



# Central Iowa COVID19 Update

---

Wednesday, September 15, 2021



Statistical Consulting

Dr. Meg Schaeffer





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

	Polk County	Iowa
Percent of population with 1 dose	5.5%	4.4%
Percent of population with 2 doses	56.7%	52.8%
7d Lab Test Positivity	9.9%	9.1%
Total cases per 100,000 the last 7d	375	367
CDC County Transmission Level*	High	
Average daily cases the last 7d	263	1655

\*[VaccineInformation | Iowa COVID-19 Information](#)

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

- Cases are rising after a brief drop over the Labor Day holiday. Iowa and Polk County have not yet peaked, though hospitalizations recently decreased. US activity continues to rise as well.
- [States are sounding the alarm on Covid-19 outbreaks among school-age children](#)
- [Localized and Whole-Room Effects of Portable Air Filtration Units on Aerosol Particle Deposition and Concentration in a Classroom Environment](#)
- [Emergency Department Encounters Among Youth with Suicidal Thoughts or Behaviors During the COVID-19 Pandemic | JAMA Psychiatry](#)
- [Pooled RT-qPCR testing for SARS-CoV-2 surveillance in schools - a cluster randomised trial](#)
- [Trends in COVID-19 Cases, Emergency Department Visits, and Hospital Admissions Among Children and Adolescents Aged 0–17 Years — United States, August 2020–August 2021](#)
- [Hospitalizations Associated with COVID-19 Among Children and Adolescents — COVID-NET, 14 States, March 1, 2020–August 14, 2021](#)
- [Model-based assessment of SARS-CoV-2 Delta variant transmission dynamics within partially vaccinated K-12 school populations](#)
- [One-Year Outcomes of Critical Care Patients Post-COVID-19 Multisystem Inflammatory Syndrome in Children | Critical Care Medicine | JAMA Pediatrics](#)
- [SARS-CoV-2 Transmission to Masked and Unmasked Close Contacts of University Students with COVID-19 — St. Louis, Missouri, January–May 2021 | MMWR](#)
- [Denmark Ends Its COVID Restrictions, Thanks To Its High Vaccination Rate](#)
- [Waning immunity of the BNT162b2 vaccine: A nationwide study from Israel.](#) Breakthrough infections and severe disease from the Delta variant appear to have increased with time since vaccination, which might prompt consideration of booster doses for people who have been vaccinated previously. However, more definitive evidence is needed regarding duration of immunity following vaccination.
- [Durability of antibody responses elicited by a single dose of Ad26.COV2.S \(Janssen\) and substantial increase following late boosting](#)
- [Resurgence of SARS-CoV-2 Infection in a Highly Vaccinated Health System Workforce | NEJM](#)



## Vaccine Progress

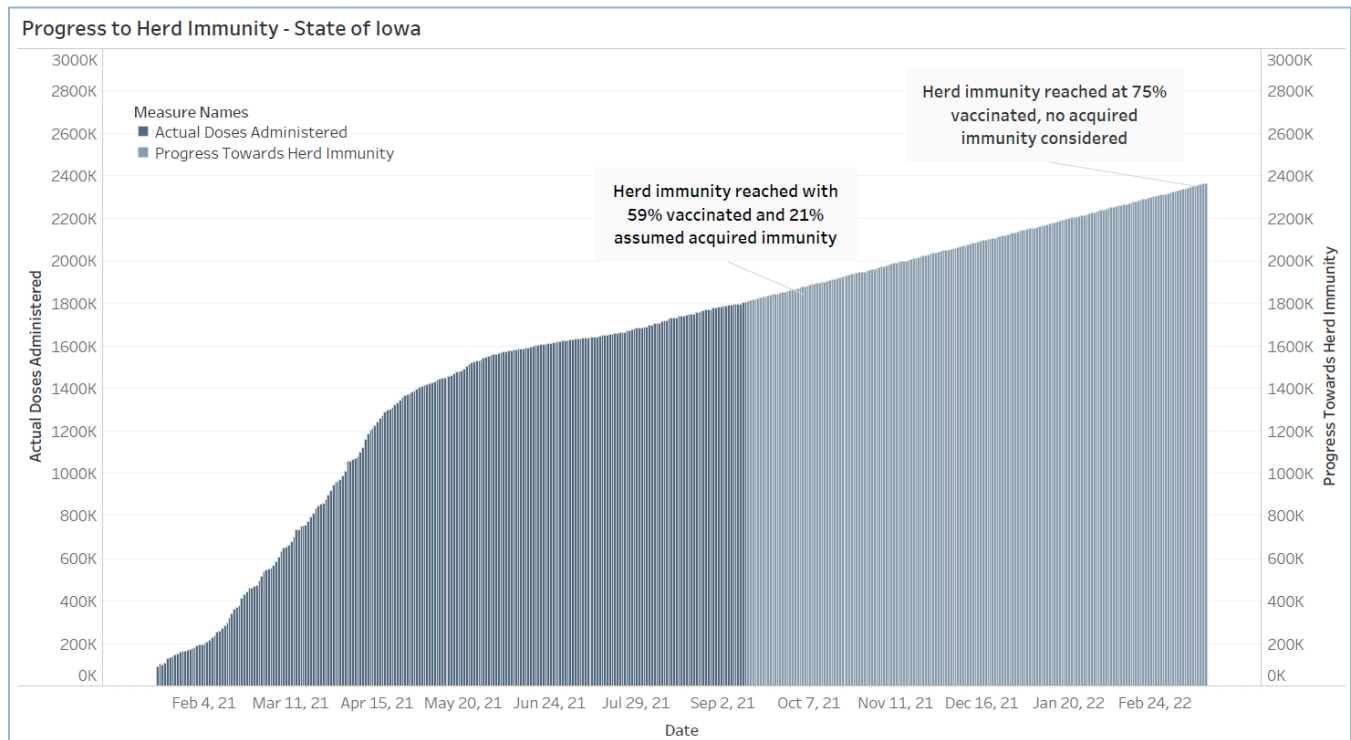
Polk Co Vaccination Rates CDC Covid Data Tracker Data (*)	At Least One Dose	Fully Vaccinated
Total	304,966	277,917
% of Total Population	62.2%	56.7%
Population ≥ 12 Years of Age	304,953	277,916
% of Population ≥ 12 Years of Age	74.6%	68.0%
Population ≥ 18 Years of Age	280,978	257,381
% of Population ≥ 18 Years of Age	76.1%	69.7%
Population ≥ 65 Years of Age	62,849	59,741
% of Population ≥ 65 Years of Age	95.1%	90.4%

(\*) CDC COVID Data Tracker Data: CDC data includes vaccine administration data from all sources, including IRIS\*, other state immunization registries, and federal entities (Bureau of Prisons, Veterans Health Administration, Department of Defense, and Federal Long-Term Care program). These doses may not have been reported to IRIS.

Data as of 09/14/21

Link to Zip Code-Level Vaccination

Rates - <https://arcg.is/1nTry4>





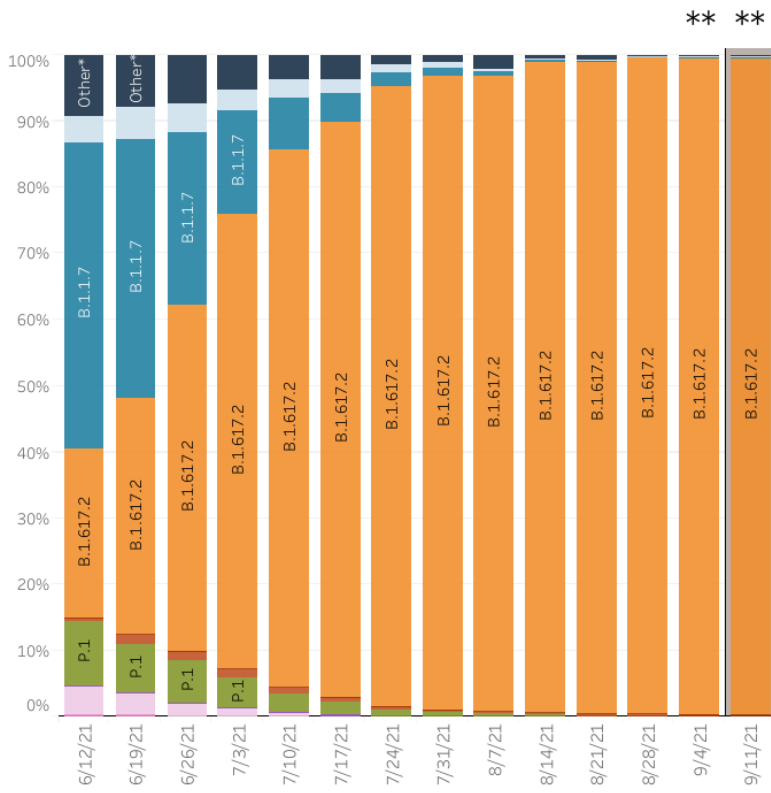
### School Data

15-Sep				
	NEW Student Cases	NEW Staff Cases	Cases Per 100 Students	Enrollment
DMPS	22	4	0.07	33,000
Ankeny	87	15	0.85	12,000
Waukee*	41	NA	0.36	11,500
WDM	35	NA	0.39	9,000
Johnston*	18	NA	NA	7,000
SE Polk	106	7	1.61	7,000
Urbandale	15	NA	0.38	4,000
Total	324	26	0.42	83500

### Variant Prevalence

United States: 6/6/2021 – 9/11/2021

United States: 9/5/2021 – 9/11/2021 NOWCAST



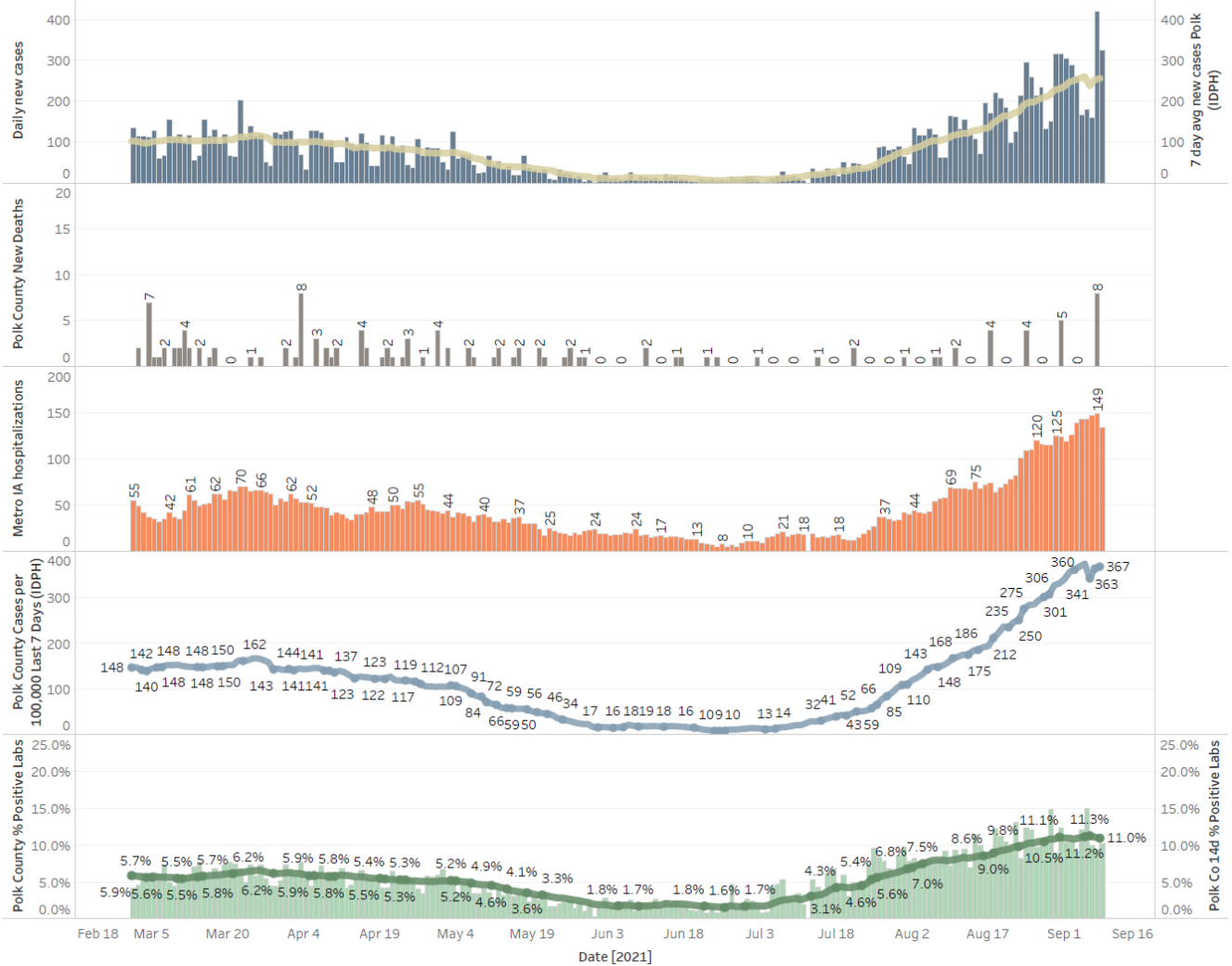
USA				
WHO label	Lineage #	Type	%Total	95%PI
Alpha	B.1.1.7	VOC	0.0%	0.0-0.2%
Beta	B.1.351	VOC	0.0%	0.0-0.2%
Gamma	P.1	VOC	0.0%	0.0-0.2%
Delta	B.1.617.2	VOC	99.4%	98.6-100.0%
	AY.1	VOC	0.2%	0.0-0.7%
	AY.2	VOC	0.1%	0.0-0.5%
Eta	B.1.525	VOI	0.0%	0.0-0.2%
Iota	B.1.526	VOI	0.0%	0.0-0.2%
Kappa	B.1.617.1	VOI	0.0%	0.0-0.2%
Mu	B.1.621		0.1%	0.0-0.5%
N/A	B.1.617.3	VOI	0.0%	0.0-0.2%
Other	Other*		0.2%	0.0-0.7%

\* Enumerated lineages are VOI/VOC or are circulating >1% in at least one HHS region during at least one two week period; remaining lineages are aggregated as "Other".  
 \*\* These data include Nowcast estimates, which are modeled projections that may differ from weighted estimates generated at later dates.  
 # Sublineages of P.1, B.1.351 and B.1.621 are aggregated with the parent lineage and included in parent lineage's proportion. Q.1-Q.8 are aggregated with B.1.1.7. AY.3-AY.25 are aggregated with B.1.617.2.

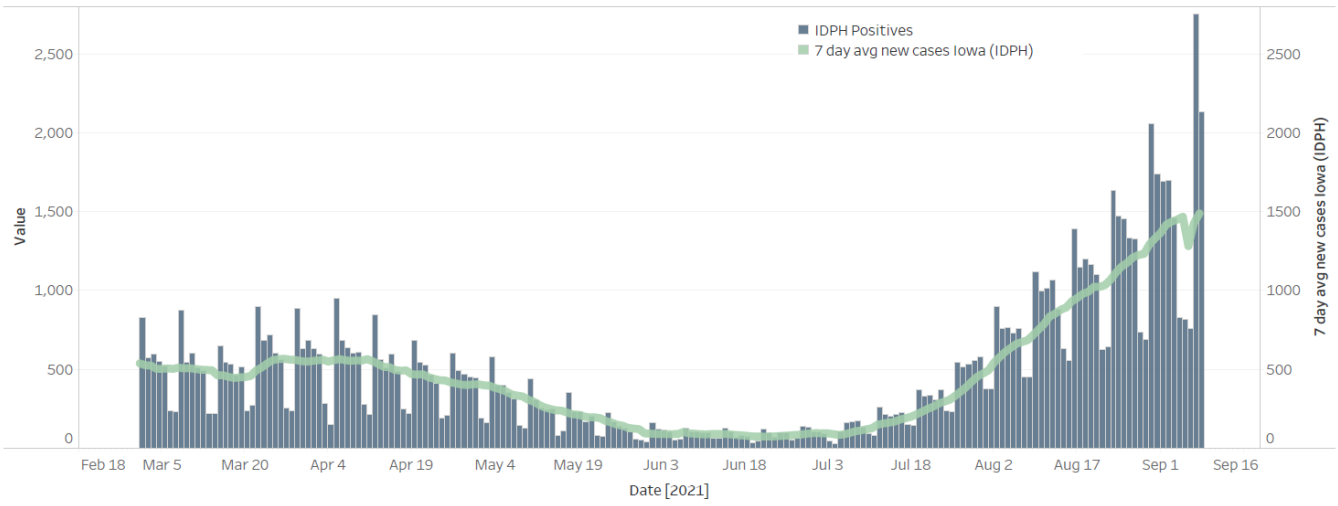
# Central Iowa COVID19 Update



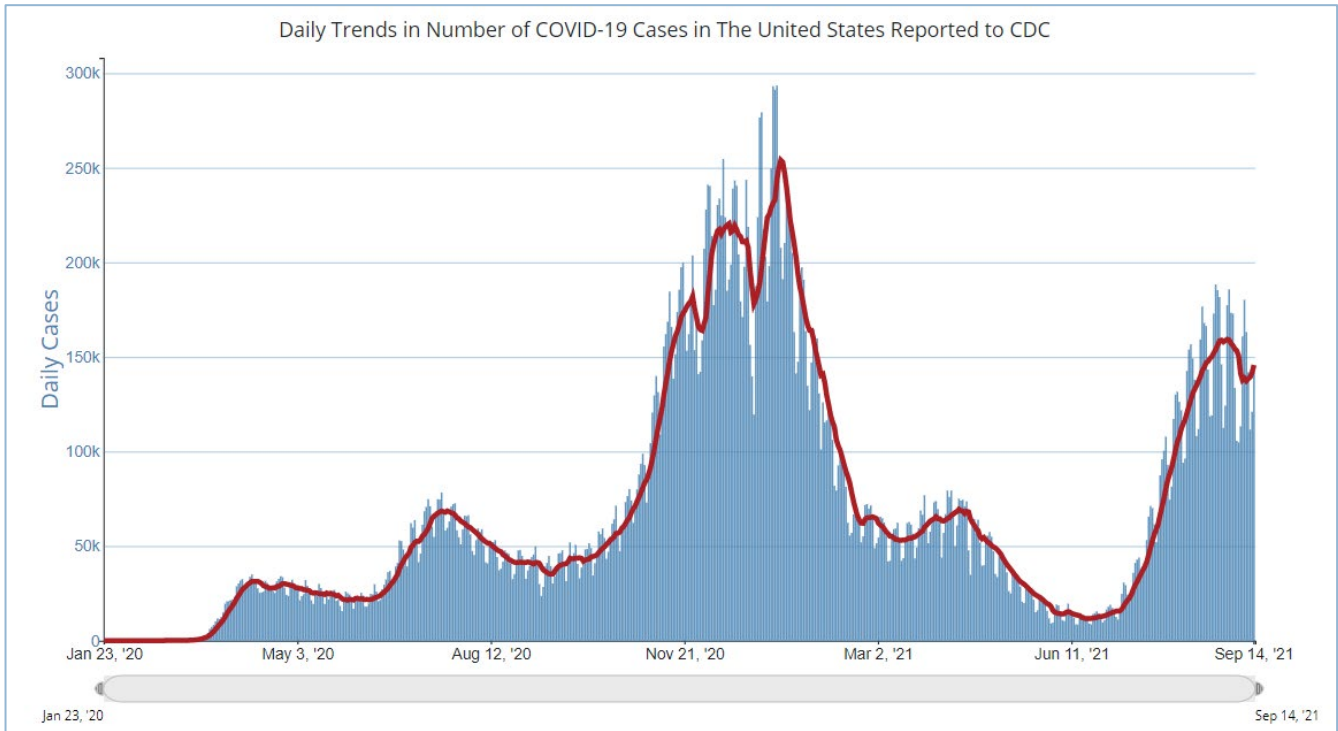
Polk County Activity View - Since Jan 1 2021 through Predictive



Iowa Cases by Day and 7d Moving Average



# Central Iowa COVID19 Update



	CASES DAILY AVG.	PER 100,000	14-DAY CHANGE	HOSPITALIZED DAILY AVG.	PER 100,000	14-DAY CHANGE	DEATHS DAILY AVG.	PER 100,000	FULLY VACCINATED
United States	152,177	46	-5%	99,275	30	-3%	1,888.1	0.57	54%
Guam	183	108	+35%	—	—	—	2.4	1.44	63%
West Virginia ›	1,839	103	+45%	889	50	+37%	15.7	0.88	40%
Tennessee ›	6,870	101	+2%	3,255	48	-2%	58.3	0.85	44%
Wyoming ›	567	98	+29%	227	39	+16%	5.6	0.96	40%
Kentucky ›	4,297	96	-1%	2,596	58	+14%	29.1	0.65	50%
South Carolina ›	4,773	93	-7%	2,563	50	+14%	53.9	1.05	45%
Alaska ›	645	88	+23%	213	29	+38%	2.3	0.31	48%
Alabama ›	3,840	78	-21%	2,826	58	-8%	42.6	0.87	40%
Montana ›	782	73	+58%	377	35	+46%	4.0	0.37	47%
Texas ›	20,982	72	+26%	14,140	49	-3%	286.0	0.99	49%