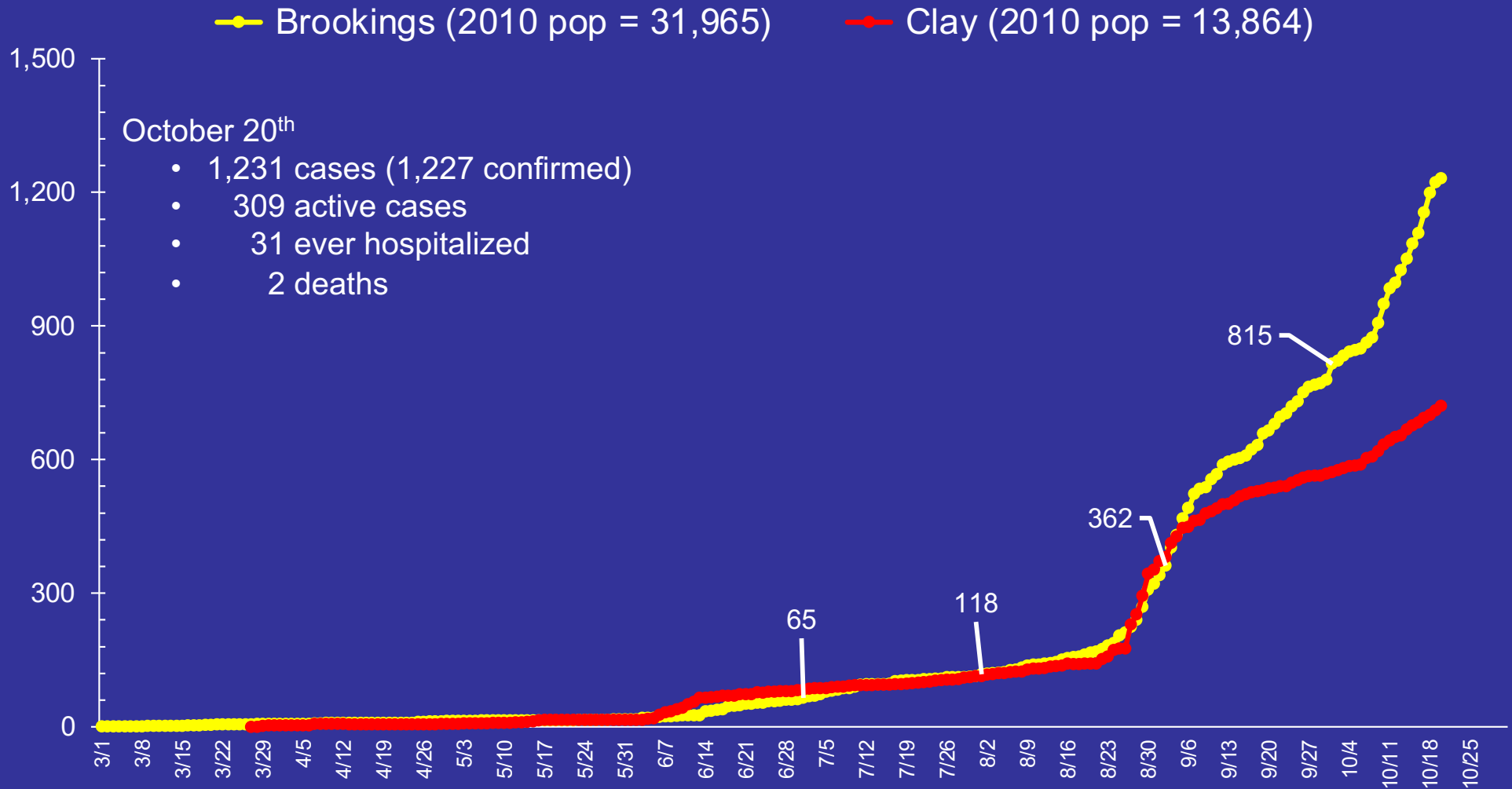


**COVID-19 Situation**

**Brookings County**

# Brookings Situation

## Number of Confirmed & Probable COVID-19 Cases

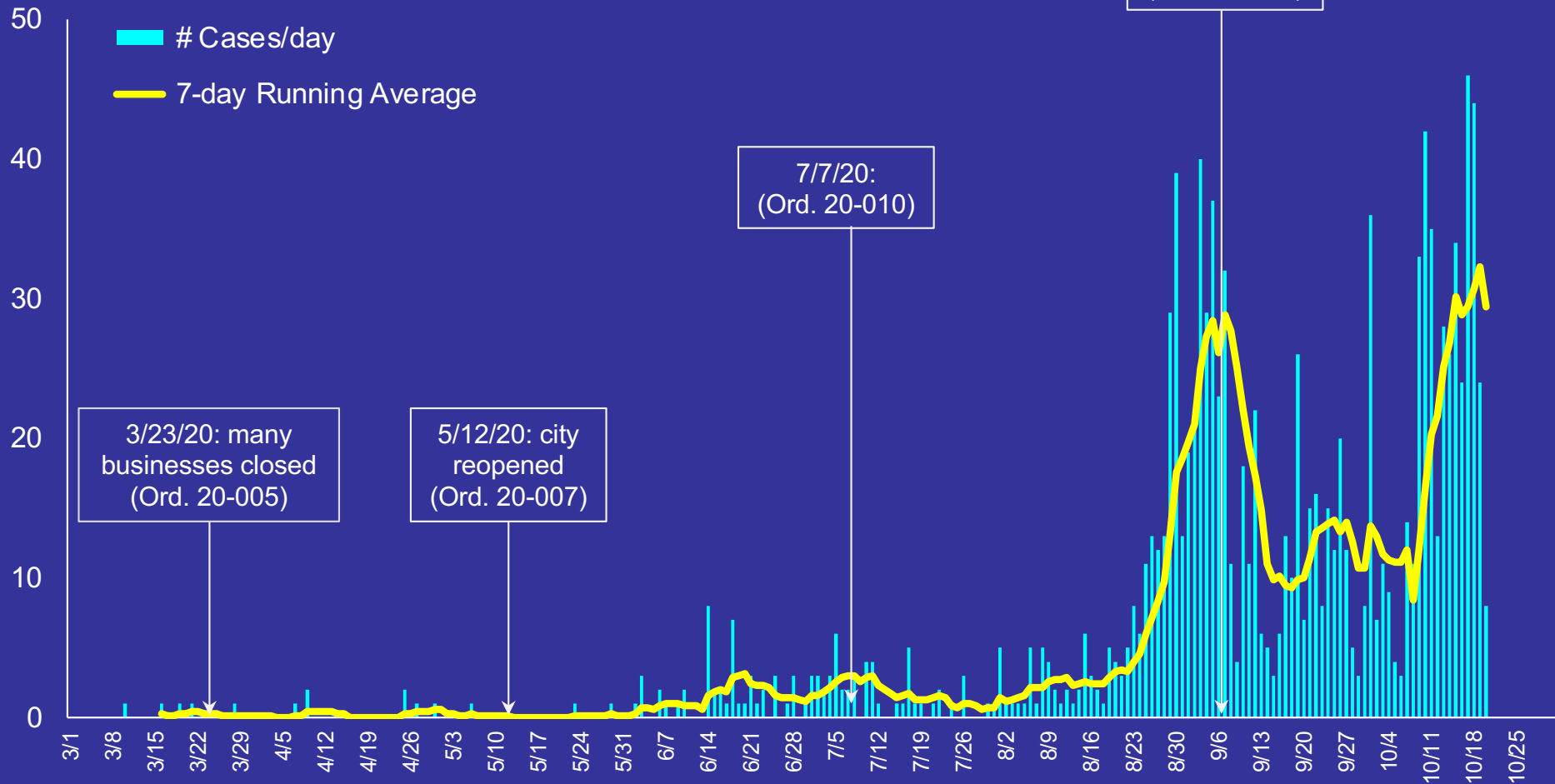


Numbers given for the first of July, August, Sept, and Oct.  
 Clay County historical data prior to 9/12/20 graciously provided by Arnold Meyer.  
 Confirmed = PCR test; Probable = antigen tests

# Brookings COVID-19 Situation

## Number of Confirmed & Probable COVID-19 Cases by Day

Current Level of Community Spread<sup>^</sup>: **substantial**



Ordinance 20-005: closure of many businesses effective 3/23/20, updated 4/9/20

Ordinance 20-007: restrictions on reopening effective 5/12/20

Ordinance 20-010: like 20-007 (includes bar servers), 2<sup>nd</sup> reading 7/7/20

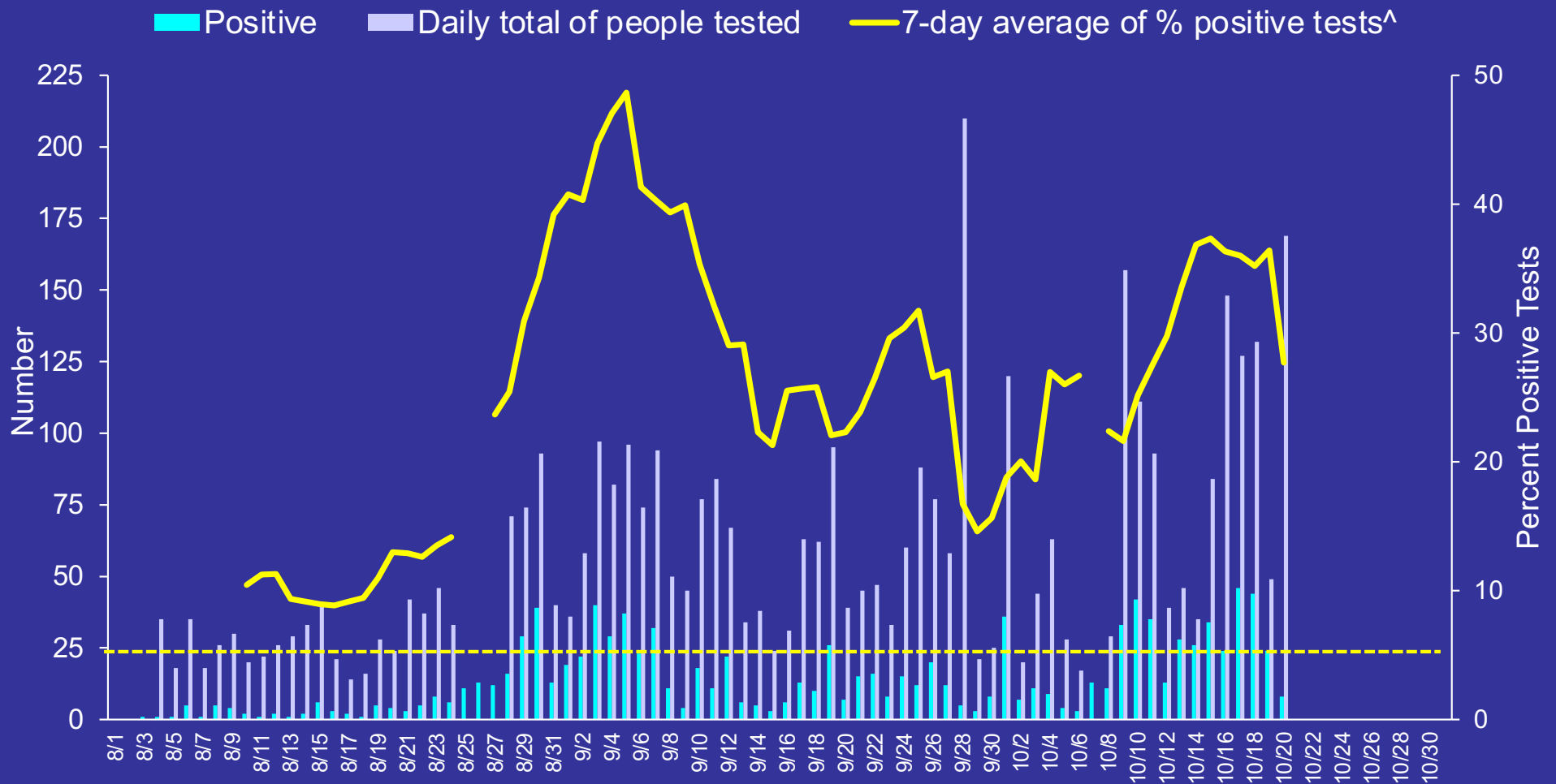
Ordinance 20-019: mask mandate in public, 2<sup>nd</sup> reading 9/8/20

<https://doh.sd.gov/news/Coronavirus.aspx>

<sup>^</sup> [https://doh.sd.gov/documents/COVID19/Comm\\_Mitig\\_Levels\\_081720.pdf](https://doh.sd.gov/documents/COVID19/Comm_Mitig_Levels_081720.pdf)

# Brookings COVID-19 Situation

## Percentage of Positive Tests (PCR + Antigen)

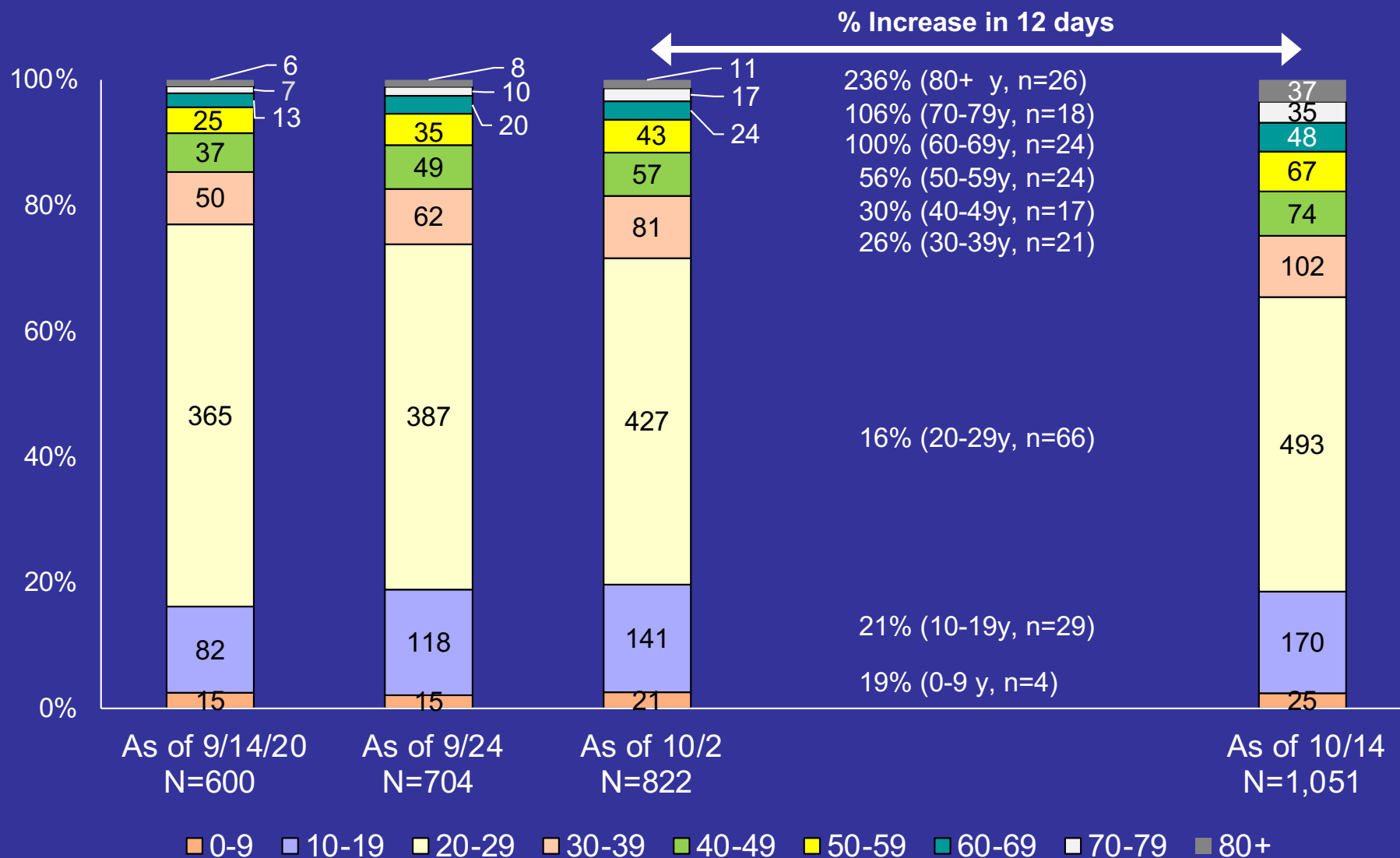


<sup>^</sup> Calculated as sum of 7-days of previous positive cases/sum of 7-days of total tests completed\*100. Duplicate tests on same individual not included. Used total cases and total persons tested on DOH website (includes sentinel & surveillance samples). Only positive cases available on 8/25-8/27/20. Antigen tests added on 10/7/20 and included past tests so test positivity not calculated for 10/7/20.

The rate of positivity provides insight into whether enough testing is being conducted. If positivity is high, it suggests that the sickest are being tested and milder or asymptomatic cases may be missed. The WHO has said that in countries that have extensive testing for COVID-19, percent positive should remain at 5% or lower for at least 14 days.

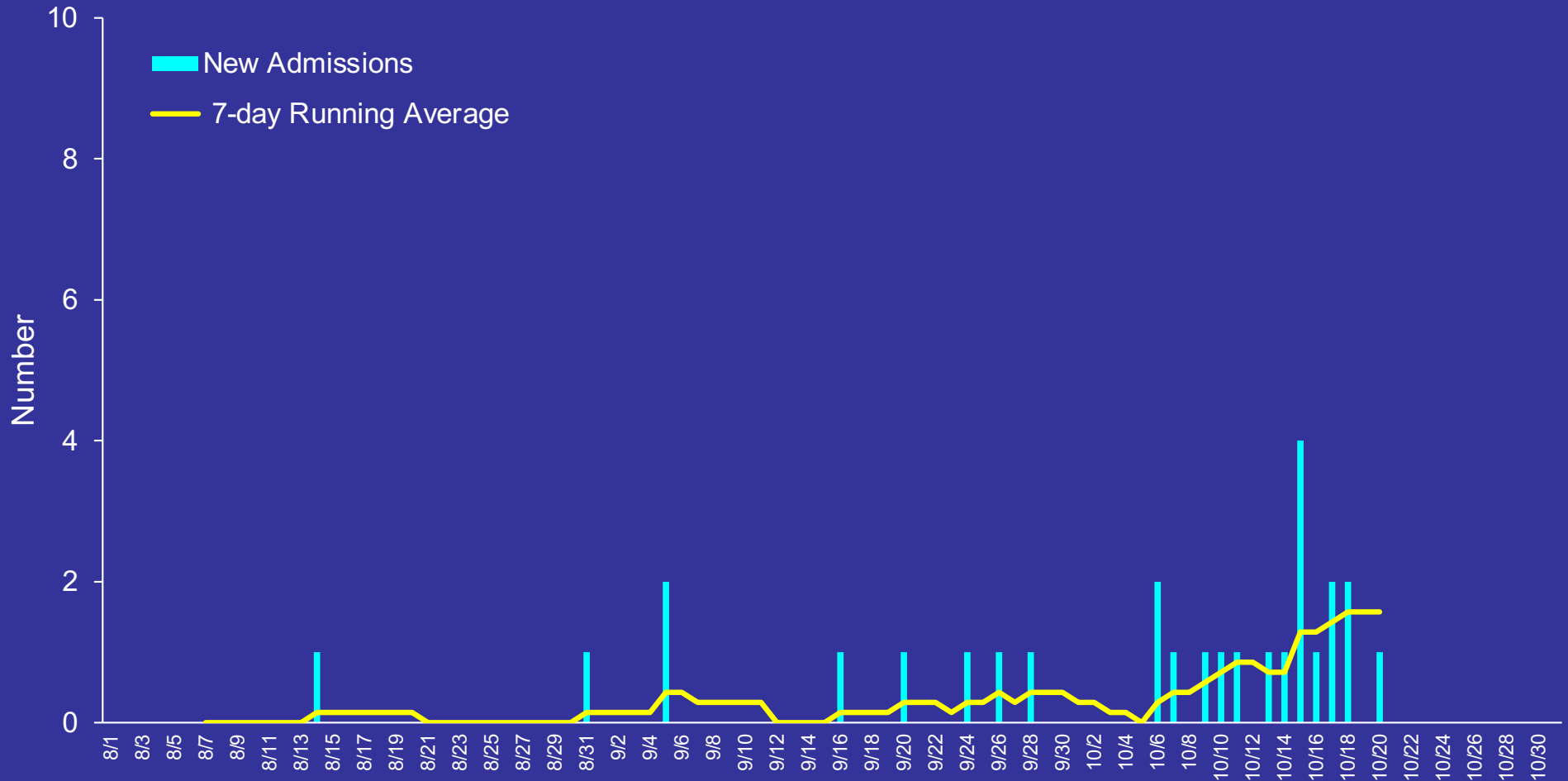
# South Dakota COVID-19 Situation

## Number of Brookings Cases Who Have Tested Positive by Age and Date



# Brookings COVID-19 Situation

## Number of New Hospitalizations by Day

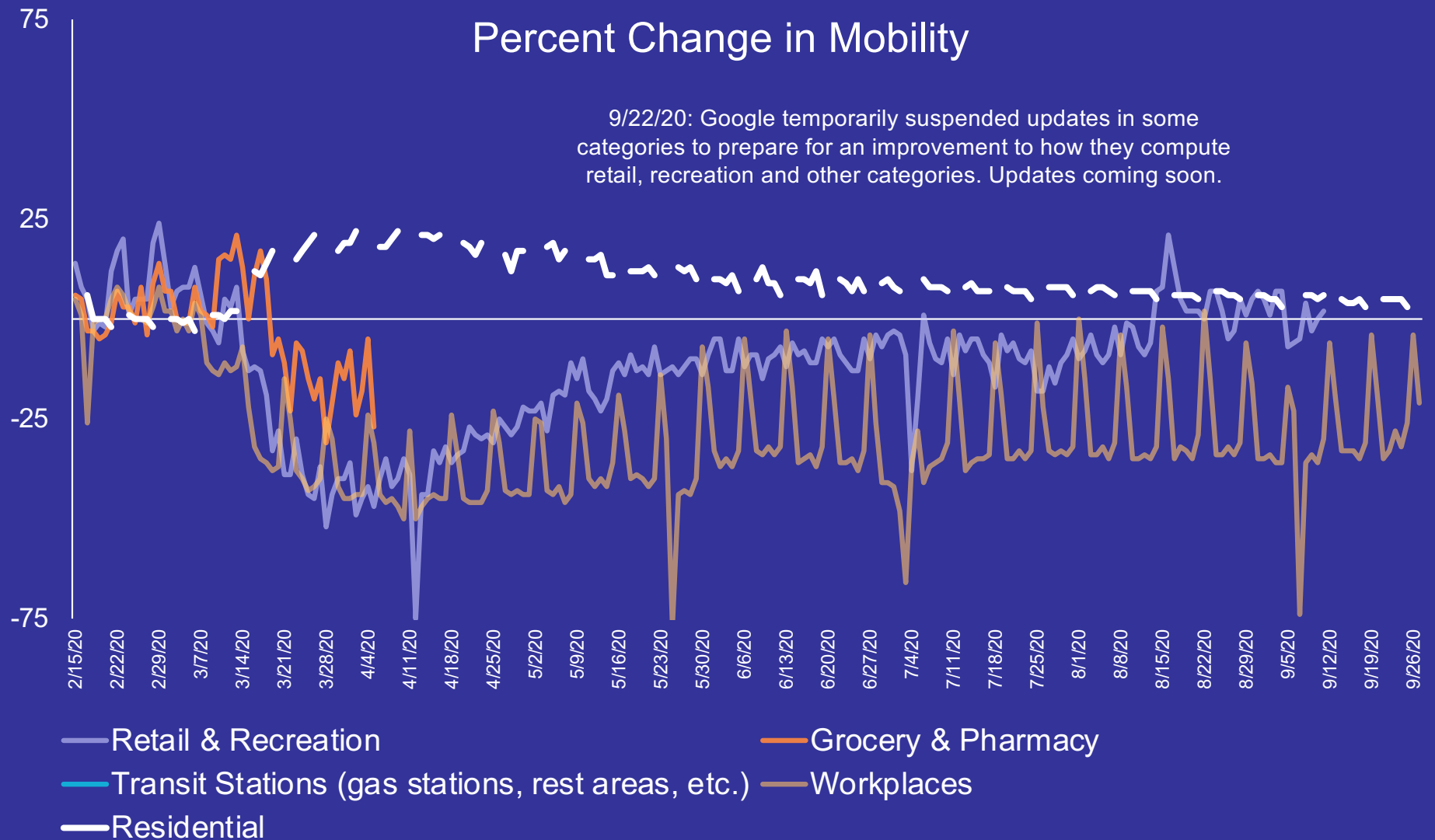


Includes only Brookings County residents.

As of August 1<sup>st</sup> there were 4 individuals who had been hospitalized since March.

<https://doh.sd.gov/news/Coronavirus.aspx>

# Brookings County Mobility Data via Google



Baseline: normal value for day of week (1/3-2/6/20)

*Residential* shows a change in duration, other categories are change in total visitors. *Parks* not shown.

Data from <https://www.google.com/covid19/mobility/>

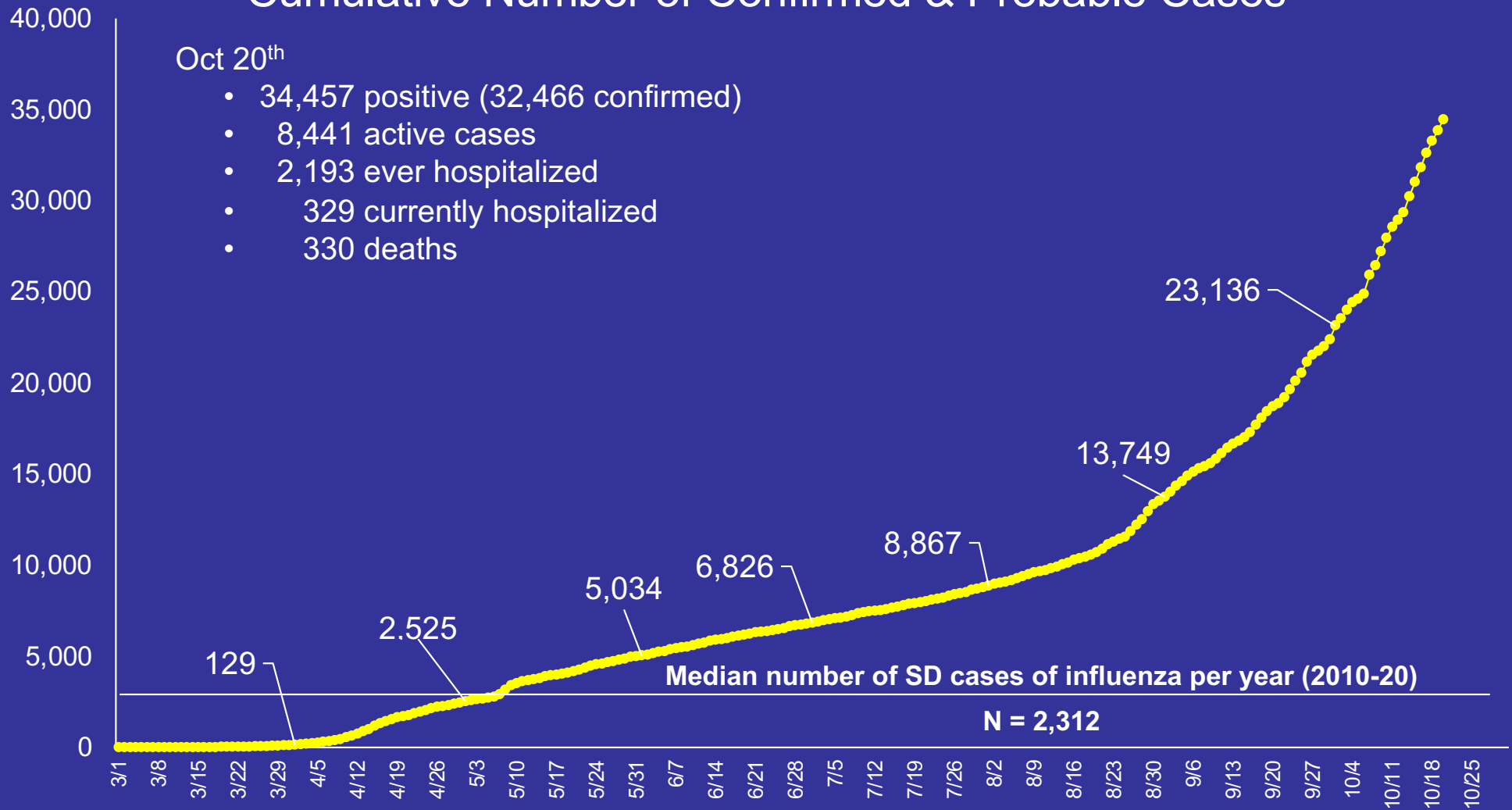
# **COVID-19 Situation**

## **South Dakota**



# South Dakota COVID-19 Situation

## Cumulative Number of Confirmed & Probable Cases



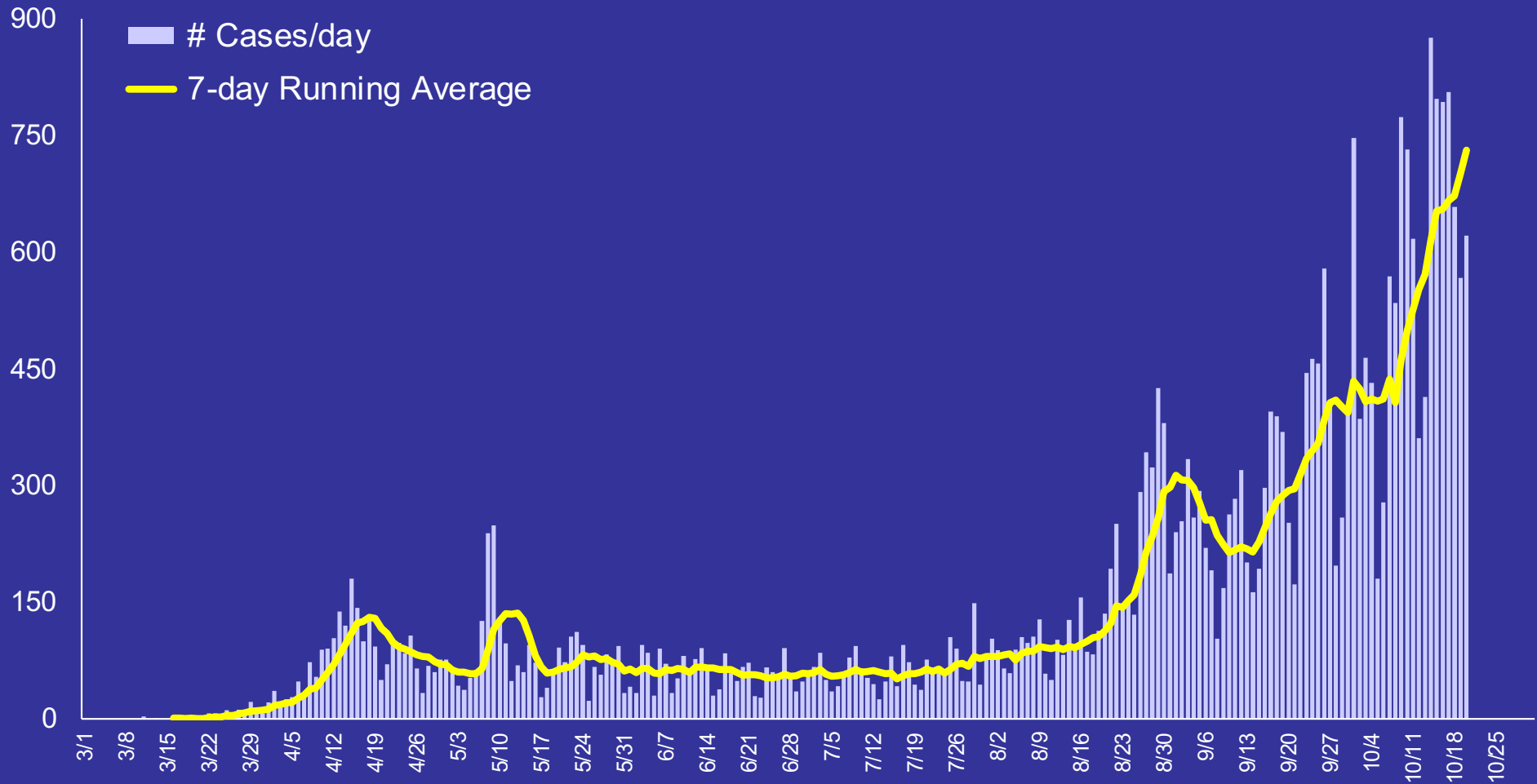
Numbers given for the first of April, May, June, July, August, Sept, and Oct.  
State residents only.a

Oct 7: Probable cases added (based on antigen tests), including 427 past positive tests

<https://doh.sd.gov/news/Coronavirus.aspx>

# South Dakota COVID-19 Situation

## Number of Confirmed & Probable Cases by Day



Mid-April: Smithfield outbreak.

Week of May 4: screened Smithfield workers, families & contacts.

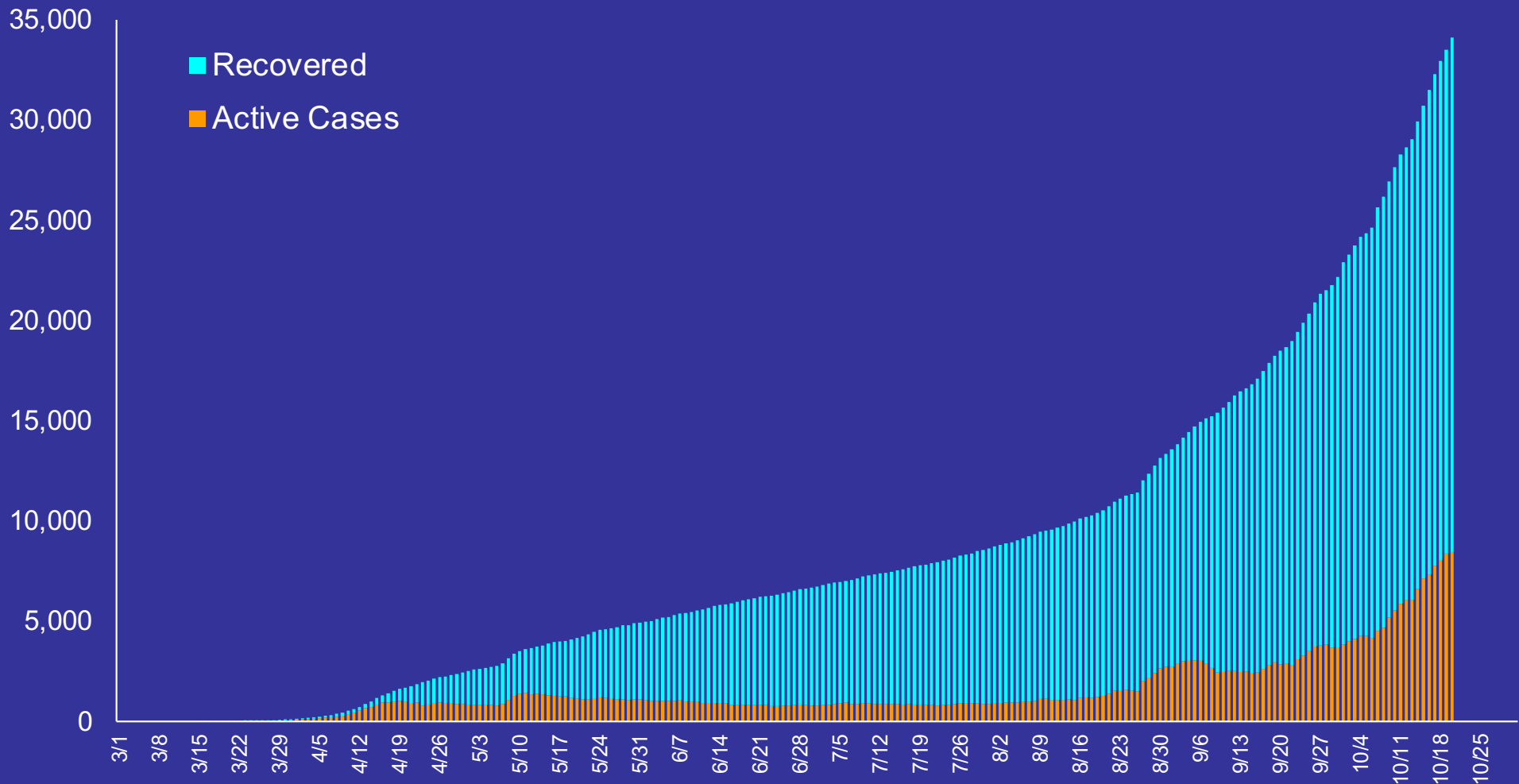
May 28: began screenings residential care residents & health care providers

Oct 7: Probable cases added (antigen tests); 426 probable cases diagnosed prior to 10/7 not included in this graph.

<https://doh.sd.gov/news/Coronavirus.aspx>

# South Dakota COVID-19 Situation

## Number of Active and Recovered Cases



Does not include number of deaths.

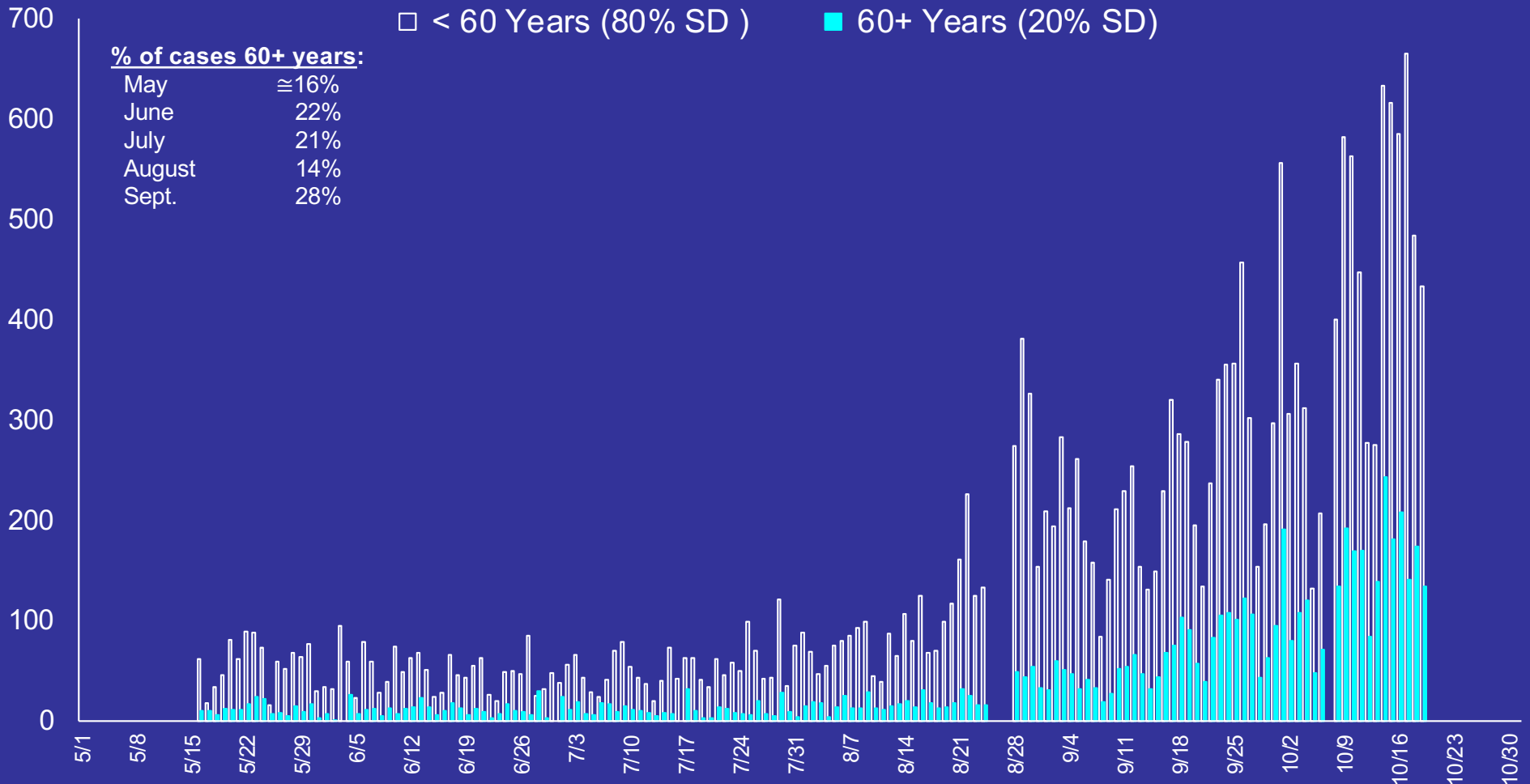
Oct 7: Probable cases added (based on antigen tests) and included in recovered cases.

<https://doh.sd.gov/news/Coronavirus.aspx>

# South Dakota COVID-19 Situation

## Age Distribution

Number of Confirmed & Probable Cases by Age & Day



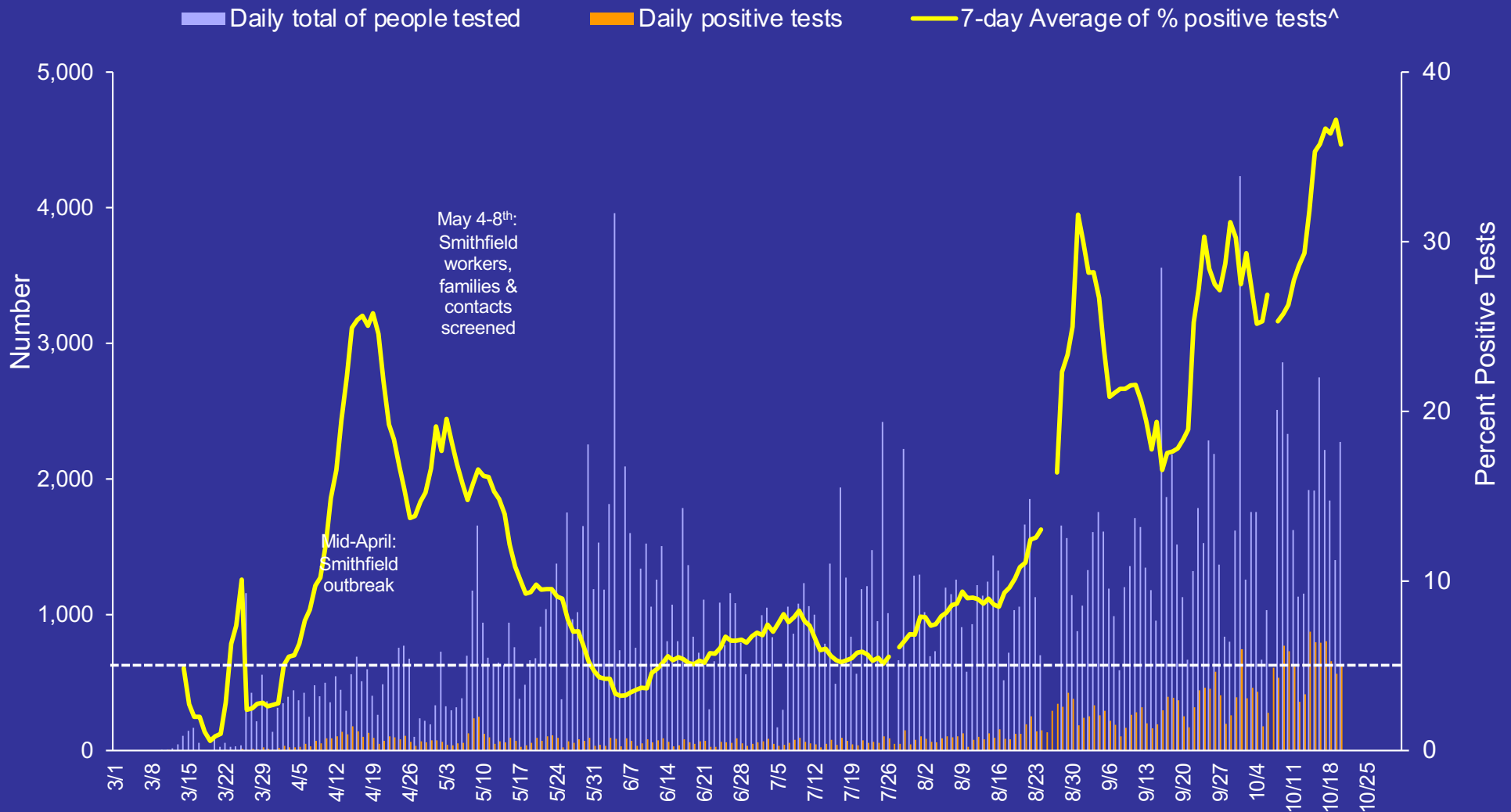
Started recording age distribution on May 15<sup>th</sup>.

No data available for 8/25-8/27/20

Oct 7: Probable cases added (based on antigen tests); since past data were added, data for this day were excluded.

# South Dakota COVID-19 Situation

## Percentage of Positive Tests

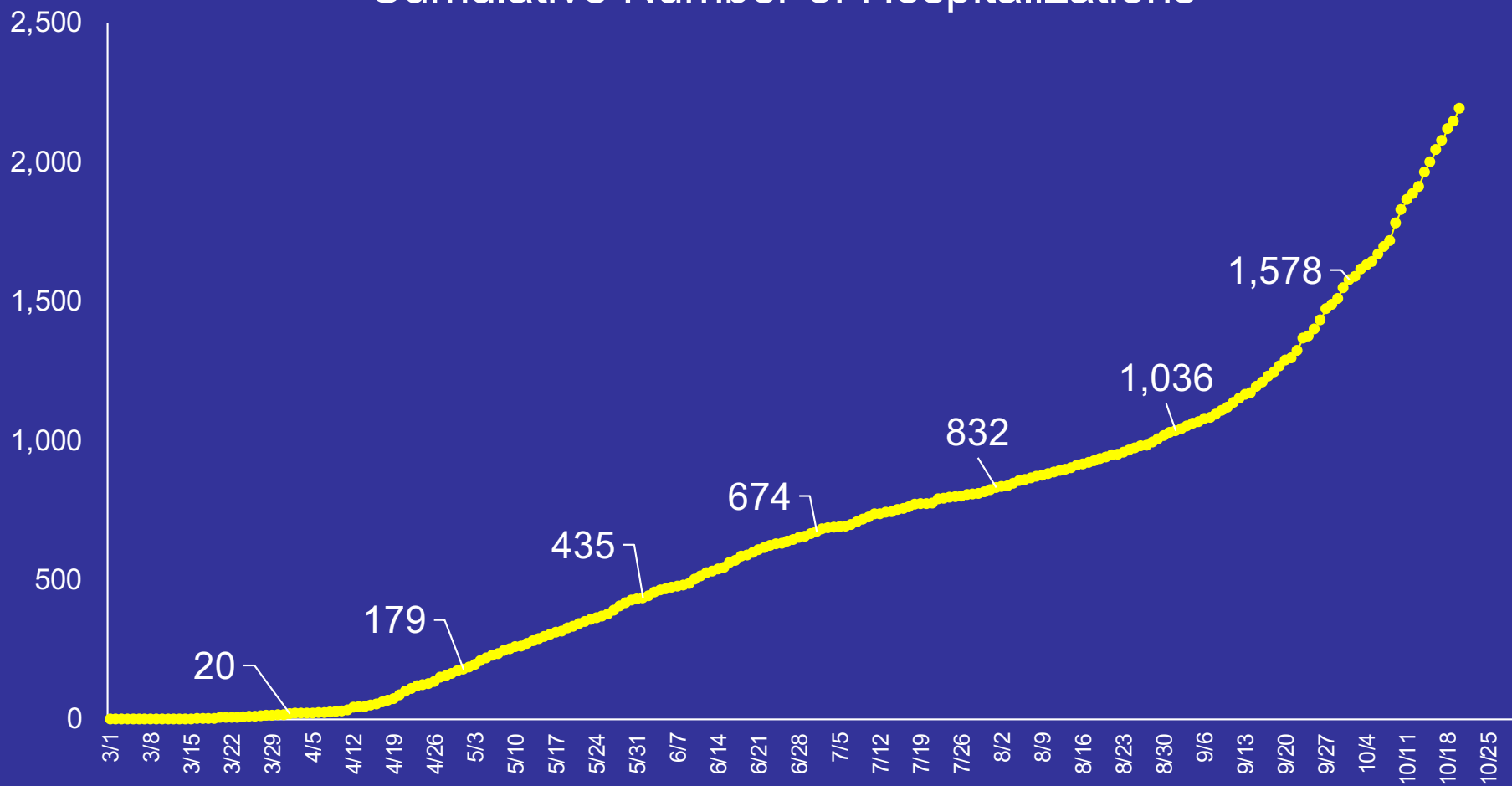


<sup>^</sup> Calculated as sum of 7-days of previous positive cases/sum of 7-days of total tests completed\*100. Duplicate tests on same individual are not included. Either no data or partial data available for 7/27 and 8/25-8/27.

**Oct 7:** Antigen tests added, including past tests. Data for this day are not included. Beginning 10/7/20 tests include PCR & antigen since the denominator is only available for both tests combined. DOH reports test positivity using only PCR data and the denominator is total number of tests, not people.

# South Dakota COVID-19 Situation

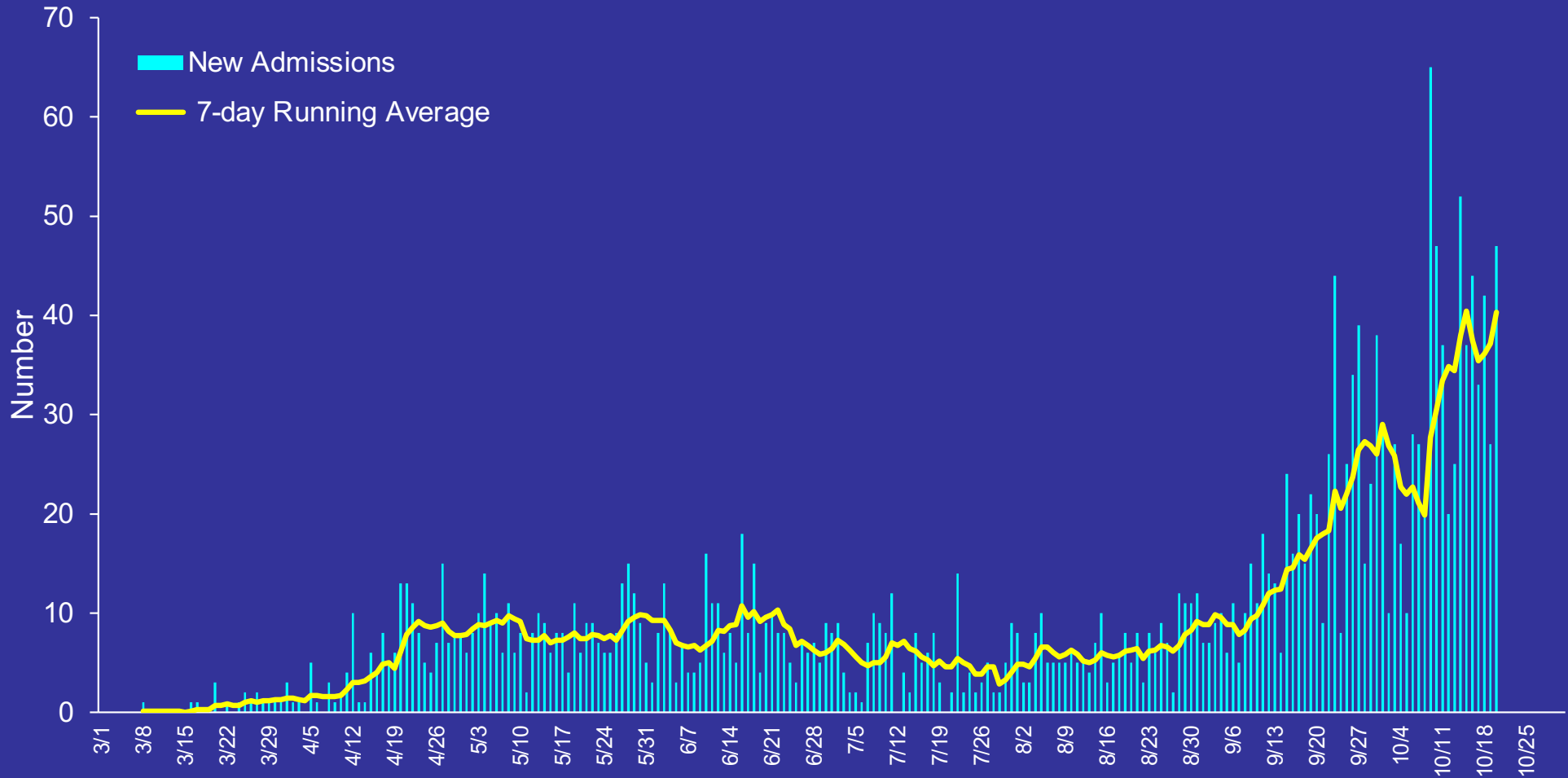
## Cumulative Number of Hospitalizations



Numbers given for the first of April, May, June, July, August, Sept, and Oct.  
Includes only state residents.

# South Dakota COVID-19 Situation

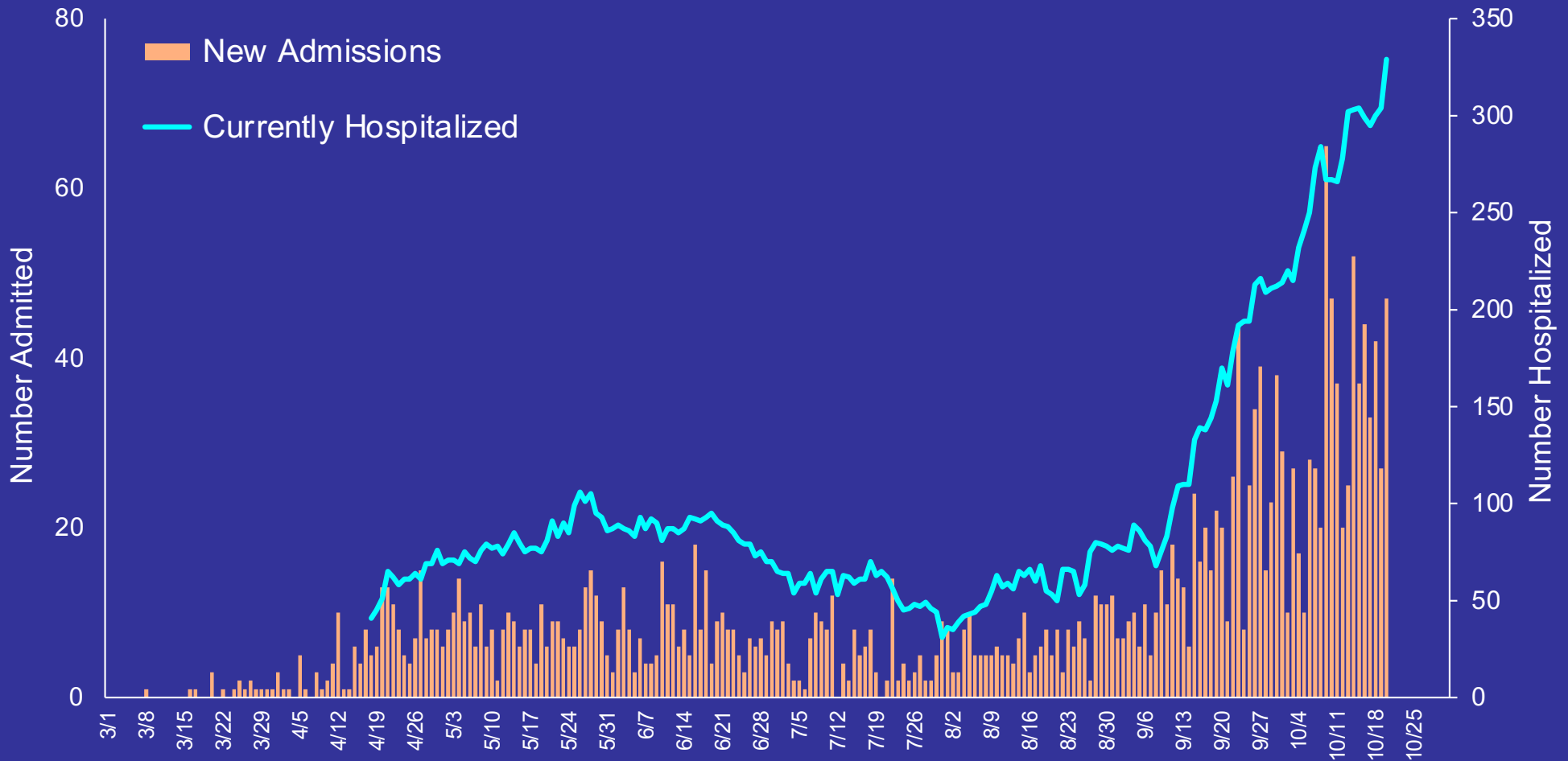
## Number of New Hospitalizations by Day



Includes only state residents.

# South Dakota COVID-19 Situation

## Hospitalization Data by Day



No data on currently hospitalized before April 18<sup>th</sup>.

Currently hospitalized includes state and out-of-state residents and transfers from other states.

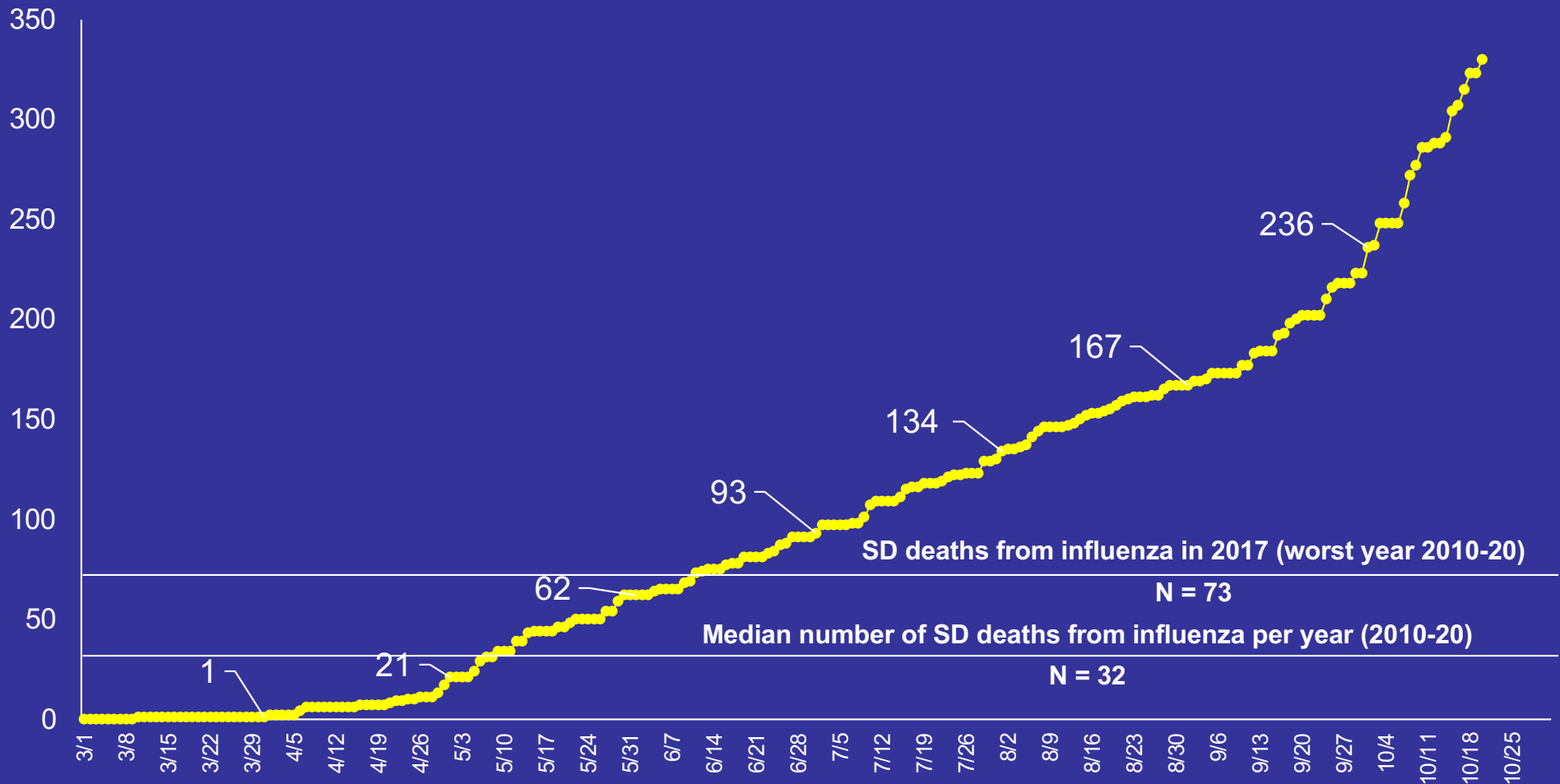
New admissions includes only state residents.

Does not include patients on home health care.



# South Dakota COVID-19 Situation

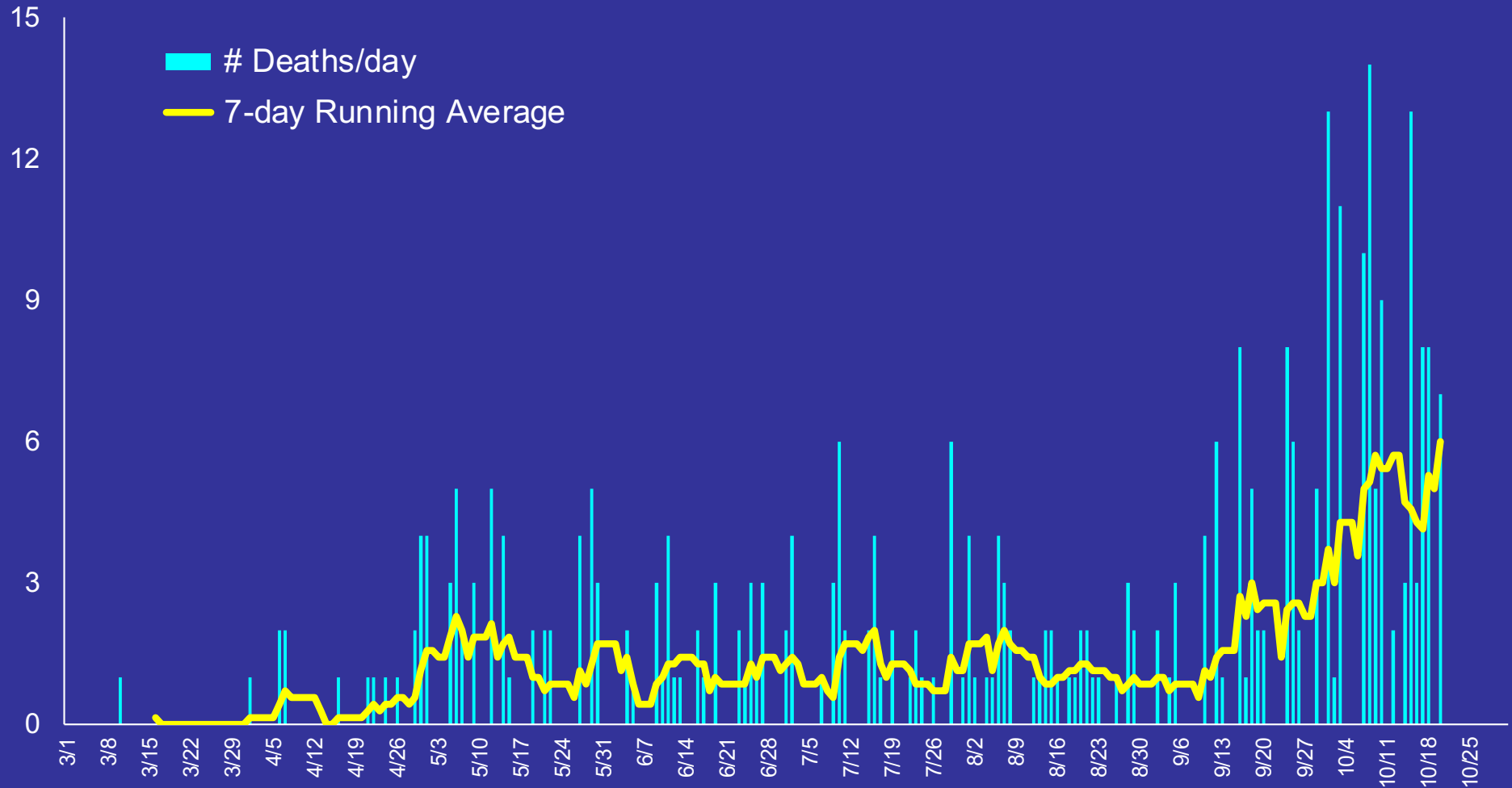
## Number of Deaths from COVID-19



Dept of Health does not report deaths until a certified death record is filed.  
By law, a death record must be filed within 5 days of the date of death.  
Numbers given for the first of April, May, June, July, August, Sept, and Oct.

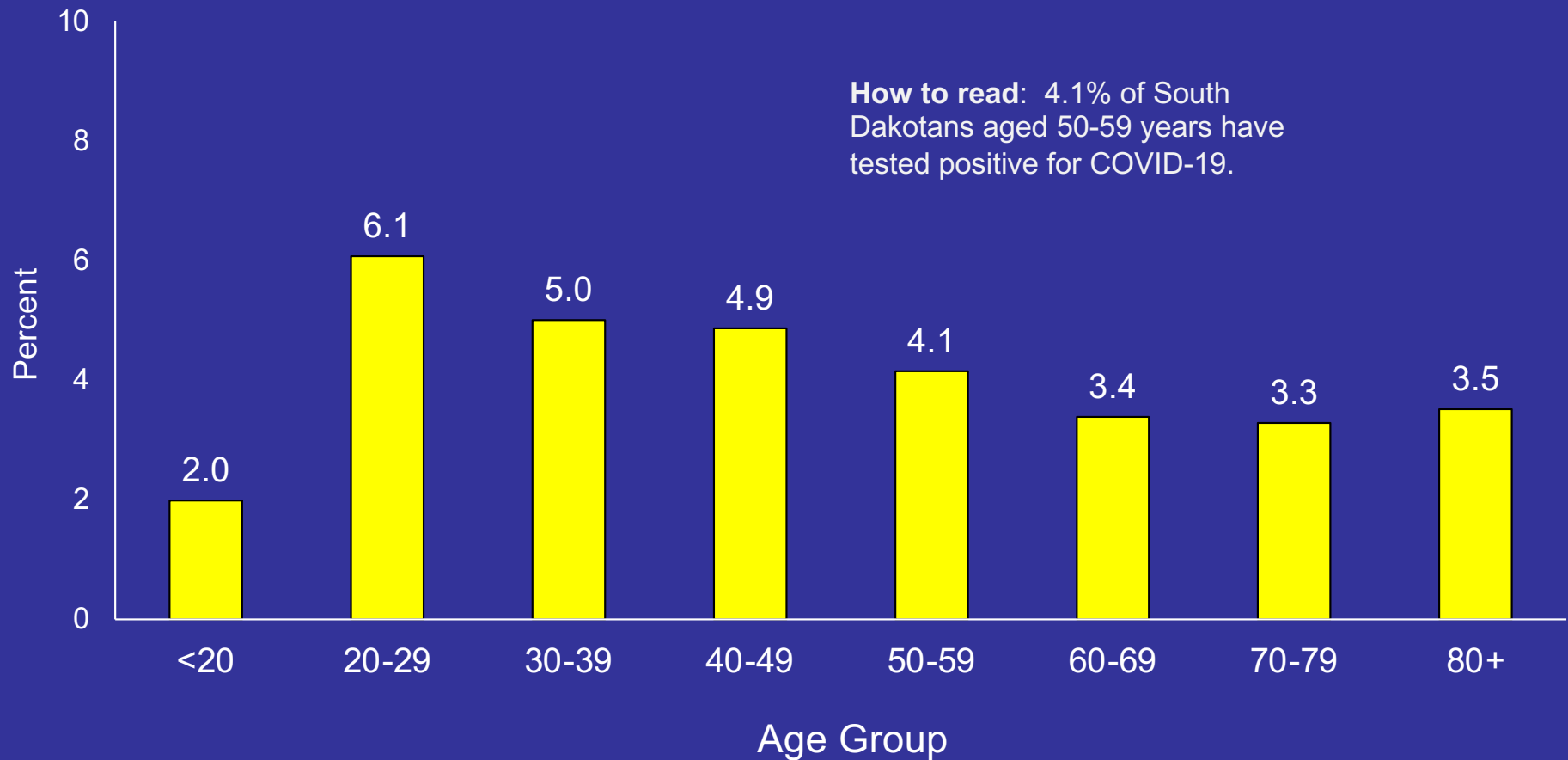
# South Dakota COVID-19 Situation

## Number of Deaths from COVID-19 by Day



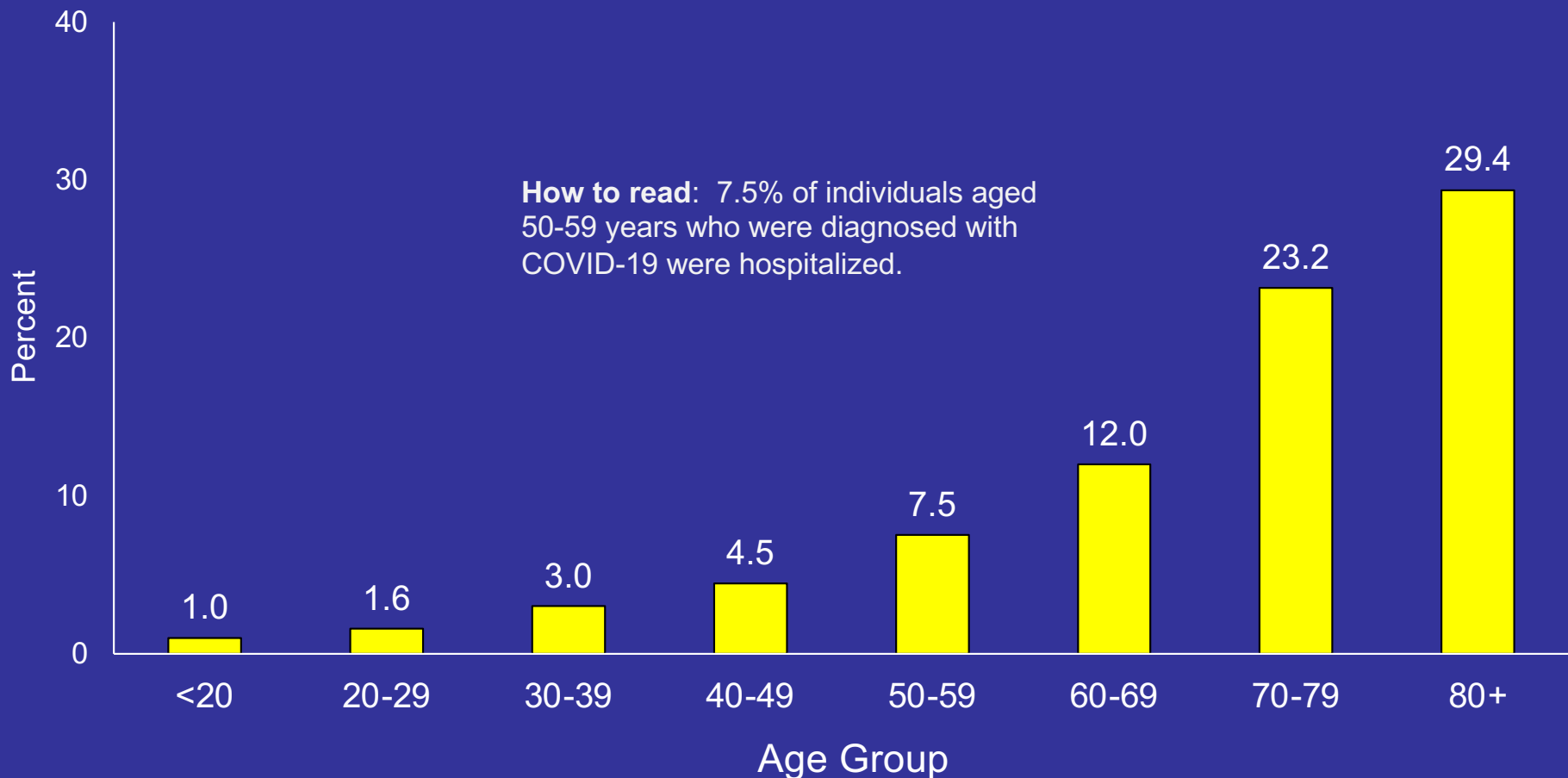
# South Dakota COVID-19 Situation

## Percent of South Dakota Population Ever Testing Positive by Age as of October 18, 2020



# South Dakota COVID-19 Situation

## Percent of Cases Ever Hospitalized by Age as of October 18, 2020

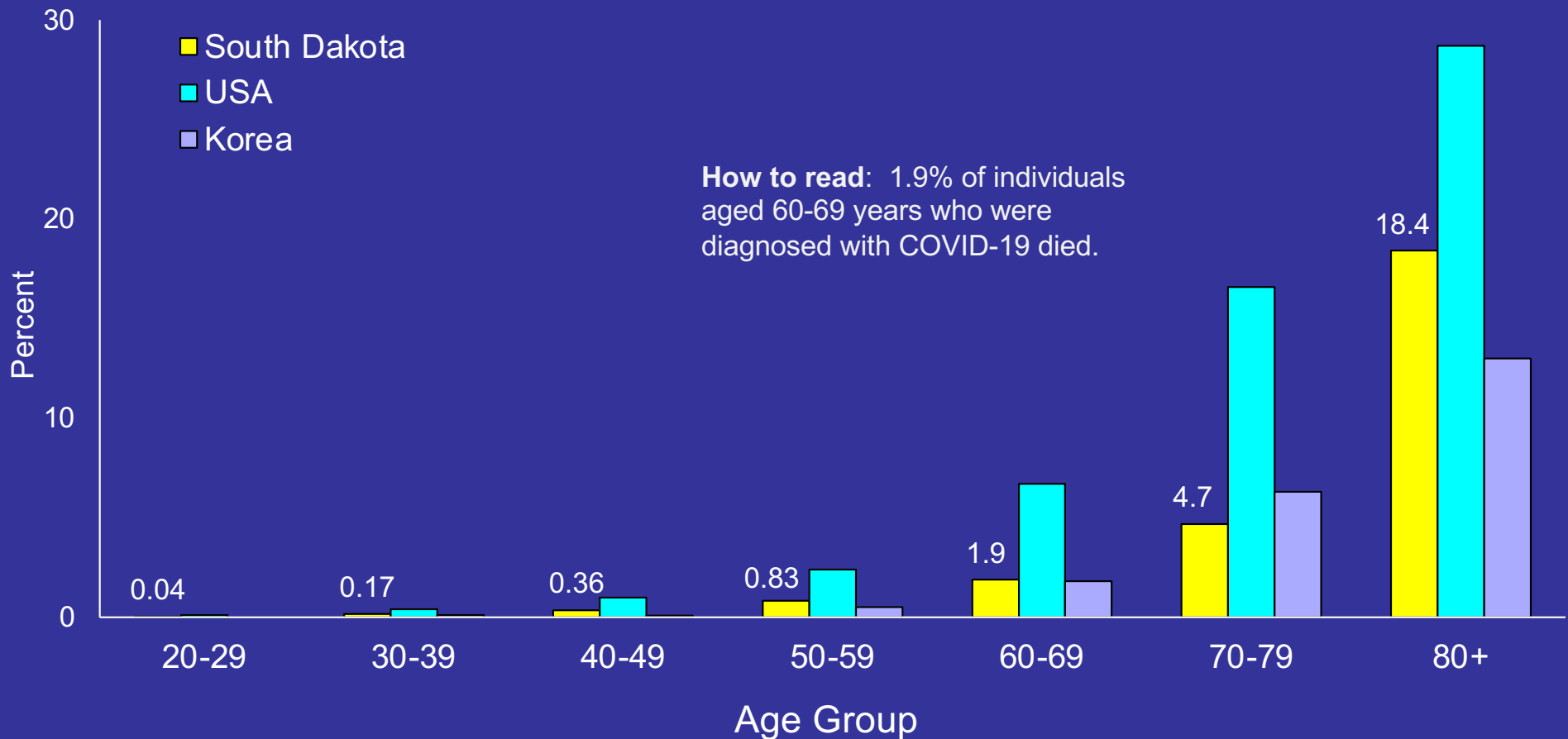


Calculated as (ever hospitalized/tested positive)\*100 using South Dakota data.

# South Dakota COVID-19 Situation

## Case Fatality Rates by Age

### South Dakota updated on October 18, 2020



Case fatality rate calculated as  $\text{COVID deaths} / (\text{COVID deaths} + \text{recovered}) * 100$

Data not given for ages <19 years.

Country data from [https://preventepidemics.org/wp-content/uploads/2020/08/COVID-19-Science-Metrics\\_2020August11.pdf](https://preventepidemics.org/wp-content/uploads/2020/08/COVID-19-Science-Metrics_2020August11.pdf)

<https://www.statista.com/statistics/1127639/covid-19-mortality-by-age-us/>

# University Situation

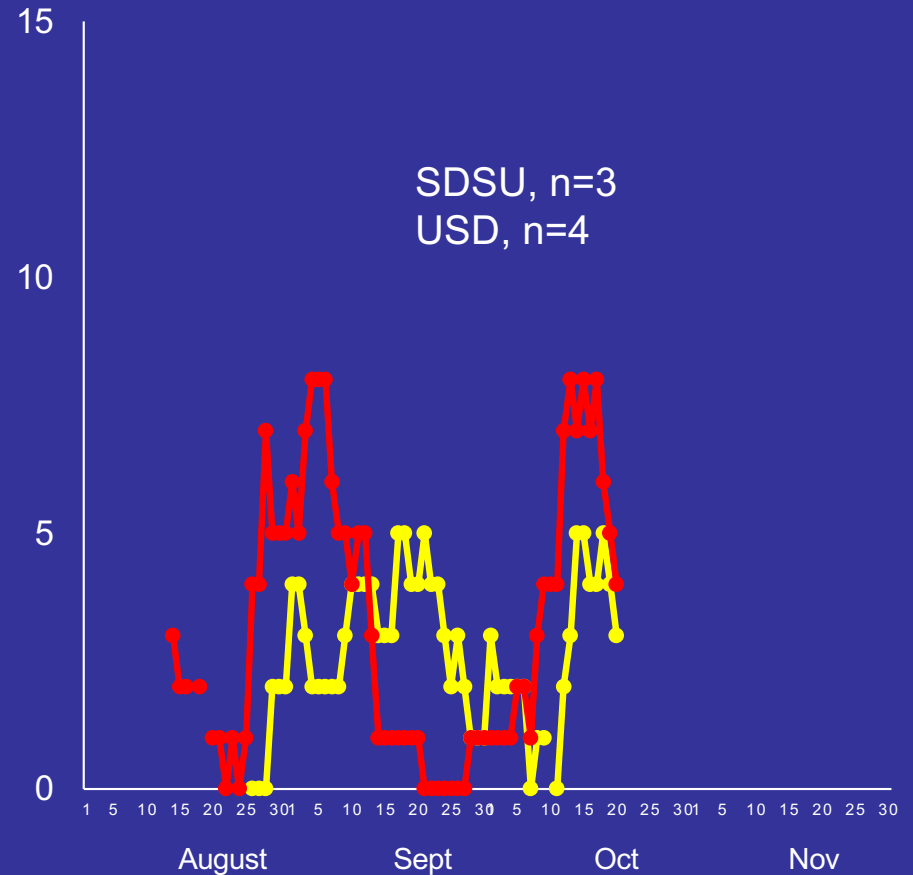
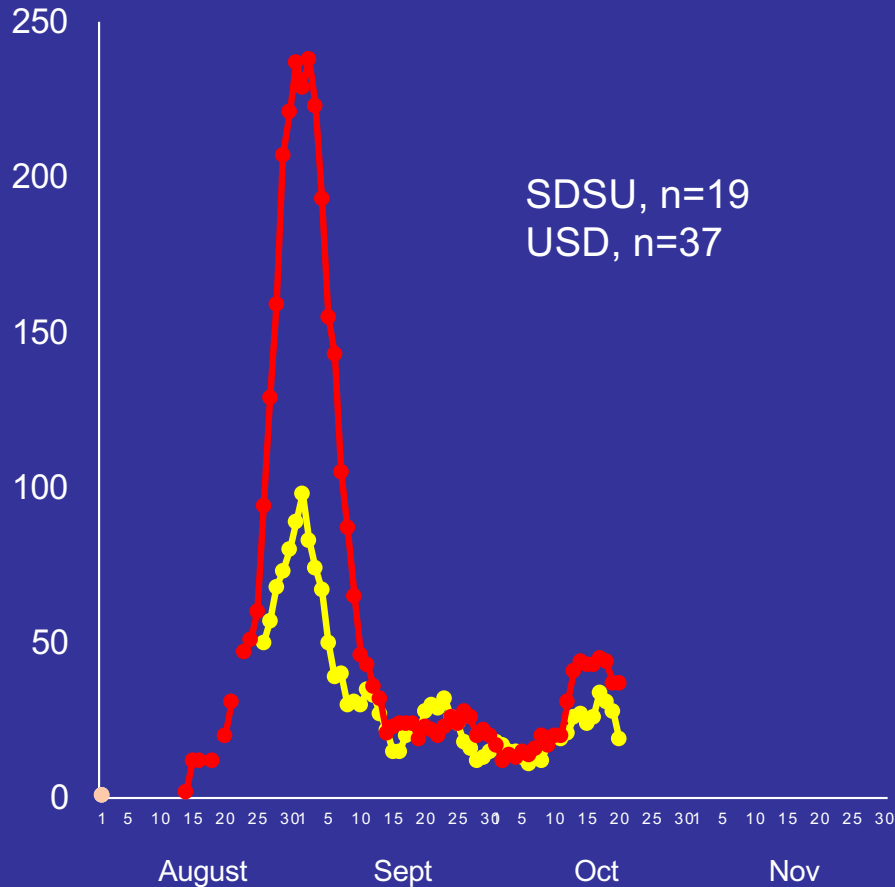
## Number of Active COVID-19 Cases

--- = SDSU

--- = USD

Students

Employees



Last updated on 10/20/20

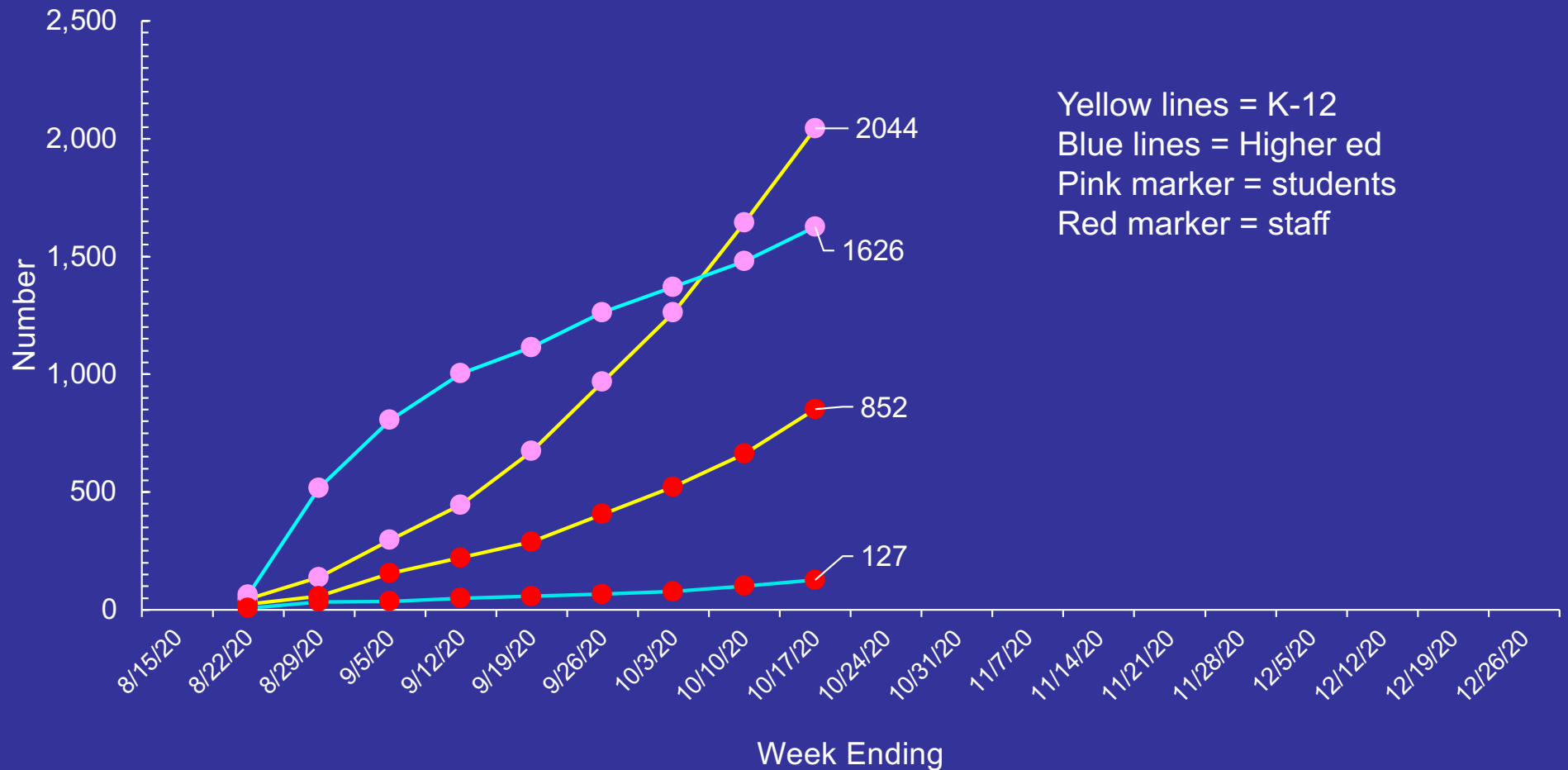
Individuals are not necessarily residents of Brookings or Clay counties.

<https://www.sdstate.edu/covid-19/covid-19-dashboard>  
<https://www.usd.edu/covid19/covid-19-dashboard>

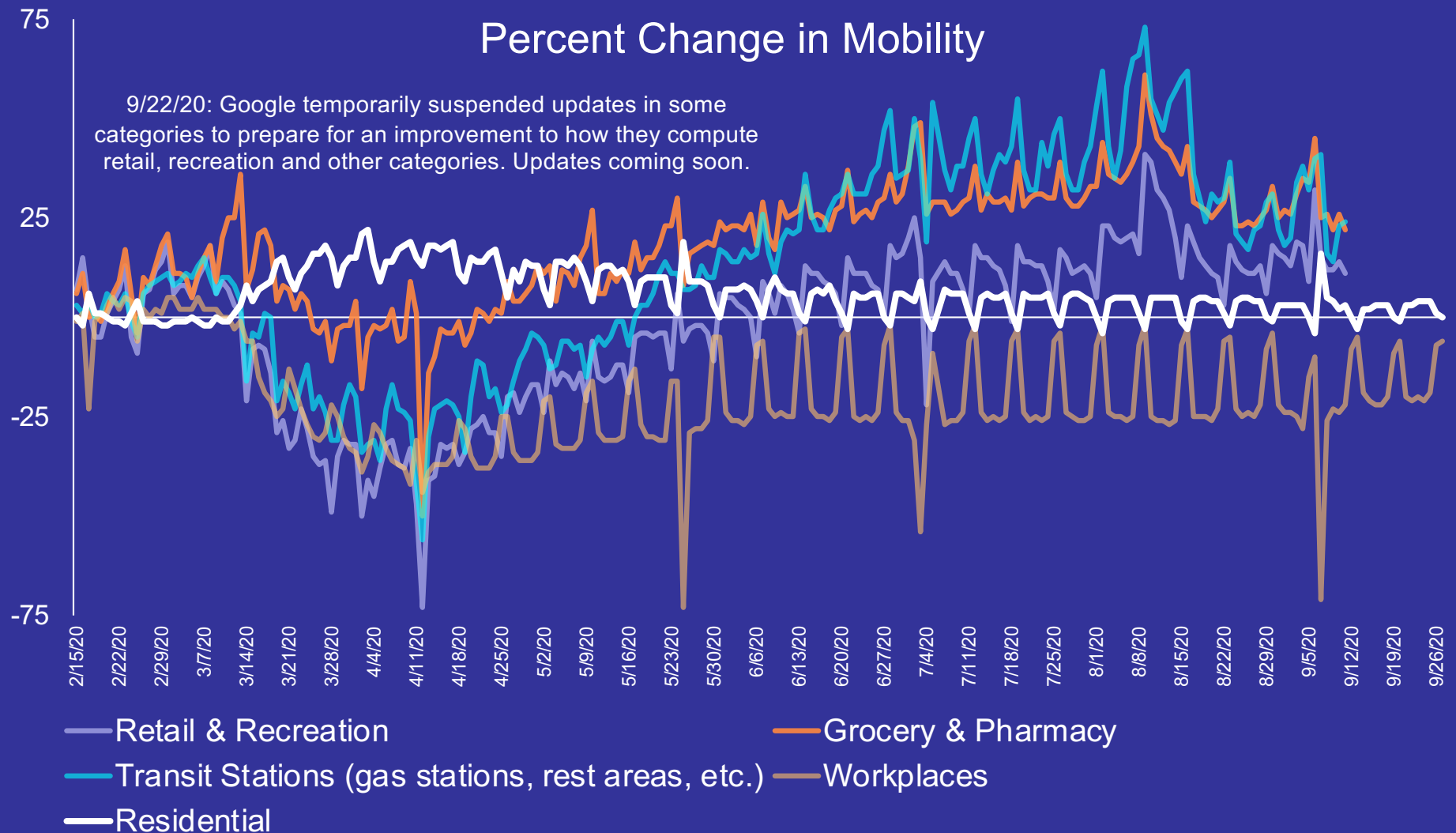
# South Dakota School Situation

## Cumulative Number of COVID-19 Cases

—●— K-12 Students —●— K-12 Staff —●— Higher Ed Students —●— Higher Ed Staff



# South Dakota Mobility Data via Google



Baseline: normal value for day of week (1/3-2/6/20)

*Residential* shows a change in duration, other categories are change in total visitors. *Parks* not shown.

Data from <https://www.google.com/covid19/mobility/>

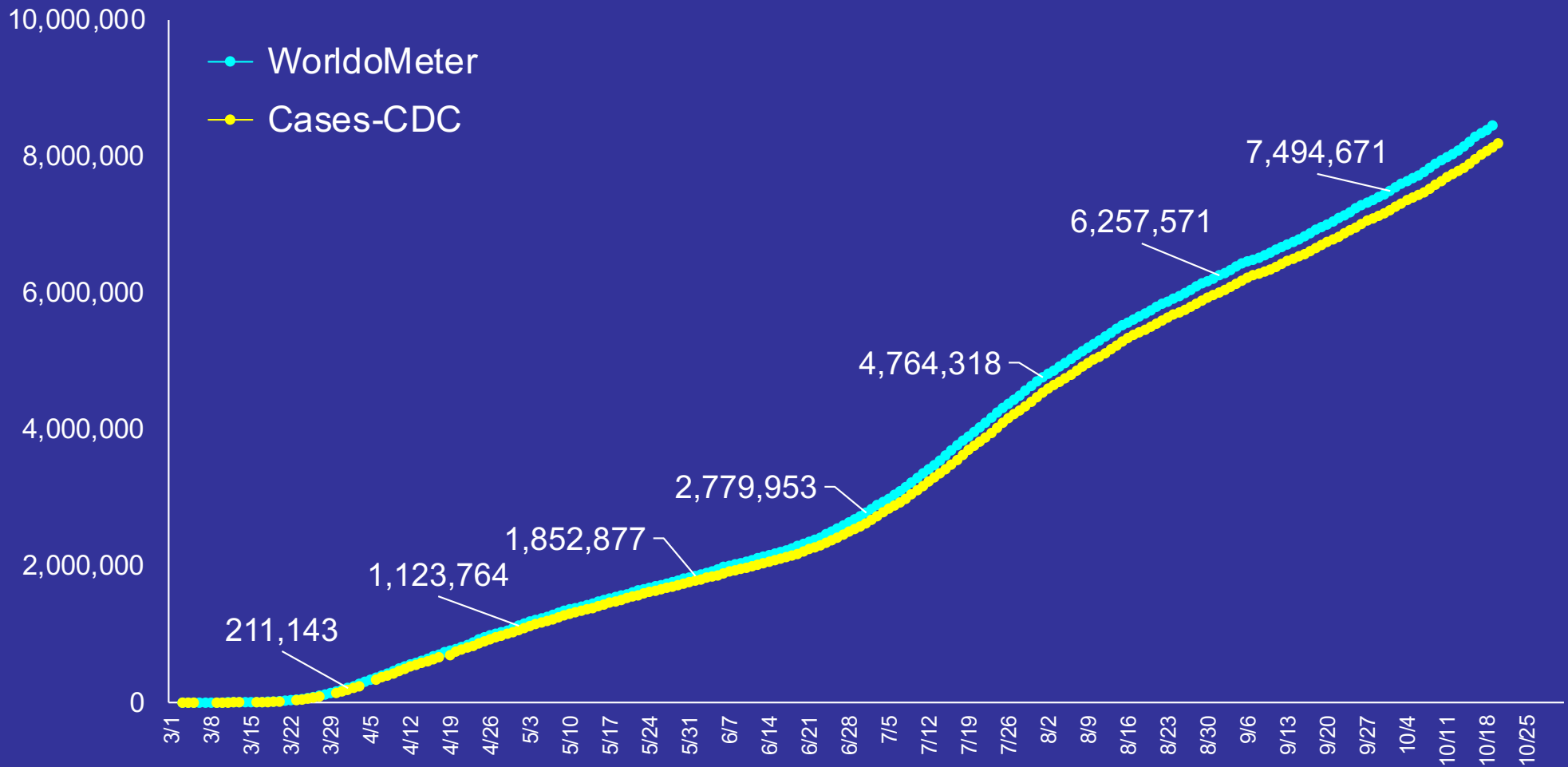


# **COVID-19 Situation**

**U.S.**

# U.S. COVID-19 Situation

## Cumulative Number of Confirmed Cases

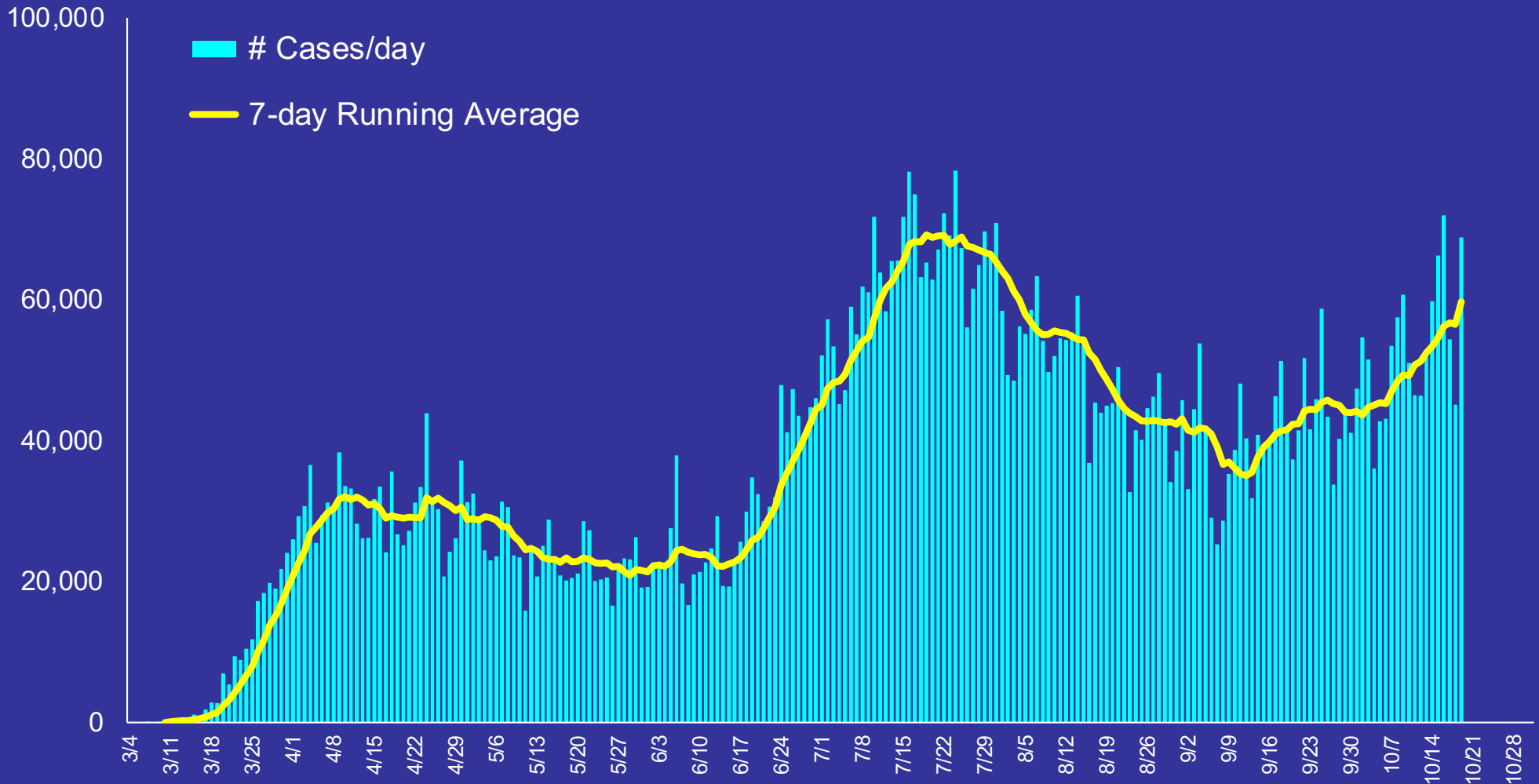


March 5 – removed some of the restrictions on who could be tested.  
May 1 – many states began loosening social distancing restrictions.  
Numbers given for the first of April, May, June, July, August, Sept, and Oct.

<https://www.worldometers.info/coronavirus/#countries>  
<https://www.cdc.gov/coronavirus/2019-ncov/cases-in-us.html>

# U.S. COVID-19 Situation

## Number of Newly Diagnosed Cases by Day

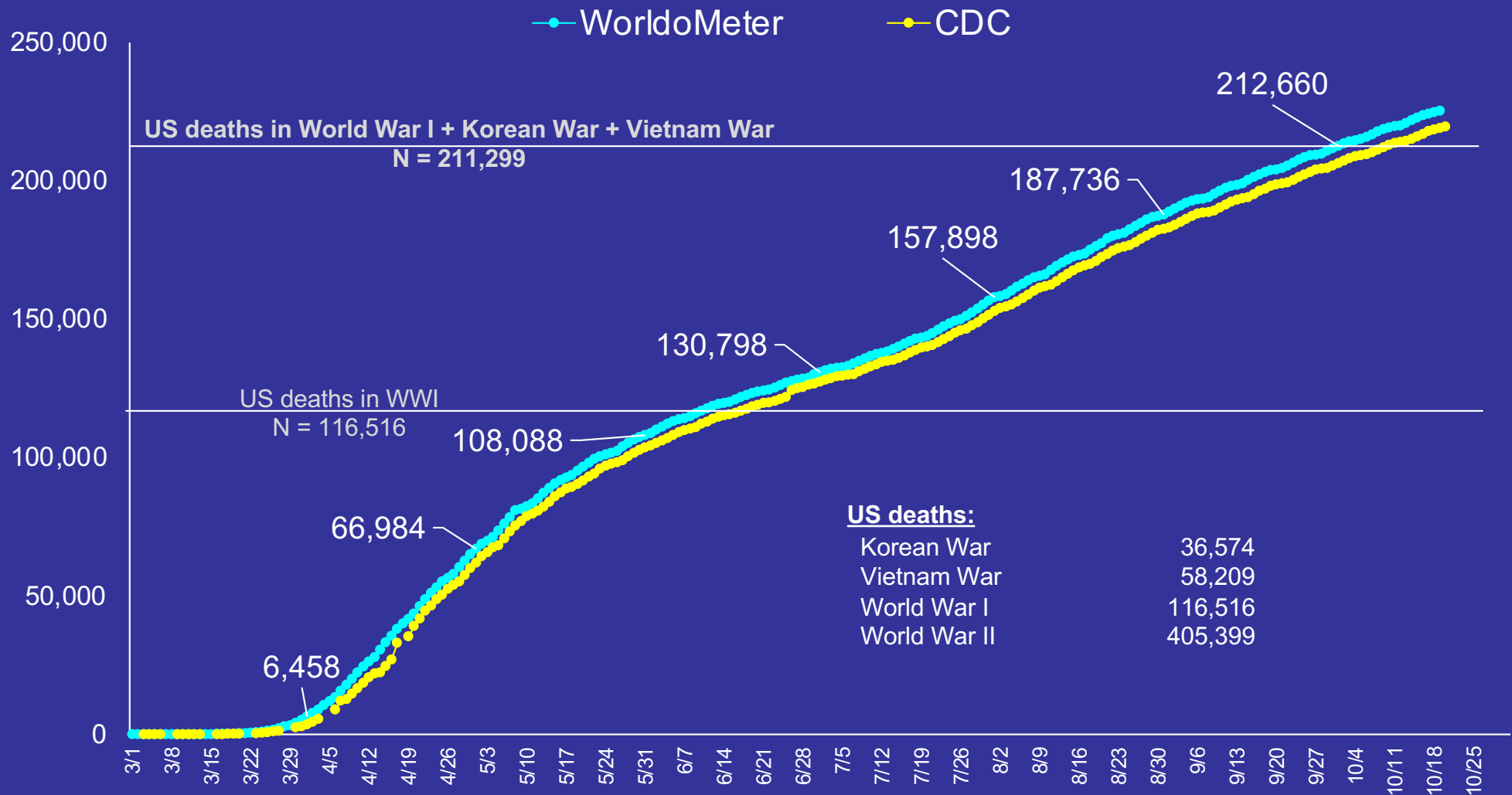


May 1 – many states began loosening social distancing restrictions.

Aug 24 – changed testing of contacts to symptomatic only, reverted back to asymptomatic mid-Sept.

# U.S. COVID-19 Situation

## Cumulative Number of Deaths from COVID-19



### US deaths:

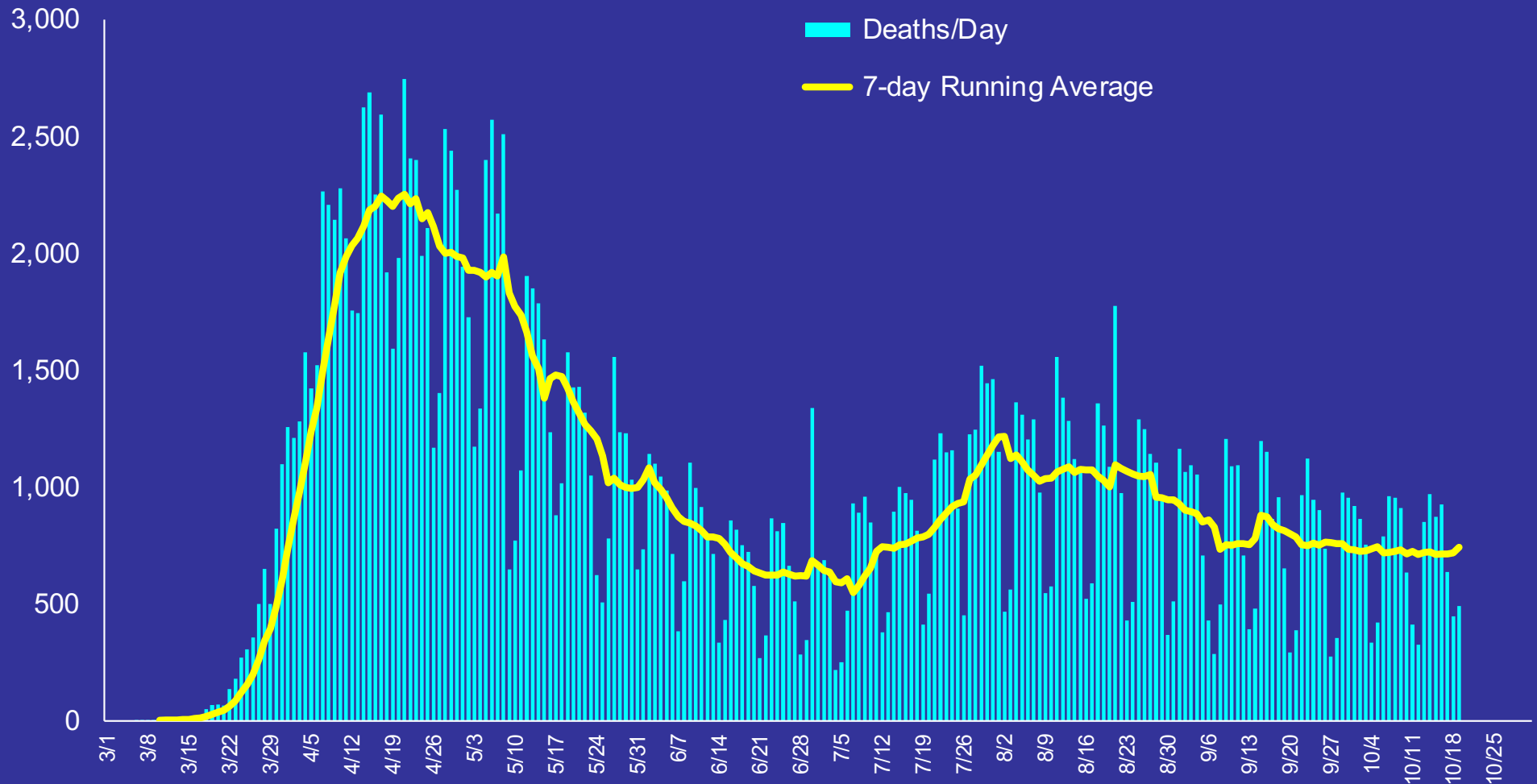
Korean War	36,574
Vietnam War	58,209
World War I	116,516
World War II	405,399

May 1 – many states loosened social distancing restrictions.  
 Numbers given for the first of April, May, June, July, August and Sept.

<https://www.worldometers.info/coronavirus/#countries>  
<https://www.cdc.gov/coronavirus/2019-ncov/cases-in-us.html>

# U.S. COVID-19 Situation

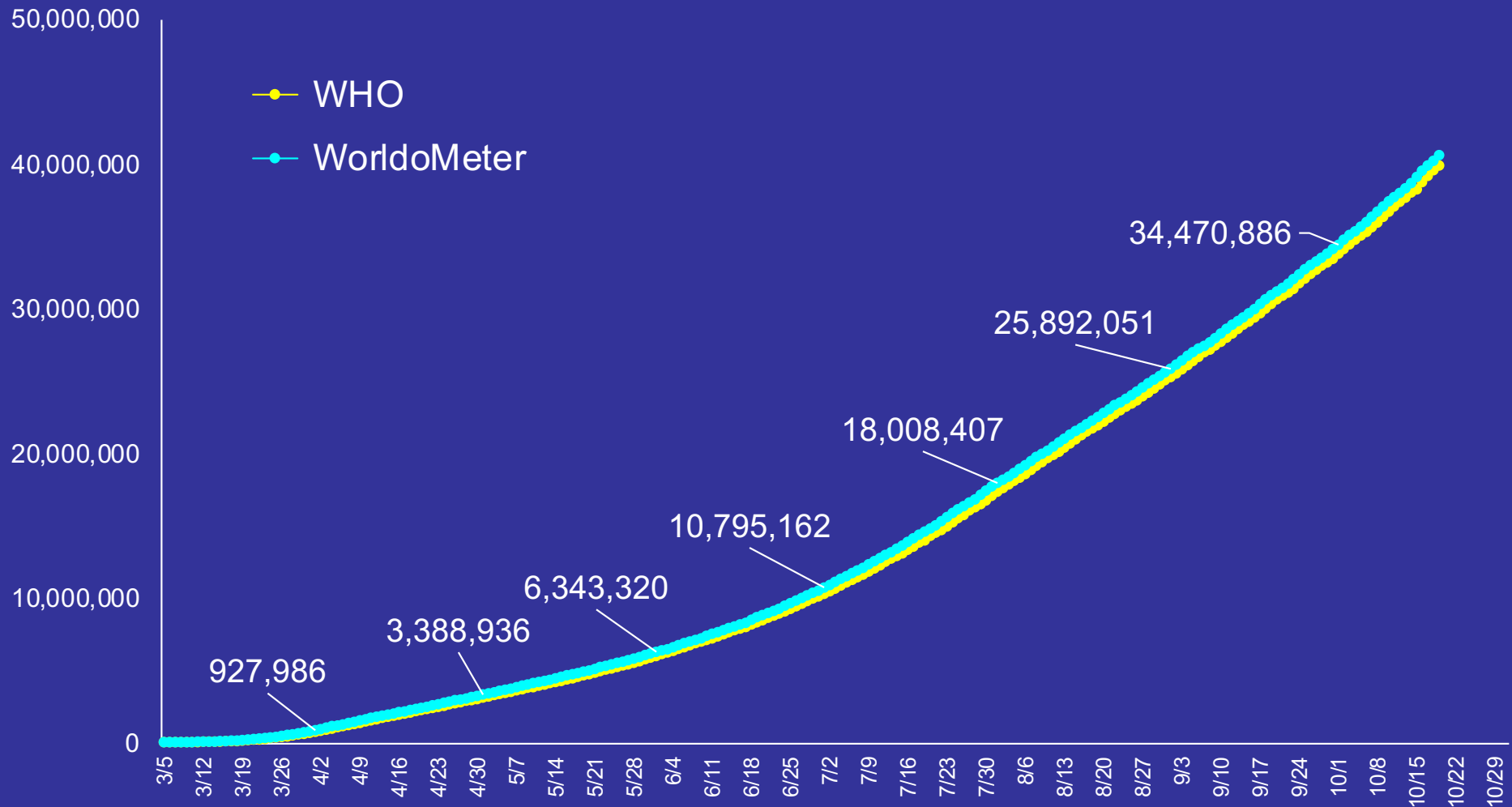
## Number of Deaths from COVID-19 by Day



# **COVID-19 Situation World**

# World COVID-19 Situation

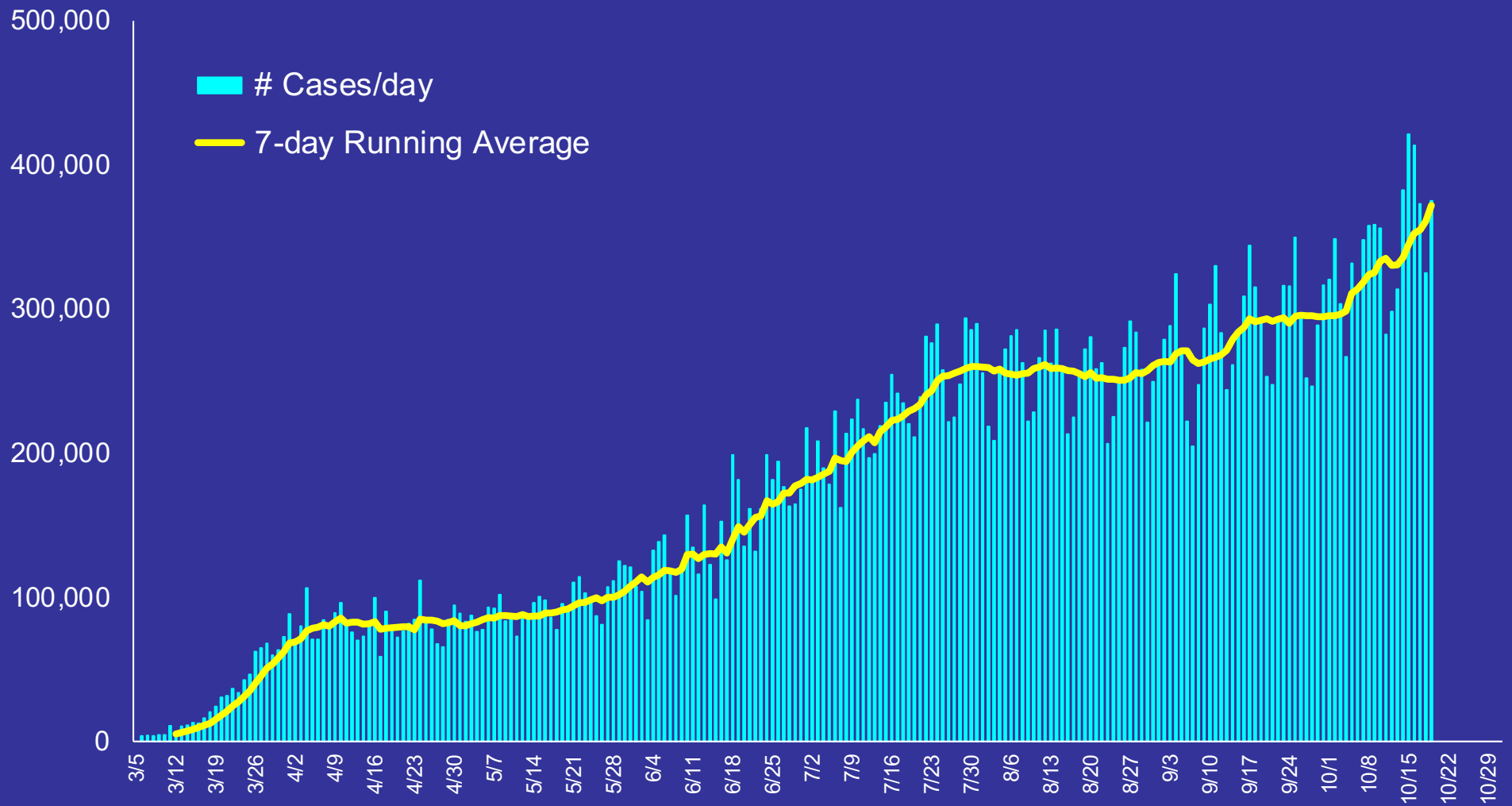
## Cumulative Number of Confirmed Cases



Numbers given for the first of April, May, June, July, August, Sept, and Oct.

# World COVID-19 Situation

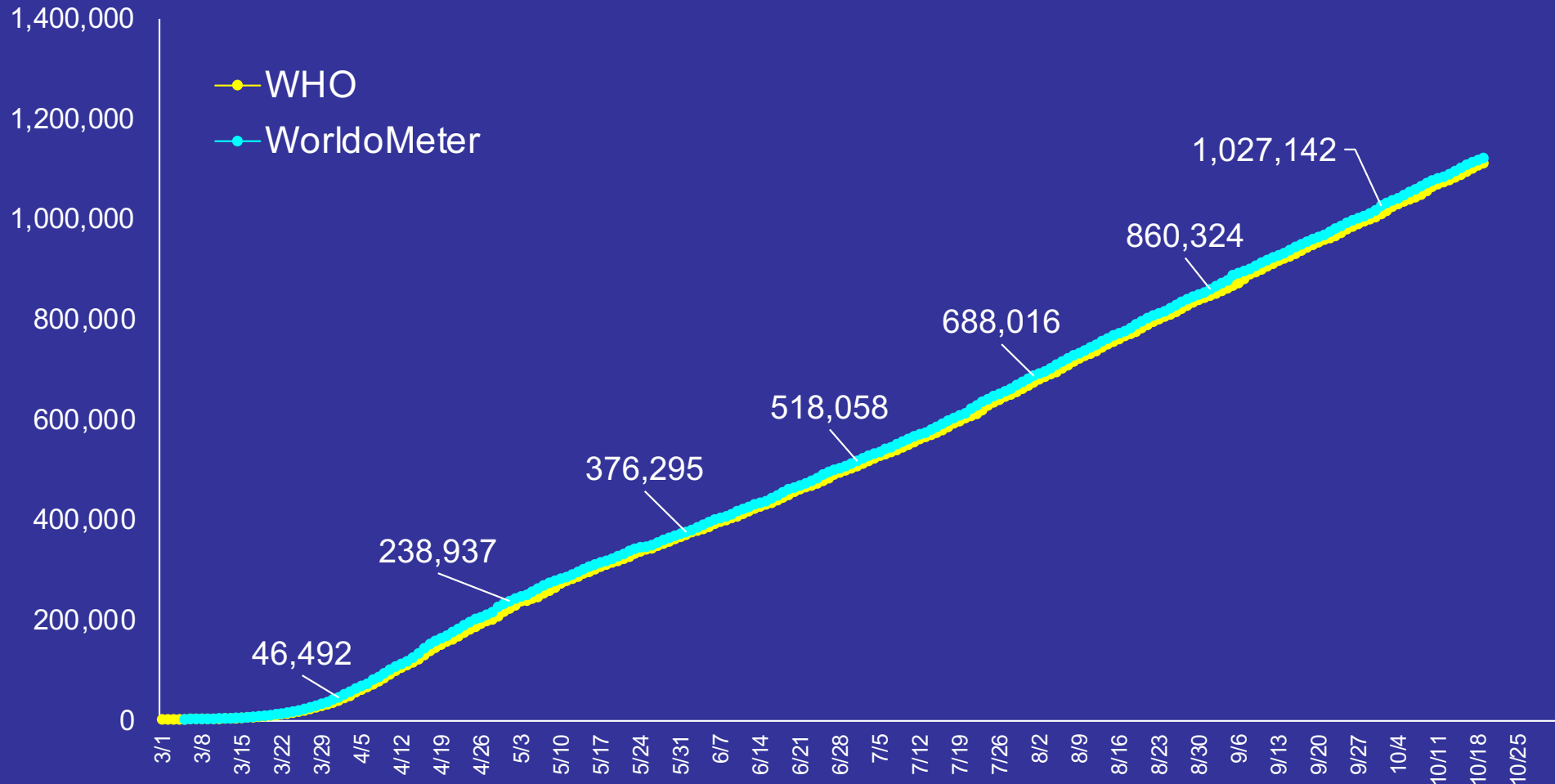
## Number of Newly Confirmed Cases by Day





# World COVID-19 Situation

## Cumulative Number of Deaths from COVID-19



Numbers given for the first of April, May, June, July, August, and Sept.

# World COVID-19 Situation

## Number of Deaths from COVID by Day

# Deaths/Day 7-day Running Average

