



AGENDA MATERIAL

DATE 11-12-21

ITEM NO. RA 7

MEMORANDUM

Date: November 12, 2021

To: The Honorable Chair and Members
Pima County Board of Supervisors

From: Jan Leshner *Jan Leshner*
Chief Deputy County Administrator

Re: COVID-19 Update for the November 16, 2021 Board of Supervisors Meeting

Pandemic Update

Consistent with the rest of the state and much of the nation, the number of COVID-19 cases in Pima County are continuing to increase, in what is increasingly looks like another spike in infections. Since the week of October 10 (when we reported 1,689 cases and a rate of 160/100,000 population), cases have increased significantly each week to 3,117 in the last week of October. We fully expect to report a rate in excess of 300 cases per 100,000 persons far exceeding our nadir of 23 per 100,000 persons at the end of May. (Attachment 1)

The situation with regards to case growth is dynamic enough that I plan to provide the Board an update on the Monday, November 15, so that you will have the most current data to inform for your discussion at the Board meeting on November 16, 2021.

Not surprisingly, diagnostic testing for COVID-19 has continued to increase during this surge as would be expected with 32,327 tests performed last week and an elevated positivity rate of 11 percent. This is compared to 2 percent positivity rate during the prior low point the last week of May.

COVID-19 positive individuals occupy approximately 313 hospital beds each day this week. Overall intensive care capacity continues to be extremely constrained across Pima County hovering at less than 5 percent adult ICU bed availability for a second month. As of yesterday, intensive care bed use by COVID-19 patients occupied 29 percent of all ICU beds in Pima County.

The reasons for the continued surge that is impacting Pima County and the rest of the state is unclear. The delta variant which is the most common variant circulating since September has been substantially more transmissible and especially problematic for unvaccinated populations who represent the overwhelming majority of new infections. The greatest growth increase has been among previously vaccine ineligible pediatric populations as well as unvaccinated individuals in the 20 to 40-year age range.

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Schools

Since July 20 of this year schools have reported 4,684 cases. This includes last week when schools reported 581 cases, the highest count since they began reporting. Students still represent the overwhelming majority of these cases at 86 percent compared to teachers and staff at 14 percent. Previously, non-vaccine eligible children up to 11 years of age represent 49 percent (2,300 cases) of school reported cases, while the 12 to 19-year age group make up 37 percent (1,724 cases) of school reported cases. (Attachment 2)

A total of 297 schools reported cases and are summarized by district in of Attachment 2. These individual district case counts reflect the underlying infection in those communities as well as the overall size of the district. What may be more informative is examining the distribution of the 148 school outbreaks (as defined by the Centers for Disease Control and Prevention of 2 or more epidemiologically linked cases not in the same household) and 94 separate classroom closures. The table provides information on outbreaks and classroom closures as counts as well as rates, in an attempt to adjust for the size of the school districts. In general, districts that do not require masks had higher rates of outbreaks and classroom closures, while those with the largest enrollment have higher absolute numbers of cases reported.

Vaccination

Vaccination activities continue across the County, with the net impact of the various efforts being that 1,359,945 doses have been administered in Pima County. As of November 11, per the CDC, 69.6 percent of Pima County residents who are 12 years of age or older have been fully vaccinated with two doses of Moderna/Pfizer or a single dose of Johnson & Johnson. Significantly, 60.2 percent of the *entire* population of Pima County has now been vaccinated. This compares very favorably with 53.6 percent of Arizonans and 58.5 percent of all Americans.

Breakthrough infections have become more frequent with the spread of delta variant and the waning of immunity at about six months. In total we have documented 7,615 breakthrough infections following complete vaccination. To put this in perspective, this is only 1.25 percent of the fully vaccinated population. Although these breakthrough cases are occurring, the usual course of the infection appears to cause less morbidity among those previously vaccinated. Because of that only 0.03 percent (198) of fully vaccinated individuals have required hospitalization, and only 0.01 percent (58) have died of COVID-19 related illness.

“Booster” vaccination is essential to optimize the protection afforded by the initial vaccine. More than 56,333 Pima County residents have received booster doses. Significantly, it is anticipated the Food & Drug Administration will take action in the near future to expand the Emergency Use Authorization of the Pfizer vaccine to cover all adults. Similar action for the Moderna vaccine will likely follow.

Additionally, this week the Health Department launched its pediatric vaccination effort. We are happy to report that the prepositioned pediatric doses were received by 15 local vaccination sites. These are well supplemented by federal retail pharmacy contractors throughout the community that are also well stocked and delivering vaccine to our children.

Conclusion

Regrettably, the current surge appears to be far from over and may indeed be worsening. For that reason, I have asked the Health Department to update its Public Health Advisory to respond to the persistently high level of transmission. More than ever, it is critical that individuals mask effectively when in indoor public spaces; that sick individuals stay out of the work or school settings; that symptomatic individuals seek out rapid antigen testing; and most importantly, that **all eligible** persons undergo vaccination, if they have not yet done so.

In anticipation of forthcoming federal action that is expected to expand booster eligibility, I have asked Dr. Theresa Cullen to develop local strategies to increase the accessibility of booster vaccinations for all adults across Pima County. Already Johnson & Johnson boosters are available to all adults. While Moderna and Pfizer are available for individuals 65 and older; any adult with an underlying medical condition; and those working or living in high risk settings. Given that Pima County remains a persistently high transmission setting, it is reasonable that the benefits of booster vaccination be extended to all adults living in this community.

JKL/dym

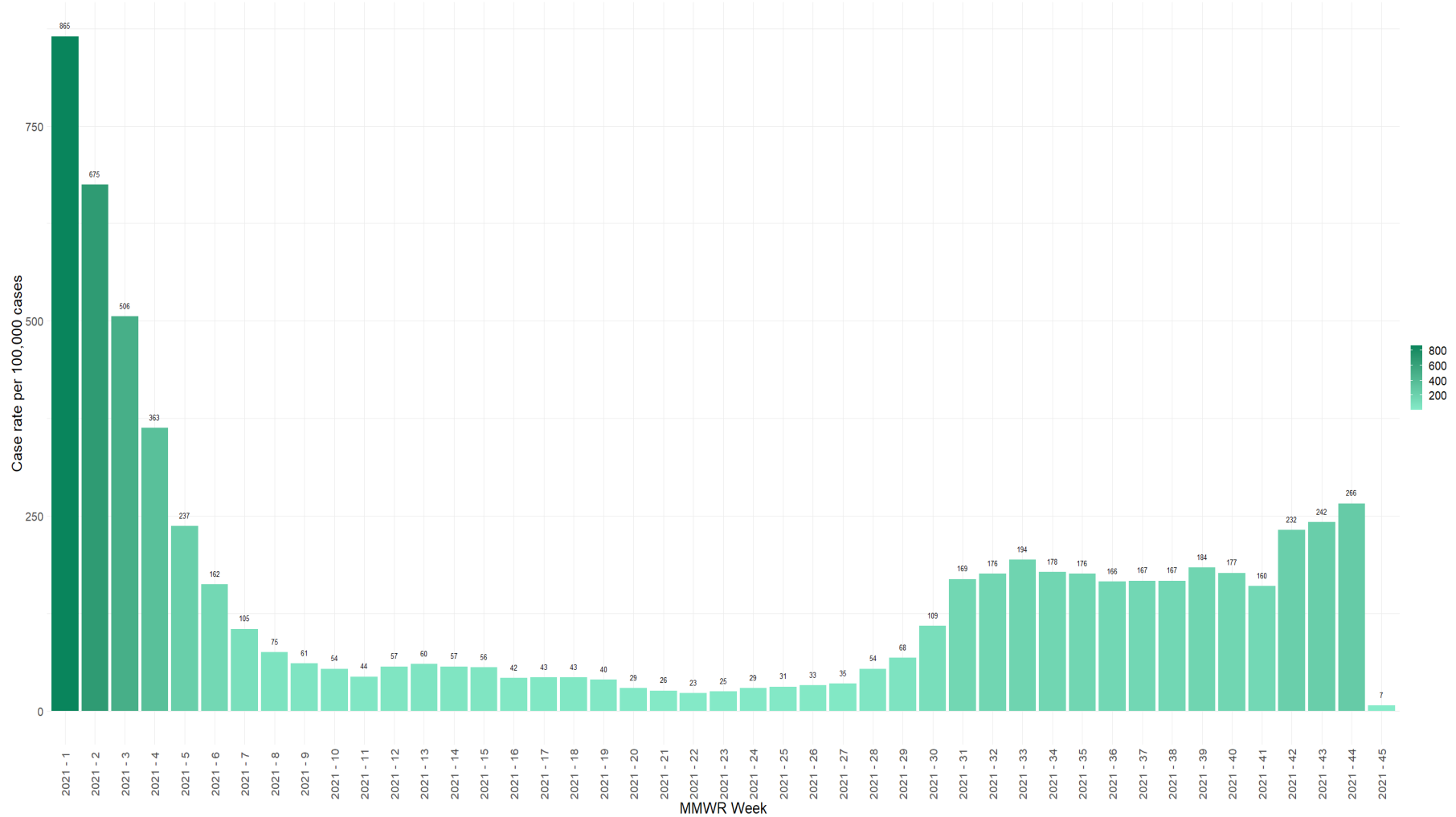
Attachments

c: Francisco García, MD, MPH, Deputy County Administrator & Chief Medical Officer,
Health and Community Services
Carmine DeBonis, Jr., Deputy County Administrator for Public Works
Theresa Cullen, MD, MS, Public Health Director, Health Department

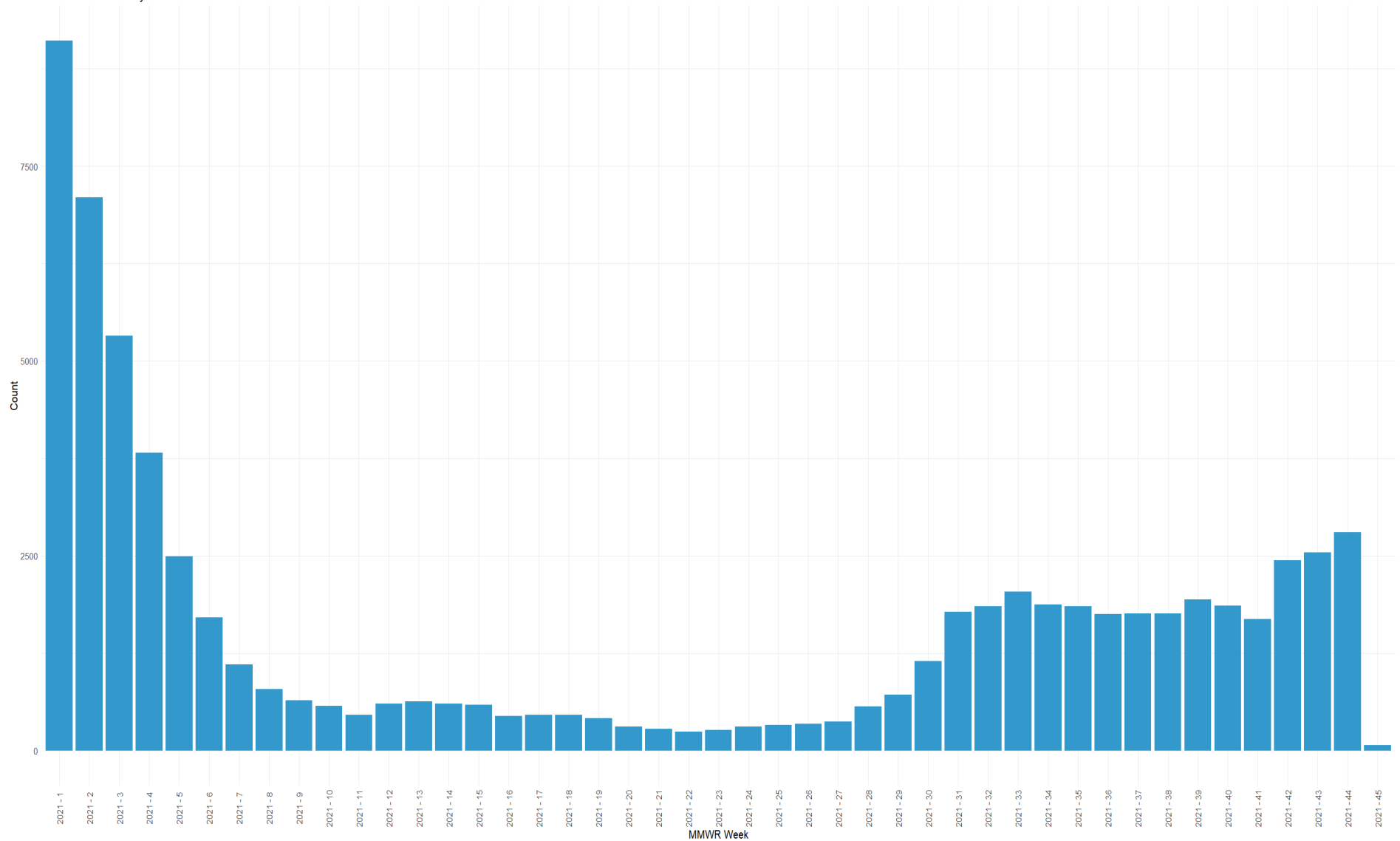
ATTACHMENT 1

COVID-19 Incidence Rate by MMWR Week
Based on 2020 Pima County population - n=1,052,375

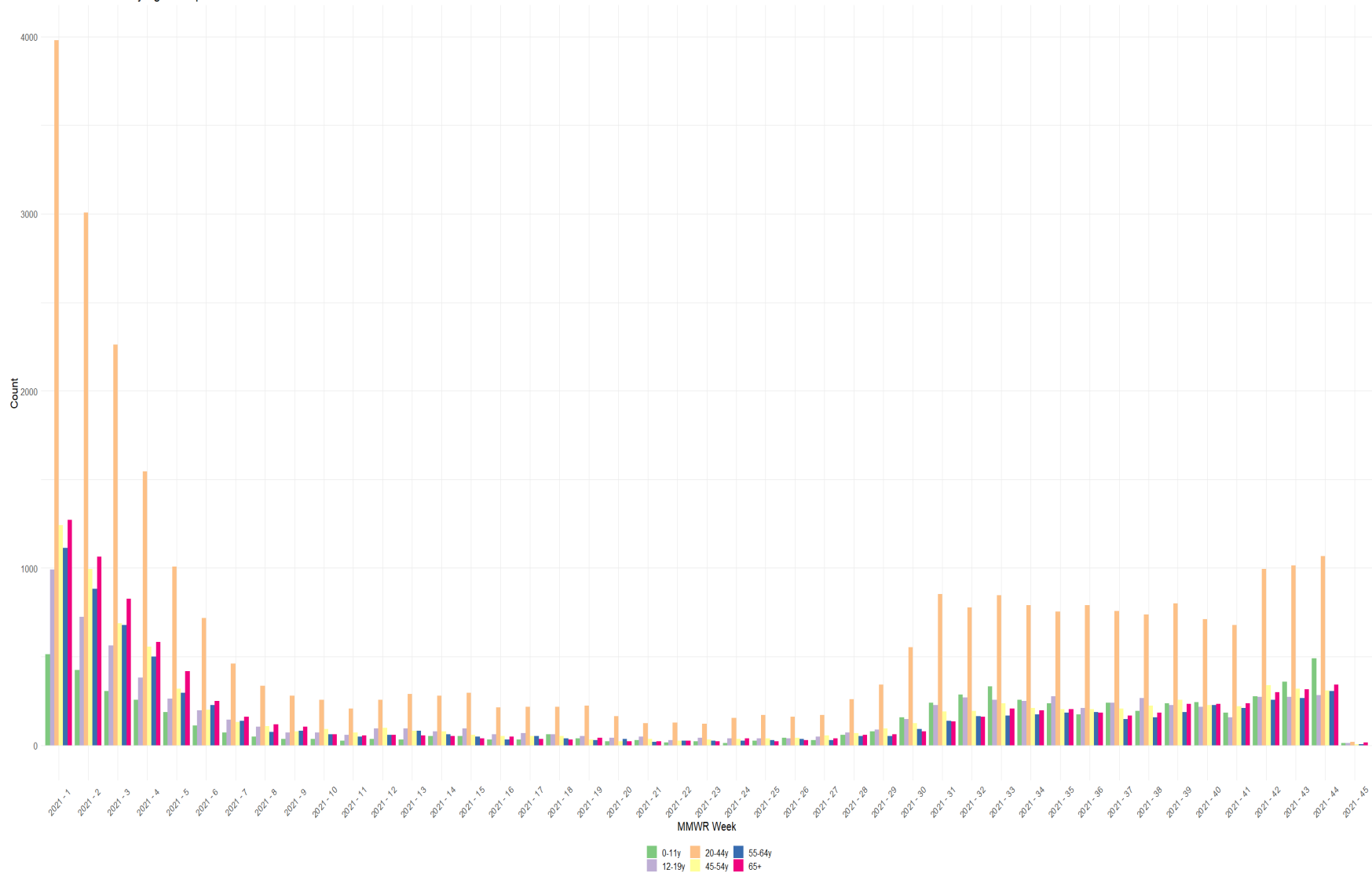
November 10, 2021



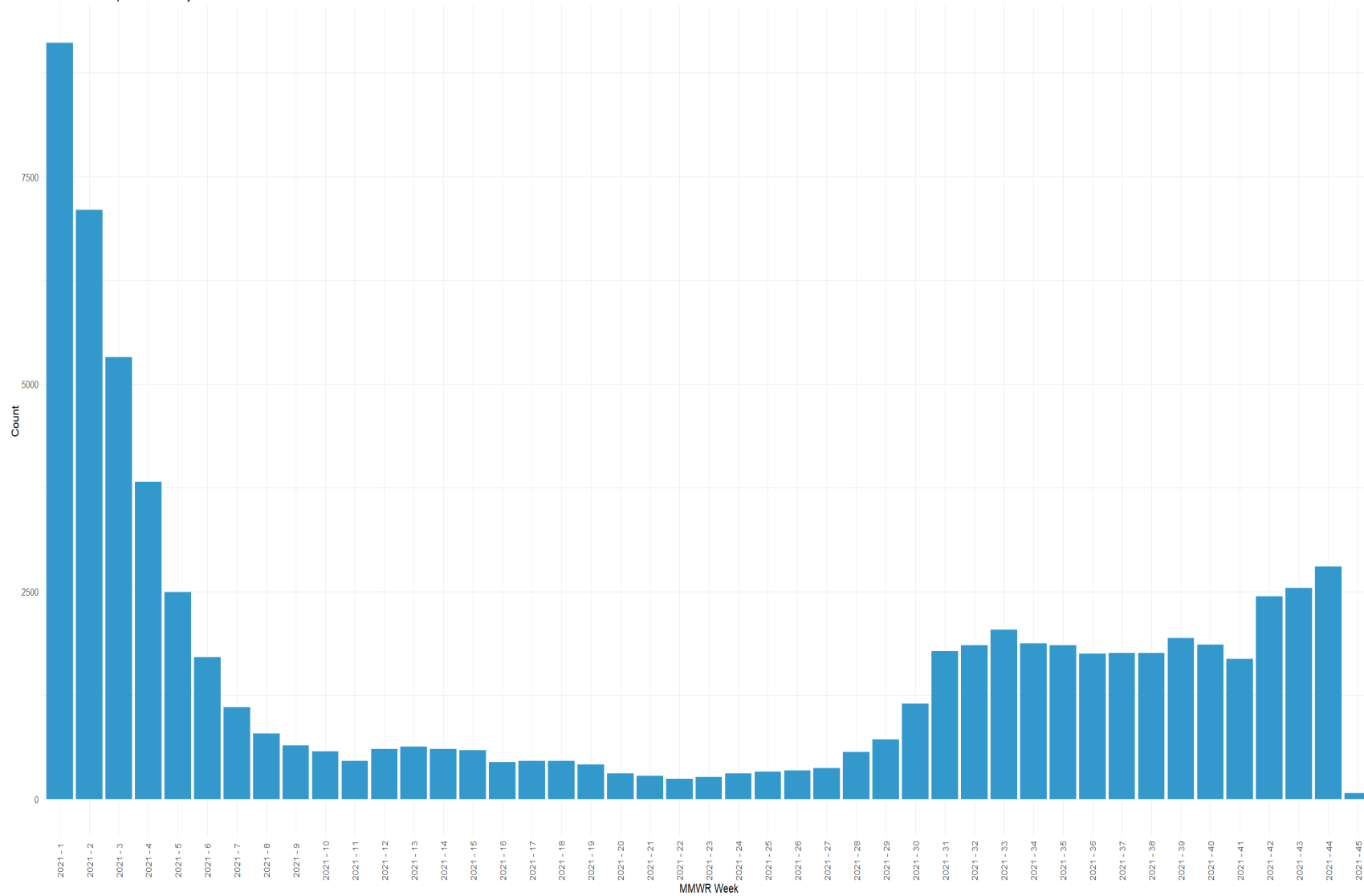
November 10, 2021



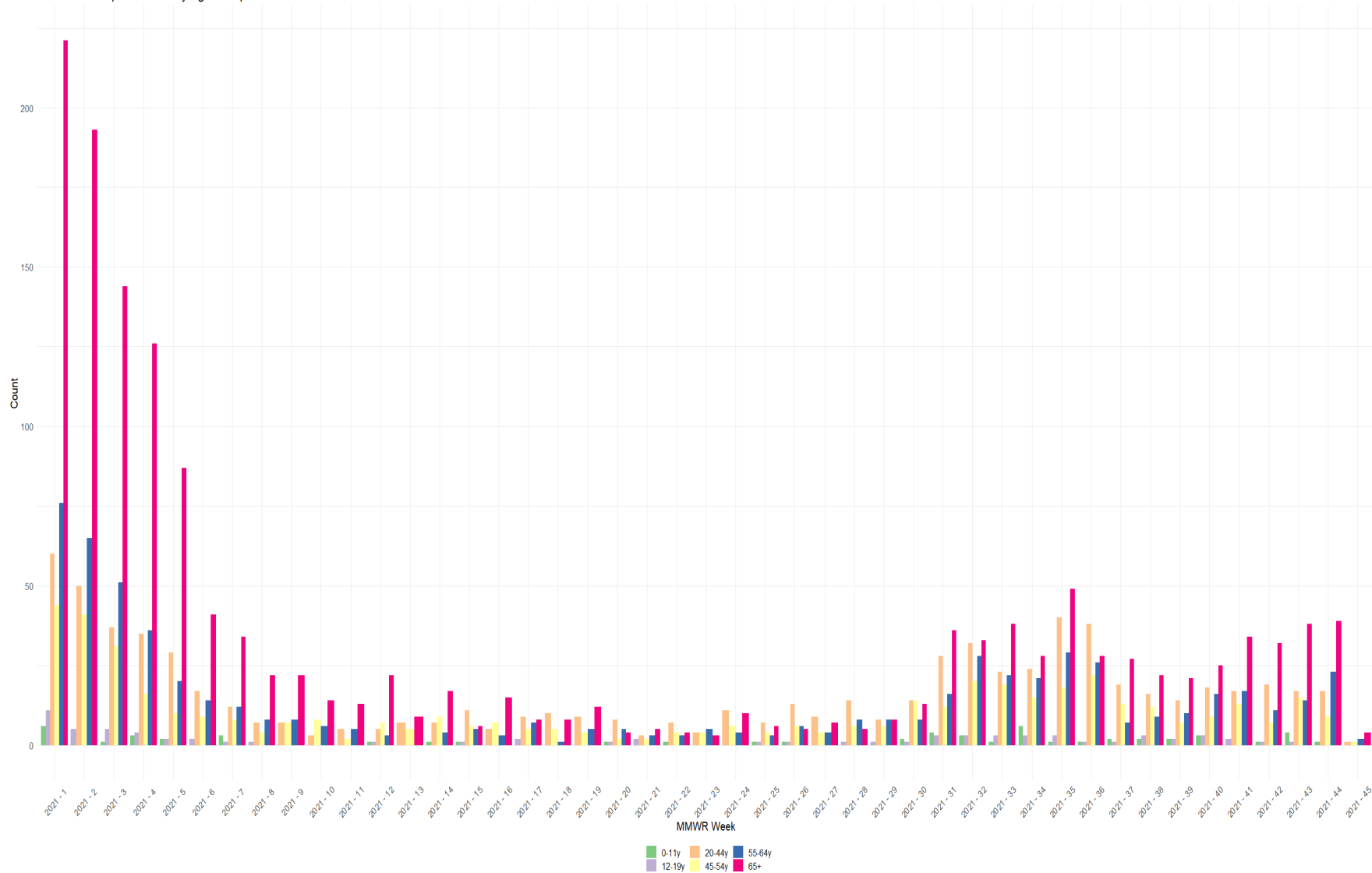
November 10, 2021



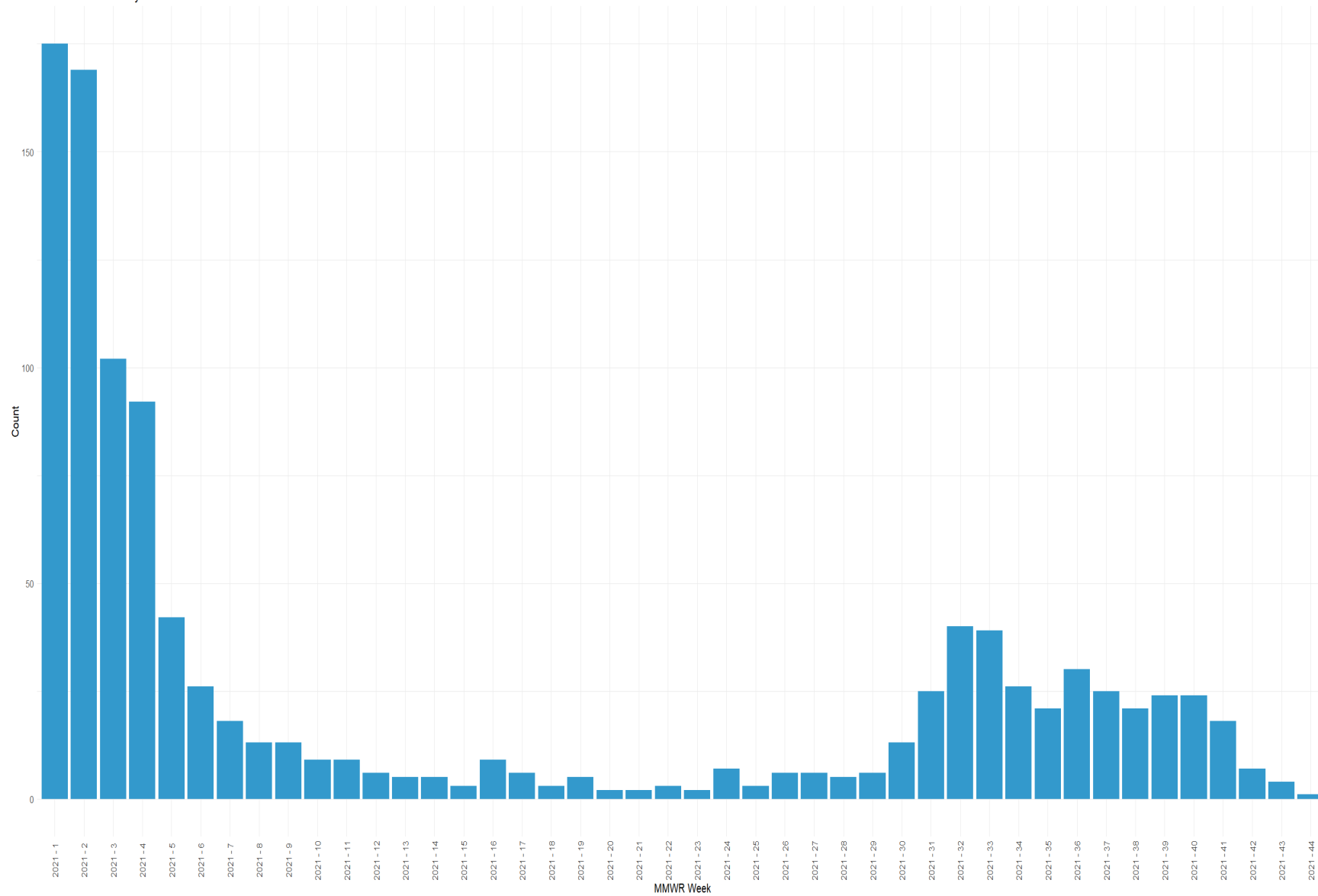
November 10, 2021



November 10, 2021

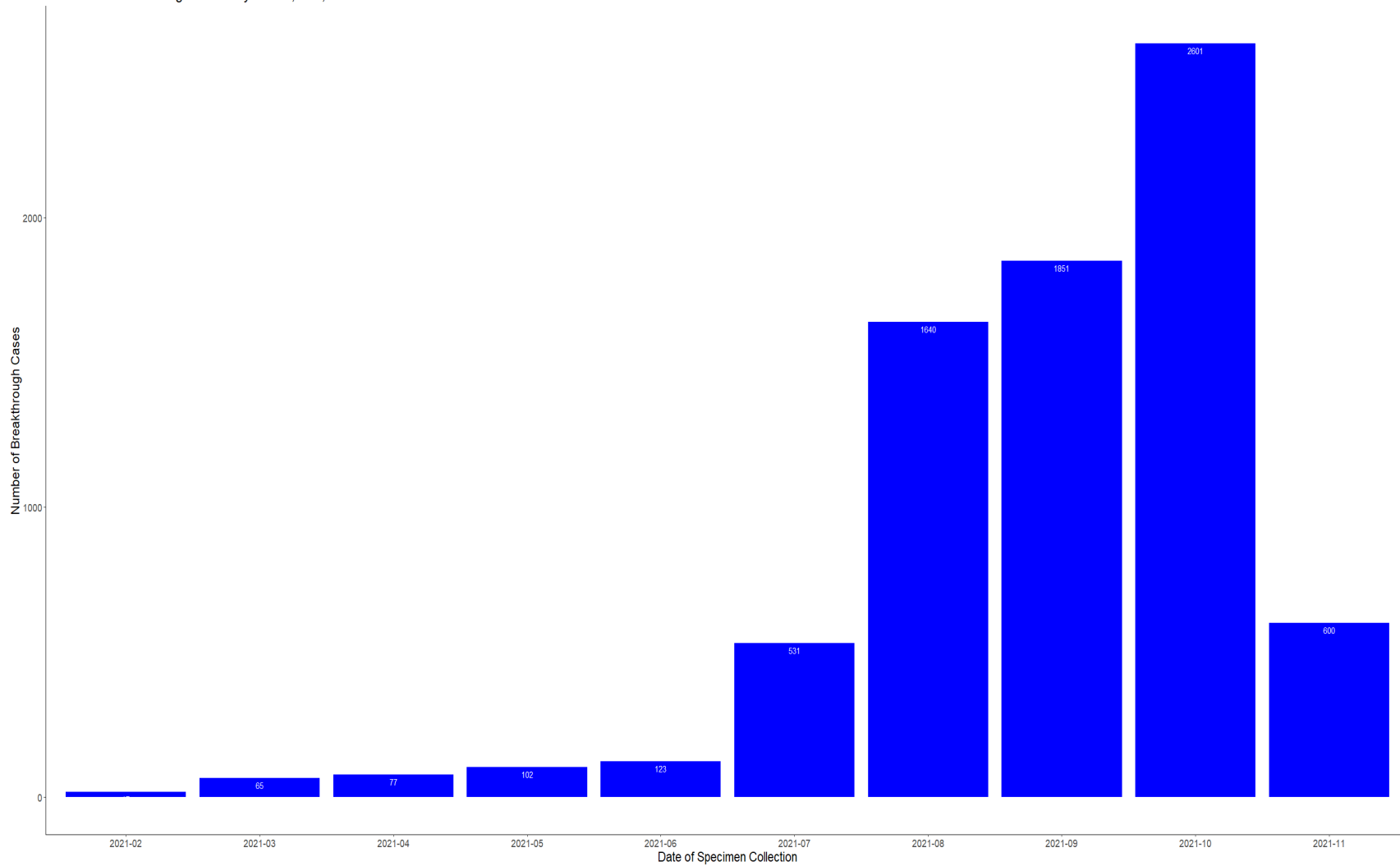


November 10, 2021



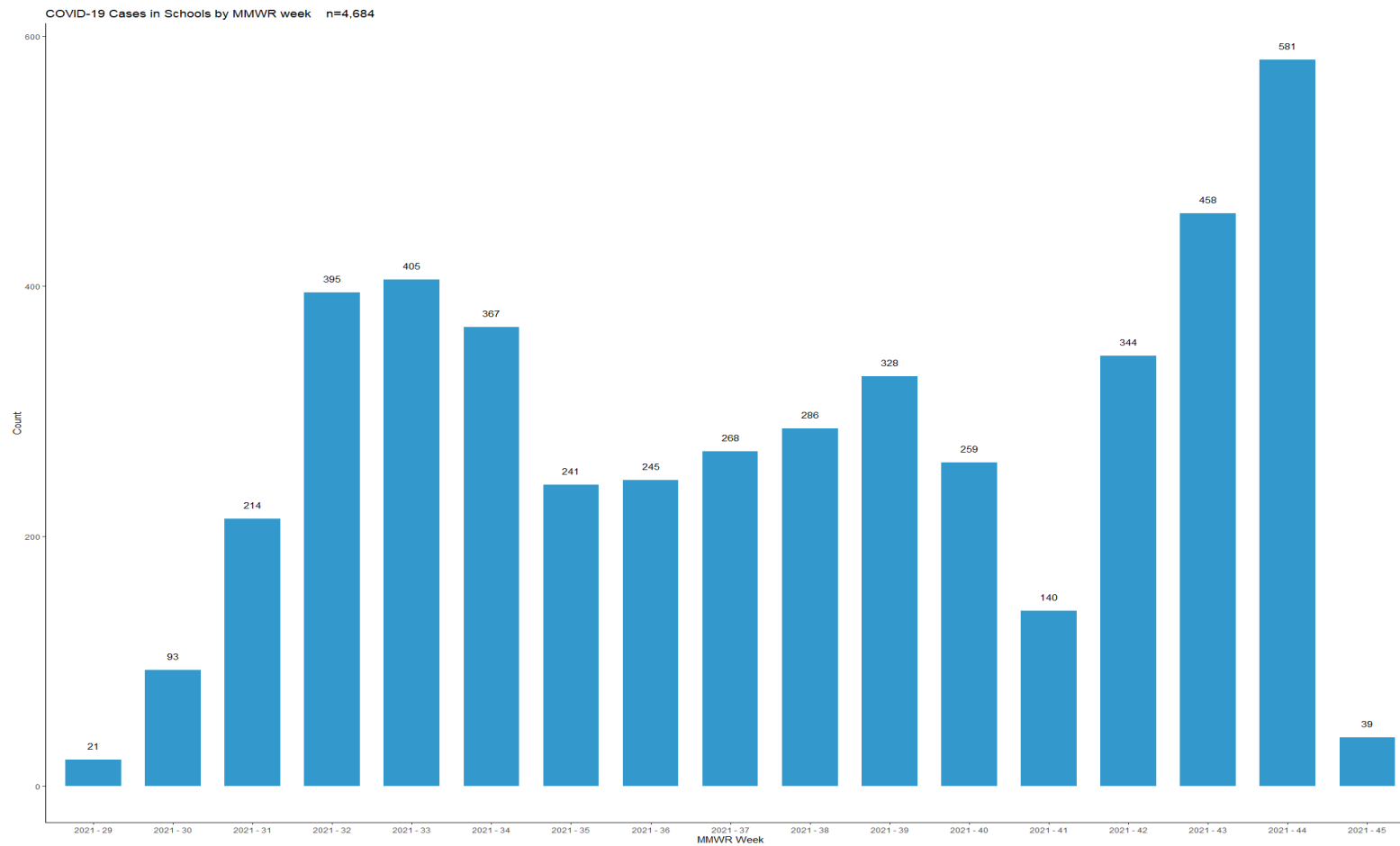
Breakthrough Vaccine Health Outcomes	Counts and Percent
Total Pima County residents fully vaccinated	609,921
Total breakthrough cases	7,615
Breakthrough cases as a % of the fully vaccinated population	1.25%
Total breakthrough hospitalizations	198
Breakthrough hospitalizations as a % of the fully vaccinated population	0.03%
Total breakthrough deaths	58
Breakthrough deaths as a % of the fully vaccinated population	0.01%

COVID-19 Breakthrough Cases by Month; n=7,615

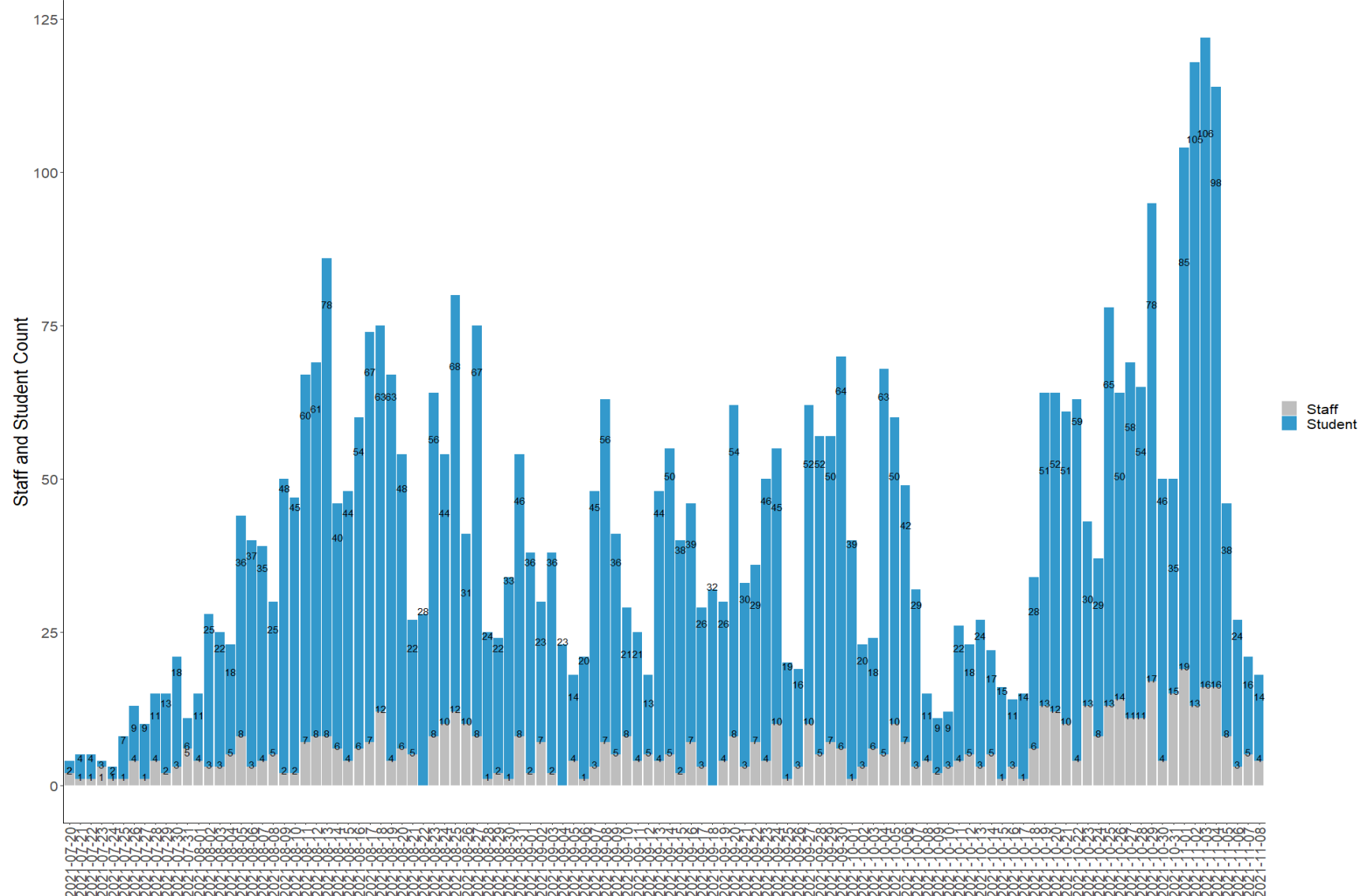


ATTACHMENT 2

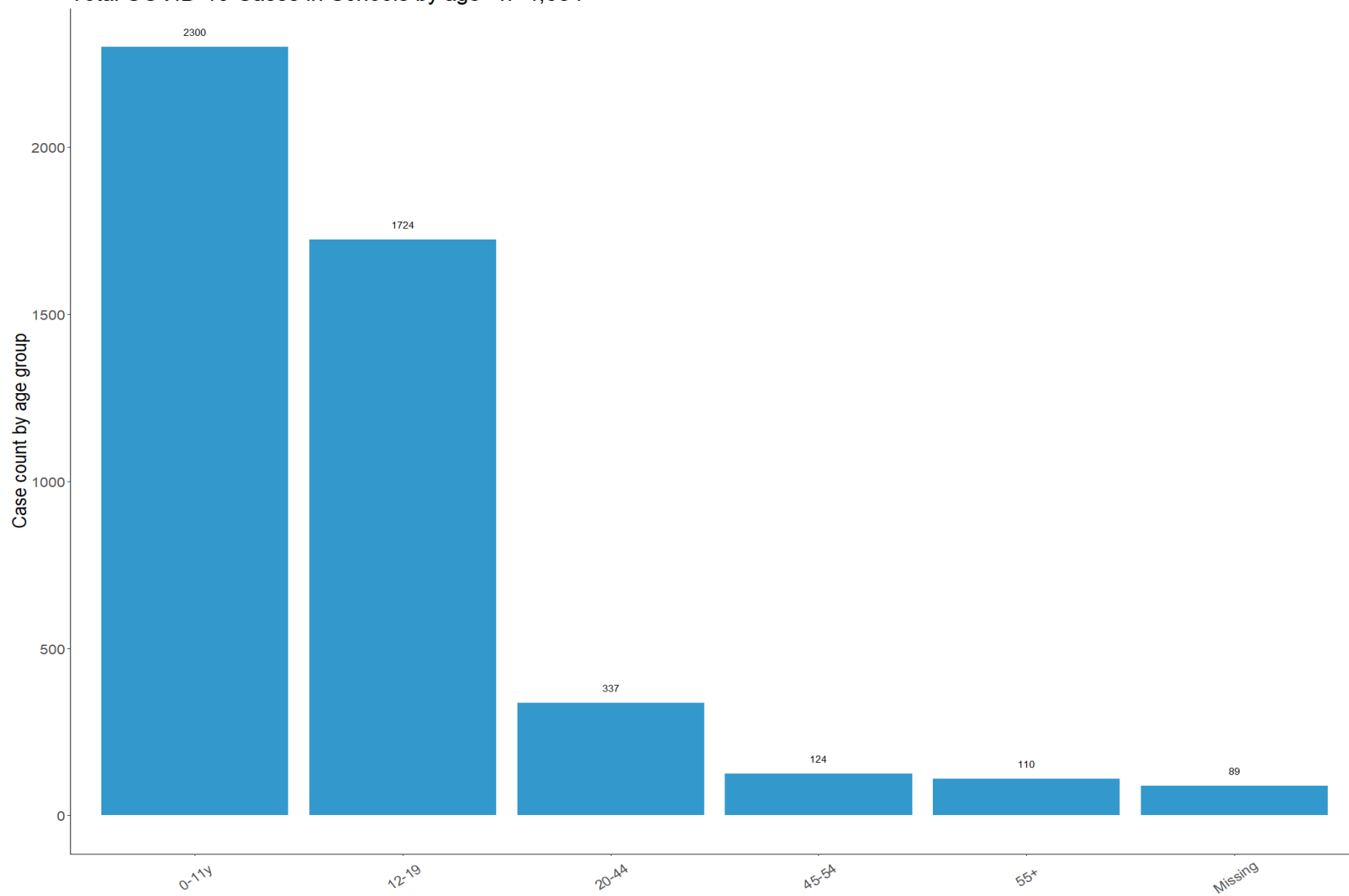
COVID-19 in Pima County Schools



Daily COVID-19 Cases by Staff (n=639) and Student (n=4,045) n=4,684



Total COVID-19 Cases in Schools by age n=4,684



Total COVID-19 Cases in Pima County School Districts n=4,684

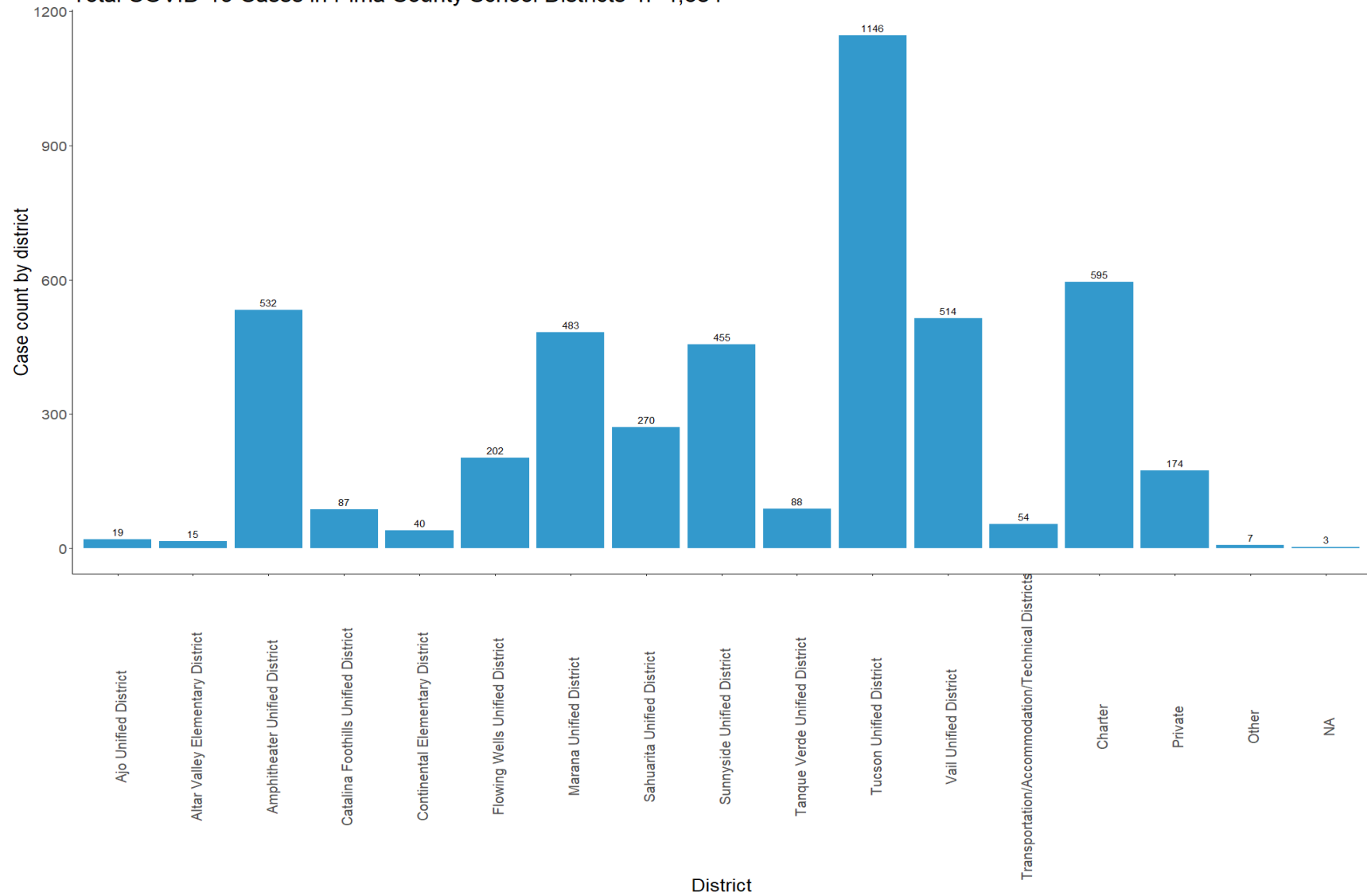


Table 1: School case counts and incidence rates by district enrollment

District	Case count	District enrollment	Case incidence rate
Ajo Unified District	19	452	4.2
Altar Valley Elementary District	15	639	2.35
Amphitheater Unified District	532	13658	3.9
Catalina Foothills Unified District	87	5427	1.6
Continental Elementary District	40	598	6.69
Flowing Wells Unified District	202	5649	3.58
Marana Unified District	483	12292	3.93
Sahuarita Unified District	270	6499	4.15
Sunnyside Unified District	455	16113	2.82
Tanque Verde Unified District	88	2103	4.18
Tucson Unified District	1,146	45565	2.52
Vail Unified District	514	13392	3.84
Charter	595	N/A	N/A
Private	174	N/A	N/A
Other	7	1076	0.65

Table 2: School outbreak and classroom closures; counts and rates by district enrollment and school count by district

District	District enrollment	School count by district	Outbreak count	Outbreak rate by enrollment	Outbreak rate by school count	Closure count	Classroom closure rate by enrollment	Classroom closure rate by school count
Ajo Unified District	452	1	1	0.2	100.0	0	0	0.00
Altar Valley Elementary District	639	2	0	0	0.0	0	0	0.00
Amphitheater Unified District	13658	22	10	0.1	45.5	8	0.06	36.36
Catalina Foothills Unified District	5427	9	1	0	11.1	0	0	0.00
Continental Elementary District	598	1	0	0	0.0	0	0	0.00
Flowing Wells Unified District	5649	10	1	0	10.0	2	0.04	20.00
Marana Unified District	12292	19	12	0.1	63.2	9	0.07	47.37
Sahuarita Unified District	6499	9	4	0.1	44.4	3	0.05	33.33
Sunnyside Unified District	16113	21	12	0.1	57.1	6	0.04	28.57
Tanque Verde Unified District	2103	4	10	0.5	250.0	8	0.38	200.00
Tucson Unified District	45565	92	35	0.1	38.0	26	0.06	28.26
Vail Unified District	13392	20	30	0.2	150.0	18	0.13	90.00
Charter	N/A	95	23	N/A	24.2	9	N/A	9.47
Private	N/A	62	9	N/A	14.5	5	N/A	8.06
Other	1076	5	0	0	0.0	0	0	0.00