

Covid-19 in Iowa: 100,000 Cases

Figure 1. Days to Gain Each 10,000 Covid-19 Cases, Iowa, 2020

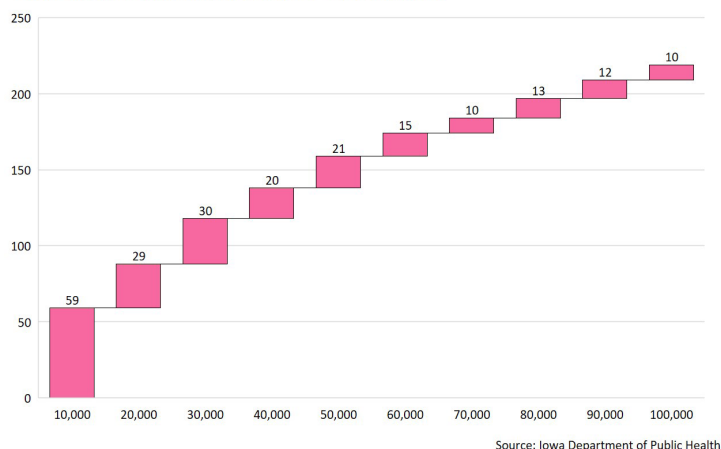


Figure 2. Weekly Additional Covid-19 Cases, Iowa, 2020

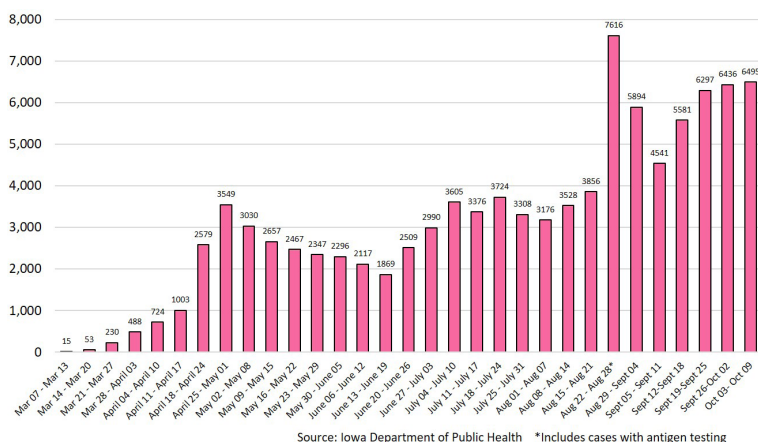
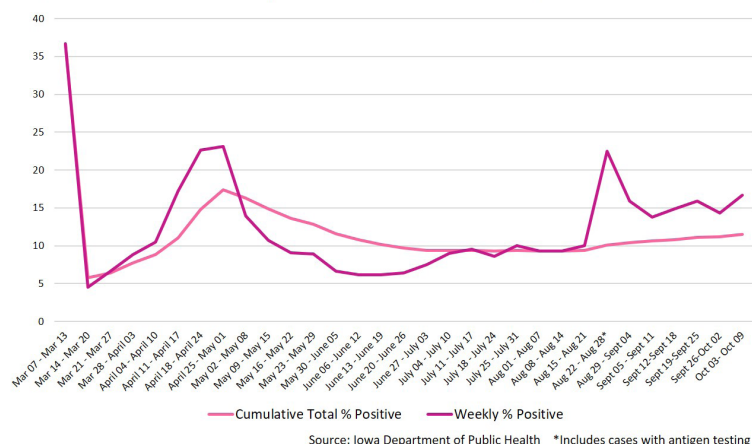


Figure 3. Cumulative Total and Weekly Percent of Covid-19 Tests Positive, Iowa, 2020



Covid-19¹ cases have been reported in Iowa since March 7th, 2020. On October 11th, seven months later, Iowa recorded its 100,000th case.² It is an unhappy circumstance that Iowa has reached this milestone of cases. In recent weeks, the rate of new cases has increased and Iowa has recorded more than 6,000 cases each week (Figures 1, 2; Table 1).

In the earliest months of Covid-19 in Iowa, it took 59 days for the state to record the first 10,000 cases. Since then, the virus has been spreading more rapidly. It took 29 days to reach the second set of 10,000 cases and 30 more days for another 10,000. New milestones of successive 10,000 cases then came at a faster pace. Since mid-September, each set of 10,000 cases is less than two weeks apart. Only 10 days were needed to jump from around 90,000 positive cases to just over 100,000 (Figure 1, Table 1). In order to have 10,000 cases in 10 days, the state has to average 1,000 cases per day.

As a contributing factor to the rise in cases, weekly rates of positive cases have been particularly high since mid-August.³ The recent rates of 13% - 22%⁴ are more than double the rates recorded in June (Figure 3, Table 1). Week-by-week trends⁵ help to better understand what is happening on a shorter time frame. The cumulative total positive percent rate, since it is calculated over a much longer time frame, serves to mask these shorter-term increases that Iowa is experiencing.

These recent Iowa trends are unfortunate and dismaying. Increased vigilance and precautions are needed across the state in order to stem the community spread of Covid-19.

Covid-19 in Iowa: 100,000 Cases

Table 1. Cumulative Total and Weekly Covid-19 Cases, Dates and Number of Days Between Successive 10,000 Count Days, Cumulative Total and Weekly Percent Positive and Number of Tests, Iowa, 2020.¹

Week	Cumulative Total Cases	Dates of Successive 10,000 Count Days	Number of Days Between Successive 10,000 Count Days	Cumulative Total Percent Positive ²	Cumulative Tests	Weekly Cases	Weekly Percent Positive ²	Weekly Tests
Mar 07 - Mar 13	18	March 07 (3 cases)	Date of first case	36.7	49	18	36.7	49
Mar 14 - Mar 20	68			5.8	1171	50	4.5	1122
Mar 21 - Mar 27	298			6.4	4673	230	6.6	3502
Mar 28 - April 03	786			7.7	10240	488	8.8	5567
April 04 - April 10	1510			8.8	17132	724	10.5	6892
April 11 - April 17	2513			11.0	22947	1003	17.2	5815
April 18 - April 24	5092			14.8	34350	2579	22.6	11403
April 25 - May 01	8641			17.4	49727	3549	23.1	15377
May 02 - May 08***	11671	May 04 (10,111 cases)	59 days since first case	16.3	71476	3030	13.9	21749
May 09 - May 15	14328			14.9	96300	2657	10.7	24824
May 16 - May 22	16795			13.6	123653	2467	9.1	27353
May 23 - May 29	19142			12.8	150108	2347	8.9	26455
May 30 - June 05***	21438	June 02 (20,010 cases)	29 days since 10,000 cases	11.6	184554	2296	6.6	34446
June 06 - June 12	23555			10.8	218964	2117	6.2	34410
June 13 - June 19	25424			10.2	249207	1869	6.2	30243
June 20 - June 26	27933			9.7	288212	2509	6.4	39005
June 27 - July 03***	30923	July 02 (30,355 cases)	30 days since 20,000 cases	9.4	327936	2990	7.5	39724
July 04 - July 10	34528			9.4	368104	3605	9.0	40168
July 11 - July 17	37904			9.4	403726	3376	9.5	35622
July 18 - July 24***	41628	July 22 (40,509 cases)	20 days since 30,000 cases	9.3	447251	3724	8.6	43525
July 25 - July 31	44936			9.4	480423	3308	10.0	33172
Aug 01 - Aug 07	48112			9.3	514451	3176	9.3	34028
Aug 08 - Aug 14***	51640	August 12 (50,167 cases)	21 days since 40,000 cases	9.3	552389	3528	9.3	37938
Aug 15 - Aug 21	55496			9.4	591016	3856	10.0	38627
Aug 22 - Aug 28*** ³	63112	August 27 (62,031 cases)	15 days since 50,000 cases	10.1	624834	7616	22.5	33818
Aug 29 - Sept 04	69006			10.4	661821	5894	15.9	36987
Sept 05 - Sept 11***	73547	September 06 (70,314 cases)	10 days since 60,000 cases	10.6	694782	4541	13.8	32961
Sept 12 - Sept 18	79128			10.8	732186	5581	14.9	37404
Sept 19 - Sept 25***	85425	September 19 (80,009 cases)	13 days since 70,000 cases	11.1	771756	6297	15.9	39570
Sept 26 - Oct 02***	91861	October 01 (90,754 cases)	12 days since 80,000 cases	11.2	816710	6436	14.3	44954
Oct 03 - Oct 09	98356			11.5	855596	6495	16.7	38886
Oct 10 - Oct 16***	100,000+	October 11 (100,052 cases)	10 days since 90,000 cases	-----	-----	-----	-----	-----

***Designates weeks when cumulative total cases exceeded 10,000 Count Days. Exact dates and case counts given in column three; ¹Source: Iowa Department of Public Health; ²Percent positive is calculated by dividing the cases (cumulative total or weekly) by the number of tests (cumulative total or weekly) and multiplying the result by 100; ³On August 27th, the Iowa Department of Public Health added the cumulative positive Covid-19 cases identified by antigen testing (1,377) to the state cumulative Covid-19 total cases identified by PCR (polymerase chain reaction) testing. Before August 27th, the reported state positive totals were based only on PCR testing. The data reported here for the week of August 22-August 28 reflect the totals *with* the added antigen cases even though those cases were from many previous weeks and months, not from just that week.

Covid-19 in Iowa: 100,000 Cases

This report, others in the series, along with other information related to Covid-19 in Iowa and nationwide is available at:
<https://indicators.extension.iastate.edu/Indicators/COVID19/>

Notes

¹Coronavirus disease 2019 (COVID-19) is defined as illness caused by a novel coronavirus now called severe acute respiratory syndrome coronavirus 2 (SARS-CoV-2; formerly called 2019-nCoV) <https://www.medscape.com/answers/2500114-197401/what-is-covid-19>

²The source for the Covid-19 data reviewed here is the Iowa Department of Public Health (IDPH). Through the months that Covid-19 cases have been reported in Iowa, the Iowa Department of Public Health has utilized several methods of reporting the cases and testing in Iowa. These include press reports, web sites, data tables and files, mapping, and graphing. The data in this report have been gathered from a number of these methods. Several web sites directly from or affiliated with the Iowa Department of Public Health have been used. These include: <https://www.idph.iowa.gov/>; <https://idph.iowa.gov/Emerging-Health-Issues/Novel-Coronavirus/>; <https://coronavirus.iowa.gov/>; <https://coronavirus.iowa.gov/pages/access/>; <https://open-iowa.opendata.arcgis.com/datasets/iacovid19-demographics/>; and <https://open-iowa.opendata.arcgis.com/datasets/ia-covid19-cases/>

³Percent positive is calculated by dividing the cases (cumulative total or weekly) by the number of tests (cumulative total or weekly) and multiplying the result by 100

⁵On August 27, 2020, IDPH revised the reported statewide Covid-19 cases by adding an estimated cumulative 1,377 previous cases that had not been reported as positive cases. These cases were from many previous weeks and months, not from that current week. These cases came from an additional method of diagnosis using rapid antigen technology instead of the usual PCR (polymerase chain reaction) technology. The data reported here and in Table 1 for the week of August 22-August 28 reflect the totals *with* the added antigen cases even though those cases were from many previous weeks and months, not from just that week. In order to get a more appropriate idea of what were the actual new cases just for that week only, the case totals can be adjusted downward by subtracting the number (1,377) of cumulative antigen cases added on August 27th ($62,031 - 1,377 = 60,654$). Even if a downward adjustment is made, August 27th would still be the day when cumulative cases exceeded 60,000. See <https://idph.iowa.gov/News/ArtMID/646/ArticleID/158374/IDPH-updates-COVID-19-antigen-test-results-following-increased-testing-volume-and-new-CDC-guidance>.

⁵Although cases are reported on a daily basis, there are day-by-day variations in reporting that include weekends and holidays that make it useful to aggregate cases and reporting on a weekly basis to look at trends. The weeks reported here start with cases and tests reported for a Saturday and end with the reporting for the following Friday.

Sandra Charvat Burke
Iowa State University
Ames, IA
515-294-9307
schurke@iastate.edu
October 12, 2020

This institution is an equal opportunity provider. For the full non-discrimination statement or accommodation inquiries, go to www.extension.iastate.edu/diversity/ext

Iowa State University Extension and Outreach Indicators Portal: www.indicators.extension.iastate.edu

IOWA STATE UNIVERSITY
Extension and Outreach
Community and Economic Development