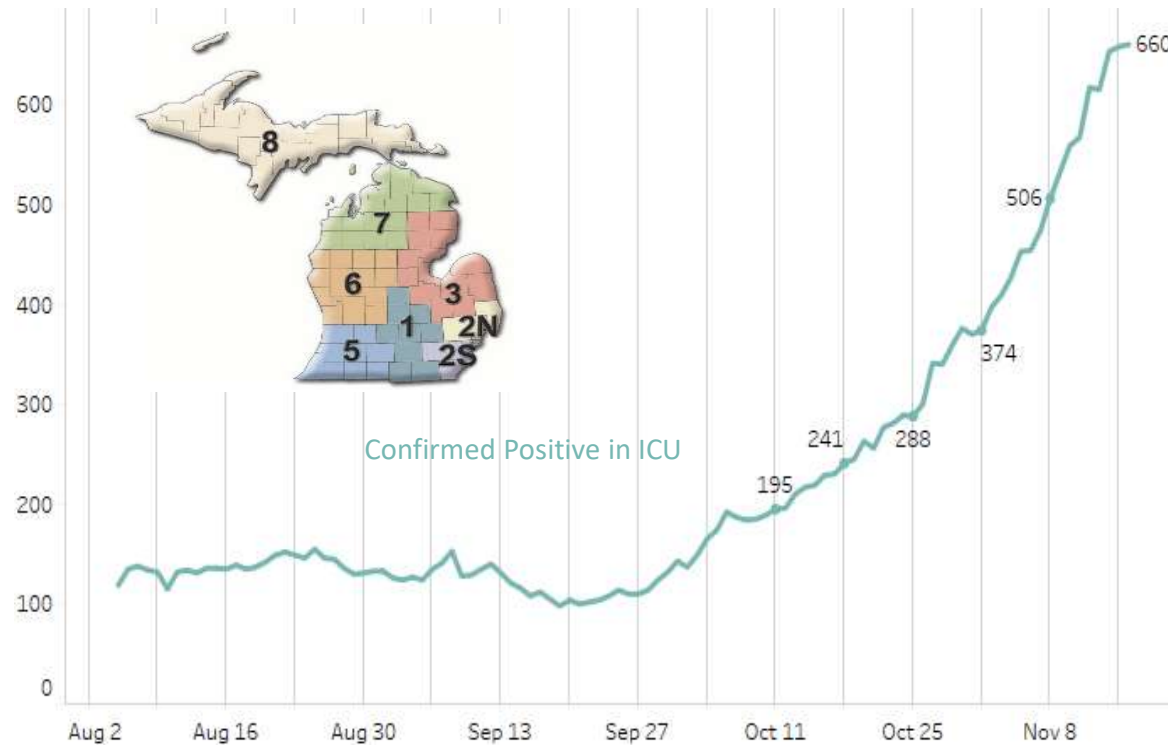
Doubling time of hospitalizations now at 2.5 to 3 weeks (vs. 2 weeks for week prior)

Hospitalized COVID Positive Long Term Trend (beginning March)



# Statewide Hospitalization Trends: ICU COVID+ Census

Hospitalization Trends 8/1/2020 – 11/15/2020  
Confirmed Positive in ICUs



COVID+ census in ICUs increased by 30% this week  
Doubling time is 2.5 to 3 weeks

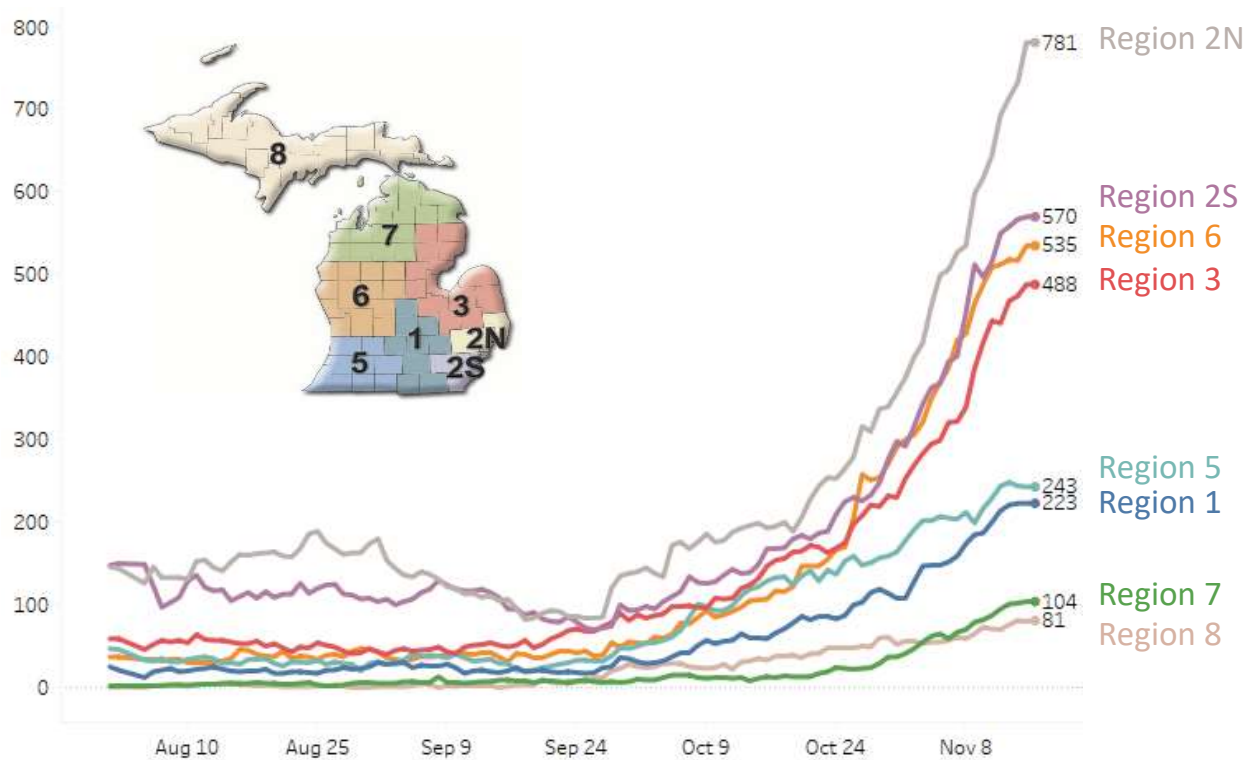
Statewide 27% of Adult ICU beds are occupied with COVID+ patients

5/8 Regions are over 30% of Adult ICU beds occupied with COVID+ patients

Region	Adult COVID+ in ICU	Adult ICU Occupancy	% of Adult ICU beds COVID+
Region 1	61	89%	31%
Region 2N	109	83%	20%
Region 2S	125	83%	17%
Region 3	110	89%	31%
Region 5	41	83%	26%
Region 6	118	80%	42%
Region 7	68	75%	39%
Region 8	28	86%	48%

# Statewide Hospitalization Trends: Regional COVID+ Census

Hospitalization Trends 8/1/2020 – 11/15/2020  
Confirmed Positive by Region



Regions 2N, 3, and 7 show the most rapid growth rate for the week of 11/8-11/15

Region 2N, 3, 6 are the most pressured on a per population basis

Region	Growth from Last Week	COVID+ Hospitalizations / MM
Region 1	28%	206/MM
Region 2N	46%	352/MM
Region 2S	26%	255/MM
Region 3	44%	431/MM
Region 5	15%	255/MM
Region 6	25%	365/MM
Region 7	49%	208/MM
Region 8	35%	260/MM

## **How is public health capacity?**

Case investigation and contact tracing is becoming overwhelmed with the influx of new cases and contacts and is at or near all-time lows

- MDHHS recently released phone proximity notification app to aid in contact tracing



## New Case Investigation Metrics

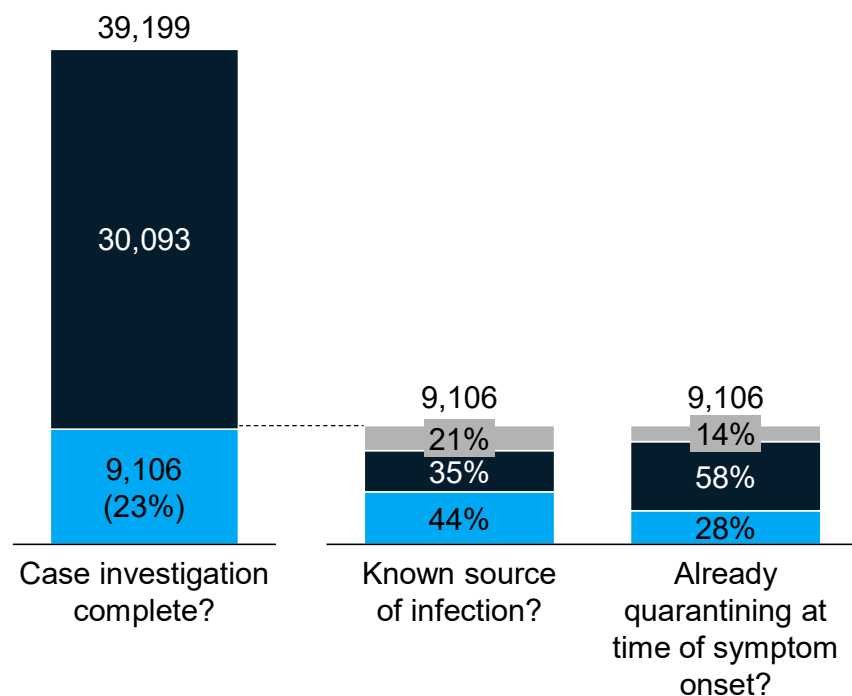
Case investigation metrics remain low since last week:

- 44% of investigated cases have a known source (47% last week)
- 28% of investigated cases noting that they were quarantining before symptoms (28% last week)

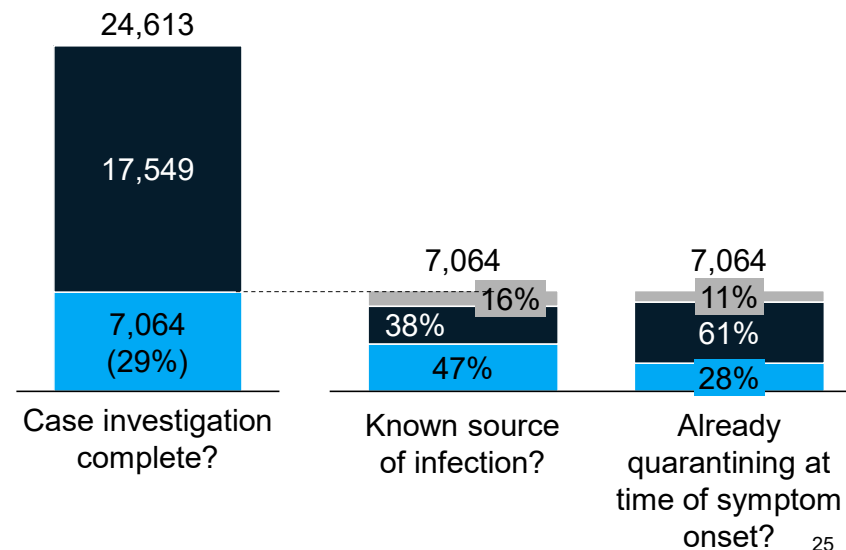
Over the last week, number of complete case investigations increased 29%, number of cases has increased 59%

■ Yes ■ No ■ Not answered

Case report form information, 11/7-11/13



Case report form information, 10/31-11/6



# Testing, case investigation, and contact tracing: Current state

	Testing			Case investigation and contact acquisition			Initial contact tracing		Ongoing contact monitoring still occurring through texting and calls
Goal	2K tests per million per day	3% test positivity, excluding MDOC	Fast test to result turnaround time <sup>6</sup>	90% calls attempted in one day	75% calls completed in one day	50% with contacts in one day	90% calls attempted in one day	75% calls completed in one day	
Performance	6.0K	12.5%	2.7 days	18.3% <sup>1</sup>	14.1% <sup>2</sup>	14.1% <sup>3</sup>	91.4% <sup>4</sup>	45.6% <sup>5</sup>	
Trend since last week	Favorable	Unfavorable	Stable	Unfavorable	Unfavorable	Unfavorable	Favorable	Favorable	
							<div>63% of contacts successfully complete intake within five days</div>		

1. % of cases documented as "attempted" within one day

2. % of cases documented as "successful" within one day

3. % of cases with at least one contact documented within one day

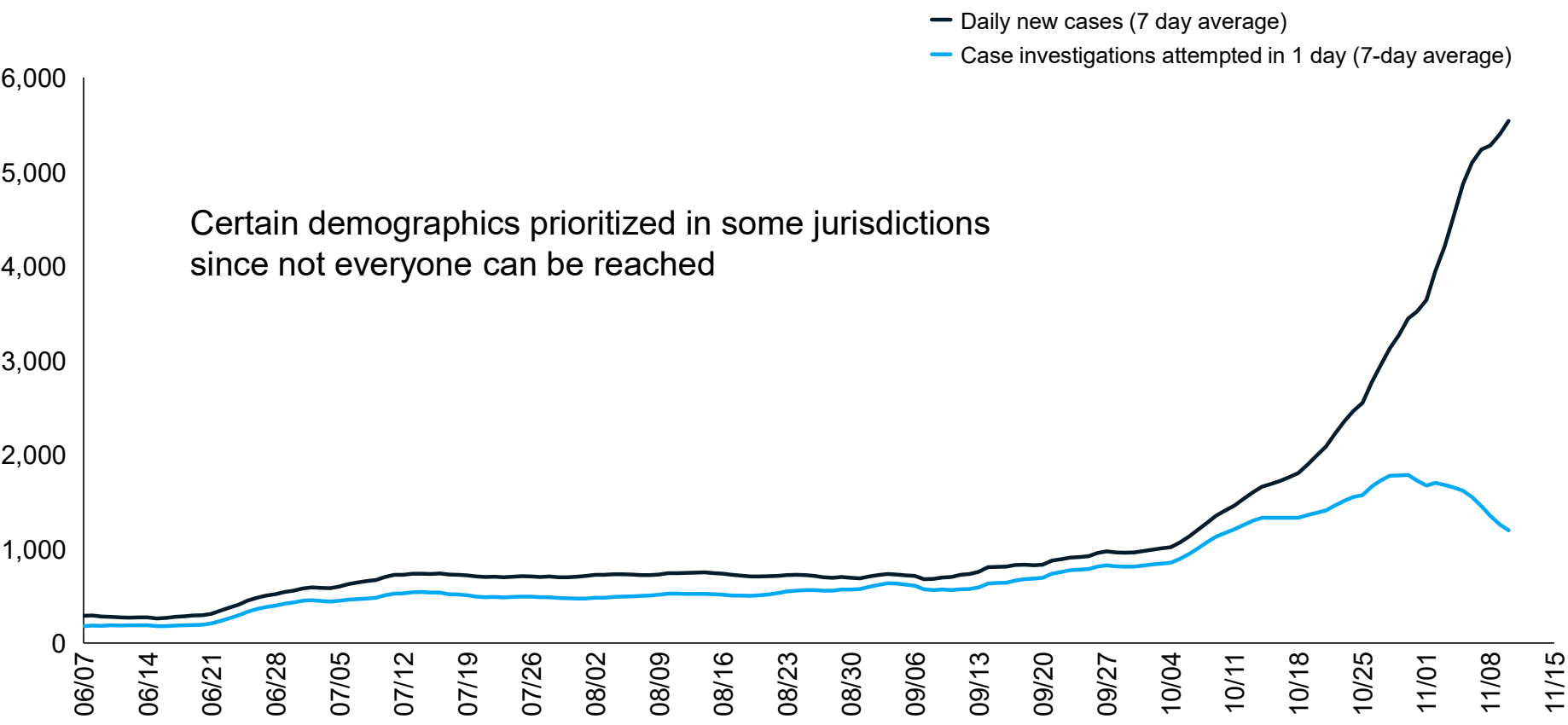
4. Weighted average of % of cases documented as "attempted" within one day in OMS, LHD survey, and Traceforce

5. Average of % of cases documented as "successful" within one day (Traceforce-only due to data accuracy concerns in other systems)

6. Sourced from weighted average of all lab turnaround times

Source: MDSS and OMS summary statistics. Traceforce summary statistics. LHD Sitrep survey. Testing information from MAG summary files (percent positivity excludes MDOC)

# Cases vs. Attempted Case Investigations



Certain demographics prioritized in some jurisdictions since not everyone can be reached

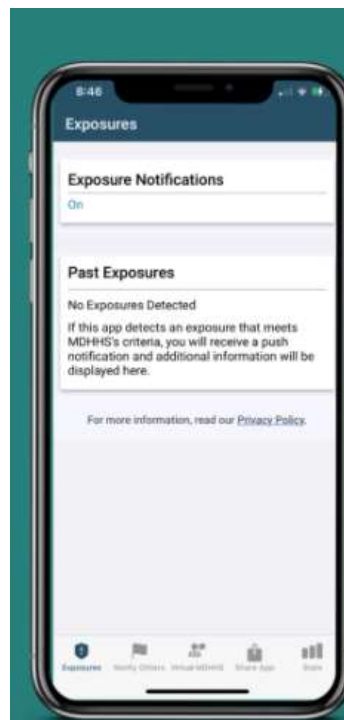
Note: Cases visualized by onset date; Absolute number of case investigations estimated from daily case investigation success rate  
Source: MDHHS – Michigan Disease Surveillance System



Iphone or Android

More than 280,000 people  
already signed up

Spanish and Arabic  
translations coming soon



## EXPOSURE NOTIFICATIONS

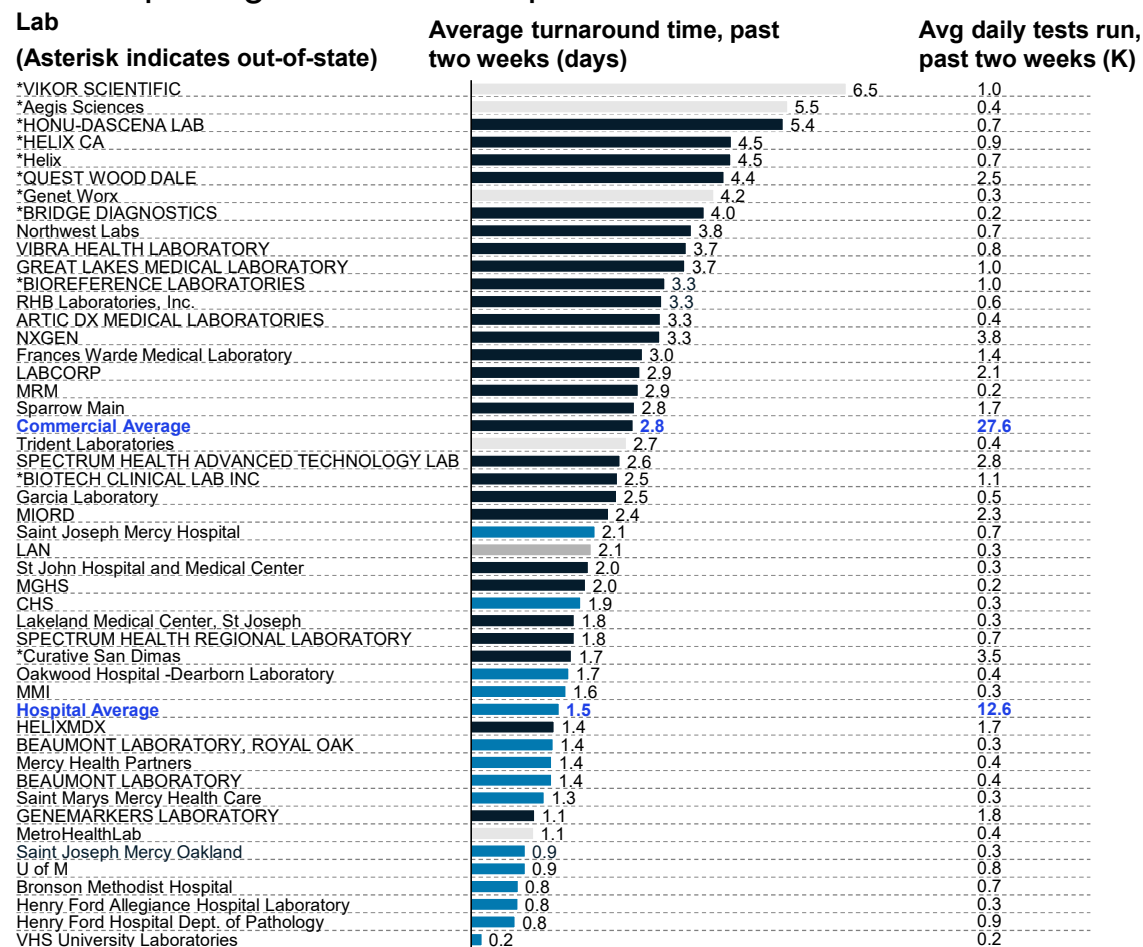
If you use the app you will:

- be alerted if you may have been in close contact with someone who has tested positive for coronavirus
- be able to track any symptoms you have and get advice on what to do to protect yourself and others
- be able to anonymously warn other app users that you were in close contact with, if you test positive for coronavirus

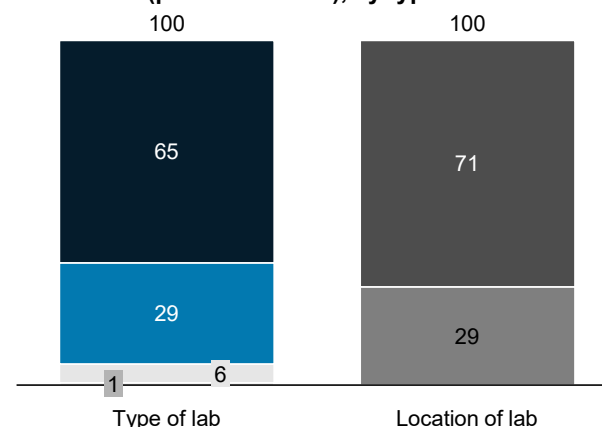
**Exposure Notifications - what they look like and how it works**

# Testing turnaround time – Collection to report

Labs reporting >1K results in past two weeks



Percent of tests (past two weeks), by type of lab and location



**14-day average testing turnaround time is 2.7 days, stable since last week**

Source: MDSS/Michigan Medical Advantage Group, MDHHS, testing labs (as of 11/6). NOTE: Smaller labs do not appear on this page

## Indirect Impacts of COVID-19

The pandemic has affected many public health services not directly related to COVID-19

- Childhood preventative services like lead testing and vaccinations have fallen but are rebounding

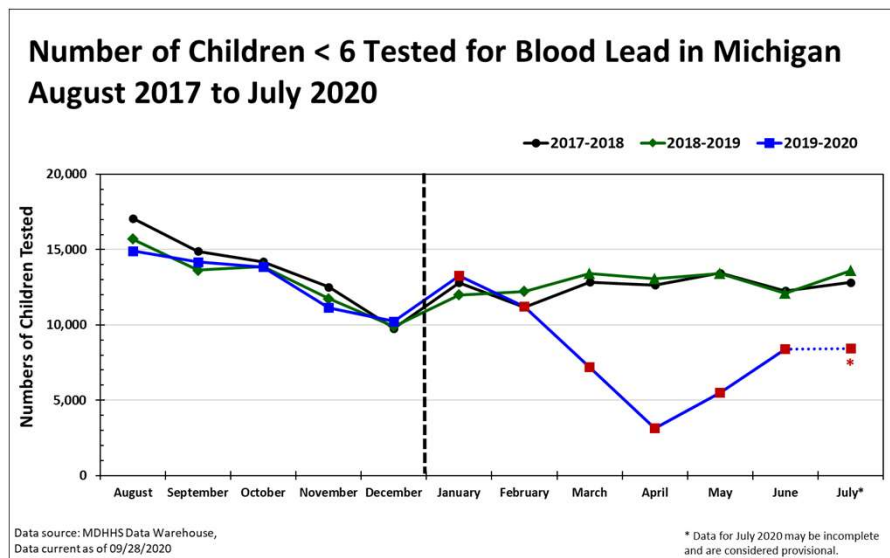
Access to emergency care services have also been impacted

- Emergency department visits are lower than years past
- EMS use for opioid overdose has increased
- Mental health impacts, directly and indirectly related to the pandemic, are visible in Michiganders

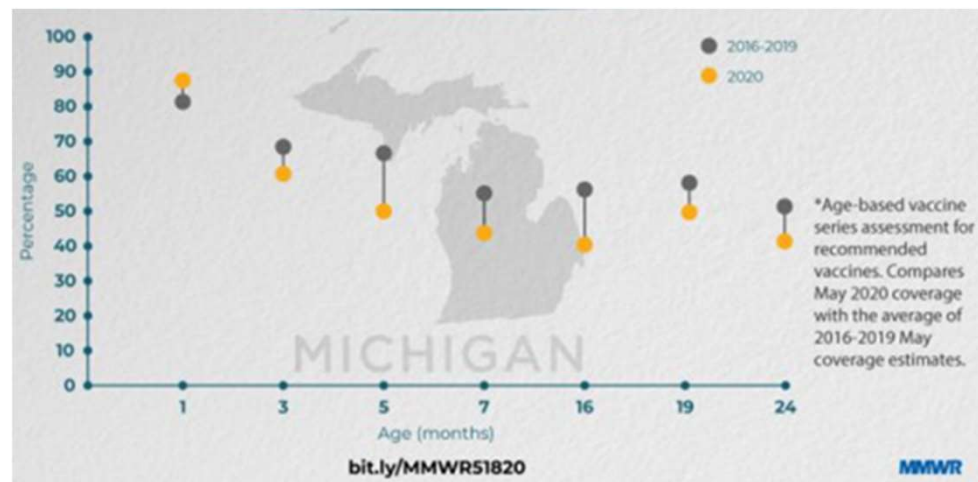
# Preventative Services

1. Childhood lead testing fell 75% in April but have since risen to 60% of pre-pandemic levels
2. Up-to-date vaccinations declined < 50% among most children  $\leq 2$  years
3. Childhood vaccination series remained relatively stable since 2019 Q2 although disparities exist for Black/African Americans

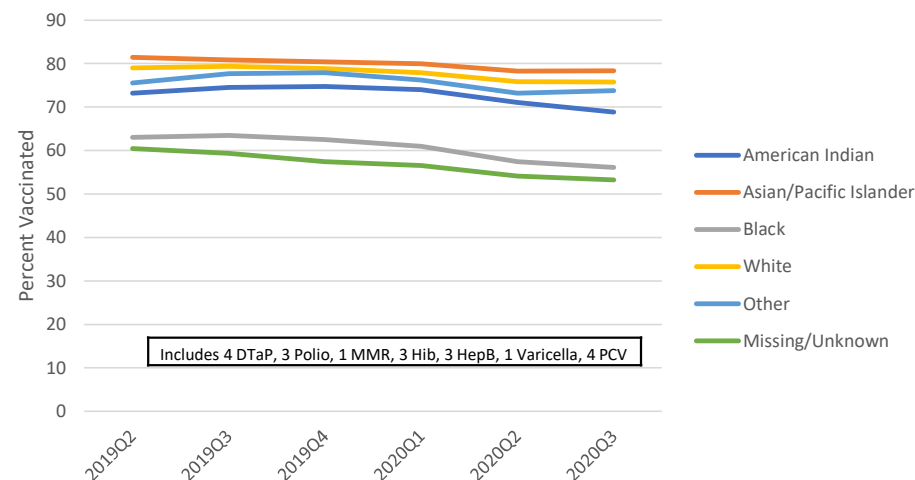
## 1. Number of Children < 6 Tested for Blood Lead



## 2. Quarterly trends for childhood vaccination coverage



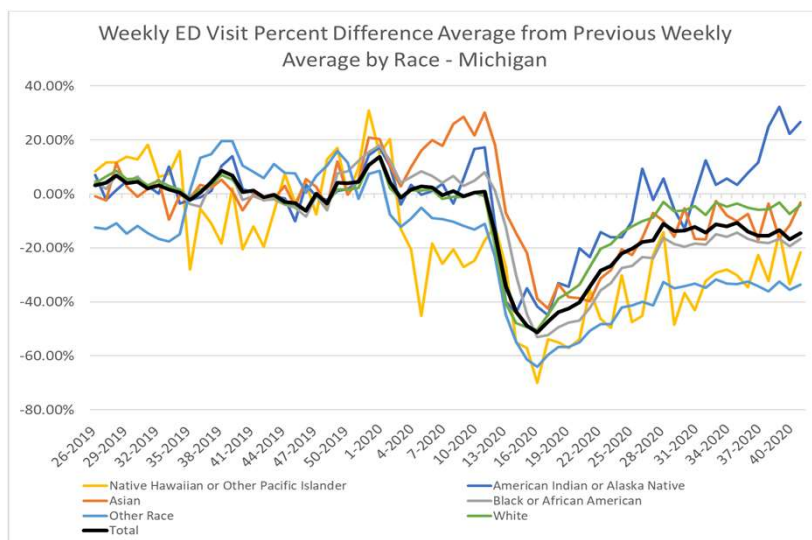
## 19 through 35 months quarterly child vaccine series coverage by mother's race, March 30, 2019 through September 30, 2020 as of November 1, 2020



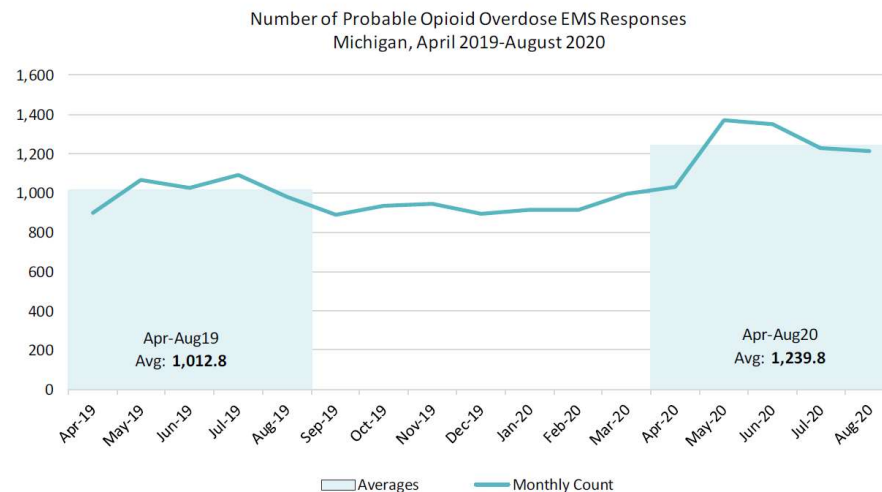
# Access to Emergent Care

1. Total ED visits for all complaints are approximately 13% below normal levels for most recent week
2. Total EMS responses decreased but EMS opioid responses increased 22% since 2019
3. Proportion of ED visits for mental health, appears to increase 50% at the end of March to near 3%, but is trending back to pre-pandemic levels around 2%

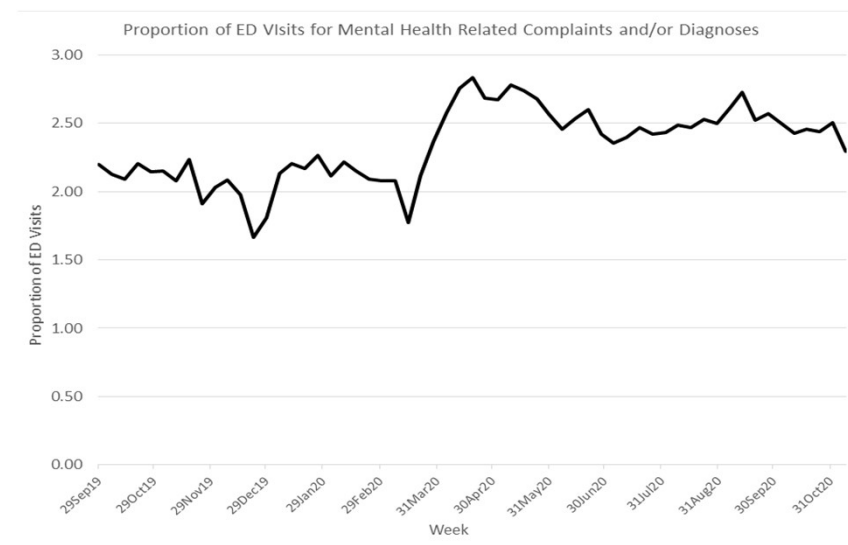
1. Average Weekly ED Visit Percent Difference



2. EMS Response Changes in Total & Opioid Overdose



3. Proportion of ED Visits for Mental Health







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# QUESTIONS?