



COVID Epidemiology Situation Update

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

October 14, 2020

Summary

October 14, 2020				
	Statewide		Maricopa	
	Reported Today	Cumulative	Reported Today	Cumulative
Cases	902	227,635	541	147,551
PCR Tests	8,050	1,589,202	4889	934,654
% Positive	11.2%	14.3%	11.1%	11.9%
Hospitalizations	0	20,366	35	12,762
Deaths	5	5,772	4	3,475

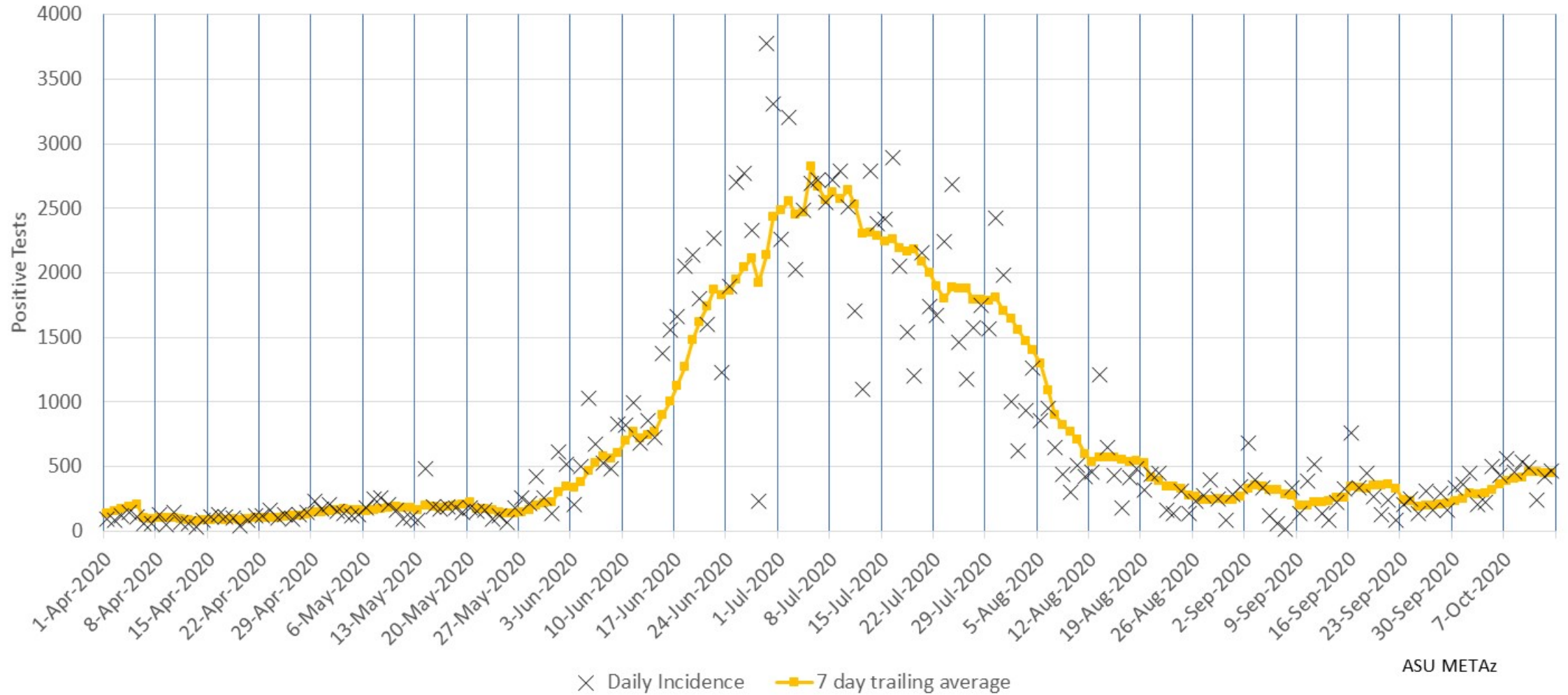
All data pulled from azdhs.gov. Numbers may not match Maricopa county data.

- Today's statewide case count is 902, with 541 cases (60%) in Maricopa County, in line with population distribution.
- The demonstrated epi curve continues to increase in Maricopa County and statewide. Case counts continue to rise and are still consistent with the second week of June at the beginning of exponential growth after the statewide stay-at-home order was ended.
- Percent positivity statewide is 11.2%. Maricopa county positivity is 11.1%, with low testing on both levels. Significantly more testing is needed to characterize the extent of the current outbreak and community transmission.
- ED visits and inpatient bed use for COVID-19 appear to be plateauing, including stable ICU beds and slightly increased use of regular ward beds. Inpatient utilization reflects rates consistent with late April, and ED visits have stabilized at rates similar to the second week of June. There is no indication that hospital resources are at risk of becoming overwhelmed.

Maricopa County Analysis

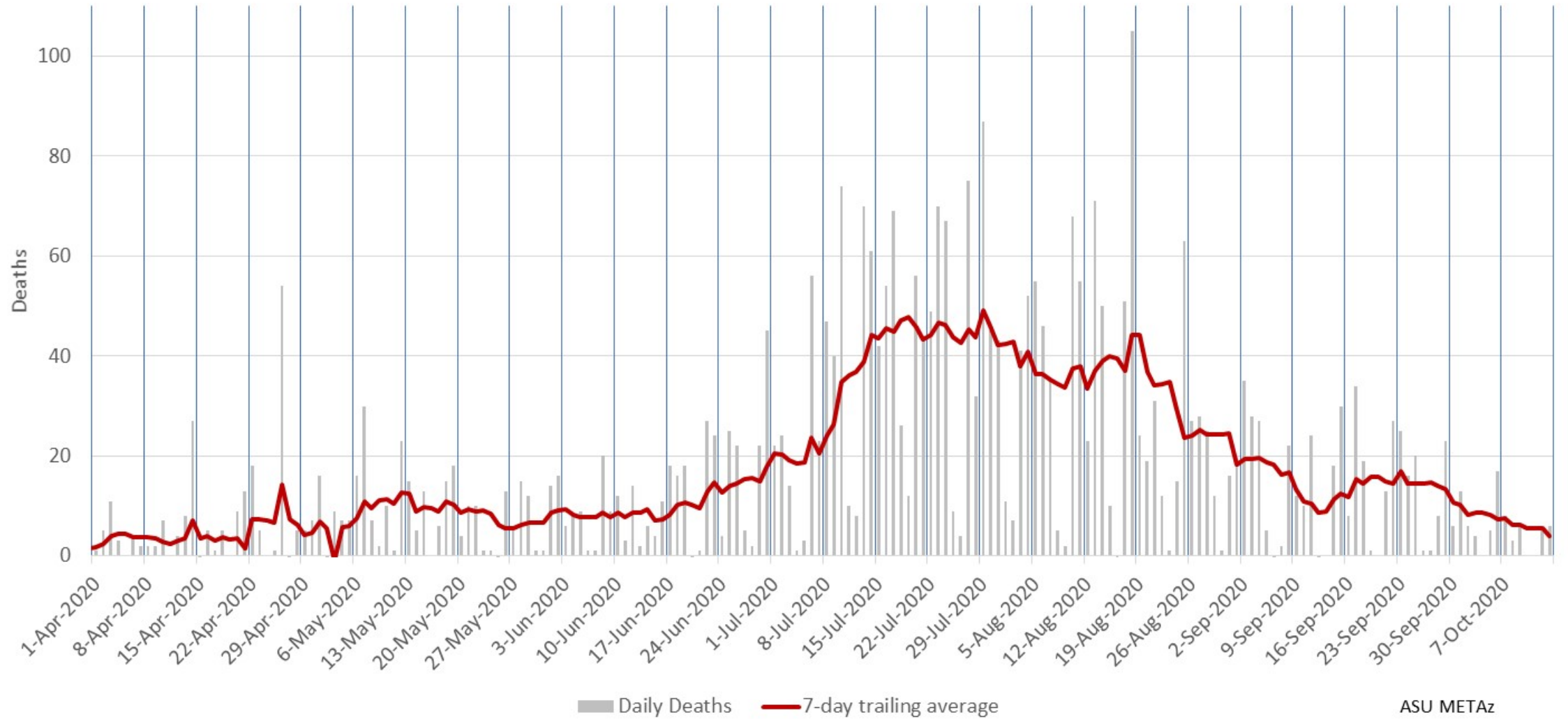


Maricopa County Daily COVID-19 Positive Tests Results Reported (confirmed incidence)



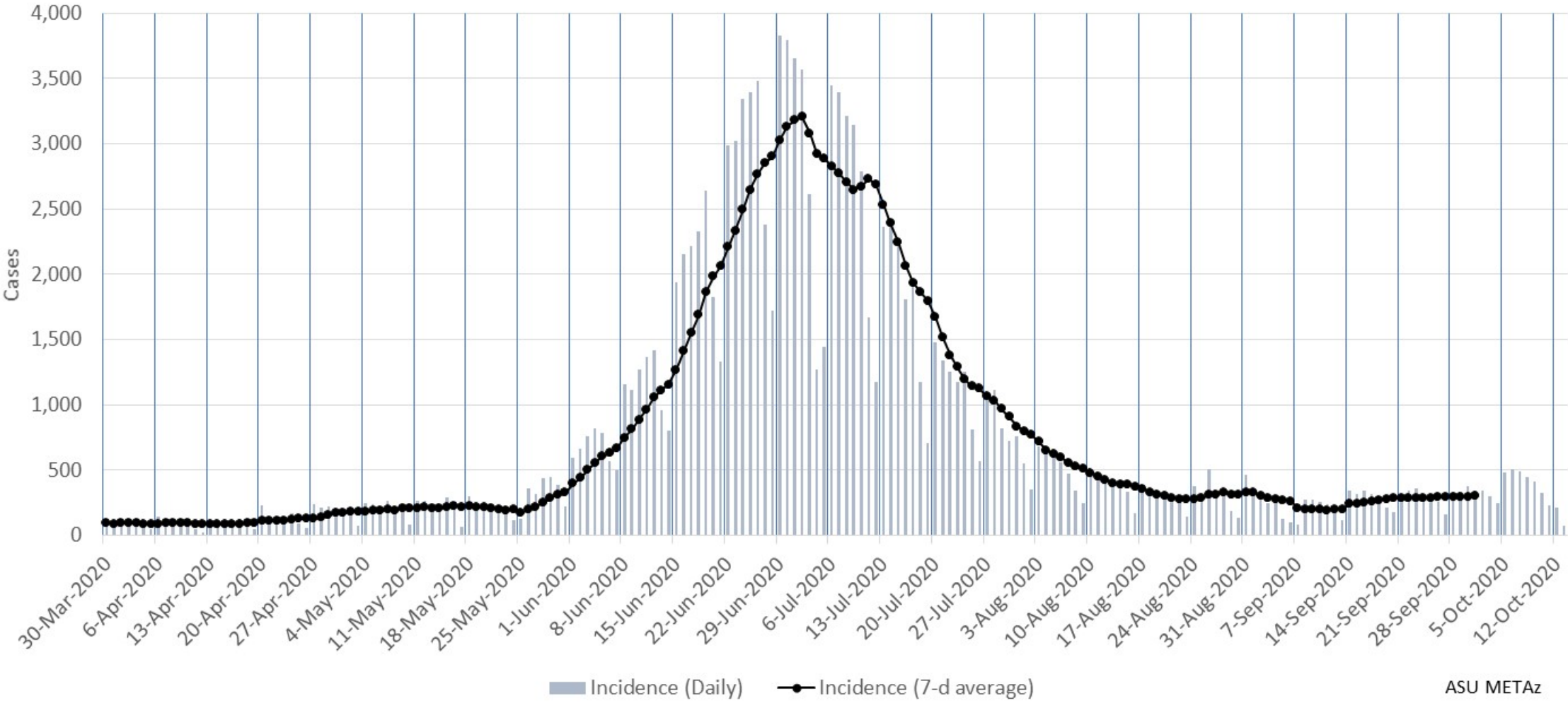
ASU METAz

Maricopa County Daily COVID-19 Deaths (by date of reporting)



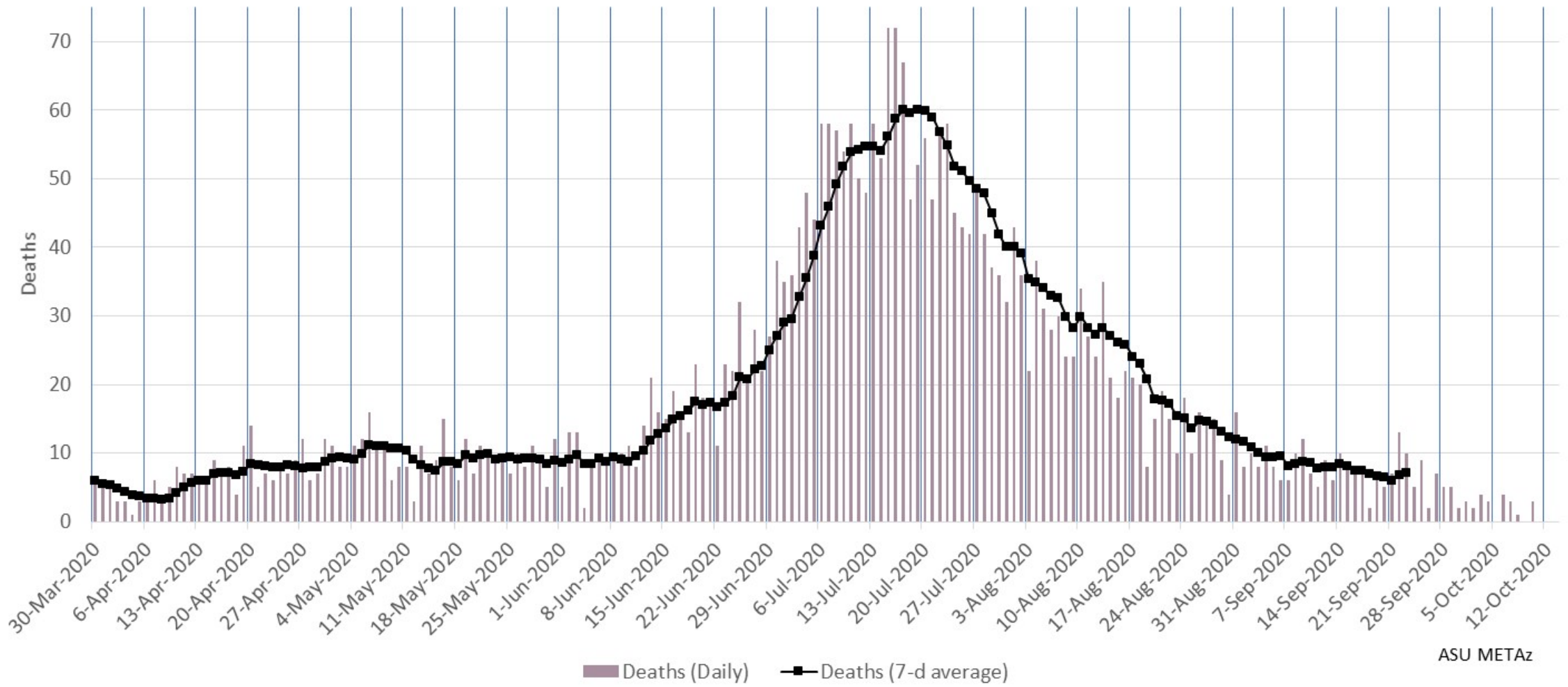
ASU METaz

Maricopa County Daily COVID-19 Cases by Date of Sample Collection (Epi Curve)



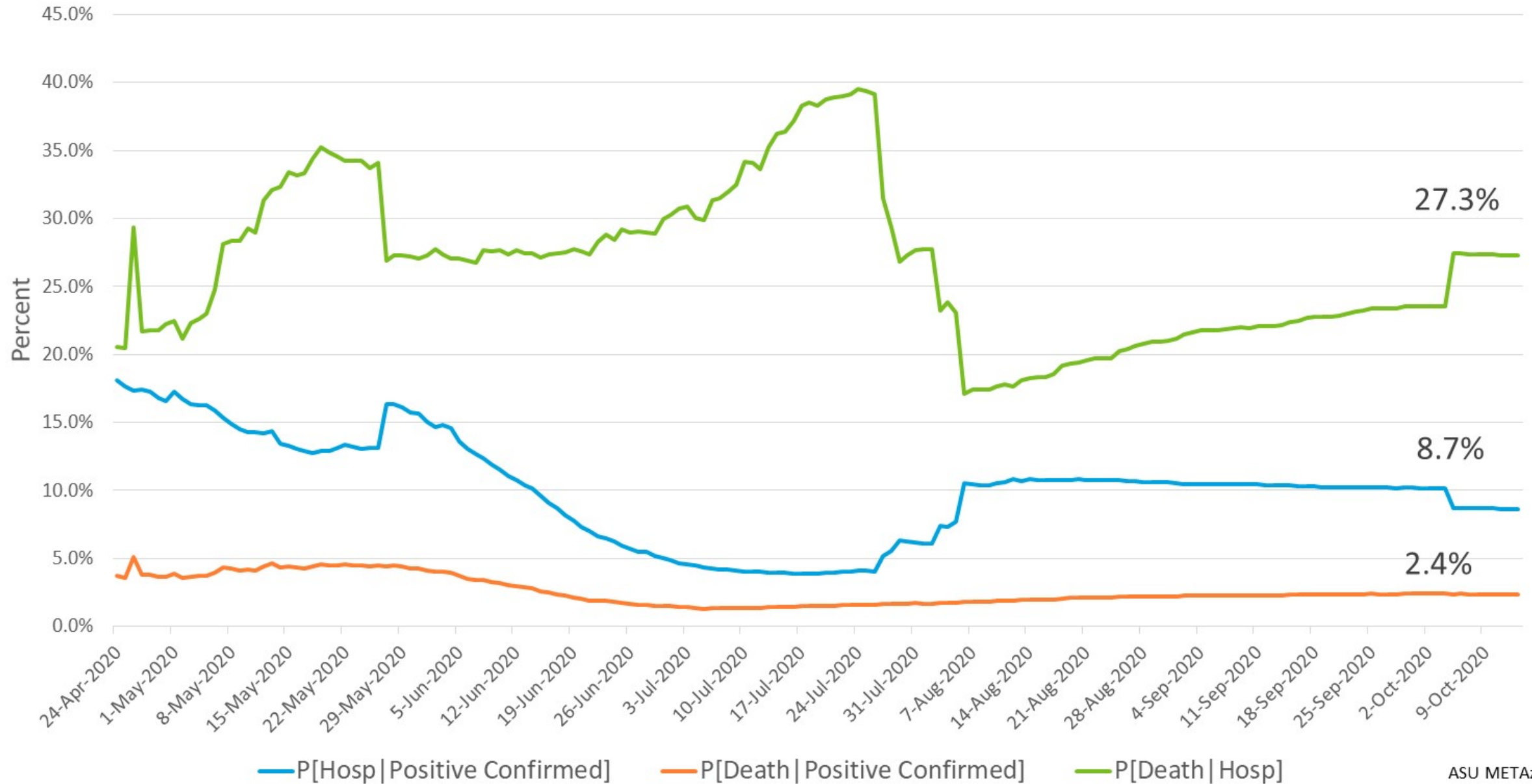
ASU METAz

Maricopa County Daily COVID-19 Deaths by Date of Death
(Epi Curve)



ASU METAz

Maricopa County Case Fatality and Hospitalization Rates



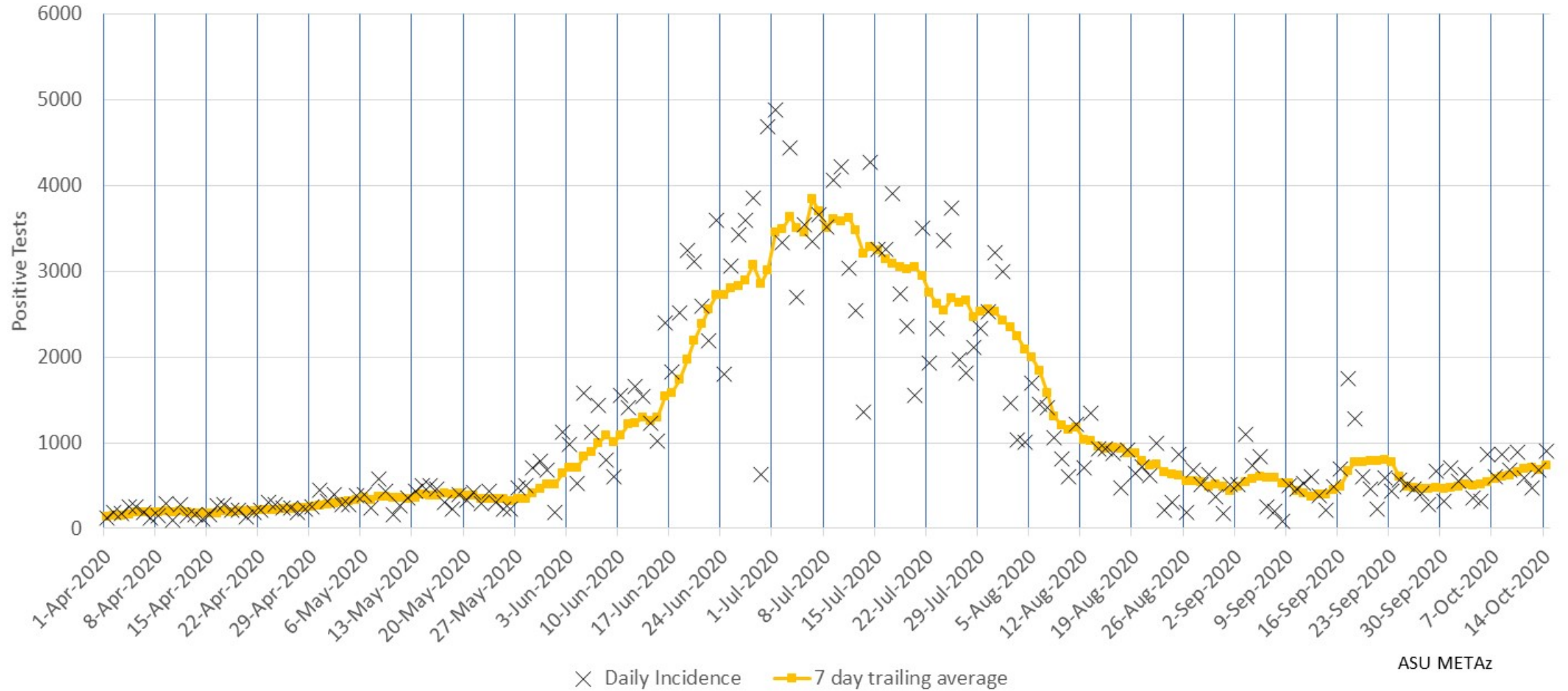
Arizona Statewide Analysis



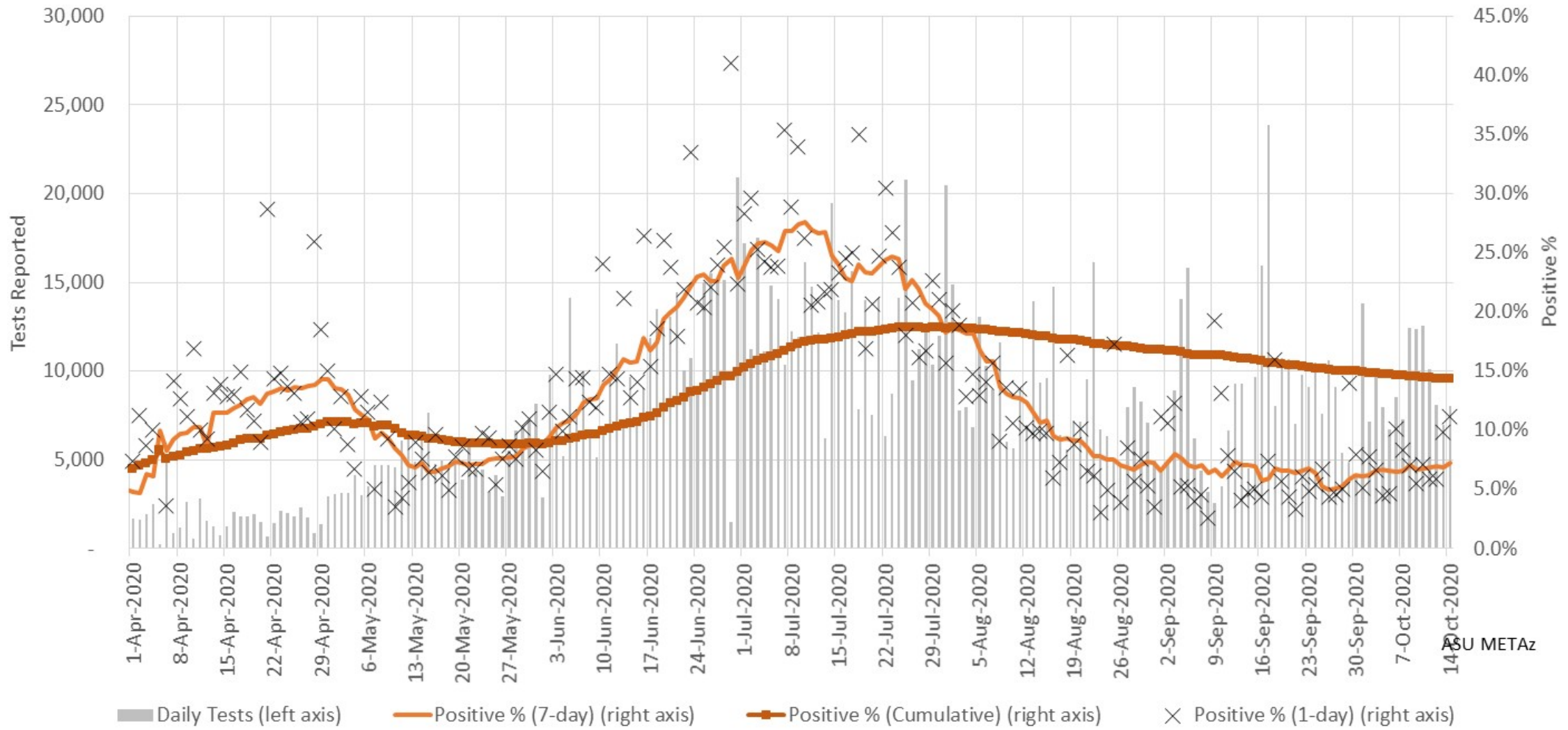
Epidemiology



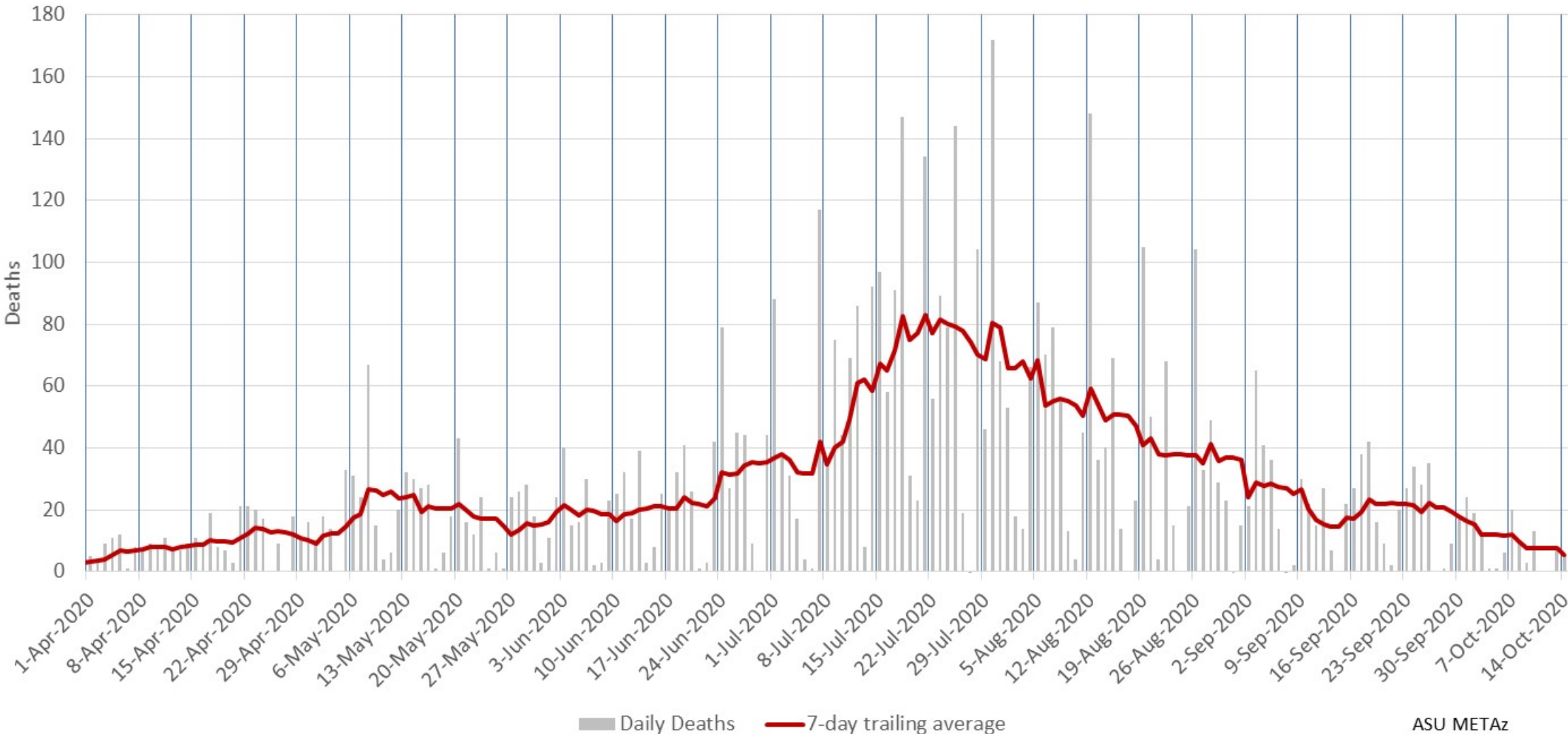
Arizona Statewide Daily COVID-19 Positive Tests Results Reported (confirmed incidence)



Arizona Statewide Rolling weekly positive COVID-19 test rate

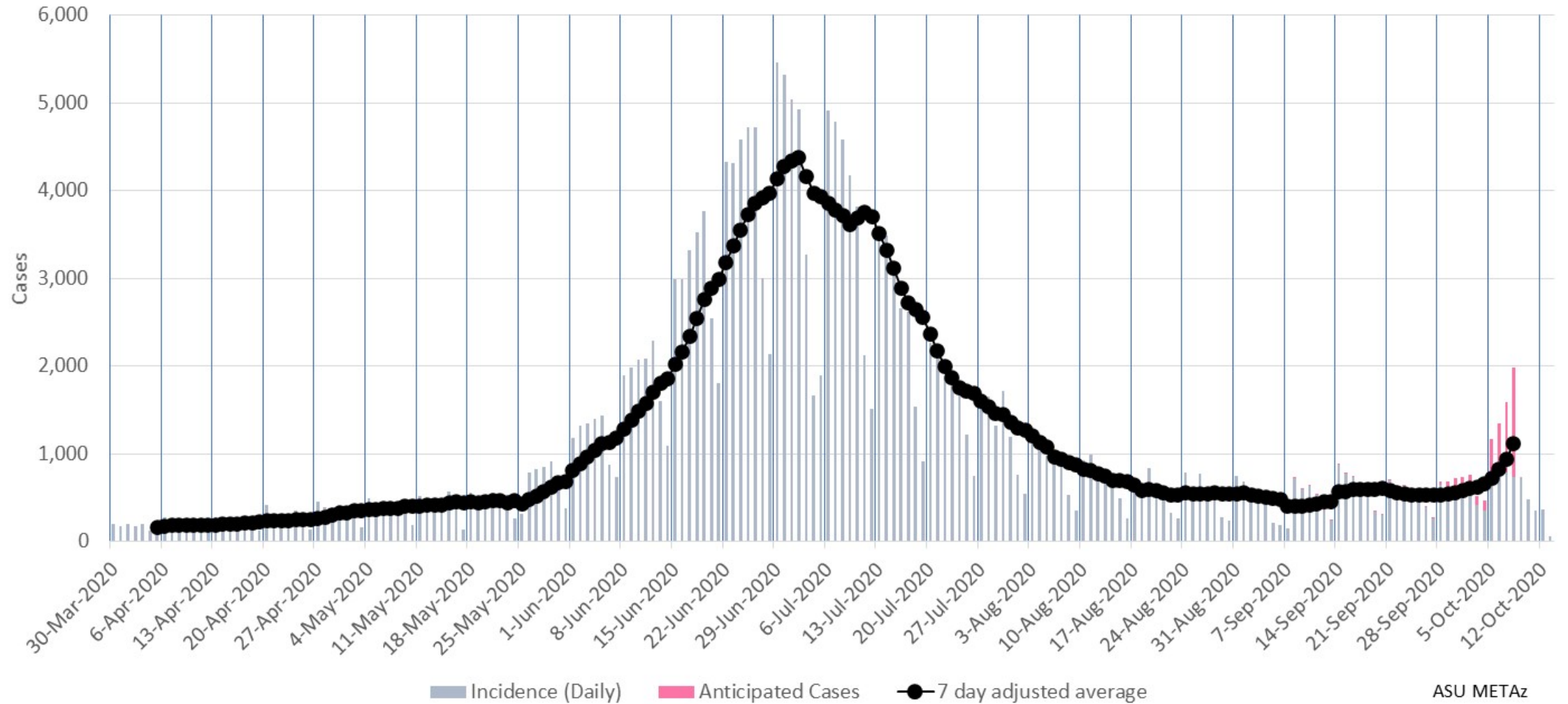


Arizona Statewide Daily COVID-19 Deaths (by date of reporting)



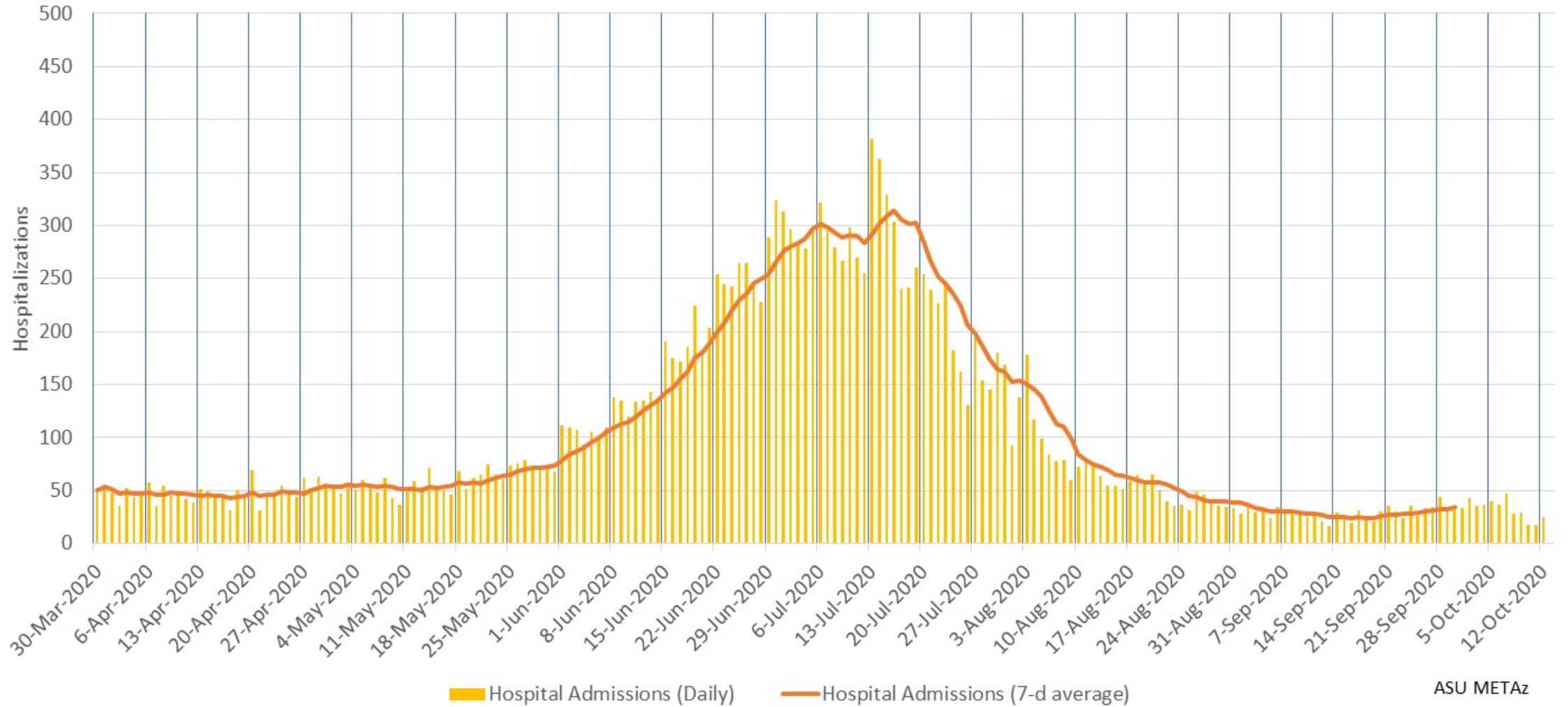
ASU METaz

Arizona Statewide Daily COVID-19 Cases by Date of Sample Collection (Epi Curve)



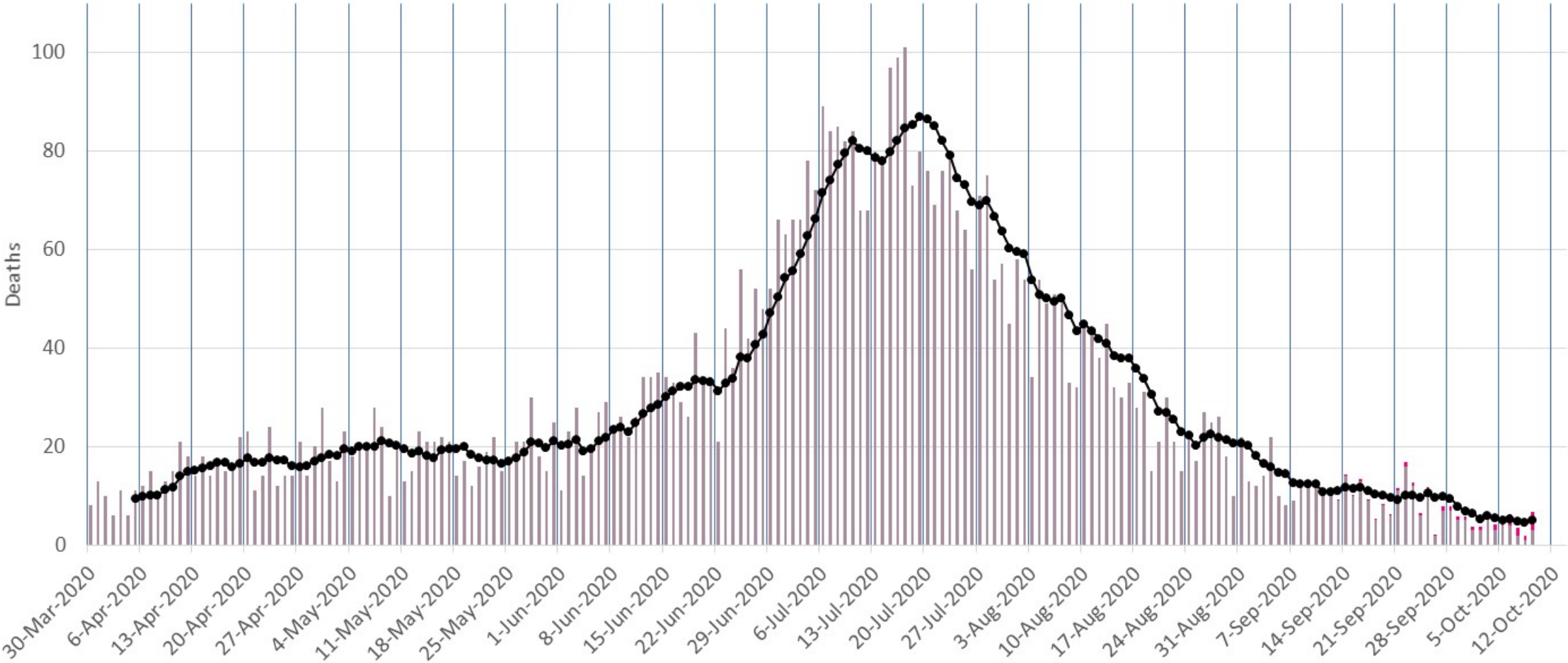
ASU METAz

Arizona Statewide Daily COVID-19 Hospitalizations by Date of Hospitalization (Epi Curve)



ASU METAz

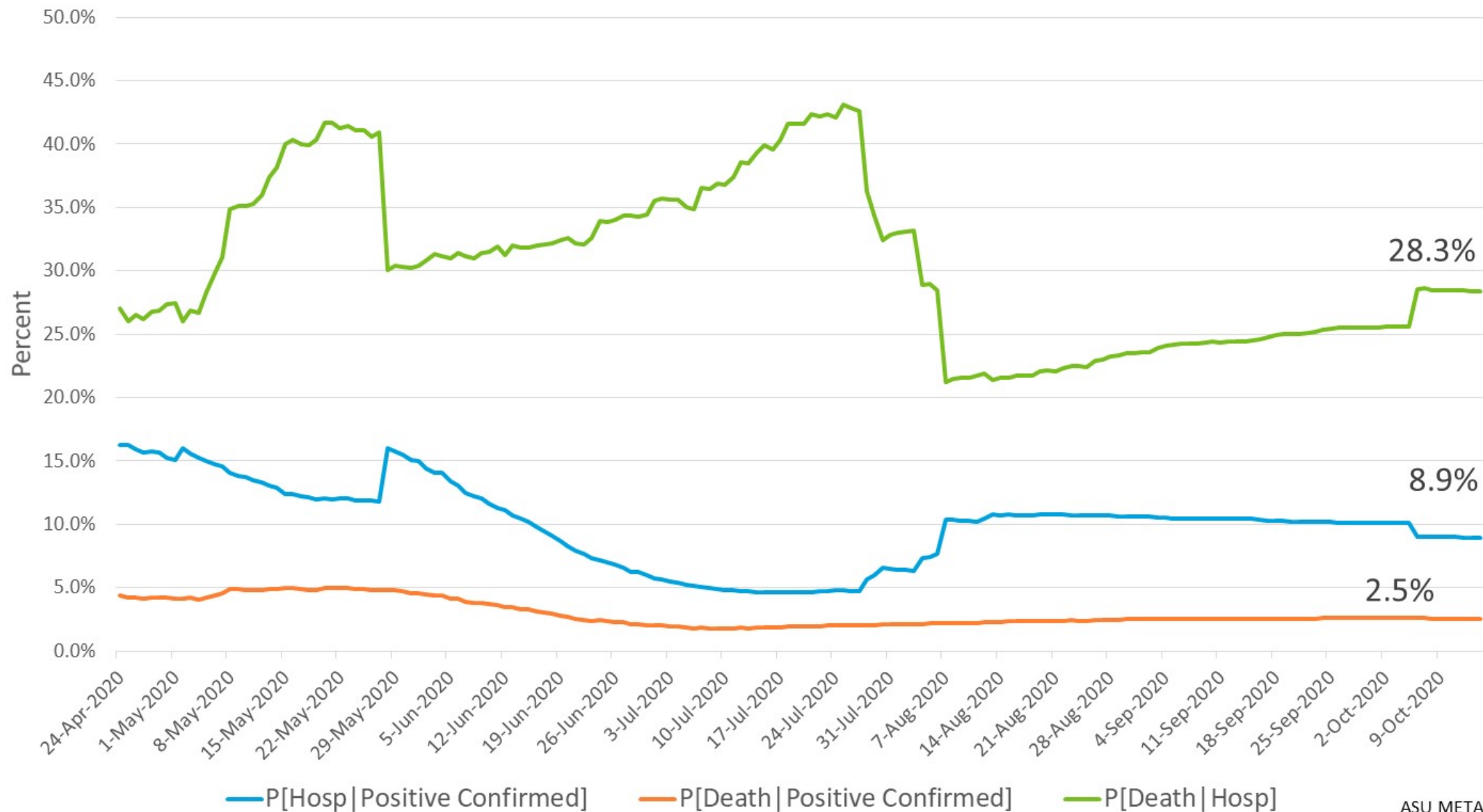
Arizona Statewide Daily COVID-19 Deaths by Date of Death (Epi Curve)



Deaths (Daily) Anticipated Deaths Deaths (7-d average)

ASU METAz

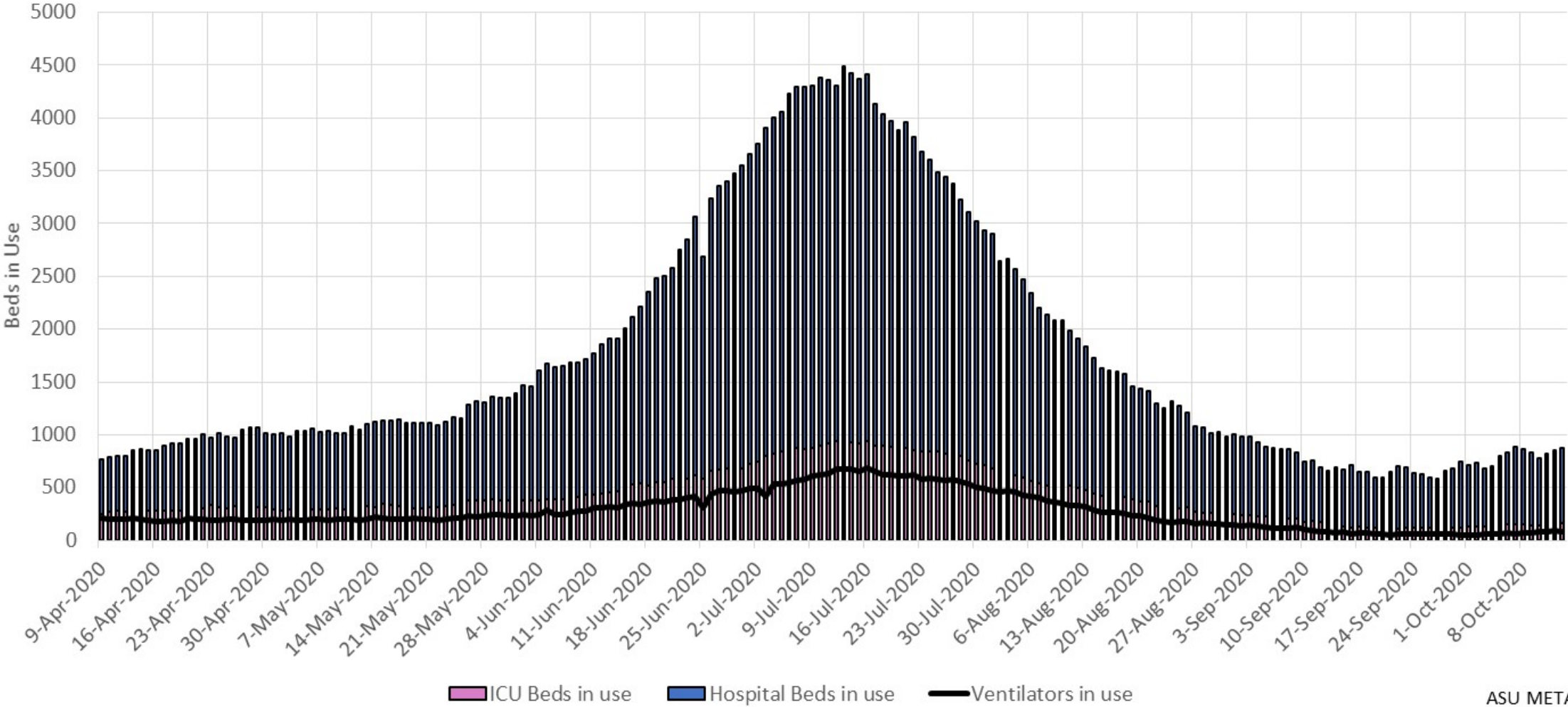
Arizona Statewide Case Fatality and Hospitalization Rates



Hospital Usage

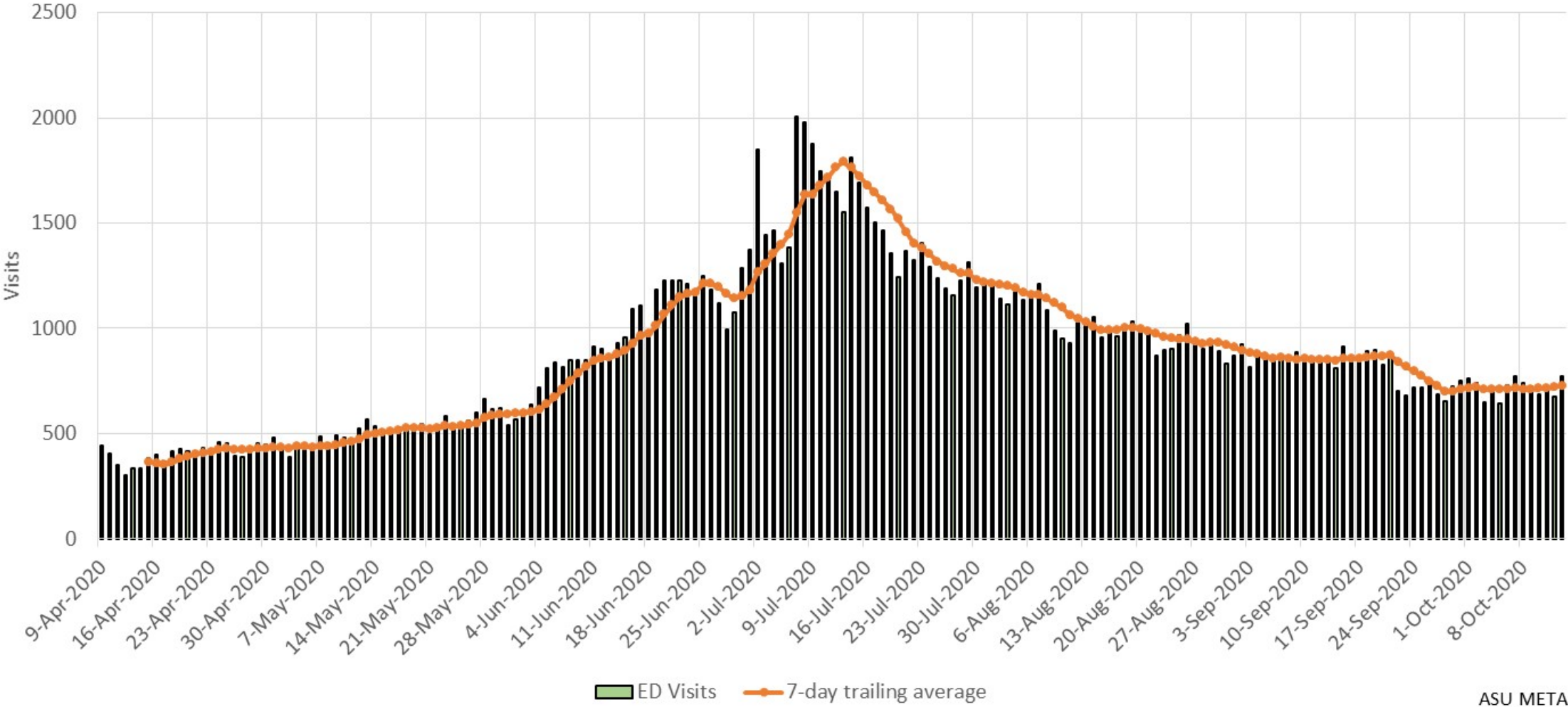


Arizona Statewide COVID-19 Hospital Resource Utilization



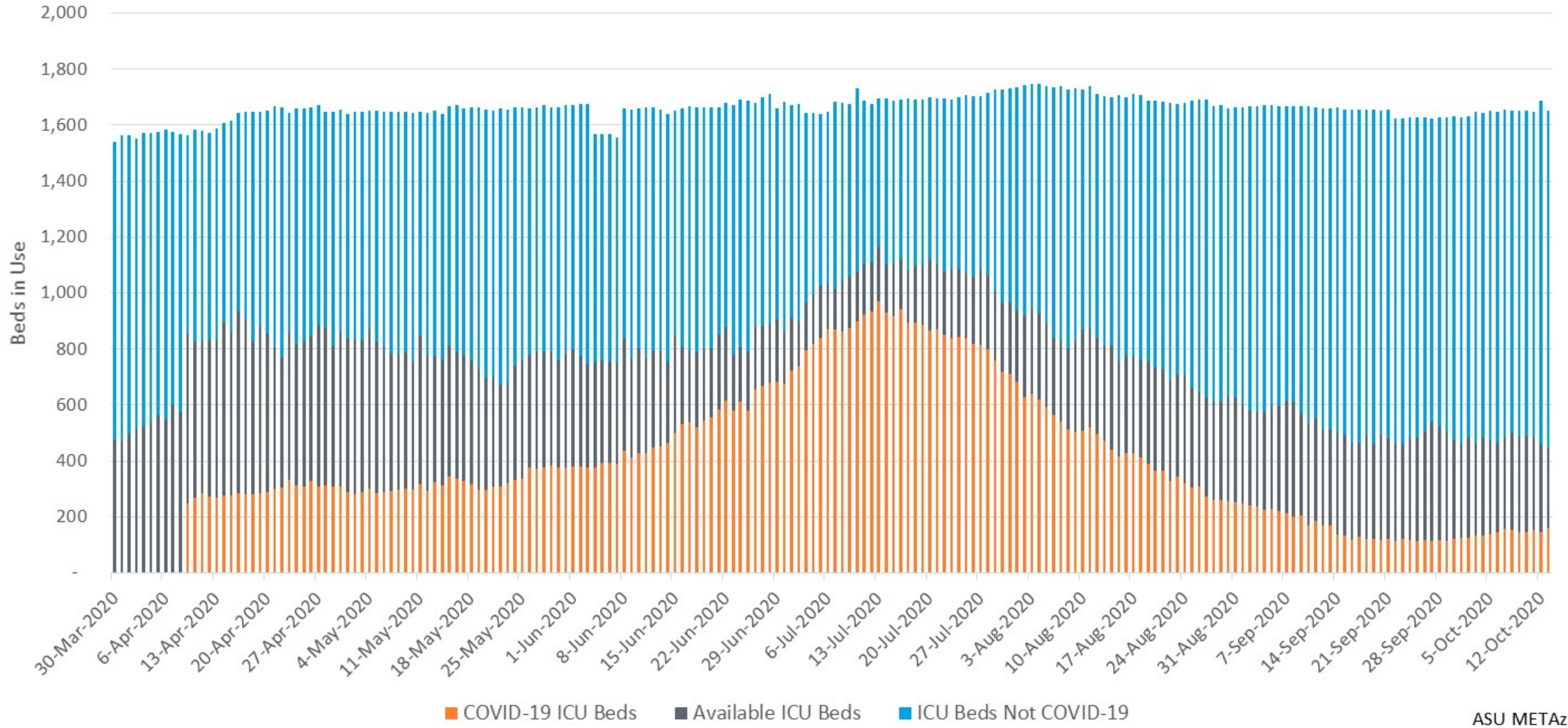
ASU METaz

Arizona Statewide COVID-19 Emergency Department Visits



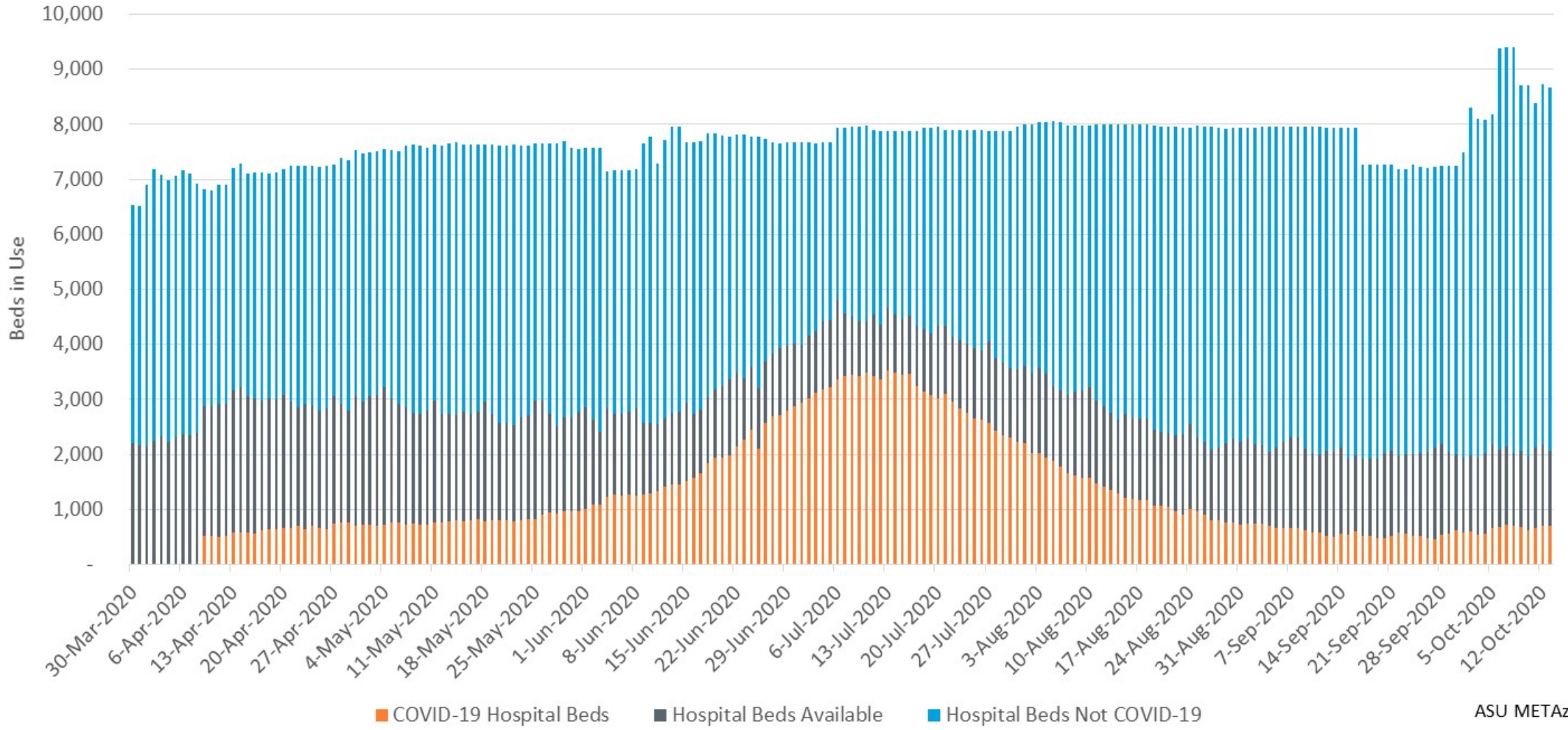
ASU METAz

Arizona Statewide ICU Bed Usage



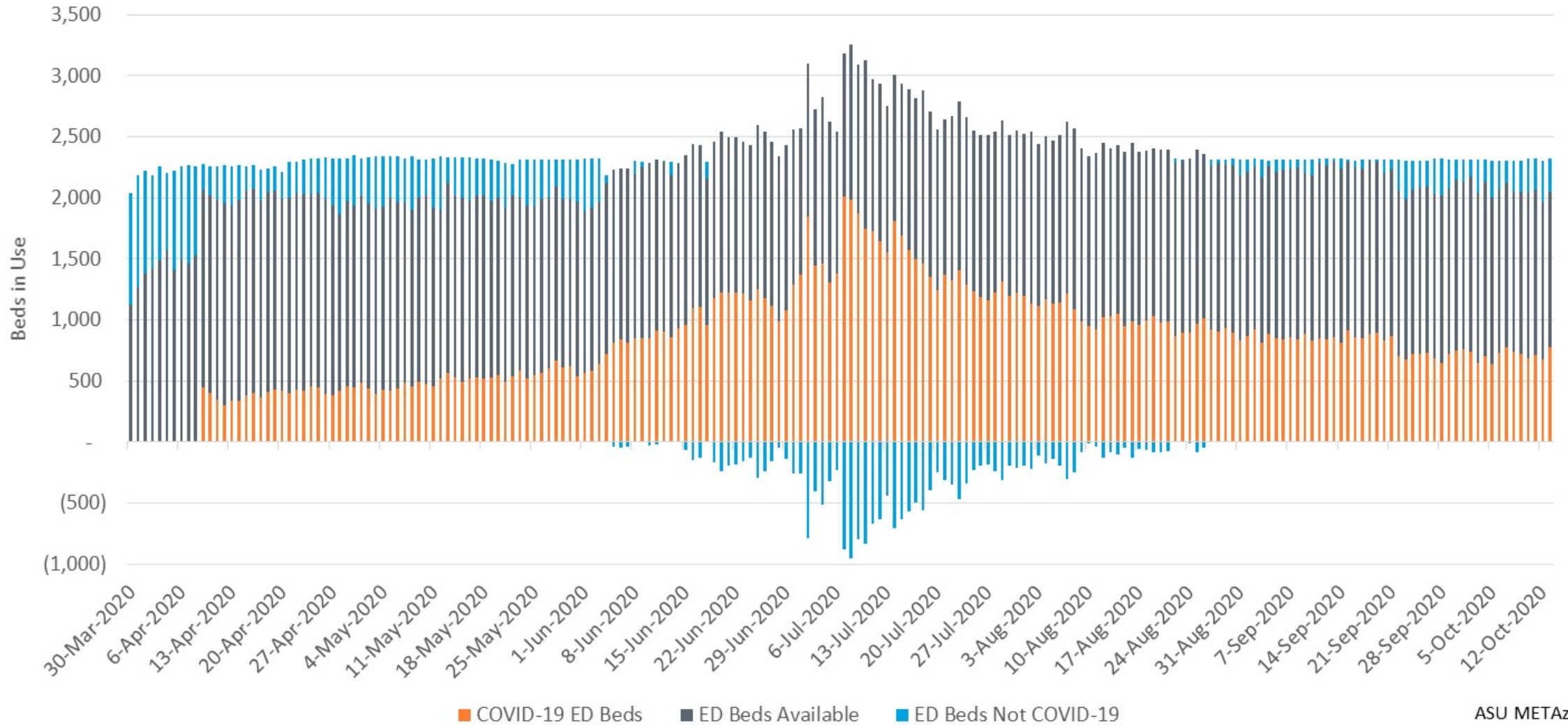
ASU METAz

Arizona Statewide Inpatient Bed Usage



ASU METAz

Arizona Statewide ED Bed Usage



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