



Central Iowa COVID19 Update

Monday, April 5, 2021



Aperio

Statistical Consulting

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Quick Stats¹

	Polk County	Iowa
Percent of population with 1 dose	12%	12%
Percent of population with 2 doses	21%	19.3%
7d Lab Test Positivity	5.4%	5.7%
14d Lab Test Positivity	6.2%	5.1%
Total cases per 100,000 the last 7d	136	120
Total cases per 100,000 the last 14d	303	244
Average daily cases the last 7d	95	540
Average 7-day new cases per 100,000	19	17

¹All data are sourced from <https://coronavirus.iowa.gov/pages/case-counts> with previous days refreshed daily. When recent data are unavailable, data from <https://github.com/nytimes/covid-19-data> may be used. Population of Polk County used is 490,161. Population of Iowa used is 3.155 million. Averages and percent positivity are subject to change with retrospectively refreshed data.

Critical Points, Media, and Research

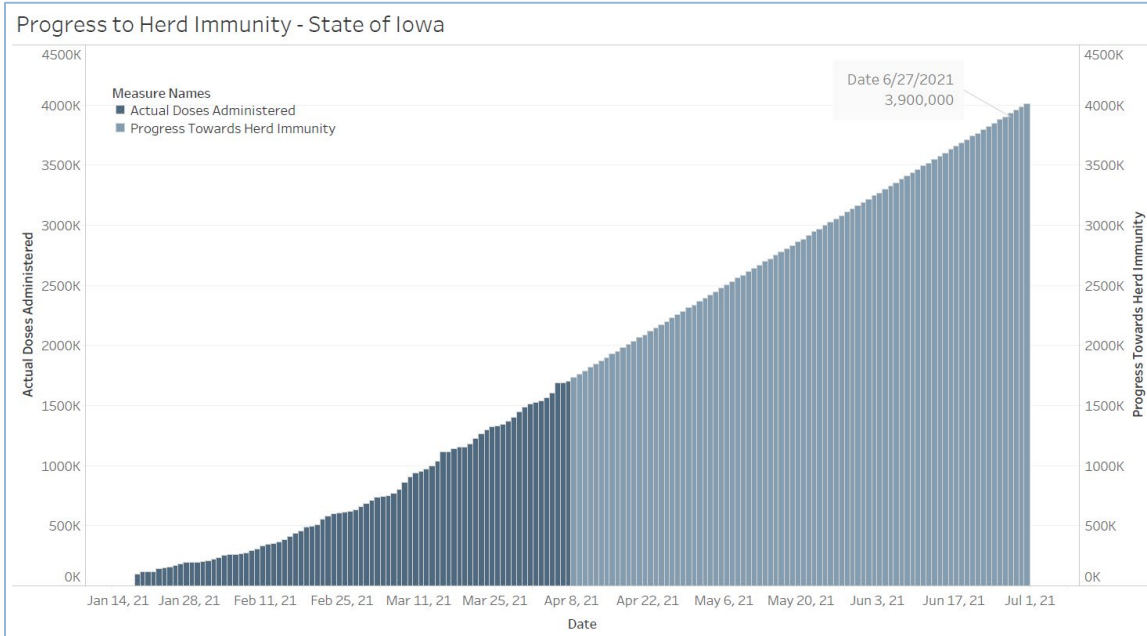
- Activity continues at a higher level than two weeks ago. Hospitalizations are steady.
- Iowa is averaging 27,500 doses administered per day.
- The rate of increase in COVID-19 cases with the B.1.1.7 variant in 2 areas highlights its increased transmissibility; some data suggest increased illness severity, reinforcing the urgency of vaccination and other mitigation efforts. [Rapid, widespread, and preferential increase of SARS-CoV-2 B.1.1.7 variant in Houston, TX, revealed by 8,857 genome sequences, First and second SARS-CoV-2 waves in inner London: A comparison of admission characteristics and the impact of the B.1.1.7 variant](#)
- [Change Over Time in Public Support for Social Distancing, Mask Wearing, and Contact Tracing to Combat the COVID-19 Pandemic Among US Adults, April to November 2020 | AJPH](#)
- Unexpectedly, patients (recovered from COVID-19) ages 19–30 years showed lower antibody responses to SARS-CoV-2 than children and older adults. [Association of Age With SARS-CoV-2 Antibody Response | Adolescent Medicine | JAMA](#)
- Findings suggest in-person schooling might increase community transmission, but to a lesser extent than other indoor gatherings. Data from this and another recent study in Canada support implementing precautions, including physical distancing and face coverings, when opening schools. [The effect of in-person primary and secondary school instruction on county-level SARS-CoV-2 spread in Indiana.](#)
- [CDC Releases Air Travel Guidance for Fully Vaccinated People: Coronavirus Updates: NPR](#)
- Testing for SARS-CoV-2 with a rapid antigen test on the day of departure or RT-PCR 3 days before departure could reduce the risk of transmission during travel. The addition of post-travel testing, and 5-day quarantine could further reduce importation and ongoing transmission in the destination city. [Routine asymptomatic testing strategies for airline travel during the COVID-19 pandemic: a simulation study](#)
- [Impact of the influenza vaccine on COVID-19 infection rates and severity - American Journal of Infection Control](#)

Vaccine

- Data from large studies of HCWs in the US and show that vaccination is effective at reducing SARS-CoV-2 incidence in a real-world setting. Shah *et al.* found that SARS-CoV-2 vaccination also reduced documented cases and hospitalization in household members. [SARS-CoV-2 Infection after Vaccination in Health Care Workers in California | NEJM, Effect of vaccination on transmission of COVID-19: an observational study in healthcare workers and their households | medRxiv](#)
- [NEJM — Covid-19 Vaccine Frequently Asked Questions \(FAQ\)](#)
- [Iowa Vaccination Progress](#)
- [Vaccination progress in the US](#)



Vaccination Progress

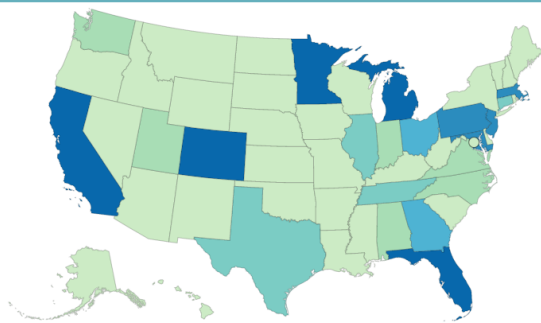


Assumptions: 20% of the population or higher will have acquired immunity; children under the age of 16 cannot be vaccinated, therefore 78% of adults need to be vaccinated. Two doses regimen.

Variant Prevalence

Variant	Reported Cases in US	Number of Jurisdictions Reporting
B.1.1.7	15,511	52
B.1.351	374	33
P.1	289	25

Cases of Variants of Concern in the United States*†



Territories **AS** **GU** **MH** **FM** **MP** **PW** **PR** **VI**

Number of Cases

- 0 to 0
- 1 to 150
- 151 to 300
- 301 to 450
- 451 to 600
- 601 to 750
- 751+

Filters

Variant B.1.1.7



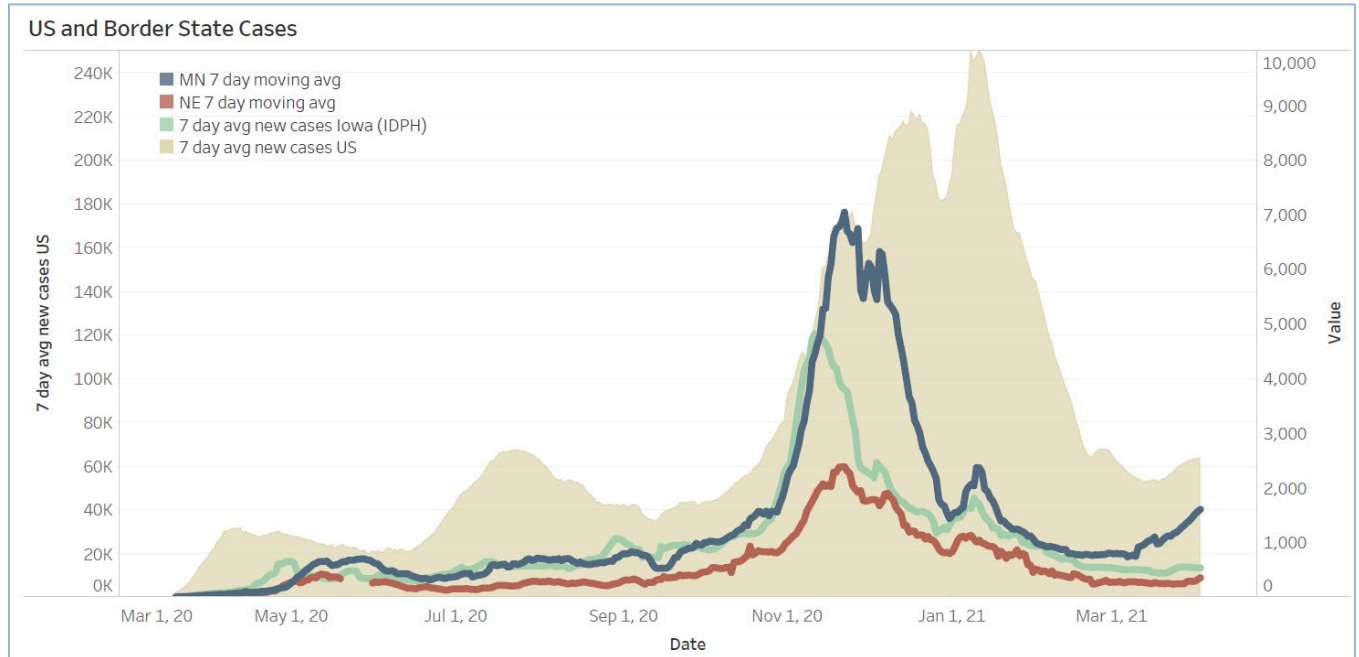
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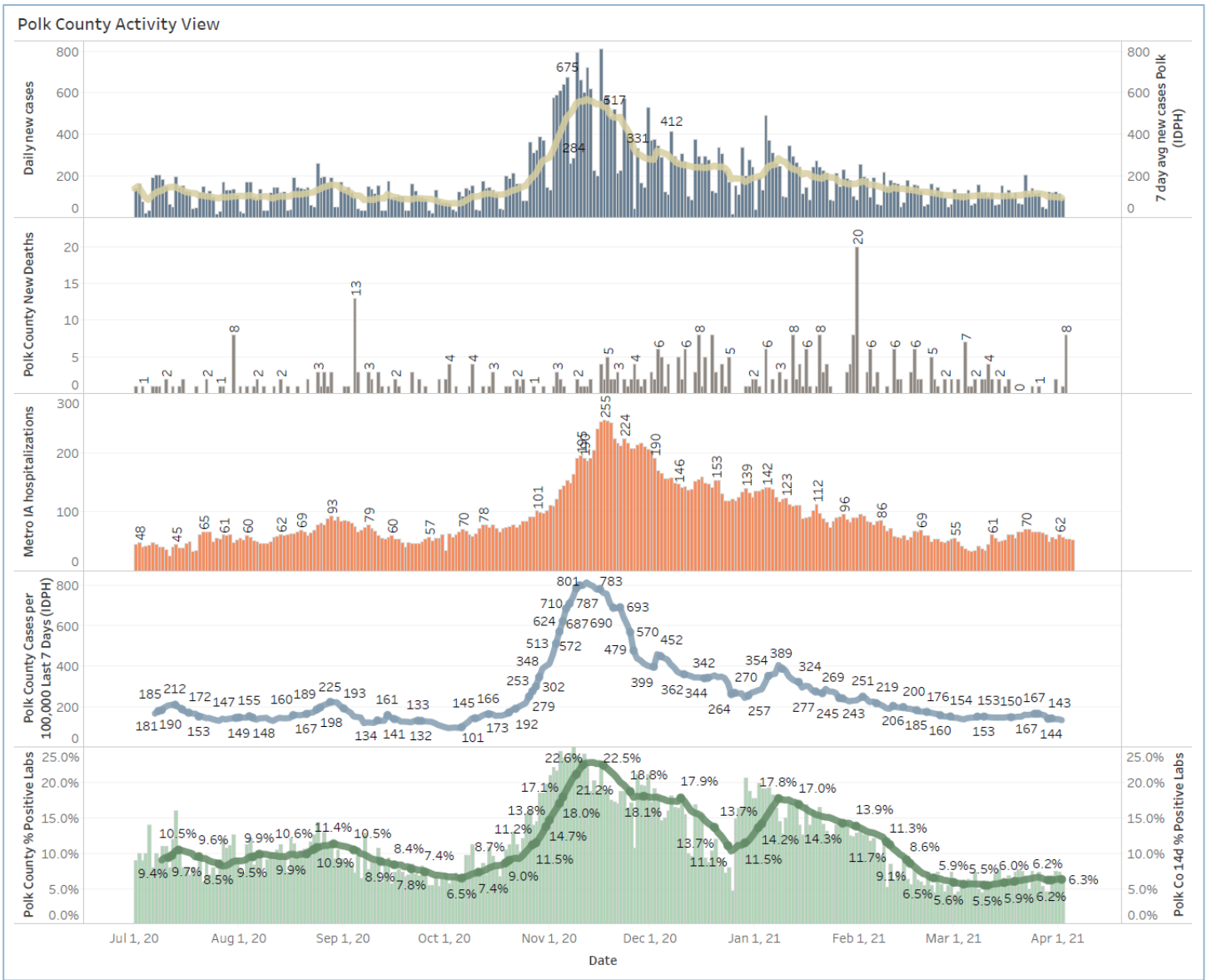
School Statistics – Polk County (Updated weekly on Mondays)

Rate of Student/Staff Cases Per 1,000																				
Week Ending	1-Nov	8-Nov	15-Nov	22-Nov	29-Nov	13-Dec	20-Dec	27-Dec	10-Jan	17-Jan	24-Jan	31-Jan	7-Feb	14-Feb	22-Feb	1-Mar	7-Mar	15-Mar	29-Mar	5-Apr
DMPS	0.2	4.0	0.5	0.5	0.2	0.7	0.7	0.4	4.0	1.9	2.6	0.2	2.5	0.8	1.3	0.6	0.7	0.5	0.1	0.2
Ankeny	3.8	3.8	4.3	4.3	4.5	3.3	1.9	1.8	5.9	3.8	3.1	2.8	2.3	1.6	2.0	1.0	0.7	1.0	1.5	1.5
Waukee	5.8	10.3	9.4	6.5	4.6	3.5	1.7	1.7	4.5	5.0	2.4	3.3	3.0	3.0	3.0	2.3	1.7	1.7	1.9	0.8
WDM	2.8	5.7	11.0	4.7	1.1	2.7	1.9	0.6	4.0	4.2	1.6	2.2	1.6	2.4	1.1	1.3	1.1	1.6	1.2	0.6
Johnston	6.3	8.3	10.4	7.1	5.4	2.3	1.7	0.3	4.6	3.4	2.1	3.3	2.3	1.6	3.3	3.7	1.6	1.1	2.4	0.3
SE Polk	4.7	5.0	8.3	7.9	7.7	3.0	4.6	2.7	3.4	5.0	3.9	2.9	3.4	3.0	2.1	2.4	2.1	2.3	1.3	2.0
Urbandale	1.8	2.0	10.8	8.5	5.8	3.5	3.5	2.0	6.0	3.0	2.5	2.8	3.3	4.0	2.3	2.5	2.8	2.8	0.3	2.0
DCG		6.0	10.4	9.5	13.3	4.7	0.9	2.8	2.2	2.2	2.5	1.3	1.3	1.9	2.5	1.9	1.3	2.5	4.1	1.3
Bondurant		8.3	7.9	13.4	13.4	3.7	2.8	7.4	0.0		0.9	12.5	19.0	11.6	11.6	0.9	0.5	2.3	10.2	5.6
North Polk		4.5	5.6	5.6	4.5	1.1	1.7	2.3	3.9	1.1	7.9	5.6	10.1	1.7	3.9	11.3	1.1	0.6	1.7	1.1
Ballard		0.0	0.0	8.2	0.6	1.2	1.2	0.0	0.0	4.1	1.2	1.2	6.4	6.4	5.8	2.3	1.2	1.2	4.1	1.2
Saydel		7.5	12.7	3.0	0.0	2.2	3.0	2.2	3.7	3.7	3.7	0.7	1.5	3.0	2.2	3.7	0.7	0.0	1.5	0.0

Students/Staff in Quarantine																					
Week Ending	1-Nov	8-Nov	15-Nov	22-Nov	29-Nov	13-Dec	20-Dec	27-Dec	10-Jan	17-Jan	24-Jan	31-Jan	7-Feb	14-Feb	22-Feb	1-Mar	7-Mar	15-Mar	22-Mar	29-Mar	5-Apr
DMPS	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	220	235	223	193	203	116	134	141
Ankeny	225	225	370	370	273	172	107	87	132	116	125	138	178	106	88	75	45	53		36	101
Waukee	332	500	575	384	160	76	113	136	156	195	95	108	127	128	94	102	65	79	32	62	41
WDM	146	204	239	70	12	38	19	14	114	55	54	83	69	39	46	22	25	41	7	33	28
Johnston	586	667	527	318	286	73	78	73	116	147	126	109	100	106	150	137	84	85		68	48
SE Polk	186	211	307	380	401	126	121	129	89	125	129	96	84	86	92	105	93	77		45	54
Urbandale	39	97	180	223	179	49	32	34	43	71	78	50	67	77	59	54	51	51		27	38
DCG		80	159	216	82	69	46	41	33	43	42	44	45	59	79	44	37	37		29	27
Bondurant		148	160	167	138	97	55	62	<6	N/A	28	68	86	69	69	11	18	18		0	21
North Polk		103	101	90	61	55	51	46	30	19	35	57	52	50	39	39	34	31	26	13	16
Ballard				77	40	34	16		28	12	25	20	18	40	30	9	16	18		2	2
Saydel		109	88	65	46	30	33	24	39	26	27	26	33	19	23	18	18	15	6	7	3
Total	1514	2344	2706	2360	1678	819	671	646	780	809	764	799	1079	977	1004	839	679	708	187	456	520



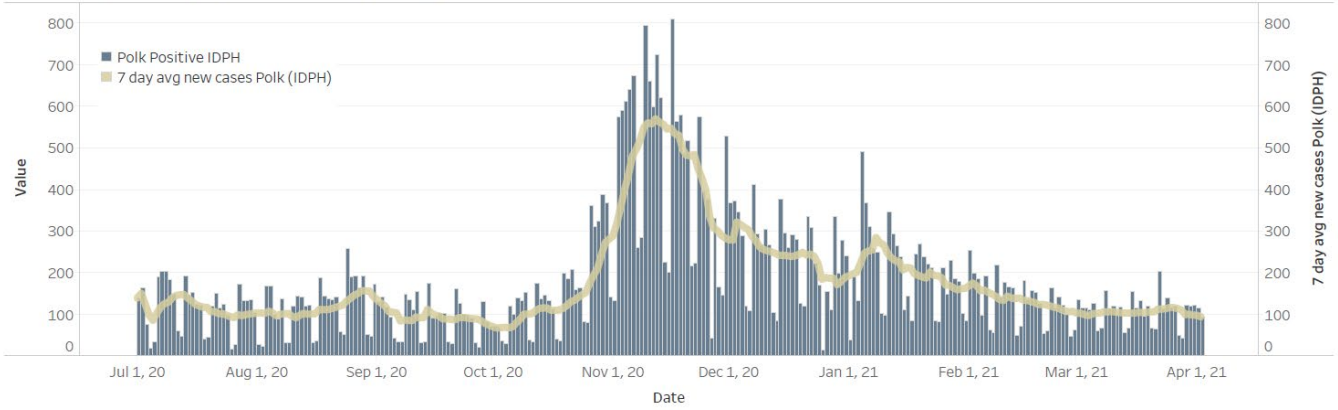
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Polk County Cases by Day and 7d Moving Average



Iowa Cases by Day and 7d Moving Average

