



# Central Iowa COVID19 Update

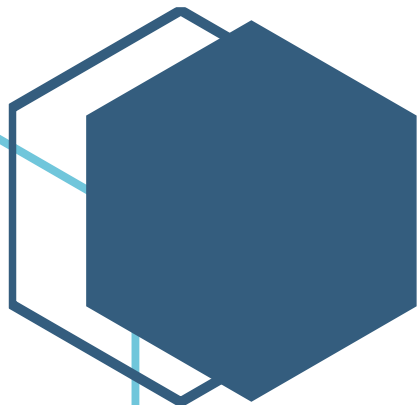
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Monday, April 26, 2021



Statistical Consulting

Dr. Meg Schaeffer





## Quick Stats<sup>1</sup>

	Polk County	Iowa
Percent of population with 1 dose	14.3%	11%
Percent of population with 2 doses	29%	31.4%
7d Lab Test Positivity	5.4%	4.2%
14d Lab Test Positivity	5.2%	4.2%
Total cases per 100,000 the last 7d	116	95
Total cases per 100,000 the last 14d	242	205
Average daily cases the last 7d	81	430
Average 7-day new cases per 100,000	17	14

<sup>1</sup>All 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

- Polk and State case activity remains stable and slightly lower than the previous week. Hospitalizations are steady in the metro, but have dropped statewide.
- [JJ will be available again, to everyone, in the US - Your Local Epidemiologist \(substack.com\)](#)
- [Where Des Moines metro hospitals stand now in the fight against the pandemic \(kcci.com\)](#)
- [Younger People Hospitalized With COVID-19 in Michigan: Report \(businessinsider.com\)](#)
- [The effect of eviction moratoria on the transmission of SARS-CoV-2 | Nature Communications](#)
- [6-month neurological and psychiatric outcomes in 236 379 survivors of COVID-19: a retrospective cohort study using electronic health records](#)
- [Genomic characteristics and clinical effect of the emergent SARS-CoV-2 B.1.1.7 lineage in London, UK: a whole-genome sequencing and hospital-based cohort study - The Lancet Infectious Diseases](#)
- [Preliminary evidence on long COVID in children - Buonsenso - - Acta Paediatrica](#)
- [Behavioral nudges increase COVID-19 vaccinations: Two randomized controlled trials](#)
- [Trends in Drug Overdose Mortality in Ohio During the First 7 Months of the COVID-19 Pandemic | Emergency Medicine | JAMA Network Open](#)
- [Physical Activity and the Risk of COVID-19 Infection and Mortality: A Nationwide Population-Based Case-Control Study \(mdpi.com\)](#)

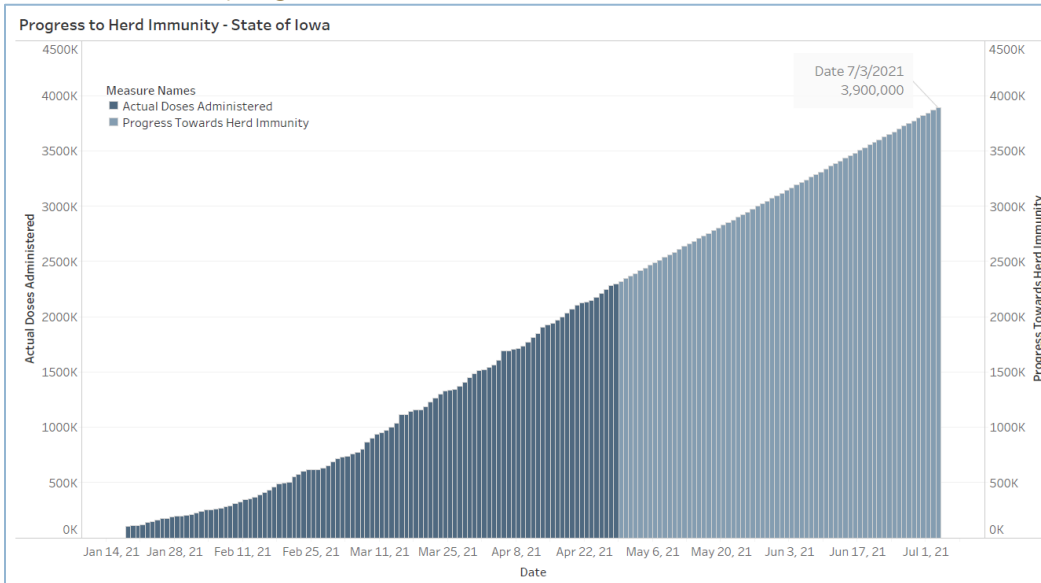
## Vaccine

- [COVID vaccines and blood clots: five key questions \(nature.com\)](#)
- [Vaccine Breakthrough Infections with SARS-CoV-2 Variants | NEJM](#)
  - Variants result in breakthrough disease in cohort study (performed fall 2020)
- [Preliminary Findings of mRNA Covid-19 Vaccine Safety in Pregnant Persons | NEJM](#)
  - Neonatal outcomes appear to be similar among women vaccinated during pregnancy compared to pre-pandemic. Additional studies are needed as this was conducted using VSAFE self-reported and telephonic data.
- [Safety and Efficacy of Single-Dose Ad26.COVS.2.S Vaccine against Covid-19 | NEJM](#)
  - Janssen vaccine protects against severe-critical disease



## Vaccination Progress

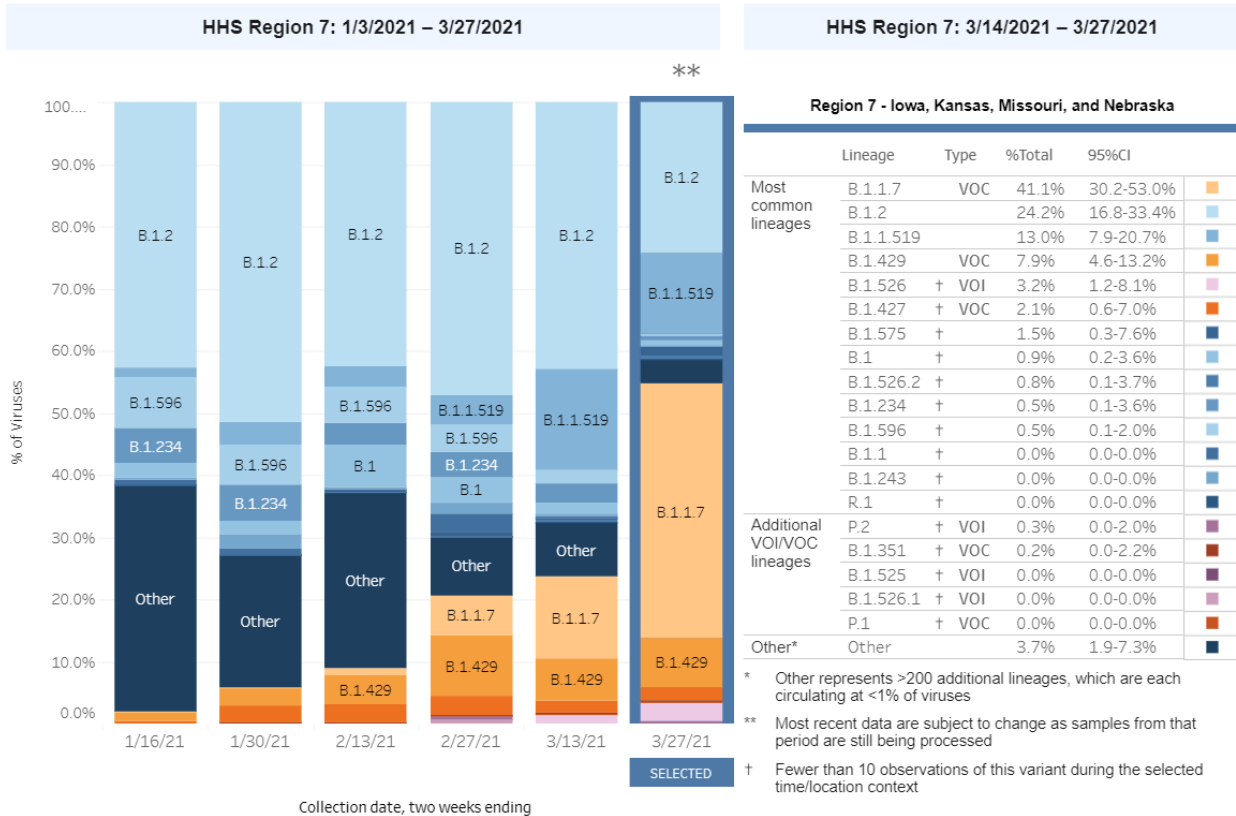
- [Iowa Vaccination Progress](#)
- [Vaccination progress in the US](#)



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

Weighted Estimates of Proportions of SARS-CoV-2 Lineages



Collection date, two weeks ending

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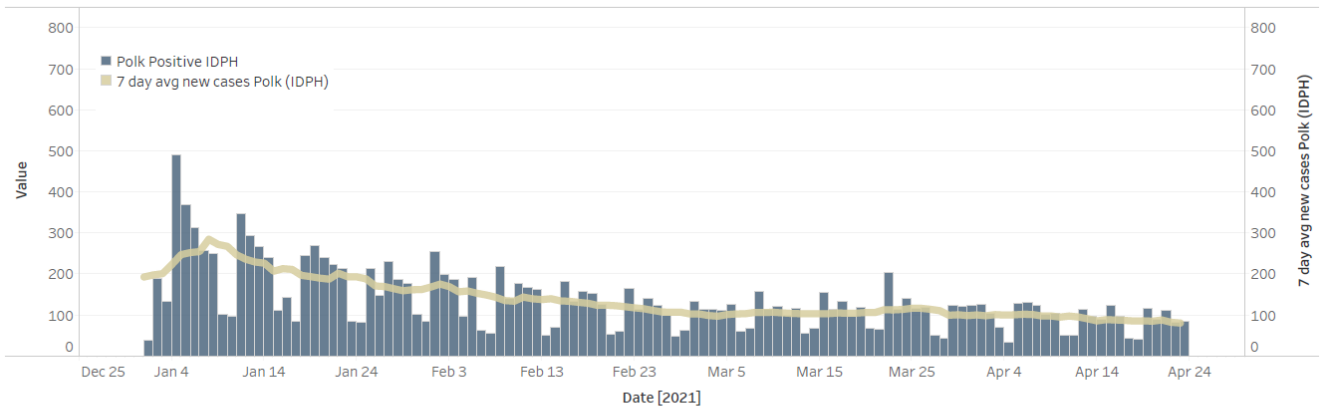


## School Statistics – Polk County (Updated weekly on Mondays)

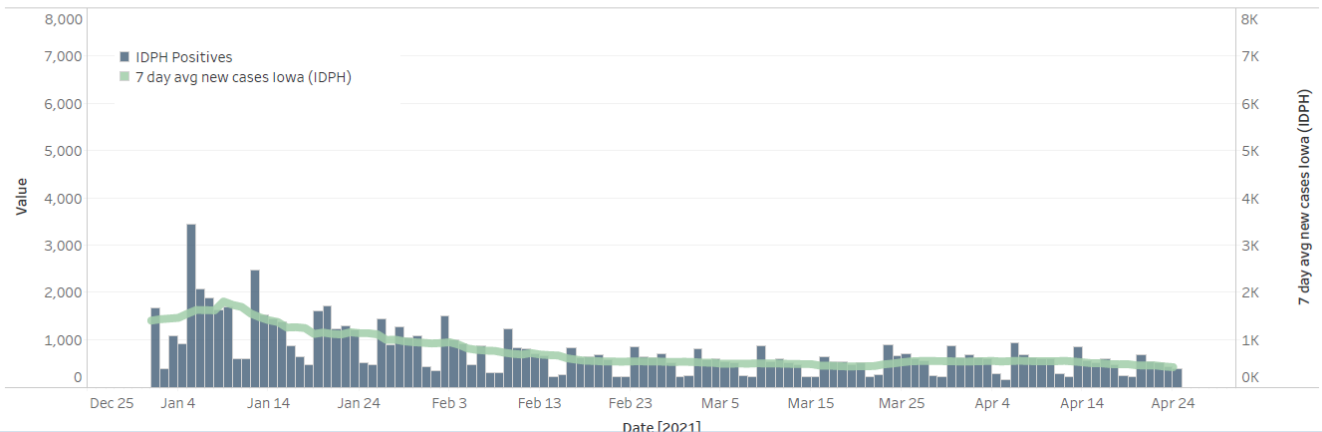
Rate of Student/Staff Cases Per 1,000																						
Week Ending	1-Nov	8-Nov	15-Nov	22-Nov	29-Nov	13-Dec	20-Dec	27-Dec	10-Jan	17-Jan	24-Jan	31-Jan	7-Feb	14-Feb	22-Feb	1-Mar	7-Mar	15-Mar	29-Mar	5-Apr	12-Apr	26-Apr
DMPS	0.2	4.0	0.5	0.5	0.2	0.7	0.7	0.4	4.0	1.9	2.6	0.2	2.5	0.8	1.3	0.6	0.7	0.5	0.1	0.2	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	1.2	0.4
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	0.6	1.1
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	1.1	1.2
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	1.1	1.7
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	1.3	0.3
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	2.0	0.5
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	1.6	2.5
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	3.7	1.9	4.2	4.6
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	0.0	0.6
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	1.2	0.6
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	0.0	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	12-Apr	19-Apr	26-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	220	198	235	223	193	203	116	134	141	115	154	137
Ankeny	225	225	370	370	273	172	107	87	132	116	125	138	178	106	88	75	45	53		36	101	94	29	62
Waukee	332	500	575	384	160	76	113	136	156	195	95	108	127	128	94	102	65	79	32	62	41	24	41	25
WDM	146	204	239	70	12	38	19	14	114	55	54	83	69	39	46	22	25	41	7	33	28	22	27	14
Johnston	586	667	527	318	286	73	78	73	116	147	126	109	100	106	150	137	84	85		68	48	68	78	34
SE Polk	186	211	307	380	401	126	121	129	89	125	129	96	84	86	92	105	93	77		45	54	34	39	33
Urbandale	39	97	180	223	179	49	32	34	43	71	78	50	67	77	59	54	51	51		27	38	35	24	20
DCG		80	159	216	82	69	46	41	33	43	42	44	45	59	79	44	37	37		29	27	30	31	18
Bondurant		148	160	167	138	97	55	62	<6	N/A	28	68	86	69	69	11	18	18		0	21	38	22	35
North Polk		103	101	90	61	55	51	46	30	19	35	57	52	50	39	39	34	31	26	13	16	12	10	13
Ballard				77	40	34	16		28	12	25	20	18	40	30	9	16	18		2	2	2	12	1
Saydel		109	88	65	46	30	33	24	39	26	27	26	33	19	23	18	18	15	6	7	3	4	9	10
Total	1514	2344	2706	2360	1678	819	671	646	780	809	764	799	1079	977	1004	839	679	708	187	456	520	478	476	402

Polk County Cases by Day and 7d Moving Average - Jan 1 2021 through Present



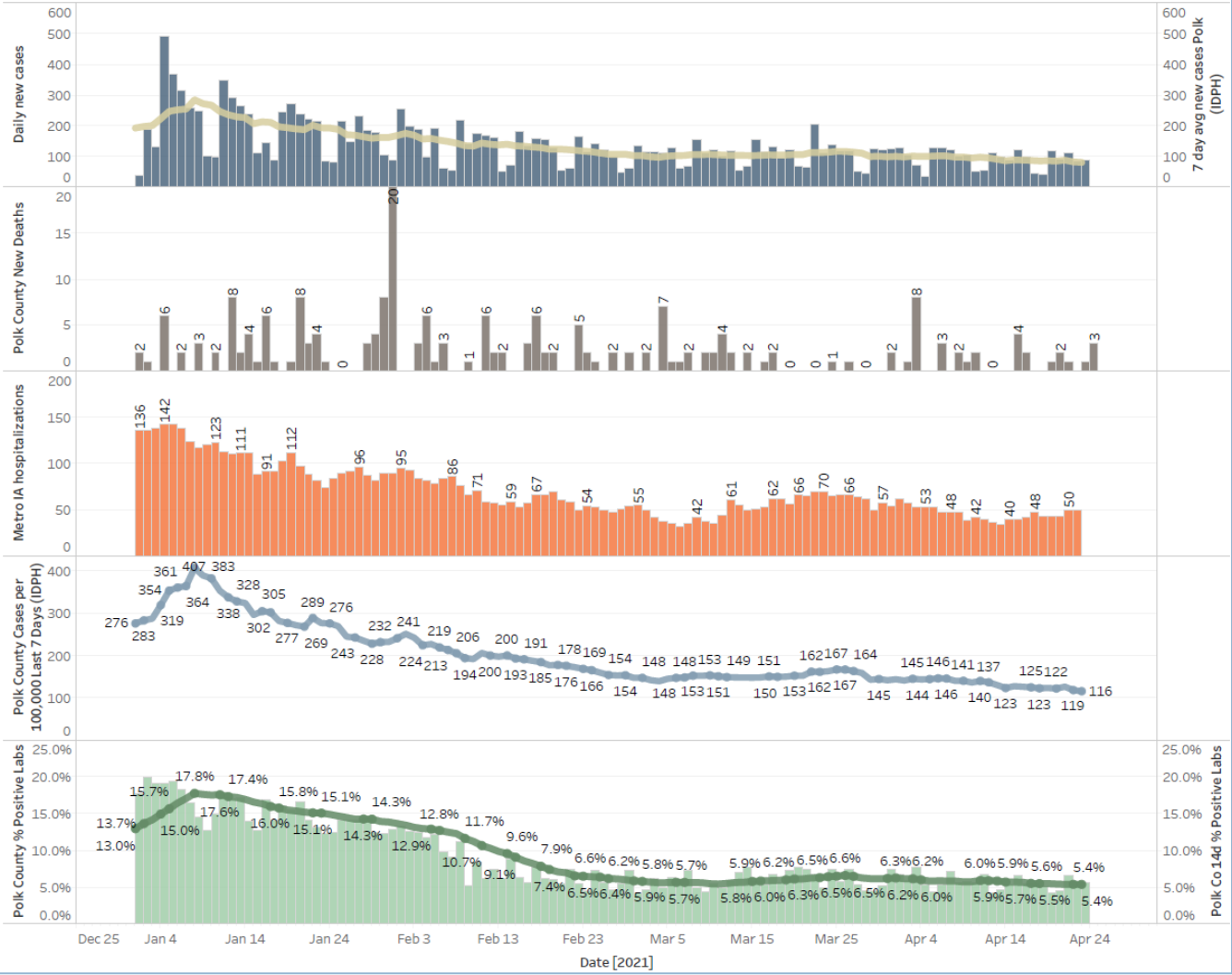
Iowa Cases by Day and 7d Moving Average



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Polk County Activity View - Since Jan 1 2021 through Predictive



US and Border State Cases

