



# Central Iowa COVID19 Update

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Aperio

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

	Polk County	Iowa
Percent of population with 1 dose*	8%	5%
Percent of population with 2 doses*	45%	43%
7d Lab Test Positivity	1.7%	2.0%
14d Lab Test Positivity	2.1%	2.4%
Total cases per 100,000 the last 7d	21	29
Total cases per 100,000 the last 14d	68	74
Average daily cases the last 7d	15	131
Average 7-day new cases per 100,000	3	4

\*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.

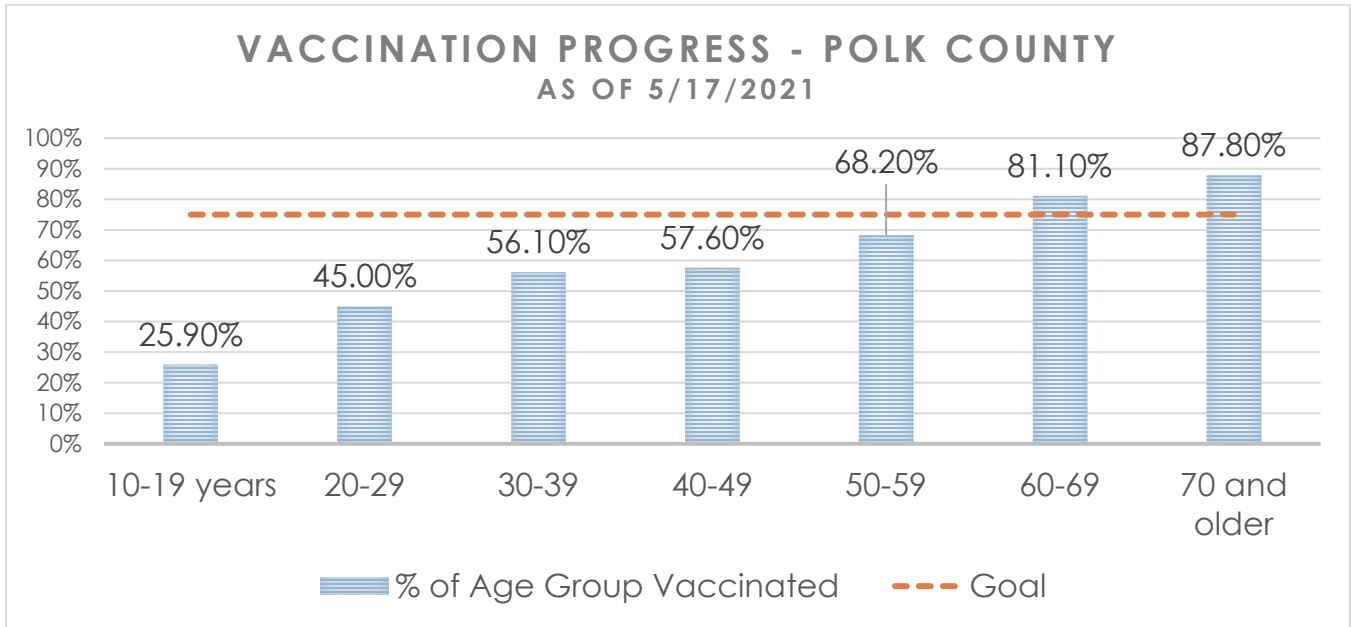
Population of Iowa used is 3.155 million. Averages and percent positivity are subject to change with retrospectively refreshed data.

## Critical Points, Media, and Research

- COVID-19 cases in Polk County, Iowa, and the US continue to decline. There is still a possibility for increased activity this summer, but vaccination is making a significant impact internationally.
- [COVID-19 outbreaks following full reopening of primary and secondary schools in England: Cross-sectional national surveillance, November 2020 - The Lancet Regional Health – Europe](#)  
Higher attack rates among teaching staff during an outbreak underscores the importance of maintaining low community infection rates for reducing the risk of virus introduction into educational settings.
- [Factors Associated with Readmission in the US Following Hospitalization with COVID-19](#)
- [Incident SARS-CoV-2 Infection among mRNA-Vaccinated and Unvaccinated Nursing Home Residents | NEJM](#)  
SARS-CoV-2 vaccination might provide protection against infection for vaccinated residents that extends to unvaccinated nursing home residents as well.
- [Effectiveness of the TWO-DOSE BNT162b2 vaccine: analysis of real-world data](#)  
Findings affirm the effectiveness of Pfizer/BioNTech BNT162b2 vaccine against infection and COVID-19 disease but indicate less protection for individuals who are older, immunocompromised, and with certain comorbidities.
- [Durability of mRNA-1273-induced antibodies against SARS-CoV-2 variants](#)  
The Moderna mRNA-1273 vaccine induces relatively long-lived functional antibodies, able to neutralize 5 circulating SARS-CoV-2 variants; however, it induces a less robust, shorter-lived response to B.1.351.
- [Fatal breakthrough infection after anti-BCMA CAR-T therapy highlights suboptimal immune response to SARS-CoV-2 vaccination in myeloma patients | medRxiv](#)
- [Long-term post-COVID symptoms and associated risk factors in previously hospitalized patients: A multicenter study](#)
- [Post-COVID syndrome in non-hospitalised patients with COVID-19: a longitudinal prospective cohort study - The Lancet Regional Health – Europe](#)
- [Infections, Hospitalizations, and Deaths Averted Via Direct Effects of the Pfizer-BioNTech BNT162b2 mRNA COVID-19 Vaccine in a Nationwide Vaccination Campaign, Israel](#)
- [Next-generation COVID vaccines to be cheaper, easier, more protective](#)



## Vaccine Progress

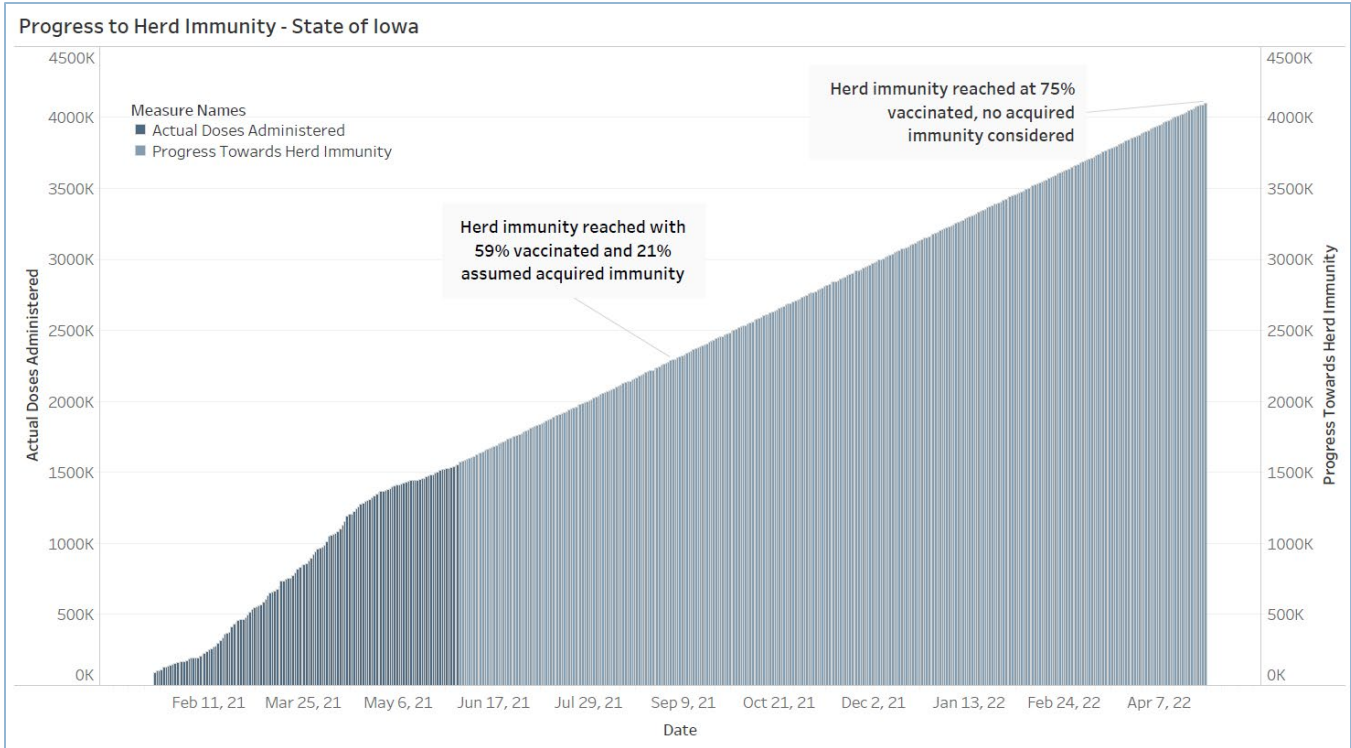


Number of Doses Administered (by date of report)	Initiated Vaccination (1st dose/No Janssen)	Completed Vaccination (2nd dose/Janssen)	Total Polk Co Residents Partially/Fully Vaccinated	Total Population of Polk County (all ages)
468,152	38,607 (7%)	209,653 (42.4%)	258,691 (50%)	490,121

Age Group	Vaccinated	% Age Group Vaccinated	Estimated Census Population*
10-19 years	16,118	25.90%	62,295
20-29	31,112	45.00%	69,065
30-39	39,231	56.10%	69,982
40-49	37,649	57.60%	65,361
50-59	40,757	68.20%	59,727
60-69	39,949	81.10%	49,269
70 and older	38,391	87.80%	43,742
<b>Total</b>	<b>243,207</b>	<b>58.00%</b>	<b>419,441</b>

\*U.S Census Bureau Polk County (2019 1yr estimate). Census predetermined age data includes non-eligible ages 10 and 11 years old.

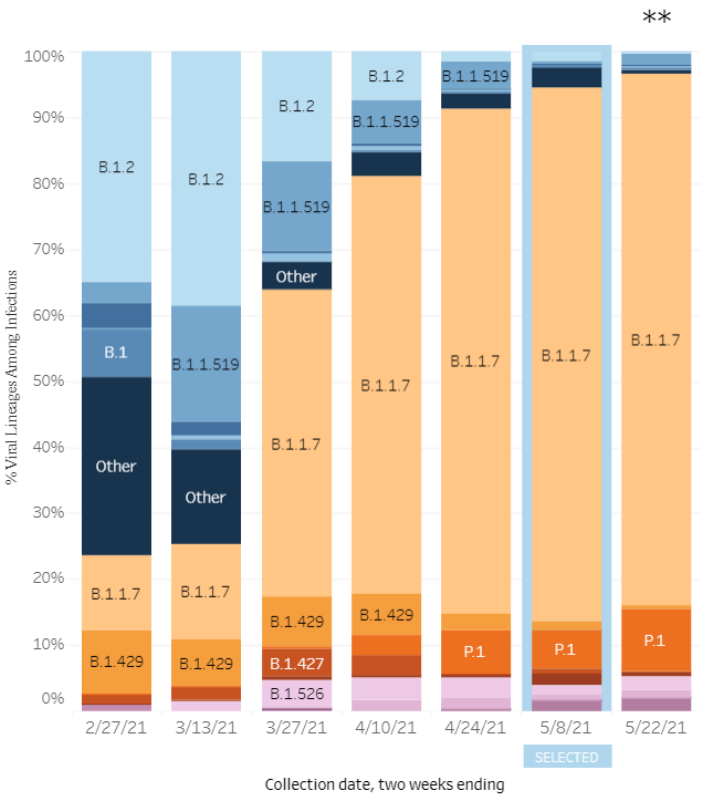
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## Variant Prevalence

HHS Region 7: 2/14/2021 – 5/22/2021

HHS Region 7: 4/25/2021 – 5/8/2021



Region 7 - Iowa, Kansas, Missouri, and Nebraska

	Lineage	Type	%Total	95%CI	
Most common lineages	B.1.1.7	VOC	81.0%	61.9-91.8%	
	P.1	VOC	5.8%	0.9-30.4%	
	B.1.351	† VOC	1.8%	0.1-28.4%	
	B.1.617.2	† VOI	1.7%	0.6-4.9%	
	B.1.2	†	1.5%	0.2-9.3%	
	B.1.526	† VOI	1.4%	0.4-5.4%	
	B.1.429	† VOC	1.4%	0.1-13.9%	
Additional VOI/VOC lineages	B.1	†	0.6%	0.1-3.1%	
	B.1.1.519	†	0.3%	0.1-1.8%	
	B.1.526.2	†	0.0%	NA	
	B.1.596	†	0.0%	NA	
	B.1.526.1	† VOI	0.9%	0.1-10.2%	
	B.1.427	† VOC	0.7%	0.1-5.2%	
	B.1.525	† VOI	0.0%	NA	
	B.1.617	† VOI	0.0%	NA	
	B.1.617.1	† VOI	0.0%	NA	
	B.1.617.3	† VOI	0.0%	NA	
Other*	Other	2.9%	0.5-15.1%		

\* Other represents >200 additional lineages, which are each circulating a <1% of viruses

\*\* These data include Nowcast estimates, which are modeled projections that may differ from weighted estimates generated at later dates

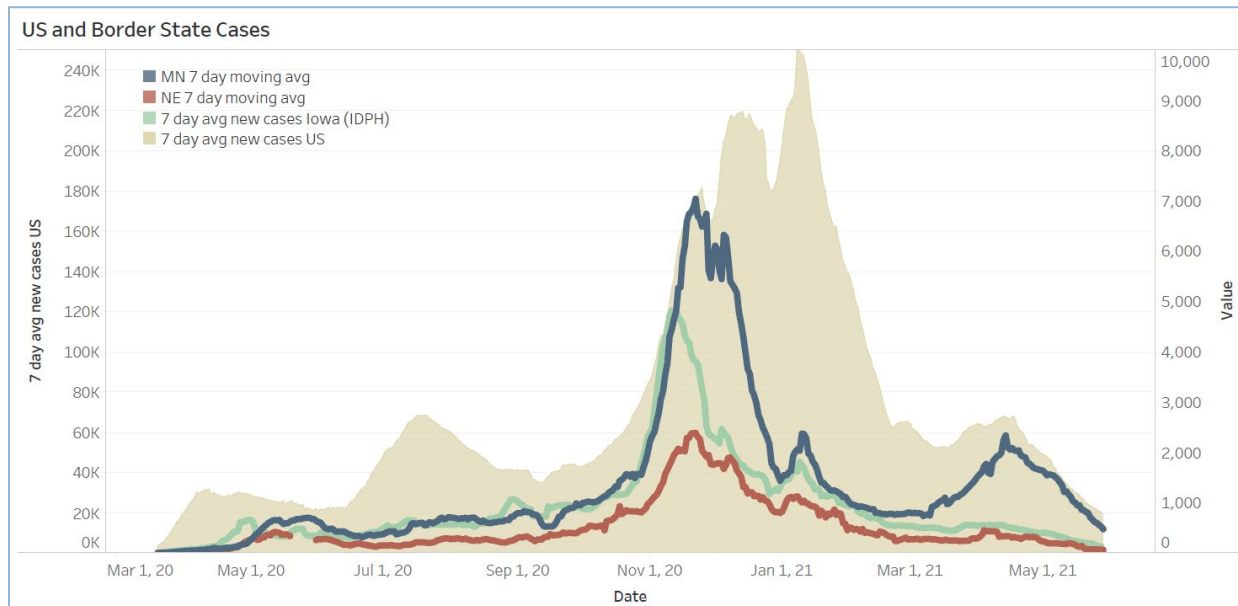
† Fewer than 10 observations of this variant during the selected time/loc..



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

Rate of Student/Staff Cases Per 1,000											
Week Ending	7-Mar	15-Mar	29-Mar	5-Apr	12-Apr	19-Apr	26-Apr	3-May	10-May	17-May	24-May
DMPS	0.7	0.5	0.1	0.2	0.1	0.2	0.2	0.1	0.1	0.2	0.1
Ankeny	0.7	1.0	1.5	1.5	1.2	0.4	0.8	1.8	0.6	0.3	0.5
Waukee	1.7	1.7	1.9	0.8	0.6	1.1	0.4	0.4	1.0	0.1	0.2
WDM	1.1	1.6	1.2	0.6	1.1	1.2	0.6	0.9	0.2	0.4	
Johnston	1.6	1.1	2.4	0.3	1.1	1.7	0.3	1.1	1.3	1.1	
SE Polk	2.1	2.3	1.3	2.0	1.3	0.3	1.3	1.4	2.0	1.3	0.4
Urbandale	2.8	2.8	0.3	2.0	2.0	0.5	0.5	1.5	0.3	0.3	0.3
DCG	1.3	2.5	4.1	1.3	1.6	2.5	0.6	0.9	2.2	0.6	0.0
Bondurant	0.5	2.3	3.7	1.9	4.2	6.0	3.7	2.8	3.2	0.9	2.8
North Polk	1.1	0.6	1.7	1.1	0.0	0.6	0.0	0.0	0.0	0.6	0.0
Ballard	1.2	1.2	4.1	1.2	1.2	0.6	0.6	0.6	0.6	0.6	0.0
Saydel	0.7	0.0	1.5	0.0	0.0	0.0	2.2	3.7	2.2	2.2	0.7

Students/Staff in Quarantine												
Week Ending	7-Mar	15-Mar	29-Mar	5-Apr	12-Apr	19-Apr	26-Apr	3-May	10-May	17-May	24-May	31-May
DMPS	193	203	134	141	115	154	137	143	125	81	75	83
Ankeny	45	53	36	101	94	29	62	85	31	26	19	8
Waukee	65	79	62	41	24	41	25	34	47	24		0
WDM	25	41	33	28	22	27	14	14	8	3		
Johnston	84	85	68	48	68	78	34	40	55	38		
SE Polk	93	77	45	54	34	39	33	29	22	22	11	4
Urbandale	51	51	27	38	35	24	20	31	23	15	14	9
DCG	37	37	29	27	30	31	18	17	13	9	6	0
Bondurant	18	18	0	21	38	22	35	24	20	9	1	1
North Polk	34	31	13	16	12	10	13	8	0	0	0	
Ballard	16	18	2	2	2	12	1	1	1	1		
Saydel	18	15	7	3	4	9	10	15	10	10	0	1
Total	679	708	456	520	478	476	402	441	355	238	126	106



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