



# Central Iowa COVID19 Update

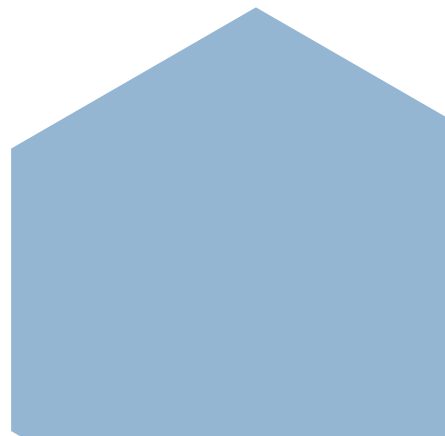
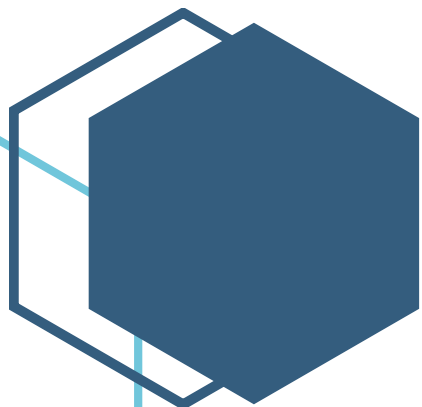
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Monday, April 12, 2021



Statistical Consulting

Dr. Meg Schaeffer





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

	Polk County	Iowa
Percent of population with 1 dose	13.3%	12.5%
Percent of population with 2 doses	22%	25%
7d Lab Test Positivity	5.8%	5.0%
14d Lab Test Positivity	5.8%	4.9%
Total cases per 100,000 the last 7d	135	120
Total cases per 100,000 the last 14d	277	243
Average daily cases the last 7d	95	540
Average 7-day new cases per 100,000	19	17

<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

- New case activity and hospitalizations remains high, but stable.
- [Estimation of secondary household attack rates for emergent spike L452R SARS-CoV-2 variants detected by genomic surveillance at a community-based testing site in San Francisco](#)  
The prevalence of variants B.1.427 and B.1.429 increased sharply in a community-based sample of persons at risk for SARS-CoV-2 over a 3-month period. Maintaining prevention measures, like physical distancing and mask wearing, can reduce the elevated transmission risk.
- [Pediatric household transmission of SARS-CoV-2 infection | medRxiv](#)  
In 6,280 households in Ontario Canada, children aged 0-3 years or 4-8 years were more likely to transmit SARS-CoV-2 infection compared to children aged 14-17.
- [The vaccine-elicited immunoglobulin profile in milk after COVID-19 mRNA-based vaccination is IgG-dominant and lacks secretory antibodies](#)  
Antibodies (Abs) elicited in breast milk >14 days post mRNA vaccination are IgG-dominant, with only 6 of 10 post-vaccine samples positive for IgA.
- [Simulation-Based Estimation of SARS-CoV-2 Infections Associated with School Closures and Community-Based Nonpharmaceutical Interventions in Ontario, Canada | Infectious Diseases](#)  
Findings highlight the importance of prioritizing community-level NPI interventions over closing school and daycare to prevent SARS-CoV-2 transmission. Other recent studies ([Bosslet et al](#) and [Bignami-van Assche et al](#)) support implementing precautions, including physical distancing and face coverings, when opening schools.
- [Excess Deaths From COVID-19 and Other Causes in the US, March 1, 2020, to January 2, 2021 | Infectious Diseases | JAMA](#)  
The US experienced 2,801,439 deaths, 22.9% more than expected (522,368 excess deaths).
  - Deaths attributed to COVID-19 accounted for 72.4% of excess deaths in the US.
  - Non-Hispanic Black persons comprised 16.9% of excess deaths but only 12.5% of the population.
 Excess deaths surged in the Northeast and Great Lakes in the spring, followed by extended summer and early winter surges concentrated in Southern and Western states (Figure).
- [Use of portable air cleaners to reduce aerosol transmission on a hospital COVID-19 ward](#)  
Low-cost air cleaners in patient rooms and nurses' stations may be a useful and cost-effective method in clinical spaces to reduce the risk of healthcare-acquired respiratory viruses.
- [COVID-19 and cancer: 1 year on - The Lancet Oncology](#)

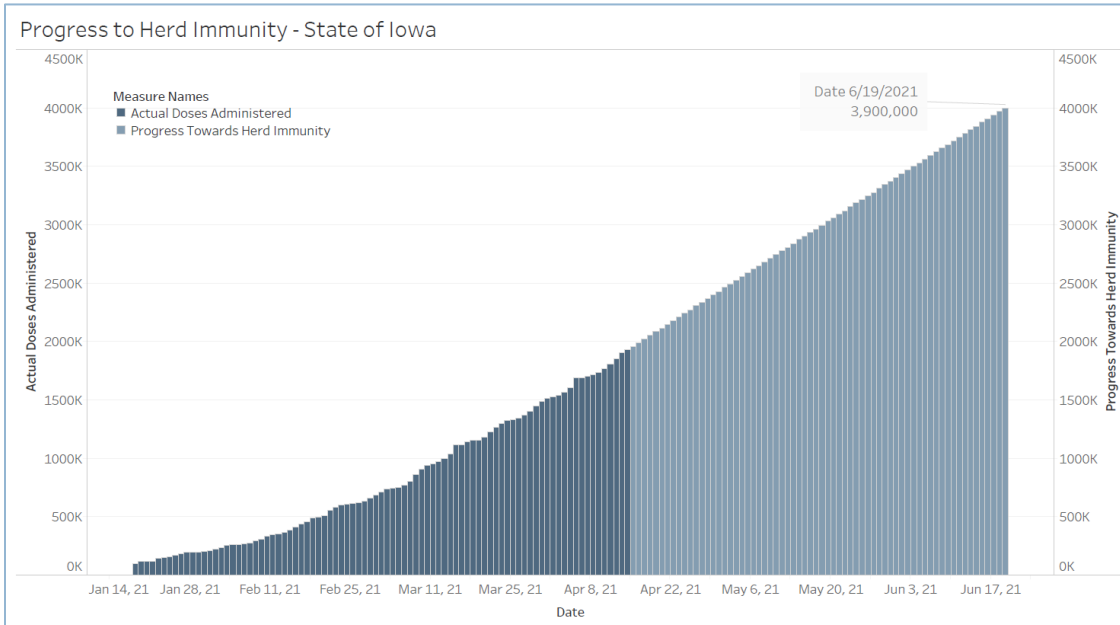
## Vaccine

- [More Colleges Say They'll Require Students to Have COVID Vaccines for Fall: NPR](#)
- [We Could Soon Have Vaccines for Cancer, HIV Thanks to COVID-19 Vaccine \(insider.com\)](#)



## Vaccination Progress

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

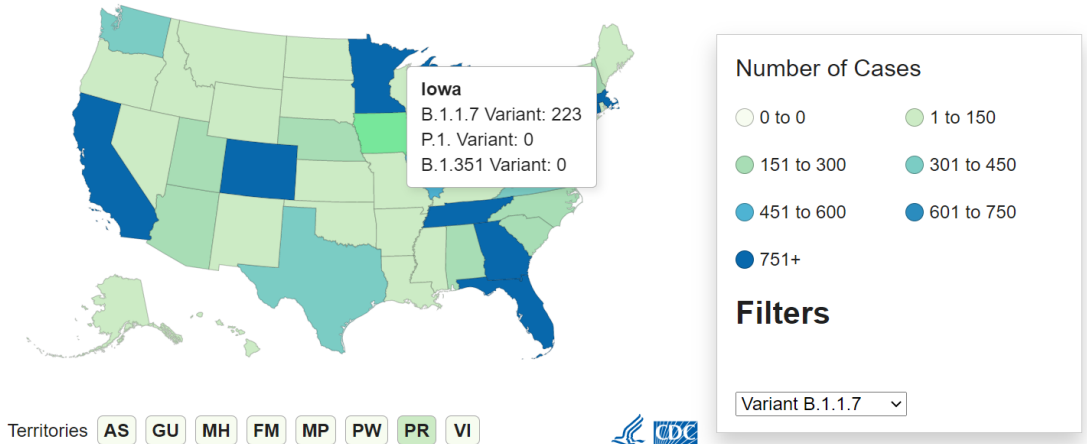


Assumptions: 20% of the population or higher will have acquired immunity; children under the age of 16 cannot be vaccinated, therefore 78% of adults need to be vaccinated. Two doses regimen.

## Variant Prevalence

Variant	Reported Cases in US	Number of Jurisdictions Reporting
B.1.1.7	20915	52
B.1.351	453	36
P.1	497	31

### Cases of Variants of Concern in the United States\*†



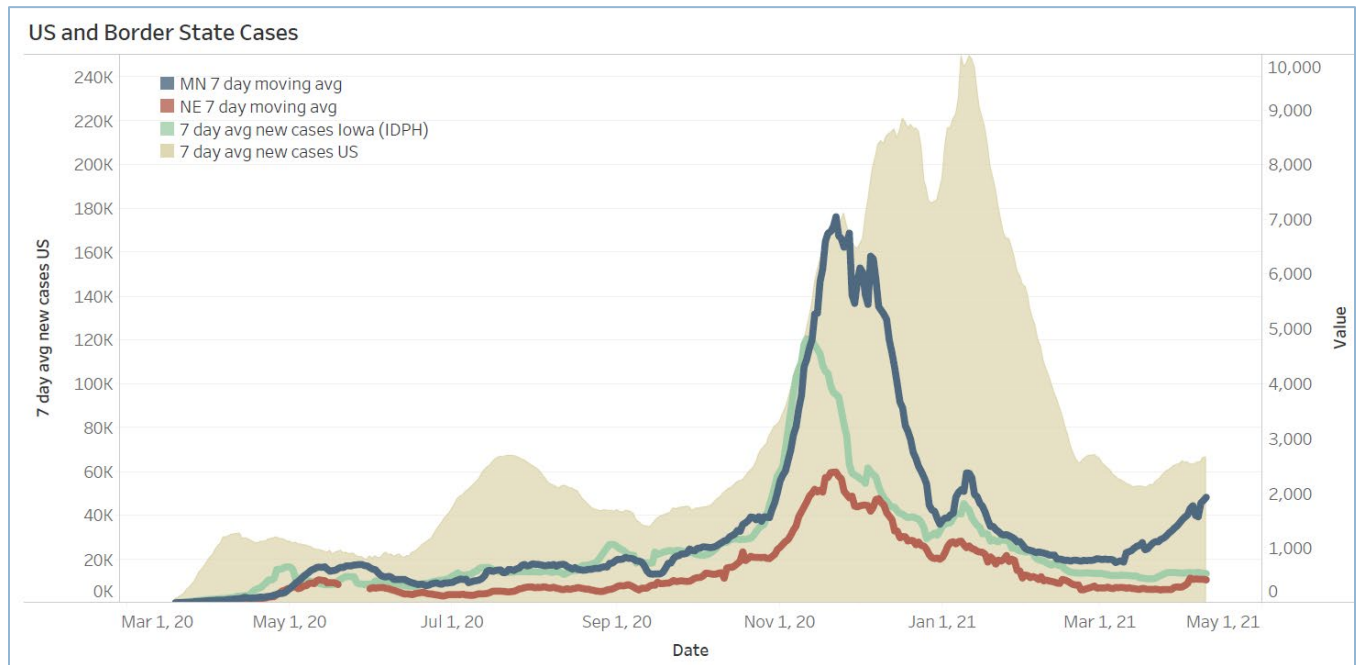
# Central Iowa COVID19 Update



## 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
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
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
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
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
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
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
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
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
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
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
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
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

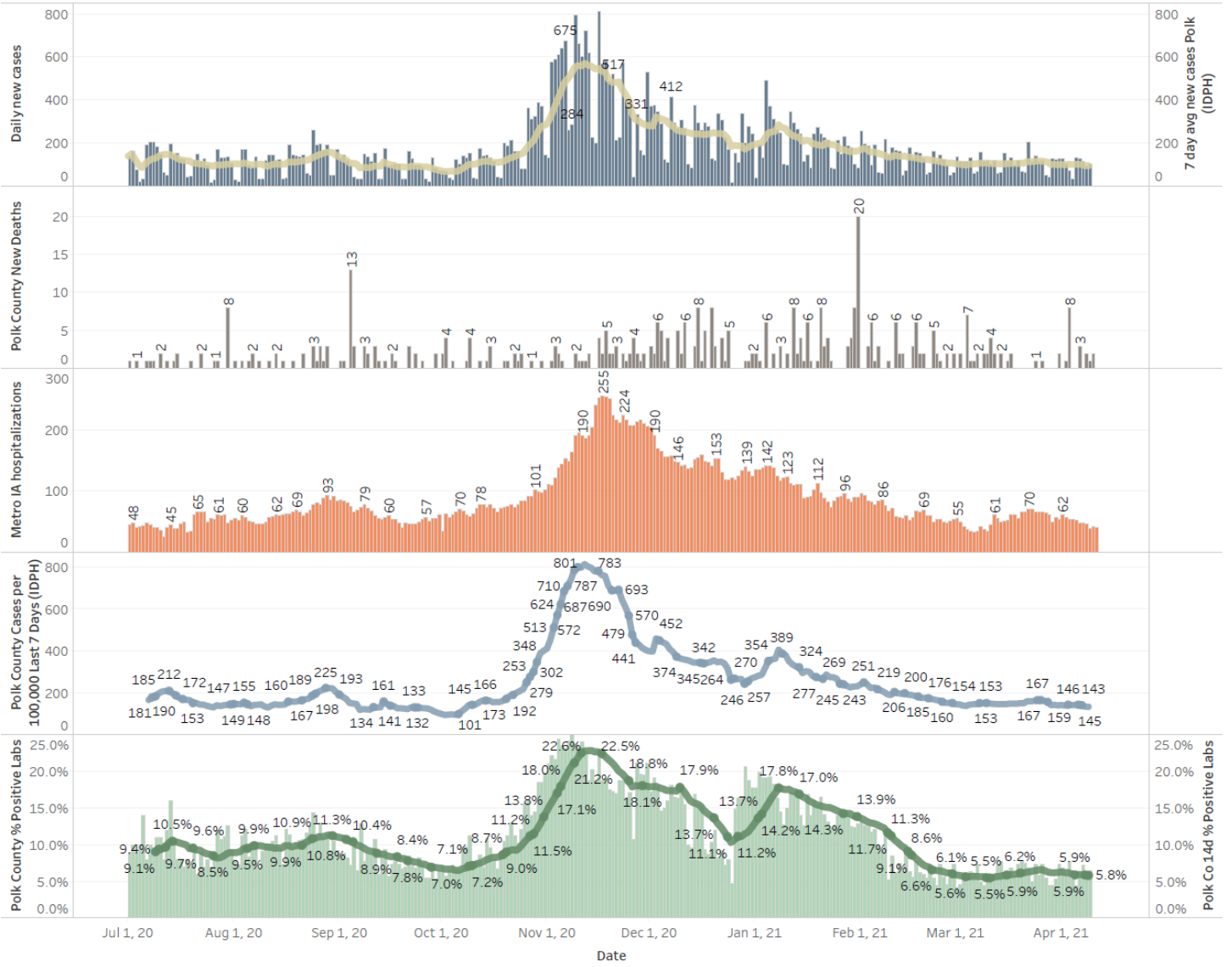
Students/Staff in Quarantine																						
Week Ending	1-Nov	8-Nov	15-Nov	22-Nov	29-Nov	13-Dec	20-Dec	27-Dec	10-Jan	17-Jan	24-Jan	31-Jan	7-Feb	14-Feb	22-Feb	1-Mar	7-Mar	15-Mar	22-Mar	29-Mar	5-Apr	12-Apr
DMPS	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	220	198	235	223	193	203	116	134	141	115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



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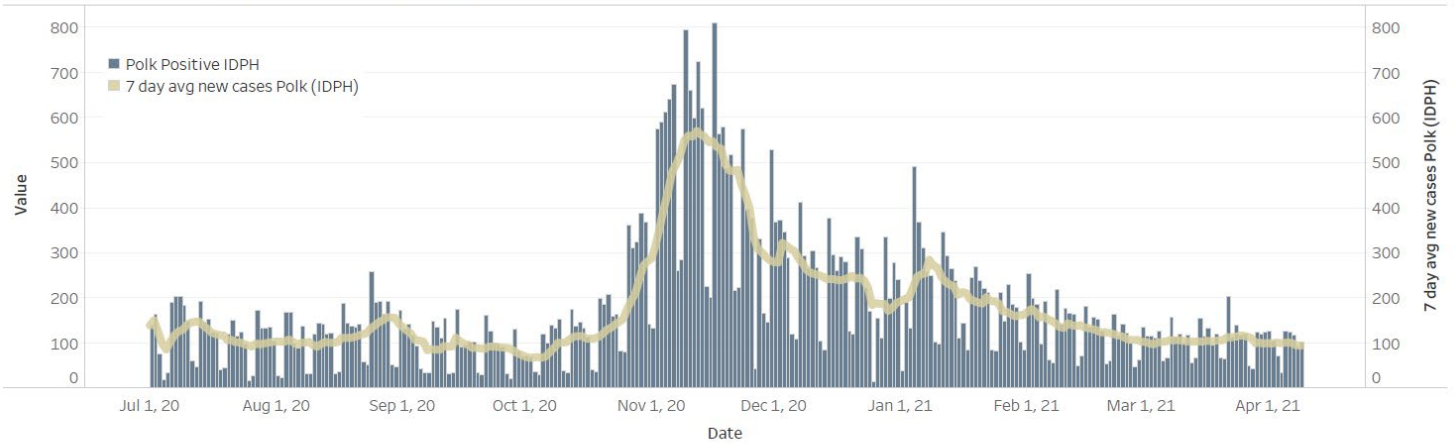
## Polk County Activity View



# Central Iowa COVID19 Update



## Polk County Cases by Day and 7d Moving Average



## Iowa Cases by Day and 7d Moving Average

