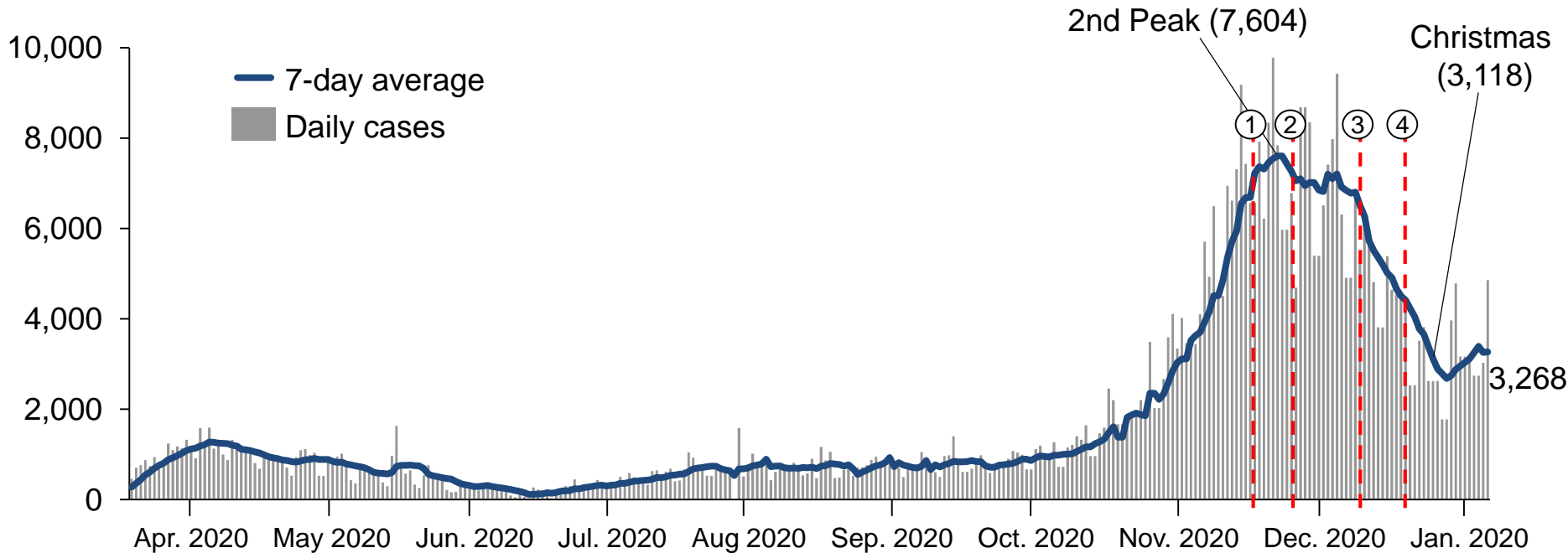

Health Update

Business Advisory Group
January 7th, 2020

Case levels across Michigan have risen slightly in the wake of the holidays; some of this may be due to lack of testing at year end

Daily new cases and 7-day average



① 11/15 New MDHHS order

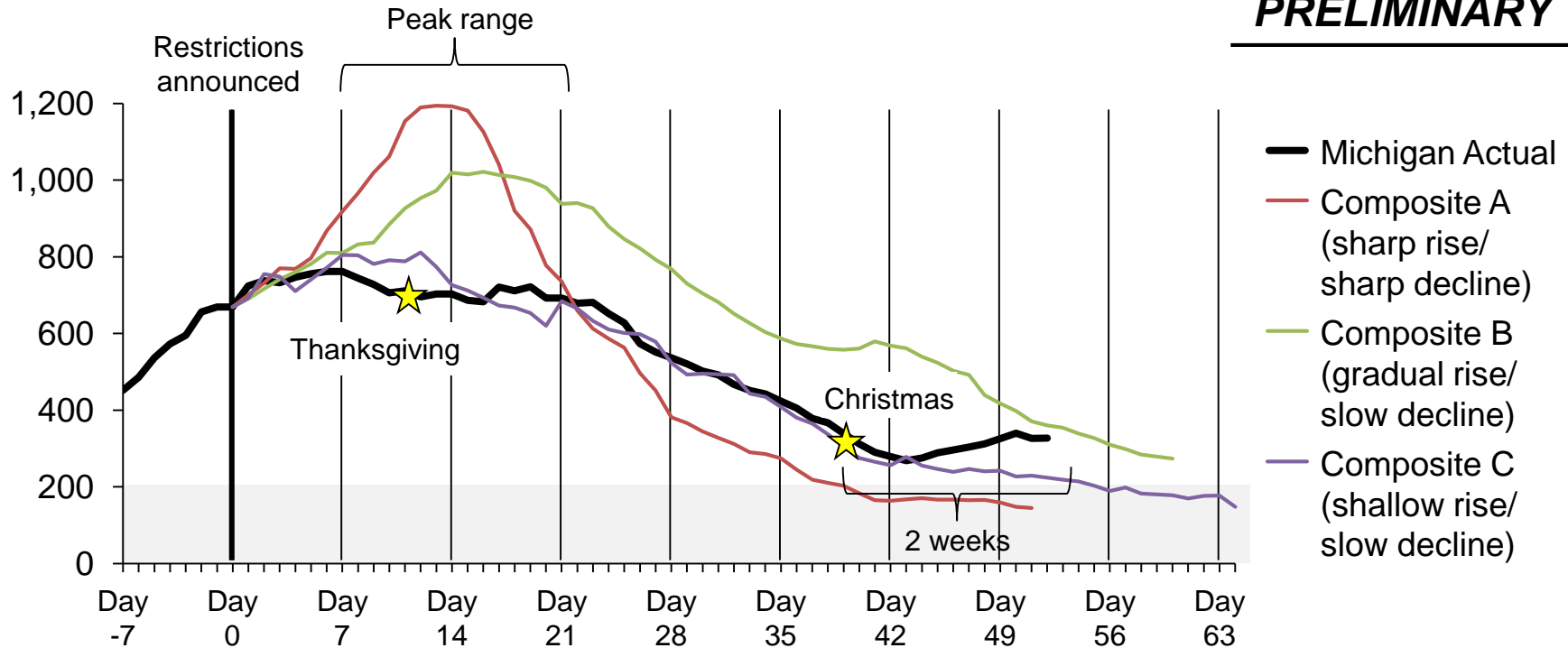
② 11/26 Thanksgiving

③ 12/7 Extension of MDHHS order

④ 12/18 Reopening of lower risk businesses

Michigan's case level trajectory has pulled away from the "Composite C" curve, almost certainly due to impacts from the holiday period

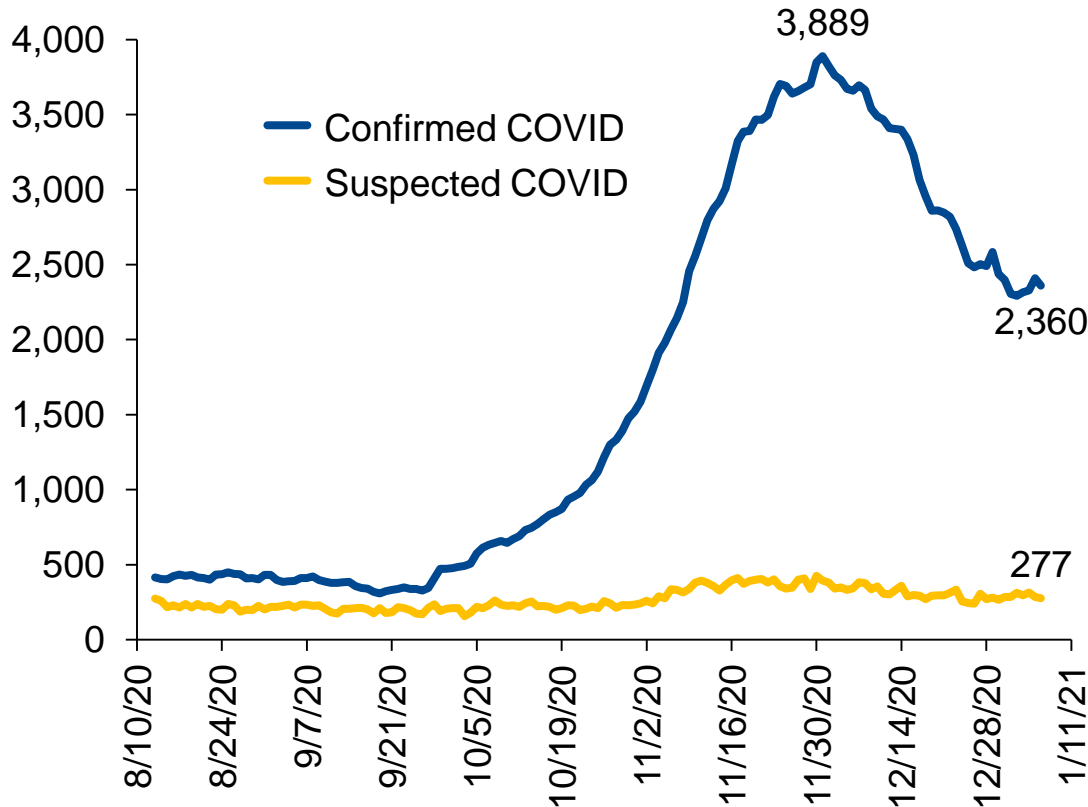
PRELIMINARY



- **As Michigan has pulled away from Composite C, it may take until mid to late January to fall below 200 cases per million**

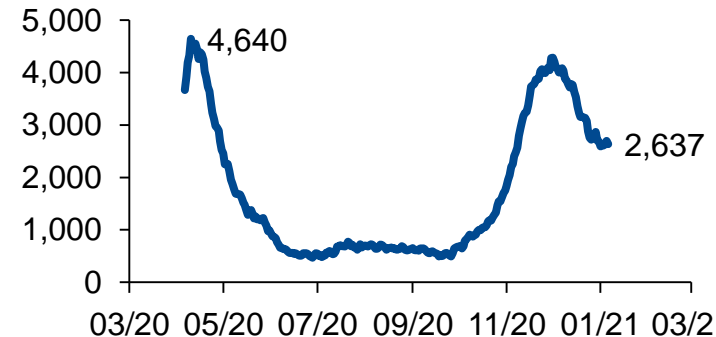
Hospitalizations are at ~57% of the spring high and are down ~1/3 from the recent peak; however, the recent decline has recently stalled

Hospitalization Trends 8/13/2020 – 1/6/2021



- The State is at ~57% of our spring peak, down from 92% six weeks ago
- This decline appears to be stalling/plateauing as case levels rise

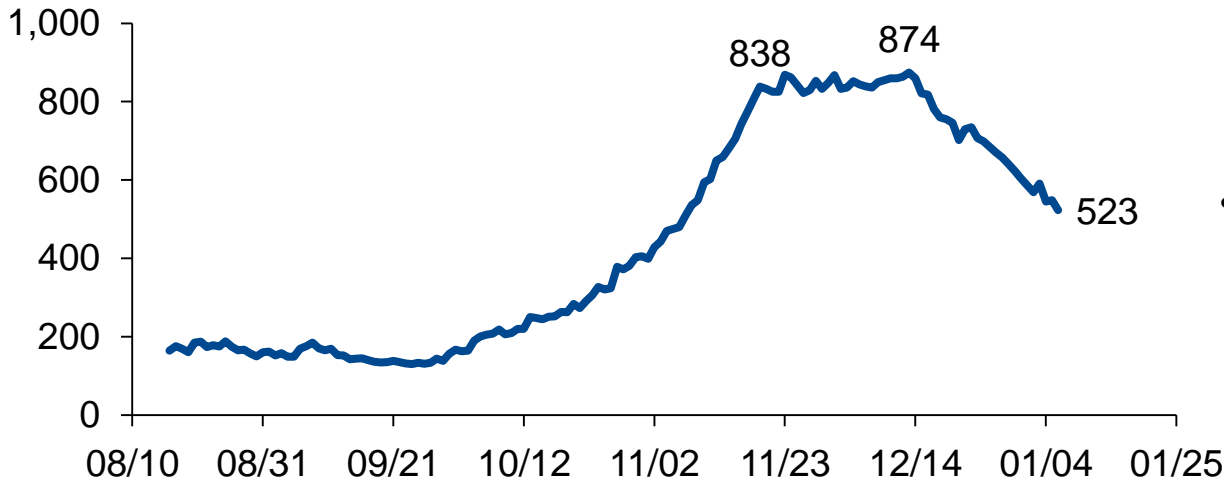
Hospitalized COVID¹ Historical Trend (beginning March)



1. This graph includes both confirmed and suspected cases
 2. Source MHHA

While hospitalizations have begun to plateau, the level of COVID-19 patients in the ICU has dropped for three straight weeks, down 40%

Hospitalization Trends 8/16/2020 – 1/6/2020
COVID patients in ICUs

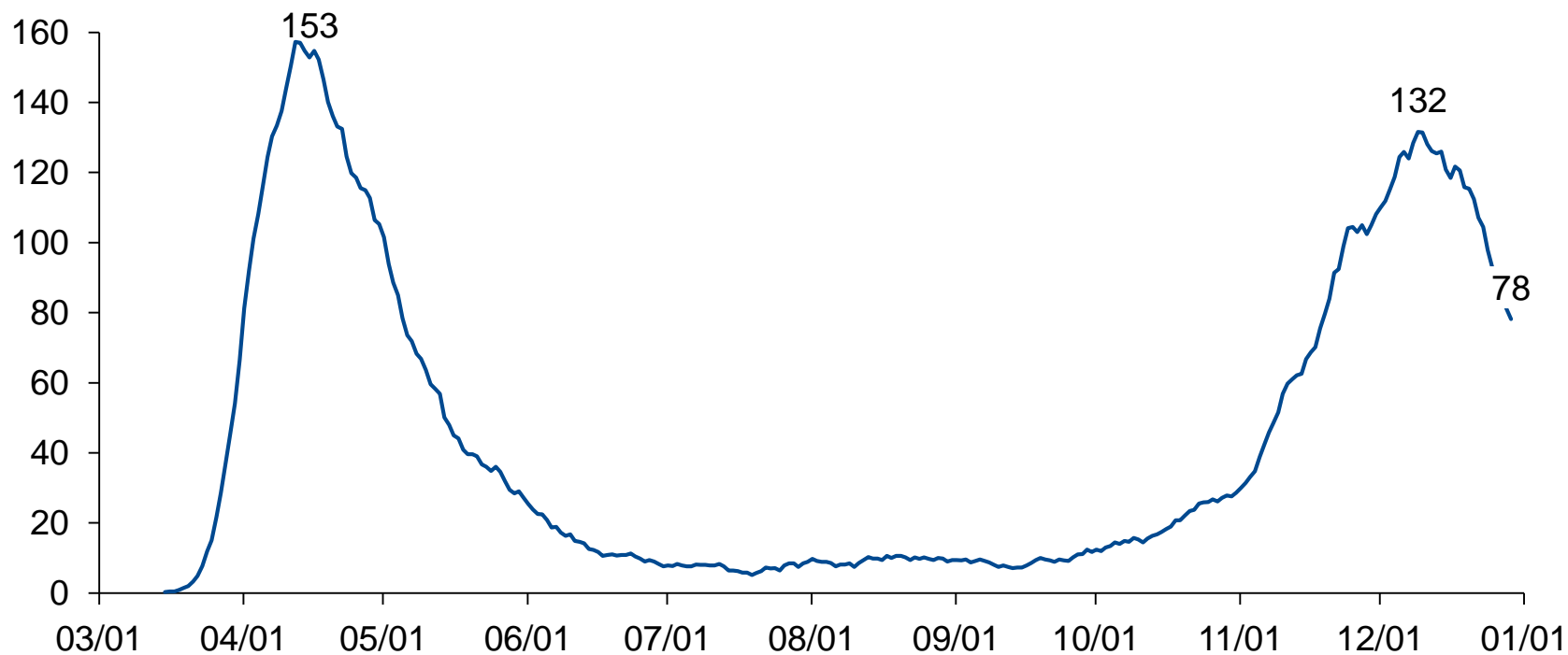


- Statewide, ~20% of ICU beds remain occupied by COVID patients; this has dropped from 30% three weeks ago
- **For the first time since November, no region has above 30% of ICU beds with COVID patients**

	North Detroit	South Detroit	Grand Rapids	Kalamazoo	Saginaw	Lansing & Jackson	Traverse	UP
ICU Occupancy	77%	81%	67%	82%	90%	81%	65%	59%
% of ICU beds COVID	18%	17%	20%	13%	27%	24%	20%	16%

Deaths related to the recent surge continue their sharp decline

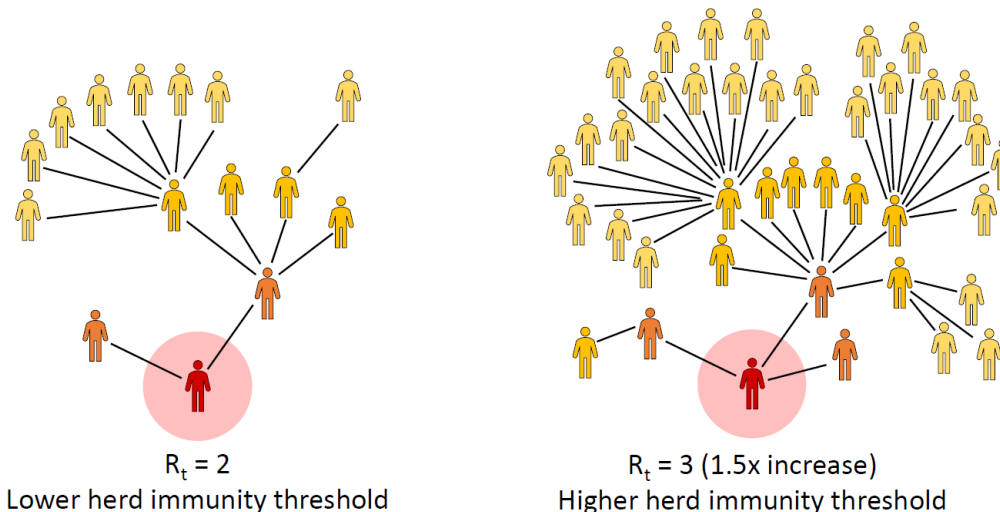
Deaths 7-day average 3/15/2020 – 12/31/2020



While a slight uptick in cases and a plateau in hospitalizations may be an expected impact from the holidays, MDHHS has additional concerns given the new COVID-19 variant identified in the UK

- The new variant has been detected in a significant number of samples in Southern California, and in isolated cases across New York, Florida, Georgia, and Colorado
- The CDC expects the new variant to spread and be more common in the coming weeks
- This new variant is thought to be 1.5x more infectious than previous variants, without increasing mortality or resistance to vaccines

Visualization of a 1.5x more infectious virus

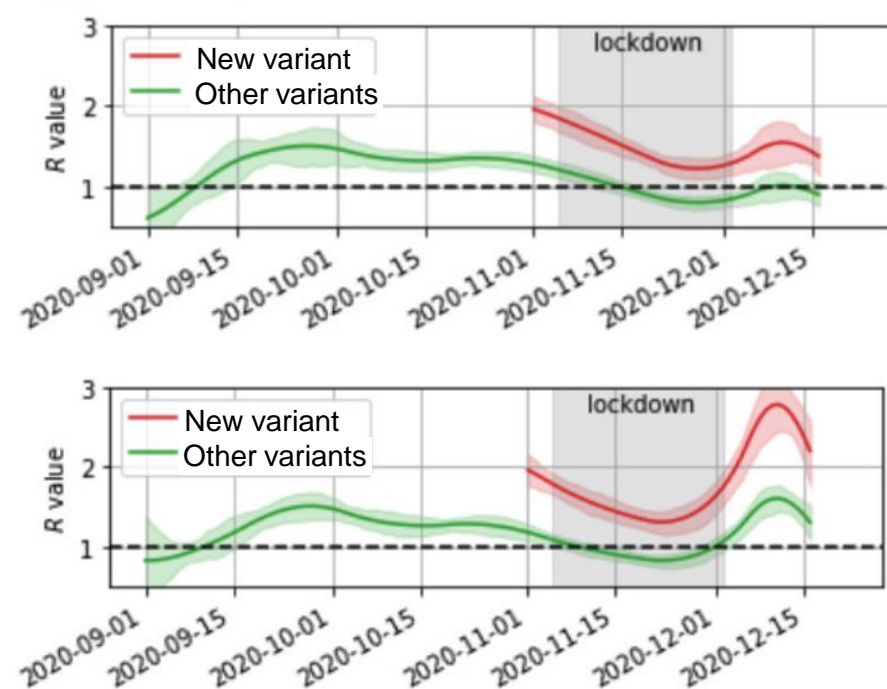


The largest concern is that, even during the UK's strict November lockdown, the new variant continued to spread

Summary

- In November, the UK put in place a 4-week partial shutdown which included:
 - No personal gatherings
 - Restaurants/bars takeout only
 - All leisure businesses closed (gyms, theaters, etc.)
 - Personal services closed (barbers, etc.)
 - Non-essential retail closed
- **Despite these restrictions the new variant maintained an R value >1 (i.e., cases grew) while cases tied to other strains dropped**

UK Region's infection charts



Additional research is required to identify what new safety protocols may be required. This variant further emphasizes the need for accelerated vaccine deployment