

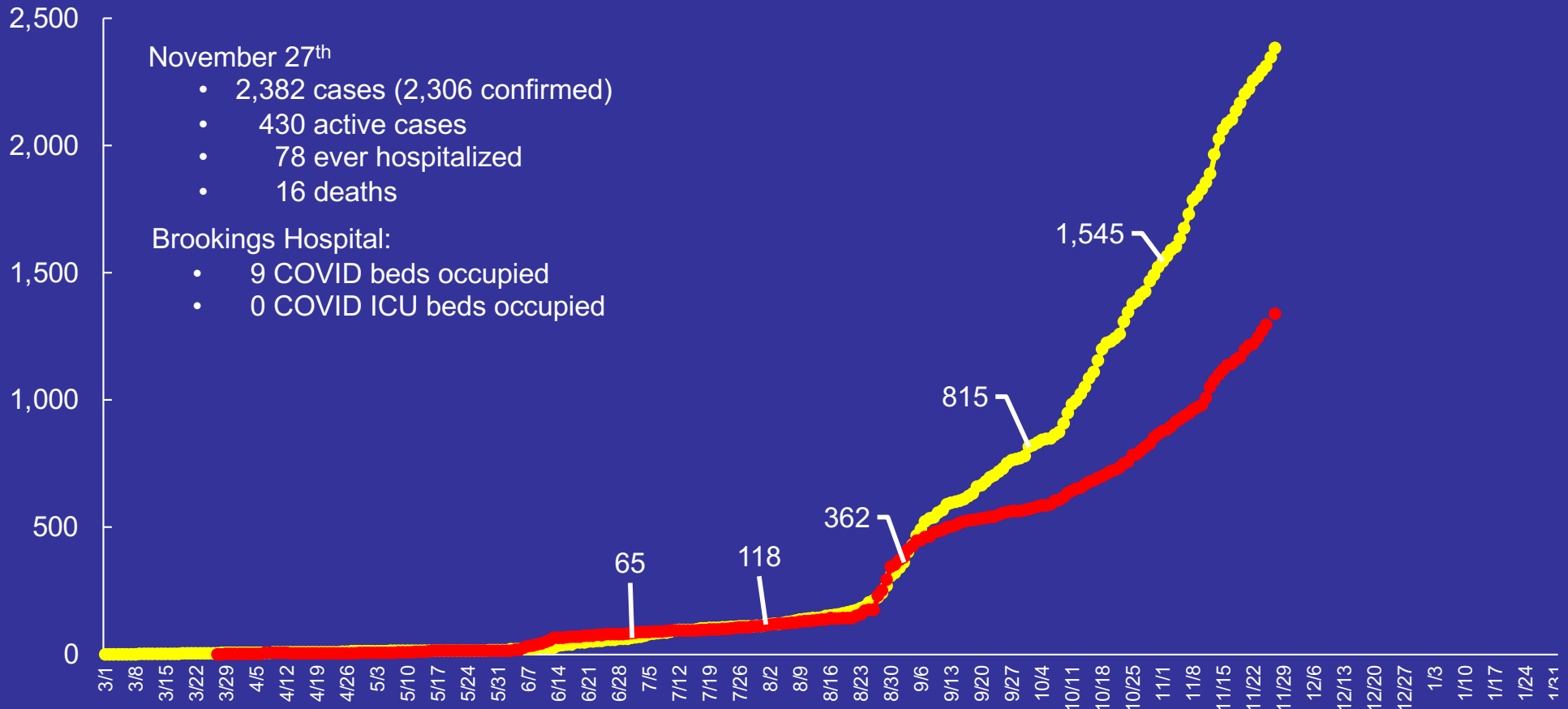
**COVID-19 Situation**

**Brookings County**

# Brookings Situation

## Number of Confirmed & Probable COVID-19 Cases

—●— Brookings (2010 pop = 31,965)
 —●— Clay (2010 pop = 13,864)



November 27<sup>th</sup>

- 2,382 cases (2,306 confirmed)
- 430 active cases
- 78 ever hospitalized
- 16 deaths

Brookings Hospital:

- 9 COVID beds occupied
- 0 COVID ICU beds occupied

Numbers given for the first of July, August, Sept, Oct, and Nov.

Confirmed = PCR test; Probable = antigen tests

Data were reported to DOH on previous day.

No SDDOH data update on 11/26; data reported 11/27 was divided equally between 11/26 & 11/27.

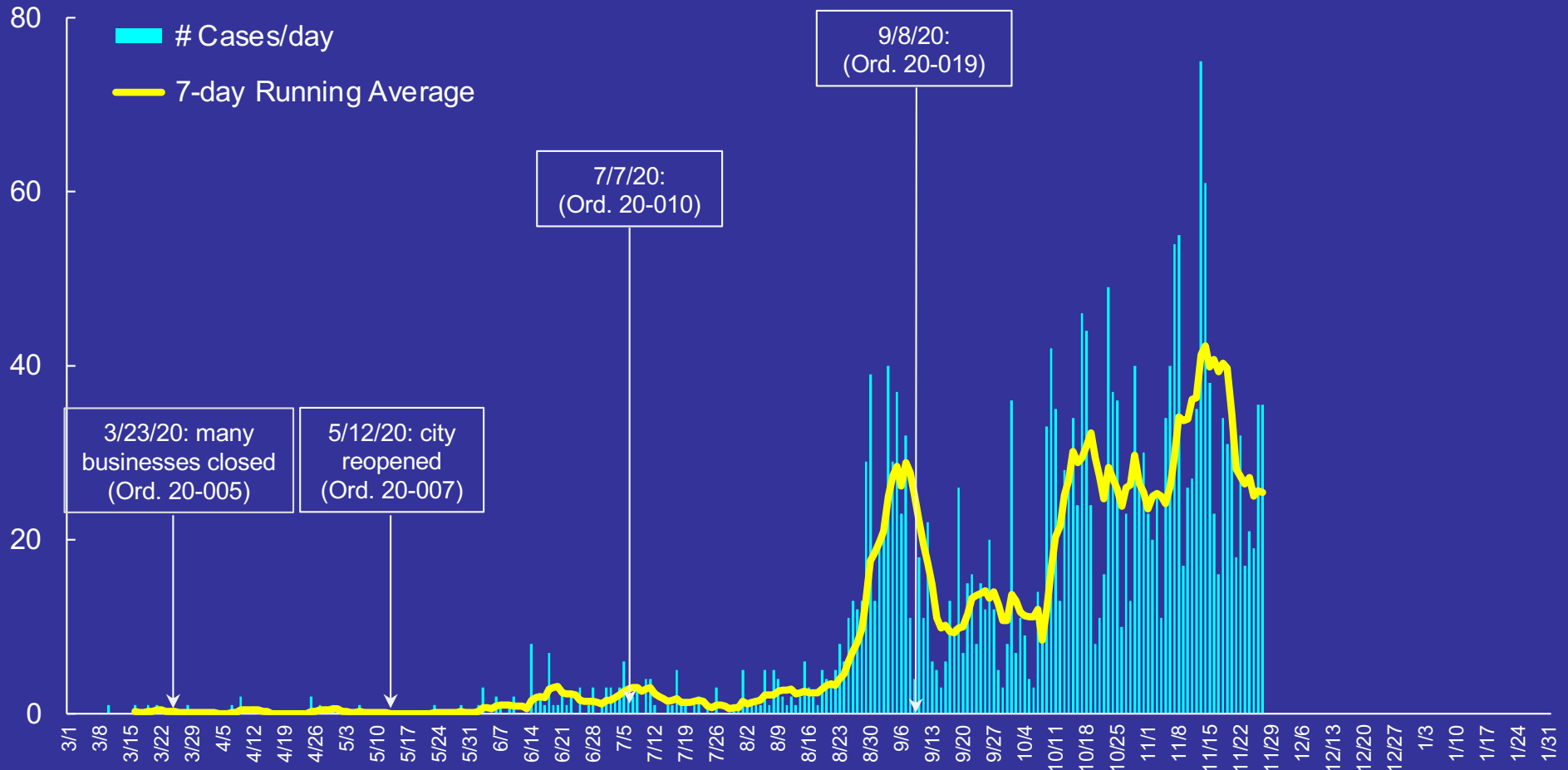
<https://doh.sd.gov/news/Coronavirus.aspx>

^ <https://www.nytimes.com/interactive/2020/us/coronavirus-us-cases.html?action=click&module=Top%20Stories&pgtype=Homepage> (10/27/20)

# Brookings COVID-19 Situation

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

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



No SDDOH data update on 11/26; data reported 11/27 was divided equally between 11/26 & 11/27

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 9/8/10

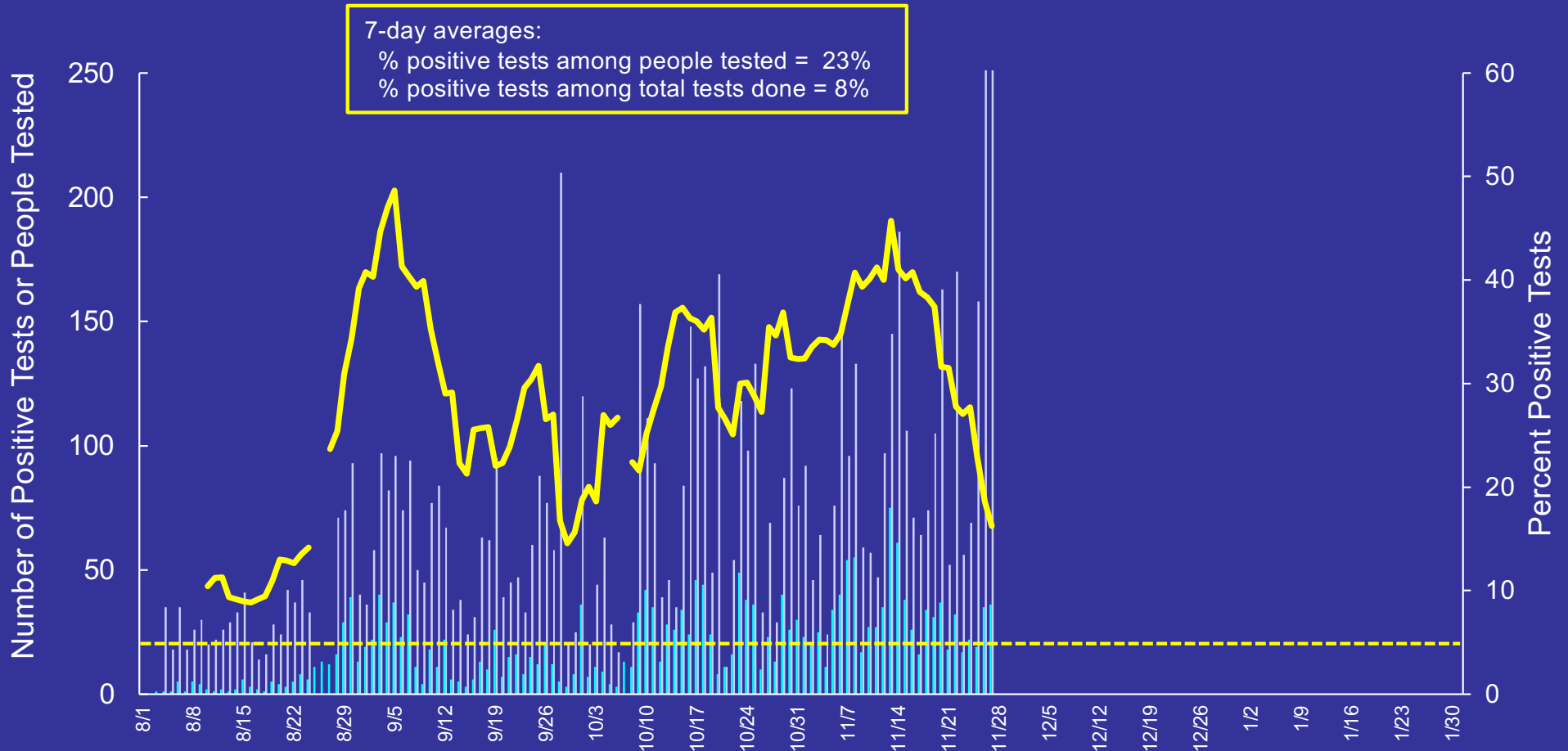
<https://doh.sd.gov/news/Coronavirus.aspx>

<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)

■ Number Positive ■ Daily total of people tested — 7-day average of % positive tests<sup>^</sup>



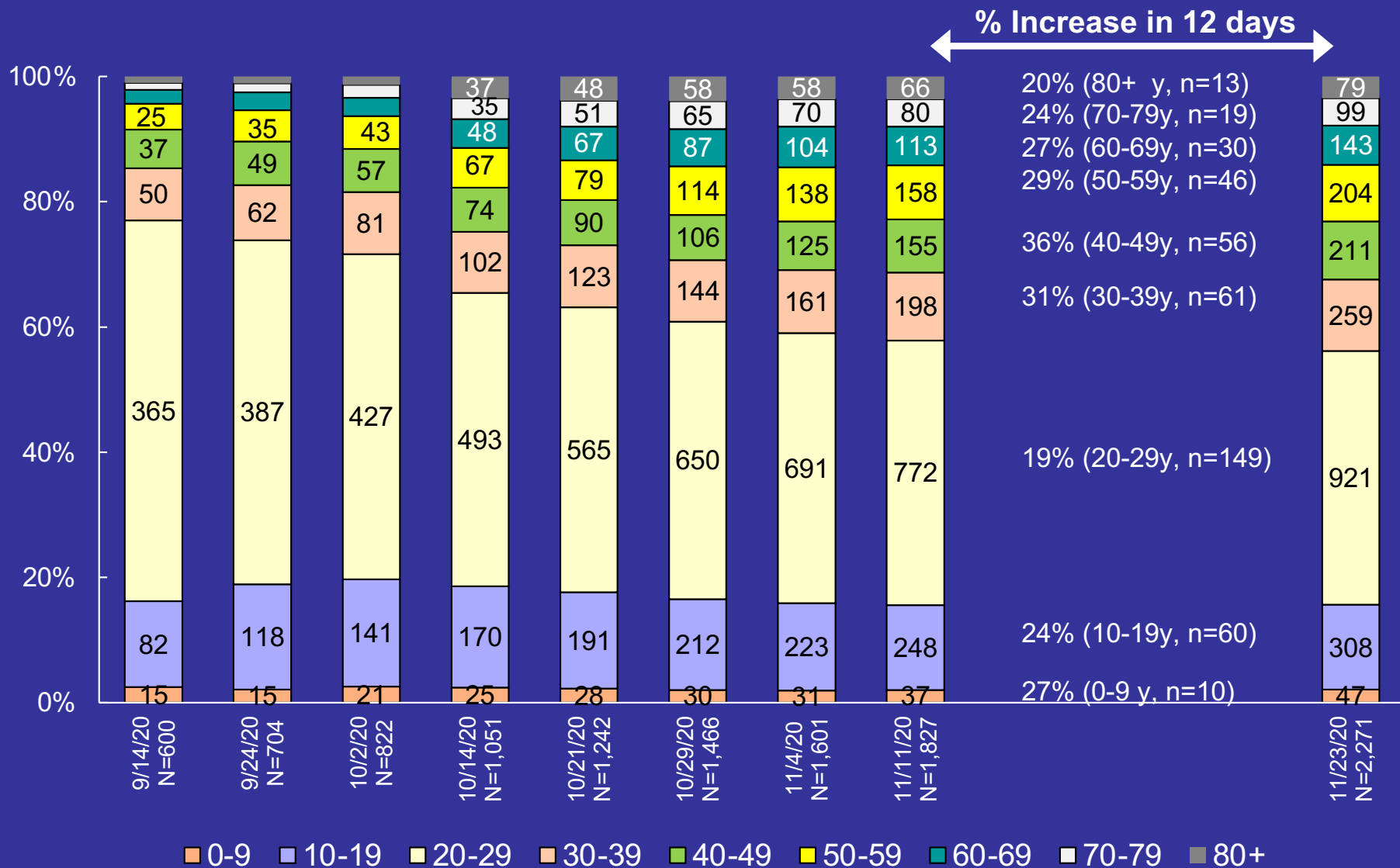
No SDDOH data update on 11/26; data reported 11/27 was divided equally between 11/26 & 11/27

<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.

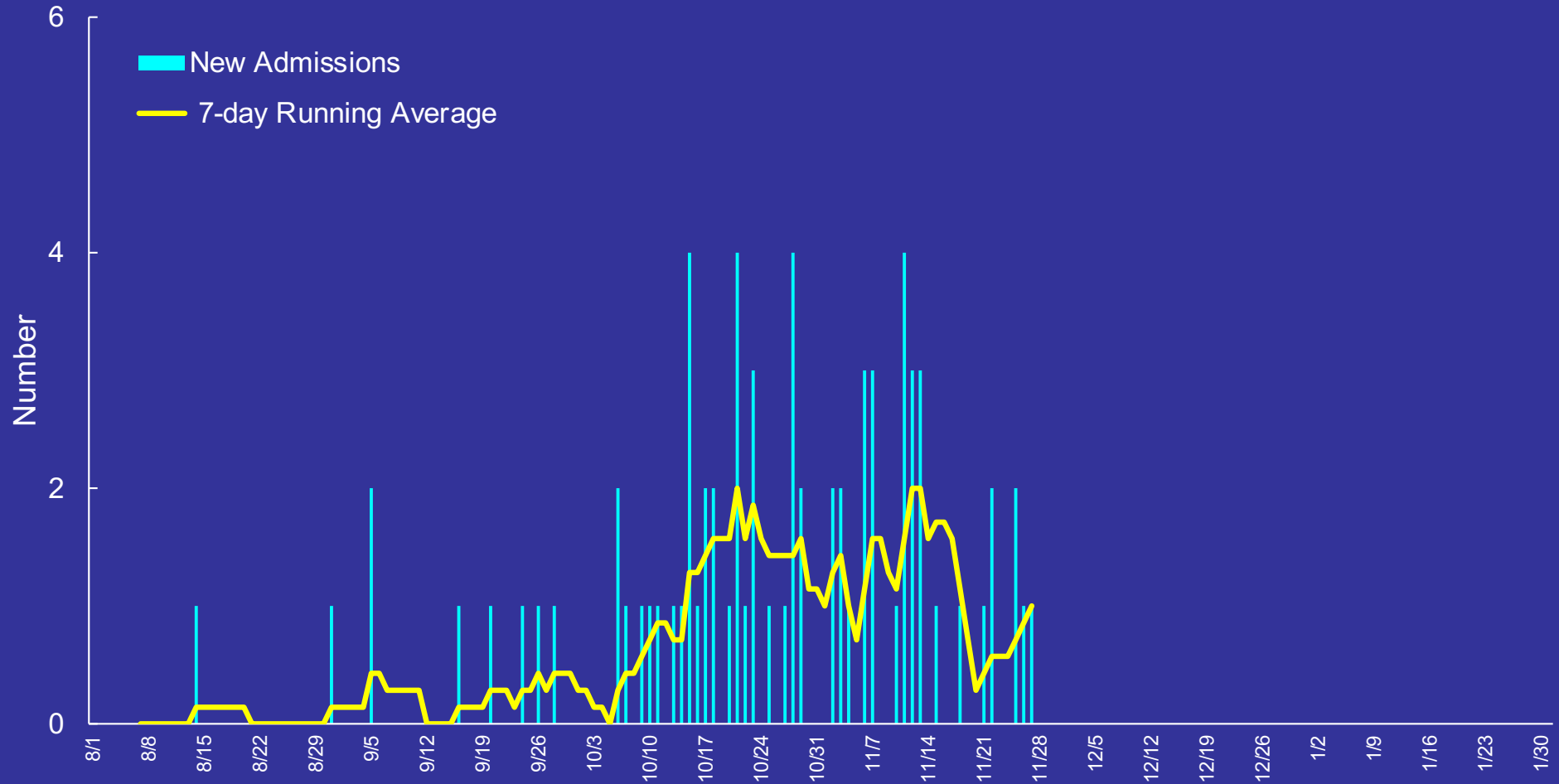
# South Dakota COVID-19 Situation

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



# Brookings COVID-19 Situation

## Number of New Hospitalizations by Day



Includes only Brookings County residents.

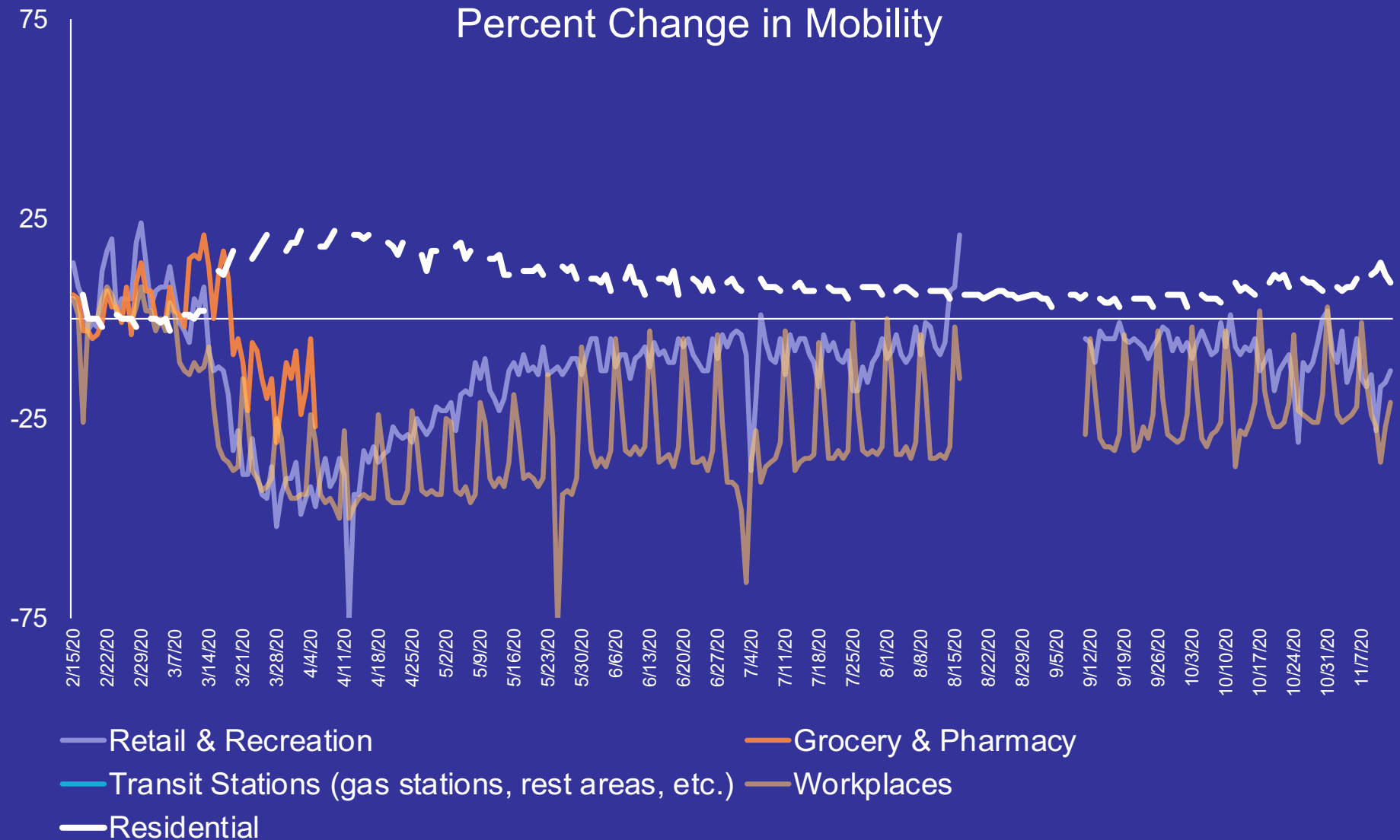
As of August 1<sup>st</sup> there were 4 individuals who had been hospitalized since March.

No SDDOH data update on 11/26; data reported 11/27 was divided equally between 11/26 & 11/27

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

# Brookings County Mobility Data via Google

Percent Change in Mobility



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/>

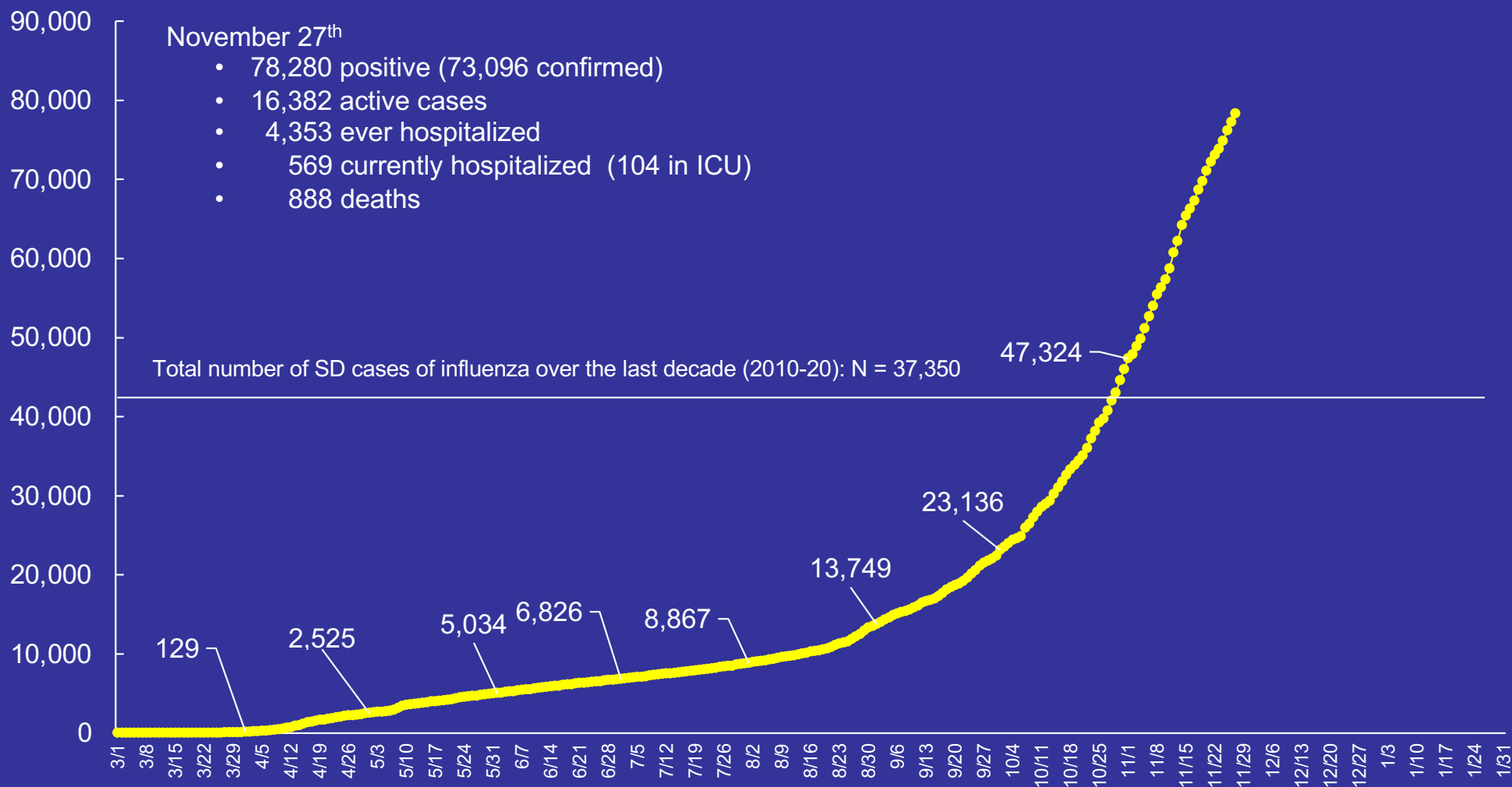
# **COVID-19 Situation**

## **South Dakota**



# South Dakota COVID-19 Situation

## Cumulative Number of Confirmed & Probable Cases



No SDDOH data update on 11/26; data reported 11/27 was divided equally between 11/26 & 11/27

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

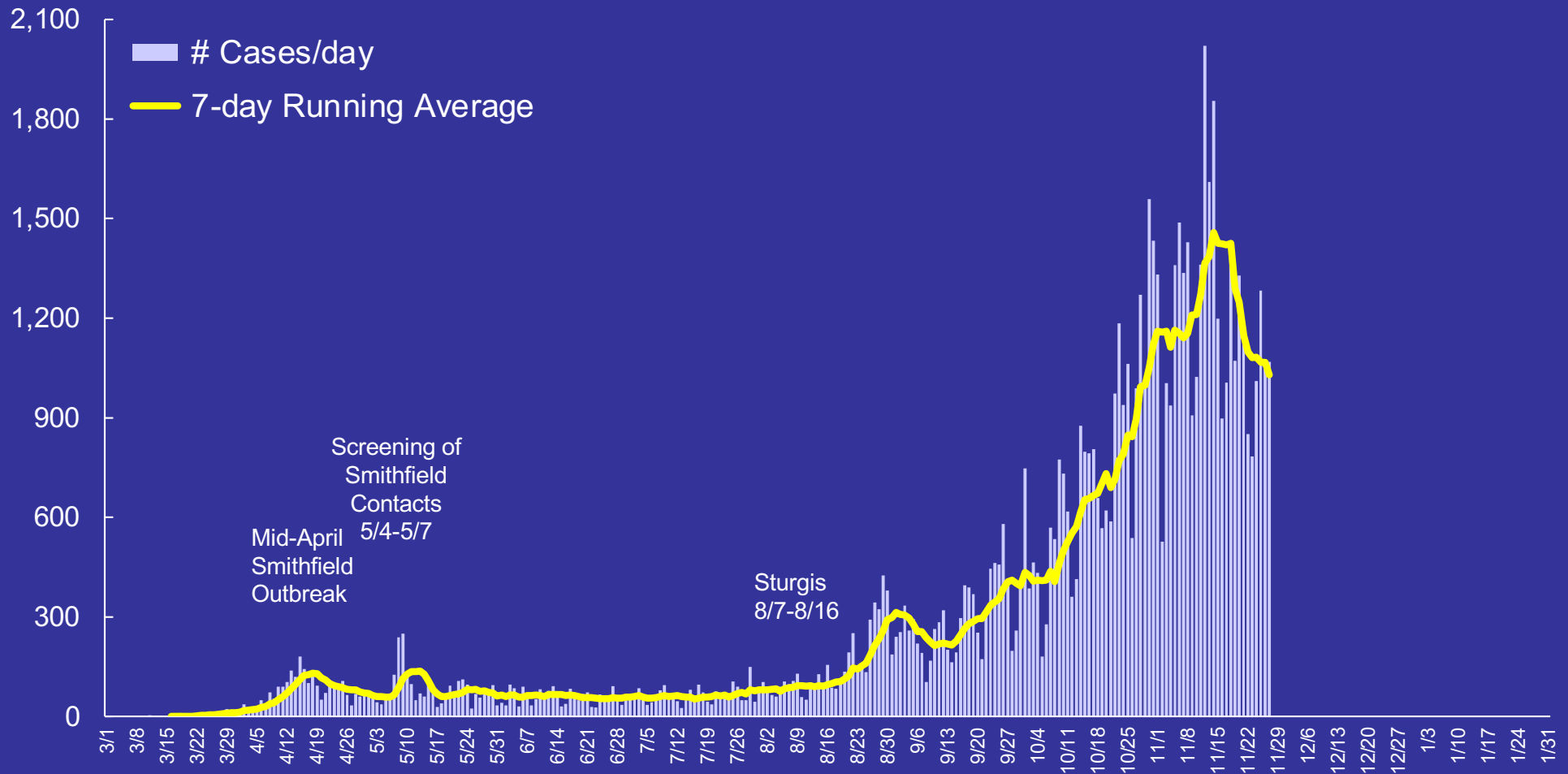
State residents only

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

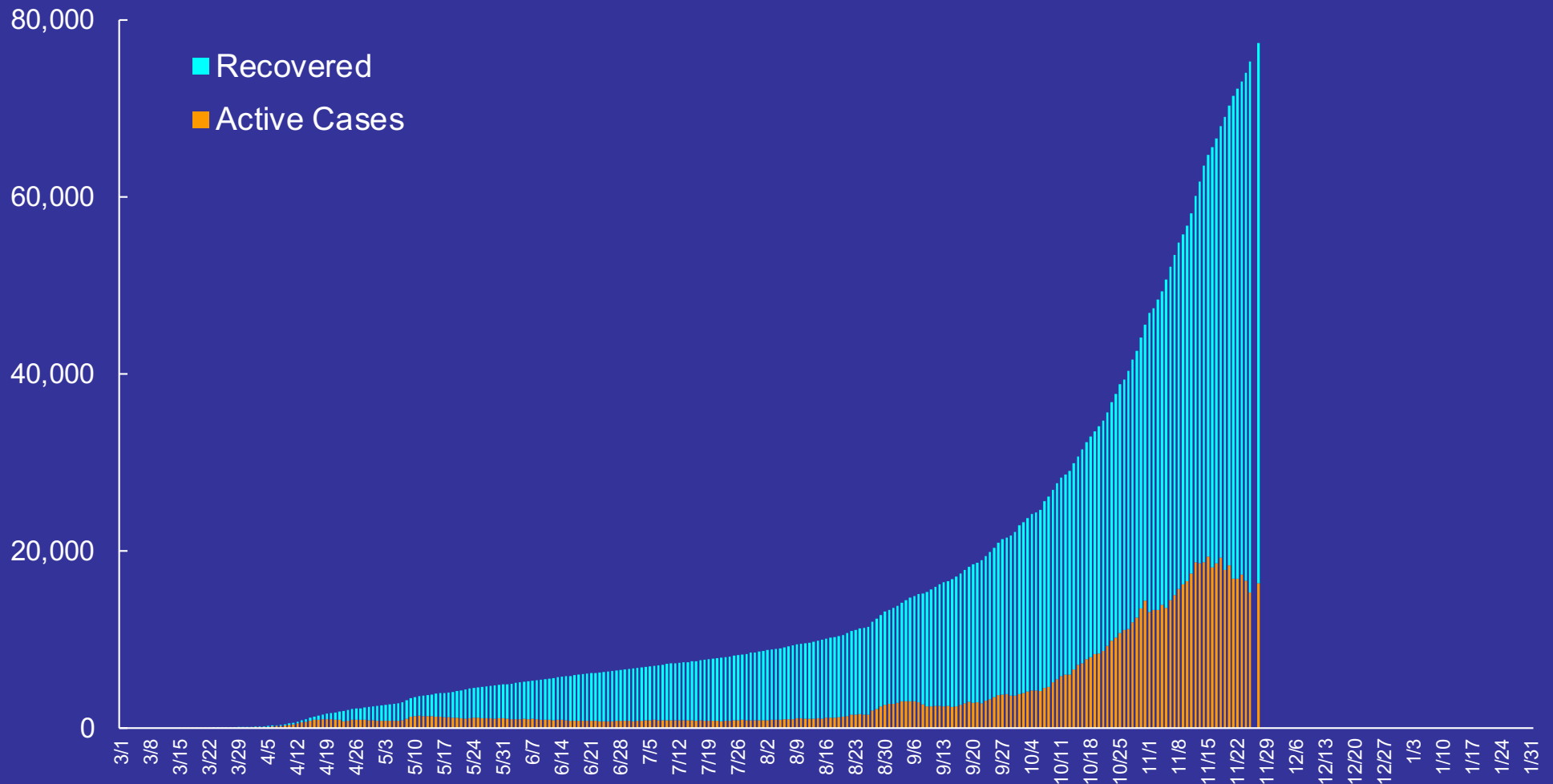


No SDDOH data update on 11/26; data reported 11/27 was divided equally between 11/26 & 11/27

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

# South Dakota COVID-19 Situation

## Number of Active and Recovered Cases



No SDDOH data update on 11/26  
Does not include number of deaths.

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

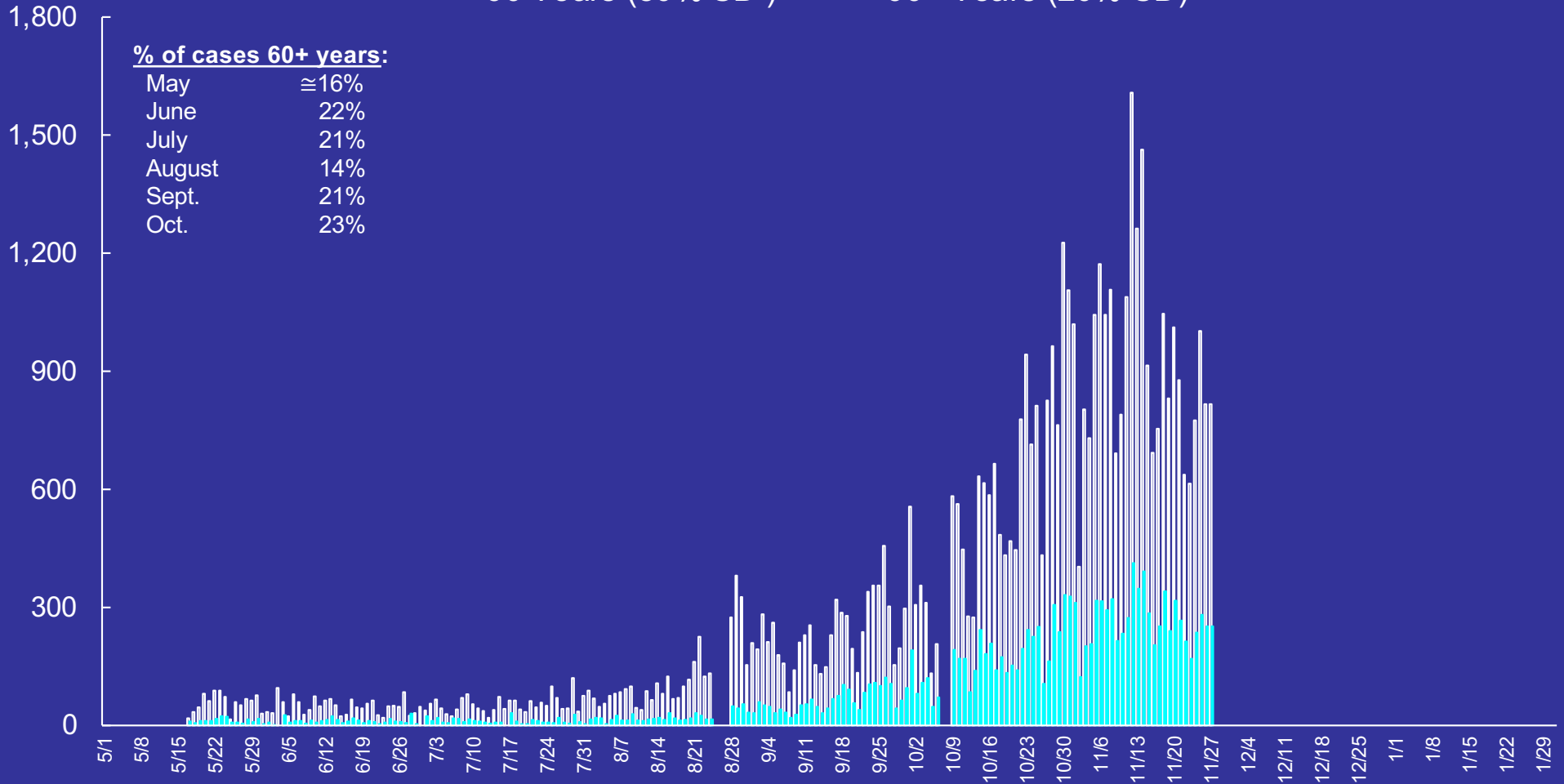
<https://doh.sd.gov/news/Coronavirus.aspx>

# South Dakota COVID-19 Situation

## Age Distribution

Number of Confirmed & Probable Cases by Age & Day

□ < 60 Years (80% SD)    ■ 60+ Years (20% SD)



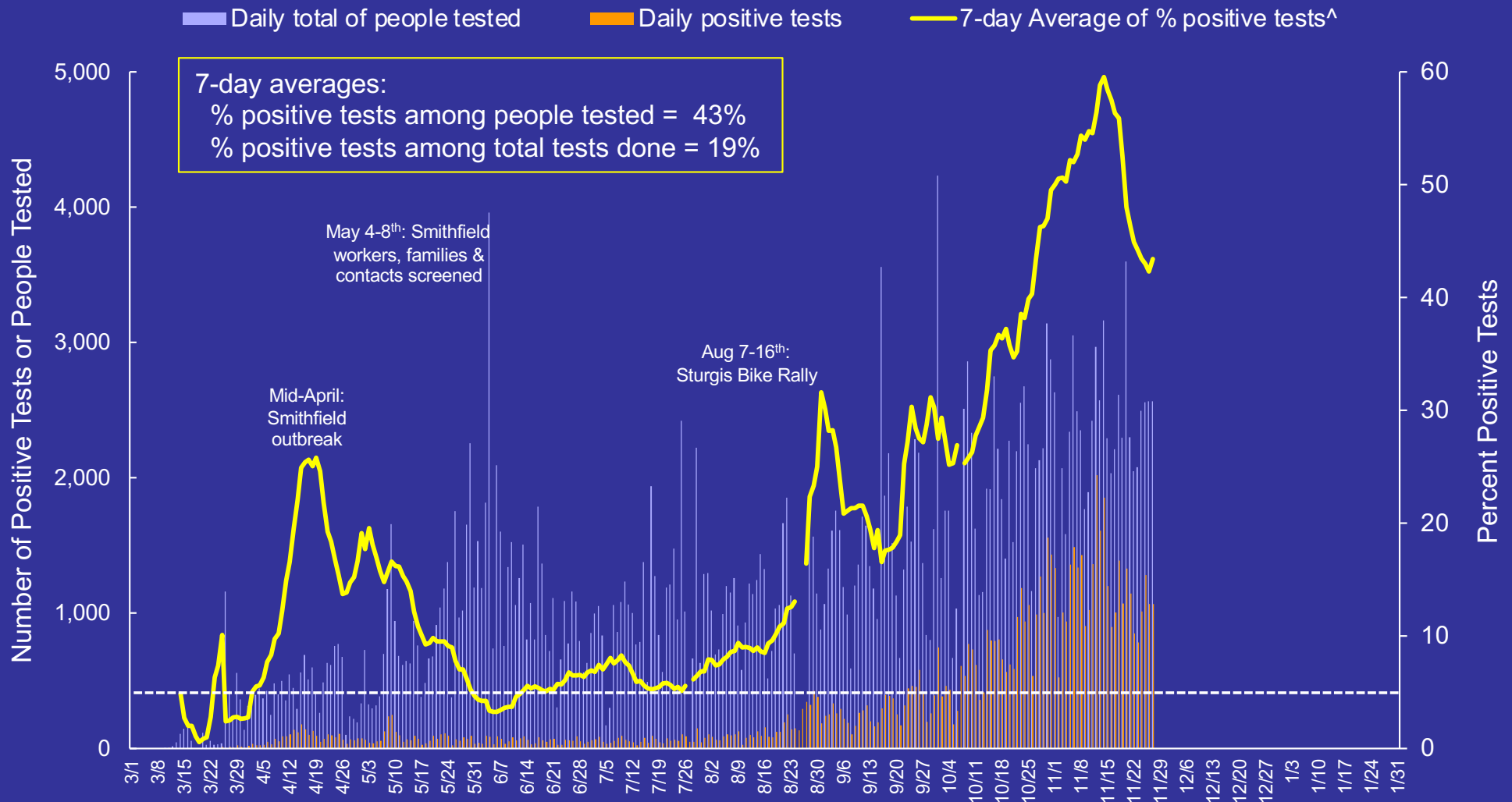
No SDDOH data update on 11/26; data reported 11/27 was divided equally between 11/26 & 11/27

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



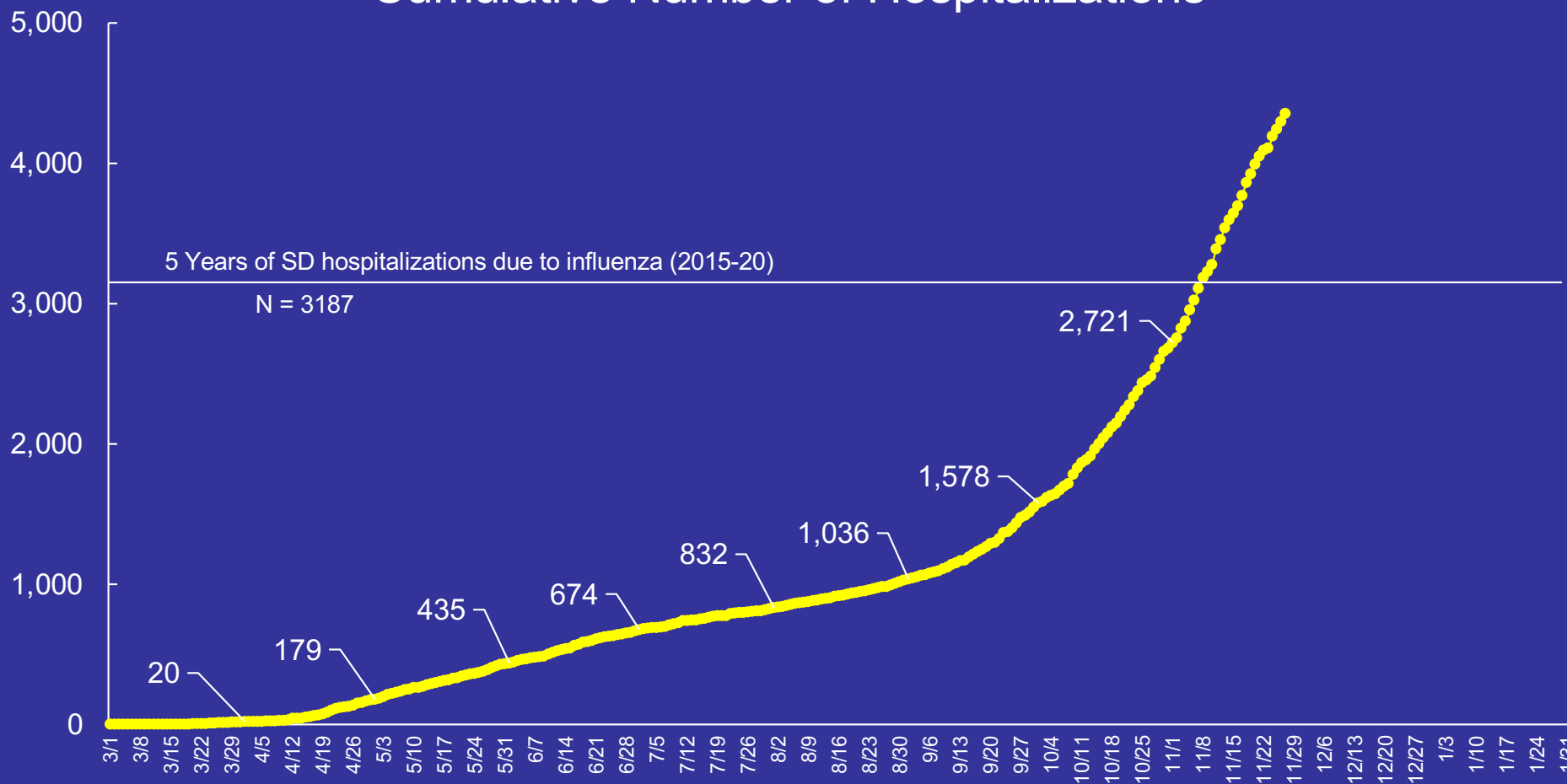
No SDDOH data update on 11/26; data reported 11/27 was divided equally between 11/26 & 11/27

^ 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 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

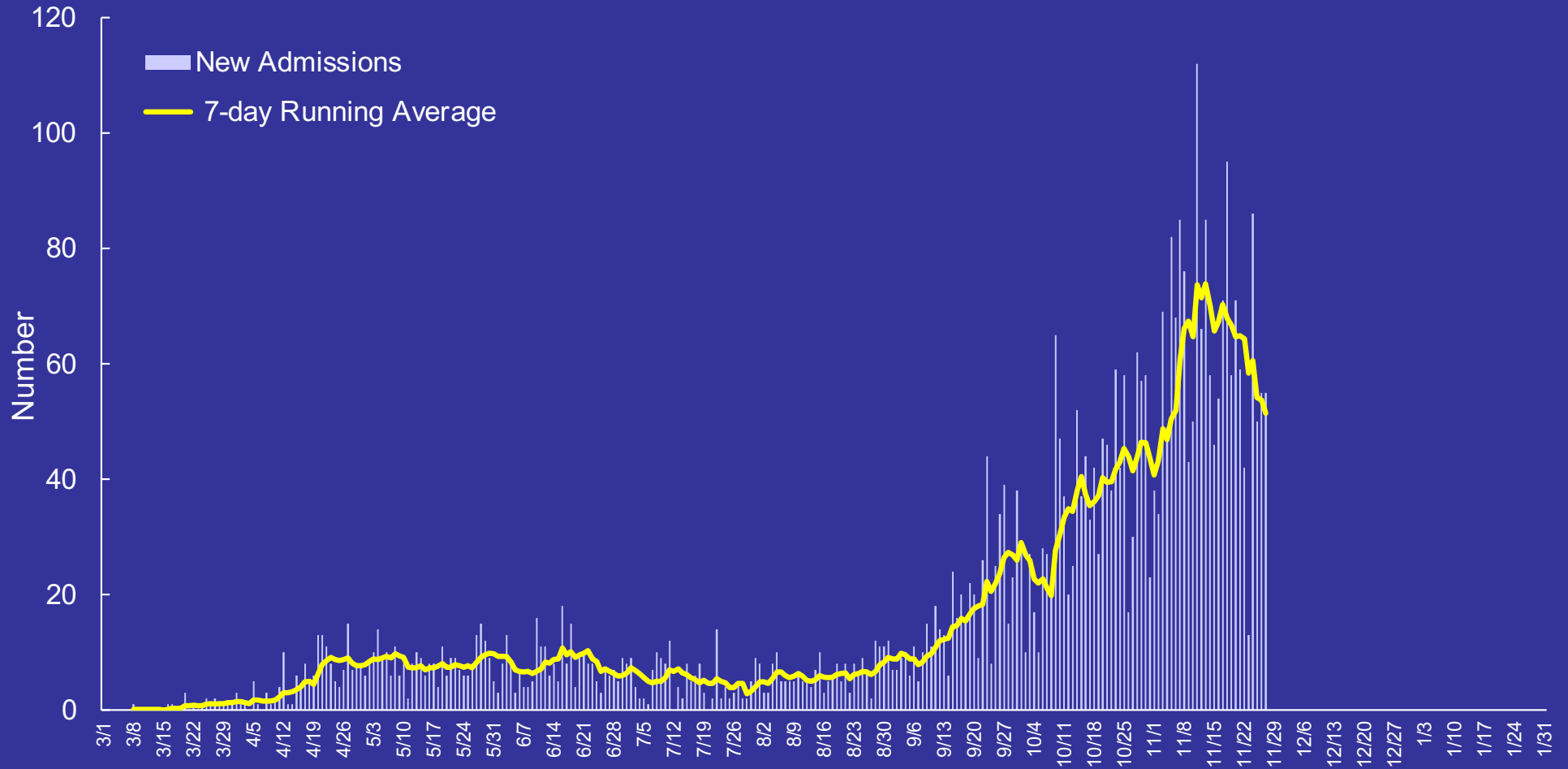
## Cumulative Number of Hospitalizations



No SDDOH data update on 11/26; data reported 11/27 was divided equally between 11/26 & 11/27  
Numbers given for the first of April, May, June, July, August, Sept, Oct, and Nov.  
Includes only state residents.

# South Dakota COVID-19 Situation

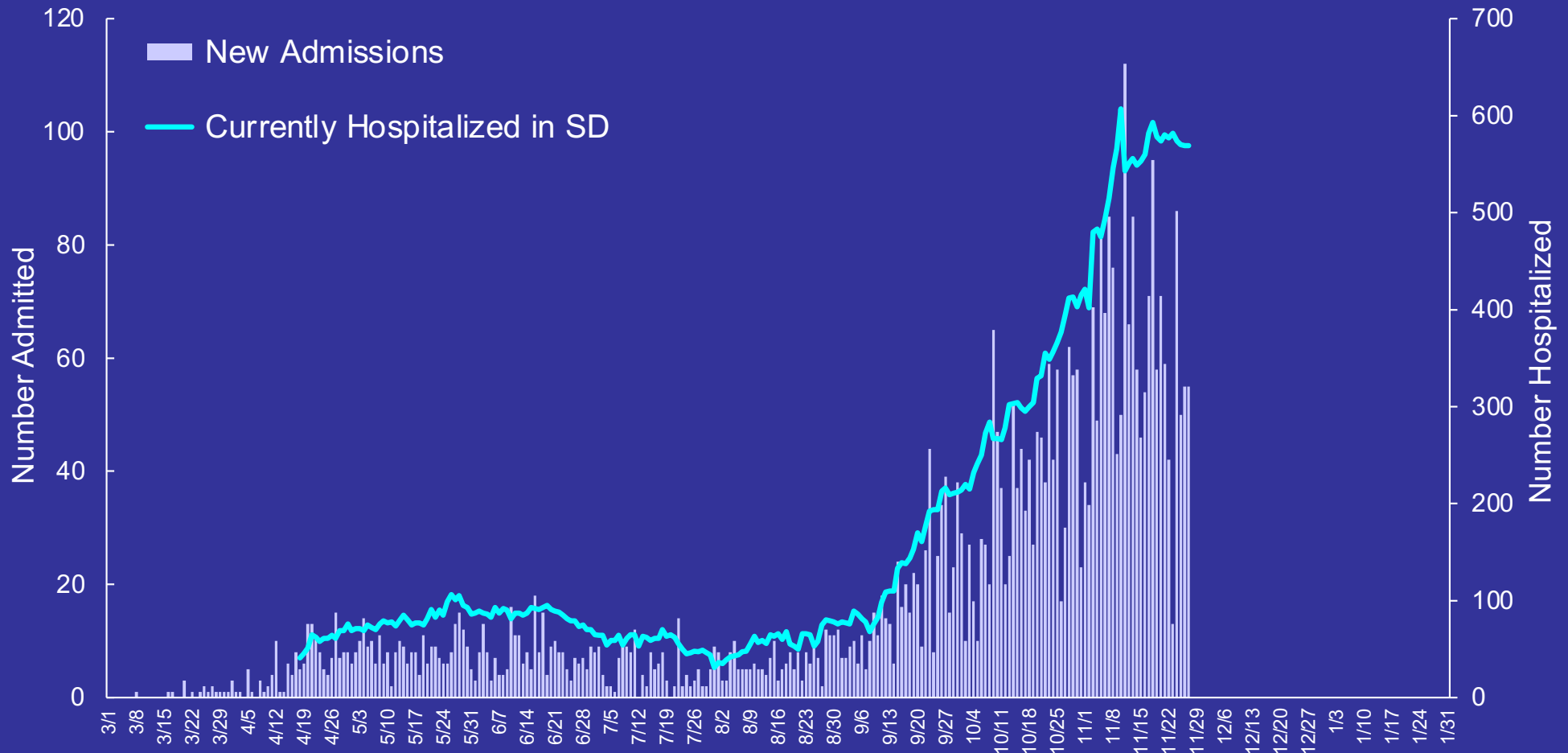
## Number of New Hospitalizations by Day



No SDDOH data update on 11/26; data reported 11/27 was divided equally between 11/26 & 11/27  
Includes only state residents.

# South Dakota COVID-19 Situation

## Hospitalization Data by Day



No SDDOH data update on 11/26; data reported 11/27 was divided equally between 11/26 & 11/27

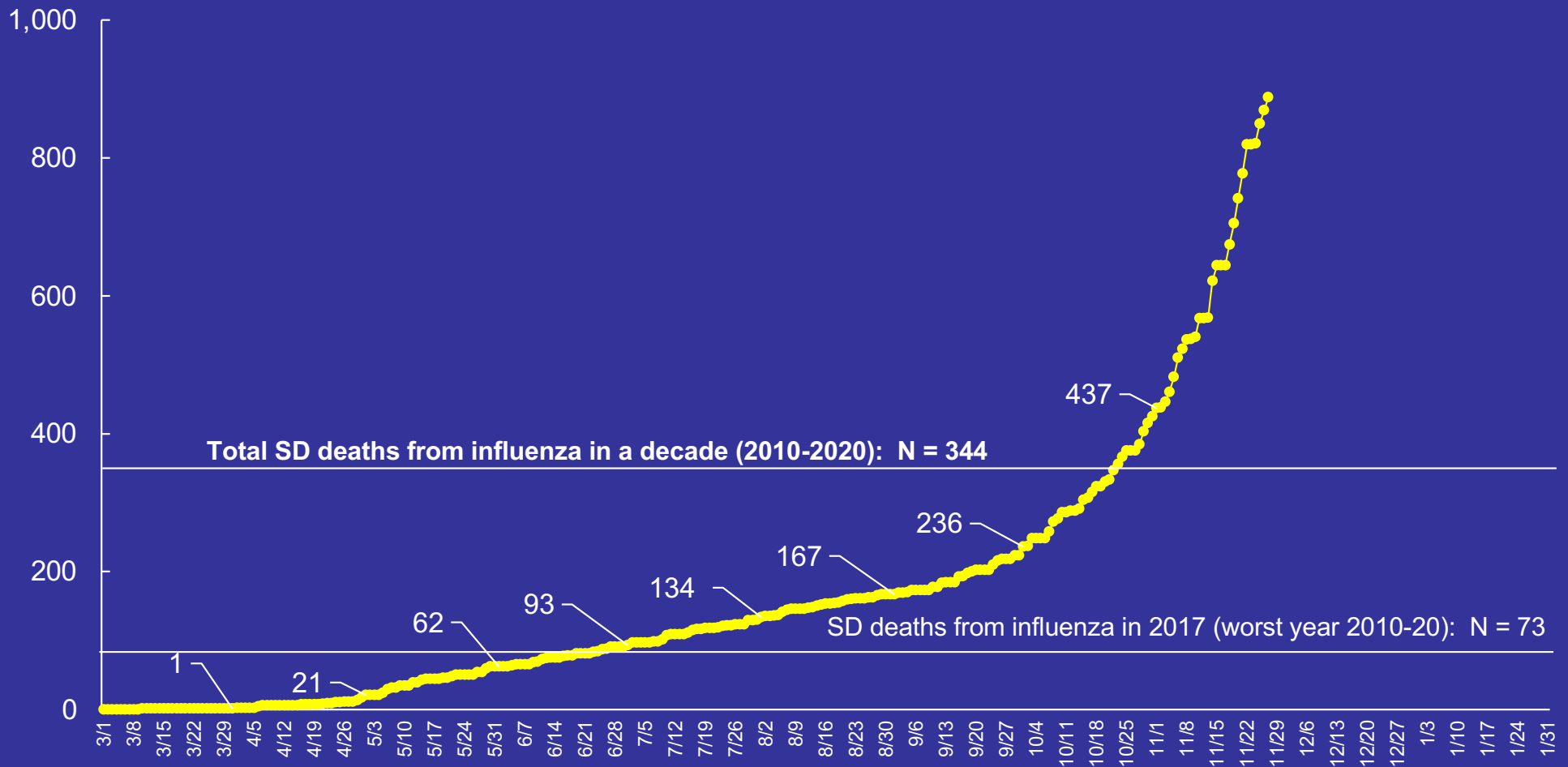
Currently hospitalized includes state and out-of-state residents and transfers in from other states, but not residents transferred out-of-state.

New admissions includes only state residents. Does not include patients on home health care.



# South Dakota COVID-19 Situation

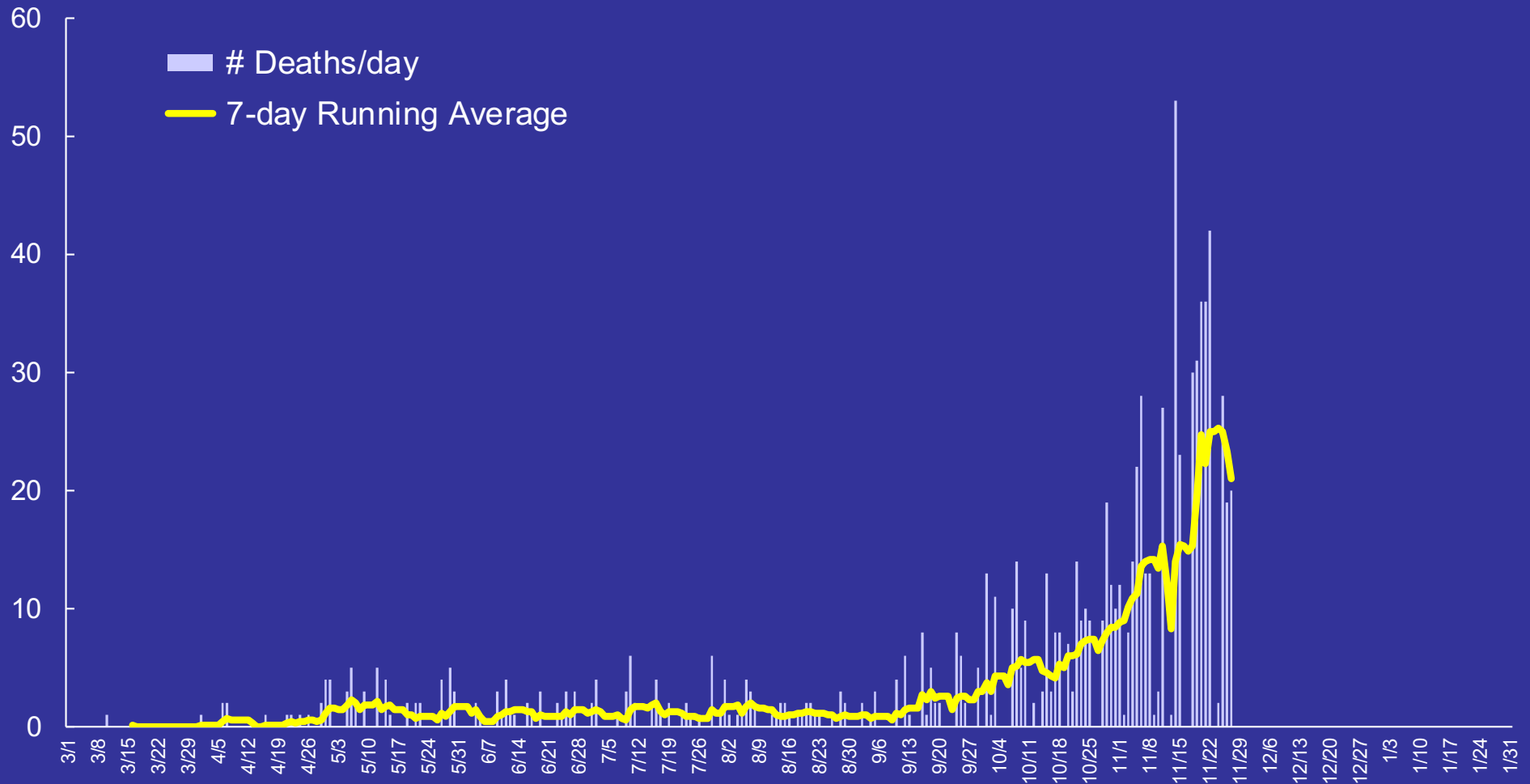
## Number of Deaths from COVID-19



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.  
 No SDDOH data update on 11/26; data reported 11/27 was divided equally between 11/26 & 11/27  
 Numbers given for the first of April, May, June, July, August, Sept, Oct, and Nov.

# South Dakota COVID-19 Situation

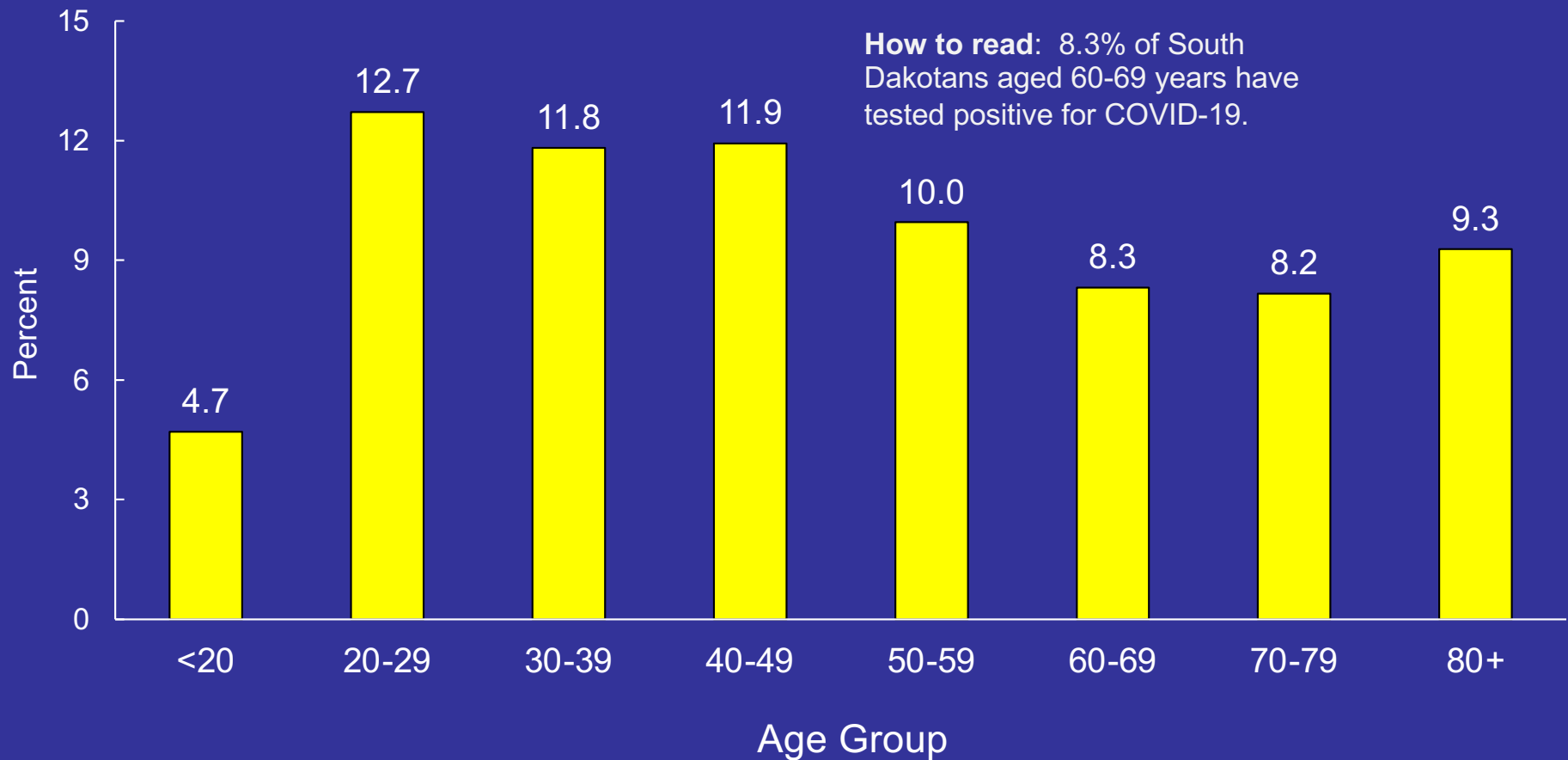
## Number of Deaths from COVID-19 by Day



No SDDOH data update on 11/26; data reported 11/27 was divided equally between 11/26 & 11/27

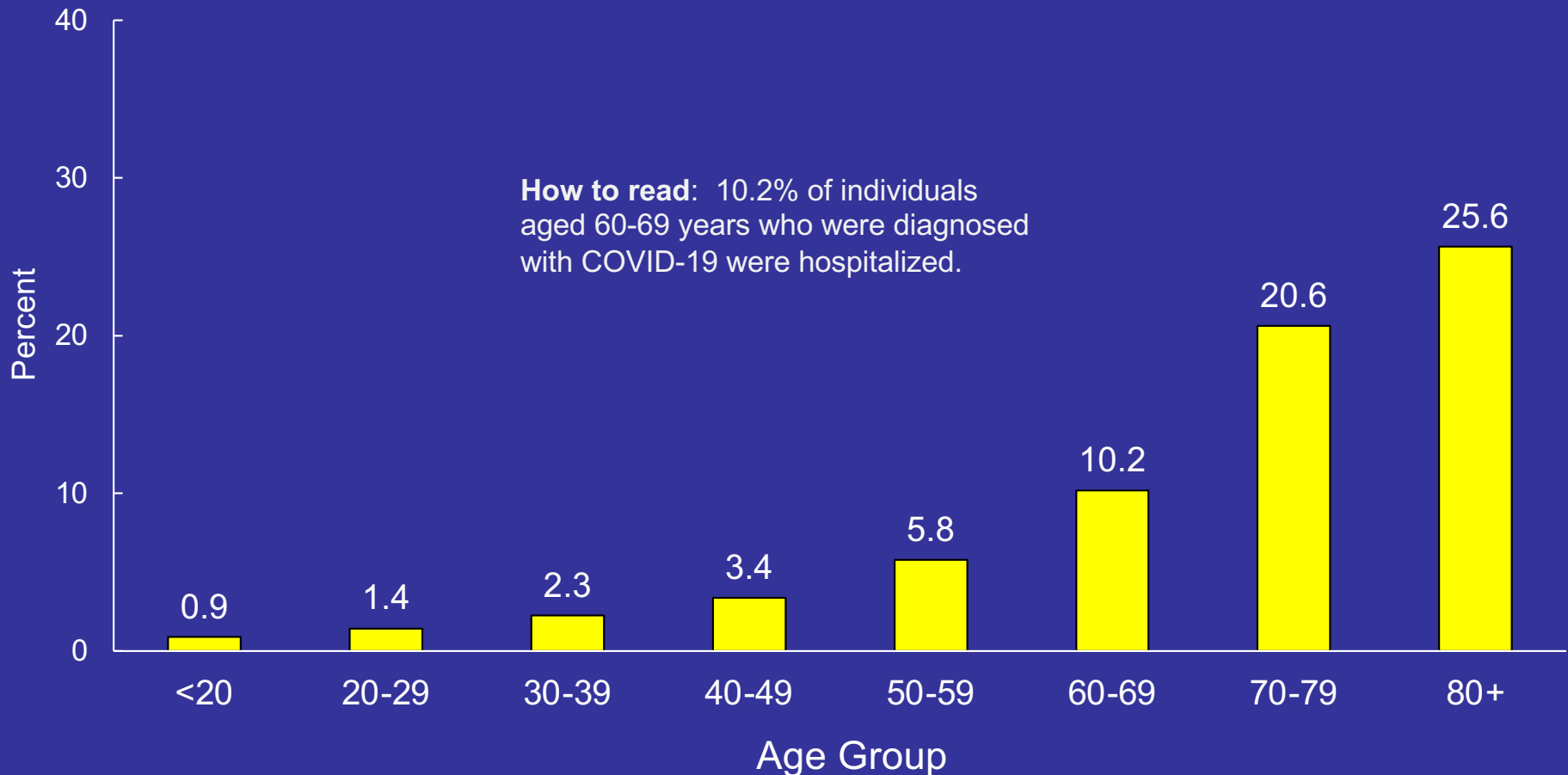
# South Dakota COVID-19 Situation

## Percent of South Dakota Population Ever Testing Positive by Age as of November 27, 2020



# South Dakota COVID-19 Situation

## Percent of Cases Ever Hospitalized by Age as of November 27, 2020

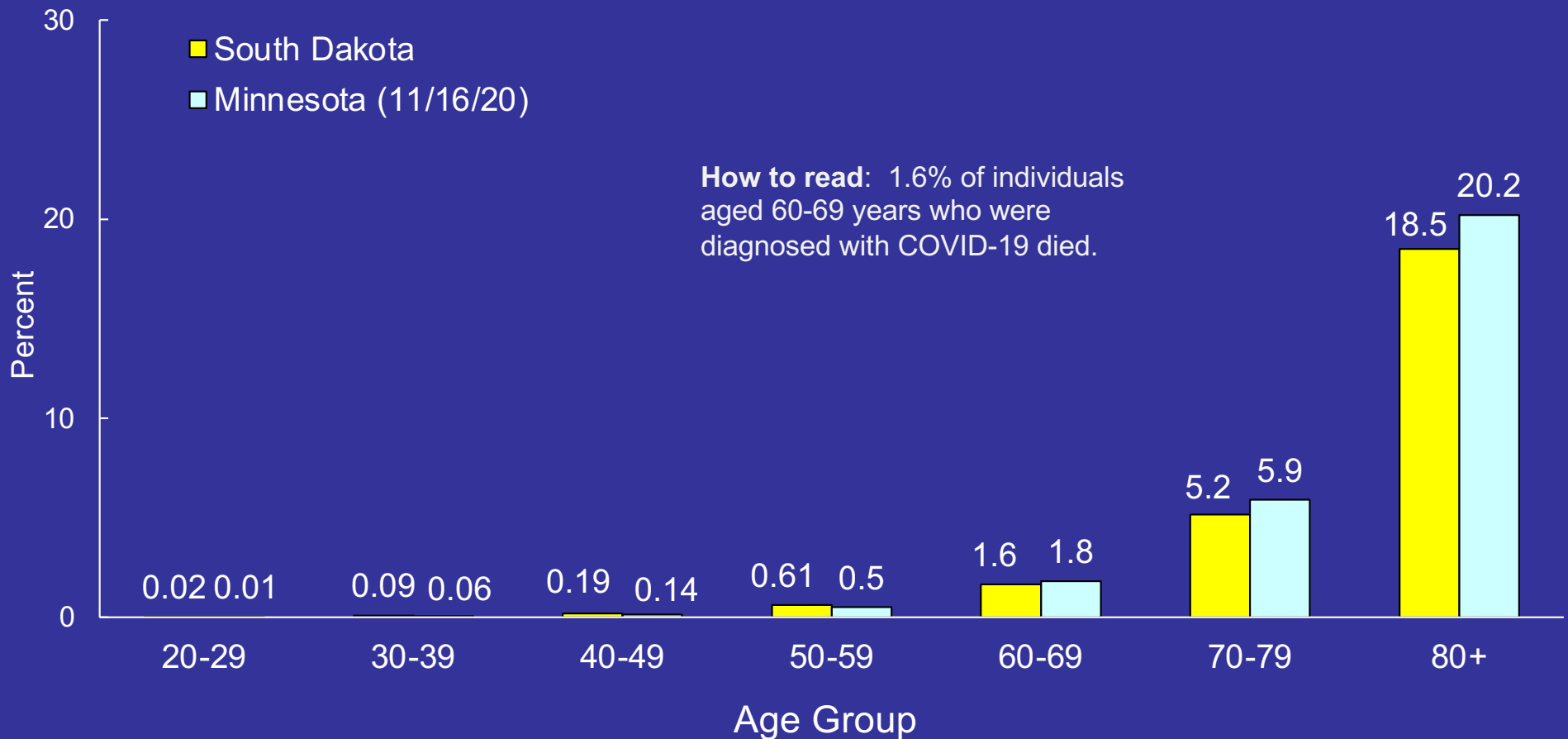


Calculated as (ever hospitalized/tested positive)\*100 using South Dakota data.  
These are likely to be underestimated since many in the denominator could still be hospitalized.

# South Dakota COVID-19 Situation

## Case Fatality Rates by Age

South Dakota updated on November 27, 2020



Case fatality rate calculated as  $\text{COVID deaths} / (\text{COVID deaths} + \text{recovered}) * 100$  (<https://doh.sd.gov/news/Coronavirus.aspx>)  
 Minnesota data:  $\text{CFR} = (\text{deaths}/\text{cases}) * 100$  (<https://www.health.state.mn.us/diseases/coronavirus/stats/covidweekly46.pdf>)  
 Data not given for ages <19 years.

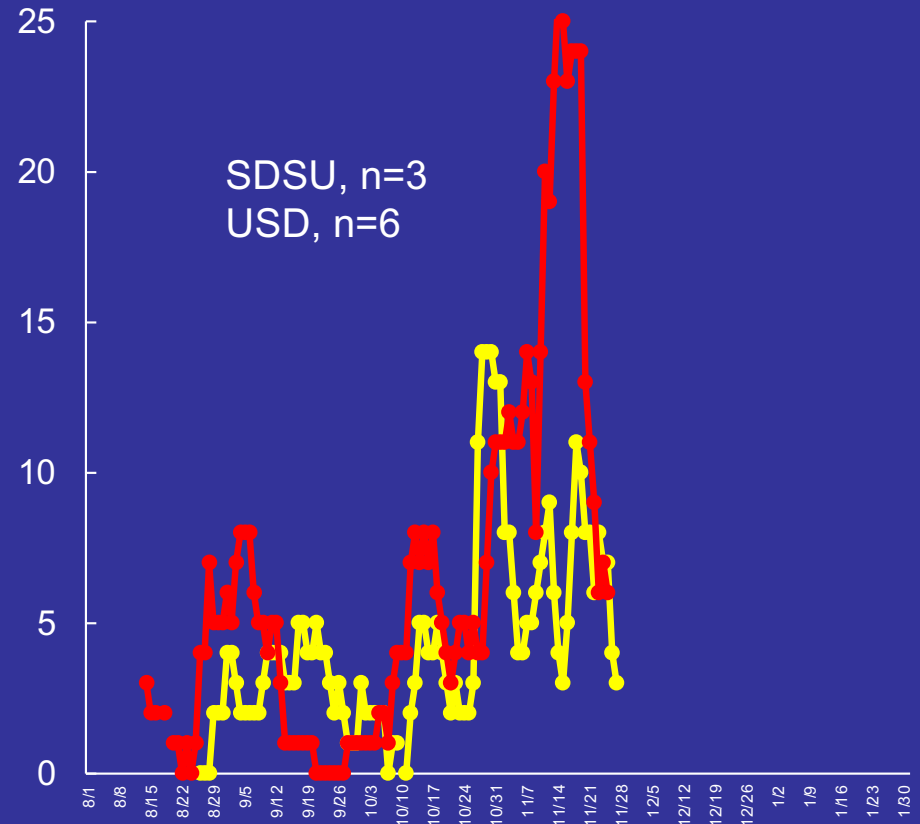
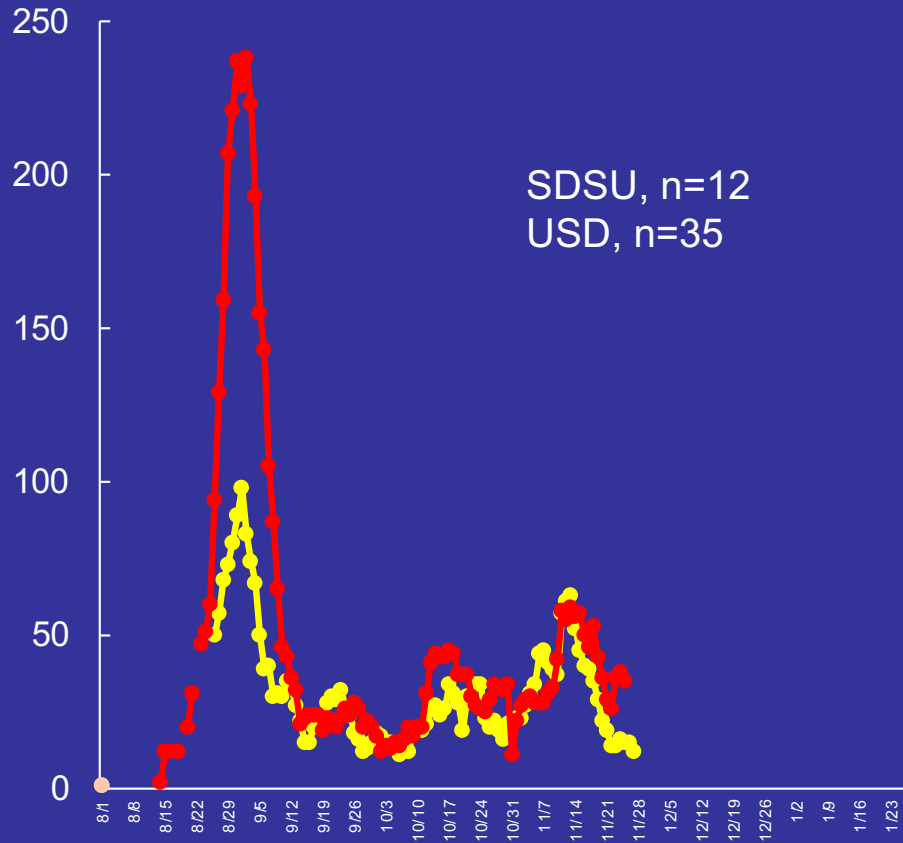
# University Situation

## Number of Active COVID-19 Cases

----- = SDSU      ----- = USD

Students

Employees



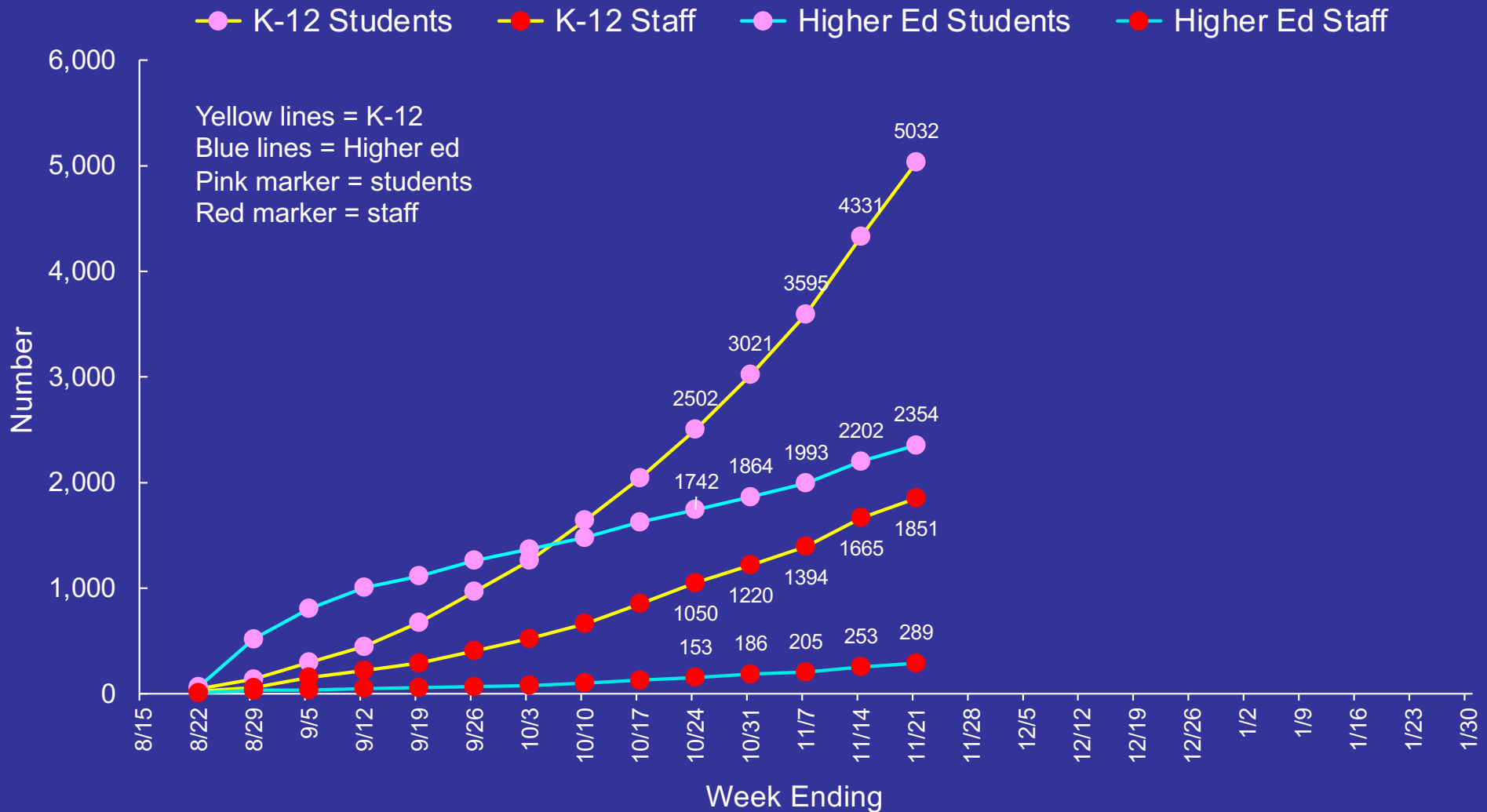
USD updated on 11/25/20; SDSU updated 11/27/20

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>

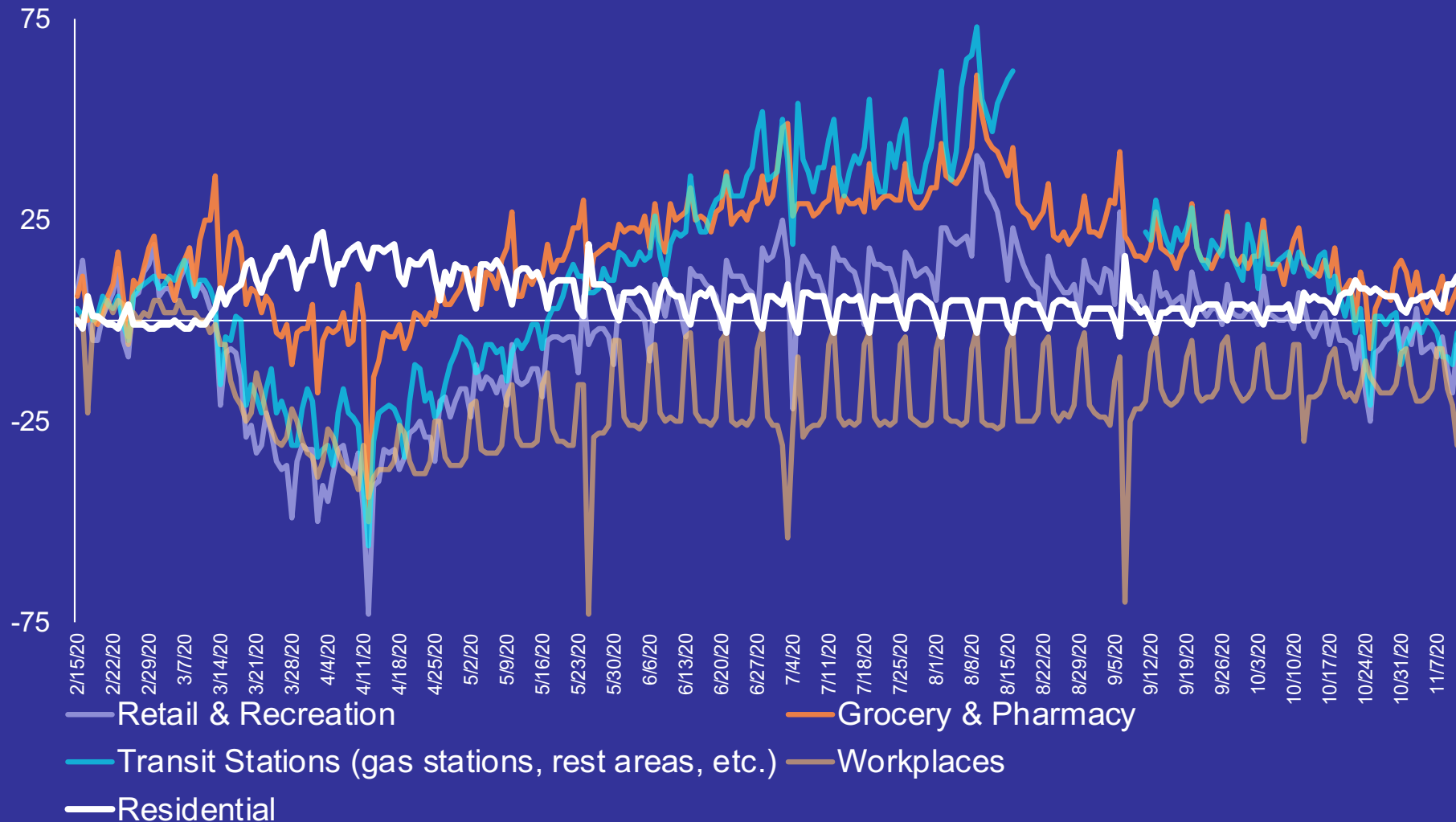
# South Dakota School Situation

## Cumulative Number of COVID-19 Cases



# South Dakota Mobility Data via Google

Percent Change in Mobility



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/>

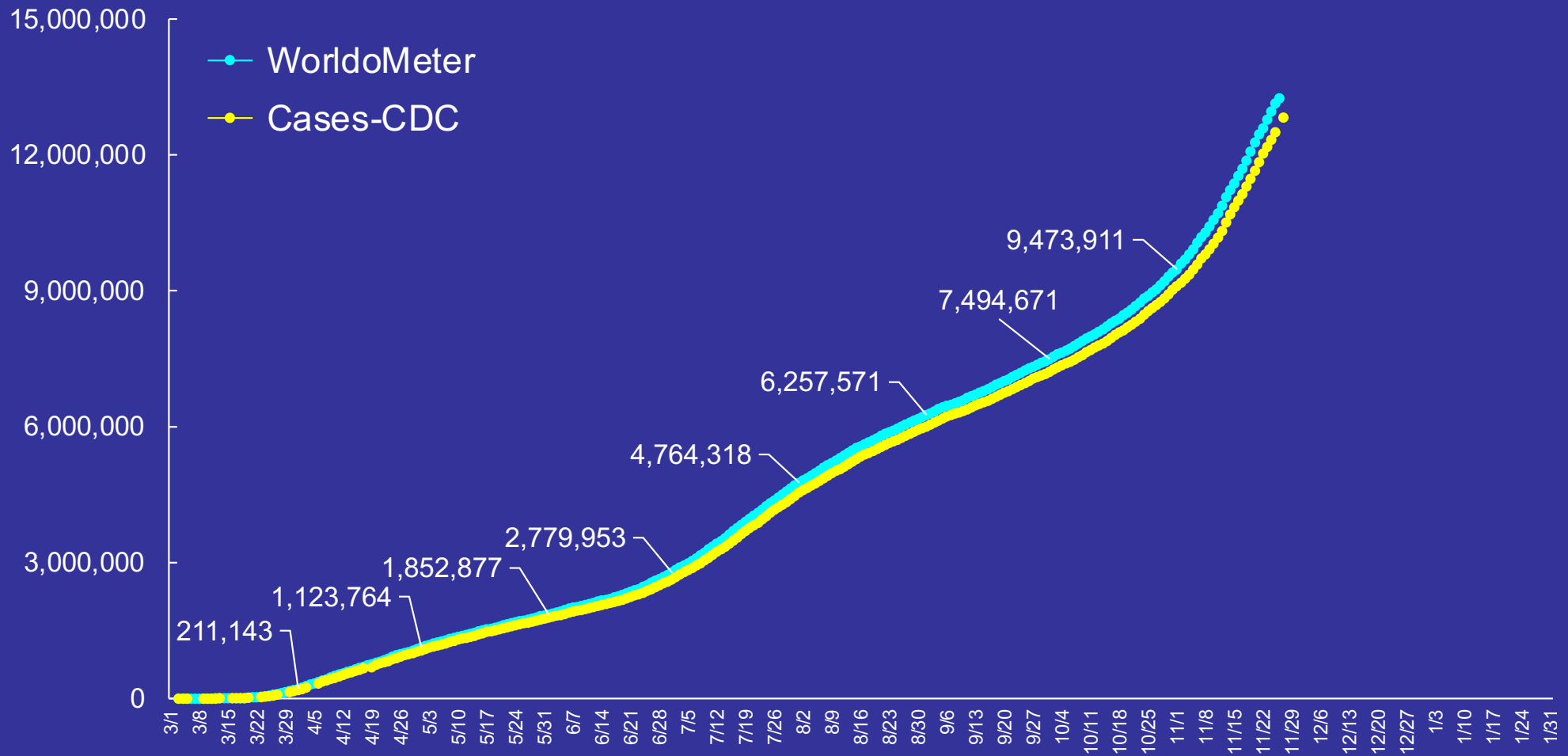


# COVID-19 Situation

U.S.

# U.S. COVID-19 Situation

## Cumulative Number of Confirmed Cases

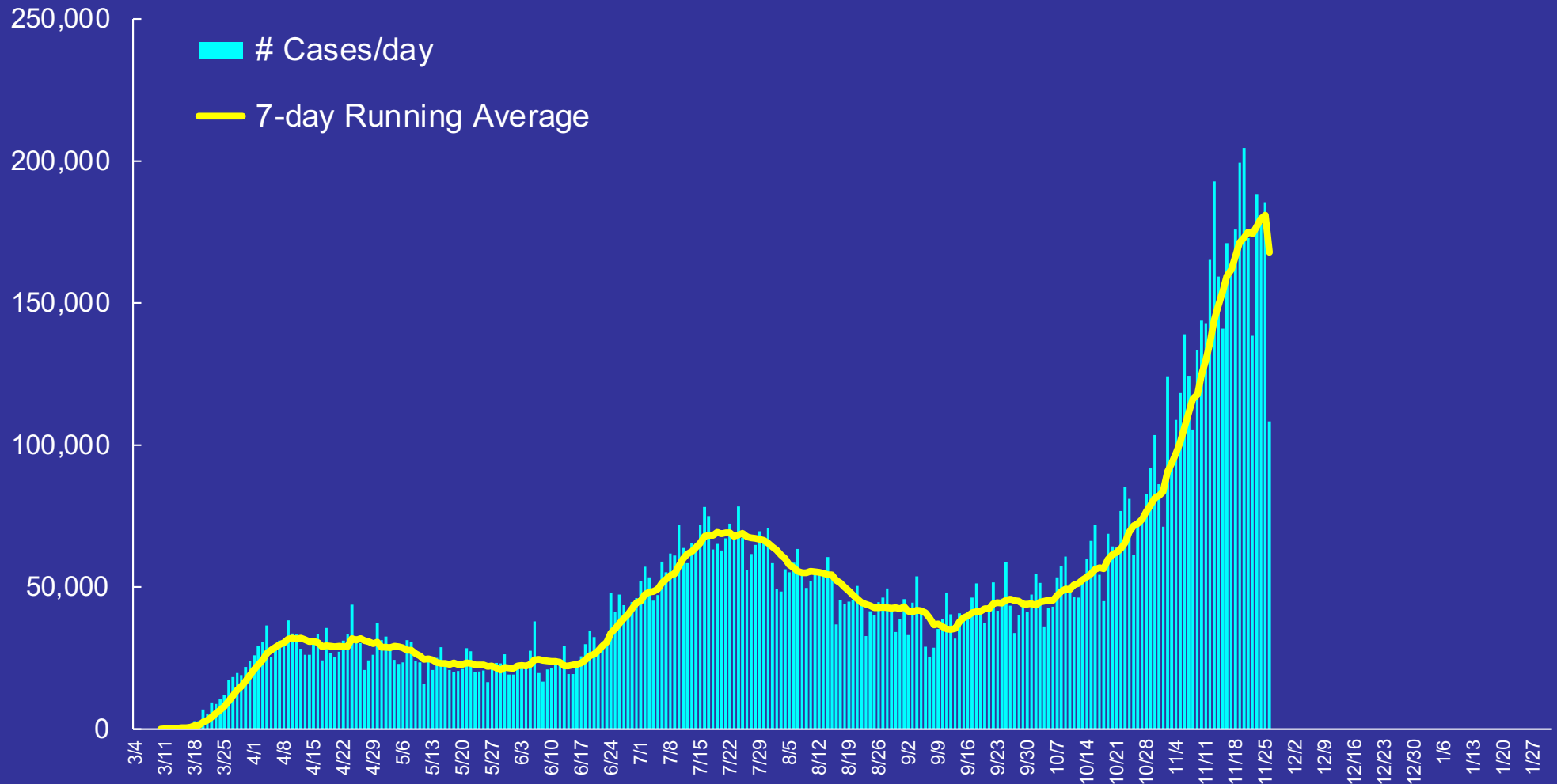


March 5 – removed some of the restrictions on who could be tested.  
May 1 – many states began loosening social distancing restrictions.  
Numbers given for the first of April, May, June, July, August, Sept, Oct and Nov.

<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

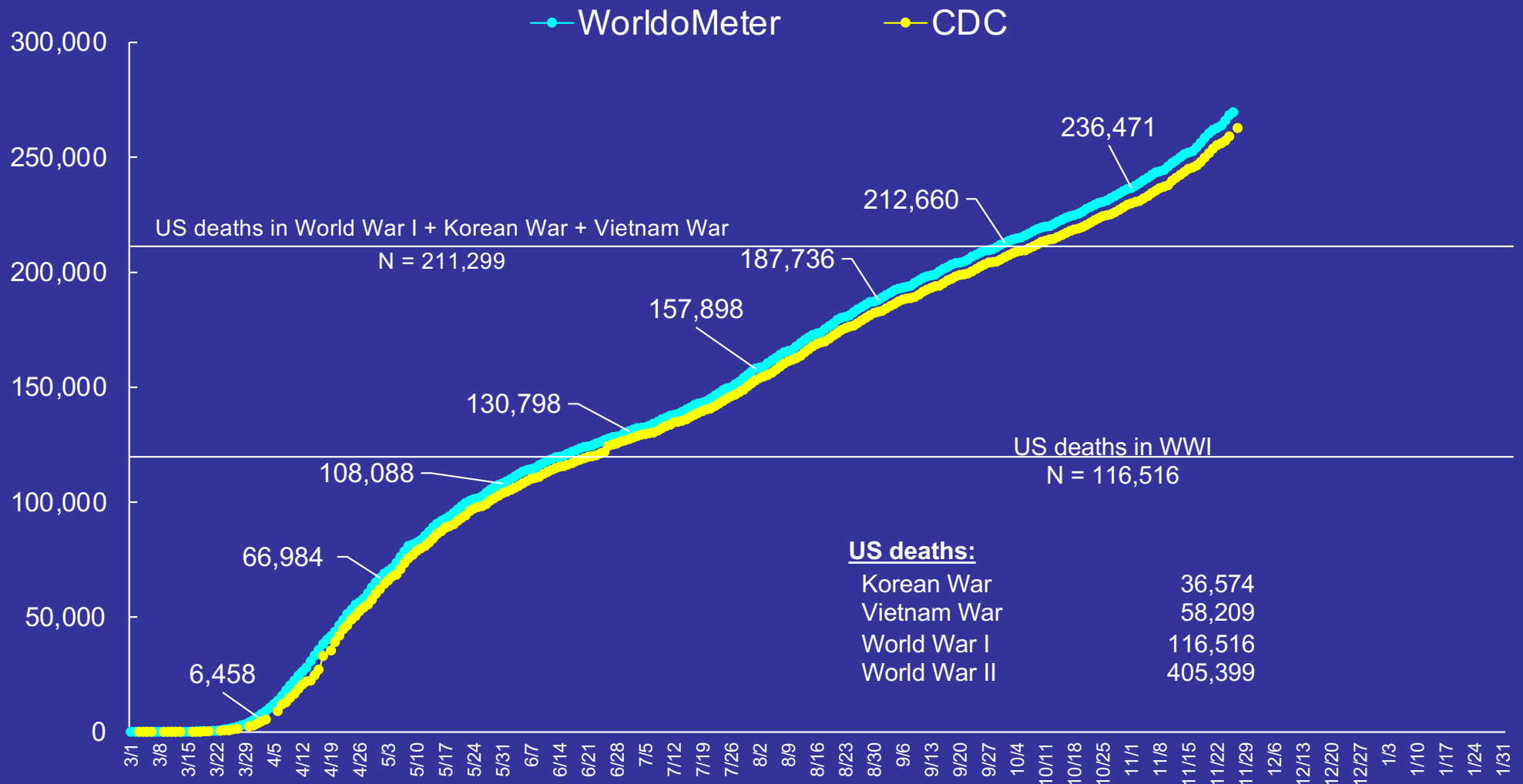


May 1 – many states began loosening social distancing restrictions.

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

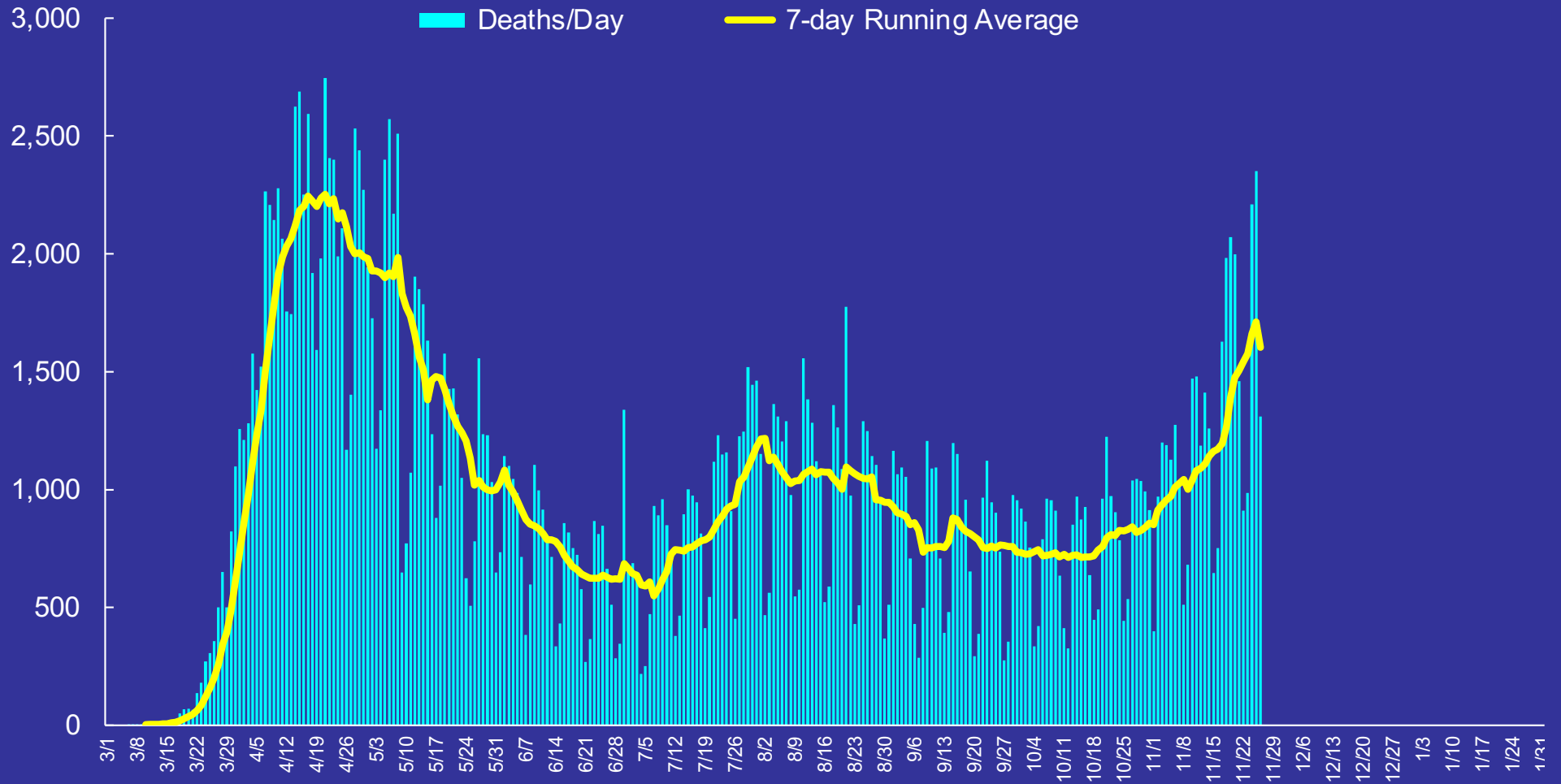


May 1 – many states loosened social distancing restrictions.  
Numbers given for the first of April, May, June, July, August Sept and Nov.

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

# U.S. COVID-19 Situation

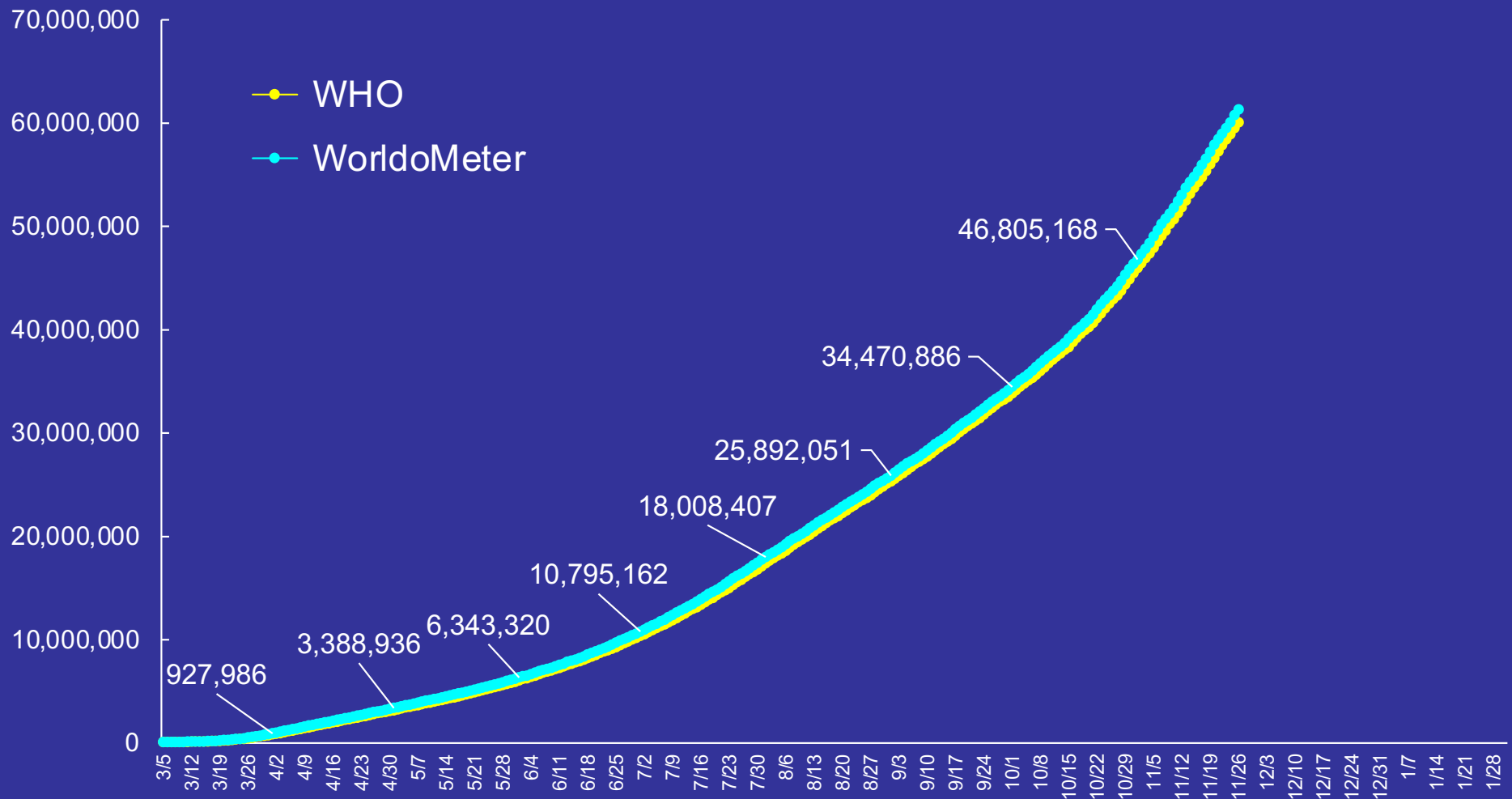
## Number of Deaths from COVID-19 by Day



# **COVID-19 Situation World**

# World COVID-19 Situation

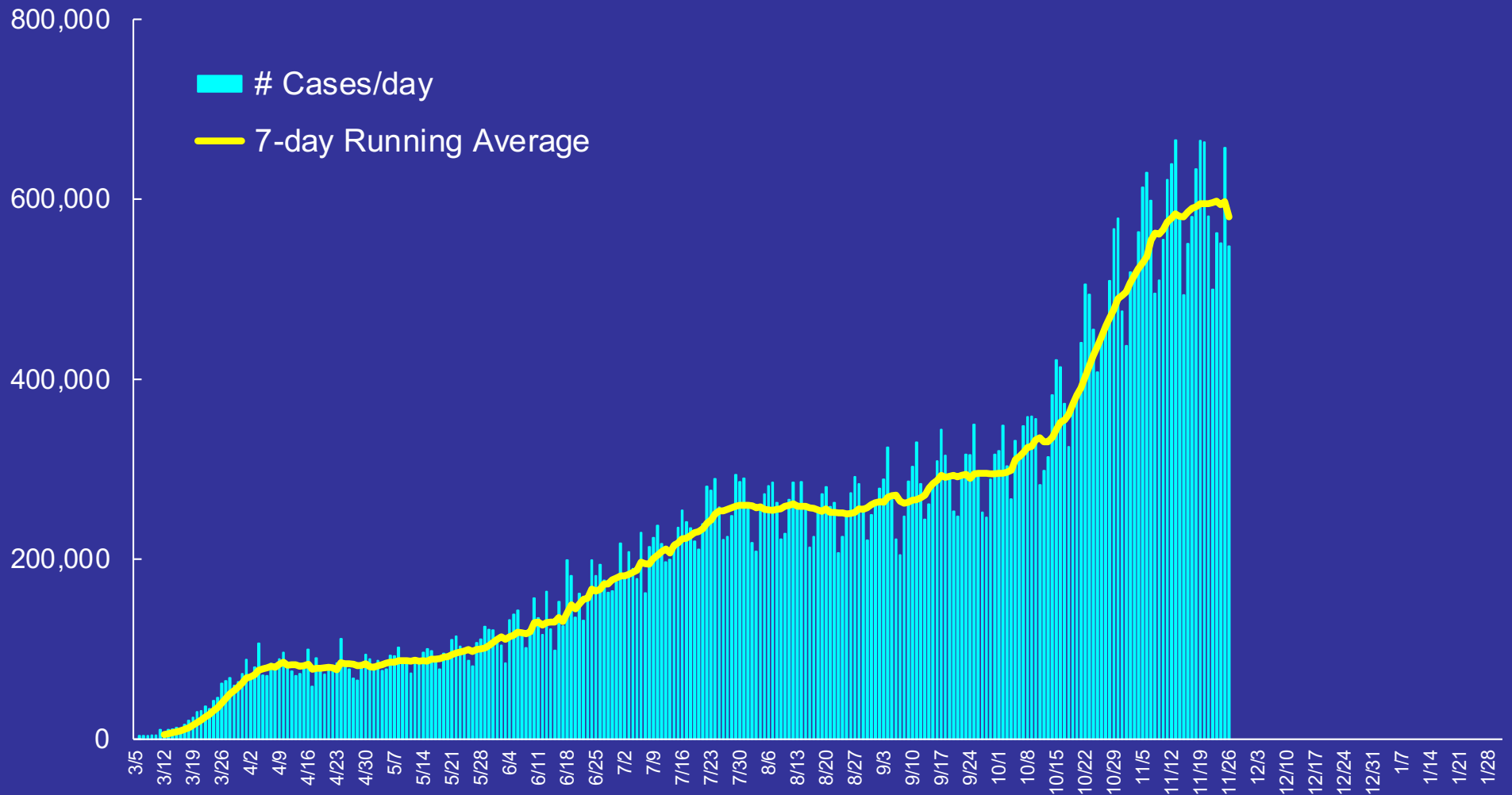
## Cumulative Number of Confirmed Cases



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

# World COVID-19 Situation

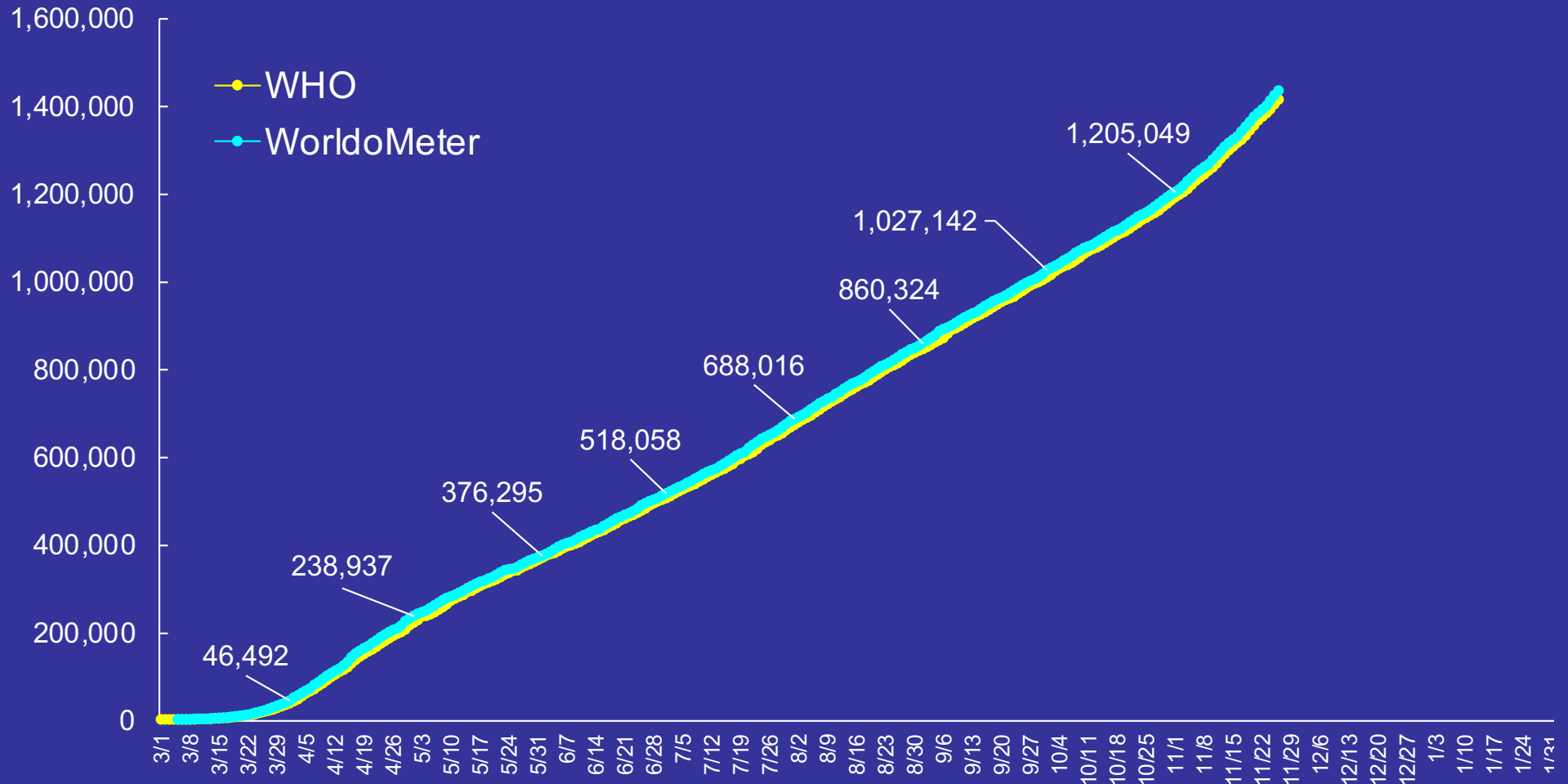
Number of Newly Confirmed Cases by Day





# World COVID-19 Situation

## Cumulative Number of Deaths from COVID-19



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

# World COVID-19 Situation

## Number of Deaths from COVID by Day

# Deaths/Day 7-day Running Average

