

1.5.2021 COVID-19 Update
New Cases per 100,000
New Hospitalizations per 100,000

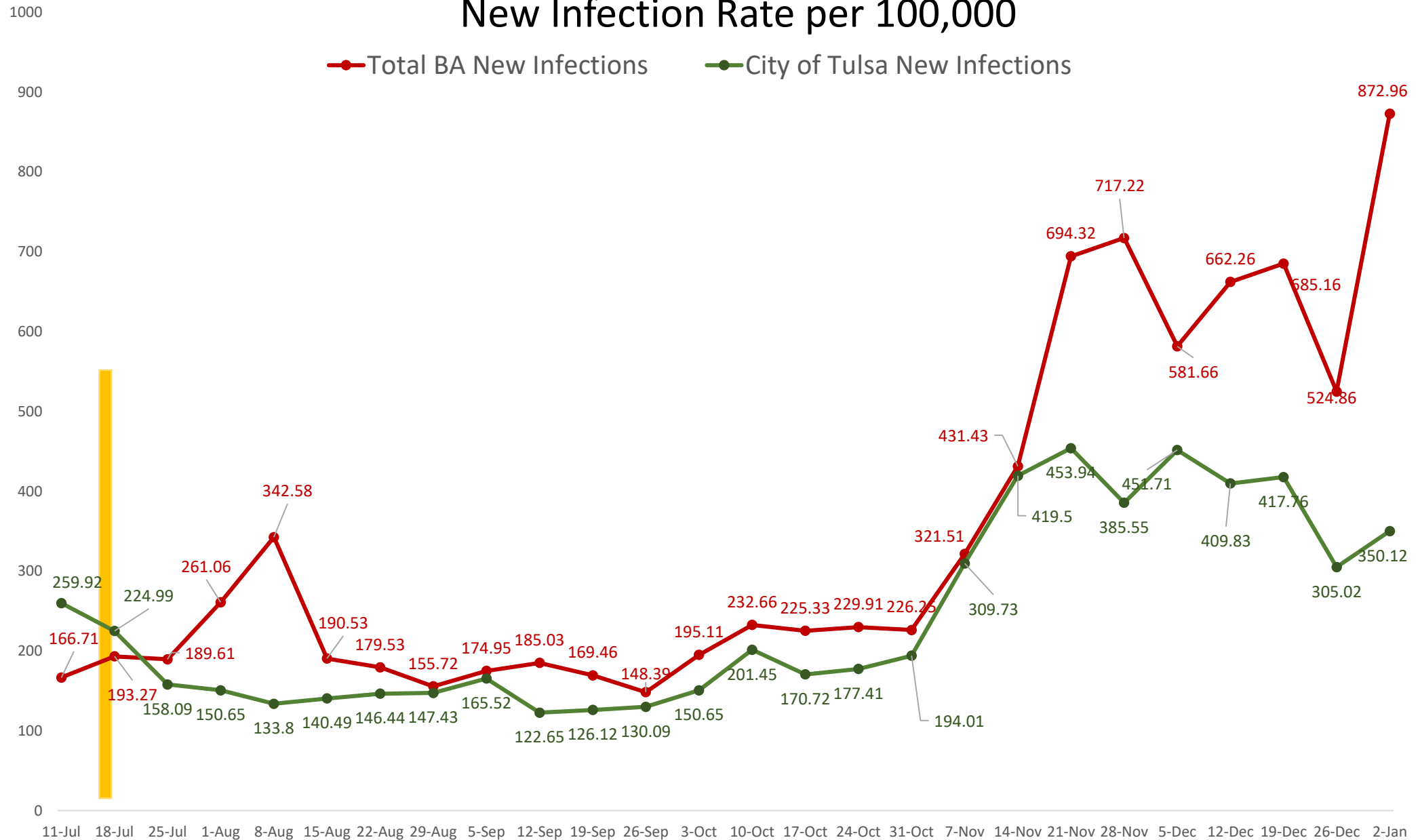
A Note on New Infections:

- In this report and in previous presentations, we have pulled data for all of BA from the OSDH daily tracking website because it includes numbers for all of Broken Arrow, including the area within Wagoner County. We used Tulsa Health Department Data for Tulsa, as it was the most accurate available.
- Moving forward we will begin tracking the OSDH data for the City of Tulsa so our comparisons are direct.
- Hospitalization data will continue to be provided by THD.

New Infections 7/19/2020 - 1/2/2021

Week of the year4	Event Date from	Event Date To	All of Broken Arrow		City of Tulsa	
			Cases	Rate per 100 k	Cases	Rate per 100 k
30	7/19/2020	7/25/2020	207	189.61	638	158.09
31	7/26/2020	8/1/2020	285	261.06	608	150.65
32	8/2/2020	8/8/2020	374	342.58	540	133.8
33	8/9/2020	8/15/2020	208	190.53	567	140.49
34	8/16/2020	8/22/2020	196	179.53	591	146.44
35	8/23/2020	8/29/2020	170	155.72	595	147.43
36	8/30/2020	9/5/2020	191	174.95	668	165.52
37	9/6/2020	9/12/2020	202	185.03	495	122.65
38	9/13/2020	9/19/2020	185	169.46	509	126.12
39	9/20/2020	9/26/2020	162	148.39	525	130.09
40	9/27/2020	10/3/2020	213	195.11	608	150.65
41	10/4/2020	10/10/2020	254	232.66	813	201.45
42	10/11/2020	10/17/2020	246	225.33	689	170.72
43	10/18/2020	10/24/2020	251	229.91	716	177.41
44	10/25/2020	10/31/2020	247	226.25	783	194.01
45	11/1/2020	11/7/2020	351	321.51	1,250	309.73
46	11/8/2020	11/14/2020	471	431.43	1,693	419.5
47	11/15/2020	11/21/2020	758	694.32	1,832	453.94
48	11/22/2020	11/28/2020	783	717.22	1,556	385.55
49	11/29/2020	12/5/2020	635	581.66	1,823	451.71
50	12/6/2020	12/12/2020	723	662.26	1,654	409.83
51	12/13/2020	12/19/2020	748	685.16	1,686	417.76
52	12/20/2020	12/26/2020	573	524.86	1,231	305.02
53	12/27/2020	1/2/2021	953	872.96	1,413	350.12

New Infection Rate per 100,000



New Hospitalizations 7/12/2020 - 1/2/2021

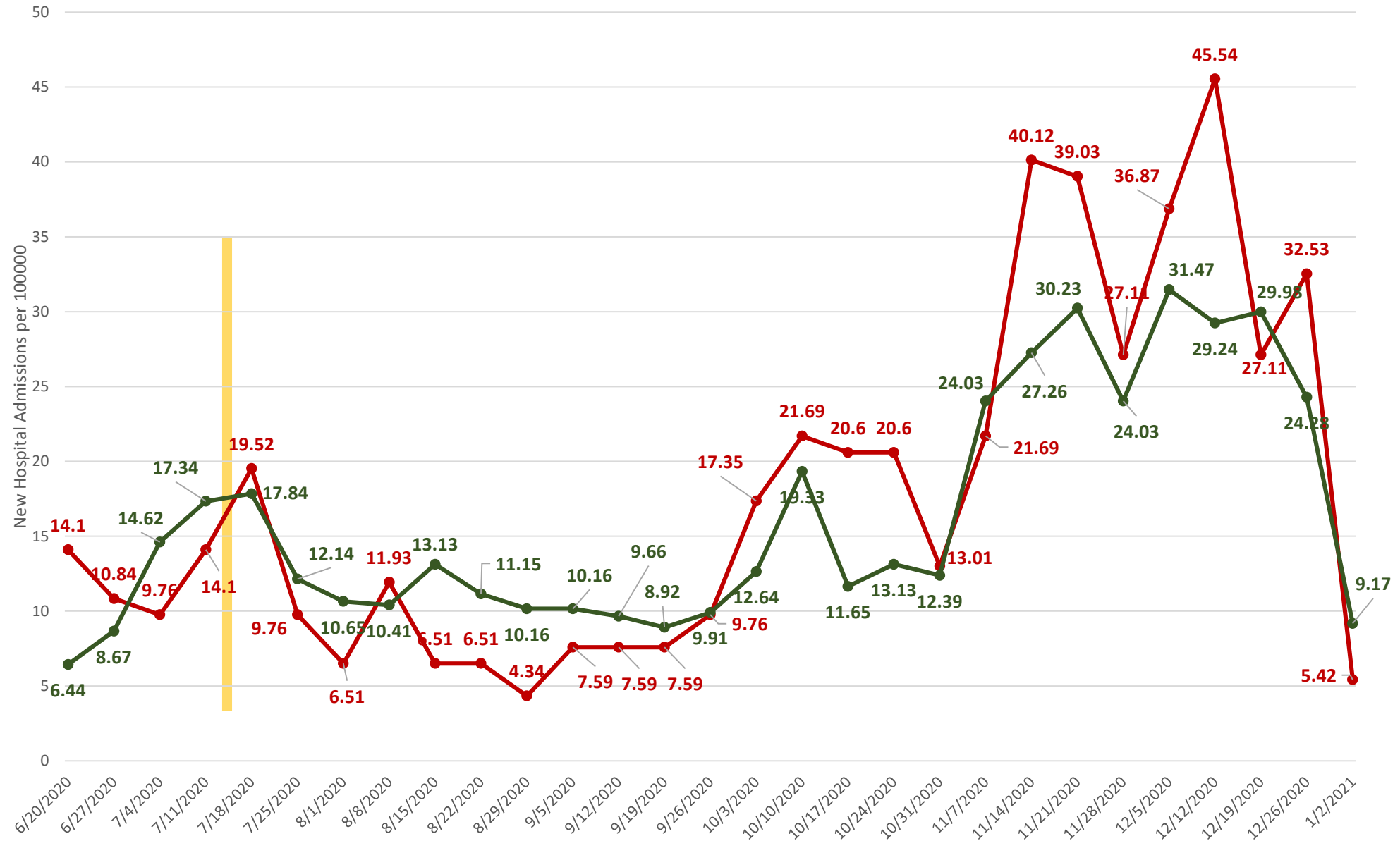
Week of the year	Event Date from	Event Date To	Part of Broken Arrow that is within Tulsa Co.		City of Tulsa	
			Hospitalizations	Rate per 100 k	Hospitalizations	Rate per 100 k
29	7/12/2020	7/18/2020	18	19.52	72	17.84
30	7/19/2020	7/25/2020	9	9.76	49	12.14
31	7/26/2020	8/1/2020	6	6.51	43	10.65
32	8/2/2020	8/8/2020	11	11.93	42	10.41
33	8/9/2020	8/15/2020	6	6.51	53	13.13
34	8/16/2020	8/22/2020	6	6.51	45	11.15
35	8/23/2020	8/29/2020	4	4.34	41	10.16
36	8/30/2020	9/5/2020	7	7.59	41	10.16
37	9/6/2020	9/12/2020	7	7.59	39	9.66
38	9/13/2020	9/19/2020	7	7.59	36	8.92
39	9/20/2020	9/26/2020	9	9.76	40	9.91
40	9/27/2020	10/3/2020	16	17.35	51	12.64
41	10/4/2020	10/10/2020	20	21.69	78	19.33
42	10/11/2020	10/17/2020	19	20.60	47	11.65
43	10/18/2020	10/24/2020	19	20.60	53	13.13
44	10/25/2020	10/31/2020	12	13.01	50	12.39
45	11/1/2020	11/7/2020	20	21.69	97	24.03
46	11/8/2020	11/14/2020	37	40.12	110	27.26
47	11/15/2020	11/21/2020	36	39.03	122	30.23
48	11/22/2020	11/28/2020	25	27.11	97	24.03
49	11/29/2020	12/5/2020	34	36.87	127	31.47
50	12/6/2020	12/12/2020	42	45.54	118	29.24
51	12/13/2020	12/19/2020	25	27.11	121	29.98
52	12/20/2020	12/26/2020	30	32.53	98	24.28
53	12/27/2020	1/2/2021	5	5.42	37	9.17
Total	3/1/2020	1/2/2021	518	561.67	2,106	521.83

A Note on Hospitalizations from THD:

- Since hospital capacity has been at 100% or more for a number of weeks, the recent trends for hospitalizations is NOT representative of historical/previous trends, as we know patients who would have been admitted previously have been turned away, and the data represented is based on admittance.
- This is important because there have also been numerous reports of patients being held for extended periods of time in the waiting rooms, ER, etc. who have been identified as needing care, but have not been formally admitted yet.

New Hospital Admissions per 100,000

BA in Tulsa County City of Tulsa



Long Term Care Facilities Data (Via Dec. 31 OSDH Epidemiology Report)

Name	Zip Code	Cases	Recovered**	Deaths
Alterra Healthcare	74011			
Aspen Health & Rehab	74012	9	9	0
Baptist Village *	74012			
Beehive Homes of Broken Arrow	74012			
Broken Arrow Assisted Living	74012	6	5	1
Broken Arrow Nursing Home	74012	33	28	4
Brookdale Cedar Ridge	74011	7	6	0
Brookdale Home Health	74012			
Brookdale Nursing Home	74011	10	8	2
Canoe Brook	74012			
Cedar Crest Manor	74012	5	5	0
Forest Hills Assisted Living	74012	13	11	1
Franciscan Villa	74012	105	90	13
Gatesway Foundation	74012	3	3	0
Living Rose Christian Assisted Living	74012			
Living Rose Christian Assisted Living Home	74012			
New Direction Residential Care	74012			
Prairie House Assisted Living	74012	7	4	0
Senior Suites Healthcare	74012	10	8	1
Village Healthcare Center	74012	11	11	0

Data taken from the Dec. 31 State Epidemiology Report.

**Recovered: Currently not hospitalized or deceased and 14 days after onset/report.

Note: Some listed above are the operating companies of other facilities - for example, Alterra operates the Brookdale system. This is why some of the entries do not have case numbers.

We have reached out for clarification on the other missing case numbers.

*Baptist Village of OKC, Owasso, and Hugo are all listed on the OSDH weekly epidemiology report, but not Broken Arrow.

IMPACT OF MASK MANDATES

There are several important factors to consider in examining the data on case rates in mask mandate communities vs. those without:

1. As can be seen in this week's figure, there have been several municipalities adopt a mask mandate recently. Because mask usage prevents new infections but does not impact those currently in the incubation period, it is not appropriate to include these recent additions in the same group as communities that adopted mandates prior to October. Indeed, it is likely that increasing disease rates in these communities influenced the decision to adopt mandates.
2. The percentage change in case rates provided represent only a comparison from one single day to another. The full difference in rates can only be estimated by comparing data on all days within the period of interest. Such analysis is beyond the scope of this summary.
3. Mask mandates have been implemented primarily in densely populated metropolitan areas. Experience has shown that, in absence of mitigation efforts, such urban areas will have higher rates of disease transmission than in less populated areas. This can be observed in the graph above in the period before mid-July. The rate of increase was clearly higher in those communities that eventually adopted mask mandates. If urban populations have rates at or below those of less populated areas, it is likely that mitigation efforts are having a beneficial impact. Of course, mask mandates are not the only mitigation effort being employed, and it is not possible to determine what effect that alone has.

	7 Day Average Number of Cases by date of Onset* with 7 day lag						Percent Change 8/1 to 12/29	Percent Change 11/1 to 12/29
	1-Aug	1-Sep	1-Oct	1-Nov	1-Dec	29-Dec		
Mask Cities (Prior to Oct.)	331	291	379	480	1,284	1,099	232%	129%
per 100,000 Pop'l	20.5	18.1	23.5	29.8	79.7	68.2		
Mask Cities (Nov.)	25	21	37	48	150	122	388%	154%
per 100,000 Pop'l	17.7	14.9	26.2	34.0	106.1	86.3		
No Mask Areas	319	386	629	720	1,686	1,682	427%	134%
per 100,000 Pop'l	14.5	17.5	28.5	32.7	76.5	76.3		
Mask (Prior to Oct.) vs No Mask Incidence Difference	42%	3%	-18%	-9%	4%	-11%		

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From OSDH:

The bottom row is the percent difference between per capita rates for masked (prior to Oct) and No mask mandate areas.

Last week's report indicates that on August 1 - Mask mandated cities had a rate (per capita) that was 42% than the No Mask areas.

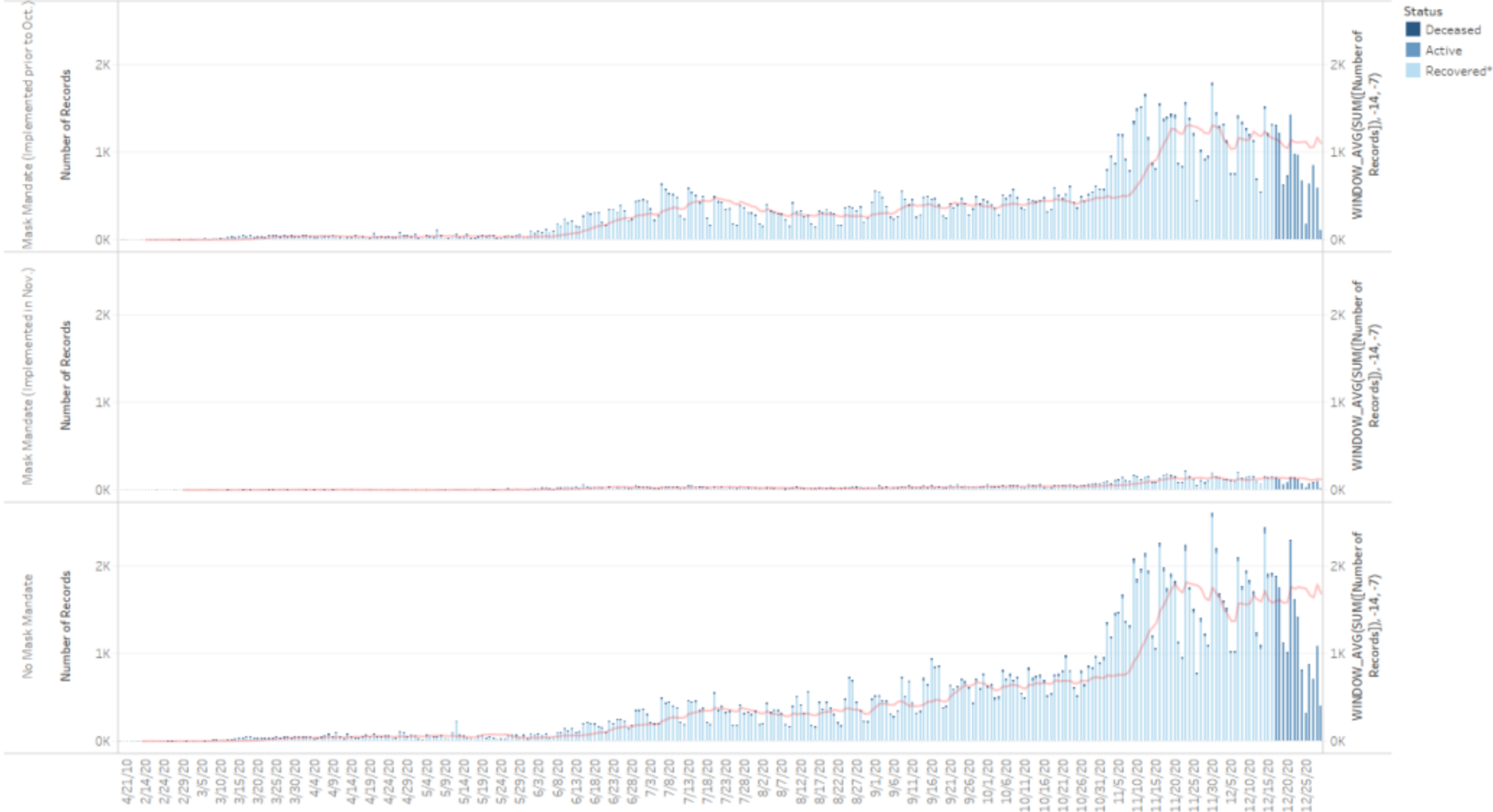
Note: most mandates were just being put in place at this time

$$(20.5-14.5)/14.5 \times 100 = 41.38\%$$

A month later the rates were nearly same and a month after that mask mandated areas had 18% fewer cases per capita.

IMPACT OF MASK MANDATES (continued)

Status by Date of Onset as of 12/31/2020



The trends of sum of Number of Records and WINDOW_AVG(SUM([Number of Records]), -14, -7) for Event Dt Day broken down by Mask Mandate. For pane Sum of Number of Records: Color shows details about Status. The view is filtered on Status, which keeps Active, Deceased and Recovered*.