MI COVID RESPONSE DATA AND MODELING UPDATE

NOTE: All data as of Dec. 5 unless otherwise noted

December 8, 2020

SARAH LYON-CALLO, PH.D., MS

Director, Bureau of Epidemiology and Population Health

**Michigan Department of Health
and Human Services**

Executive summary

Michigan has recorded the **7th highest number of cases (↓1)** , **4th highest number of deaths (↓1)**, **25th highest case rate (↓5)**, and **8th highest death rate (↓2)** in the last 7 days (source: CDC COVID Data Tracker)

Michigan has the **6th highest hospitalization rate as a percent of total beds (↑1)**, and **7th highest number of COVID patients in the ICU (↔)** (source: Becker's Hospital Review)

Case rates (515.6, ↓), and **coronavirus like illness** (CLI) are decreasing for the past 1 or more weeks but **percent positivity** (14.4%) has plateaued for the past 3 weeks

More than 18.7% of available inpatient beds are filled with COVID patients and state trends for hospitalizations for COVID have plateaued for last week

There were **660 deaths** (↑81) during the week of Nov 22-Nov 29 and the state death rate is **8.3 deaths/million/day**

Daily diagnostic tests dropped to an average of 51.8K per day (↓) over the last week and the state rate is **5,676.8 tests/million/day**

Indirect Impacts reviews offenses including violent offenses and domestic violence with the latter seeing increases despite overall offenses down compared to previous year

Comparison across states: Summary

What we see today:

- **33 states seeing increasing 2 week case trends** (up from 25 last week)

- **48 states** (up from 46) **with significant outbreaks** (high/increasing cases, increasing/high positivity increasing/high hospitalizations over 2 weeks (>100 per M))

- Nevada, South Dakota, <u>Indiana</u>, Montana, Missouri have highest per capita <u>hospitalized</u> patient numbers

- Most rapid 2 week <u>case</u> growth: CA, MA, NY, DE, AL

- Midwest:
  - Wisconsin showing continued decline in hospitalizations (285/M), declining cases (785/M)
  - Indiana dropped to #3 in hospitalized per capita (474/M), cases remain high (>1000/M)
  - Illinois showed continued decline in hospitalizations (407/M), cases stable >750/M
  - Ohio with slower growth in hospitalizations (434/M), cases flat at 740/M
  - Michigan with flat hospitalizations (375/M), slight decline in cases ~690/M

COVID-19 Spread

Positivity has plateaued statewide and within most regions
- Testing has dropped since the Thanksgiving holiday
- Testing and positivity are inversely related

Cases continue to decrease for second straight week
- Decreases are seen among most age groups, races, and ethnicities, although concern continues for residents who are Black/African American, Native American, and Hispanic
- Current case rates remain some of the highest to date during the pandemic
- Number of reported outbreaks has increased from the previous week

The increasing rate of deaths has slowed from previous weeks
- In the last 30 days, nearly 10% deaths occur among those younger than 60
- Death rate highest for white residents but peaks among Native American and Hispanic residents are concerning
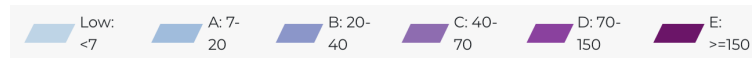
Confirmed and probable case indicators

Table Date: 12-7-2020; Case data 11-30; Testing data 12-04; Syndromic data 12-04; Death data 12-07; Hospital data 12-07

Risk levels

Low	A	B	C	D	E
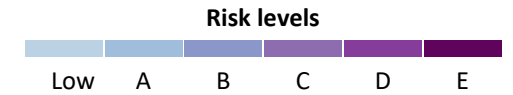
	MERC Region Number	Public Health Region	Overall Risk Level	Absolute cases (per million)	CDC Case Trend	Average percent positivity	Positivity trend	Tests per million	Weekly % CLI cases	Weekly % CLI cases trend	% inpatient beds occupied by COVID-19 cases	Absolute deaths (per million)	Death trend
Detroit	1	2N + 2S	E	492.2	decline [14 days]	14.5	Increase - 1wk	5436.7	0.9	Decrease - 1wk	18.7	5.7	Decrease - 1wk
Grand Rapids	2	6	E	575.6	decline [19 days]	15.1	Increase - 1wk	5629.6	1.2	Decrease - 1wk	16.2	11.3	Decrease - 1wk
Kalamazoo	3	5	E	571.5	decline [19 days]	14.6	Increase - 1wk	5589.6	1.3	Decrease - 1wk	18.1	7.3	Decrease - 2wk
Saginaw	4	3	E	569.7	decline [18 days]	16.4	Decrease - 1wk	5552.7	0.9	Increase - 1wk	25.2	22.2	Increase - 4wk
Lansing	5	1	E	464.3	decline [18 days]	14.9	Decrease - 2wk	4737.2	0.7	Decrease - 2wk	20.9	9.7	Increase - 2wk
Traverse City	6	7	E	408.9	decline [13 days]	11.0	Increase - 2wk	3991.7	1.6	Increase - 2wk	12.7	8.4	Decrease - 1wk
Jackson	7	1	E	604.5	decline [13 days]	16.1	Increase - 6wk	8636.4	0.6	Decrease - 1wk	24.0	4.7	<20 wkly deaths
Upper Peninsula	8	8	E	500.8	decline [22 days]	9.8	Decrease - 1wk	6397.5	0.8	Decrease - 3wk	14.9	15.5	Decrease - 1wk
Michigan			E	515.6	decline [17 days]	14.4	Increase - 1wk	5676.8	1.0	Decrease - 1wk	18.7	8.3	Decrease - 1wk

Cases

Low: <7	A: 7-20	B: 20-40	C: 40-70	D: 70-150	E: >=150

Positivity

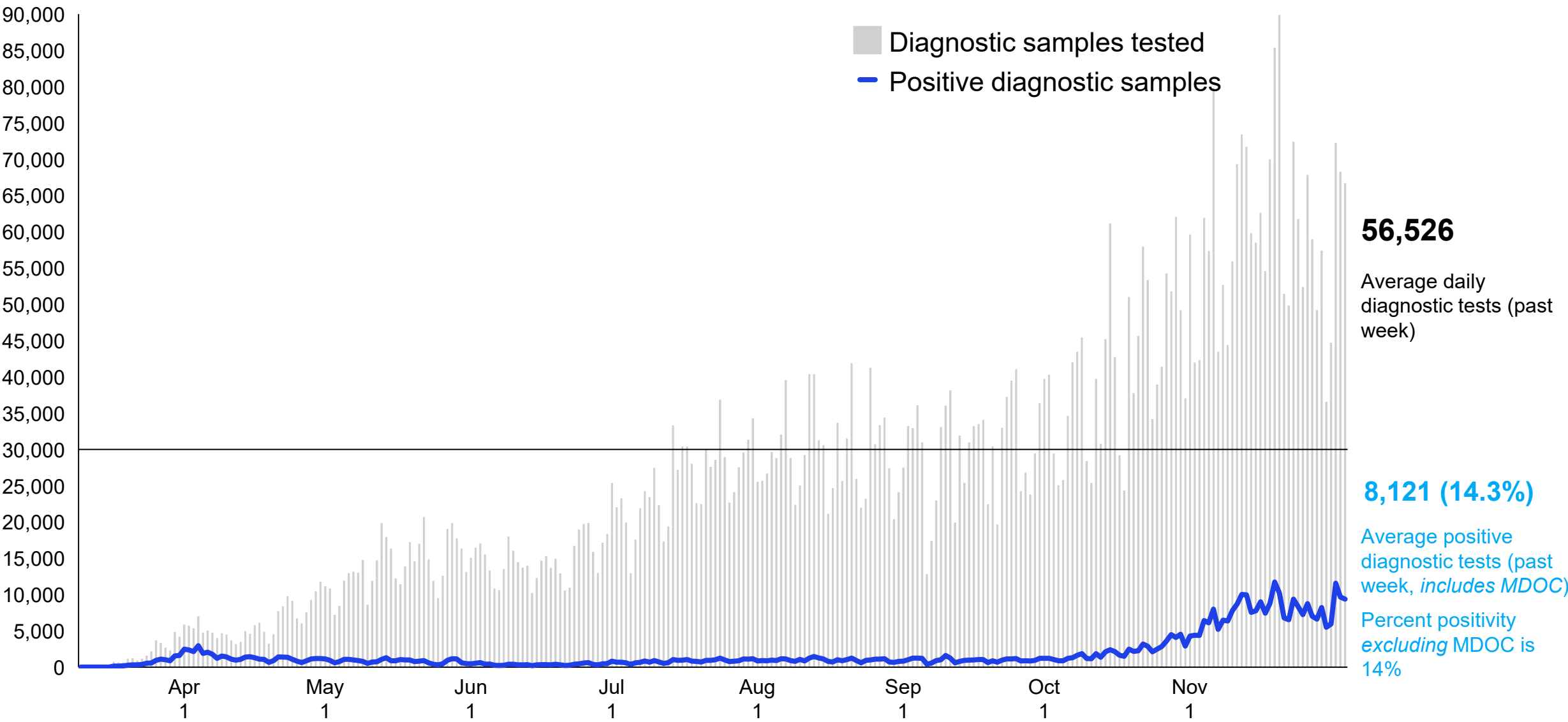|					
Low: <3%	A: 3-7%	B: 7-10%	C: 10-15%	D: 15-20%	E: >=20%

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

PUBLIC HEALTH

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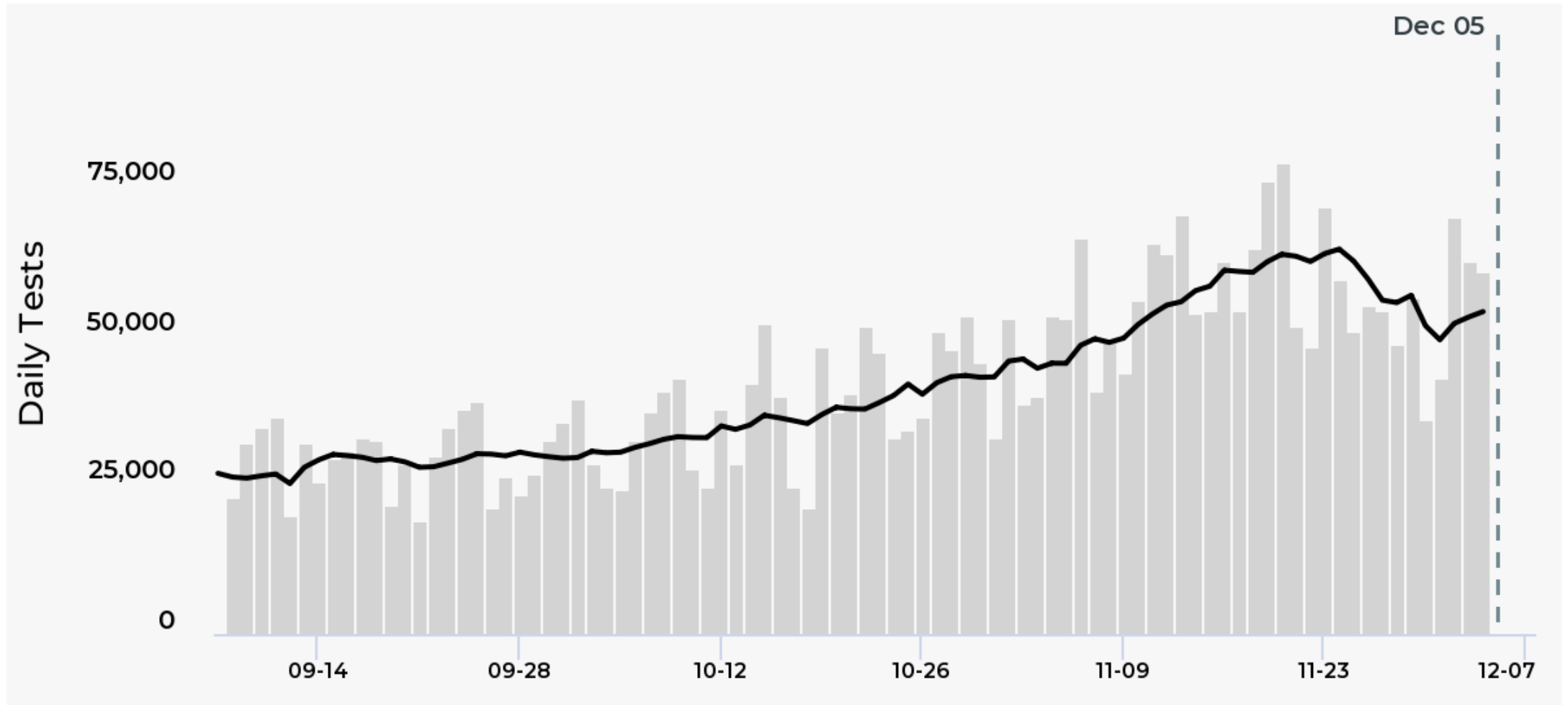# Testing

Daily <u>diagnostic</u> tests and positive diagnostic tests, by message date

56,526

Average daily diagnostic tests (past week)

8,121 (14.3%)

Average positive diagnostic tests (past week, *includes MDOC*)

Percent positivity *excluding* MDOC is 14%

Legend:
- Diagnostic samples tested
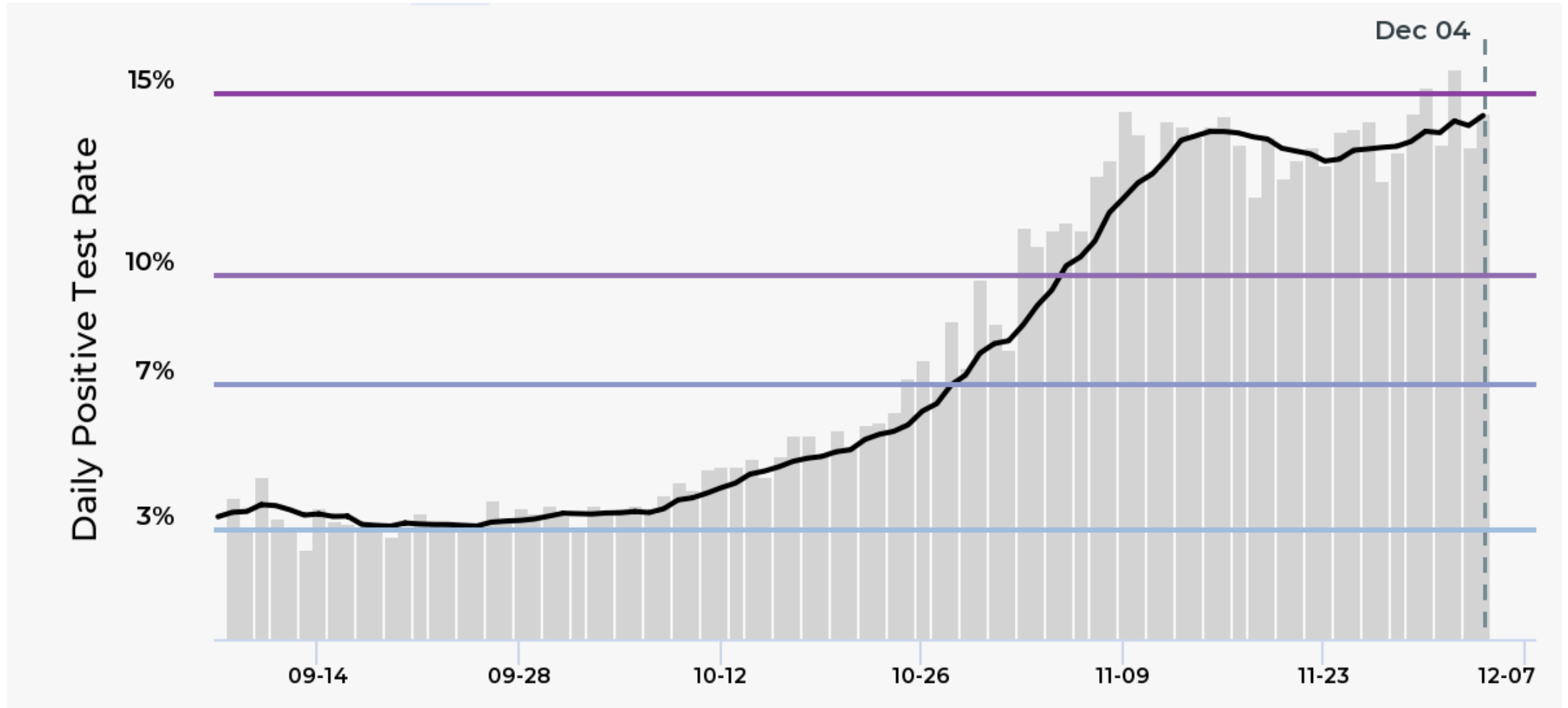- Positive diagnostic samples

Source: MDSS/Michigan Medical Advantage Group, MDHHS, testing labs

Number of diagnostic tests declined, may be rebounding

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Percent positivity decreased, then increased

7-day average of positivity in community: 14.0% on 11/15, 13.0% on 11/23, 14.4% on 12/5

Testing Turn Around Time: Collection to report

Summary

• Last two weeks nearly 900K tests, ~68% from commercial laboratories

• Less than a day transport time (from test collection to receipt by the laboratory)

• Average total turn around time 2.90 days

Estimated Turnaround Times for COVID-19 Diagnostic Testing Results Received at MDHHS During Last 14 Calendar Days (through 12/02/2020)

Lab Type	Test Count	Transport Time (Days)	Total Turn Around Time (Days)
Commercial	580,725	1	3.36
Hospital	260,528	0.5	2.02
Public Health	7,579	0.48	2.88
State Total	848,832	0.74	2.9

Region	Test Count	Transport Time (Days)	Total Turn Around Time (Days)
Region 1	82,218	0.62	2.59
Region 2N	177,846	0.68	3.37
Region 2S	189,128	0.54	3.03
Region 3	78,169	0.73	3.55
Region 5	75,760	0.45	2.12
Region 6	122,472	0.69	2.46
Region 7	25,631	0.72	3.5
Region 8	22,973	1.09	3.28

Daily tests

State	Avg. daily tests
1. California	157.5K
2. New York	151.2K
3. Oregon	150.6K
4. Illinois	78.7K
5. Texas	67.7K
6. Michigan	56.5K
7. Ohio	45.8K
8. Florida	39.6K
9. Connecticut	38.2K
10. North Carolina	34.3K
11. New Jersey	34.1K
12. Louisiana	26.8K
13. Tennessee	25.9K
14. Kentucky	22.2K
15. Georgia	20.9K
16. Pennsylvania	19.4K
17. Minnesota	19.1K
18. Oklahoma	18.7K
19. Massachusetts	18.1K
20. Arizona	15.8K
21. South Carolina	15.0K
22. Indiana	13.9K
23. Virginia	13.7K
24. Colorado	13.0K
25. Maryland	12.2K
26. New Mexico	12.0K
27. West Virginia	10.5K
28. Arkansas	10.3K

Weekly % of pop. tested

State	Weekly % tested
1. Oregon	24.99%
2. Connecticut	7.50%
3. New York	5.44%
4. Maine	5.38%
5. Alaska	5.36%
6. District of Columbia	4.66%
7. Illinois	4.35%
8. West Virginia	4.11%
9. Louisiana	4.04%
10. New Mexico	4.01%
11. Michigan	3.96%
12. Kentucky	3.48%
13. Oklahoma	3.30%
14. Montana	2.79%
15. California	2.79%
16. Ohio	2.74%
17. New Jersey	2.69%
18. Tennessee	2.65%
19. Arkansas	2.40%
20. Minnesota	2.37%
21. North Carolina	2.29%
22. Rhode Island	2.04%
23. South Carolina	2.03%
24. Massachusetts	1.84%
25. Texas	1.64%
26. Delaware	1.62%
27. Colorado	1.58%
28. Mississippi	1.57%

Percent positive

State	% positive
1. American Samoa	0.0%
2. Oregon	1.0%
3. Maine	2.2%
4. District of Columbia	4.7%
5. New York	5.4%
6. Connecticut	5.7%
7. Vermont	7.5%
8. Alaska	7.6%
9. Louisiana	8.8%
10. West Virginia	9.7%
11. California	10.5%
12. North Carolina	11.7%
13. Illinois	11.8%
14. South Carolina	12.3%
15. New Jersey	12.6%
16. Michigan	14.4%
17. Kentucky	14.4%
18. Georgia	15.1%
19. New Mexico	15.5%
20. Oklahoma	16.3%
21. Texas	17.2%
22. Virginia	17.7%
23. Ohio	17.8%
24. Arkansas	18.6%
25. Maryland	19.1%
26. Tennessee	19.8%
27. Florida	21.1%
28. Massachusetts	21.4%

Week ending 12/05/2020 (Michigan average uses most recent MAG data and includes all tests, including MDOC and "Region Unknown")
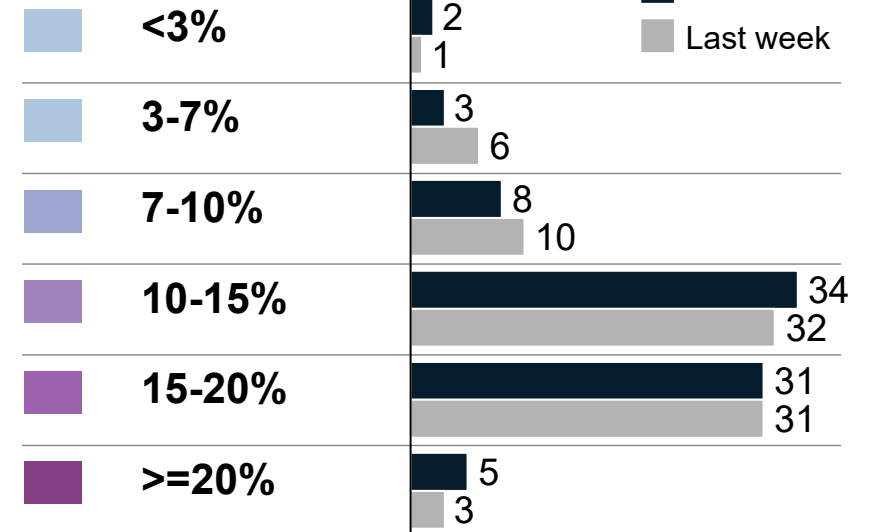SOURCE: Numerical Data – MDSS, COVID Tracking Project, U.S. Census Bureau.

Positivity by county, 11/28-12/04

Last week, 11/21-11/27
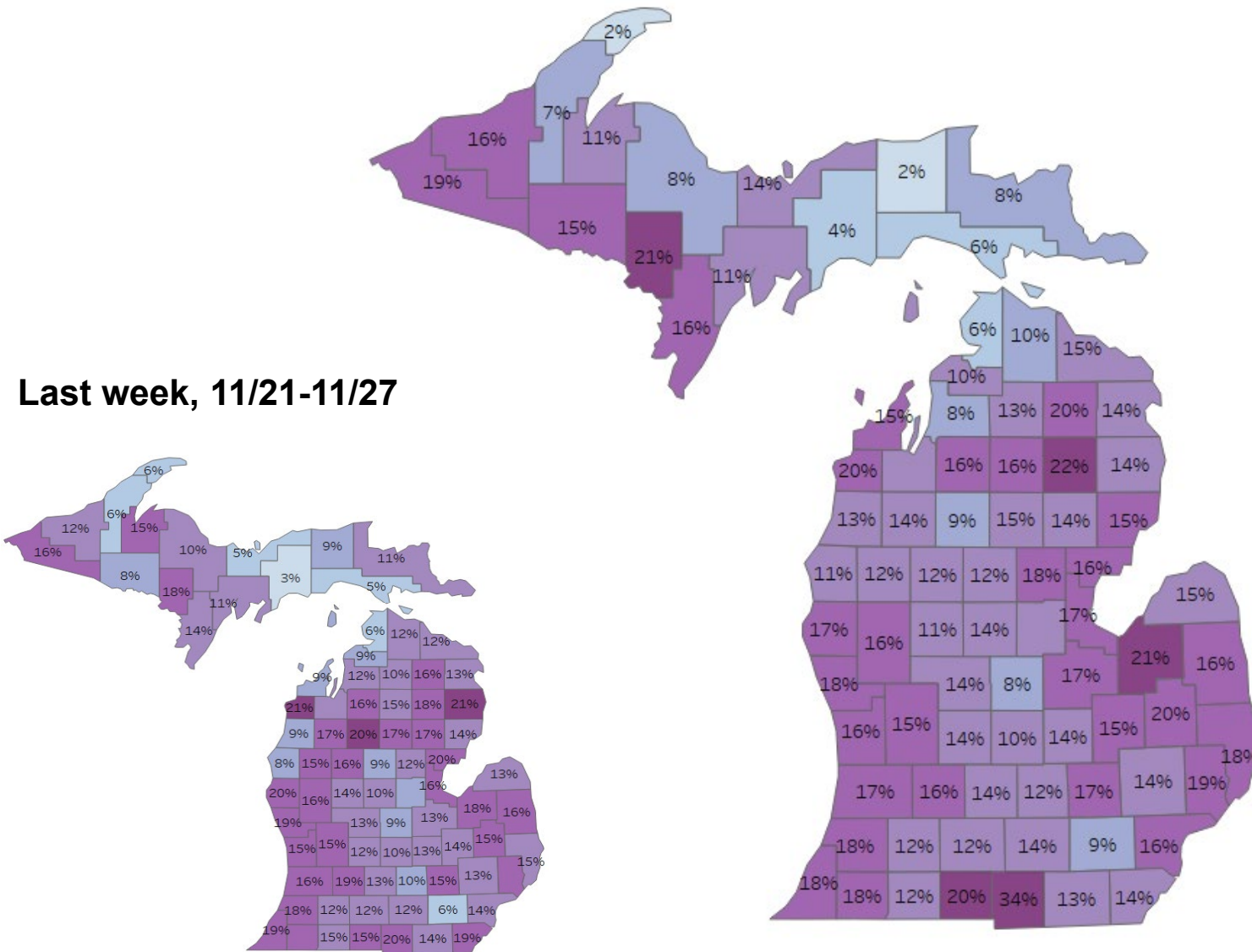
| Average positivity per day	# of counties		
		This week	**Last week**
<3%	2		
	1		
3-7%	3		
	6		
7-10%	8		
	10		
10-15%	34		
	32		
15-20%	31		
	31		
>=20%	5		
	3		

Updates since last week:
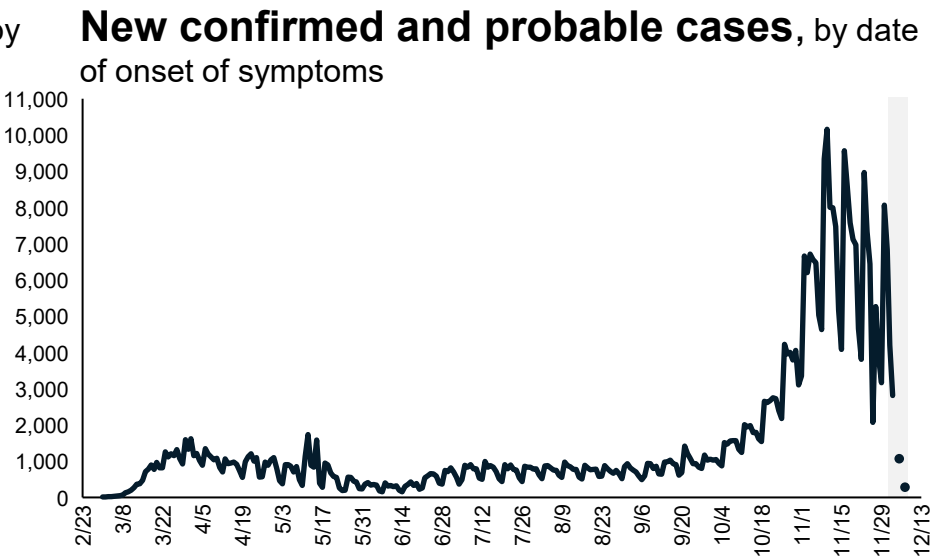
70 of 83 counties saw double digit positivity in the last week

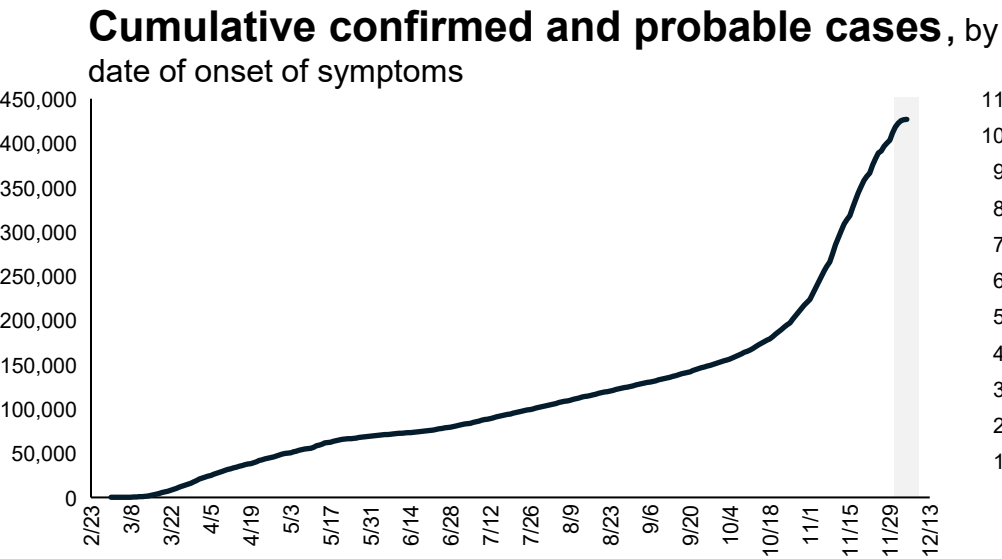# Cases

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

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

In the last 7 days, 44,053 cases reported

Legend:
- ▇ Number of cases
- —— 7 day rolling average
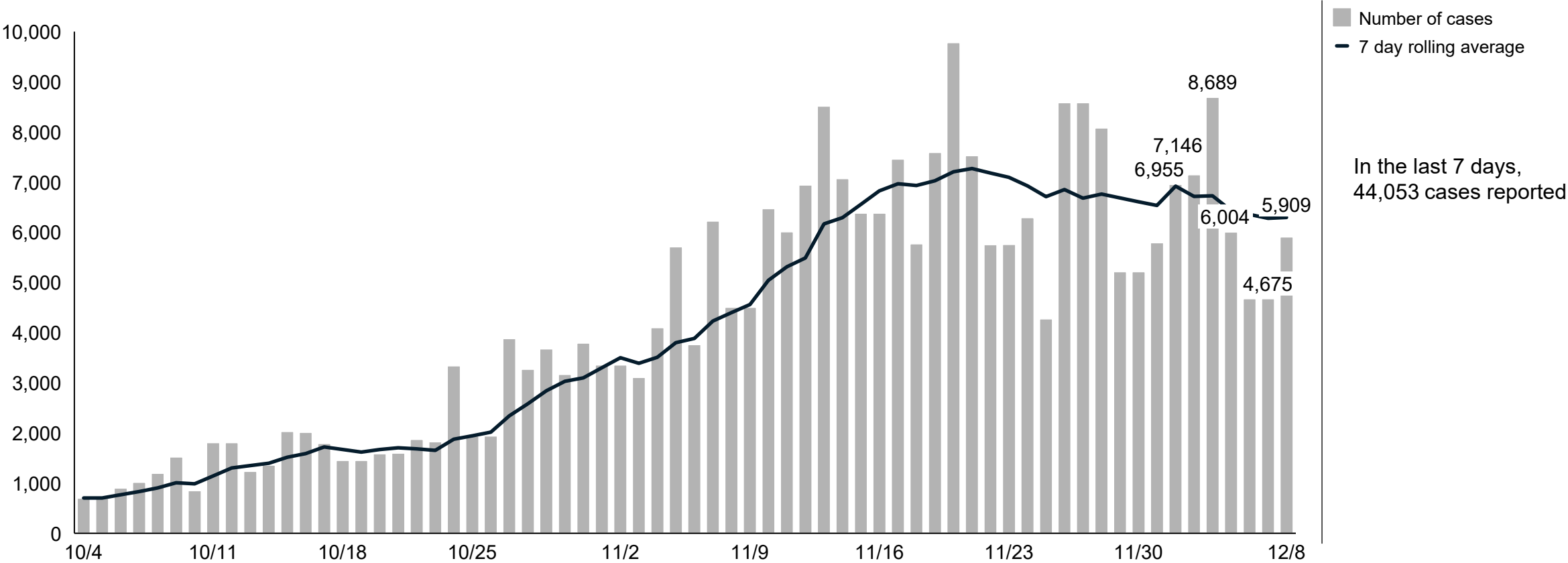
COVID-19 cases by onset date: State of Michigan

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

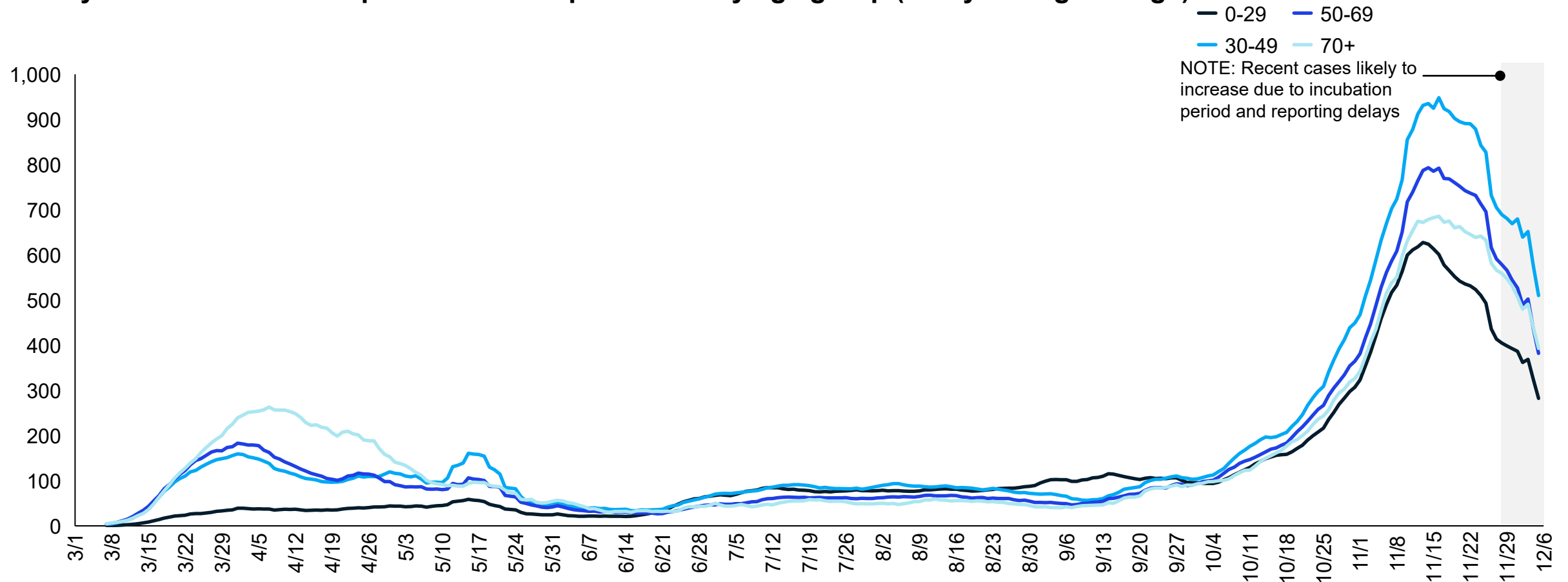**New confirmed and probable cases**, by date of onset of symptoms

Updates since last week:

Cases have dropped for the second week in a row

Current daily case rate remains more than 5x the rate from early 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

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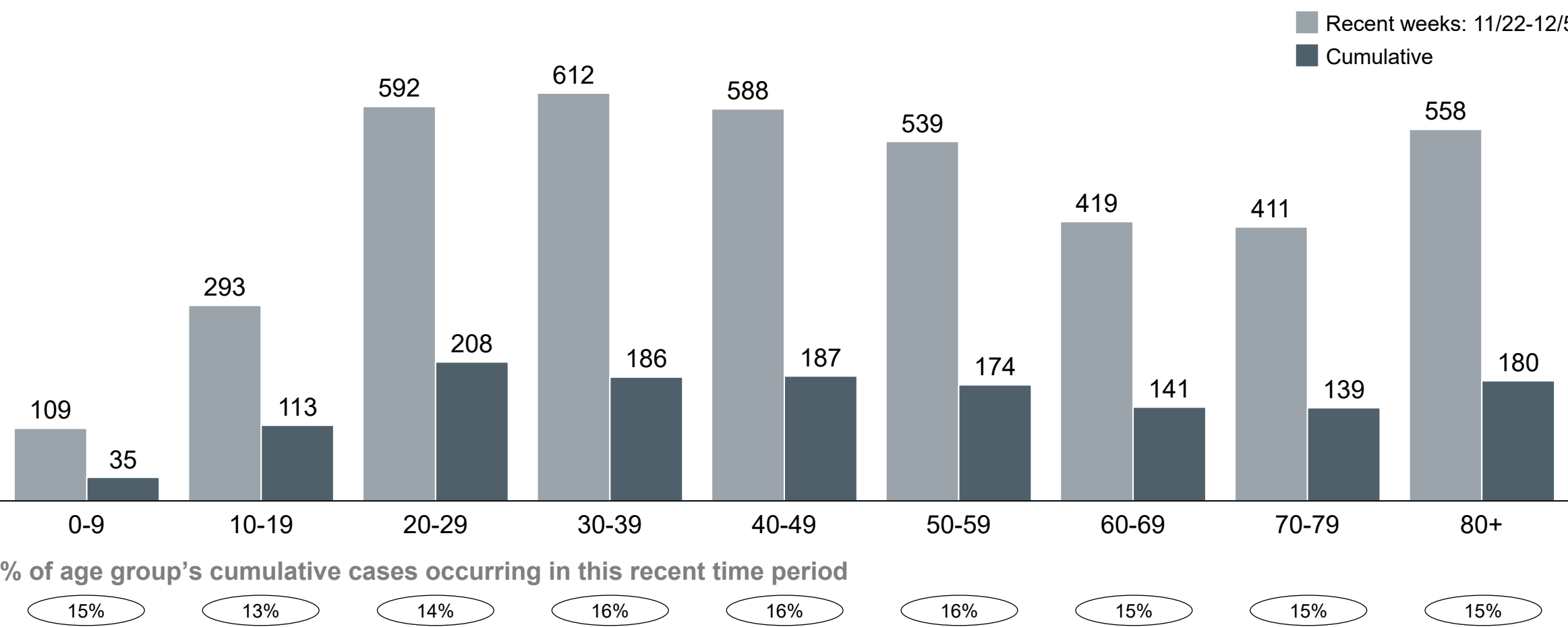# Average daily new cases per million residents, by age group

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 decreased for all age groups over the past 4 weeks

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

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Cases by age group

Average daily new confirmed and probable cases per million by age group

- Recent weeks: 11/22-12/5
- Cumulative

Age group	Recent weeks: 11/22-12/5	Cumulative
0-9	109	35
10-19	293	113
20-29	592	208
30-39	612	186
40-49	588	187
50-59	539	174
60-69	419	141
70-79	411	139
80+	558	180

% of age group's cumulative cases occurring in this recent time period

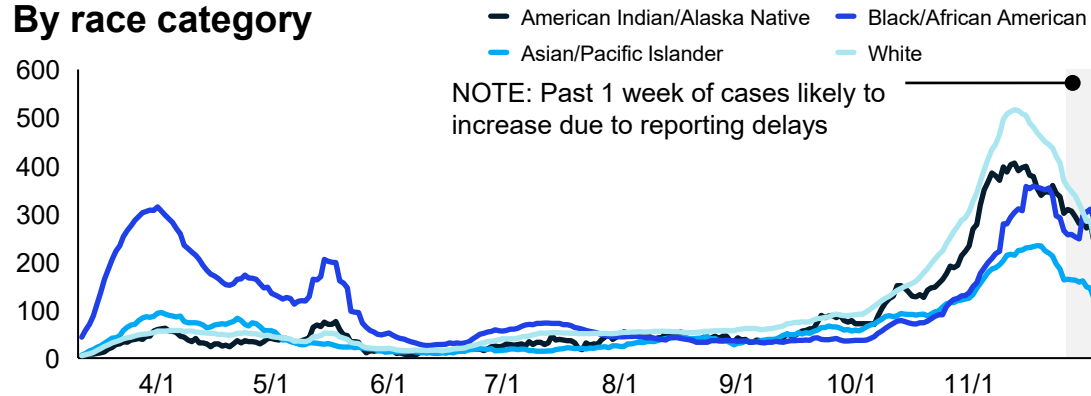| 0-9	10-19	20-29	30-39	40-49	50-59	60-69	70-79	80+
15%	13%	14%	16%	16%	16%	15%	15%	15%

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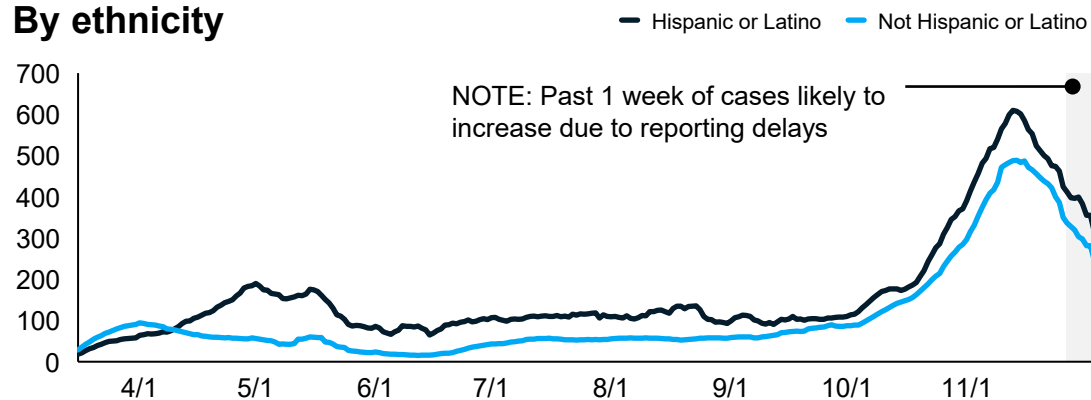Source: MDHHS – Michigan Disease Surveillance System

Average daily new cases per million people by race and ethnicity

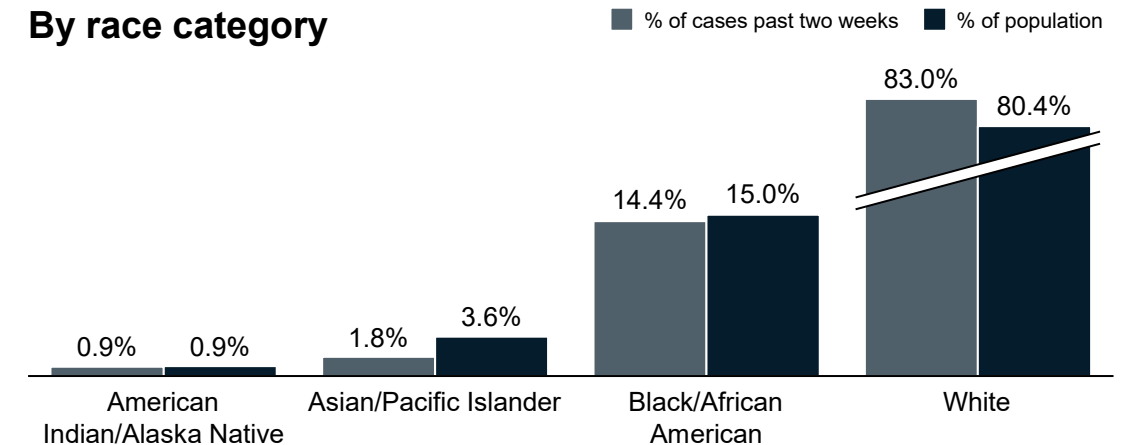**Daily new confirmed and probable cases per million (7 day rolling average)**

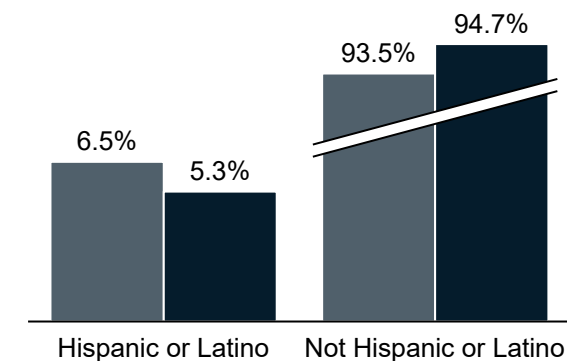**Past two weeks confirmed and probable cases vs. population,** % of total

By race category
- American Indian/Alaska Native
- Asian/Pacific Islander
- Black/African American
- White

NOTE: Past 1 week of cases likely to increase due to reporting delays

By race category
- % of cases past two weeks
- % of population

	American Indian/Alaska Native	Asian/Pacific Islander	Black/African American	White
% of cases past two weeks	0.9%	1.8%	14.4%	83.0%
% of population	0.9%	3.6%	15.0%	80.4%

By ethnicity
- Hispanic or Latino
- Not Hispanic or Latino

NOTE: Past 1 week of cases likely to increase due to reporting delays

By ethnicity

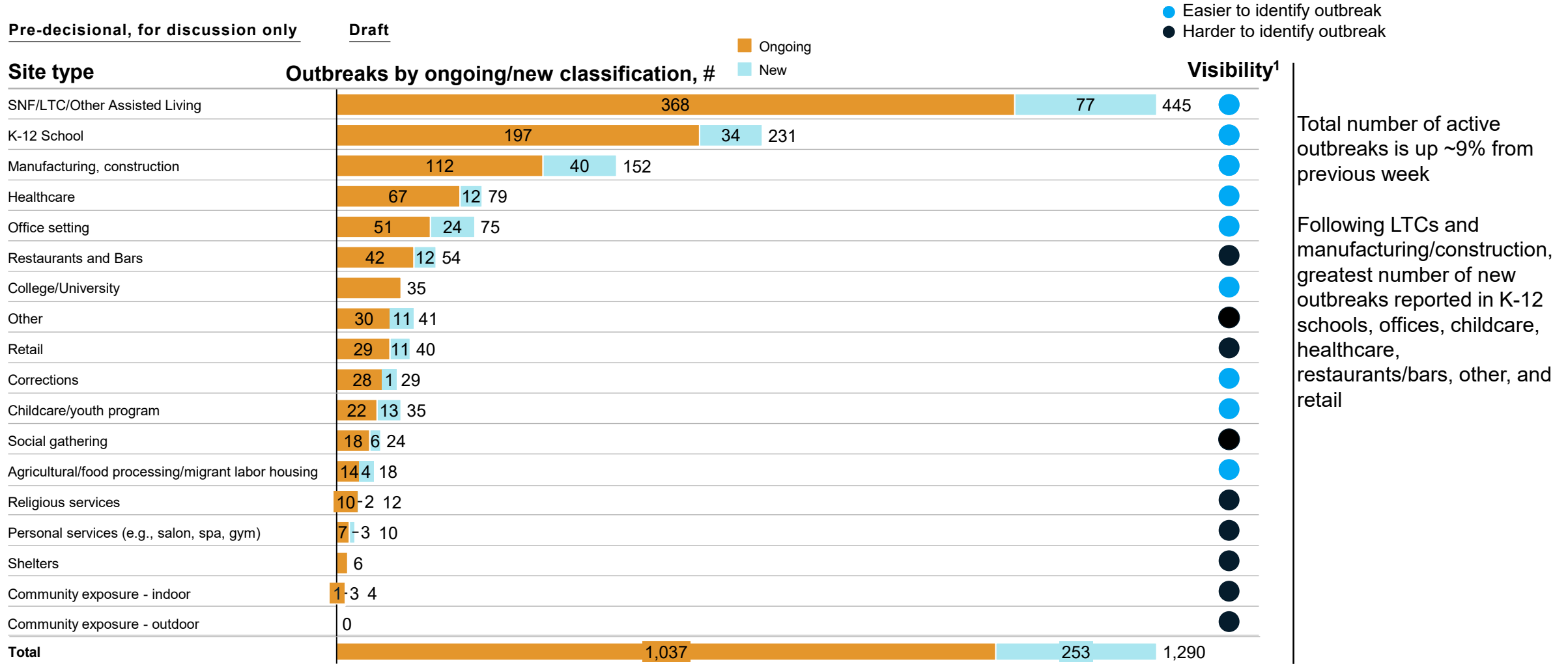|	Hispanic or Latino	Not Hispanic or Latino
% of cases past two weeks	6.5%	93.5%
% of population	5.3%	94.7%

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

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Outbreaks

Number of outbreak investigations by site type, week ending Dec 3

● Easier to identify outbreak
● Harder to identify outbreak

■ Ongoing
■ New

Site type	Outbreaks by ongoing/new classification, #	Visibility[1]
SNF/LTC/Other Assisted Living	368 | 77 → 445	●
K-12 School	197 | 34 → 231	●
Manufacturing, construction	112 | 40 → 152	●
Healthcare	67 | 12 → 79	●
Office setting	51 | 24 → 75	●
Restaurants and Bars	42 | 12 → 54	●
College/University	35	●
Other	30 | 11 → 41	●
Retail	29 | 11 → 40	●
Corrections	28 | 1 → 29	●
Childcare/youth program	22 | 13 → 35	●
Social gathering	18 | 6 → 24	●
Agricultural/food processing/migrant labor housing	14 | 4 → 18	●
Religious services	10 | 2 → 12	●
Personal services (e.g., salon, spa, gym)	7 | 3 → 10	●
Shelters	6	●
Community exposure - indoor	1 | 3 → 4	●
Community exposure - outdoor	0	●
Total	1,037 | 253 → 1,290	

Total number of active outbreaks is up ~9% from previous week

Following LTCs and manufacturing/construction, greatest number of new outbreaks reported in K-12 schools, offices, childcare, healthcare, restaurants/bars, other, and retail

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

Studies of Restaurants

- **A South Korean study** showed the coronavirus spread in a restaurant between the individuals without close contact and at a greater distance than the 6 feet recommended for social distancing. Published online Nov. 23 in the Journal of Korean Medical Science, scientists showed airflow in the restaurant from "ceiling-type air conditioners" enabled droplet transmission at distances of more than 21 feet. In one case, the infected person overlapped with a diner for only five minutes who later tested positive.

- **A US study from the Journal *Nature* of the 10 largest metropolitan areas in the United** States showed that "Reopening full-service restaurants has the largest predicted impact on infections, due to the large number of restaurants as well as their high visit densities and long dwell times". This study, published November 10th, tracked the smartphones of 98 million people between March and May and concluded that restaurants were among the most significant source of spread (more than gyms and hotels). Information on where individuals went, how long they stayed, how many others were there and what neighborhoods they were visiting from was combined with data on the number of cases and how the virus spreads to create an infection model.

- A CDC study from September of symptomatic COVID-19 patients at 11 US health care facilities showed that "Adults with positive SARS-CoV-2 test results were approximately twice as likely to have reported dining at a restaurant than were those with negative SARS-CoV-2 test results."

- **A study published in June from JP Morgan,** using data on credit card spending by 30 million customers in the United States, showed a clear correlation between spending on restaurants and the number of COVID-19 infections.

Kwon KS, Park JI, Park YJ, Jung DM, Ryu KW, Lee JH. **Evidence of Long-Distance Droplet Transmission of SARS-CoV-2 by Direct Air Flow in a Restaurant in Korea**. J Korean Med Sci. 2020 Nov;35(46):e415. https://doi.org/10.3346/jkms.2020.35.e415

Chang, S., Pierson, E., Koh, P.W. *et al.* Mobility network models of COVID-19 explain inequities and inform reopening. *Nature* (2020). https://doi.org/10.1038/s41586-020-2923-3

Fisher KA, Tenforde MW, Feldstein LR, et al. Community and Close Contact Exposures Associated with COVID-19 Among Symptomatic Adults ≥18 Years in 11 Outpatient Health Care Facilities — United States, July 2020. MMWR Morb Mortal Wkly Rep 2020;69:1258–1264.
DOI: http://dx.doi.org/10.15585/mmwr.mm6936a5external icon

https://www.cnbc.com/2020/06/26/this-chart-shows-the-link-between-restaurant-spending-and-new-coronavirus-cases.html. Research note from JP Morgan, using Johns Hopkins data

K-12 school outbreaks, recent and ongoing, week ending Dec 3

Region	Number of reported cases, #		Number of outbreaks	Range of cases per outbreak
	# Ongoing - Excluding New	**# New**		
Region 1	92	−23 **115**	31	1-10
Region 2n	115	13 **128**	32	2-14
Region 2s	108	−12 **120**	19	2-20
Region 3	177	−28 **205**	40	2-17
Region 5	32	−7 **39**	13	2-10
Region 6	438	183 **621**	47	2-79
Region 7	77	6 **83**	18	1-11
Region 8	186	−13 **199**	30	2-28
Total	1,225	285 **1,510**	**230**	**1-79**

Grade level	Number of reported cases, #		Number of outbreaks	Range of cases per outbreak
	# Ongoing - Excluding New			
Pre-school - elem.	309	69 **378**	85	1-17
Jr. high/middle school	184	−25 **209**	40	1-16
High school	710	184 **894**	96	2-79
Administrative	22	−7 **29**	9	2-5
Total	1,225	285 **1,510**	**230**	**1-79**

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.
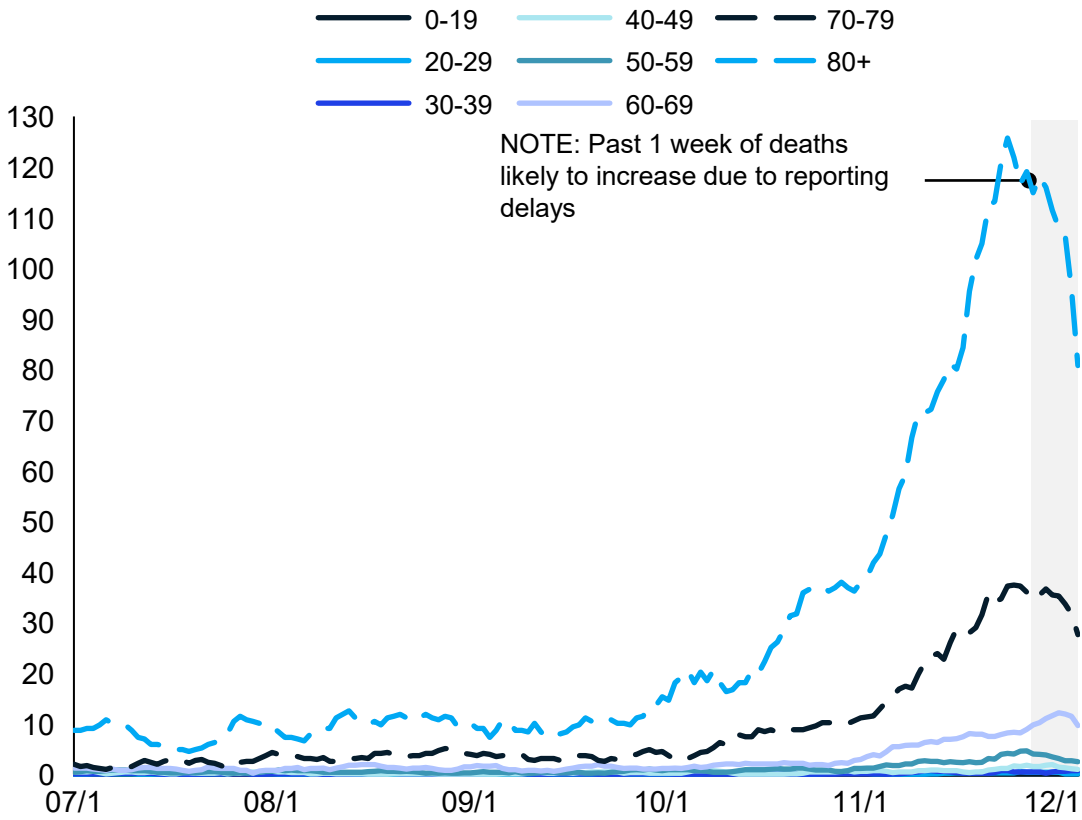
Source: LHD Weekly Sitreps

Mortality
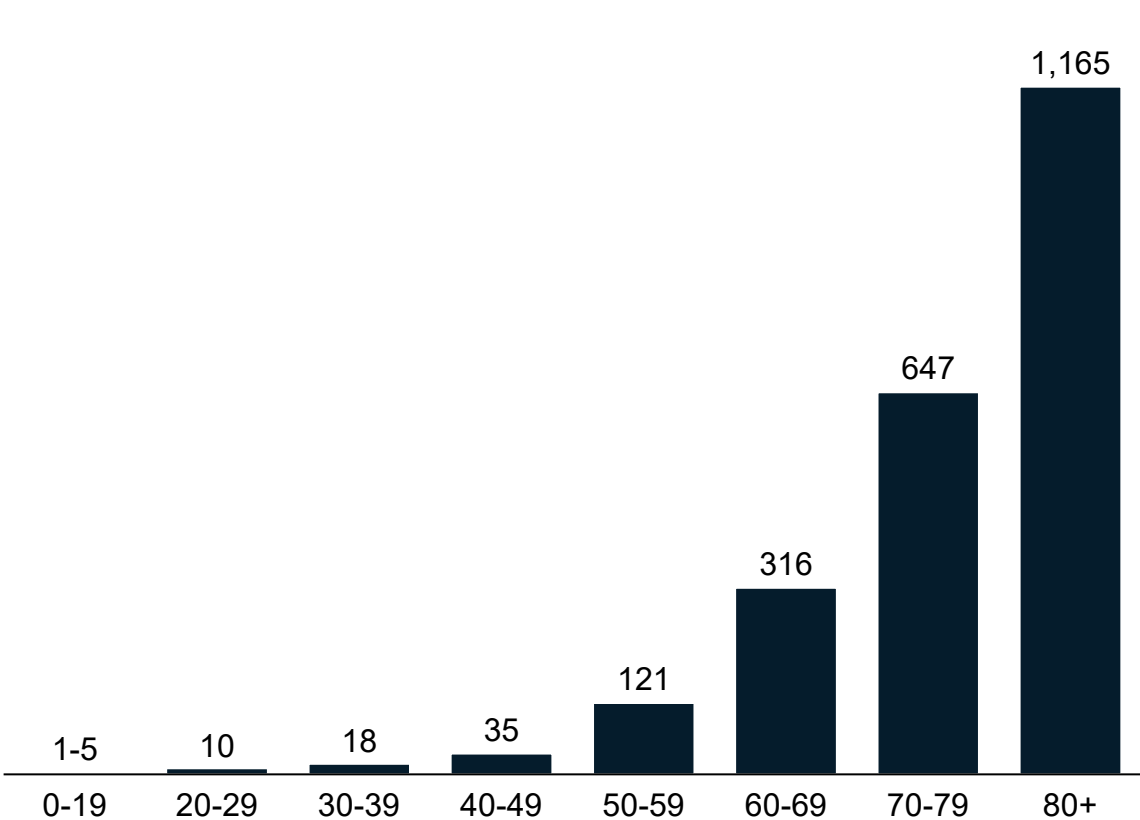
COVID-19 deaths by onset date: State of Michigan

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, but the rate of increase has started to slow.

The current number of deaths is 5x the amount of deaths in early 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 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 12/5)

Legend:
- 0-19
- 20-29
- 30-39
- 40-49
- 50-59
- 60-69
- 70-79
- 80+

NOTE: Past 1 week of deaths likely to increase due to reporting delays

Total new confirmed and probable deaths by age group:
- 0-19: 1-5
- 20-29: 10
- 30-39: 18
- 40-49: 35
- 50-59: 121
- 60-69: 316
- 70-79: 647
- 80+: 1,165

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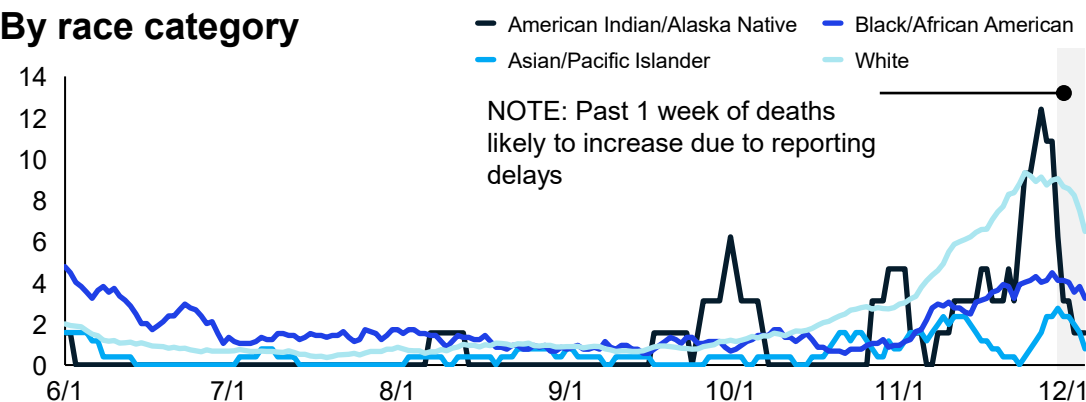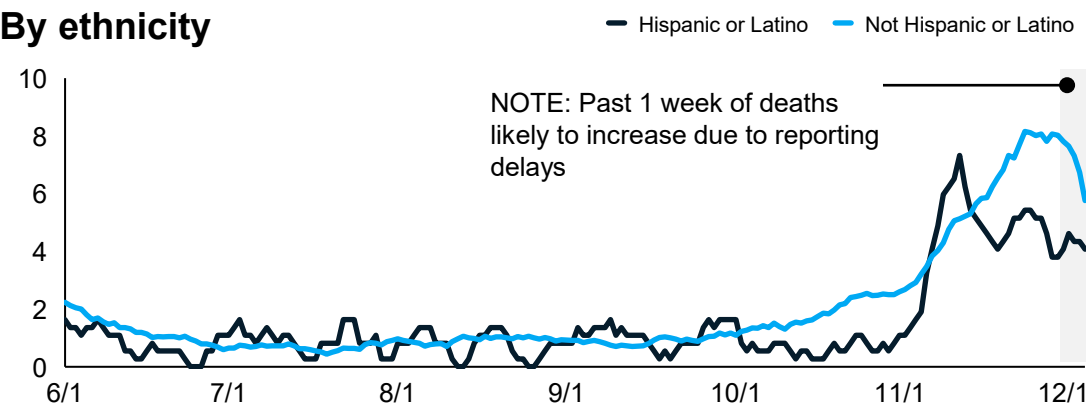
Past two weeks confirmed and probable deaths vs. population, % of total

By race category

American Indian/Alaska Native — Black/African American
Asian/Pacific Islander — White

NOTE: Past 1 week of deaths likely to increase due to reporting delays

By race category

■ % of deaths past two weeks   ■ % of population

90.2%
80.4%
15.0%
8.1%
0.8% 0.9%   0.8% 3.6%

American Indian/Alaska Native | Asian/Pacific Islander | Black/African American | White

By ethnicity

— Hispanic or Latino — Not Hispanic or Latino

NOTE: Past 1 week of deaths likely to increase due to reporting delays

By ethnicity

96.6% 94.7%
3.4% 5.3%

Hispanic or Latino | Not Hispanic or Latino

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

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COVID-19 and Healthcare Capacity

Since September, COVID-19-like illness has gone from < 2% to > 9% of the emergency department visits

- CLI has decreased over the past two week and is now around 7%

Hospitalizations and ICU utilization are plateauing or decreasing

- Hospitalizations near 90% of spring high
- ICU occupancy > 80% in five of eight regions
- Four regions have >30% of Adult ICU beds with patients positive for COVID

Six of eight regions saw decreases in hospitalization since last week (exceptions are Region 1 and 2S)

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

Legend:
- Coronavirus like illness (CLI) or a COVID-19 diagnostic code
- Influenza like illness (ILI without mention of specific influenza)
- Pneumonia
- Shortness of breath

Source: https://covid.cdc.gov/covid-data-tracker/#ed-visits
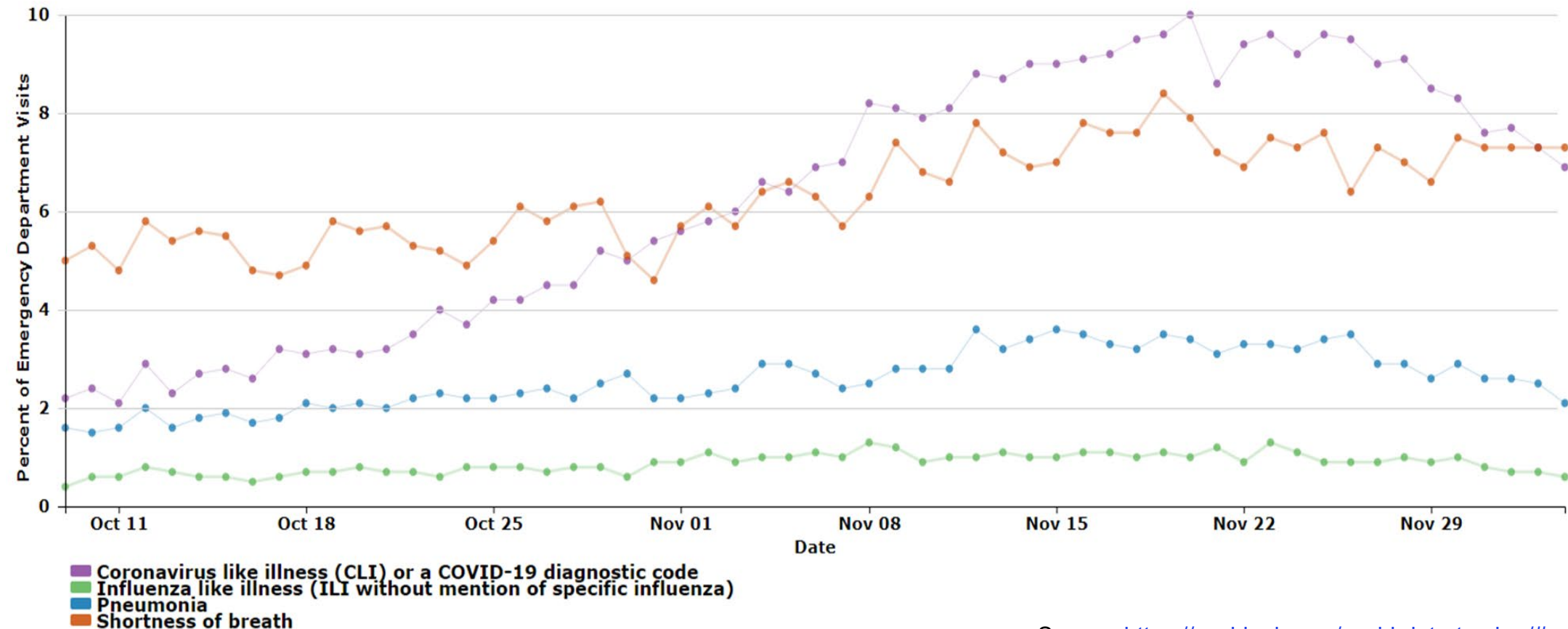
Statewide Hospitalization Trends: Total COVID+ Census

Hospitalization Trends 7/1/2020 – 12/7/2020
Confirmed Positive
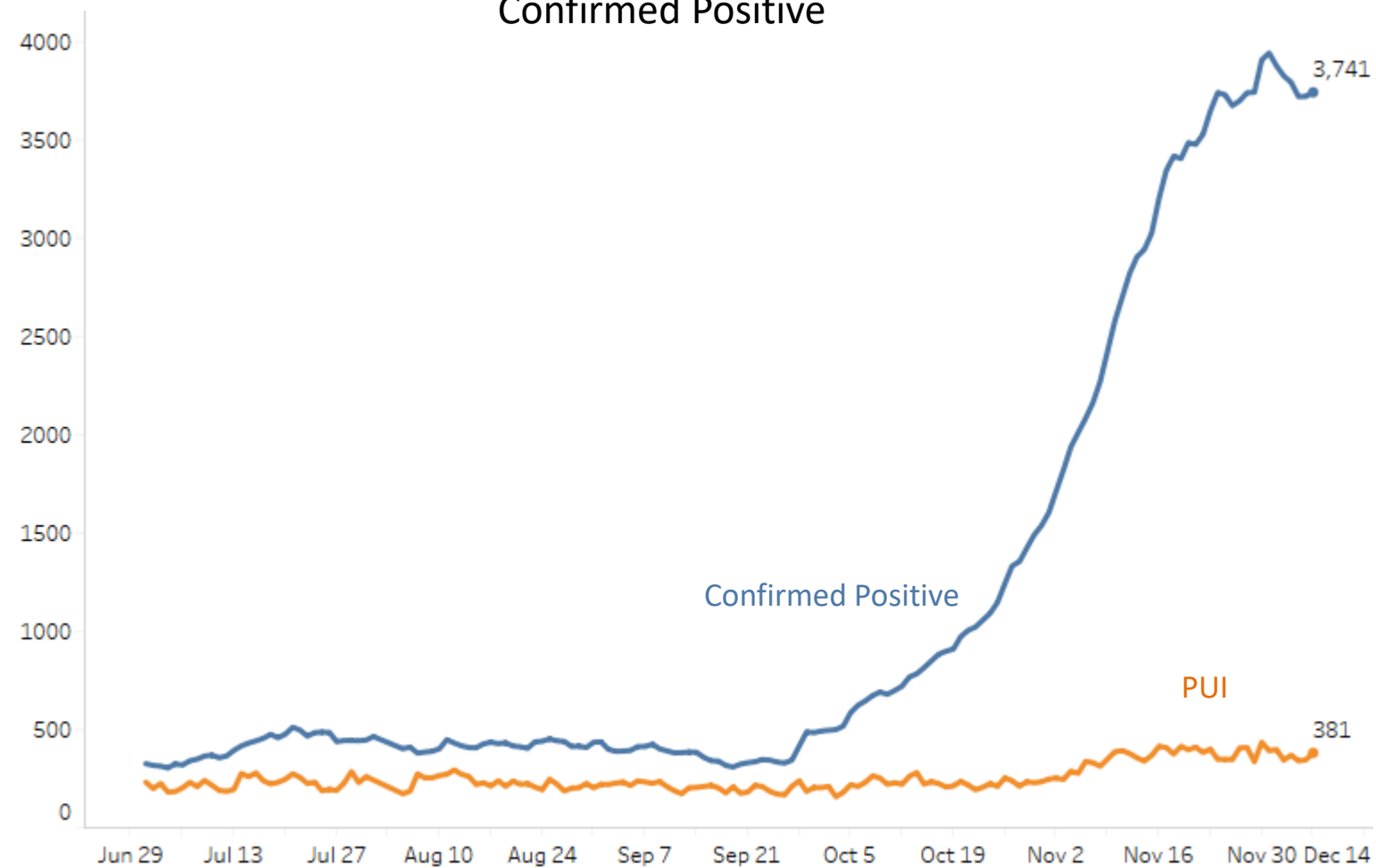
This week, hospitalization volumes are down 4% week over week, the first decline in hospitalizations since September.

We remain at ~90% of our spring peak.

New COVID admissions also appear to be down this week vs. prior weeks

Confirmed Positive

PUI

3,741

381

Hospitalized COVID Positive Long Term Trend (beginning March)
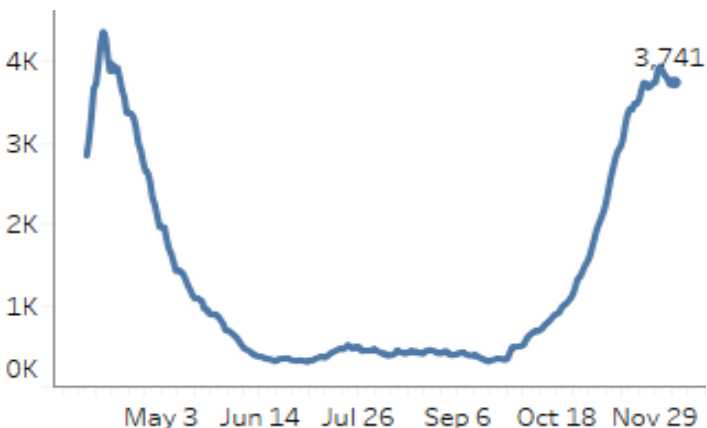
3,741

Hospitalization Trends 8/1/2020 – 12/7/2020
Confirmed Positive in ICUs
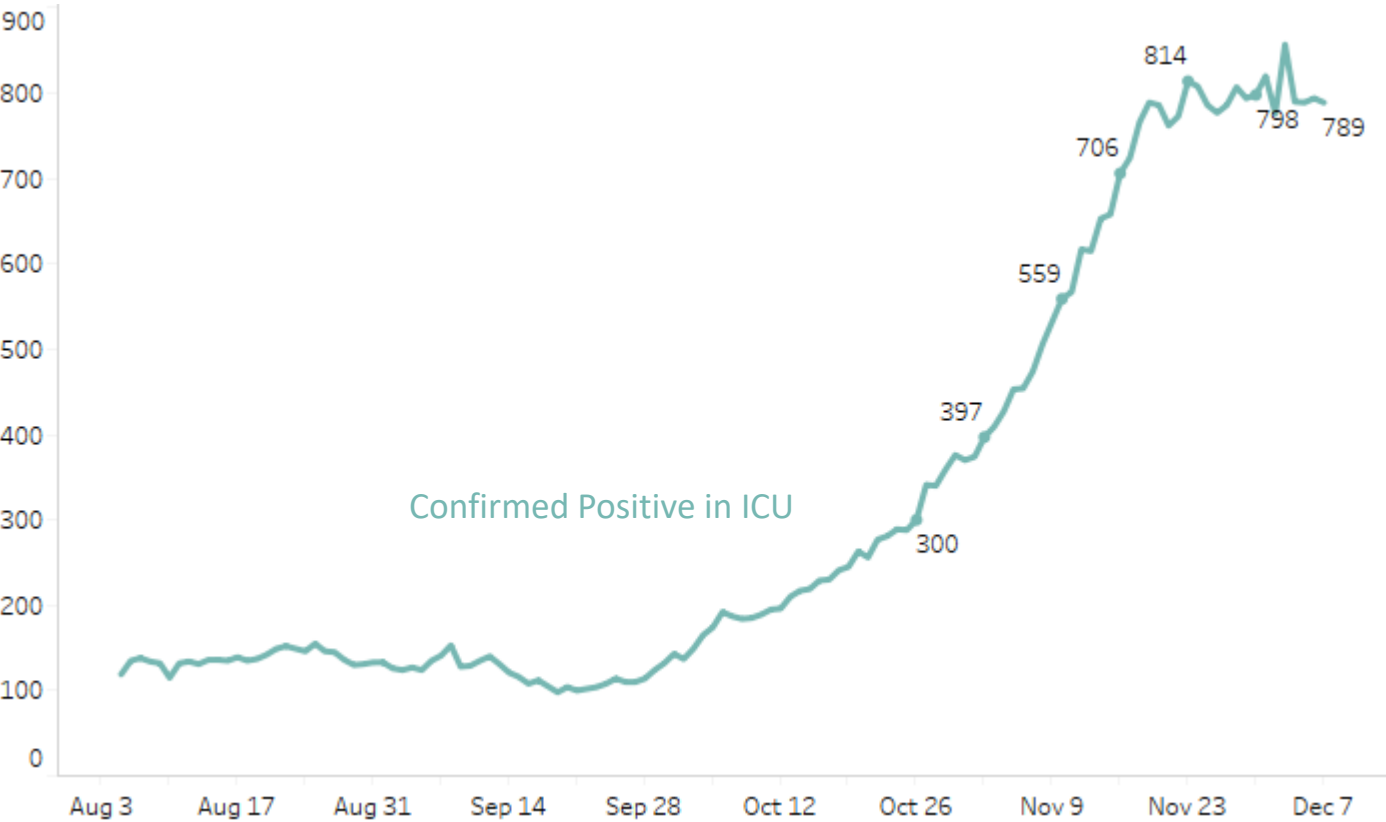
COVID+ census in ICUs has been flat to slightly decreasing over the past 2 weeks and is ~30% of Adult ICU beds.

Regions 2S and 2N showed growth in ICU hospitalizations week over week although even these regions have been flat the past few days.

Confirmed Positive in ICU

Region	Adult COVID+ in ICU (% Δ from last week)	Adult ICU Occupancy	% of Adult ICU beds COVID+
Region 1	69 (-16%)	93%	36%
Region 2N	157 (+3%)	85%	29%
Region 2S	191 (+20%)	83%	25%
Region 3	157 (0%)	88%	41%
Region 5	44 (-5%)	82%	27%
Region 6	106 (-23%)	76%	31%
Region 7	44 (-43%)	73%	24%
Region 8	21 (0%)	78%	36%

Hospital bed capacity updated as of 12/4

Statewide Hospitalization Trends: Regional COVD+ Census

Hospitalization Trends 8/1/2020 – 12/7/2020
Confirmed Positive by Region
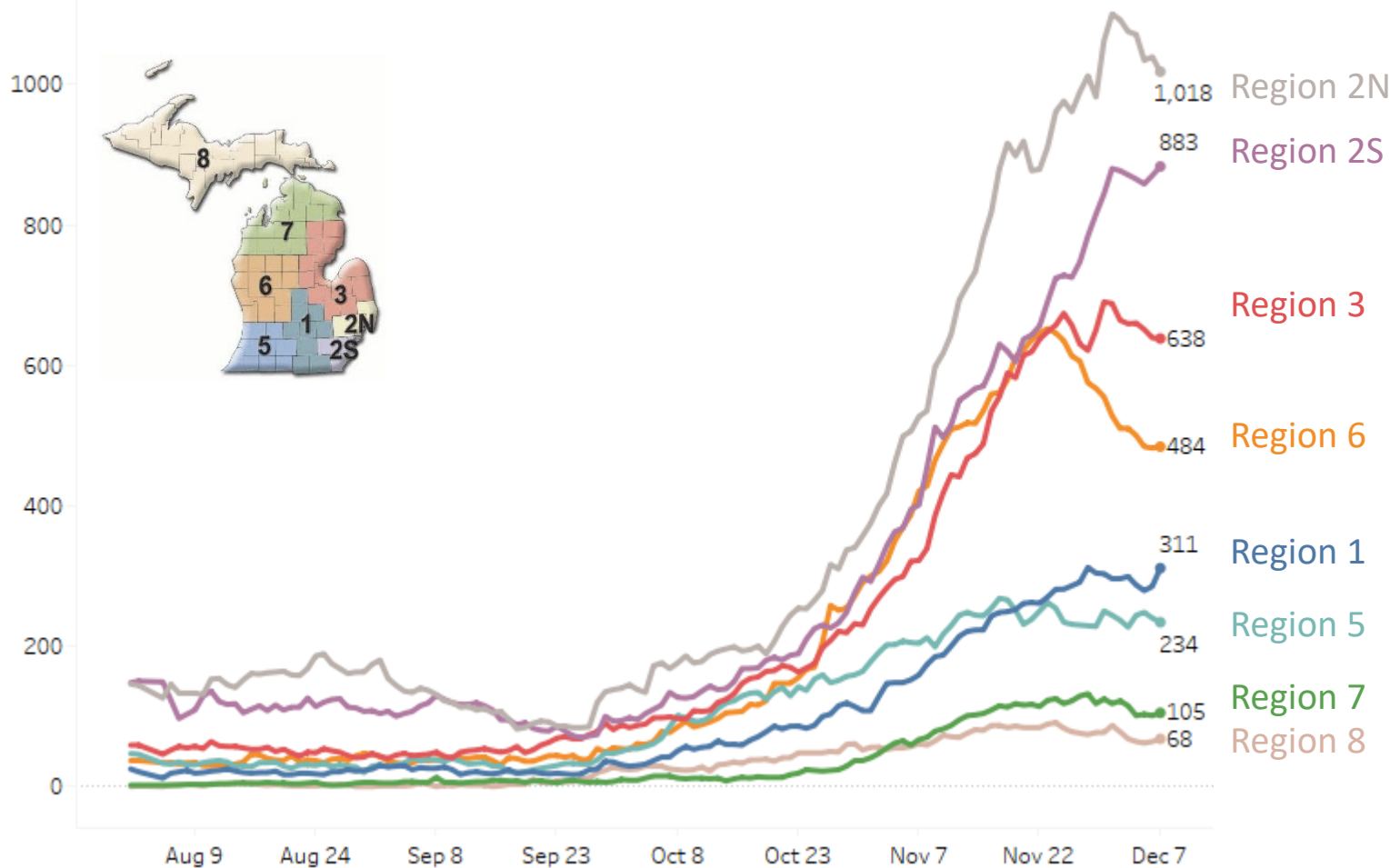
Only regions 1 and 2S show positive growth week over week although both regions are showing flattening in recent days.   All other regions show decreasing trends.

Regions 2N and 3 show high rates of population-adjusted COVID+ hospitalizations.

Region	Growth from Last Week	COVID+ Hospitalizations / MM
Region 1	5%	287/M
Region 2N	-4%	458/M
Region 2S	5%	396/M
Region 3	-8%	563/M
Region 5	-6%	245/M
Region 6	-13%	330/M
Region 7	-16%	210/M
Region 8	-6%	218/M

How is public health capacity?

Case investigation and contact tracing is remaining steady although numbers are low given influx of new cases. Percent of cases investigated increased over last week.

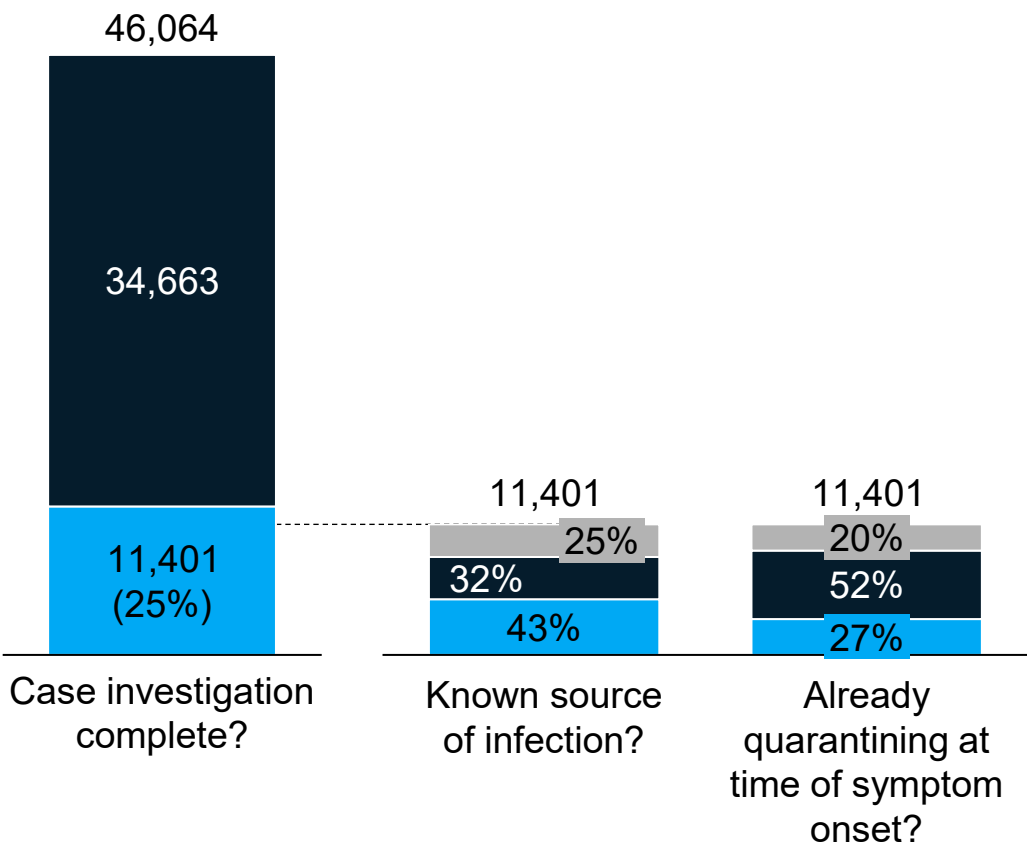Many jurisdictions prioritizing case investigation

New Case Investigation Metrics

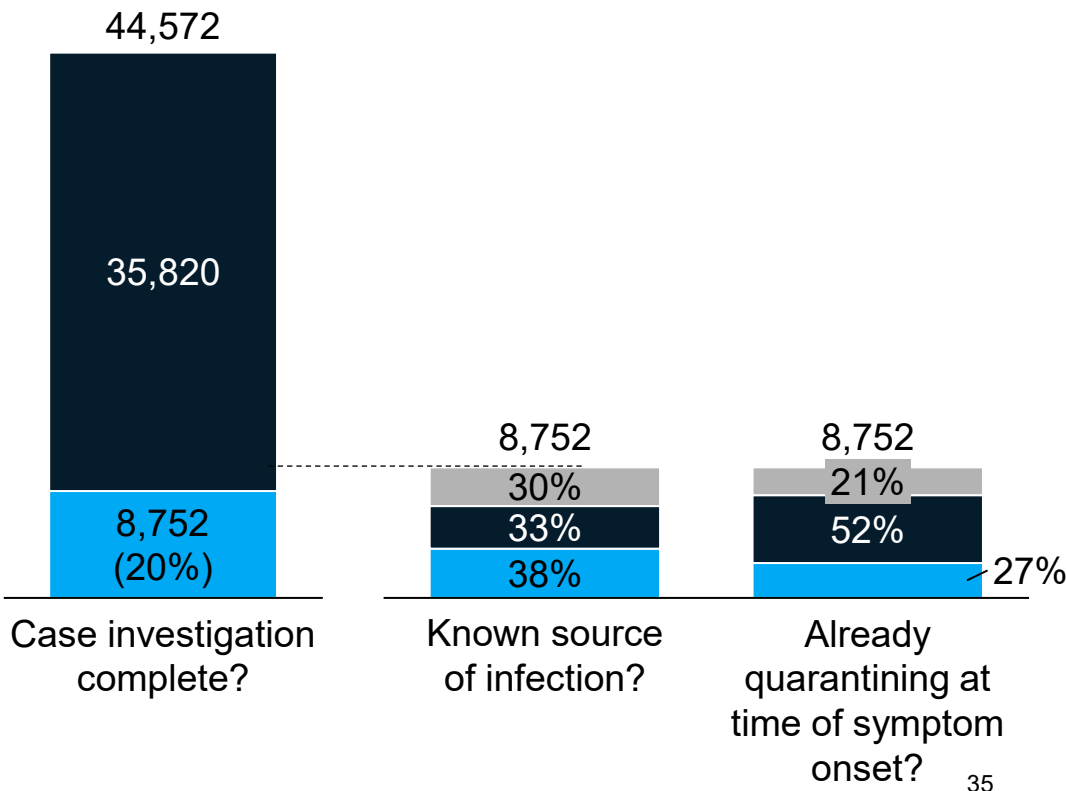New Communicable Disease metrics slightly increased since last week:

- 43% of investigated cases having a known source (38% last week, 41% week prior)
- 27% of investigated cases noting that they were quarantining before symptoms (27% last week)

Legend: ▇ Yes (light blue) ▇ No (dark navy) ▇ Not answered (gray)

Case report form information, 11/28-12/04

Case investigation complete?
46,064
34,663
11,401 (25%)

Known source of infection?
11,401
25%
32%
43%

Already quarantining at time of symptom onset?
11,401
20%
52%
27%

Case report form information, 11/21-11/27

Case investigation complete?
44,572
35,820
8,752 (20%)

Known source of infection?
8,752
30%
33%
38%

Already quarantining at time of symptom onset?
8,752
21%
52%
27%

35

Source: MDHHS – Michigan Disease Surveillance System

iPhone or Android

More than 450,000 people already signed up

81 people notified of exposures since 11/21 alone

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

Exposures

Exposure Notifications
On

Past Exposures

No Exposures Detected

If this app detects an exposure that meets MDHHS's criteria, you will receive a push notification and additional information will be displayed here.

For more information, read our Privacy Policy.

Indirect Impacts

Total offenses are down 16% this year compared to last year

Aggravated assaults and murders are up this year compared to last year, with aggravated assaults up 9% and murders up 20%, particularly spiking in the summer months

Non-aggravated assaults decreased 11% from 2019
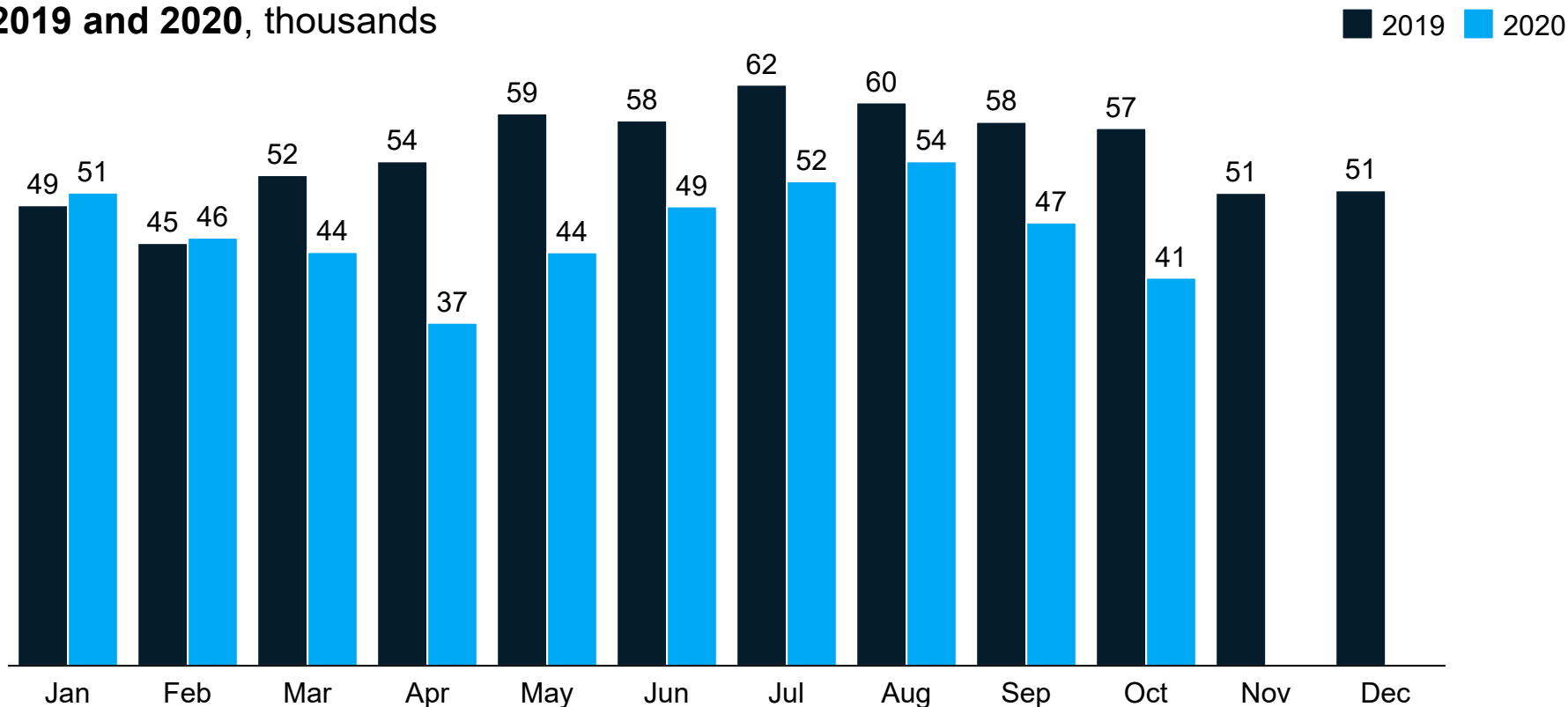
Domestic violence offenses increased 9% from 2019

While overall crashes are down 22% from 2019, the number of fatalities has increased by 2%

Michigan statewide offenses

The totals below represent the number of offenses reported by all Michigan law enforcement agencies to the Michigan Crime Reporting (MICR) program with incident dates between January and October of 2019 and 2020

Statewide offense totals for January through October 2020 are down 16% compared to 2019. Since March specifically, monthly totals in 2020 have been 10%-32% lower than 2019 monthly totals

Offenses[1] from 2019 and 2020, thousands

■ 2019 ■ 2020

|	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec
2019	49	45	52	54	59	58	62	60	58	57	51	51
2020	51	46	44	37	44	49	52	54	47	41		

1. Please note, the offense counts included in this report do not take into account victims of an offense for incidents where there were multiple victims of the same offense. In other words, this report counts offenses reported, not victims reported.
Note: 2020 crime data will fluctuate as law enforcement agencies continue to submit reports, resolve submission issues, and update incident reports during the course of their investigations. Some agencies have not yet submitted complete data for January through October of 2020. For these reasons, an interpretation of 2020 statewide crime numbers should take into account their incompleteness.
Source: Michigan State Police

Alcohol related offenses

Alcohol related offenses are gathered by selecting those offenses where the offender was suspected of using those substances

Statewide alcohol related offenses from January through October 2020 are down 15% compared to 2019
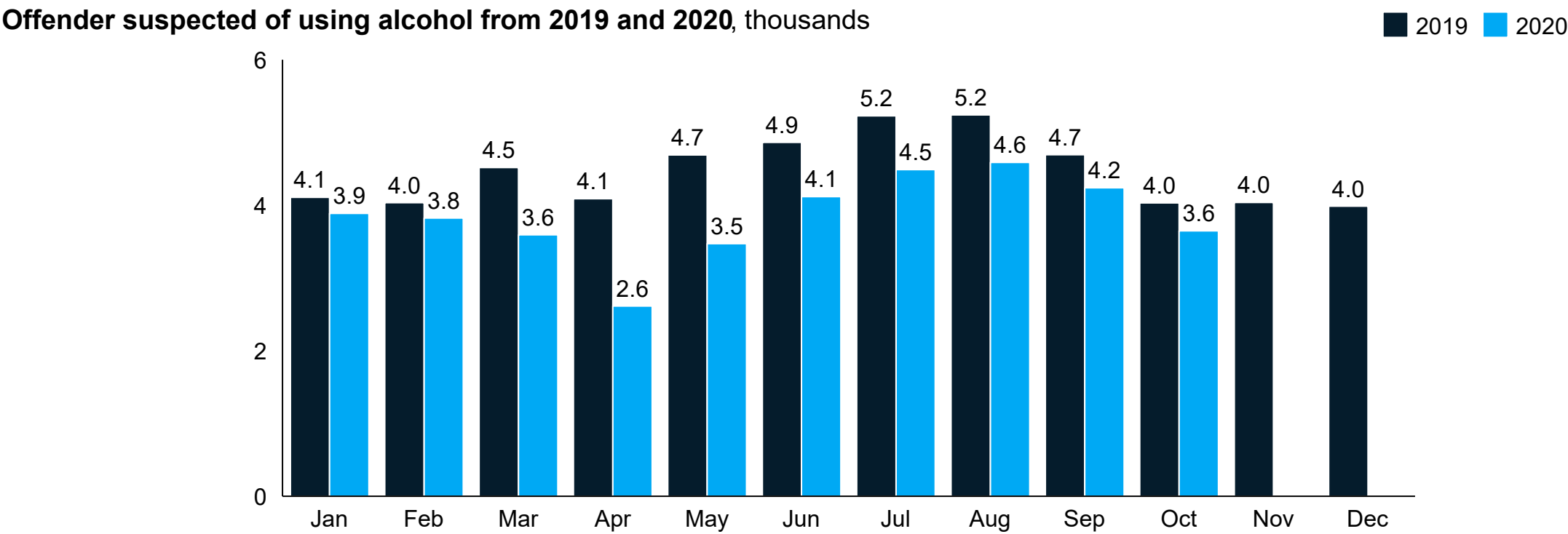
Offender suspected of using alcohol from 2019 and 2020, thousands
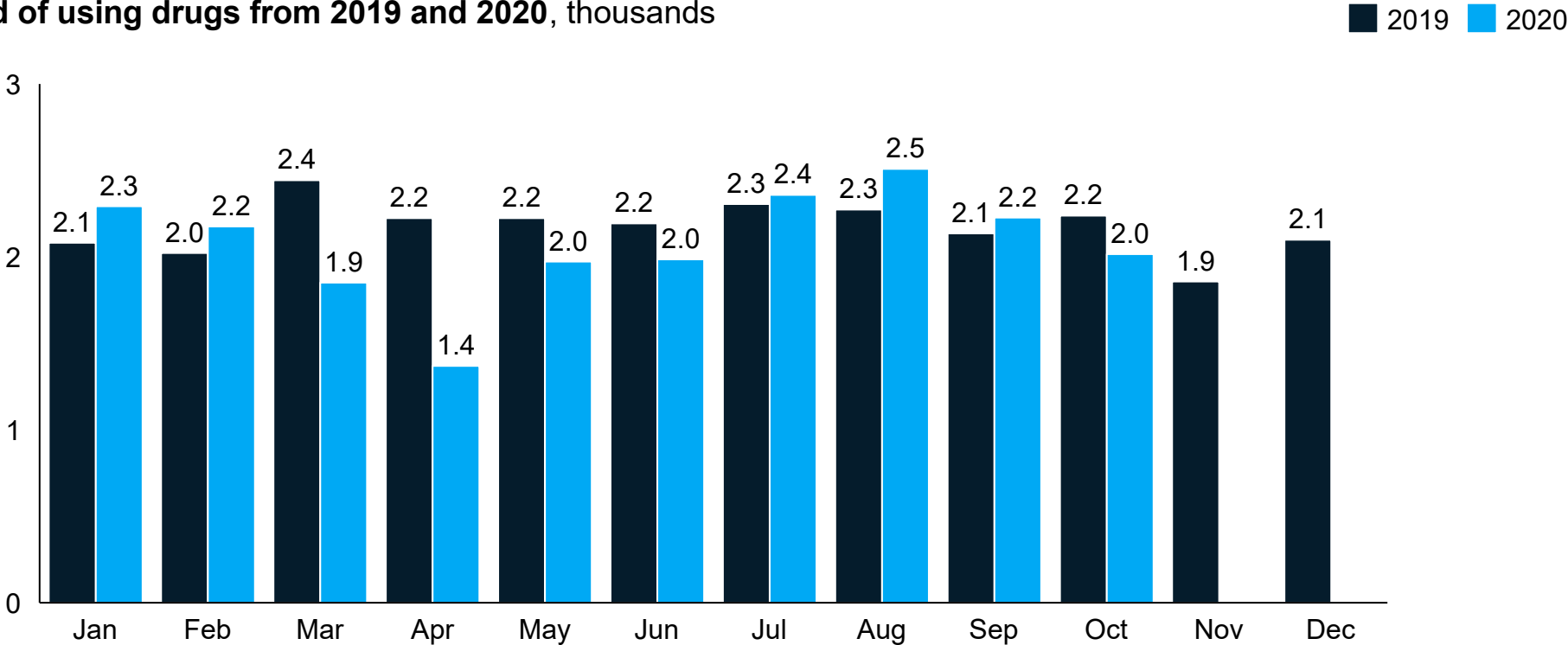
■ 2019　■ 2020

Note: 2020 crime data will fluctuate as law enforcement agencies continue to submit reports, resolve submission issues, and update incident reports during the course of their investigations. Some agencies have not yet submitted complete data for January through October of 2020. For these reasons, an interpretation of 2020 statewide crime numbers should take into account their incompleteness.

Drug related offenses

Drug related offenses are gathered by selecting those offenses where the offender was suspected of using those substances

Statewide drug related offenses from January through October are down 6% compared to 2019, but monthly case counts from July through September 2020 have exceeded the amount of monthly case counts in 2019

Offender suspected of using drugs from 2019 and 2020, thousands

■ 2019 ■ 2020

Month	2019	2020
Jan	2.1	2.3
Feb	2.0	2.2
Mar	2.4	1.9
Apr	2.2	1.4
May	2.2	2.0
Jun	2.2	2.0
Jul	2.3	2.4
Aug	2.3	2.5
Sep	2.1	2.2
Oct	2.2	2.0
Nov	1.9	
Dec	2.1	

Note: 2020 crime data will fluctuate as law enforcement agencies continue to submit reports, resolve submission issues, and update incident reports during the course of their investigations. Some agencies have not yet submitted complete data for January through October of 2020. For these reasons, an interpretation of 2020 statewide crime numbers should take into account their incompleteness.

Source: Michigan State Police

40

Aggravated assaults

Aggravated assaults have increased 9% in 2020 as compared to 2019. Further, the months of June through October 2020 were greater than their respective months in 2019.
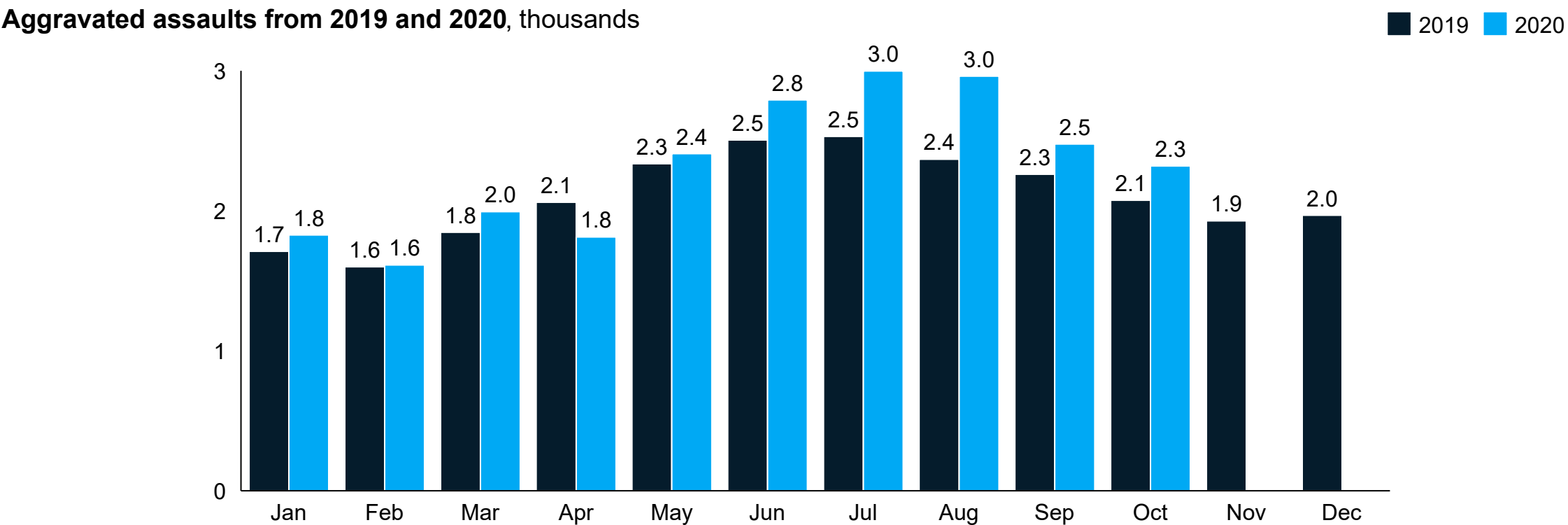
Aggravated assaults from 2019 and 2020, thousands   ■ 2019 ■ 2020
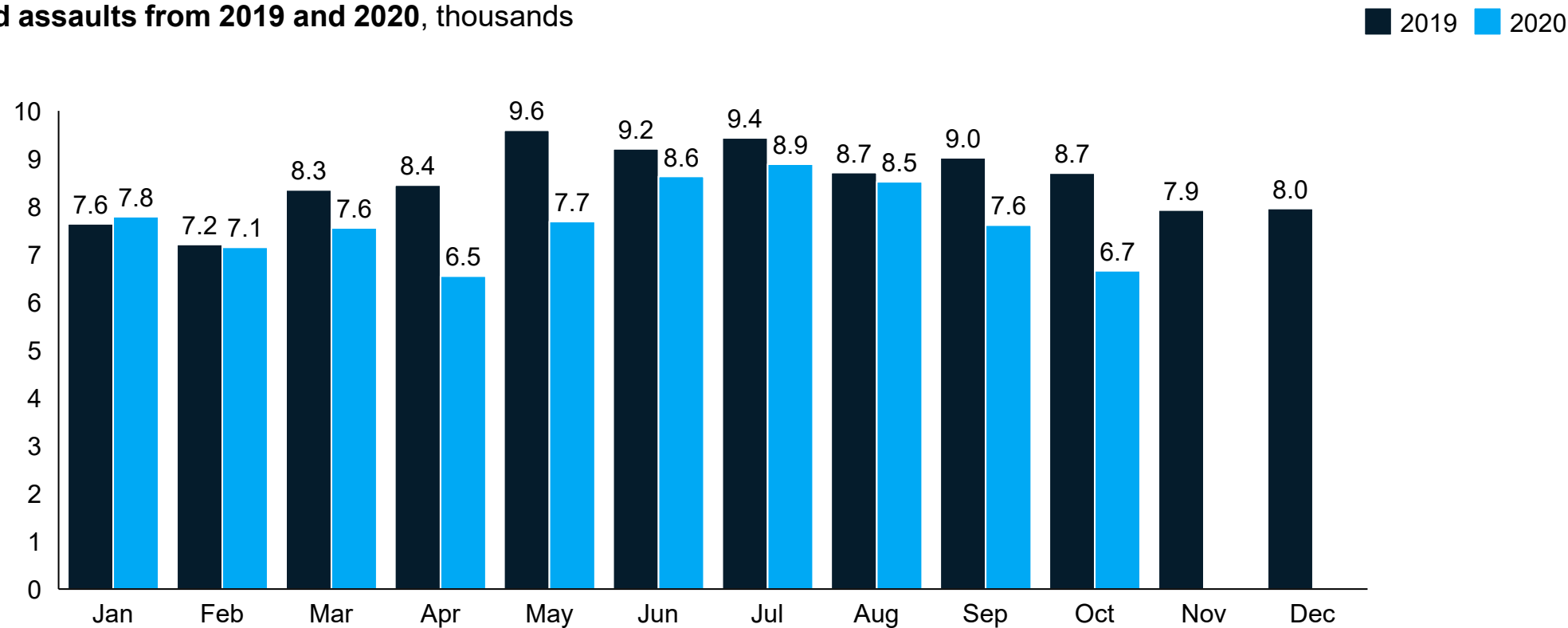

Note: 2020 crime data will fluctuate as law enforcement agencies continue to submit reports, resolve submission issues, and update incident reports during the course of their investigations. Some agencies have not yet submitted complete data for January through October of 2020. For these reasons, an interpretation of 2020 statewide crime numbers should take into account their incompleteness.

Non-aggravated assaults

Non-aggravated assaults decreased 11% from 2019. From March through October of 2020, monthly counts of non-aggravated assaults were considerably lower than in 2019

Non-aggravated assaults from 2019 and 2020, thousands

■ 2019 ■ 2020

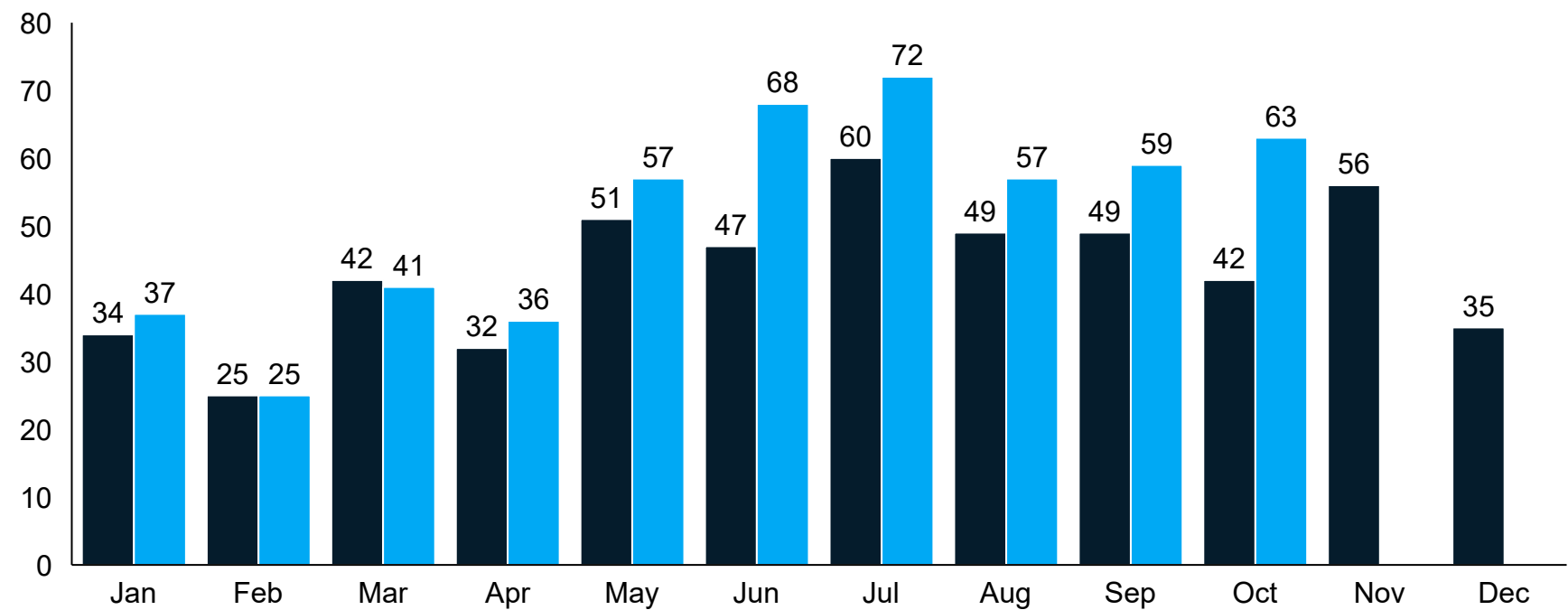| Month	2019	2020
Jan	7.6	7.8
Feb	7.2	7.1
Mar	8.3	7.6
Apr	8.4	6.5
May	9.6	7.7
Jun	9.2	8.6
Jul	9.4	8.9
Aug	8.7	8.5
Sep	9.0	7.6
Oct	8.7	6.7
Nov	7.9	
Dec	8.0	

Note: 2020 crime data will fluctuate as law enforcement agencies continue to submit reports, resolve submission issues, and update incident reports during the course of their investigations. Some agencies have not yet submitted complete data for January through October of 2020. For these reasons, an interpretation of 2020 statewide crime numbers should take into account their incompleteness.

Source: Michigan State Police

Murders

There have been 84 more murder offenses reported in 2020 (515 murders) as compared to 2019 (431 murders). Murder counts for 2020 peaked in June and July and were significantly higher during that period and the following months as compared to June through October of 2019

Murders from 2019 and 2020

■ 2019 ■ 2020

| Month	2019	2020
Jan	34	37
Feb	25	25
Mar	42	41
Apr	32	36
May	51	57
Jun	47	68
Jul	60	72
Aug	49	57
Sep	49	59
Oct	42	63
Nov	56	
Dec	35	

Note: 2020 crime data will fluctuate as law enforcement agencies continue to submit reports, resolve submission issues, and update incident reports during the course of their investigations. Some agencies have not yet submitted complete data for January through October of 2020. For these reasons, an interpretation of 2020 statewide crime numbers should take into account their incompleteness.

Source: Michigan State Police
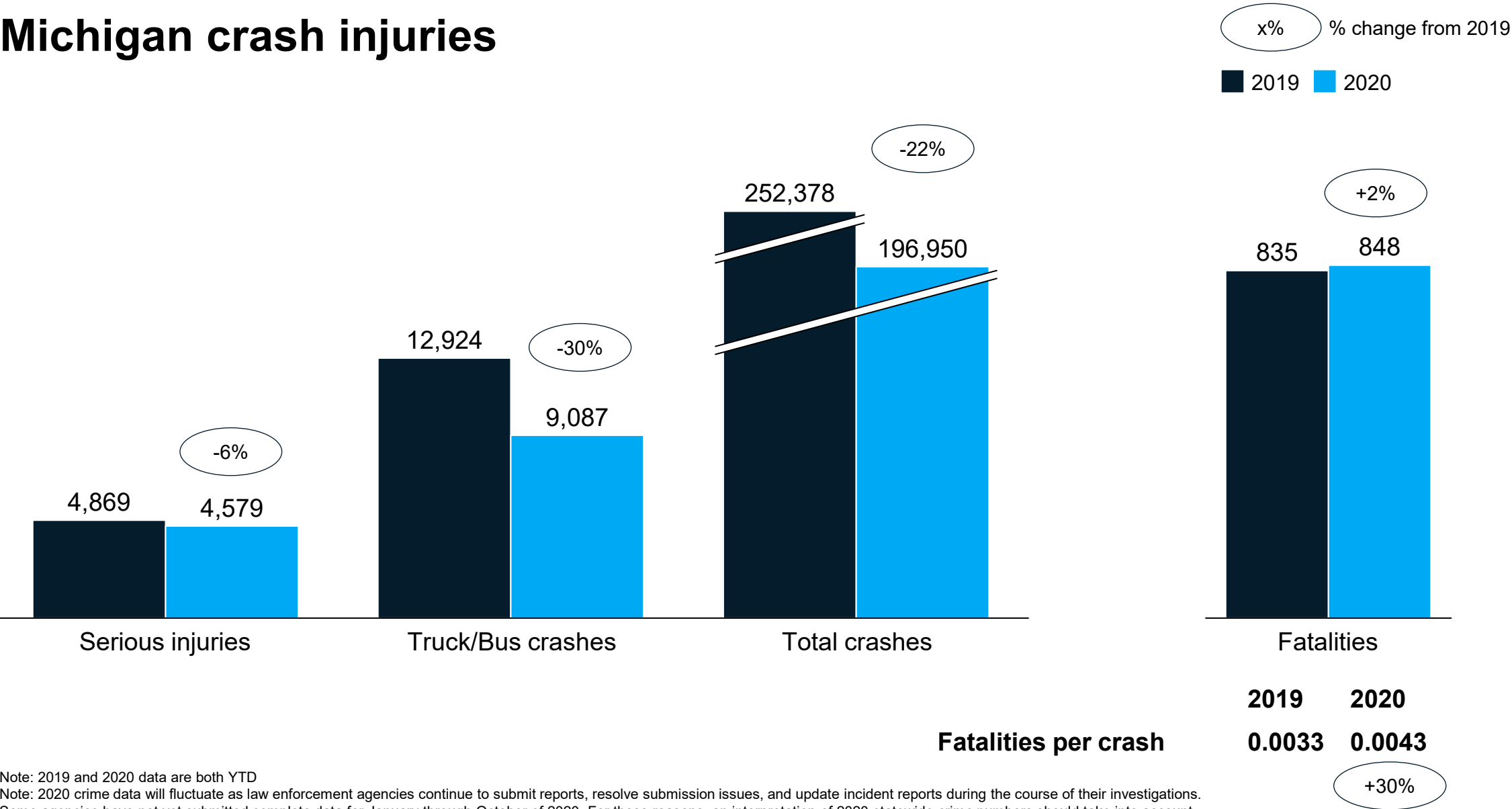
Domestic violence offenses

Domestic violence offenses increased 9% from 2019

Domestic violence offenses from 2019 and 2020, thousands
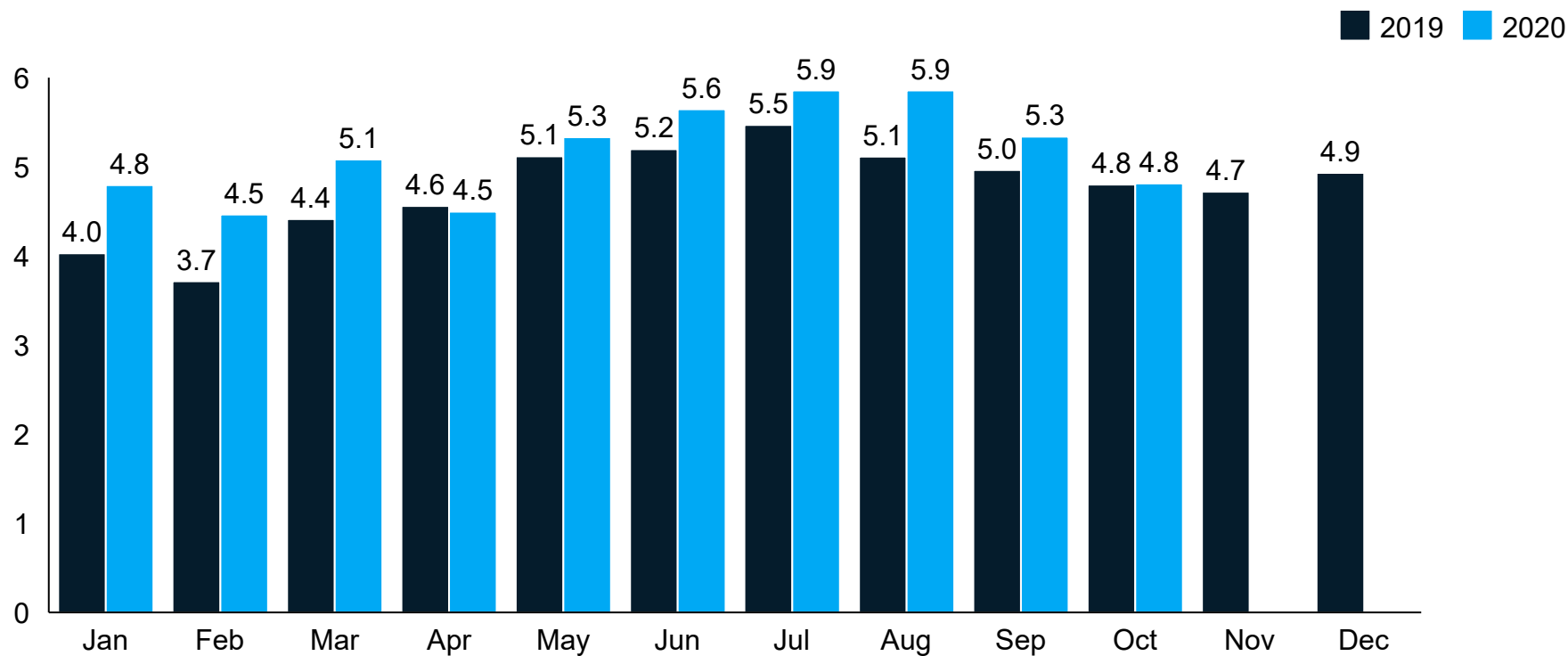
Note: 2020 crime data will fluctuate as law enforcement agencies continue to submit reports, resolve submission issues, and update incident reports during the course of their investigations. Some agencies have not yet submitted complete data for January through October of 2020. For these reasons, an interpretation of 2020 statewide crime numbers should take into account their incompleteness.

Source: Michigan State Police

Michigan crash injuries

x% % change from 2019

■ 2019 ■ 2020

-22%

252,378

196,950

12,924

-30%

9,087

-6%

4,869 4,579

Serious injuries	Truck/Bus crashes	Total crashes

+2%

835 848

Fatalities

	2019	2020
Fatalities per crash	0.0033	0.0043

+30%

Note: 2019 and 2020 data are both YTD
Note: 2020 crime data will fluctuate as law enforcement agencies continue to submit reports, resolve submission issues, and update incident reports during the course of their investigations. Some agencies have not yet submitted complete data for January through October of 2020. For these reasons, an interpretation of 2020 statewide crime numbers should take into account their incompleteness.

Source: Michigan State Police

Michigan crash fatalities by person type

Vehicle related fatalities of bicyclists and motorcyclists have increased 55% and 14% in 2020 from 2019
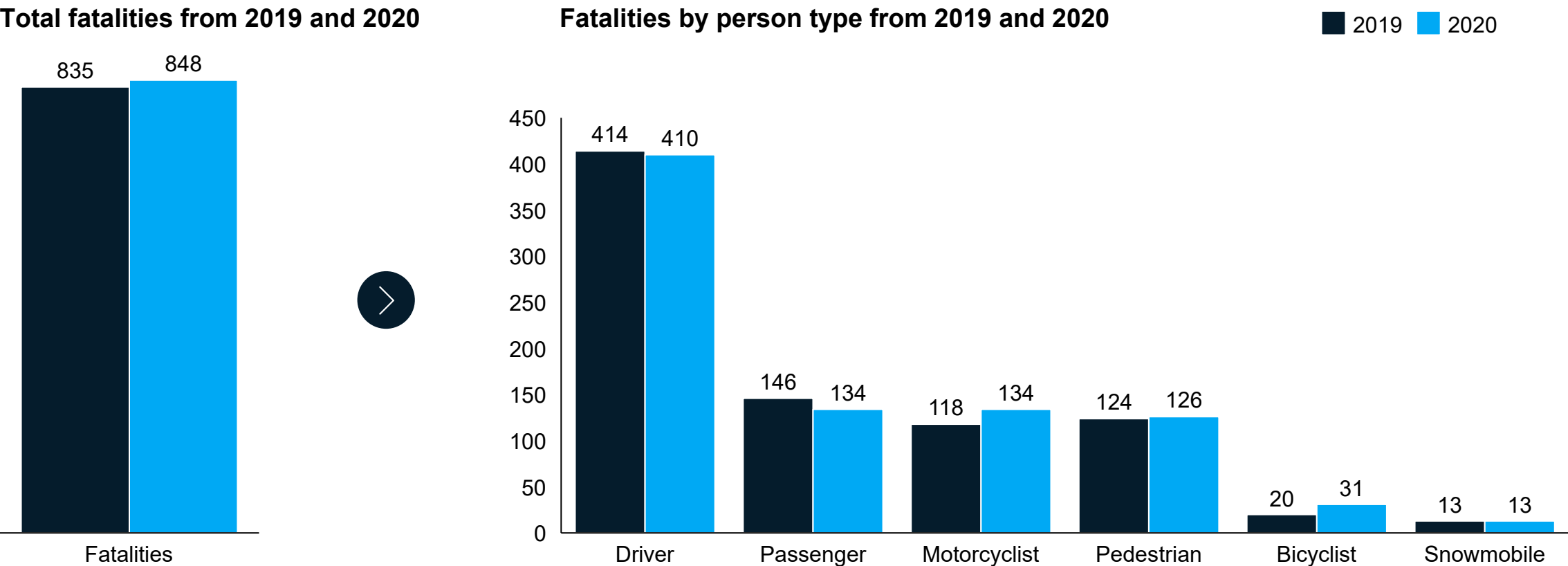
Total fatalities from 2019 and 2020

Fatalities by person type from 2019 and 2020

■ 2019 ■ 2020

Note: 2019 and 2020 data are both YTD
Note: 2020 crime data will fluctuate as law enforcement agencies continue to submit reports, resolve submission issues, and update incident reports during the course of their investigations. Some agencies have not yet submitted complete data for January through October of 2020. For these reasons, an interpretation of 2020 statewide crime numbers should take into account their incompleteness.

Source: Michigan State Police

Mobility data

How many people are staying at home in Michigan?
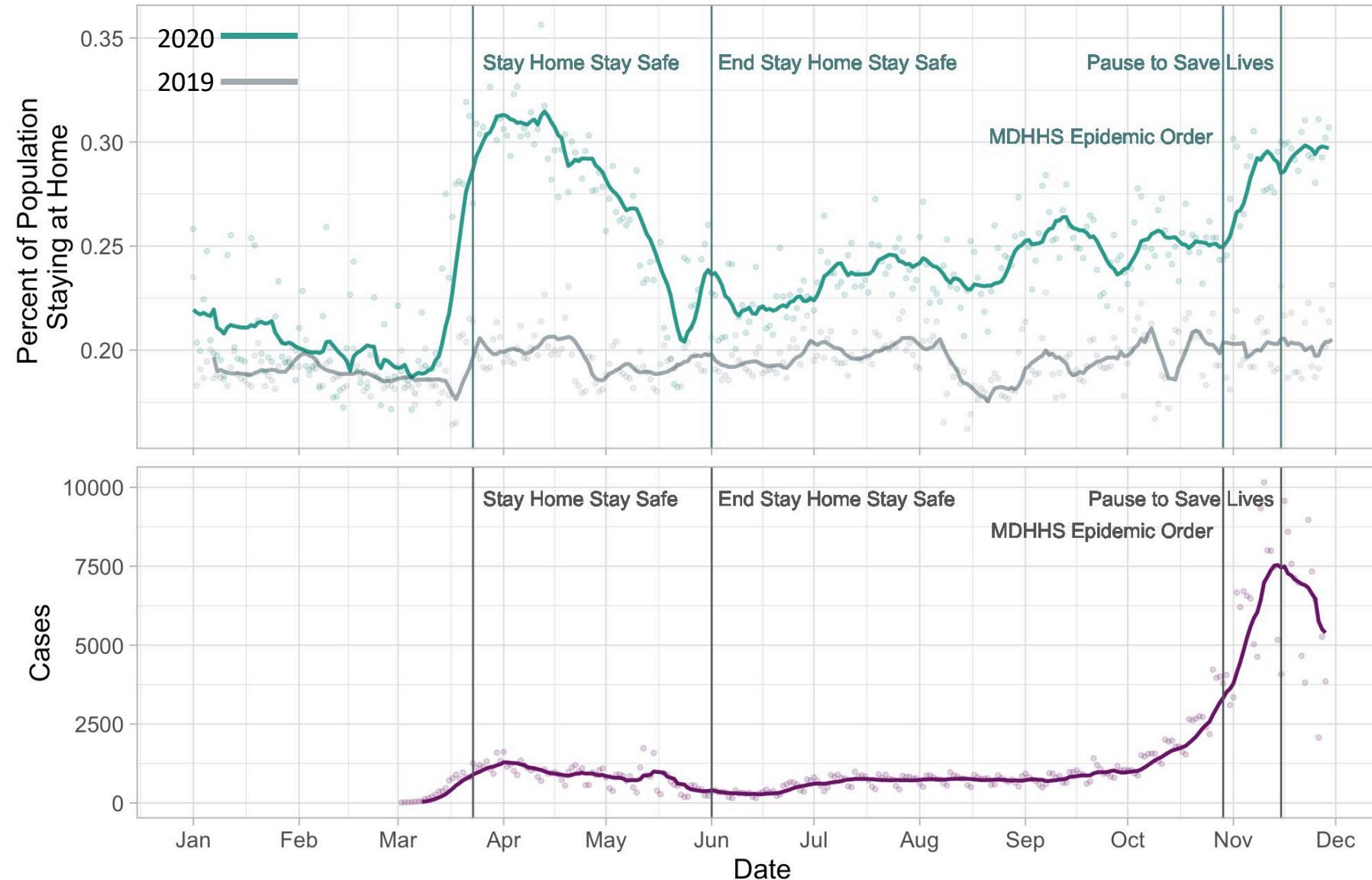
- Stay-at-home levels have recently increased
- Overall increase compared to 2019
- Stay-at-home levels appear to have stayed high over Thanksgiving holiday (most recent data is 11-29)

Data Sources: Bureau of Transportation Statistics, MDHHS

QUESTIONS?