



# Central Iowa COVID19 Update

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Monday, May 3, 2021



Aperio

Statistical Consulting

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

	Polk County	Iowa
Percent of population with 1 dose*	13%	8.7%
Percent of population with 2 doses*	33%	35%
7d Lab Test Positivity	5.8%	4.7%
14d Lab Test Positivity	5.2%	4.1%
Total cases per 100,000 the last 7d	100	88
Total cases per 100,000 the last 14d	219	186
Average daily cases the last 7d	70	396
Average 7-day new cases per 100,000	14	13

\*Percent of entire population vaccinated to represent progress to herd immunity.

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

- Case rates for Polk and the State continue to decline. Rates are approaching the lowest of the pandemic, but are not as low as last June. Percent positivity is up slightly and could be a reflection of declines in testing. Metro hospitalizations have also dropped back into an average of 45 inpatients per day.
- Statewide daily vaccinations have plummeted to an average of 6400 per day. This decrease significantly delays the state's ability to reach a target of herd immunity by end of year. However, progress is strong enough to hopefully dampen widespread future activity.
- [Viral sequencing reveals US healthcare personnel rarely become infected with SARS-CoV-2 through patient contact | Clinical Infectious Diseases | Oxford Academic \(oup.com\)](#)
- [Excess mortality associated with the COVID-19 pandemic among Californians 18–65 years of age, by occupational sector and occupation: March through October 2020 | medRxiv](#)
- [A disproportionate epidemic: COVID-19 cases and deaths among essential workers in Toronto, Canada | medRxiv](#)
- [Symptoms of Anxiety, Burnout, and PTSD and the Mitigation Effect of Serologic Testing in Emergency Department Personnel During the COVID-19 Pandemic - Annals of Emergency Medicine \(annemergmed.com\)](#)
- [Prevalence and Clinical Profile of Severe Acute Respiratory Syndrome Coronavirus 2 Infection among Farmworkers, California, USA, June–November 2020 - Volume 27, Number 5—May 2021 - Emerging Infectious Diseases journal - CDC](#)

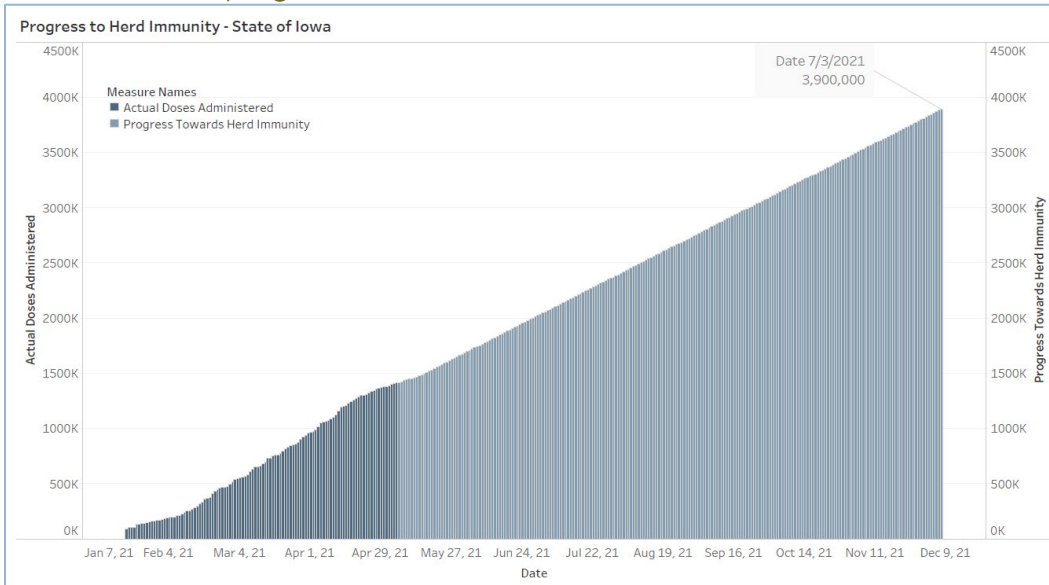
## Vaccine

- [Pfizer: FDA to authorize Covid-19 vaccine for 12-to-15-year-olds by early next week, official says](#)
- [Safety and Immunogenicity of the ChAdox1 nCoV-19 \(AZD1222\) Vaccine Against SARS-CoV-2 in HIV Infection](#)
- [Safety and Efficacy of Single-Dose Ad26.COV2.S Vaccine against Covid-19 | NEJM](#)
- [Vaccine Breakthrough Infections with SARS-CoV-2 Variants | NEJM](#)
- [COVID-19 dynamics after a national immunization program in Israel | Nature Medicine](#)
- [COVID-19 vaccine hesitancy January-March 2021 among 18–64-year-old US adults by employment and occupation](#)
- [Efficacy of the BNT162b2 mRNA COVID-19 Vaccine in Patients with Chronic Lymphocytic Leukemia | Blood | American Society of Hematology](#)



## Vaccination Progress

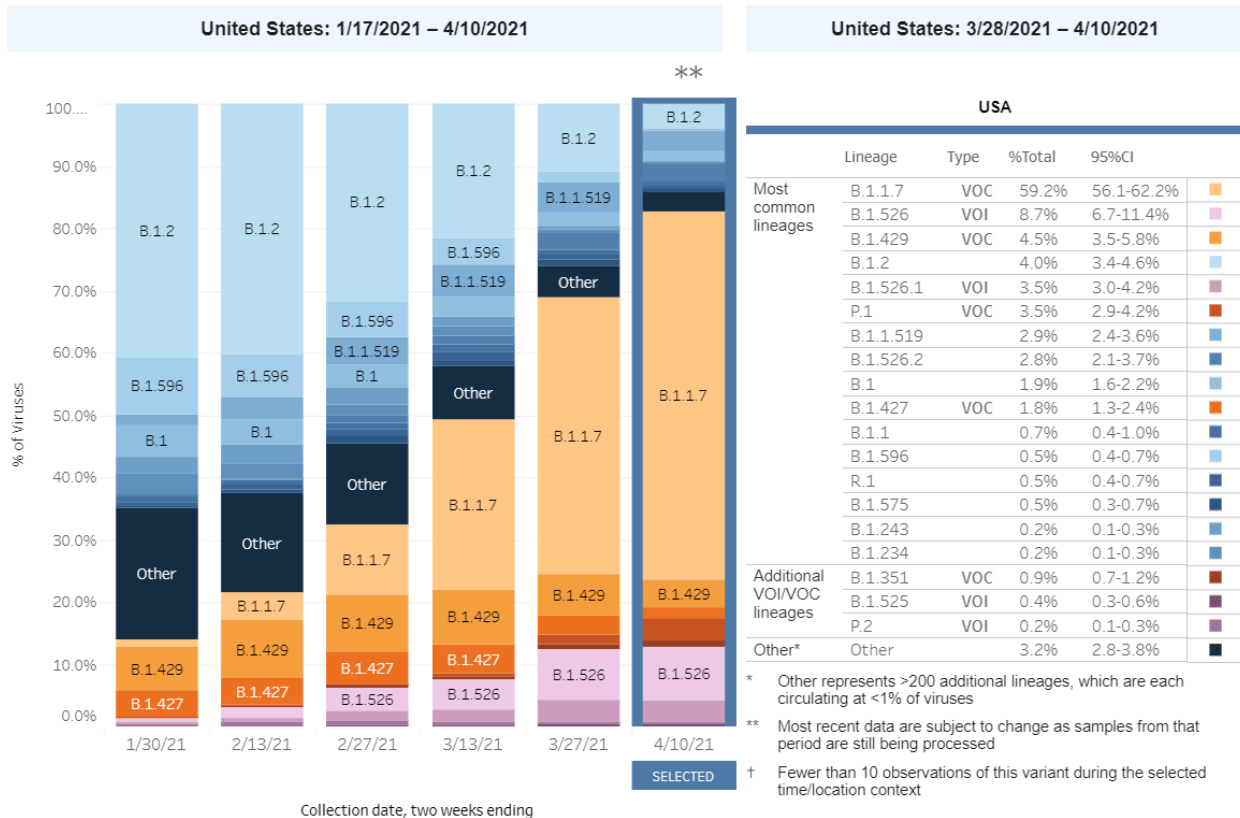
- [Iowa Vaccination Progress](#)
- [Vaccination progress in the US](#)



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

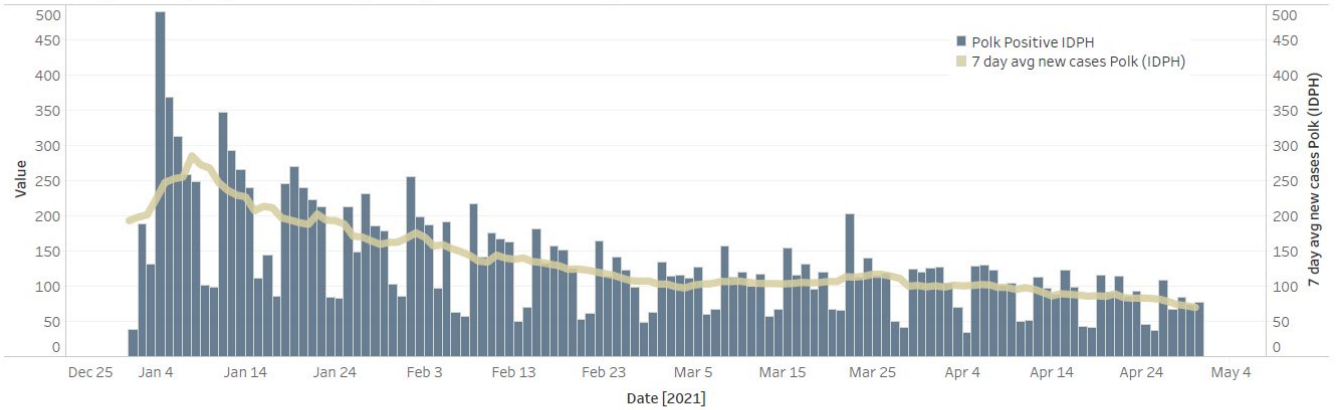


## School Statistics – Polk County (Updated weekly on Mondays)

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	3-May
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	0.1	0.2	0.1
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	0.0	1.5	1.5	1.2
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	1.6	1.9	0.8	0.6
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	0.2	1.2	0.6	1.1
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	0.0	2.4	0.3	1.1
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	0.0	1.3	2.0	1.3
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	0.0	0.3	2.0	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	0.0	4.1	1.3	1.6
Bondurant		8.3	7.9	13.4	13.4	3.7	2.8	7.4	0.0	0.0	0.9	12.5	19.0	11.6	11.6	0.9	0.5	2.3	0.0	3.7	1.9	4.2
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	2.3	1.7	1.1	0.0
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	0.0	4.1	1.2	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	2.2	1.5	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	3-May	
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	198	235	223	193	203	116	134	141	115	154	137	143
Ankeny	225	225	370	370	273	172	107	87	132	116	125	138	178	106	88	75	45	53		36	101	94	29	62	85	
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	34	
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	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	40	
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	29	
Urbandale	39	97	180	223	179	49	32	34	43	71	78	50	67	77	59	54	51	51		27	38	35	24	20	31	
DCG		80	159	216	82	69	46	41	33	43	42	44	45	59	79	44	37	37		29	27	30	31	18	17	
Bondurant		148	160	167	138	97	55	62	<6	N/A	28	68	86	69	69	11	18	18		0	21	38	22	35	24	
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	8	
Ballard				77	40	34	16		28	12	25	20	18	40	30	9	16	18		2	2	2	12	1	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	15	
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	441	

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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