

### **COVID Epidemiology Situation Update**

Tim Lant, PhD, MAS, Heather Ross PhD, DNP, ANP-BC, Anna Muldoon, MPH, Samantha Sokol, Jordy Rodriguez, Esma Gel, PhD, and Megan Jehn, PhD

### February 18, 2021

### **Summary**

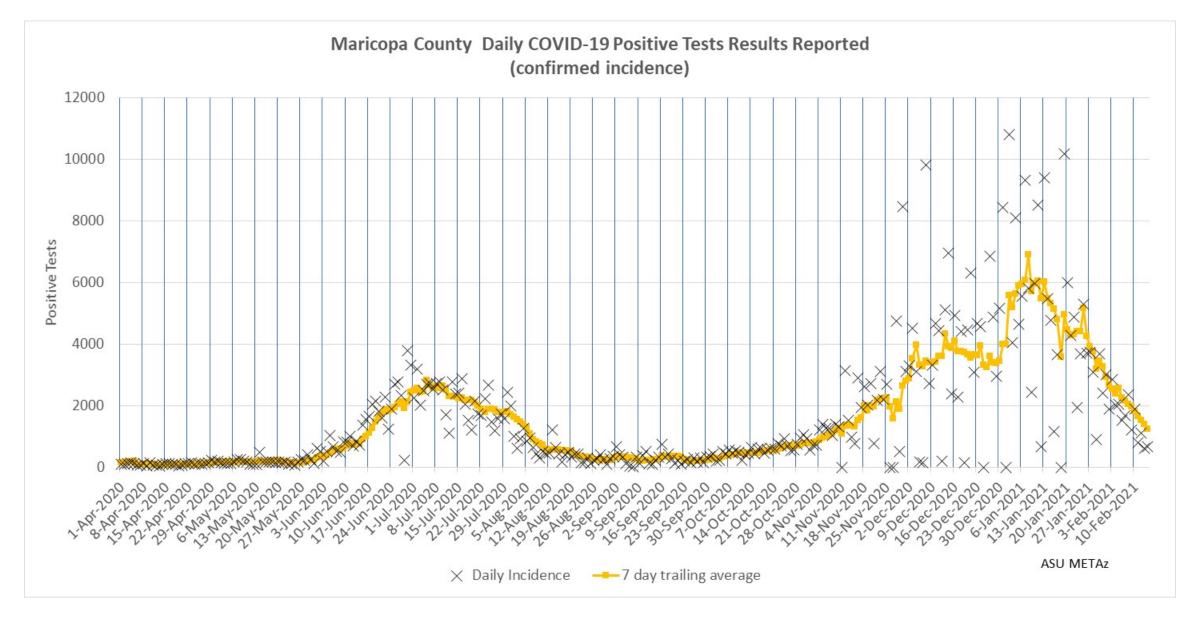
February 18, 2021				
	Statewide		Maricopa	
	Reported Today	Cumulative	Reported Today	Cumulative
Cases	1,143	802,198	<mark>583</mark>	501,214
PCR Tests	6,423	3,655,029	3 <mark>,</mark> 946	2,197,760
% Positive	17.8%	21.9%	14.8%	14.8%
Hospitalizations	107	56,090	71	34,942
Deaths	213	15,276	117	8,676
All data pulled from azdhs.gov. Numbers may not match Maricopa county data.				

- Today's statewide case count is 1,143 with 583 cases (60%) in Maricopa County, slightly lower than population distribution. The 7-day average for reported cases has fallen to 1,584, similar early November at the beginning of the most recent surge.
- The epi curve continues to fall in Maricopa County and statewide. Peak cases by incident date remains 1/4.
- 7-day average positivity has remained below 30% for more than two weeks.
- Overall hospital utilization continues to decline slowly and is now at levels similar to mid-November whereas case counts are similar to early-November levels. There was no similar temporal disparity in the decline phase from the June-July surge. The current disparity suggests an overall decline in testing behaviors – and thus diagnosed mild COVID-19 cases – in the general public.
- Bed usage for COVID-19 is 21% of inpatient beds and 32% of ICU beds statewide. Current hospital utilization is 89% for inpatient beds and 86% for ICU beds including COVID and non-COVID utilization.
- Despite declining hospital utilization, hospital death rates continue to increase with stable hospitalization rates for COVID cases, indicating the higher acuity of patients admitted to the hospital compared to earlier in the pandemic.
- COVID-19 has become the leading cause of death in Arizona in a 12-month period. Note that deaths are generally not reported on Mondays.

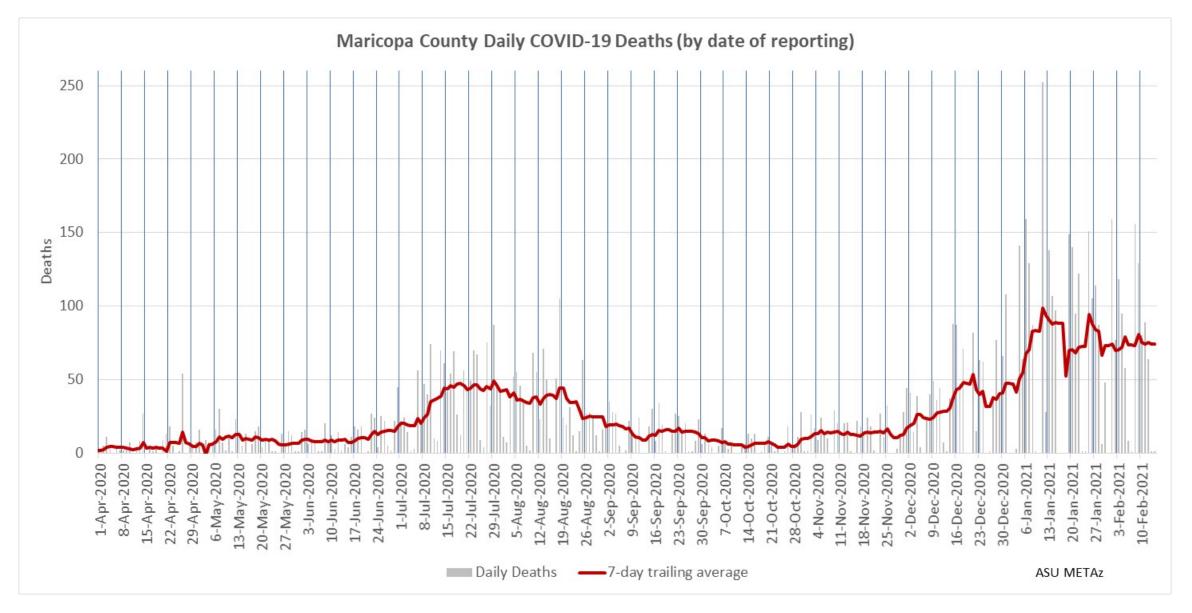
# Maricopa County Analysis



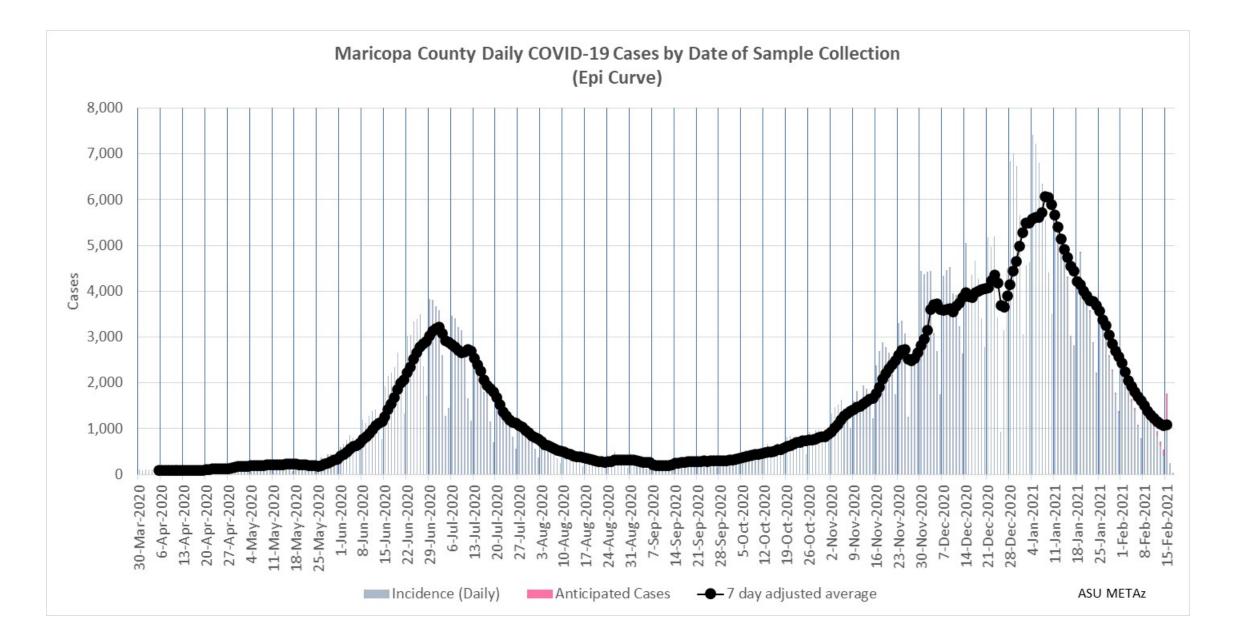
opyright © 2020 Arizona Board of Regents

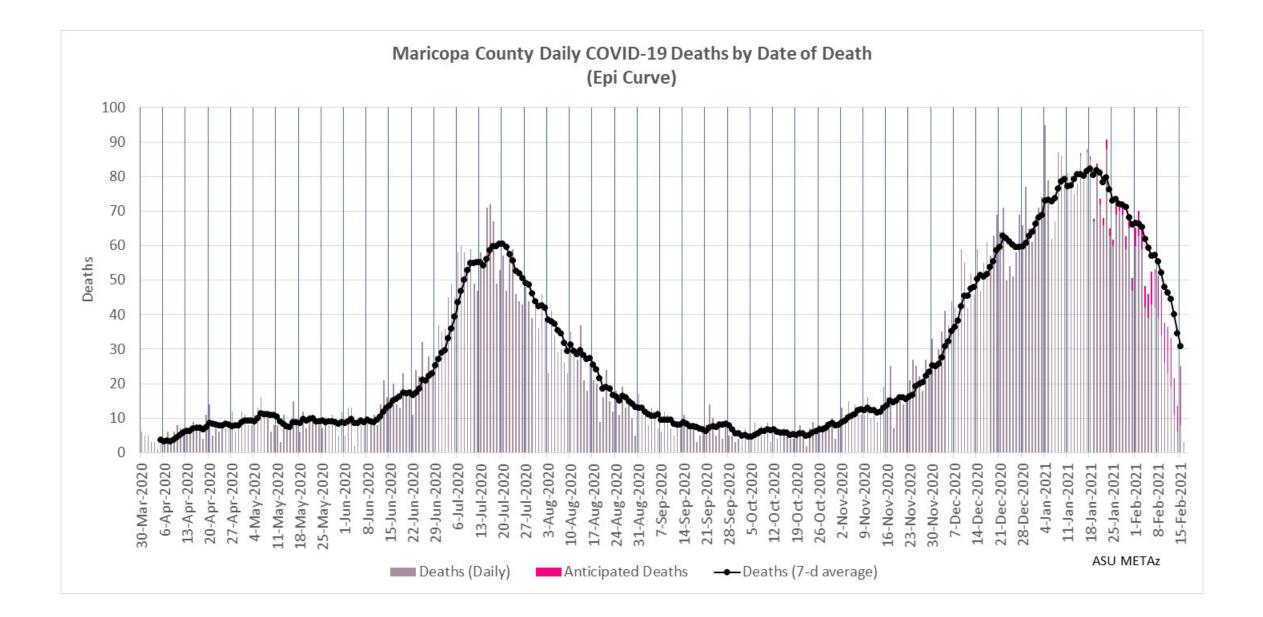


Due to the holidays, multiple days of data were held (Nov 11, 26 & 27; December 25, January 1 & 18) and reported on the next business day.



Due to the holidays, multiple days of data were held (Nov 11, 26 & 27; December 25, January 1) and reported on the next business day.





# Arizona Statewide Analysis

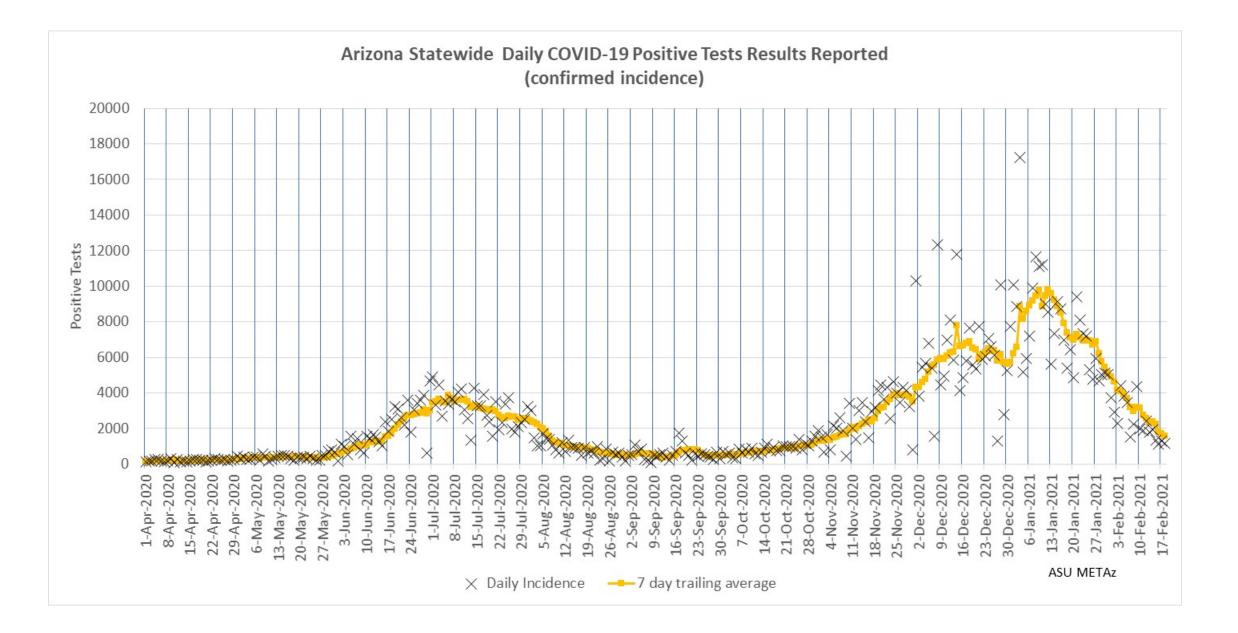


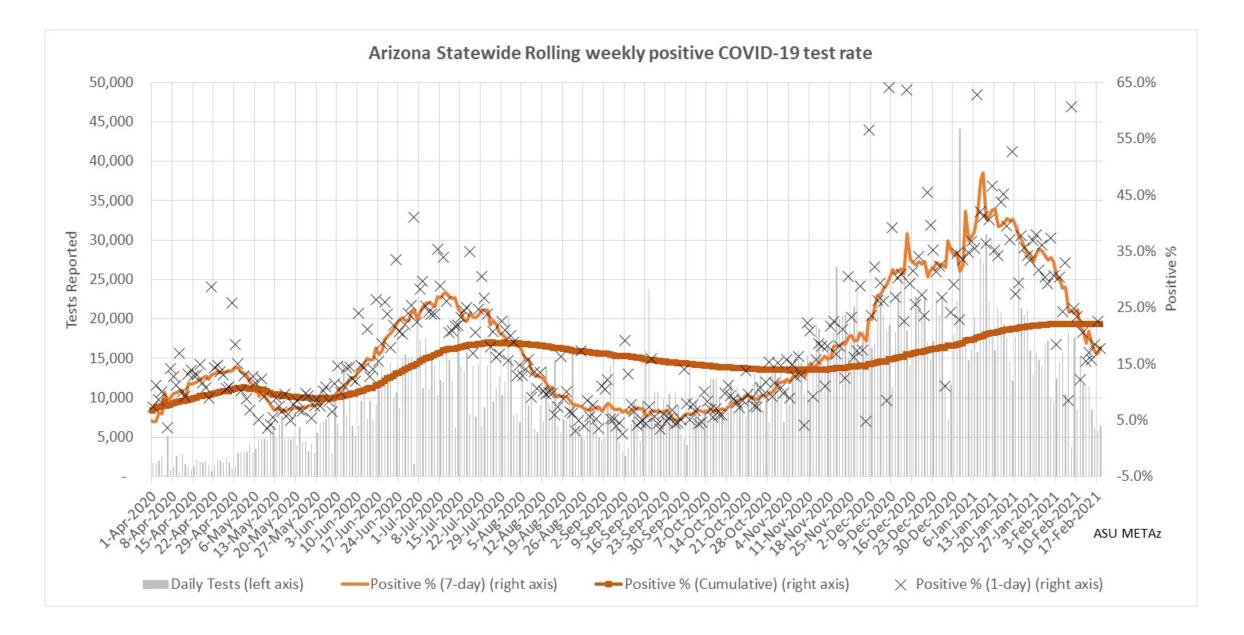
opyright © 2020 Arizona Board of Regents

## Epidemiology

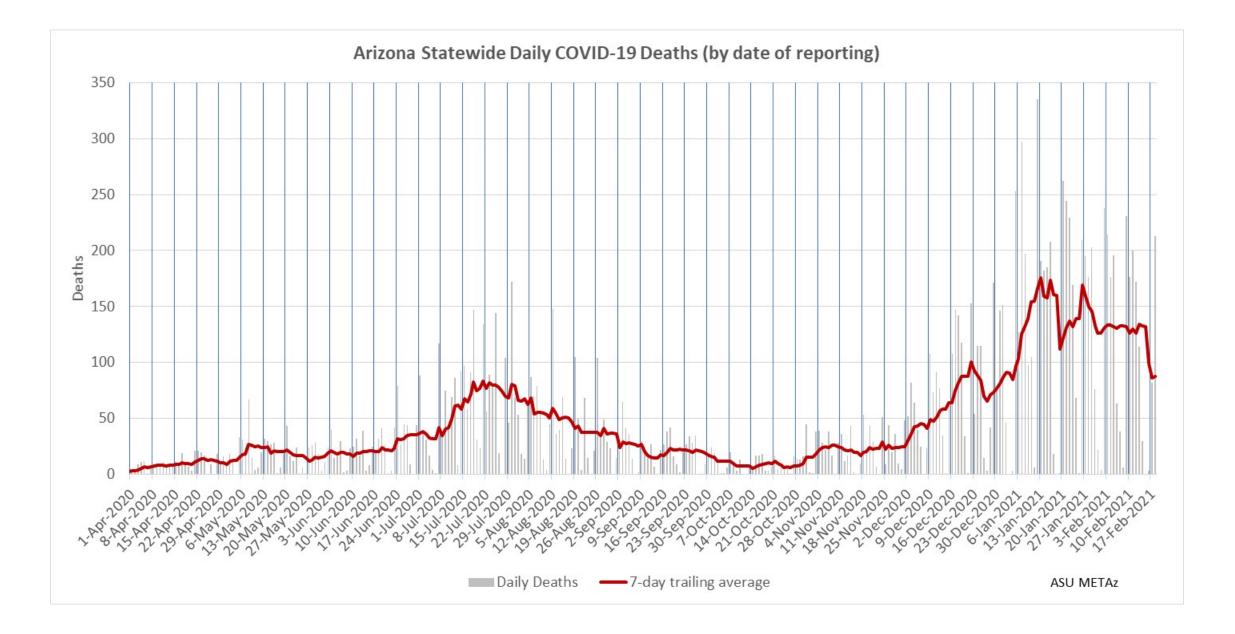


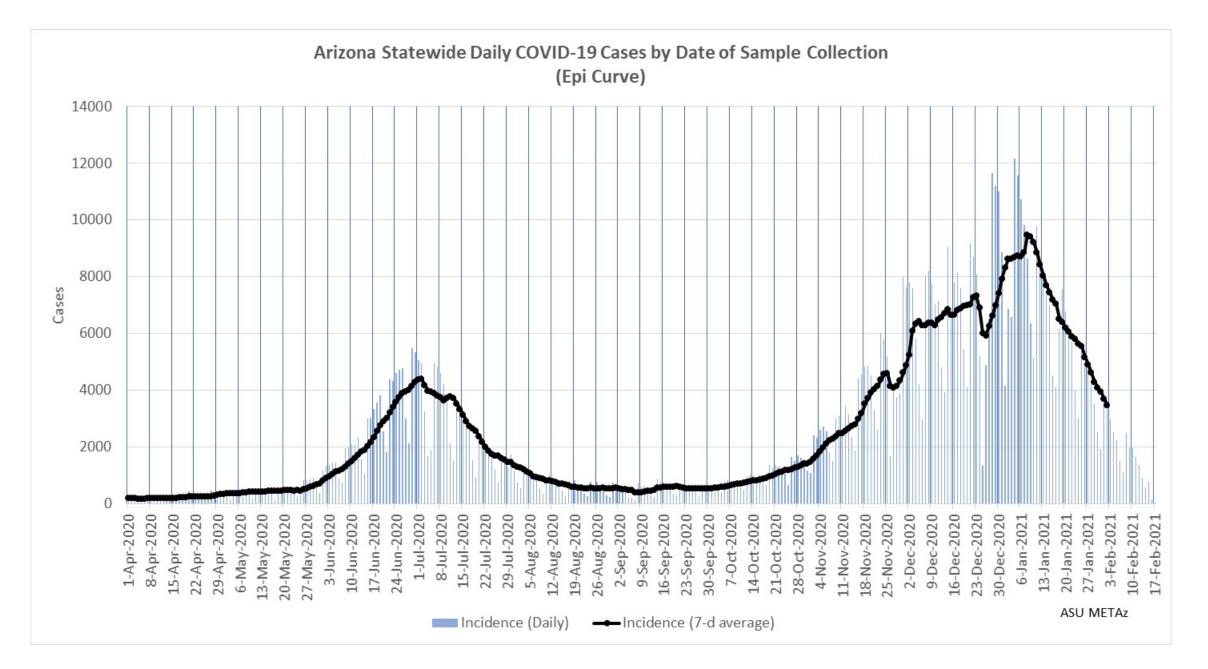
Copyright © 2020 Arizona Board of Regents.

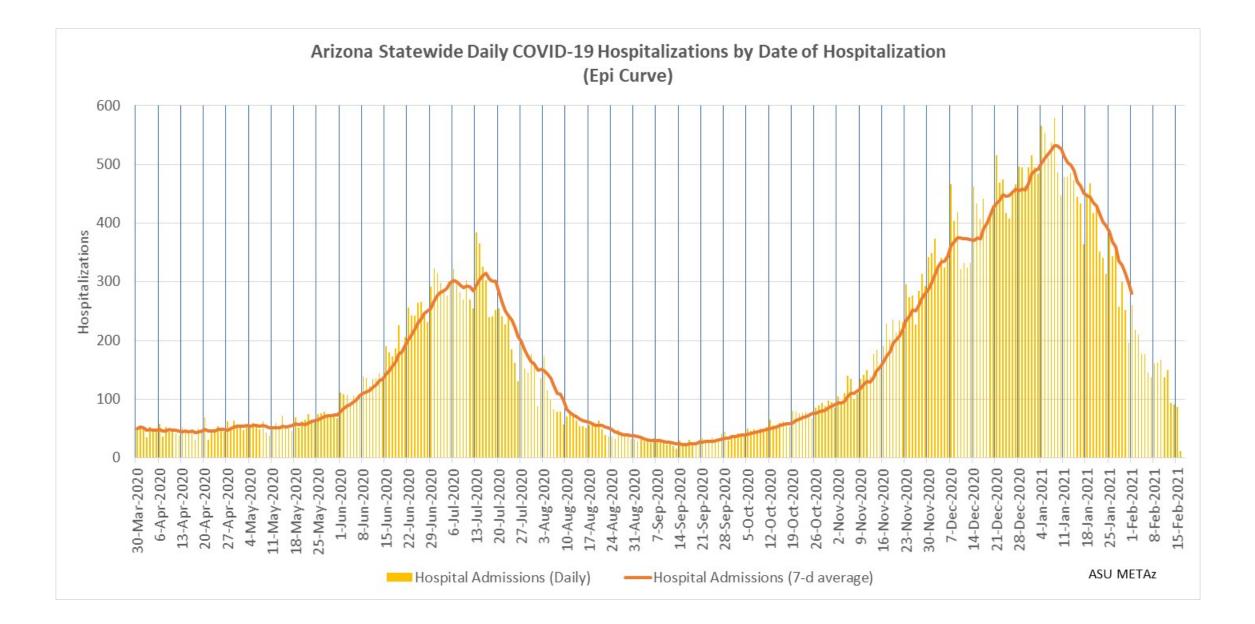


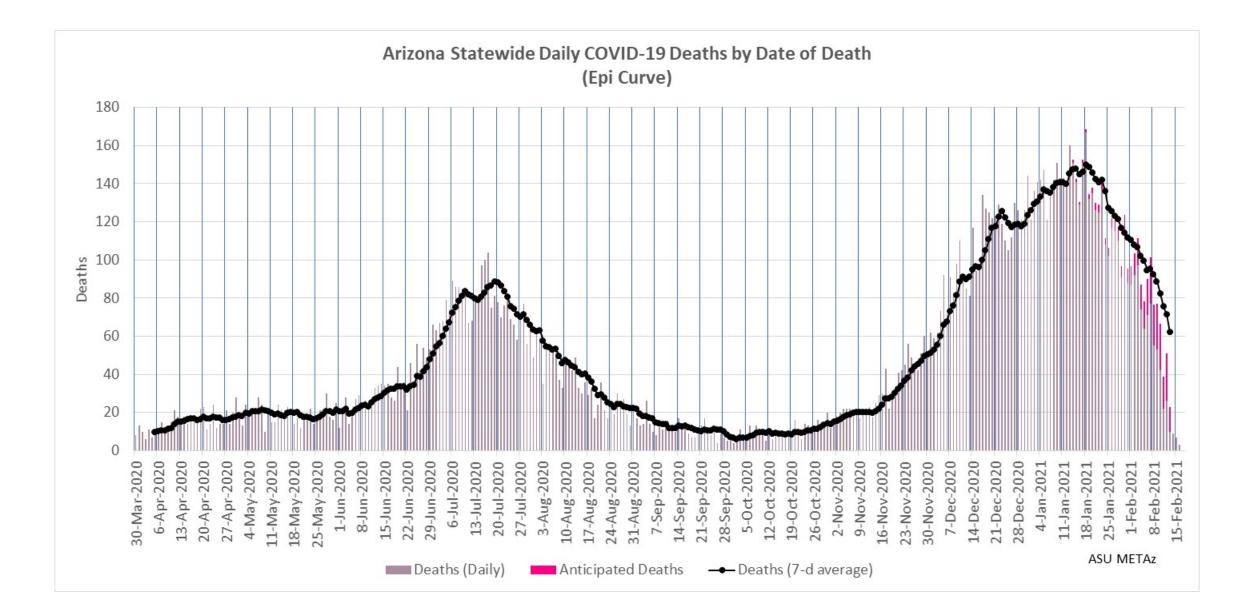


### Copyright © 2020 Arizona Board of Regents.









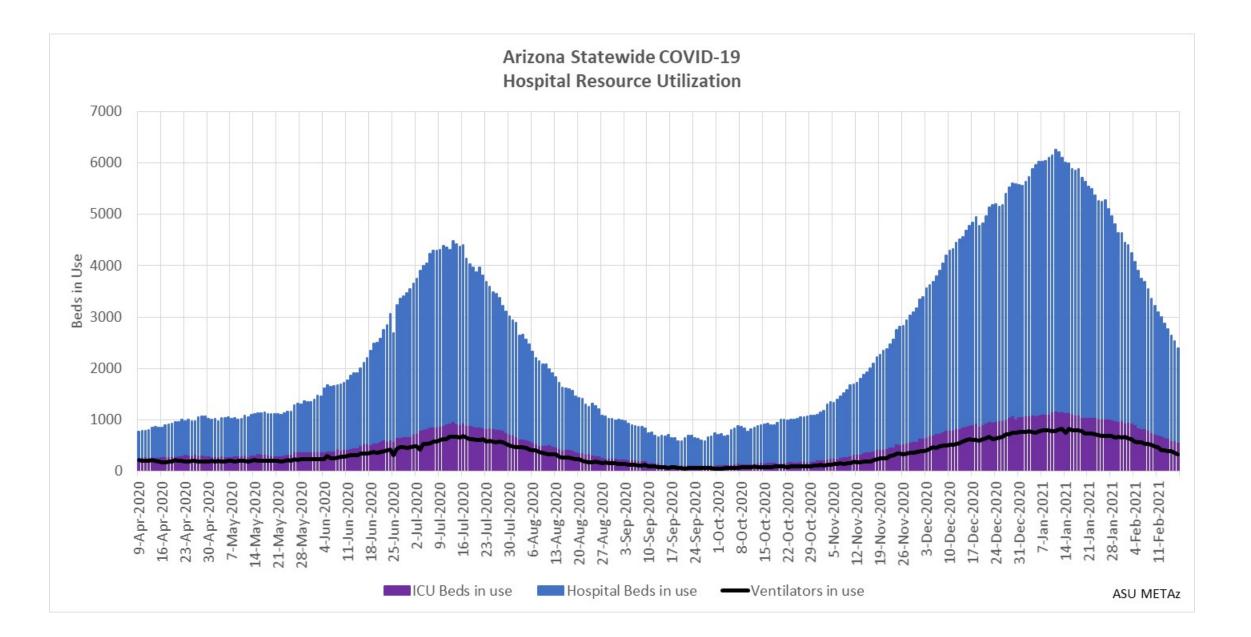
### **Arizona Statewide Case Fatality and Hospitalization Rates** 50.0% 45.0% 40.0% 35.0% 30.0% 27.2% Percent 25.0% 20.0% 15.0% 7.0% 10.0% 5.0% 1.9% 0.0% 8-Aug-2020 25-Apr-2020 2-May-2020 9-May-2020 16-May-2020 23-May-2020 30-May-2020 6-Jun-2020 13-Jun-2020 20-Jun-2020 27-Jun-2020 4-Jul-2020 11-Jul-2020 18-Jul-2020 25-Jul-2020 1-Aug-2020 15-Aug-2020 22-Aug-2020 29-Aug-2020 5-Sep-2020 12-Sep-2020 19-Sep-2020 26-Sep-2020 3-0ct-2020 10-0ct-2020 17-0ct-2020 24-0ct-2020 31-0ct-2020 7-Nov-2020 14-Nov-2020 21-Nov-2020 28-Nov-2020 5-Dec-2020 12-Dec-2020 19-Dec-2020 26-Dec-2020 13-Feb-2021 2-Jan-2021 9-Jan-2021 16-Jan-2021 23-Jan-2021 30-Jan-2021 6-Feb-2021 -P[Death | Hosp] —P[Hosp|Positive Confirmed] — P[Death | Positive Confirmed] ASU METAz

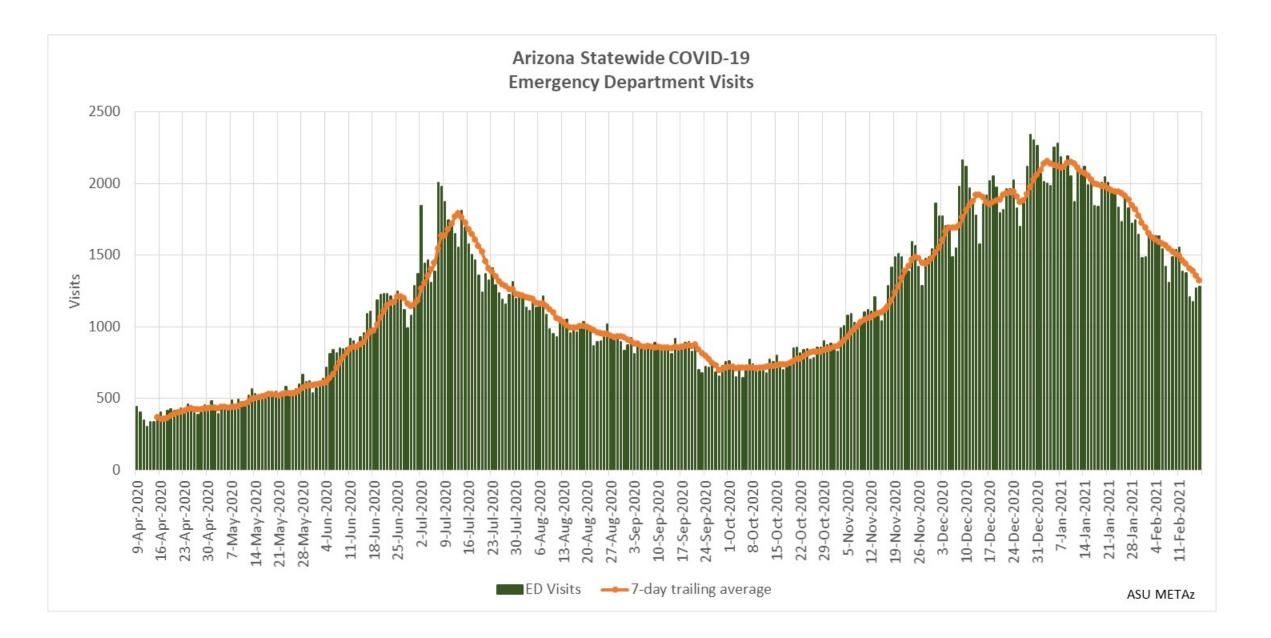
### Copyright © 2020 Arizona Board of Regents.

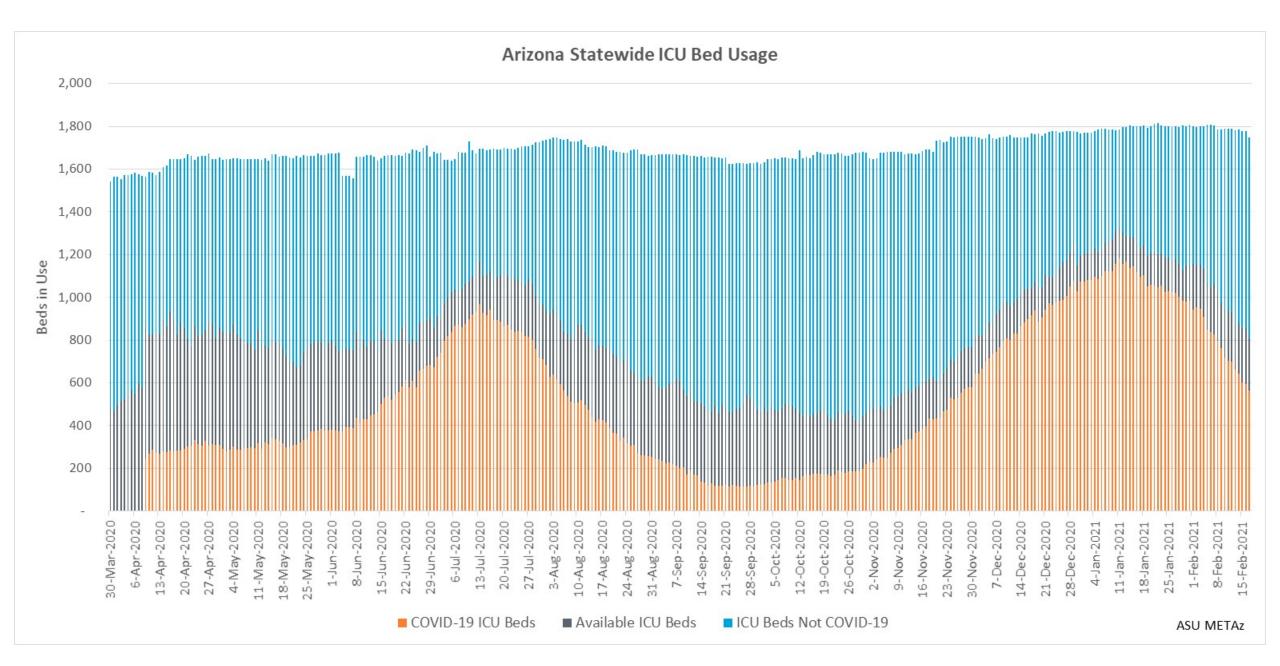
## Hospital Usage

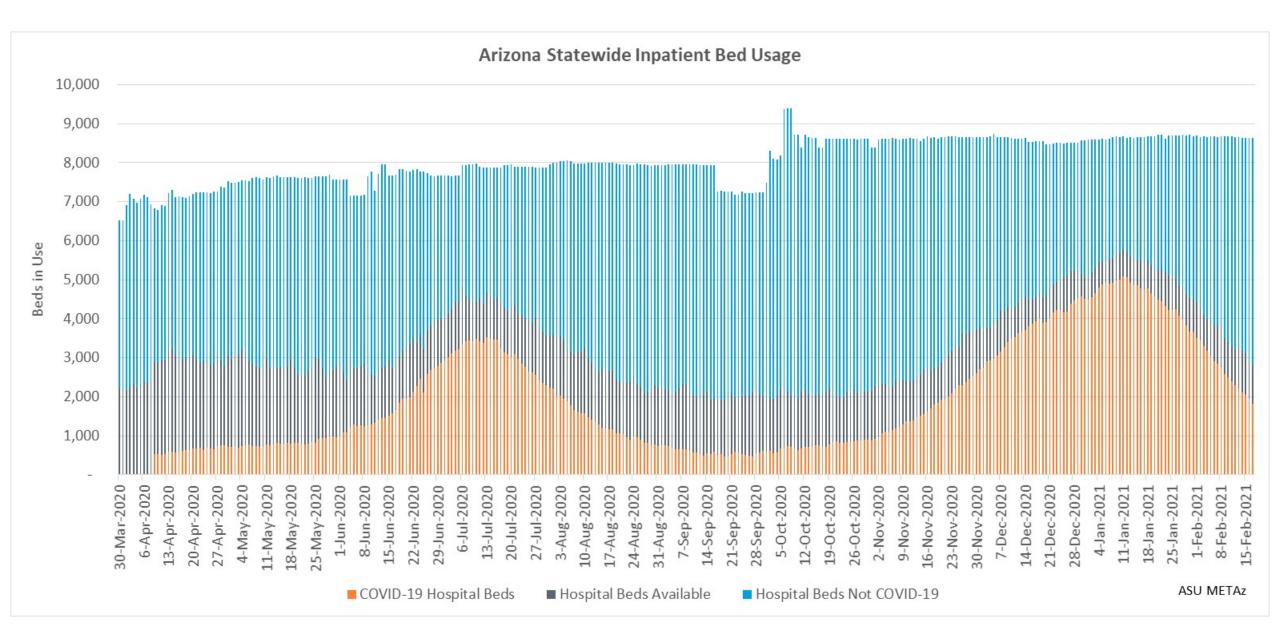


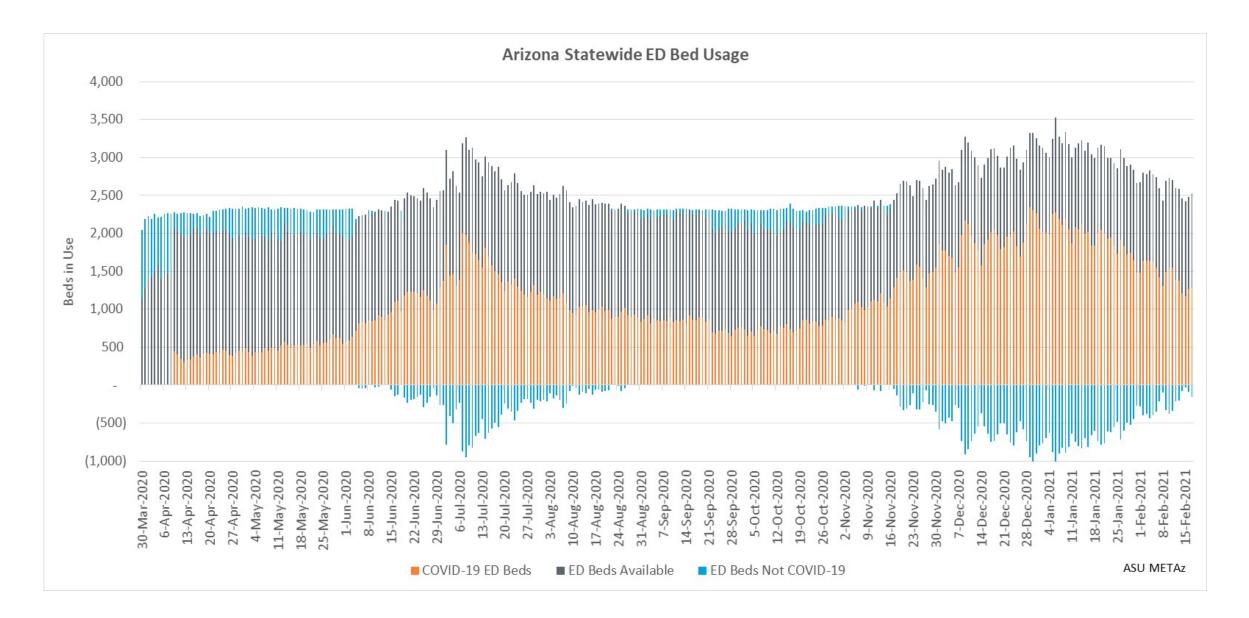
opyright © 2020 Arizona Board of Regents.











Where blue bars are below zero, COVID ED patients exceeded total reported ED bed usage