# MI COVID RESPONSE DATA AND MODELING UPDATE

**NOTE:** All data as of Dec. 19 unless otherwise noted

December 22, 2020

# Executive summary

Michigan has recorded the **15th highest number of cases (↓2)** , **5th highest number of deaths (↔)**, **43rd highest case rate (↓5)**, and **T6th highest death rate (↑2)** in the last 7 days (source: CDC COVID Data Tracker)

Michigan has the **24th highest hospitalization rate as a percent of total beds (↓12)**, and **9th highest number of COVID patients in the ICU (↓1)** (source: Becker's Hospital Review)

**Case rates** (405.7, ↓154.1), **percent positivity** (10.0%, ↓2.3%), and **coronavirus like illness** (CLI) are all decreasing

**More than 16.5% of available inpatient beds are filled with COVID patients** (↓2.0) and state trends for COVID hospitalizations are decreasing

There were **918 deaths** (↑127) during the week of Dec 6-Dec 12 and the state death rate is **13.2 deaths/million/day** (↑1.9), but these are lagging indicators of cases and hospitalizations from several weeks ago

**Daily diagnostic tests dropped to an average of 48.6K per day** (↓5.2K) over the last week and the state rate is **5,096.4 tests/million/day** (↓517.1)

# Comparison across states: Summary 12/21

What we see today:

- 19 states seeing increasing 2 week case trends (down vs. 34 last week)

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

- Nevada, Arizona, Alabama, Pennsylvania, California have highest per capita <u>hospitalized</u> patient numbers

- Most rapid 2 week <u>case</u> growth:  CA, TN, ME, HI, GA

- Midwest:
  - Wisconsin showing continued decline in hospitalizations (228/M), declining cases (583/M)
  - Indiana dropping in hospitalizations (436/M) and cases (836/M)
  - Illinois showed large decline in hospitalizations (346/M), cases down (580/M)
  - Ohio now with decline in hospitalizations (403/M) and cases (734/M)
  - Michigan showing continued decline in hospitalizations (~300/M) and cases (442/M)

# COVID-19 Spread

Positivity has dropped to 10.0 percent

- 4 MERC regions below 10%

Cases continue to decrease for 29 days

- Decreases are seen among most age groups, races, and ethnicities
- Fewer cases have race and ethnicity documented
- Number of active outbreaks is up ~1% from previous week
- Number of reported school outbreaks decreased since last week (188 to 142)

# Confirmed and probable case indicators

Table Date: 2020-12-19, 7 days from date table was produced (2020-12-12)

| | 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 | 371.6 | decline [25 days] | 10.3 | Decrease - 2wk | 4718.1 | 0.7 | Decrease - 3wk | 16.2 | 10.1 | Increase - 5wk |
| Grand Rapids | 2 | 6 | E | 464.8 | decline [31 days] | 10.7 | Decrease - 1wk | 5415.6 | 1.1 | Decrease - 3wk | 14.5 | 14.6 | Increase - 7wk |
| Kalamazoo | 3 | 5 | E | 448.3 | decline [30 days] | 9.9 | Decrease - 2wk | 4769.2 | 0.9 | Decrease - 3wk | 17.5 | 14.6 | Increase - 2wk |
| Saginaw | 4 | 3 | E | 481.0 | decline [30 days] | 12.5 | Decrease - 1wk | 5204.4 | 0.6 | Decrease - 2wk | 22.0 | 31.3 | Increase - 5wk |
| Lansing | 5 | 1 | E | 409.4 | decline [30 days] | 8.9 | Decrease - 1wk | 4391.7 | 0.4 | Decrease - 1wk | 19.9 | 11.2 | Increase - 3wk |
| Traverse City | 6 | 7 | E | 328.0 | decline [24 days] | 8.6 | Decrease - 1wk | 3945.4 | 1.5 | Increase - 1wk | 12.2 | 12.6 | Increase - 1wk |
| Jackson | 7 | 1 | E | 553.6 | decline [25 days] | 10.8 | Decrease - 1wk | 8296.7 | 0.5 | Increase - 1wk | 22.3 | 15.1 | Increase - 1wk |
| Upper Peninsula | 8 | 8 | E | 372.0 | decline [34 days] | 4.3 | Decrease - 1wk | 6320.8 | 0.6 | Decrease - 5wk | 11.1 | 20.2 | Increase - 3wk |
| Michigan | | | E | 405.7 | decline [29 days] | 10.0 | Decrease - 1wk | 5096.4 | 0.8 | Decrease - 3wk | 16.5 | 13.2 | Increase - 5wk |

*Cases*

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

*Positivity*

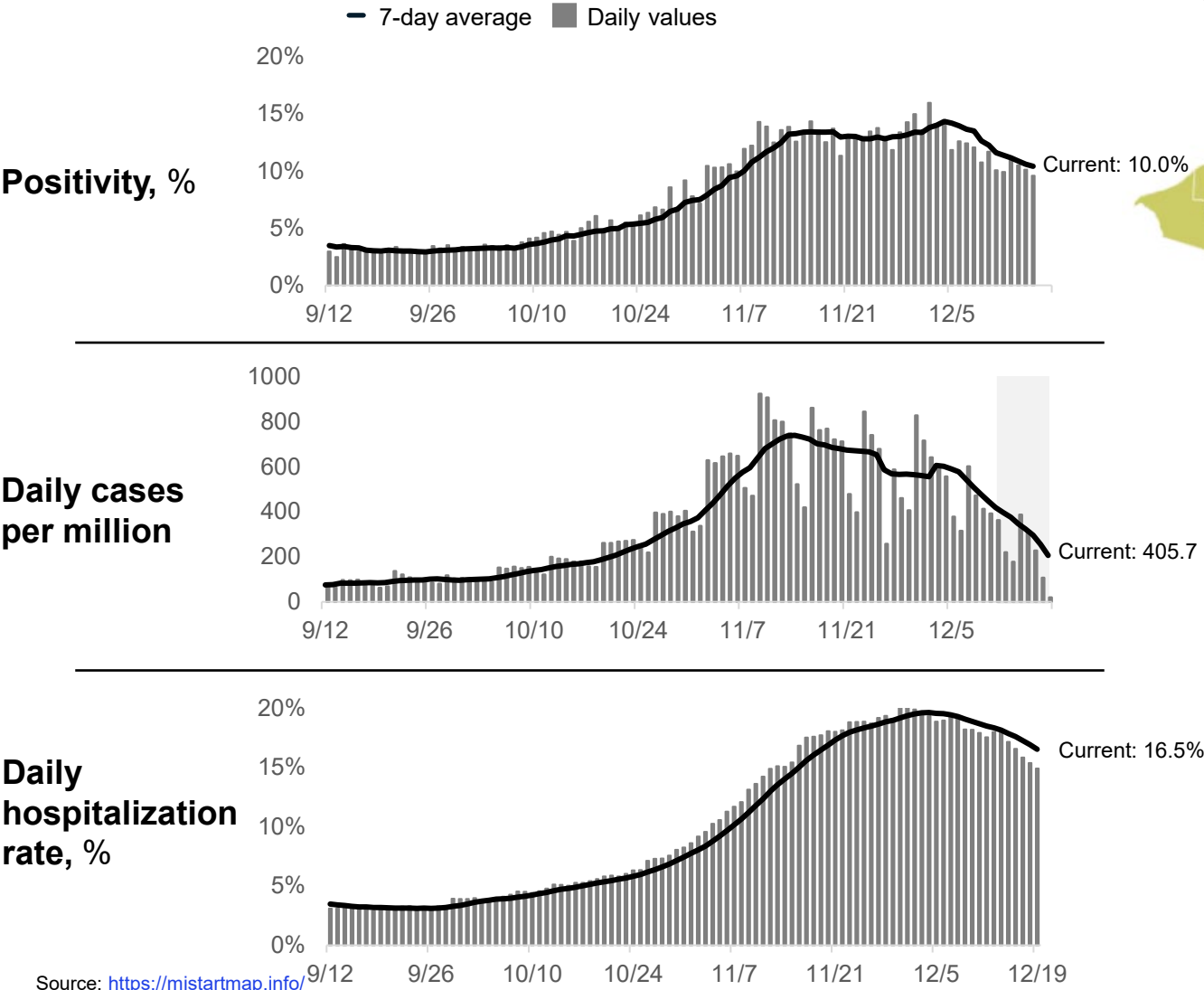| Low: <3% | A: 3-7% | B: 7-10% | C: 10-15% | D: 15-20% | E: >=20% |
|---|---|---|---|---|---|
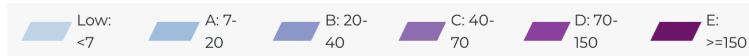
1. Epidemic curve classification based on two-week incidence slope. Data omits most recent week to account for lag period.

# Recent statewide trends
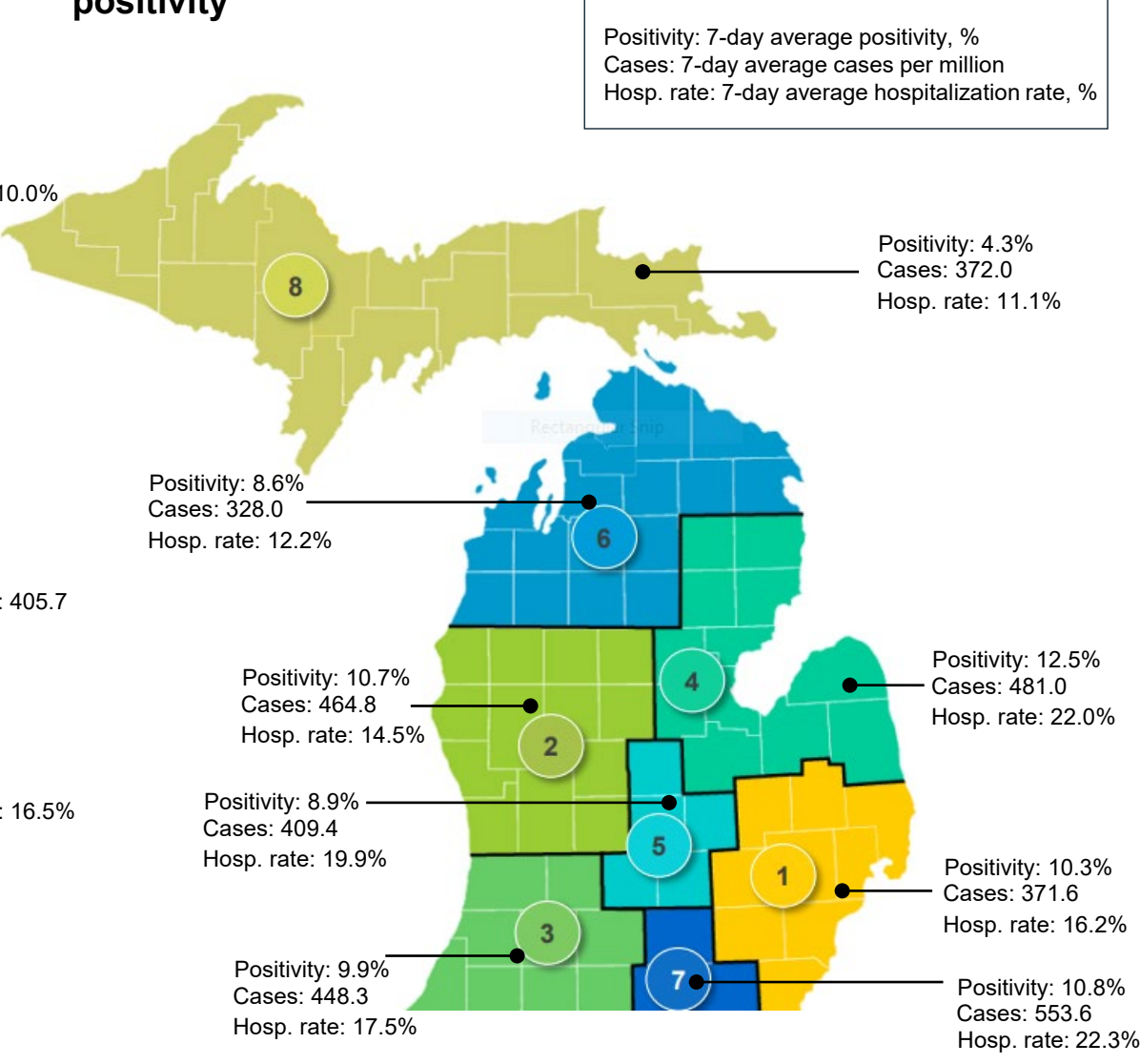
## Statewide trends

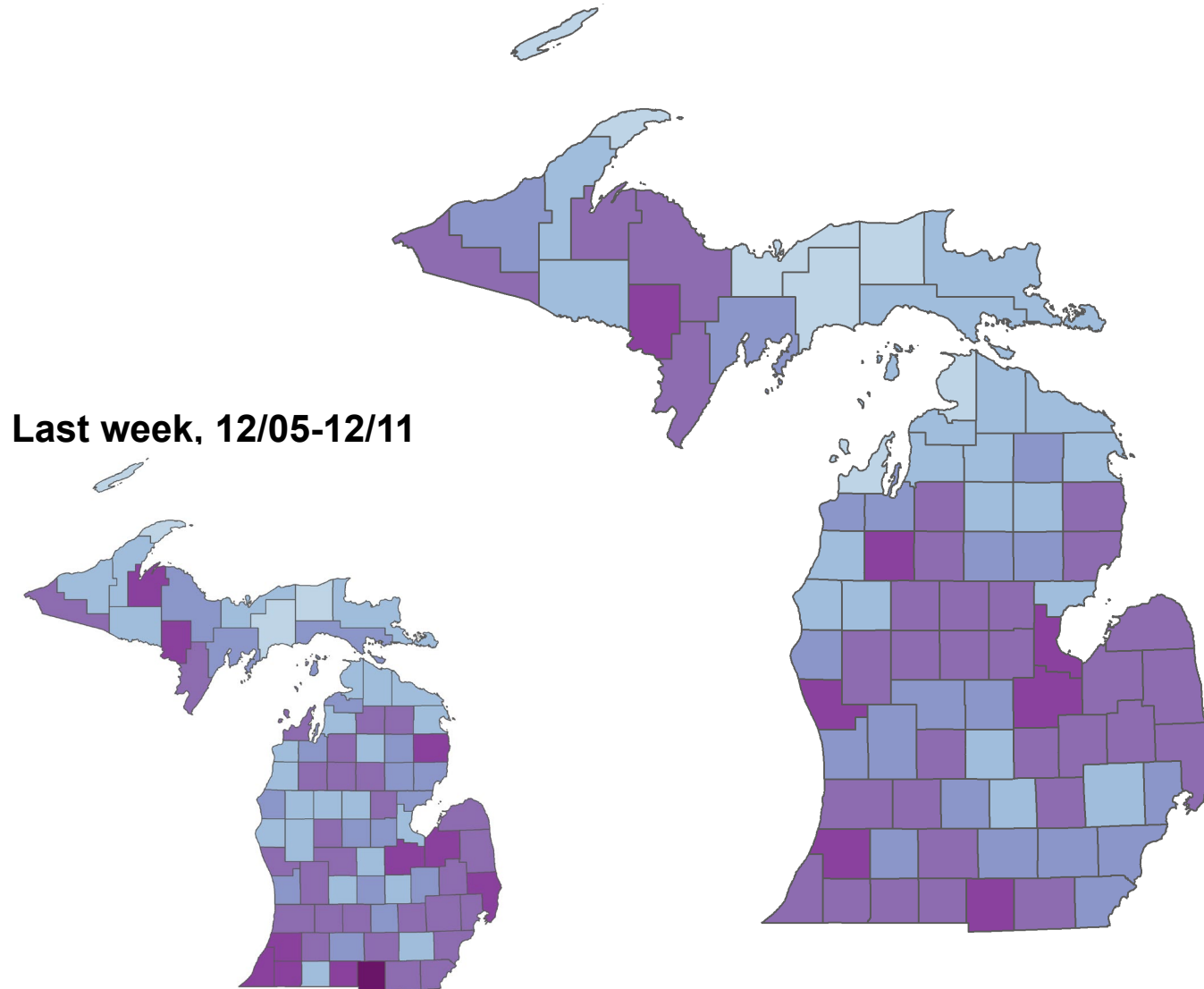— 7-day average    ▉ Daily values

**Positivity, %**

Current: 10.0%

**Daily cases per million**

Current: 405.7

**Daily hospitalization rate, %**

Current: 16.5%

Source: https://mistartmap.info/

## Regional breakdown: Cases, hospitalization rate, and positivity

Positivity: 7-day average positivity, %
Cases: 7-day average cases per million
Hosp. rate: 7-day average hospitalization rate, %

**8**
Positivity: 4.3%
Cases: 372.0
Hosp. rate: 11.1%

**6**
Positivity: 8.6%
Cases: 328.0
Hosp. rate: 12.2%

**2**
Positivity: 10.7%
Cases: 464.8
Hosp. rate: 14.5%

**4**
Positivity: 12.5%
Cases: 481.0
Hosp. rate: 22.0%

**5**
Positivity: 8.9%
Cases: 409.4
Hosp. rate: 19.9%

**1**
Positivity: 10.3%
Cases: 371.6
Hosp. rate: 16.2%

**3**
Positivity: 9.9%
Cases: 448.3
Hosp. rate: 17.5%

**7**
Positivity: 10.8%
Cases: 553.6
Hosp. rate: 22.3%

# Positivity by county, 12/12-12/18

**Last week, 12/05-12/11**



**Average positivity per day**

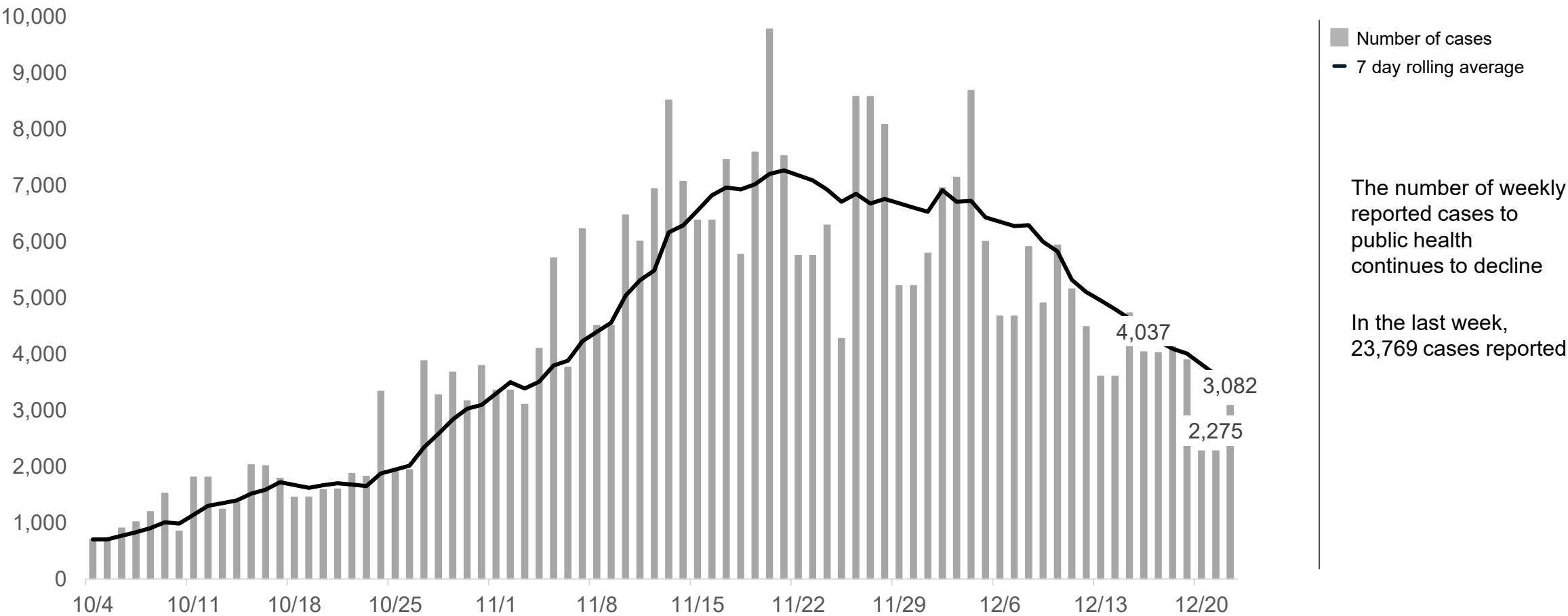| | | # of counties |
|---|---|---|
| | <3% | This week: 5 / Last week: 0 |
| | 3-7% | This week: 14 / Last week: 5 |
| | 7-10% | This week: 28 / Last week: 17 |
| | 10-15% | This week: 31 / Last week: 44 |
| | 15-20% | This week: 5 / Last week: 15 |
| | >=20% | This week: 0 / Last week: 2 |
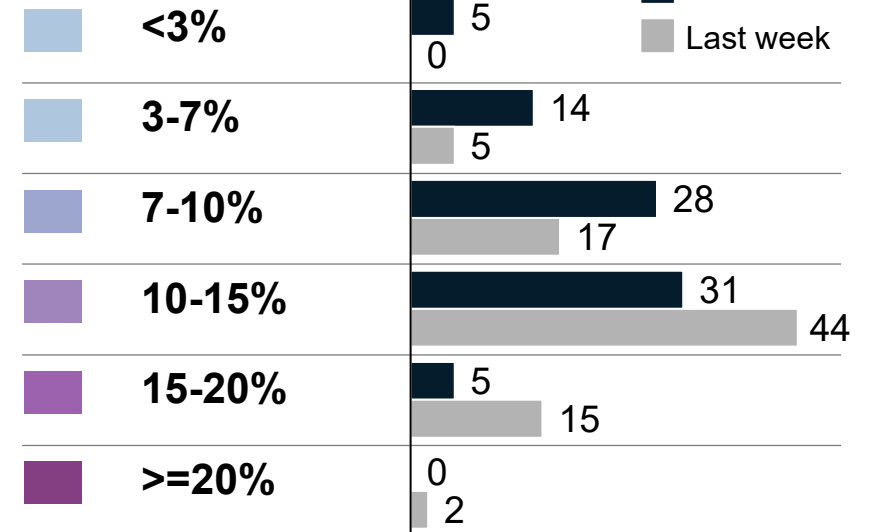
**Updates since last week:**

36 of 83 counties saw double digit positivity in the last week (25 county reduction)

Source: SEOC Testing Results – Excluding MDOC

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

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



The number of weekly reported cases to public health continues to decline
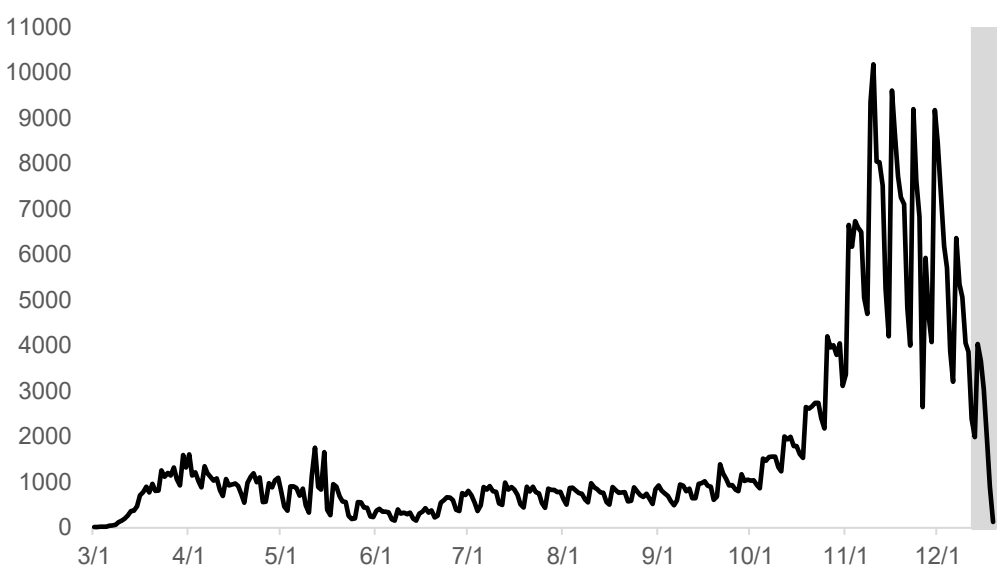
In the last week, 23,769 cases reported

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

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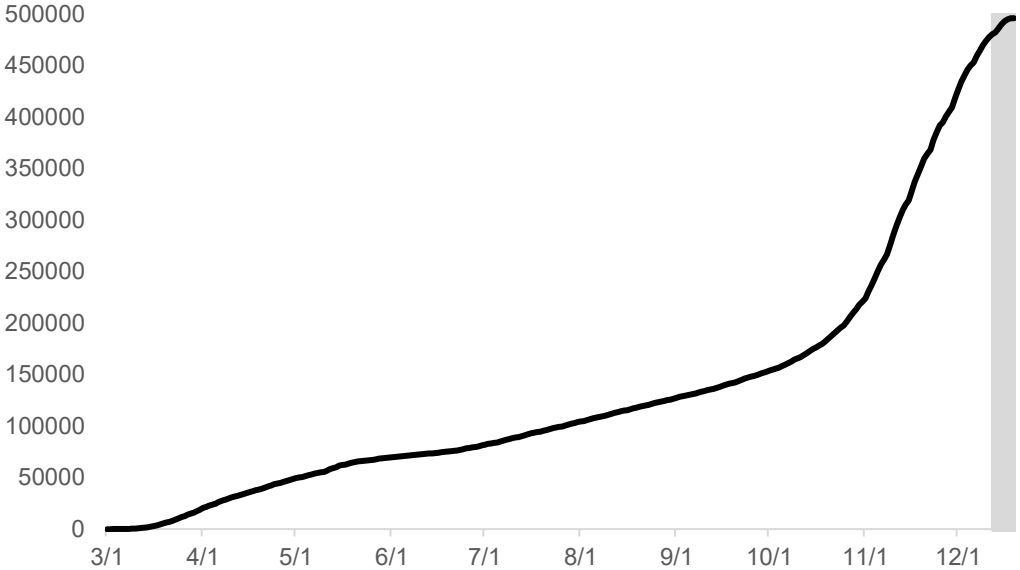


**New confirmed and probable cases**, by date of onset of symptoms



**Updates since last week:**

Cases have dropped for the fourth week in a row

Current daily case rate remains more than 4x the rate from early October, down from 5x times a week ago

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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# Age group: average new daily cases

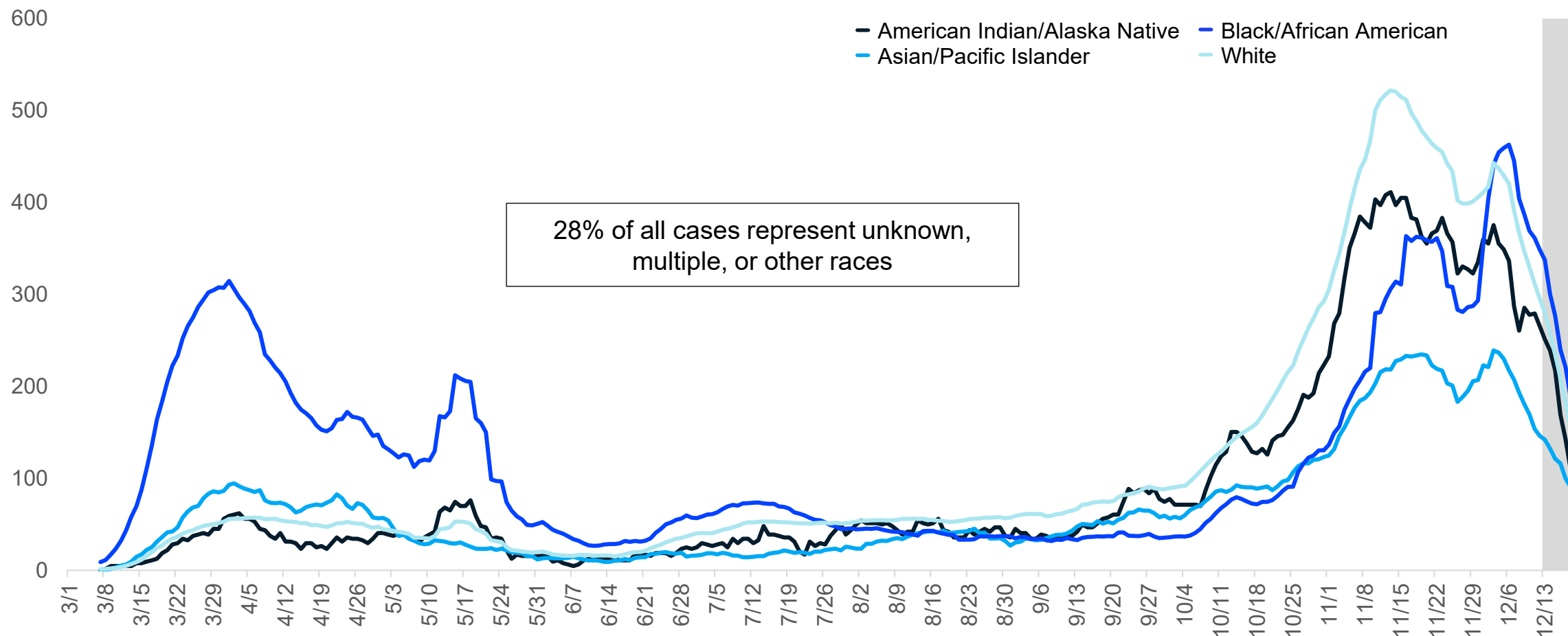**Daily new confirmed and probable cases per million by age group (7-day rolling average)**
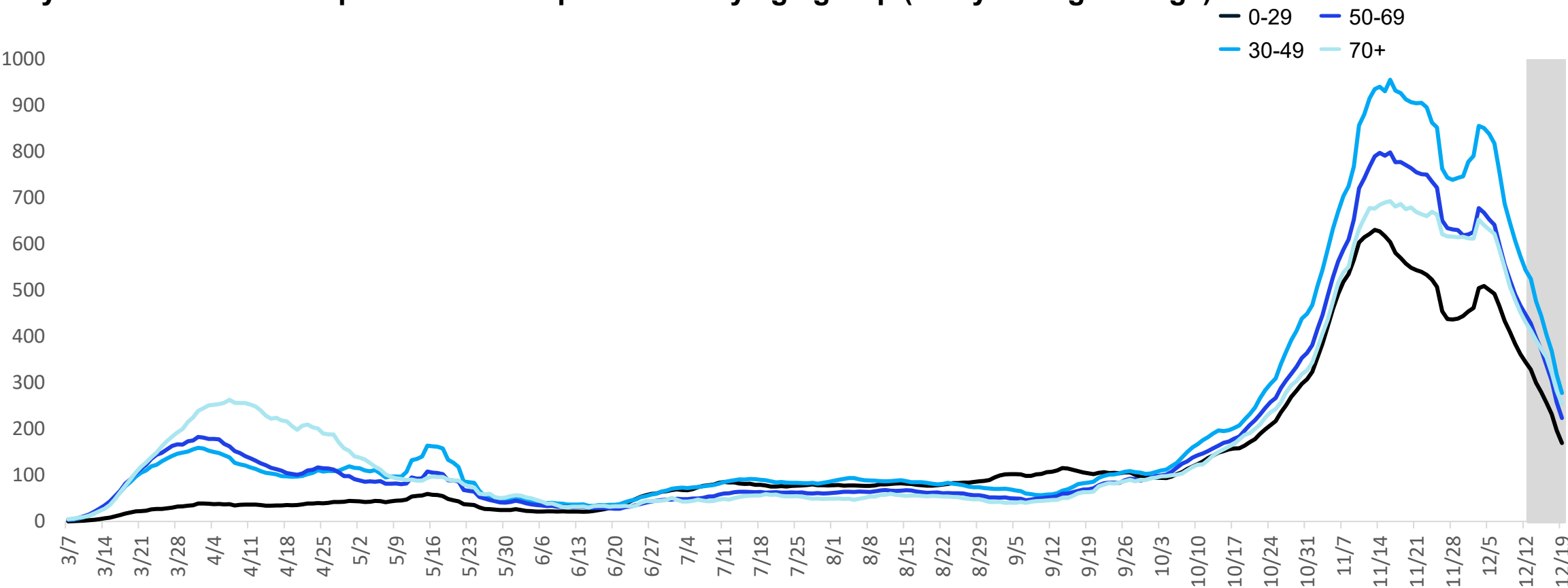


30-49 age group continues to have the highest cases per million, though cases per million have decreased for all age groups over the past 5 weeks

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

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



Legend:
- American Indian/Alaska Native
- Asian/Pacific Islander
- Black/African American
- White

28% of all cases represent unknown, multiple, or other races

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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# Average daily new cases per million people by ethnicity

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



33% of all cases have unknown ethnic data

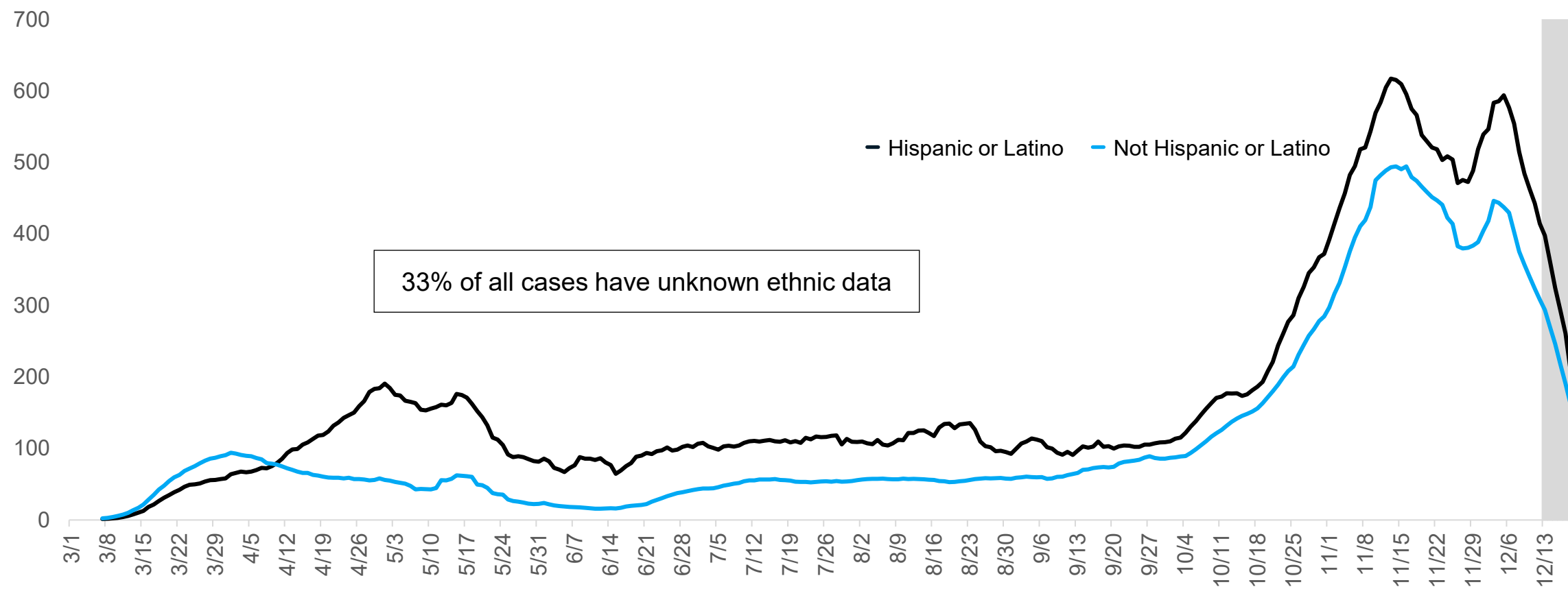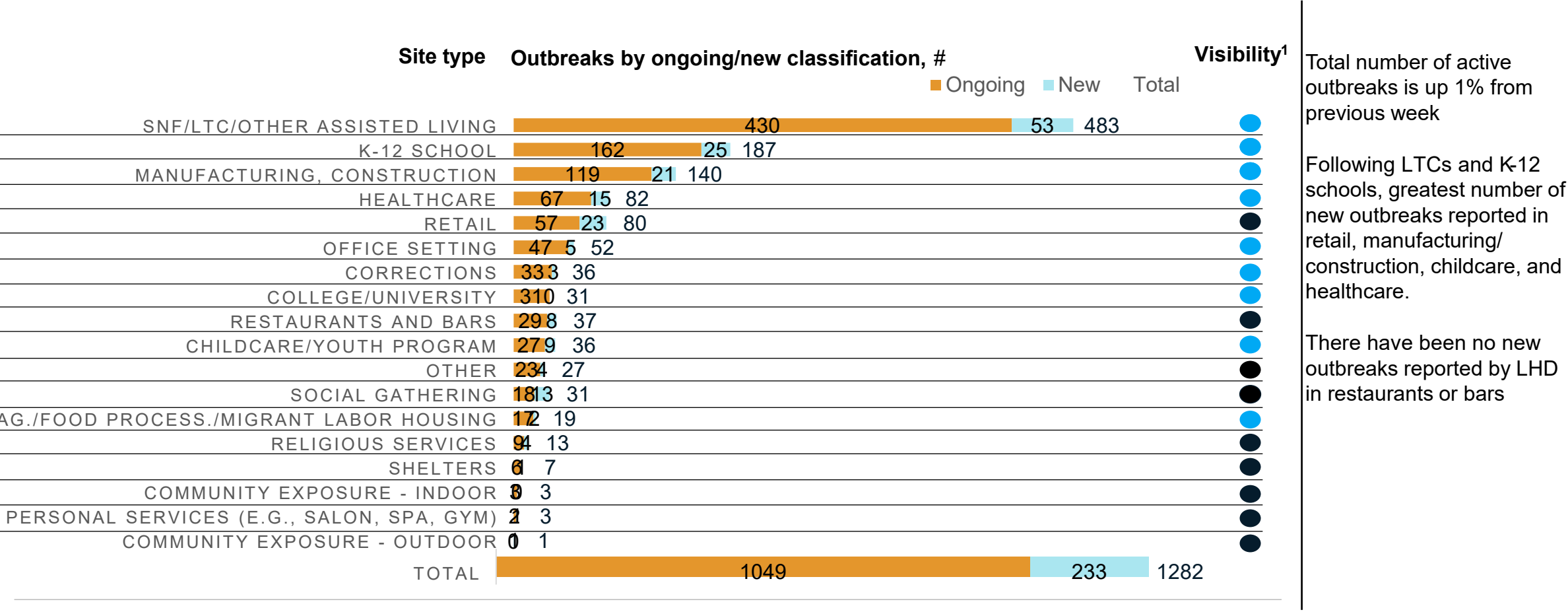Legend: Hispanic or Latino — Not Hispanic or Latino

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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# Number of outbreak investigations by site type, week ending Dec 18

● Easier to identify outbreak
● Harder to identify outbreak

| Site type | Outbreaks by ongoing/new classification, # | | | Visibility[1] |
|---|---|---|---|---|
| | ■ Ongoing | ■ New | Total | |
| SNF/LTC/OTHER ASSISTED LIVING | 430 | 53 | 483 | ● |
| K-12 SCHOOL | 162 | 25 | 187 | ● |
| MANUFACTURING, CONSTRUCTION | 119 | 21 | 140 | ● |
| HEALTHCARE | 67 | 15 | 82 | ● |
| RETAIL | 57 | 23 | 80 | ● |
| OFFICE SETTING | 47 | 5 | 52 | ● |
| CORRECTIONS | 33 | 3 | 36 | ● |
| COLLEGE/UNIVERSITY | 31 | 0 | 31 | ● |
| RESTAURANTS AND BARS | 29 | 8 | 37 | ● |
| CHILDCARE/YOUTH PROGRAM | 27 | 9 | 36 | ● |
| OTHER | 23 | 4 | 27 | ● |
| SOCIAL GATHERING | 18 | 13 | 31 | ● |
| AG./FOOD PROCESS./MIGRANT LABOR HOUSING | 17 | 2 | 19 | ● |
| RELIGIOUS SERVICES | 9 | 4 | 13 | ● |
| SHELTERS | 6 | 1 | 7 | ● |
| COMMUNITY EXPOSURE - INDOOR | 3 | 0 | 3 | ● |
| PERSONAL SERVICES (E.G., SALON, SPA, GYM) | 2 | 1 | 3 | ● |
| COMMUNITY EXPOSURE - OUTDOOR | 0 | 1 | 1 | ● |
| TOTAL | 1049 | 233 | 1282 | |

Total number of active outbreaks is up 1% from previous week

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

There have been no new outbreaks reported by LHD in restaurants or bars

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 Dec 18

Number of reported outbreaks decreased since last week (188 to 142) including reductions in High School (68 to 48), Middle/Jr High (34 to 26), And Pre K-Elementary (75 to 57), with an increase in the number of Administrative outbreaks (7 to 11)

| Region | Number of reported cases, # | Number of outbreaks | Range of cases per outbreak |
|---|---|---|---|
| Region 1 | 67 / 28 | 20 | 1-30 |
| Region 2n | 163 / 7 | 18 | 2-37 |
| Region 2s | 46 / 7 | 12 | 2-14 |
| Region 3 | 315 / 19 | 32 | 2-79 |
| Region 5 | 10 / -7 | 4 | 2-10 |
| Region 6 | 250 / 21 | 31 | 2-28 |
| Region 7 | 45 / 3 | 10 | 2-11 |
| Region 8 | 124 / 10 | 15 | 2-46 |
| **Total** | 1,020 / 102 | **142** | **1-79** |

Legend: # Ongoing - Excluding New / # New

| Grade level | Number of reported cases, # | Number of outbreaks | Range of cases per outbreak |
|---|---|---|---|
| Pre-school - elem. | 230 / 41 | 57 | 1-18 |
| Jr. high/middle school | 147 / 18 | 26 | 2-16 |
| High school | 620 / 28 | 48 | 2-79 |
| Administrative | 25 / -15 | 11 | 2-5 |
| **Total** | 1,020 / 102 | **142** | **1-79** |

Legend: # Ongoing - Excluding New / # New

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
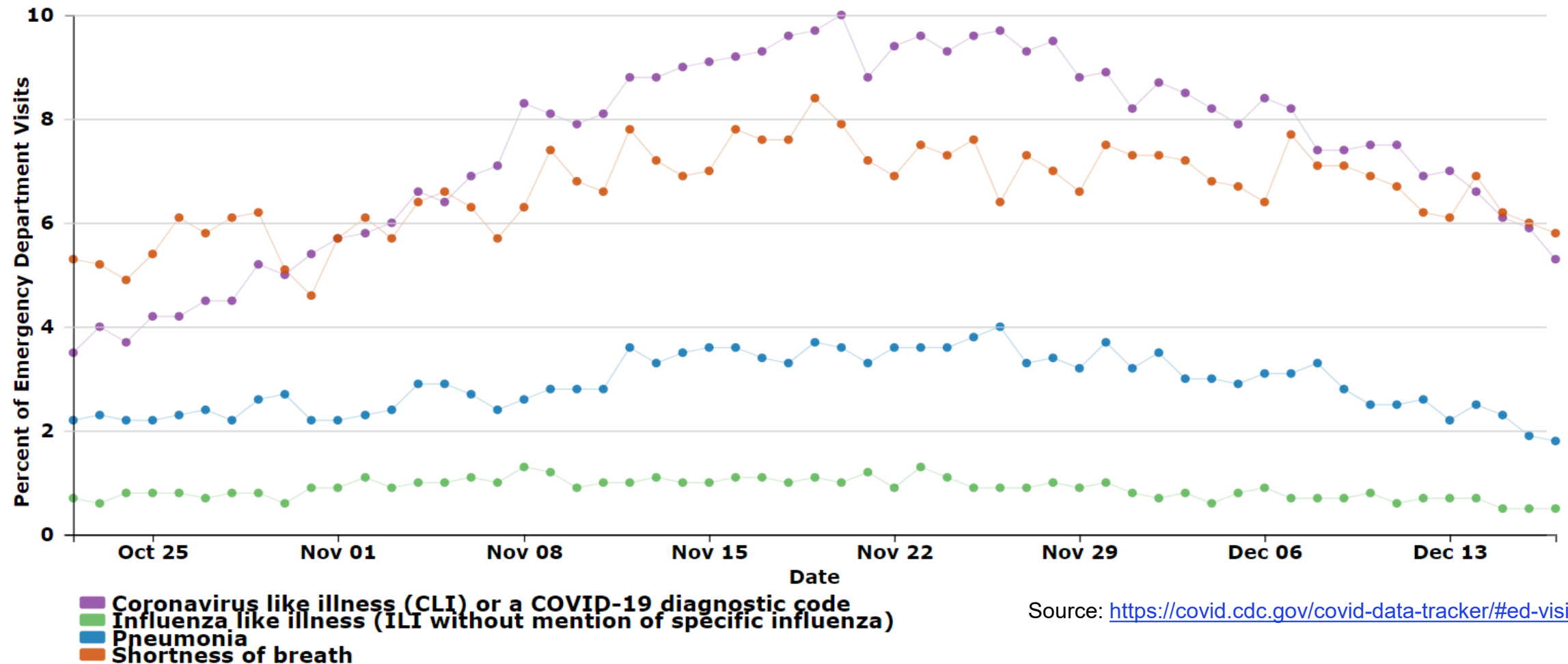
# COVID-19 and Healthcare Capacity and COVID Severity

COVID-19-like illness decreased for more than three weeks and is below 6% of emergency department visits

Hospitalizations and ICU utilization are decreasing
- Hospitalizations down 30% since December 1st peak
- ICU occupancy declined 16% over last week
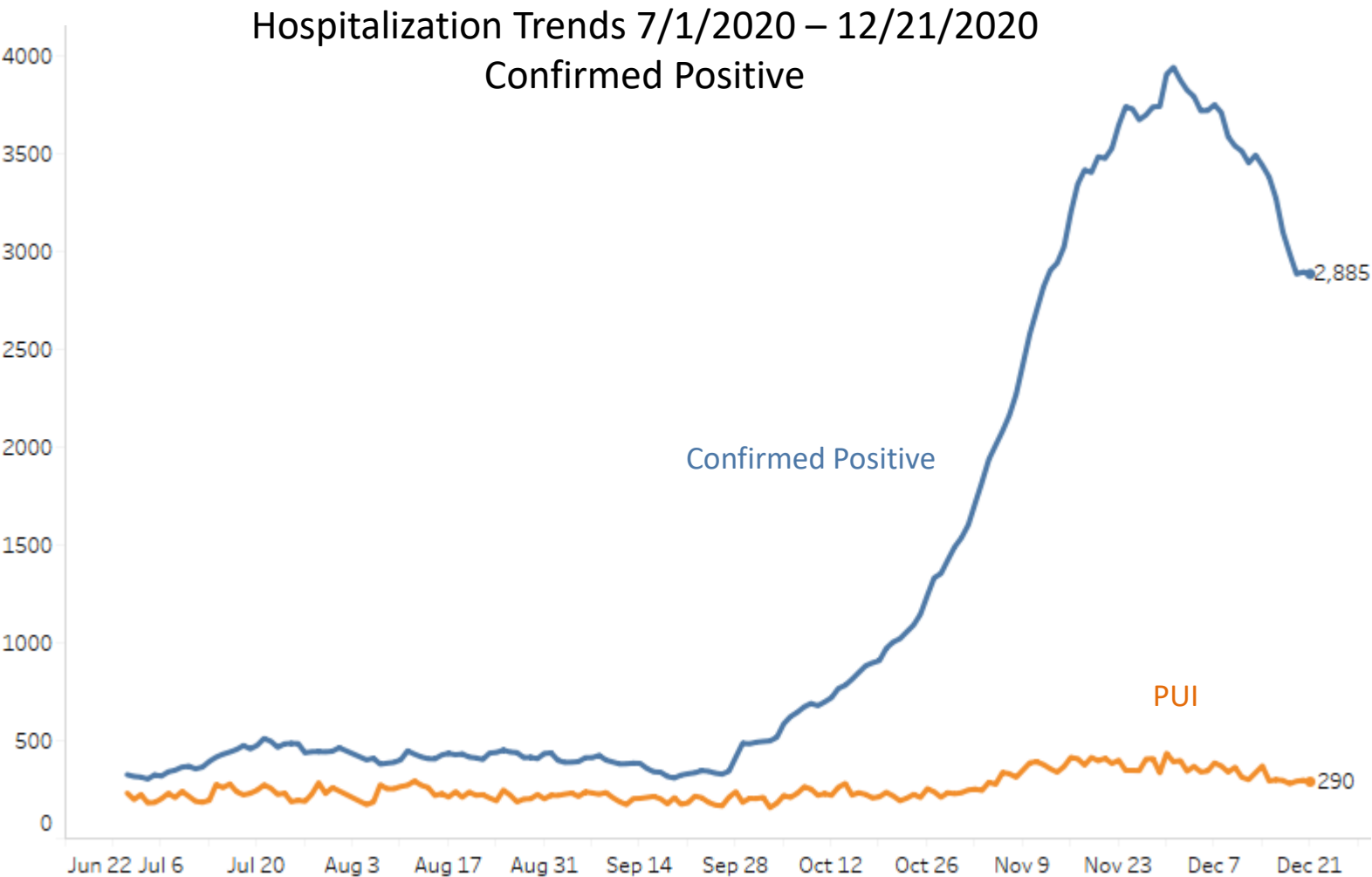- Two regions have >30% of Adult ICU beds with patients positive for COVID

# 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



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

# Statewide Hospitalization Trends: Total COVID+ Census

Hospitalization Trends 7/1/2020 – 12/21/2020
Confirmed Positive



Confirmed Positive

PUI

2,885

290

Hospital COVID census is down 16% from the previous week and down nearly 30% from the December 1 peak.

New admissions for COVID were also down about 16% this week vs. prior

Hospitalized COVID Positive Long Term Trend (beginning March)



2,885
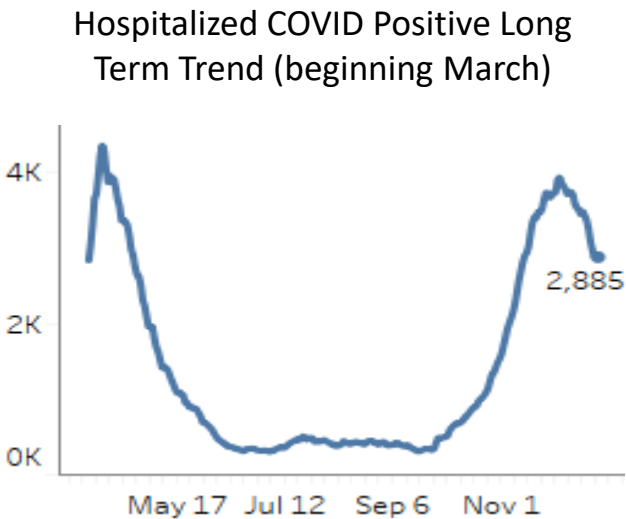
# Statewide Hospitalization Trends: Regional COVID+ Census

Hospitalization Trends 8/1/2020 – 12/21/2020
Confirmed Positive by Region
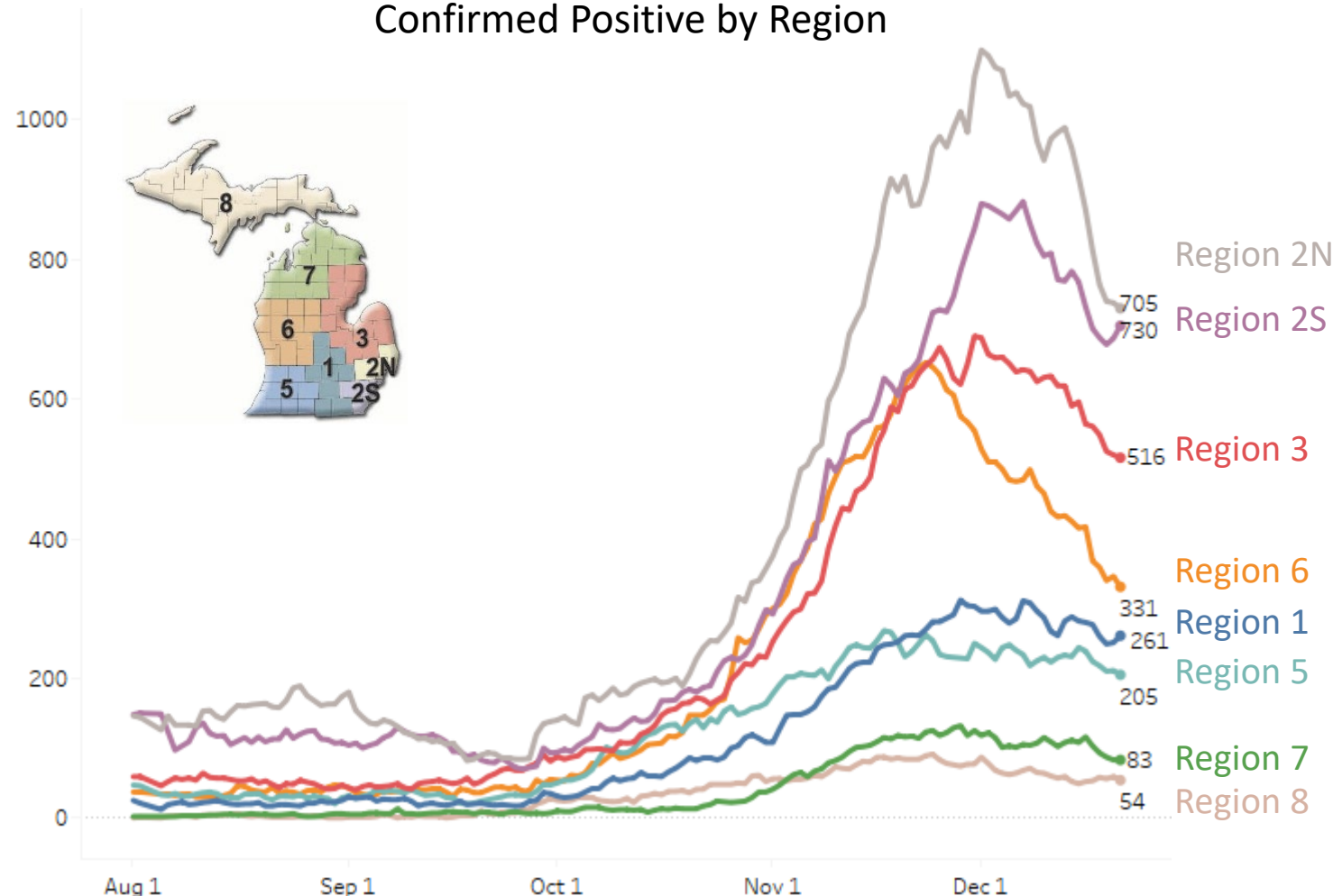


All regions are showing decreasing trends in COVID+ census, except Region 8 which is flat.

Regions 2N, 6, 7 show the largest percentage declines this week.

Region 3 remains most heavily impacted on a population basis.

| Region | Growth from Last Week | COVID+ Hospitalizations / MM |
|---|---|---|
| Region 1 | -9% | 241/M |
| Region 2N | -26% | 318/M |
| Region 2S | -7% | 328/M |
| Region 3 | -13% | 455/M |
| Region 5 | -11% | 215/M |
| Region 6 | -22% | 226/M |
| Region 7 | -25% | 166/M |
| Region 8 | 4% | 174/M |

## Hospitalization Trends 8/1/2020 – 12/21/2020
## Confirmed Positive in ICUs



Confirmed Positive in ICU

668
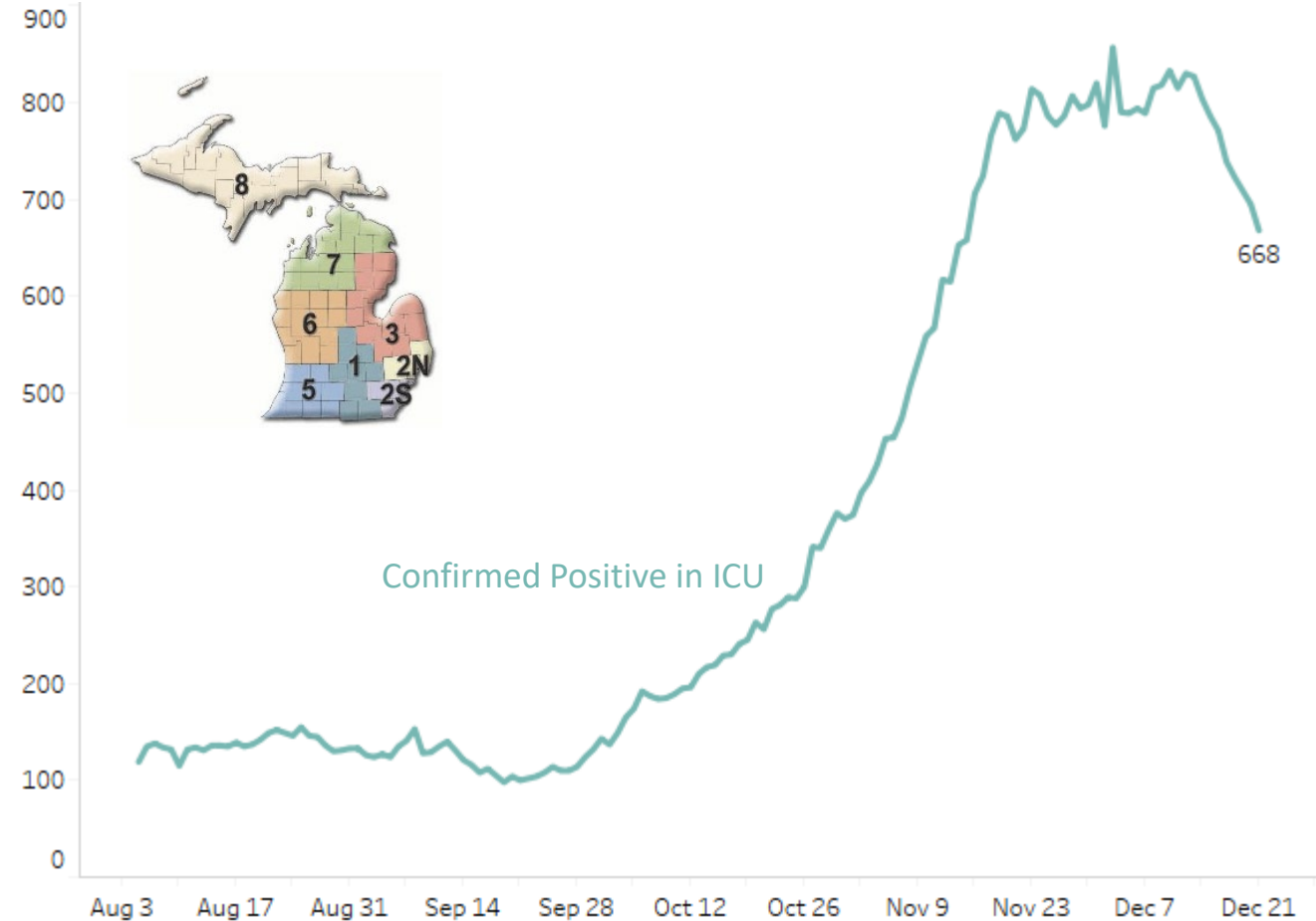
COVID census in ICUs has declined by ~16% over the past week, with nearly all regions except Region 5 showing a decline.

Only Regions 1 and 3 continue to have >30% of ICU beds occupied by COVID+ patients

| Region | Adult COVID+ in ICU (% Δ from last week) | Adult ICU Occupancy | % of Adult ICU beds COVID+ |
|---|---|---|---|
| Region 1 | 60 (-21%) | 84% | 31% |
| Region 2N | 135 (-23%) | 82% | 24% |
| Region 2S | 182 (-11%) | 87% | 24% |
| Region 3 | 124 (-15%) | 93% | 33% |
| Region 5 | 39 (+8%) | 83% | 24% |
| Region 6 | 76 (-24%) | 73% | 21% |
| Region 7 | 40 (-20%) | 76% | 22% |
| Region 8 | 12 (-14%) | 65% | 21% |

Hospital bed capacity updated as of 12/18

# COVID-19 deaths: State of Michigan

**Cumulative confirmed and probable deaths**, by date of onset of symptoms
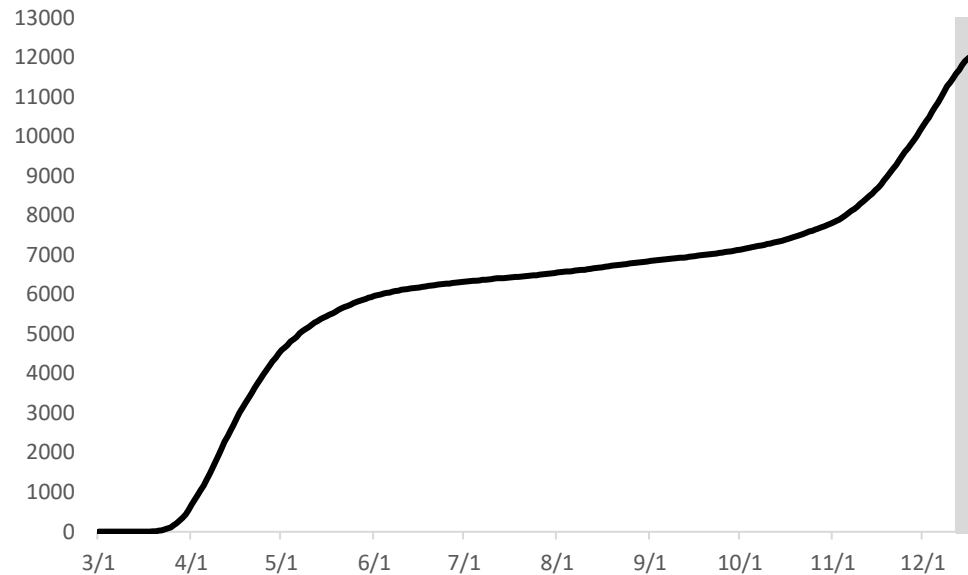
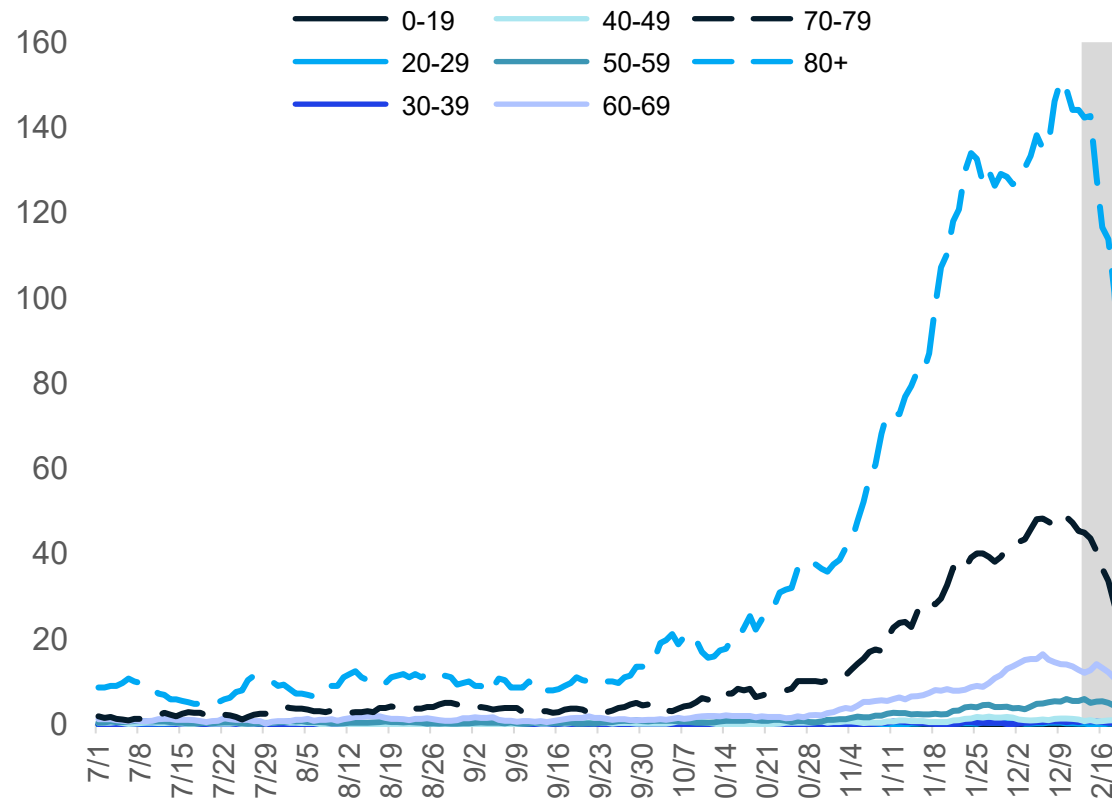**New confirmed and probable deaths**, by date of onset of symptoms
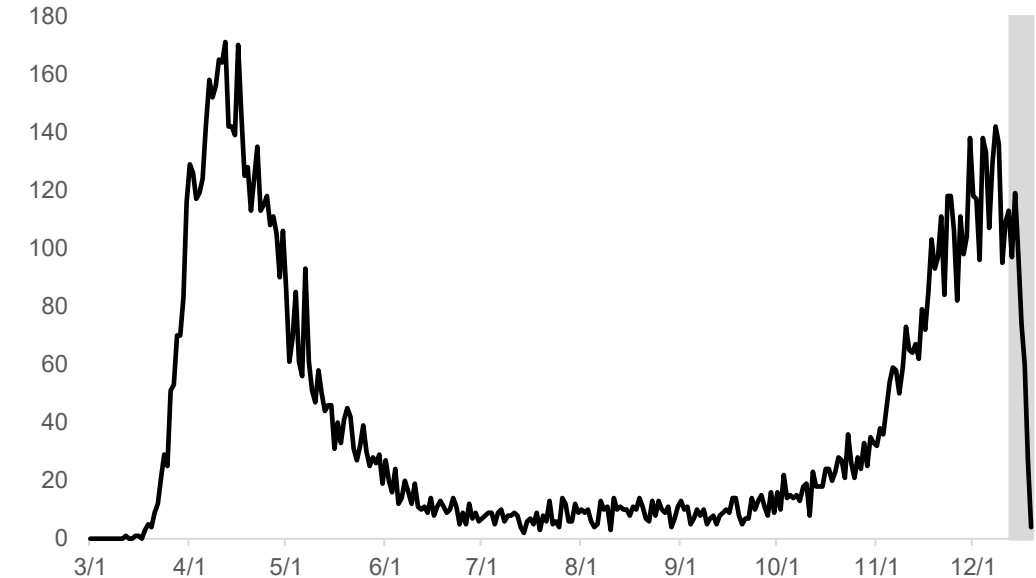


**Updates since last week:**

Current deaths are a lagging indicator of cases, but the rate of increase continues to slow
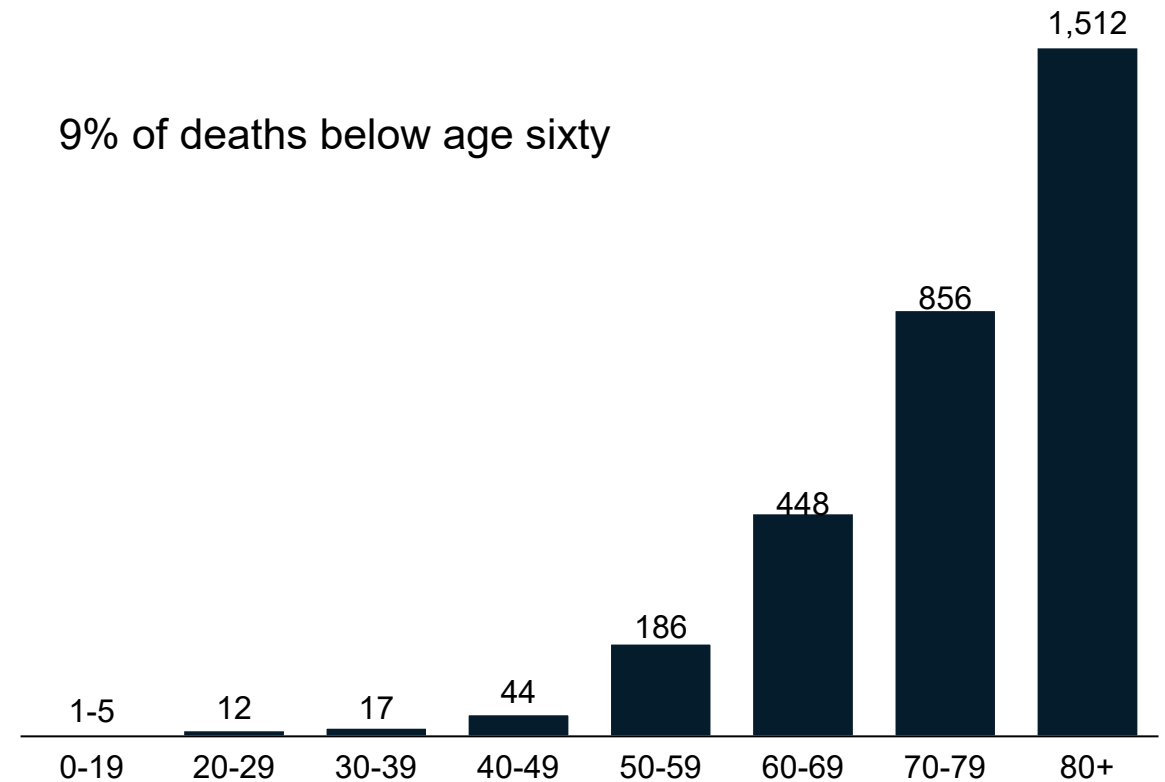
The current number of deaths is more than 10x the number of deaths in early October

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 12/19)**



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

9% of deaths below age sixty

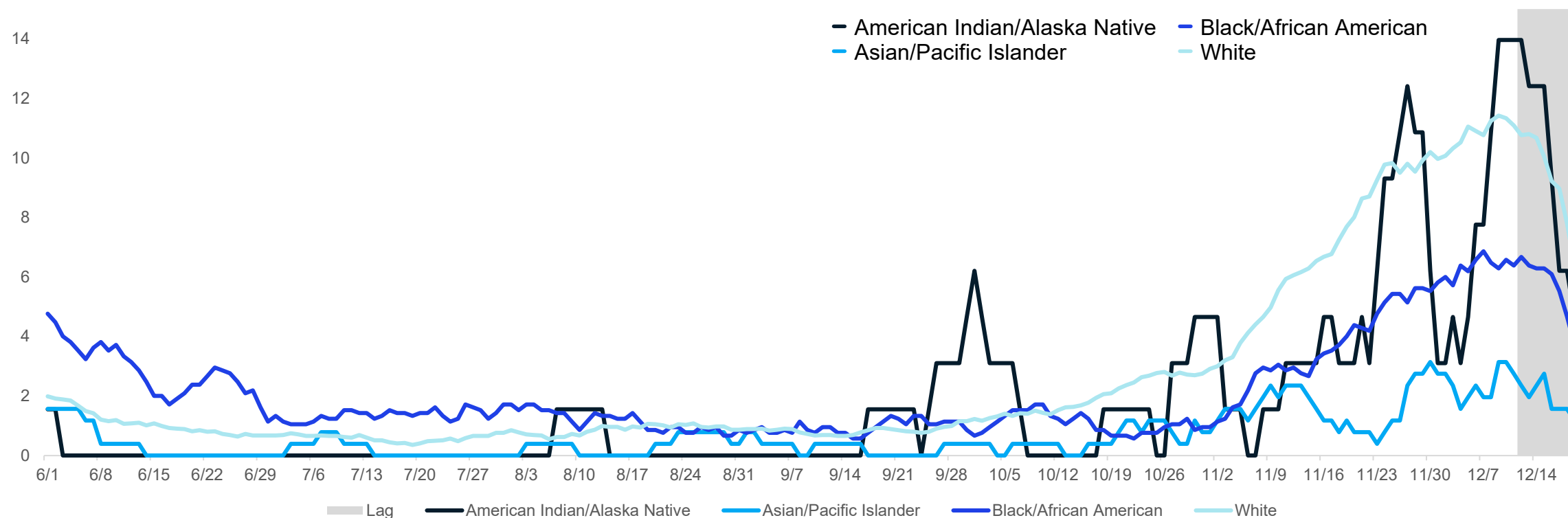| Age group | Deaths |
|-----------|--------|
| 0-19 | 1-5 |
| 20-29 | 12 |
| 30-39 | 17 |
| 40-49 | 44 |
| 50-59 | 186 |
| 60-69 | 448 |
| 70-79 | 856 |
| 80+ | 1,512 |

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)**
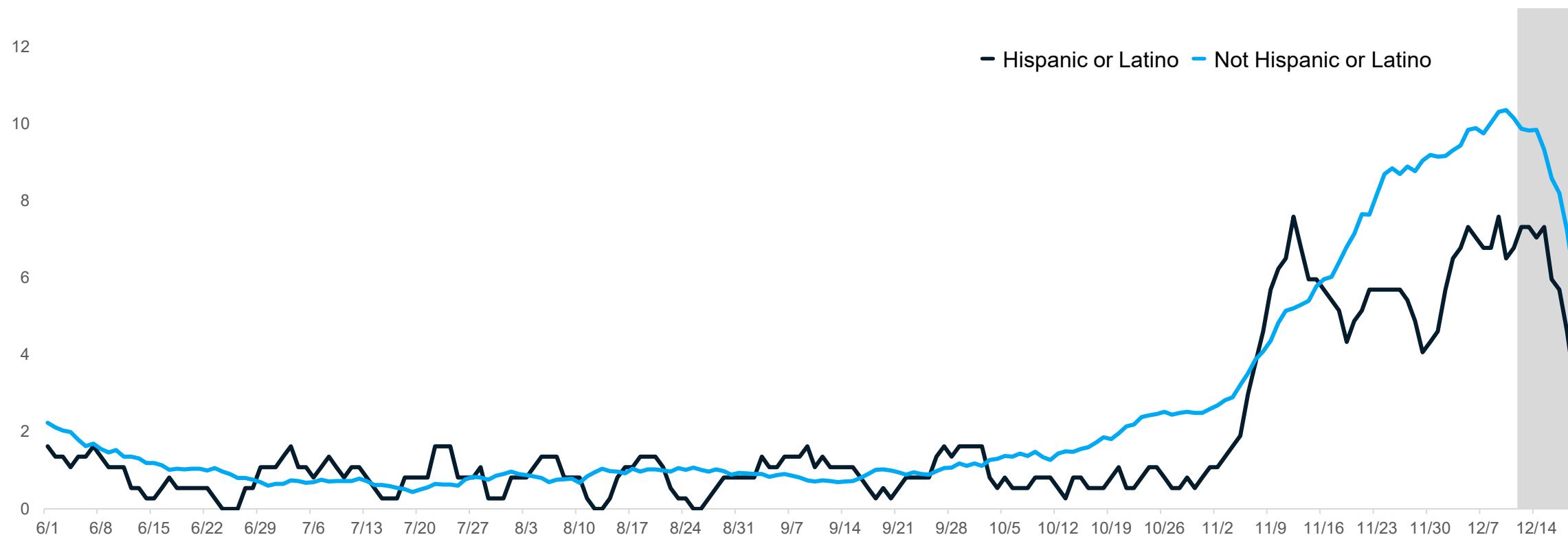**By race category**



Note: Multiple Races, Other, and Unknown race/ethnicity are not included in calculations
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 ethnicity**



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

# How is public health capacity?

Testing volume has declined to 50,407

- 11.3% are antigen tests
- Testing by county ranges from 2,000 to 7,500 daily tests per million residents

Compared to other states, Michigan remains relatively stable in testing response since last week

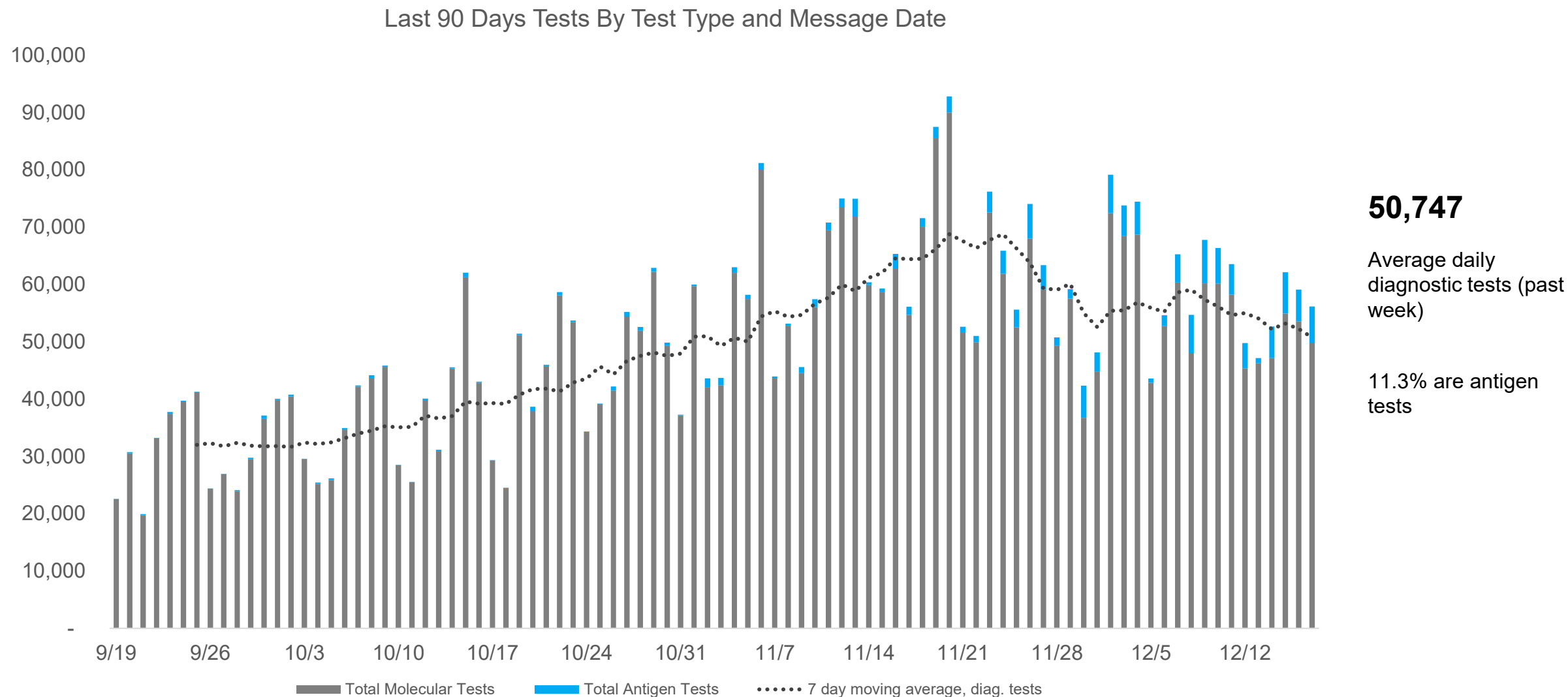A higher percentage of case investigations are being completed

- Primarily attributed due to a decrease in number of cases

Metrics for cases investigation and contact tracing are all trending in a favorable or stable direction

COVID-19 Vaccine Program Enrolled providers in every county in the state

- 140,450 vaccination doses shipped (118,950 Pfizer)
- 13,321 reported administered

# Daily diagnostic tests, by message date

## Last 90 Days Tests By Test Type and Message Date



**50,747**

Average daily diagnostic tests (past week)

11.3% are antigen tests

Legend: Total Molecular Tests — Total Antigen Tests — 7 day moving average, diag. tests

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

# Daily molecular tests

| | State | Avg. tests (K) |
|---|---|---|
| 1 | California | 318.0 |
| 2 | Illinois | 91.9 |
| 3 | New Jersey | 72.4 |
| 4 | North Carolina | 58.0 |
| **5** | **Michigan (↑1)** | **51.1** |
| 6 | Florida | 48.8 |
| 7 | Connecticut | 35.8 |
| 8 | Georgia | 34.9 |
| 9 | Louisiana | 26.6 |
| 10 | Massachusetts | 23.1 |
| 11 | Arizona | 20.4 |
| 12 | Kentucky | 19.3 |
| 13 | New Mexico | 14.9 |
| 14 | Indiana | 14.1 |
| 15 | Maryland | 14.0 |
| 16 | Minnesota | 13.6 |
| 17 | Arkansas | 12.7 |
| 18 | Alabama | 11.9 |
| 19 | Colorado | 11.3 |
| 20 | Mississippi | 9.6 |
| 21 | Alaska | 8.5 |
| 22 | Missouri | 8.1 |
| 23 | Maine | 7.7 |
| 24 | District of Columbia | 7.2 |
| 25 | Kansas | 5.7 |
| 26 | Montana | 4.8 |
| 27 | Iowa | 3.5 |
| 28 | Idaho | 3.1 |

# Weekly % of pop. tested

| | State | Weekly % tested |
|---|---|---|
| 1 | Alaska | 8.2% |
| 2 | District of Columbia | 7.1% |
| 3 | Connecticut | 7.0% |
| 4 | New York | 7.0% |
| 5 | New Jersey | 5.7% |
| 6 | California | 5.6% |
| 7 | Tennessee | 5.2% |
| 8 | Illinois | 5.1% |
| 9 | New Mexico | 5.0% |
| 10 | West Virginia | 4.5% |
| 11 | South Carolina | 4.2% |
| 12 | Oregon | 4.1% |
| **13** | **Michigan (↓1)** | **4.0%** |
| 14 | Louisiana | 4.0% |
| 15 | Maine | 4.0% |
| 16 | North Carolina | 3.9% |
| 17 | Ohio | 3.4% |
| 18 | Montana | 3.2% |
| 19 | Kentucky | 3.0% |
| 20 | Arkansas | 2.9% |
| 21 | Oklahoma | 2.8% |
| 22 | Virginia | 2.6% |
| 23 | Washington | 2.5% |
| 24 | Massachusetts | 2.4% |
| 25 | Georgia | 2.3% |
| 26 | Mississippi | 2.3% |
| 27 | Texas | 2.3% |
| 28 | Delaware | 2.2% |

# Percent positive

| | State | % Positive |
|---|---|---|
| 1 | District of Columbia | 3.4% |
| 2 | Oregon | 5.2% |
| 3 | Alaska | 5.2% |
| 4 | New York | 5.4% |
| 5 | Maine | 5.8% |
| 6 | Washington | 5.9% |
| 7 | New Jersey | 6.1% |
| 8 | Connecticut | 6.4% |
| 9 | Illinois | 8.2% |
| 10 | Vermont | 8.3% |
| 11 | Louisiana | 9.8% |
| 12 | South Carolina | 10.1% |
| 13 | New Mexico | 10.2% |
| 14 | North Carolina | 10.5% |
| 15 | Virginia | 10.9% |
| 16 | West Virginia | 11.2% |
| 17 | Montana | 11.8% |
| **18** | **Michigan (↔)** | **12.5%** |
| 19 | California | 12.9% |
| 20 | Georgia | 13.4% |
| 21 | Kentucky | 14.8% |
| 22 | Ohio | 15.3% |
| 23 | Texas | 16.7% |
| 24 | Maryland | 17.1% |
| 25 | Tennessee | 17.2% |
| 26 | Arkansas | 17.9% |
| 27 | Oklahoma | 20.2% |
| 28 | Minnesota | 20.3% |

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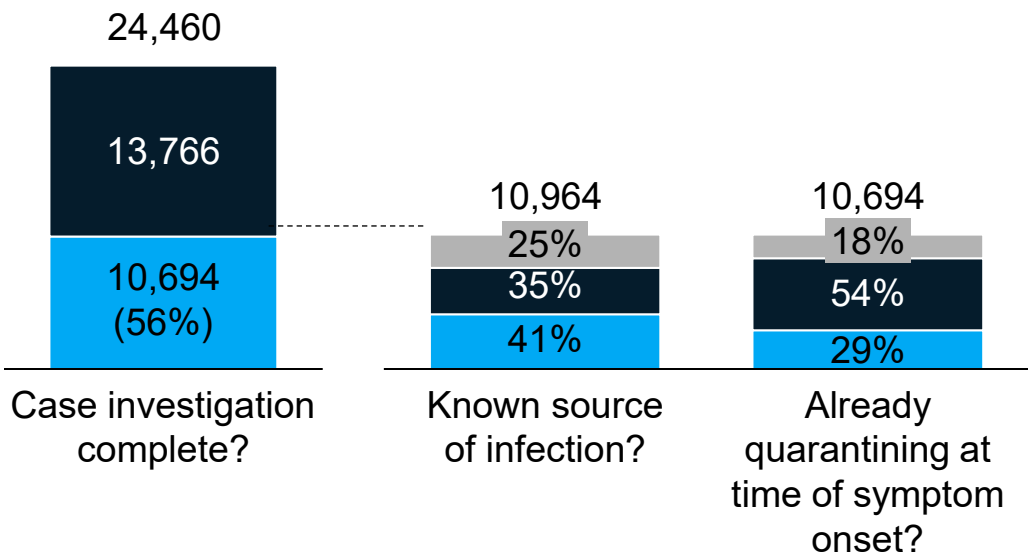SOURCE: Numerical Data – MDSS, COVID Tracking Project, U.S. Census Bureau.

# New Case Investigation Metrics

New Communicable Disease metrics slightly increased since last week:
- 41% of investigated cases having a known source (42% last week, 43% week prior)
- 29% of investigated cases noting that they were quarantining before symptoms (27% last week)



**Case report form information, 12/12-12/18**
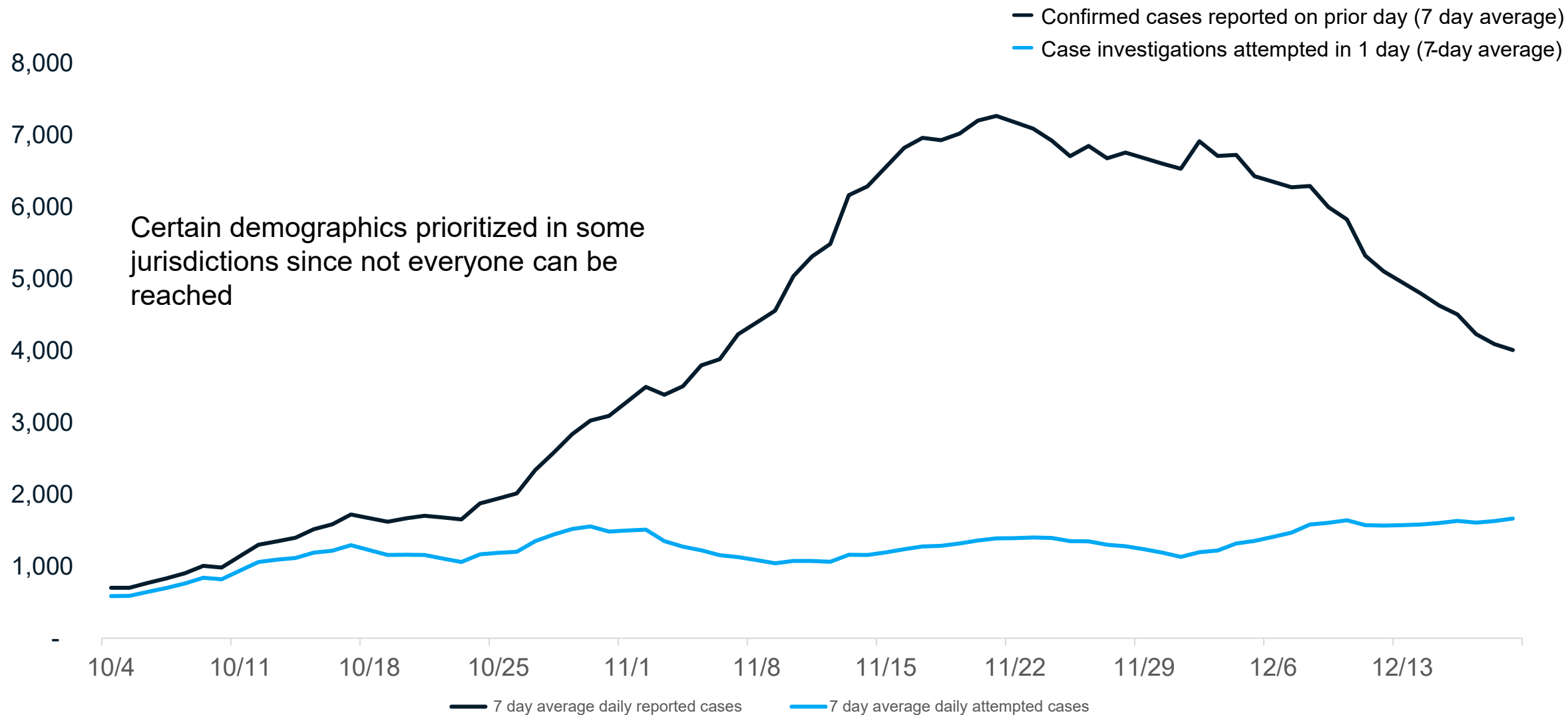
**Case report form information, 12/04-12/11**

Legend: ■ Yes  ■ No  ■ Not answered

Source: MDHHS – Michigan Disease Surveillance System
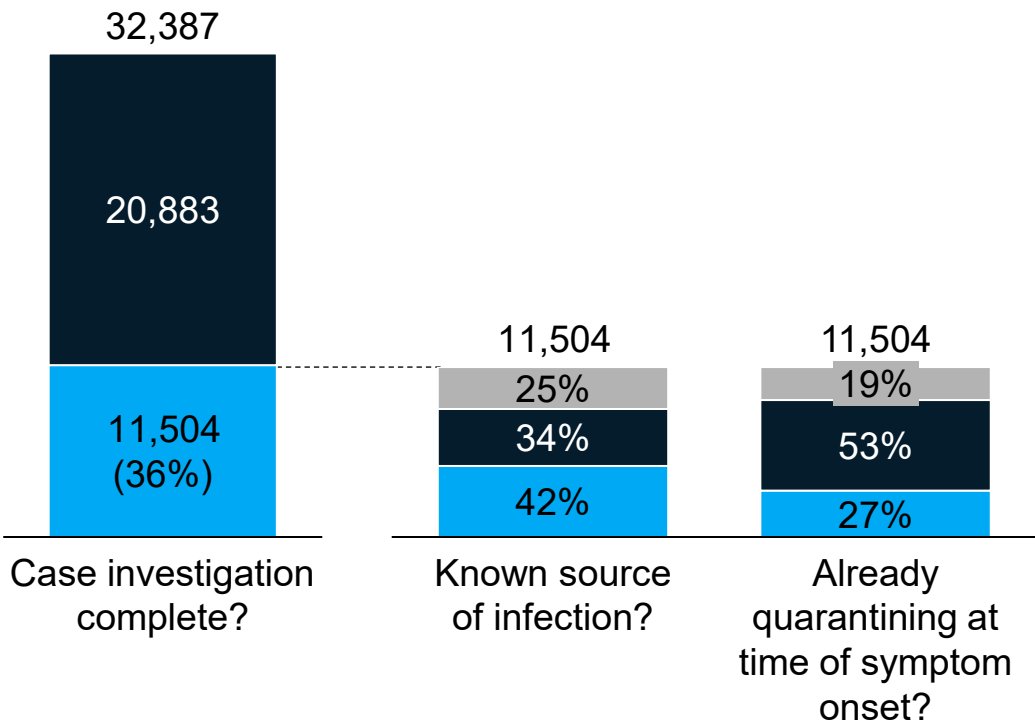
# Testing, case investigation, and contact tracing: Current state

| | 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 time** for cases[6] | **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** | 5.1K | 10.0% | 3.11 days | 46.1%[1] | 32.3%[2] | 30.9%[3] | 99.2%[4] | 62.1%[5] | 73.7% |
| **Trend since last week** | *Favorable* | *Favorable* | *Favorable* | *Favorable* | *Favorable* | *Favorable* | *Favorable* | *Stable* | |

63% of contacts successfully complete intake within five days

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 Michigan Medical Advantage Group

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

Legend:
- Confirmed cases reported on prior day (7 day average)
- Case investigations attempted in 1 day (7-day average)
- 7 day average daily reported cases
- 7 day average daily attempted cases

29

# Vaccine Data at [Michigan.gov/COVIDVaccine](Michigan.gov/COVIDVaccine)

## COVID Vaccination Program  Enrolled Providers

Based on data reported to Michigan's immunization registry, the Michigan Care Improvement Registry. The list of Providers enrolled in the COVID Vaccination Program will be updated every Friday.

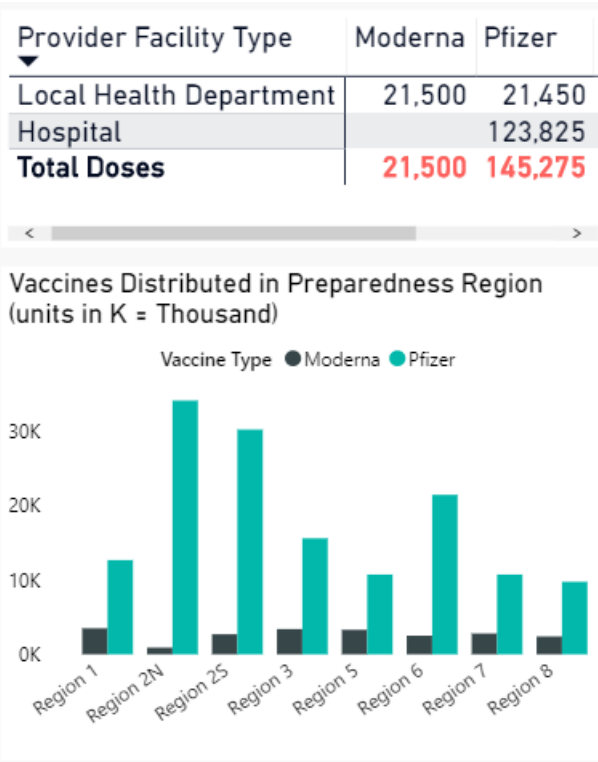Number Of Providers By Practice Type Enrolled In COVID Vaccination Program

# Sites
- 1 or 2 sites
- 3-5 sites
- 6-33 sites
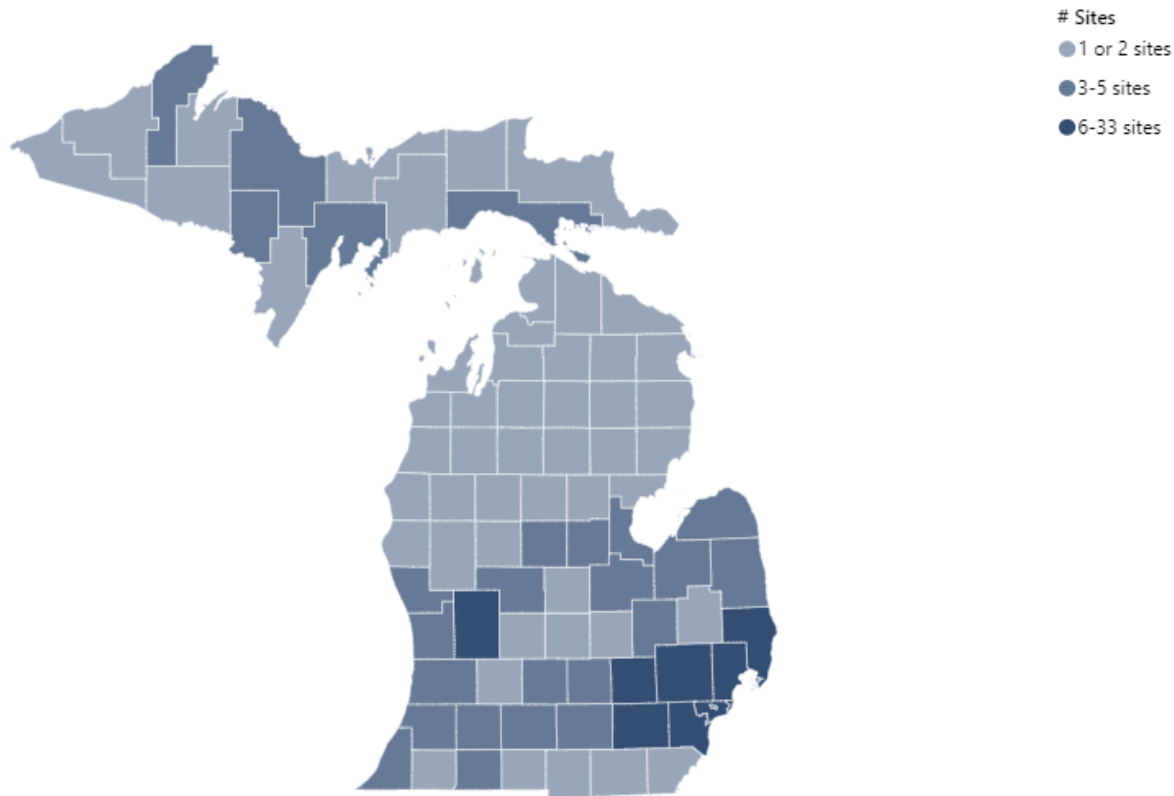
**Friday Update**

**303 Providers Enrolled**

All counties have at least one site

- 122 hospitals

- 94 LHD

Does not include federal

pharmacy partners

Source: MCIR Data in Dashboard on  Michigan.gov/COVIDVaccine

# Doses shipped and administered

166,775 vaccination doses shipped and 26,737 reported administered

| Provider Facility Type | Moderna | Pfizer |
|---|---|---|
| Local Health Department | 21,500 | 21,450 |
| Hospital | | 123,825 |
| **Total Doses** | **21,500** | **145,275** |

Vaccines Distributed in Preparedness Region (units in K = Thousand)



COVID Vaccine Doses Administered by Date (units in K = Thousand)
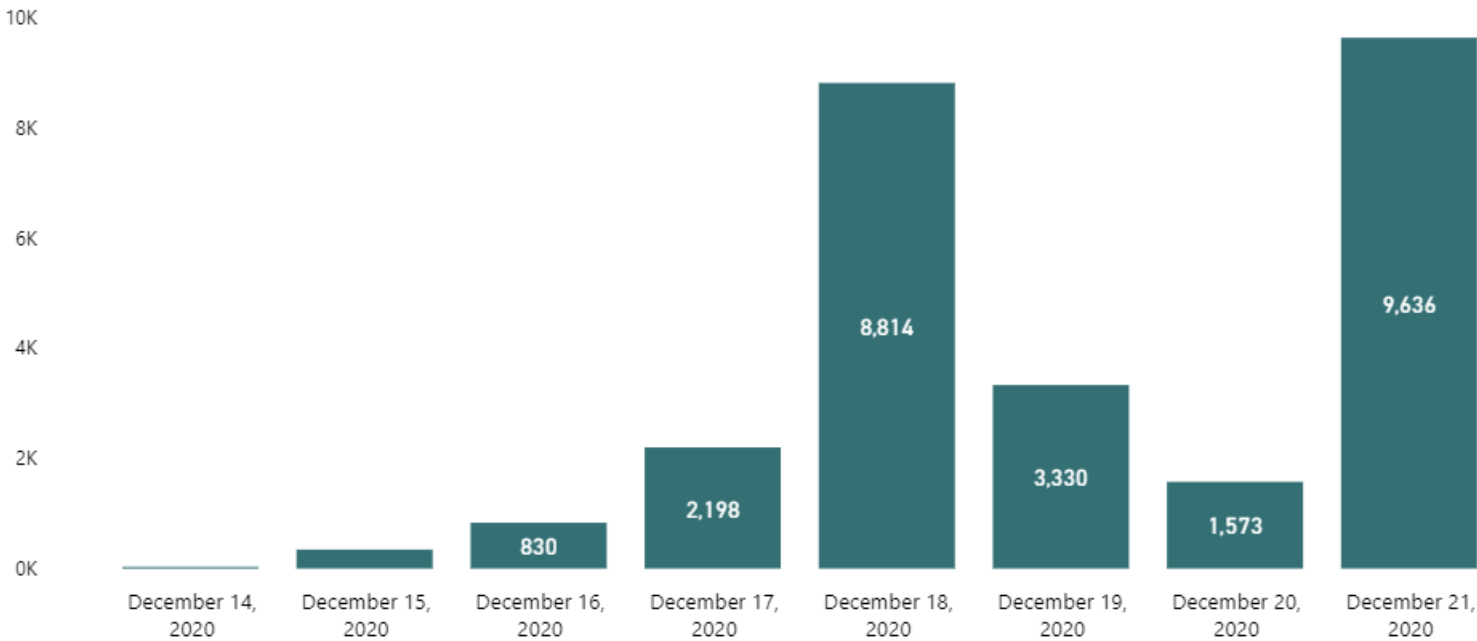


**Doses administered reported by date the vaccination occurred.  Providers have 24 hours to report vaccination to MDHH**

**MDHHS pulls data each morning for posting to website by 3 pm each day.**

Source: MCIR Data in Dashboard on  Michigan.gov/COVIDVaccine
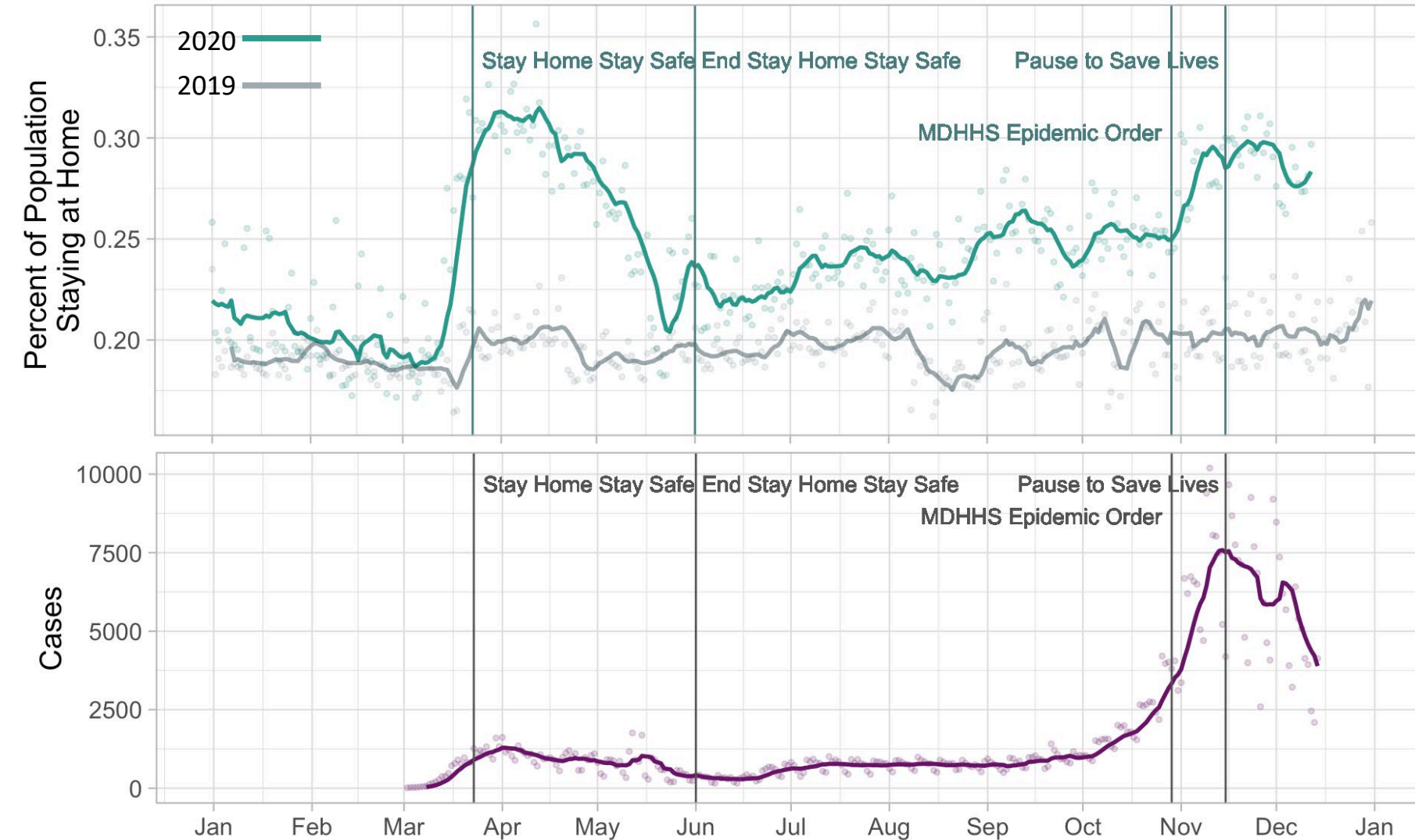
# Mobility

Mobility data show that Michiganders are staying home

Recent survey shows that most Michiganders had Thanksgiving dinner with their household only

Recent case resurgences in Europe

New features for MI Start Map dashboard (mistartmap.info)

# How many people are staying at home in Michigan?



- Stay-at-home levels have recently increased
- Overall increase compared to 2019
- Stay-home levels have varied but stayed relatively high (most recent data is 12/12)

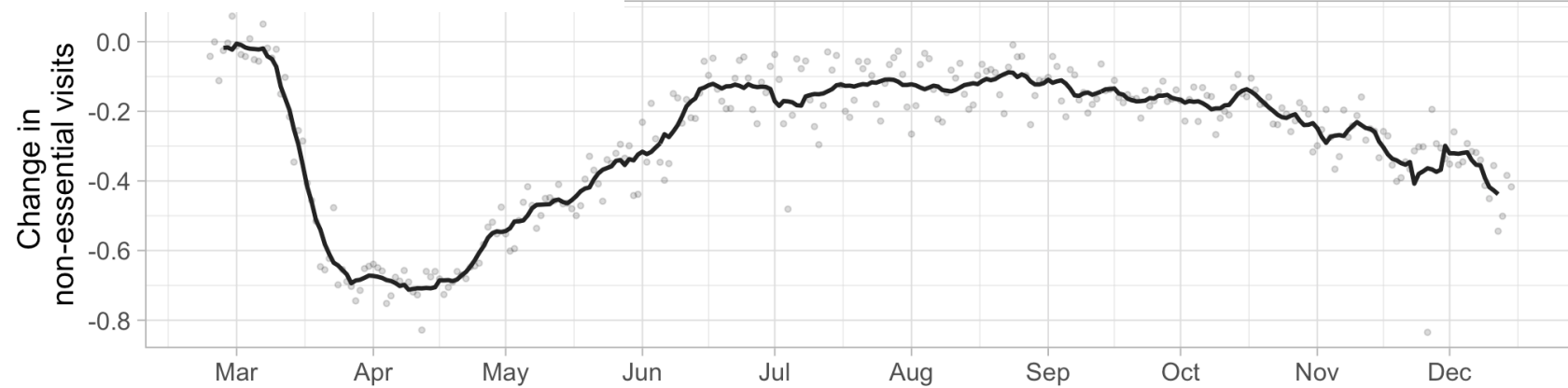Data Sources: Bureau of Transportation Statistics, MDHHS

# Unacast mobility patterns show declines for MI

Particularly pronounced decline in encounter density, but consistent across all three metrics (data through 12/19)
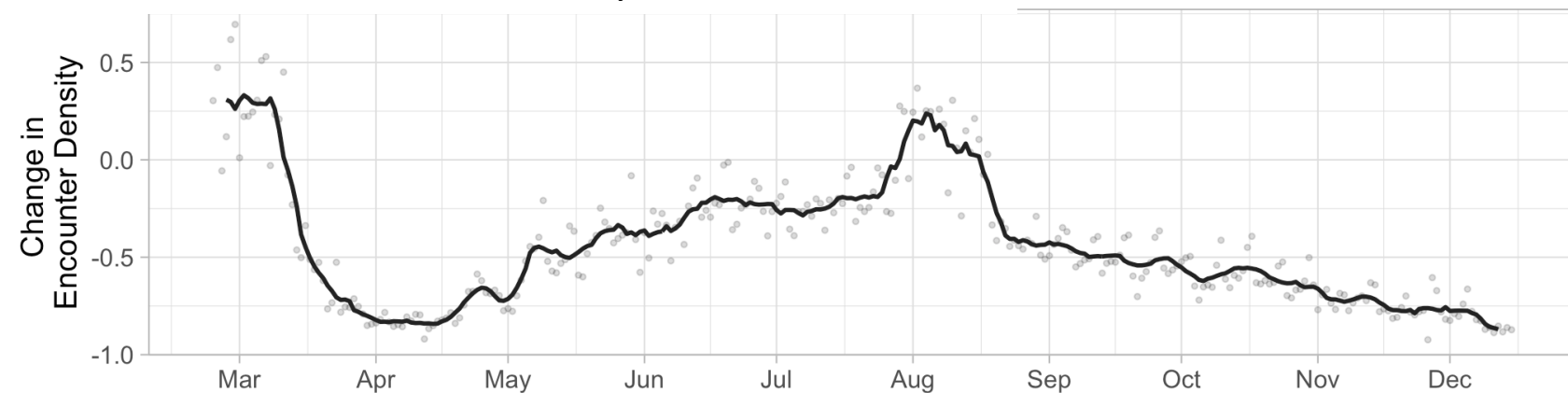
Change in average mobility
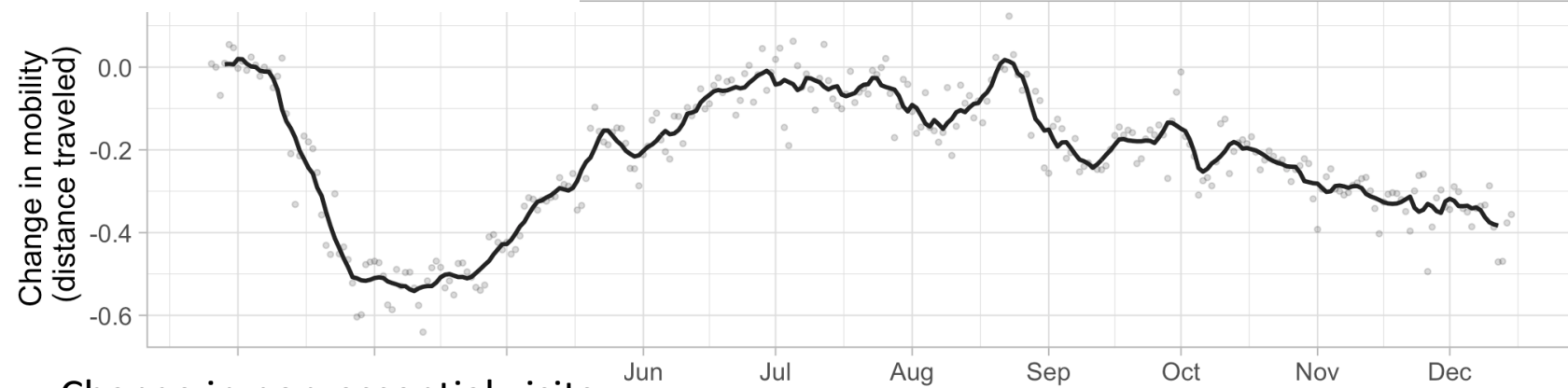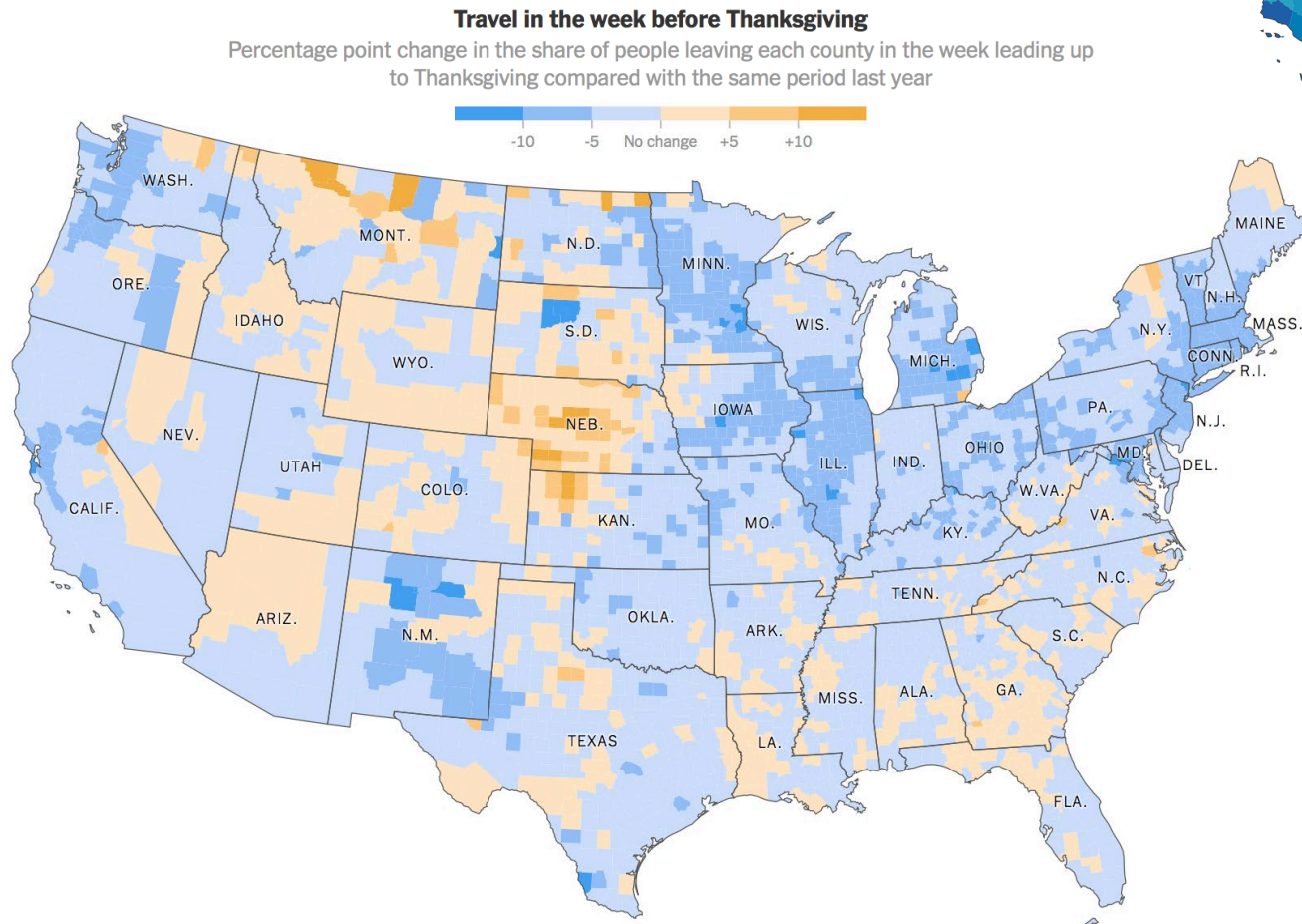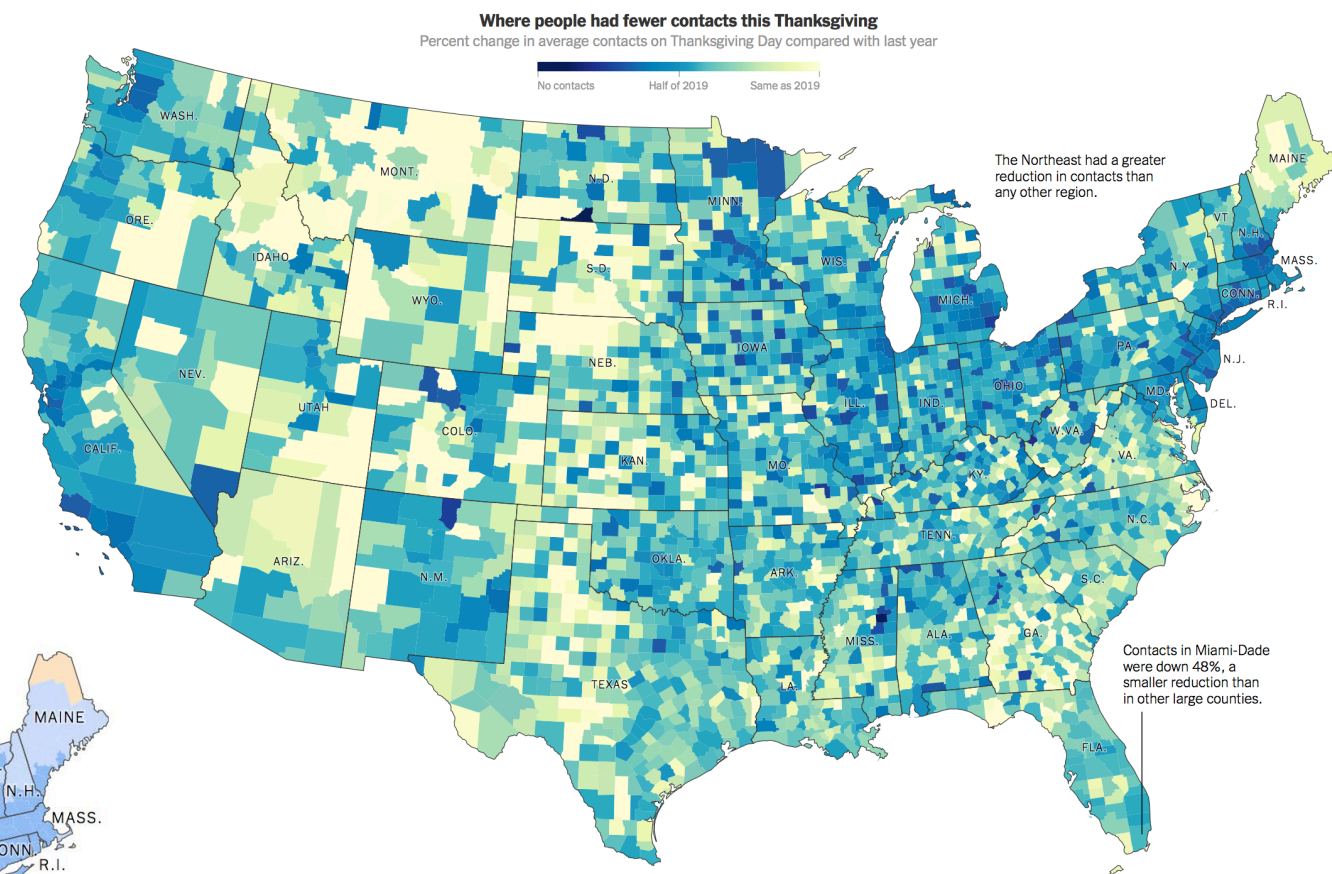
Change in non-essential visits

Difference in encounter density

# Michiganders traveled less and had fewer contacts this Thanksgiving



**Where people had fewer contacts this Thanksgiving**
Percent change in average contacts on Thanksgiving Day compared with last year

No contacts    Half of 2019    Same as 2019

The Northeast had a greater reduction in contacts than any other region.

Contacts in Miami-Dade were down 48%, a smaller reduction than in other large counties.



**Travel in the week before Thanksgiving**
Percentage point change in the share of people leaving each county in the week leading up to Thanksgiving compared with the same period last year

-10    -5    No change    +5    +10

- Mobility data suggest that travel in Michigan the week before Thanksgiving was lower than 2019 in almost all counties
- Most Michigan counties also had fewer contacts on Thanksgiving compared to 2019
- Northeast had larger reductions in travel and contacts than much of the US

Source: NYT, cuqbiq mobility data

# Michiganders mostly had Thanksgiving dinner with people in their household only

Almost all areas had <40% of people dining with people outside household (except some parts of Jackson county)



**Share of people eating Thanksgiving dinner with people outside their household**

20%    30%    40%    50%
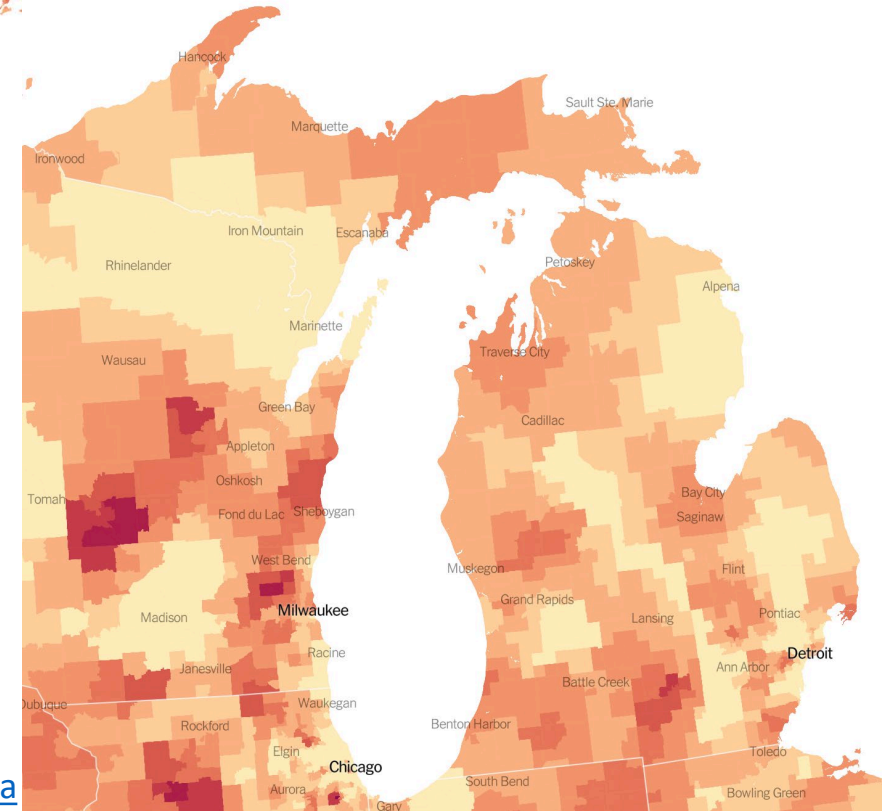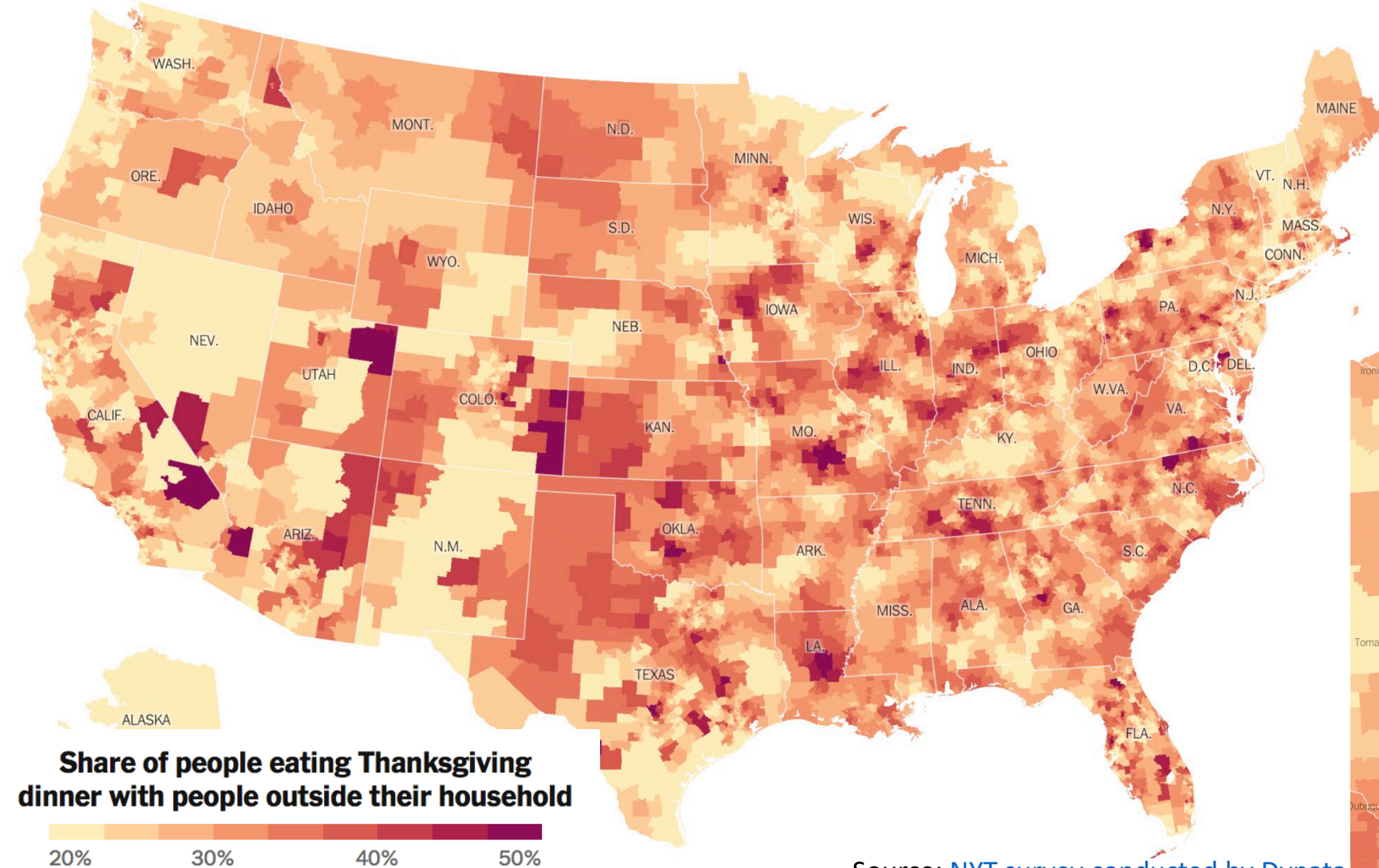
# Other countries have recently seen a resurgence after the largest case counts yet in the pandemic



Daily new confirmed COVID-19 cases per million people
Shown is the rolling 7-day average.
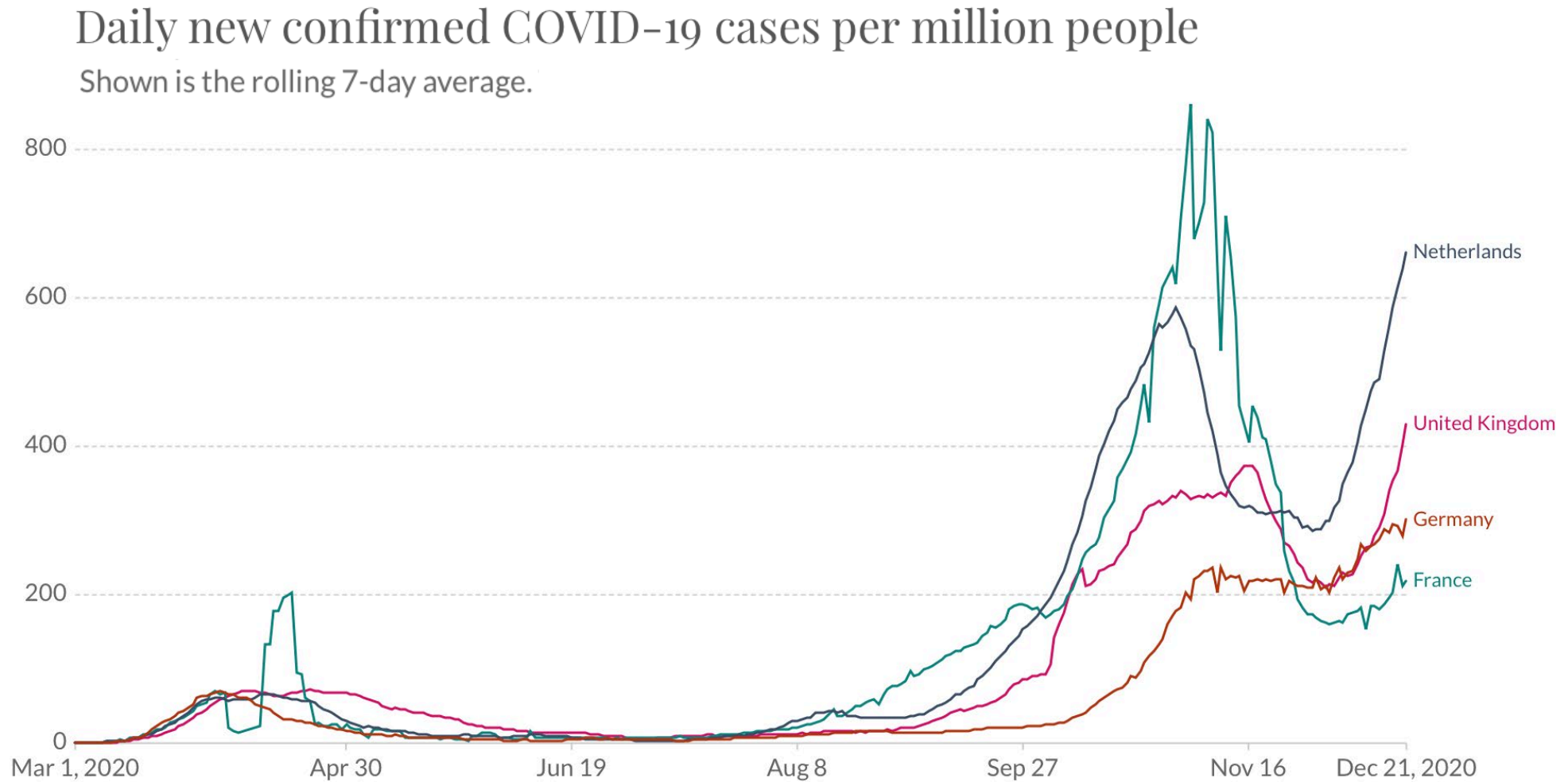
Source: Johns Hopkins University CSSE COVID-19 Data – Last updated 22 December, 06:06 (London time)

# MI Start Map: new indicators & plot features

## Epidemic Spread

**Test Results**
- 10.5% positive tests *
- 48.6k daily tests administered *

**New Cases**
- 316.6 daily/million *
- 3,152.5 daily *
- ↘ 33 days ⓘ Nov 14 - Dec 16

**Deaths**
- 189 deaths

**MI Symptoms** ⓘ
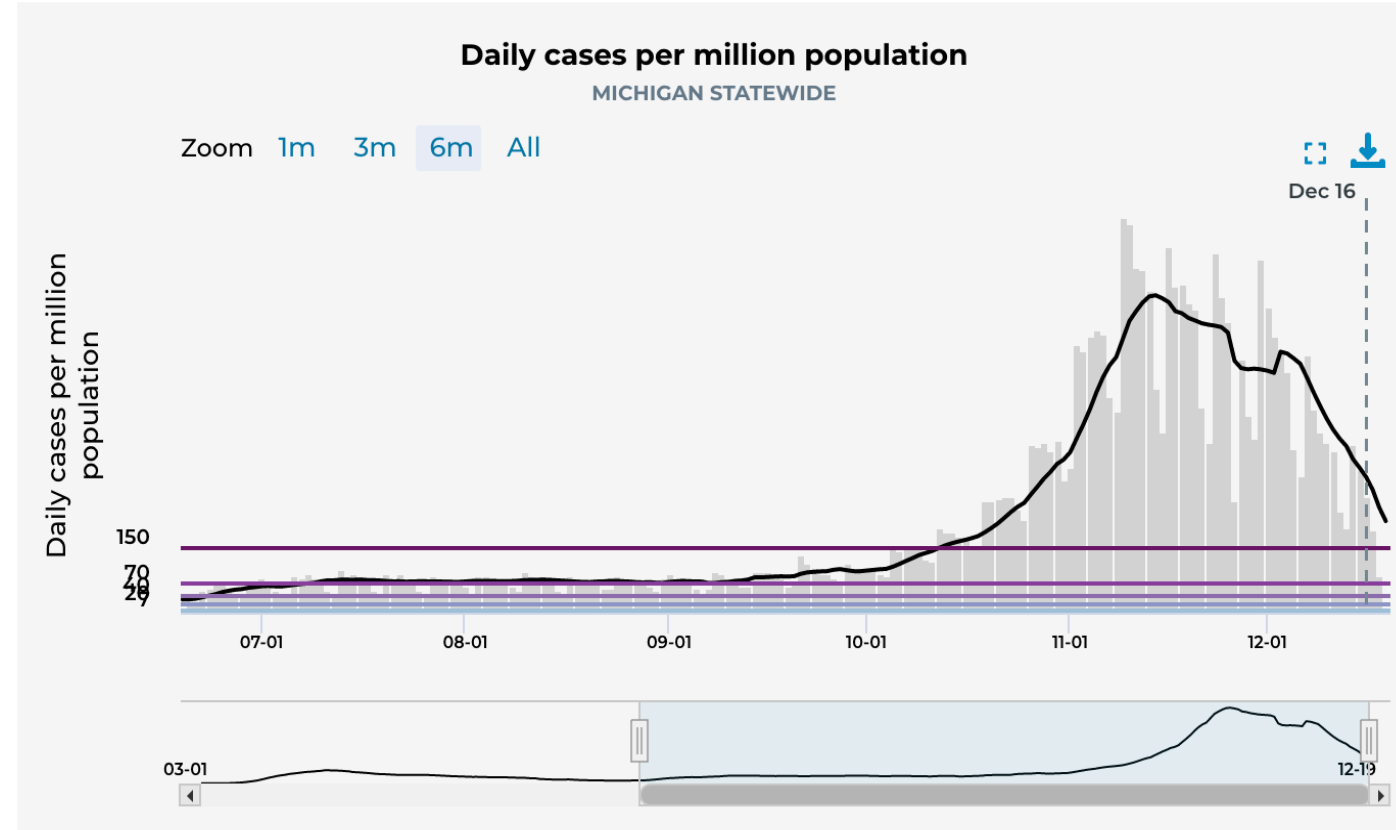- 1.5% with at risk COVID symptoms
- 29.8k surveys

**Syndromic Data**
- 0.7% ER visits with COVID symptoms *

## Public Health Capacity

**Tests**
- 4.8k daily per million *
- 48.6k daily tests administered *



**Daily cases per million population**
MICHIGAN STATEWIDE

Zoom  1m  3m  6m  All

mistartmap.info

# MI Safe Start Map

Track the risk levels of COVID-19 indicators

## Compare

| OVERVIEW | GRAPHS |
|---|---|

**DATE**

December 17, 2020

**METRICS SELECTED**

8 Selected

* Over previous 7 days

**CORRECTIONAL FACILITIES DATA**

Exclude

**PROBABLE CASES**

Include

**AREAS SELECTED**

**Metrics Overview** * Over previous 7 days

### Risk Levels

| | | | | | |
|---|---|---|---|---|---|
| Low | A | B | C | D | E |

| AREA | REGION RISK LEVEL (DEC 17) | COUNTY RISK LEVEL (DEC 17) | DAILY CASES PER MIL. * (DEC 10) | CDC CASE TREND (DEC 16) | % POSITIVE TESTS * (DEC 15) | DAILY TESTS PER MIL. * (DEC 15) | DEATHS PER MIL. * (DEC 17) | SYNDROMIC % OF ER VISITS * (DEC 14) |
|---|---|---|---|---|---|---|---|---|
| Michigan | | | 439.3 | 33d | 10.7% | 4,984.9 | 71.1 | 0.8% |
| Detroit | | | 401.8 | 29d | 11.0% | 4,833.3 | 27.1 | 0.7% |
| Grand Rapids | | | 501.9 | 35d | 10.7% | 5,106.4 | 11.2 | 1.2% |
| Jackson | | | 589.3 | 29d | 11.6% | 5,935.8 | 2.0 | 0.7% |
| Kalamazoo | | | 481.3 | 34d | 11.5% | 4,823.9 | 8.4 | 1.0% |
| Lansing | | | 439.8 | 34d | 9.3% | 4,392.6 | 4.4 | 0.5% |
| Saginaw | | | 540.0 | 34d | 12.7% | 5,009.1 | 10.7 | 0.6% |
| Traverse City | | | 357.1 | 28d | 9.7% | 3,757.4 | 4.0 | 1.5% |
| Upper Peninsula | | | 408.6 | 38d | 5.7% | 4,984.9 | 3.1 | 0.5% |
| Alcona | | Risk Level: E | 427.3 | 14d | 9.3% | 3,101.3 | 0.2 | |
| Alger | | E | 217.5 | 32d | 2.2% | 4,133.1 | 0.0 | |
| Allegan | | E | 474.7 | 36d | 11.1% | 3,762.0 | 0.7 | |

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