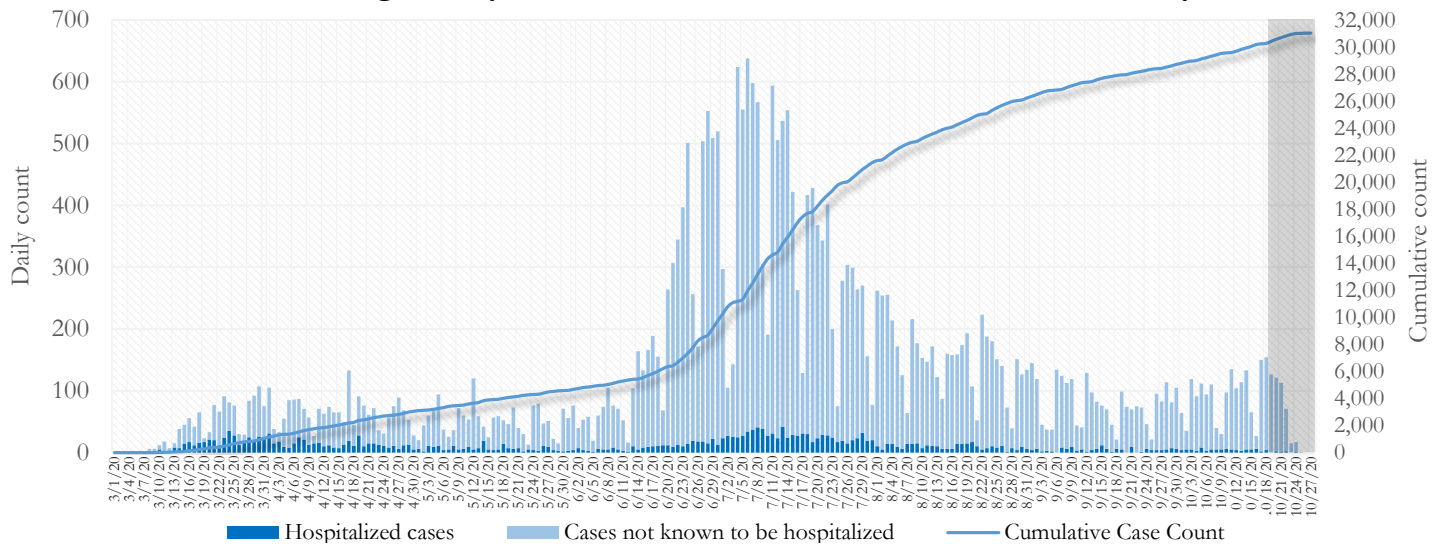


SUMMARY

- As of October 27, 2020, Fulton County has recorded **31,023 cases of the 2019 novel coronavirus (COVID-19)** and **619 confirmed COVID-19 deaths**. 81 deaths are currently being reviewed by GA DPH to confirm cause of death.
- Of **1,447 new diagnoses** made between October 7 and October 20, the central portion of the county (Atlanta metro) accounted for 44% while the northern and southern parts accounted for 29% and 22% respectively.
- By city, new COVID-19 case rates range from 55.0 per 100,000 persons (Milton) to 243.3 per 100,000 persons (Union City). [**Fulton County Diagnoses Rates (per 100,000 persons): Cumulative – 2822.4; Incidence –131.6**]. See map showing incident case rate by ZIP code on Pg.17.
- Among all persons diagnosed with COVID-19 in Fulton County since June 1, **6.2% required hospitalization and 1.3% died**.
- Of all testing done in Fulton County between October 12 and October 25, the **percent positivity rate was 4.6%**.

Fig 1. Daily and Cumulative COVID-19 cases in Fulton County, GA



*Counts shown reflect the number of confirmed cases as of 6:30 am on 10/27/20 using the date of first positive sample collection. Where date of sample collection was not available or missing, the date of report creation in GA SENDSS was used instead. **Note:** Delays in data reporting may cause changes in data counts, particularly in the shaded portion. Data throughout this report are preliminary and subject to ongoing data cleaning processes, and thus are subject to change.

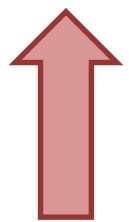
DISTRIBUTION OF COVID-19 CASES BY REGION

New cases: 44% of the new COVID-19 cases in the past 2 weeks occurred in Atlanta while 29% and 22% occurred in the Northern and Southern regions of the county respectively.

Fulton Region	% Cumulative count	% New cases*
Atlanta	44.2%	44.2%
North ¹	28.7%	29.4%
South ²	20.5%	22.4%
Unincorporated/Unknown	6.7%	4.0%

¹Includes all Fulton County cities north of Atlanta metro (Alpharetta, Milton, Johns Creek, Roswell, Sandy Springs, Mountain Park) |²Includes all cities south of Atlanta (College Park, Chattahoochee Hills, East Point, Hapeville, Palmetto, South Fulton, Fairburn, and Union City) ***New cases:** Cases diagnosed in the past 2 weeks only (between 10/7/20 – 10/20/20).

In the recent two week reporting period (10/7-10/20), there were more new cases of COVID-19 in Fulton County than the previous two weeks (9/23-10/6).



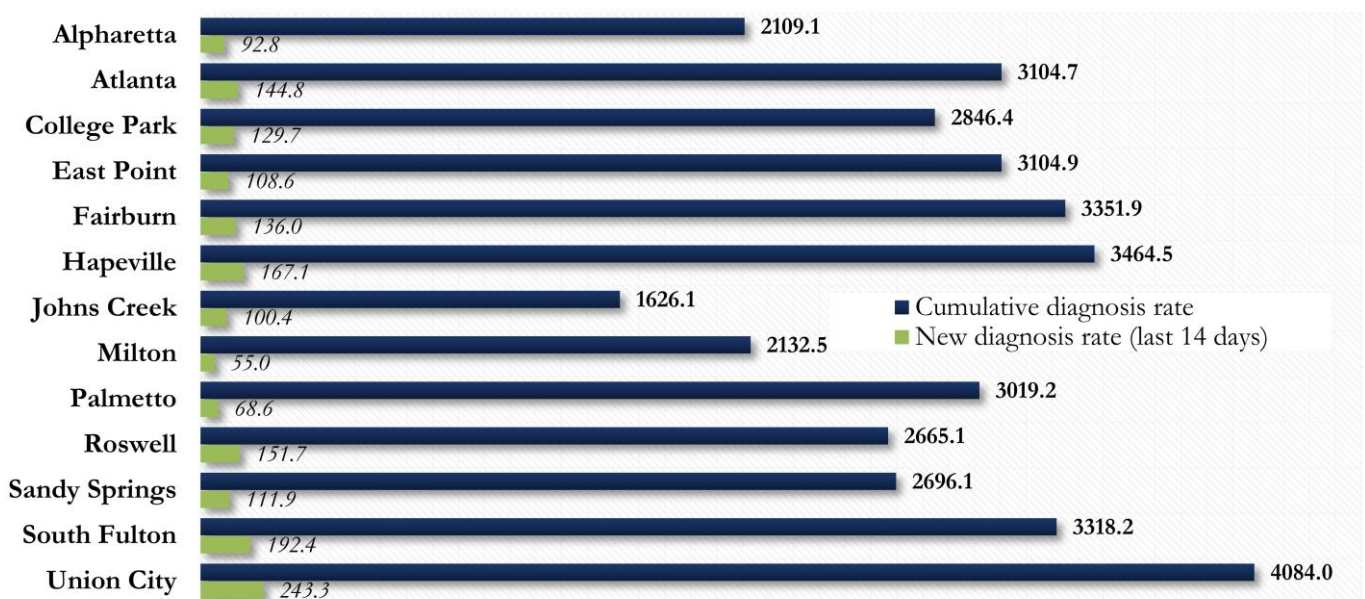
*Delayed a week to account for testing results turnaround time.

COVID-19 CASE COUNTS AND RATES BY CITY

	Prior (10/23/20)	Current Total (10/27/20)			New Cases (Period: 9/23/20 – 10/20/20) ¹			
	Count	Count	%	Cum. Rate ²	1st 14 d. (9/23–10/6)	Last 14 d. (10/7–10/20)	% change ³	Rate ⁴ (Last 14 d).
Alpharetta	1334	1364	4.4%	2109.1	60	60	-	92.8
Atlanta	13346	13697	44.2%	3104.7	430	639	↑ 48.6%	144.8
Chattahoochee Hills	1	1	0.0%	-	0	0	-	-
College Park	390	395	1.3%	2846.4	11	18	↑ 63.6%	129.7
East Point	1065	1086	3.5%	3104.9	28	38	↑ 35.7%	108.6
Fairburn	486	493	1.6%	3351.9	16	20	↑ 25.0%	136.0
Hapeville	220	228	0.7%	3464.5	<10	11	↑ 83.3%	167.1
Johns Creek	1308	1360	4.4%	1626.1	57	84	↑ 47.4%	100.4
Milton	797	814	2.6%	2132.5	45	21	↓ 53.3%	55.0
Mountain Park	7	7	0.0%	1120.0	0	0	-	-
Palmetto	131	132	0.4%	3019.2	12	<10	↓ 75.0%	68.6
Roswell	2457	2512	8.1%	2665.1	98	143	↑ 45.9%	151.7
Sandy Springs	2755	2842	9.2%	2696.1	139	118	↓ 15.1%	111.9
South Fulton	3082	3156	10.2%	3318.2	101	183	↑ 81.2%	192.4
Union City	838	856	2.8%	4084.0	23	51	↑ 121.7%	243.3
Unknown	2806	2080	6.7%	-	30	57	-	-

¹**New cases:** Cases diagnosed in most recent 28 days (based on reported dates of positive sample collection). To allow for lag in reporting results of new diagnoses from samples collected in the most recent week, data used for incident diagnoses analyses were moved back by one week. ²**Cumulative diagnosis rate:** Population estimates from US Census Bureau used to calculate cumulative diagnoses rate. All rates shown are per 100,000 persons. ³**% change:** These reflect the percentage increase or decrease in new diagnoses between the 14 days preceding the most recent 7 days and the 14 days preceding that. ⁴**(Incidence) Rate:** Rate of new diagnoses in the last 14 day period preceding the immediate past week. ****Data cleaning** (either during case interviews or address geo-coding) may lead to reassignment of few cases from one territory to another based on their corrected addresses. These may appear as “decreases” when compared to the previous day’s count. These do not reflect errors in the data collection or analysis process but only reflect the minor day-to-day fluctuations in case counts that arise in an evolving public health database like COVID’s. **Note:** All data reported are preliminary and subject to change.

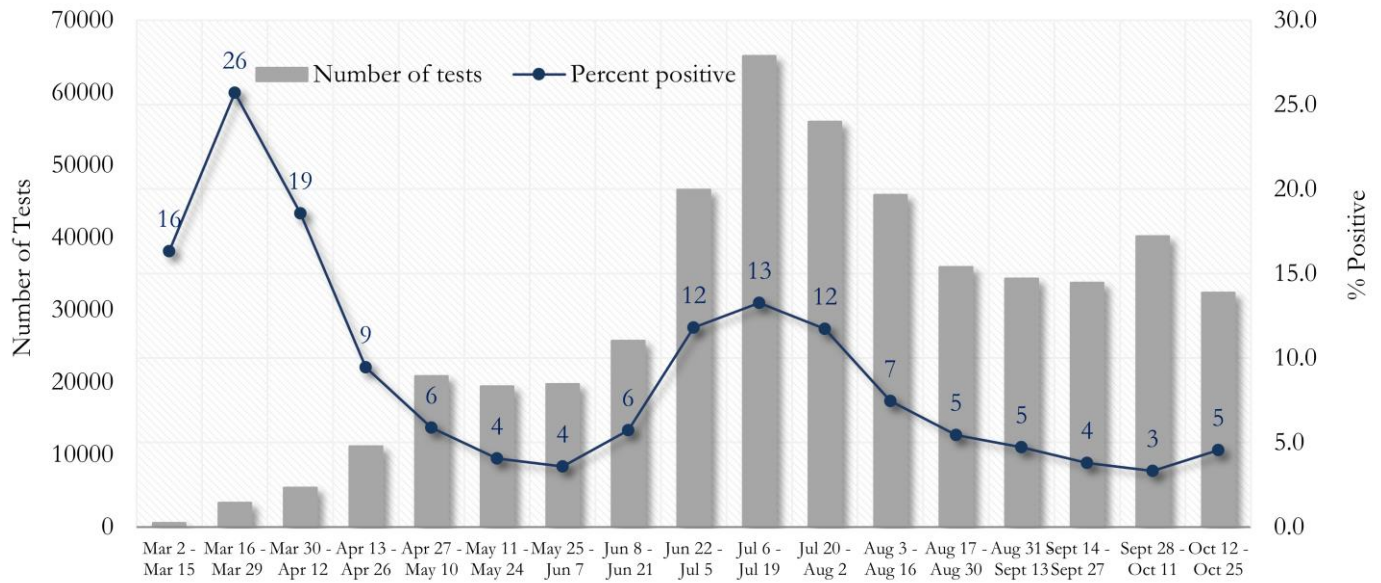
Fig. 2. Incident & Cumulative Diagnoses Rates for COVID-19 by City



*Rates shown are per 100,000 persons | **Note:** Mass testing in specific locations (e.g. long term care facilities) may cause sharp increases in the cumulative rate of COVID-19 diagnosis in those territories. All data shown are preliminary and are subject to change as testing results get updated.

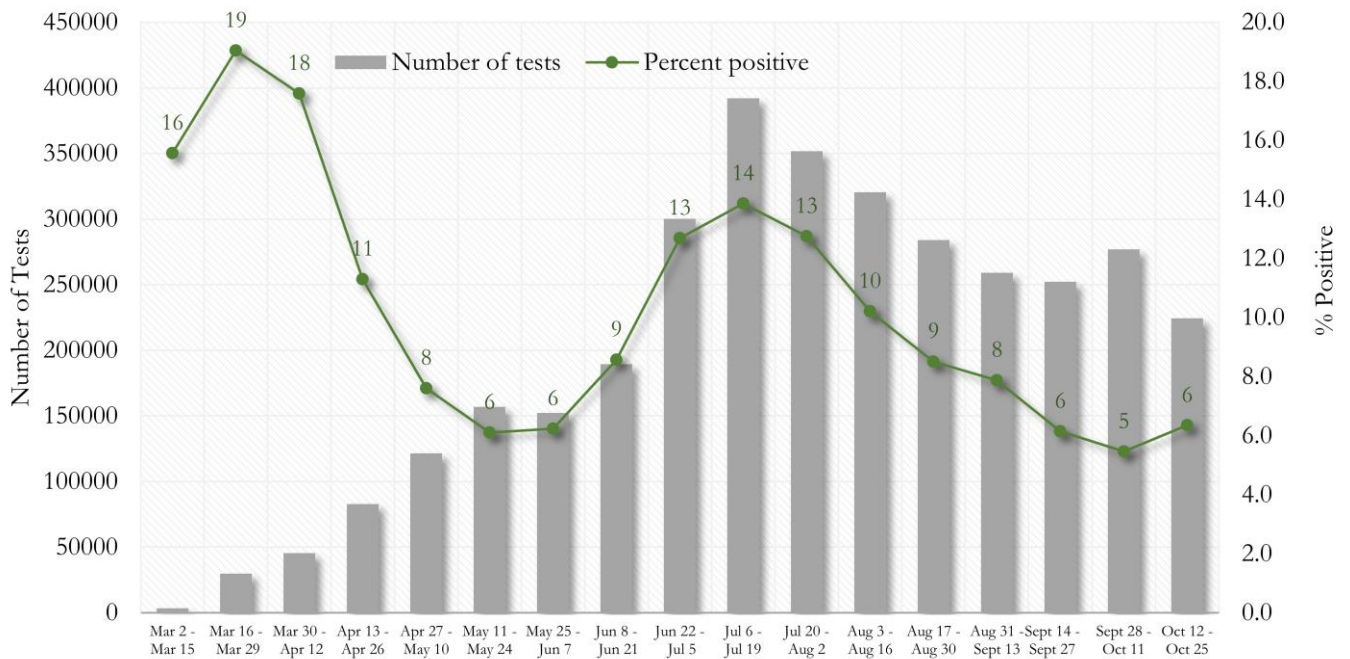
COVID-19 TESTING AND POSITIVITY IN FULTON COUNTY AND GEORGIA

Fig. 3. Trends in Positive COVID-19 Tests in Fulton County by 14-day Periods



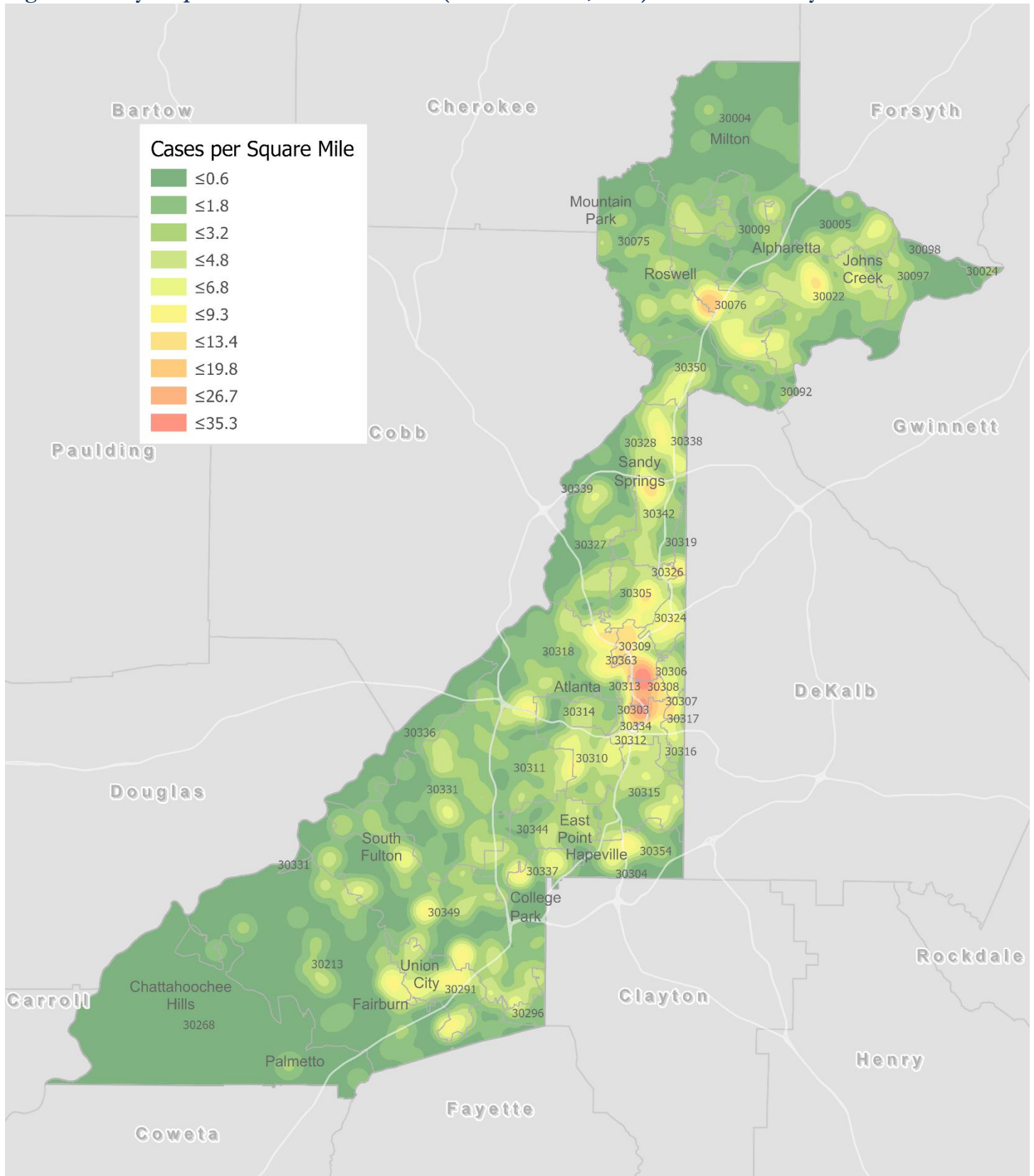
*Data on Polymerase Chain Reaction (PCR) tests only included.

Fig. 4. Trends in Positive COVID-19 Tests in Georgia by 14-day Periods



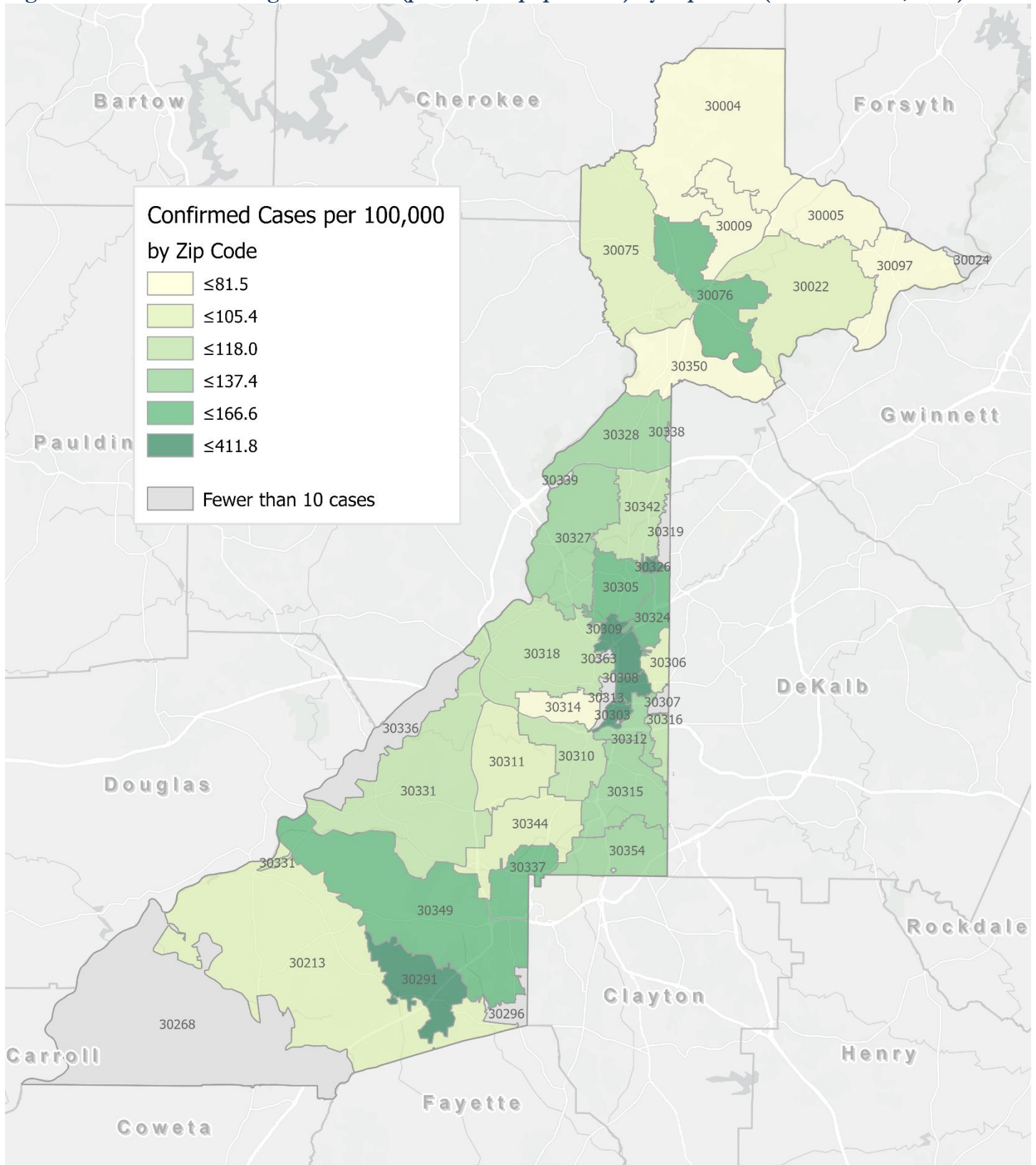
*Data on Polymerase Chain Reaction (PCR) tests only included.

Fig. 5. Density Map – New COVID-19 Cases (Oct 7 – Oct 20, 2020) in Fulton County



New COVID-19 cases: Cases diagnosed in most recent 14 days (based on reported dates of positive sample collection). To allow for lag in reporting results of positive cases from samples collected in the immediate past 7 days, data used for incident diagnoses analyses are moved back by one week. Map reflects new COVID-19 cases diagnosed between Oct 7th and Oct 20th, 2020 across Fulton County, excluding LTCF cases.

Fig. 6. New COVID-19 Diagnoses Rates (per 100,000 population) by Zip Code (Oct 7– Oct 20, 2020)



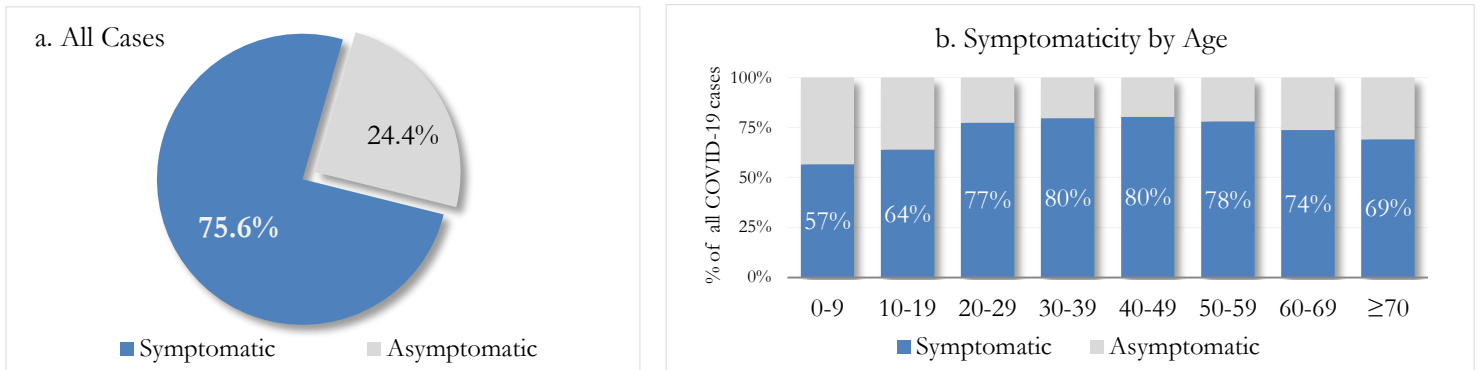
*Rates shown are per 100,000 populations.

New COVID-19 cases: Cases diagnosed in most recent 14 days (based on reported dates of positive sample collection). To allow for lag in reporting results of positive cases from samples collected in the immediate past 7 days, data used for incident diagnoses analyses are moved back by one week. Data used excludes outbreak-related cases at long-term care facilities and map shown reflects only the new non-LTCF cases diagnosed between the dates shown in map title. See page 17 for zip code break down table.

REPORTING SYMPTOMS AMONG PERSONS WITH COVID-19 IN FULTON

People with COVID-19 have reported a wide range of symptoms ranging from mild symptoms to severe illness. Symptoms may appear 2-14 days after exposure to the virus. Symptoms reported include: cough, shortness of breath/difficulty breathing, fever, chills, muscle pain, headache, sore throat, congestion, nausea or vomiting, diarrhea, or new loss of taste or smell – Centers for Disease Control and Prevention (CDC)
<https://www.cdc.gov/coronavirus/2019-ncov/symptoms-testing/symptoms.html>

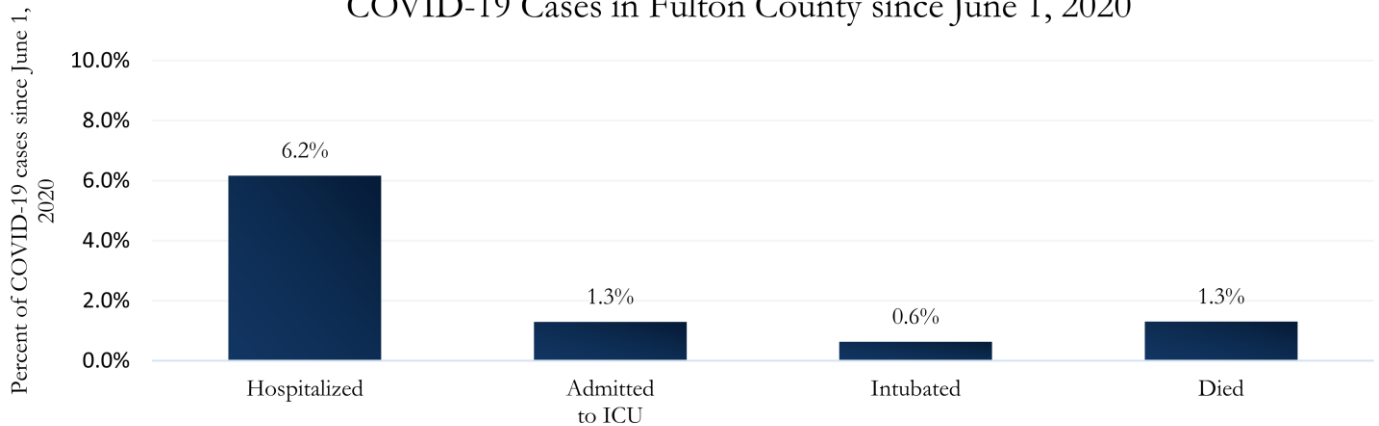
Fig. 7a & b. Total Proportion Reporting Symptoms in Fulton County



COVID-19 cases who have been case interviewed or had medical charts reviewed as of 10/27/20 only. n = 20,632

COVID-19 HOSPITALIZATIONS, ICU ADMISSIONS AND DEATHS IN FULTON

Fig. 8. Hospitalizations, ICU Admissions, Intubations, and Deaths among COVID-19 Cases in Fulton County since June 1, 2020



DEMOGRAPHIC DISTRIBUTIONS – COVID-19 CASES AND DEATHS

A. Distribution of COVID-19 cases by gender, age, and race in Fulton County by Fulton Region

	North Fulton Cities ¹ Count (%)	Atlanta Count (%)	South Fulton Cities ² Count (%)	Unknown City Count (%)	All Fulton Count (%)
Total COVID-19 cases	8899	13697	6347	2080	31023
Gender: Female	4537 (51.0%)	6658 (48.6%)	3541 (55.8%)	1006 (48.4%)	15742 (50.7%)
Male	4198 (47.2%)	6590 (48.1%)	2663 (42.0%)	1002 (48.2%)	14453 (46.6%)
Unknown*	164 (1.8%)	449 (3.3%)	143 (2.3%)	72 (3.5%)	828 (2.7%)
Age: 0-9	302 (3.4%)	257 (1.9%)	207 (3.3%)	52 (2.5%)	818 (2.6%)
10-19	1313 (14.8%)	1041 (7.6%)	452 (7.1%)	140 (6.7%)	2946 (9.5%)
20-29	1950 (21.9%)	4120 (30.1%)	1230 (19.4%)	550 (26.4%)	7850 (25.3%)
30-39	1376 (15.5%)	2982 (21.8%)	1321 (20.8%)	460 (22.1%)	6139 (19.8%)
40-49	1386 (15.6%)	1771 (12.9%)	1156 (18.2%)	316 (15.2%)	4629 (14.9%)
50-59	1290 (14.5%)	1437 (10.5%)	857 (13.5%)	256 (12.3%)	3840 (12.4%)
60-69	670 (7.5%)	954 (7.0%)	579 (9.1%)	163 (7.8%)	2366 (7.6%)
≥70	605 (6.8%)	1088 (7.9%)	542 (8.5%)	135 (6.5%)	2370 (7.6%)
Unknown*	<10	47 (0.3%)	<10	<10	65 (0.2%)
Race: Asian, NH	324 (3.6%)	235 (1.7%)	24 (0.4%)	31 (1.5%)	614 (2.0%)
Black, NH	978 (11.0%)	5971 (43.6%)	4394 (69.2%)	714 (34.3%)	12057 (38.9%)
White, NH	3705 (41.6%)	3344 (24.4%)	299 (4.7%)	494 (23.8%)	7842 (25.3%)
Hispanic	1716 (19.3%)	889 (6.5%)	526 (8.3%)	203 (9.8%)	3334 (10.7%)
Other, NH	332 (3.7%)	525 (3.8%)	173 (2.7%)	82 (3.9%)	1112 (3.6%)
Unknown*	1844 (20.7%)	2733 (20.0%)	931 (14.7%)	556 (26.7%)	6064 (19.5%)

*Unknown includes cases not yet interviewed.

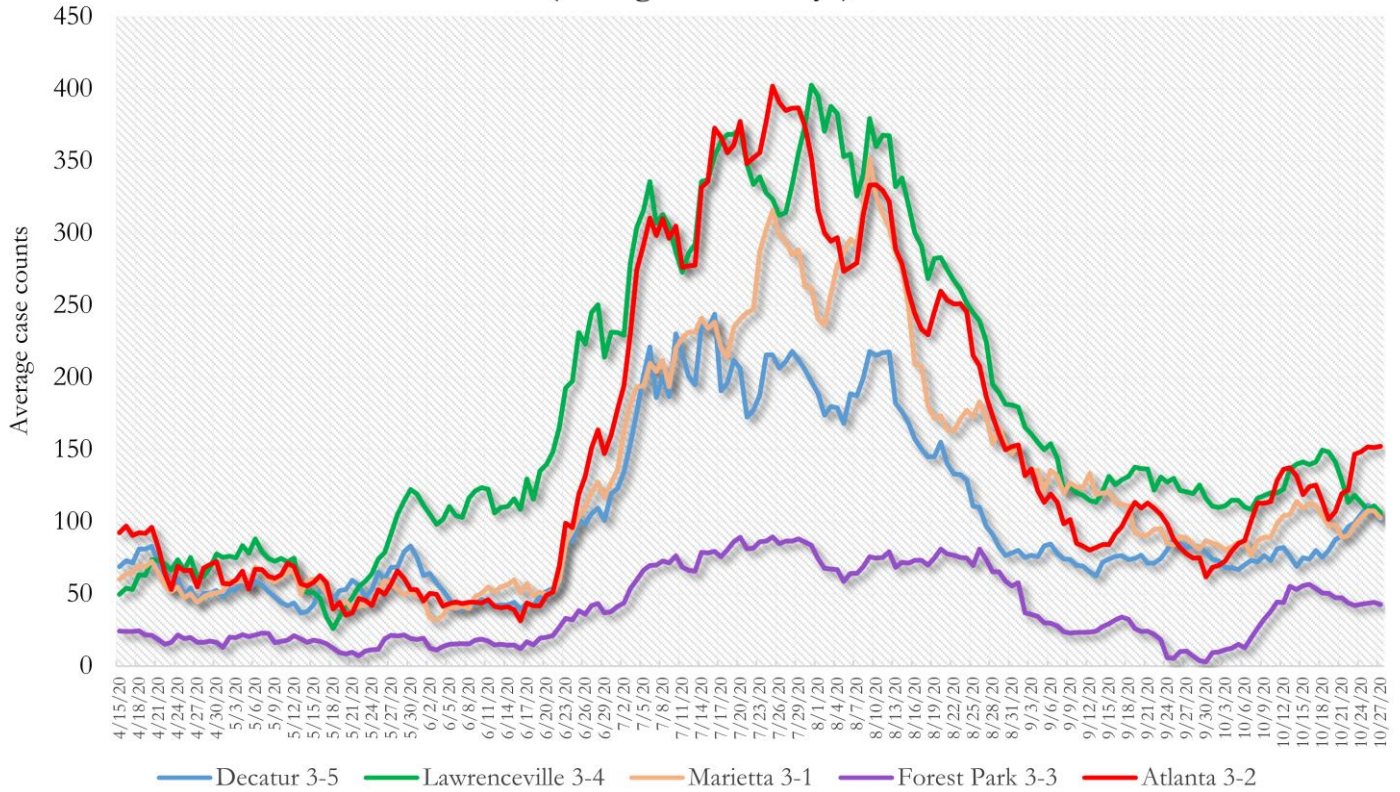
B. Distribution of COVID-19 deaths by gender, age, and race in Fulton County by Fulton Region

	North Fulton Cities ¹ Count (%)	Atlanta Count (%)	South Fulton Cities ² Count (%)	Unknown City Count (%)	All Fulton Count (%)
Total COVID-19 deaths	136	298	166	19	619
Gender: Female	61 (44.9%)	134 (45.0%)	86 (51.8%)	<10	290 (46.8%)
Male	75 (55.1%)	164 (55.0%)	80 (48.2%)	10 (52.6%)	329 (53.2%)
Unknown	0	0	0	0	0
Age: ≤ 29	<10	<10	<10	0	<10
30-39	<10	<10	<10	<10	13 (2.1%)
40-49	<10	<10	10 (6.0%)	<10	26 (4.2%)
50-59	<10	24 (8.1%)	18 (10.8%)	<10	52 (8.4%)
60-69	16 (11.8%)	58 (19.5%)	37 (22.3%)	<10	112 (18.1%)
≥70	106 (77.9%)	195 (65.4%)	97 (58.4%)	12 (63.2%)	410 (66.2%)
Unknown	0	<10	0	0	<10
Race: Asian, NH	<10	<10	<10	0	10 (1.6%)
Black, NH	23 (16.9%)	252 (84.6%)	137 (82.5%)	<10	421 (68.0%)
White, NH	95 (69.9%)	36 (12.1%)	20 (12.0%)	<10	160 (25.8%)
Hispanic	13 (9.6%)	<10	<10	<10	24 (3.9%)
Other, NH	0	<10	<10	0	<10
Unknown	<10	<10	0	0	<10

¹Includes all Fulton County cities north of Atlanta metro (Alpharetta, Milton, Johns Creek, Roswell, Sandy Springs, Mountain Park) ²Includes all cities south of Atlanta (College Park, Chattahoochee Hills, East Point, Hapeville, Palmetto, South Fulton, Fairburn, Union City). **Note:** All data reported are preliminary and subject to change. This table includes data on all confirmed COVID-19 deaths and is subject to change as GA DPH completes cause of death confirmation processes.

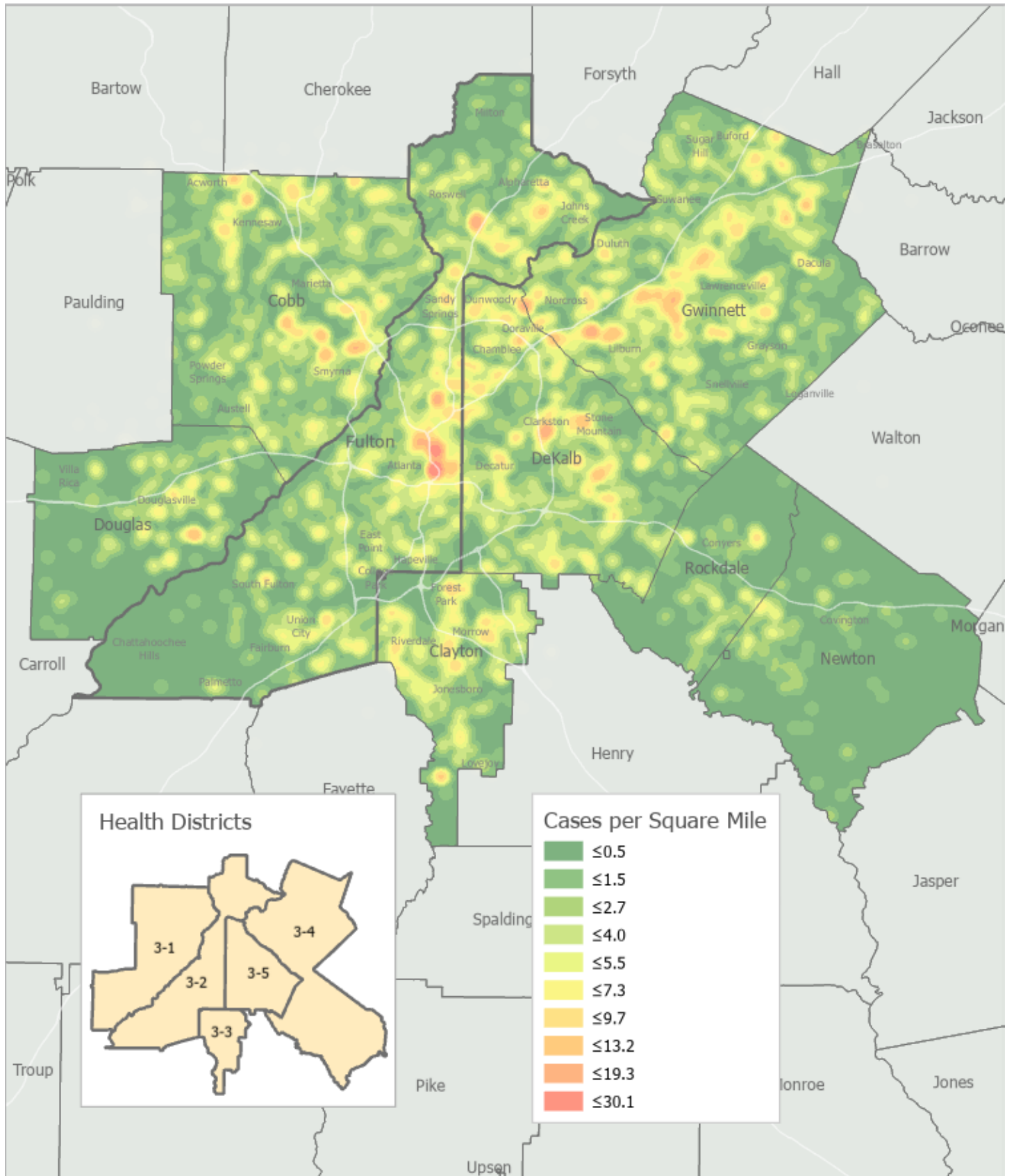
COVID-19 CASE TRENDS IN FULTON AND SURROUNDING DISTRICTS

**Fig. 9. Daily Case Counts for Atlanta Metro Districts
(Averaged over 7 days)**



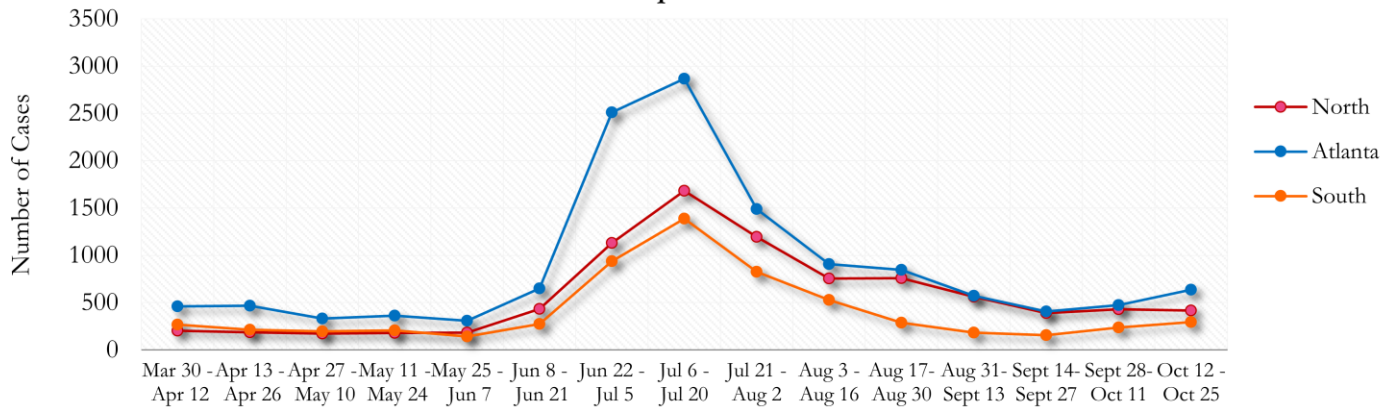
*Graph shows the average number of cases calculated from the daily cumulative case counts in the metro Atlanta districts. Increases in daily cumulative case counts may include cases diagnosed earlier during the pandemic but were only recently reported to the state as cases diagnosed belonging to these districts.

Fig. 10. COVID-19 Cases in Fulton County and Surrounding Districts (Oct 7 – Oct 20, 2020)



TRENDS IN COVID-19 CASES AMONG DEMOGRAPHIC GROUPS (14 DAY PERIODS)

Fig. 11. Trends in Geographic distribution of COVID-19 Cases in Fulton County by 14-day periods



In the past two weeks, the city of Atlanta accounted for the majority of new cases.

*North -Includes all Fulton cities north of Atlanta (Alpharetta, Milton, Johns Creek, Roswell, Sandy Springs, Mountain Park)

*South - Includes all Fulton cities south of Atlanta (College Park, Chattahoochee Hills, East Point, Hapeville, Palmetto, South Fulton, Fairburn, and Union City)

Fig. 12. Trends in Racial Distribution of COVID-19 Cases in Fulton County by 14-day periods

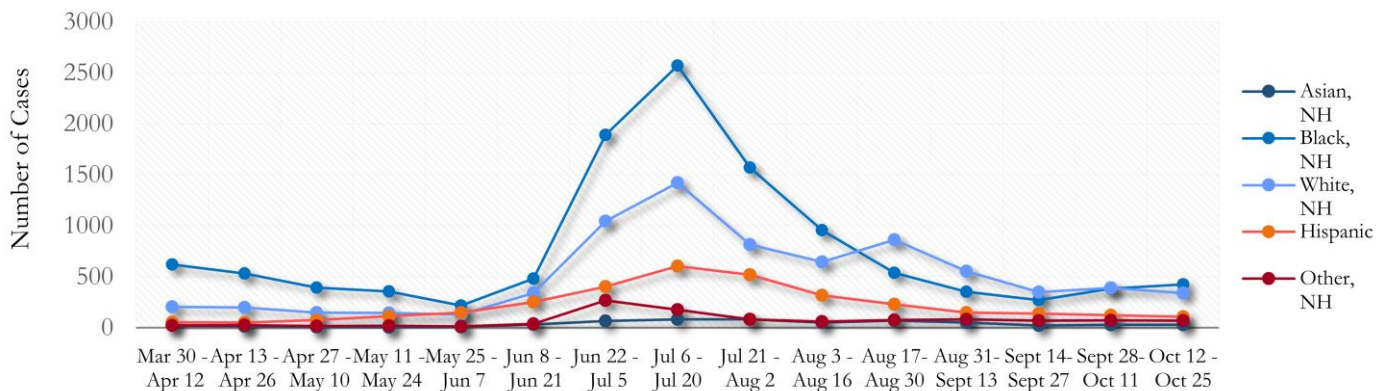
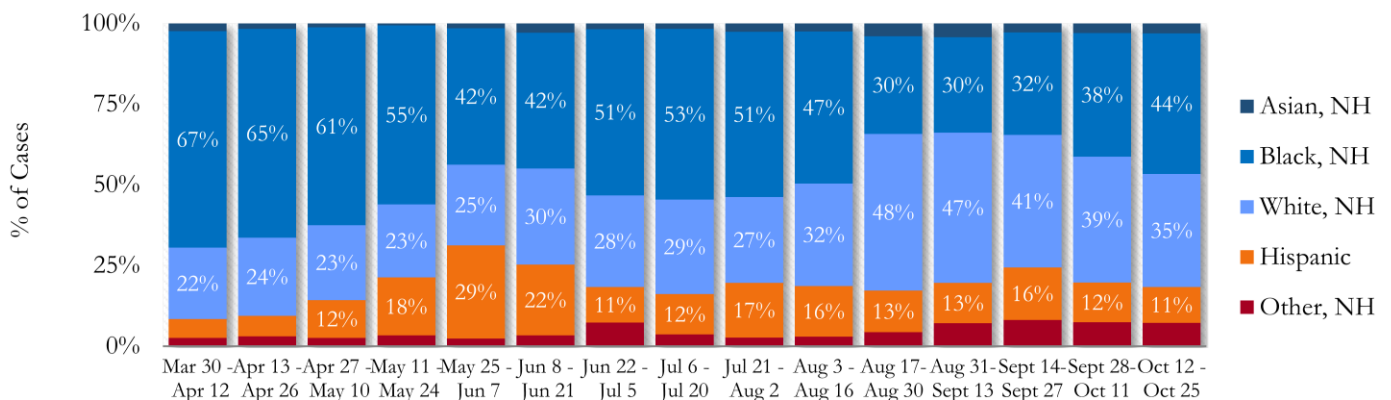


Fig. 13. Racial Distribution of COVID-19 Cases in Fulton County by 14-day periods



About 20% of COVID cases are missing data on patient race and ethnicity. The majority of new cases in the past two weeks were Black, NH (44%) and White, NH (35%).

Fig. 14. Trends in Gender Distribution of COVID-19 Cases in Fulton County by 14-day periods

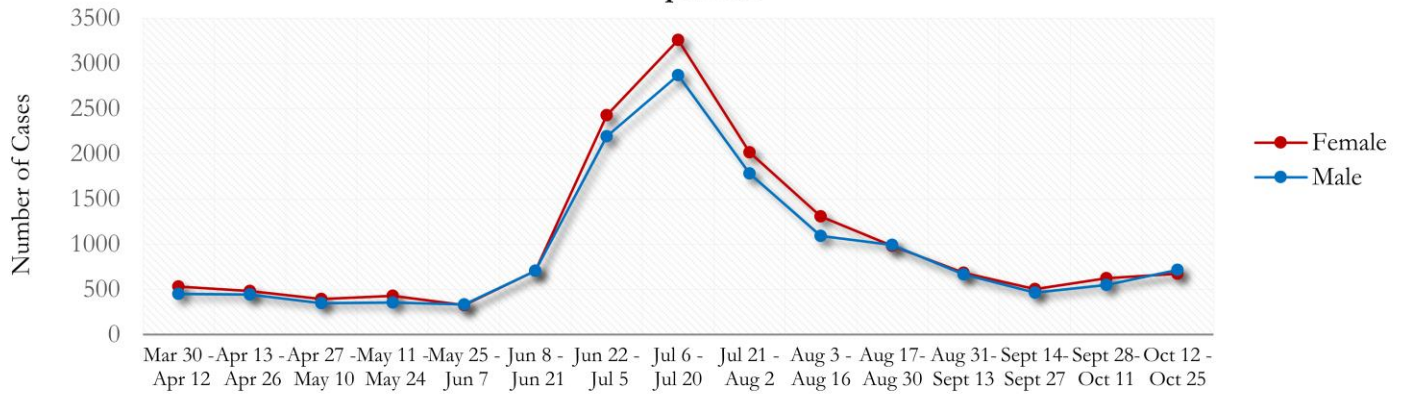
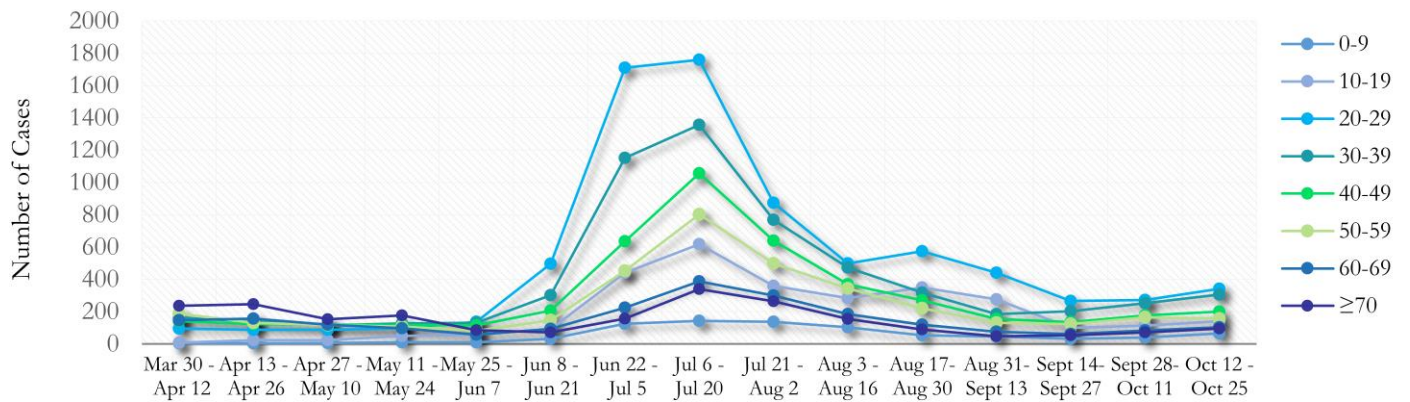
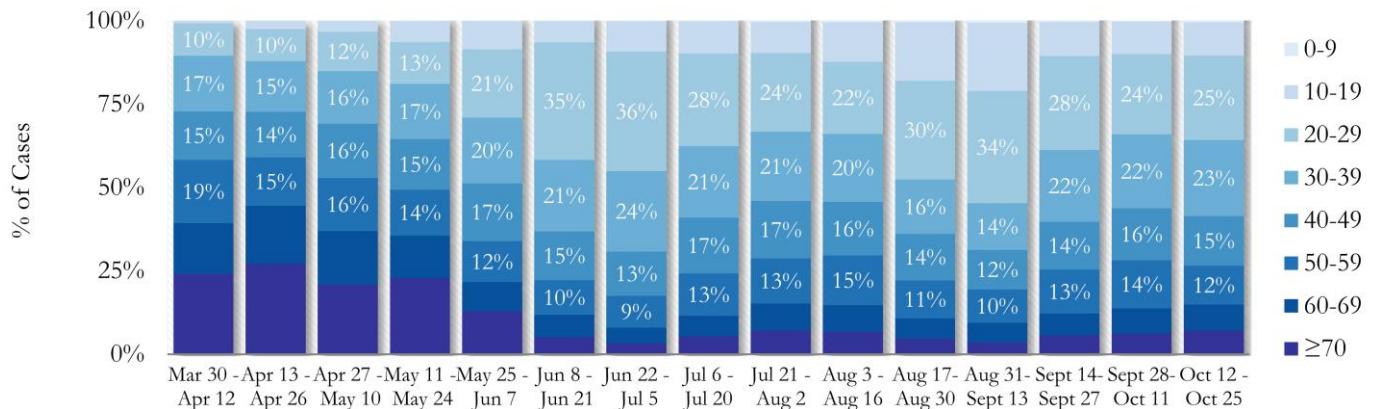


Fig. 15. Trends in Age Distribution of COVID-19 Cases in Fulton County by 14-day periods



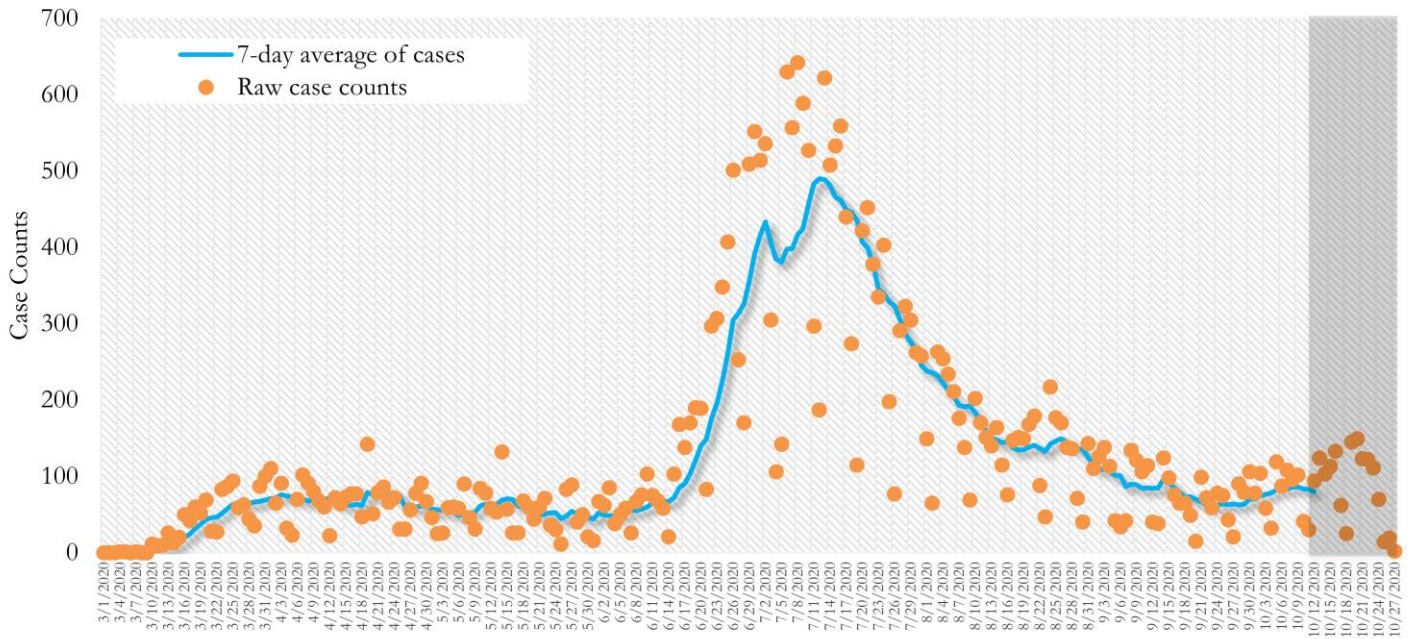
Earlier (March-May 2020) large proportions of reported cases were among persons aged 60 and older. In the most recent two weeks, 20-29 year olds accounted for the highest number of new cases among all age groups, followed by 30-39 year olds.

Fig. 16. Age Distribution of COVID-19 Cases in Fulton County by 14-day periods



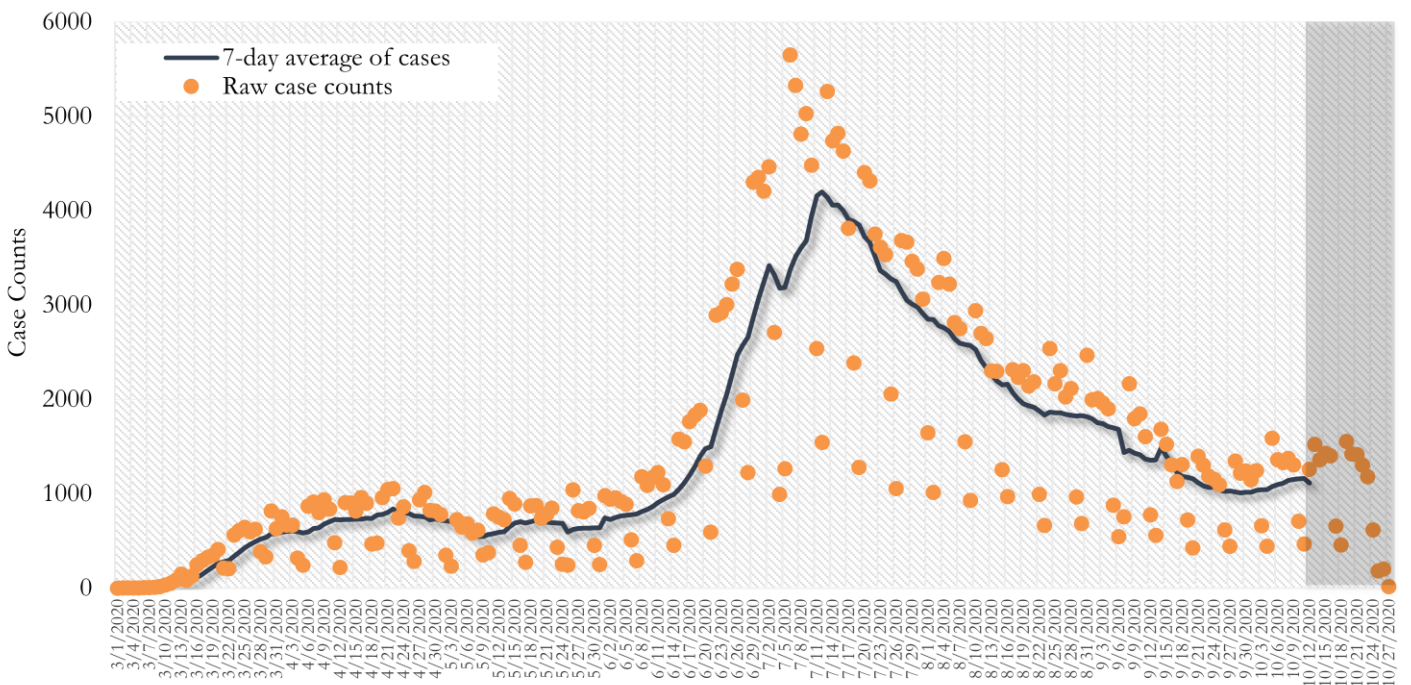
TRENDS IN COVID-19 CASES, HOSPITALIZATIONS AND DEATHS (7-DAY MOVING AVE.)

Fig. 17. New COVID-19 Cases in Fulton County Daily (Averaged over 7 days)



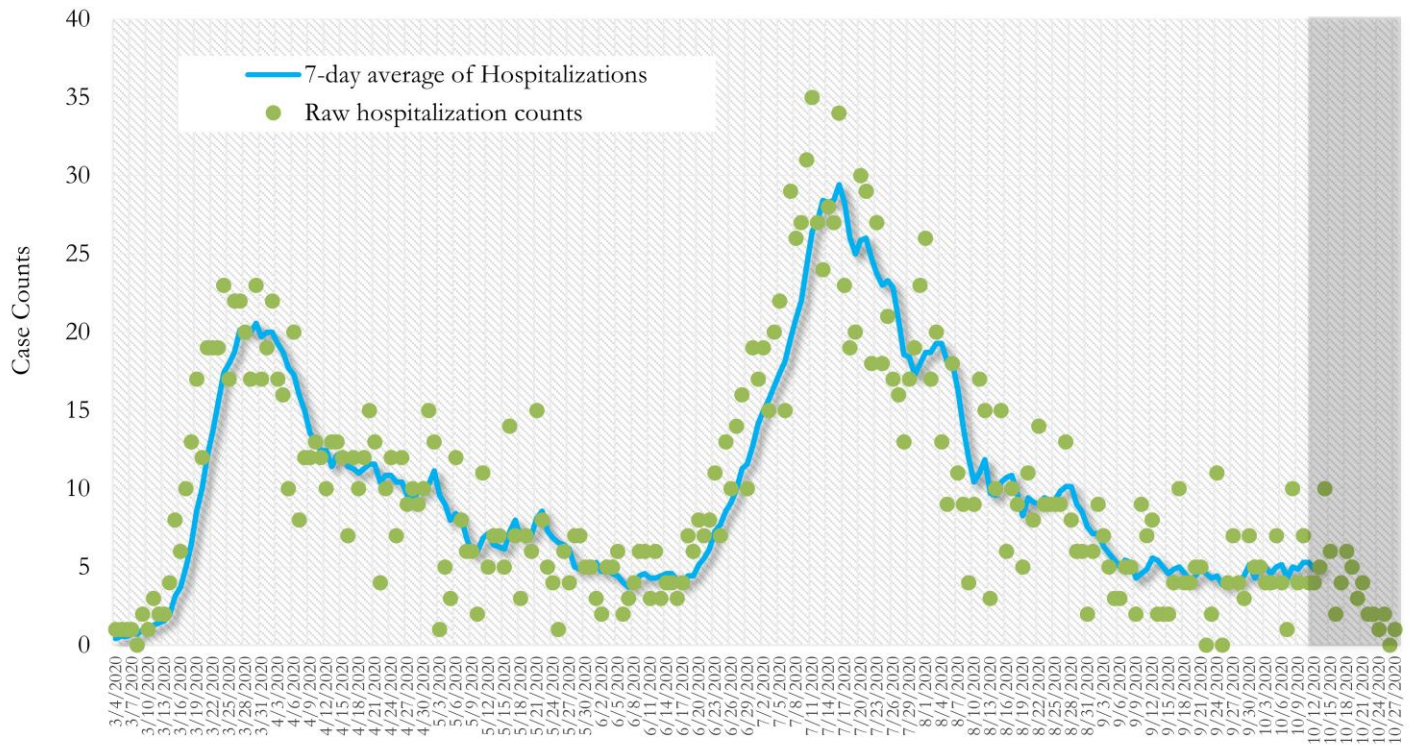
*Date of collection of first positive sample used (report creation date used where sample collection date is missing). Graph above reflects the trend in COVID-19 diagnosis. Due to the high volume of testing in recent weeks, there have been delays in reporting lab results. Thus, the trend is subject to change as more lab results get added to the state surveillance database.

Fig. 18. New COVID-19 Cases in Georgia State Daily (Averaged over 7 days)



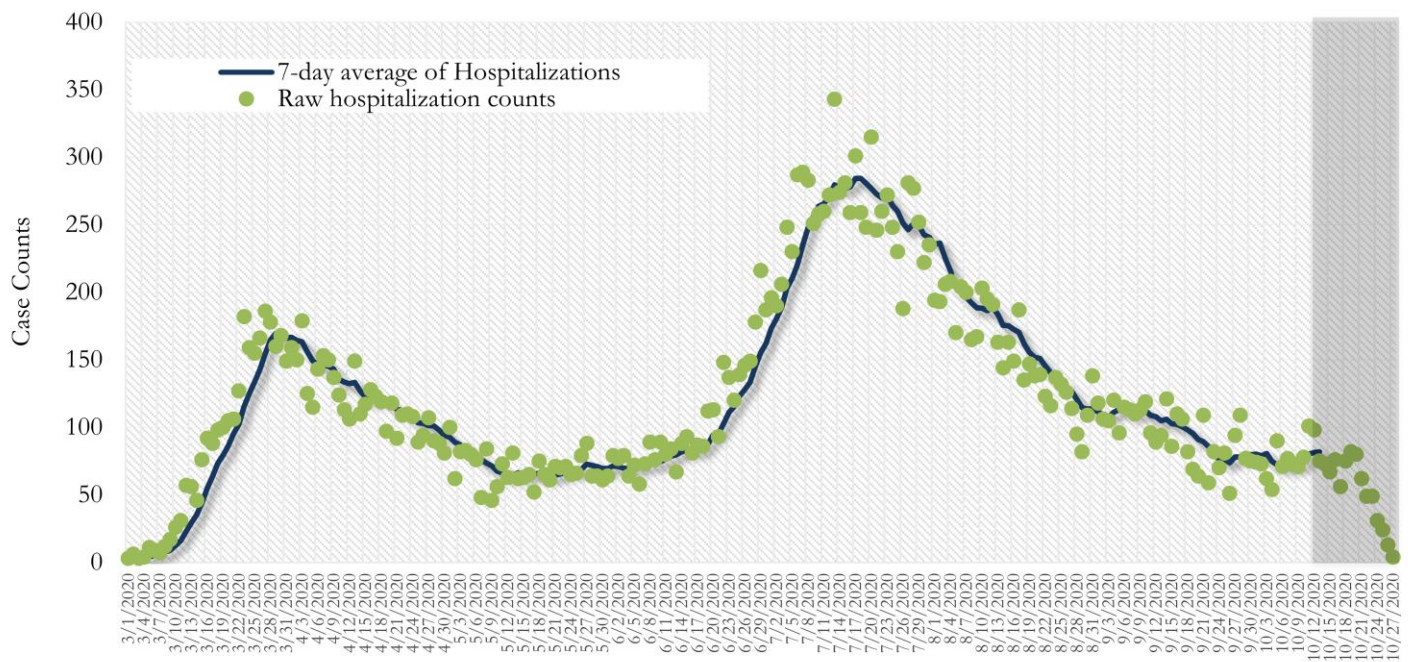
*Date of collection of first positive sample used (report creation date used where sample collection date is missing). Graph above reflects the trend in COVID-19 diagnosis. Due to the high volume of testing in recent weeks, there have been delays in reporting lab results. Thus, the trend is subject to change as more lab results get added to the state surveillance database.

Fig. 19. COVID-19 Hospitalizations in Fulton County Daily (Averaged over 7 days)



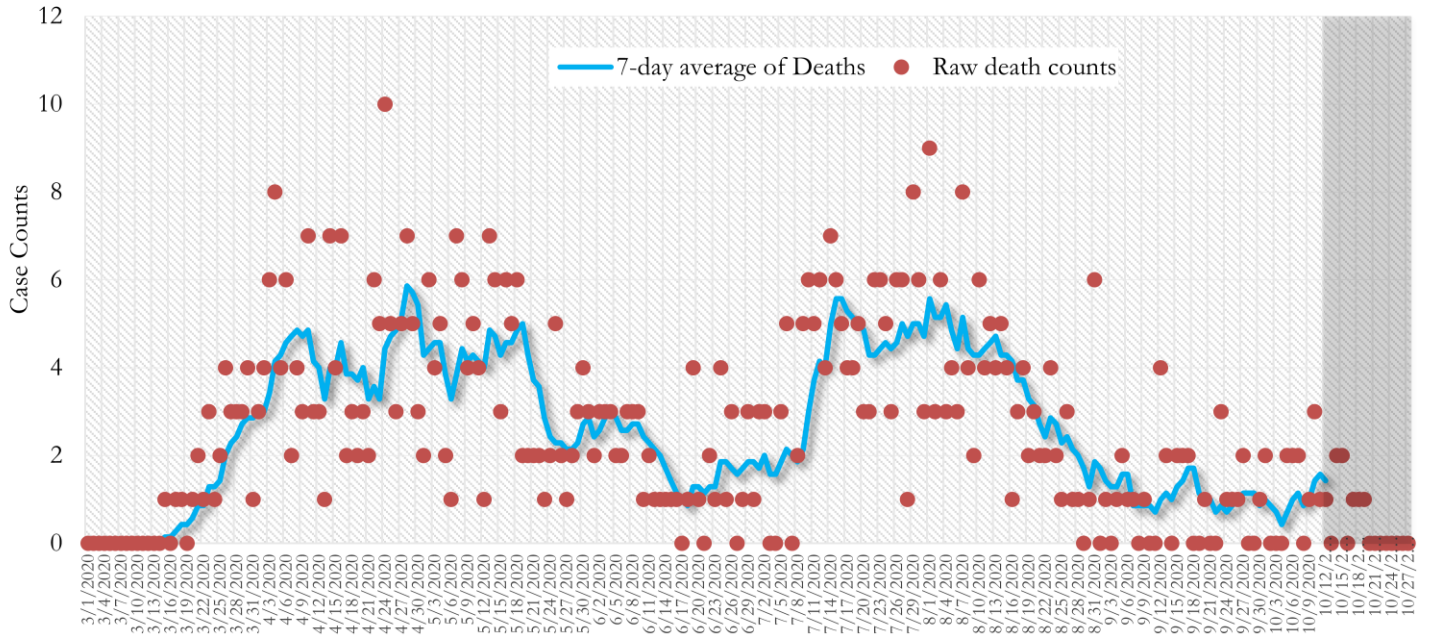
*Reported date of hospital admission used. Graph above reflects the trend in COVID-19 hospitalizations. Due to the high volume of new cases being added daily, there have been delays in reporting hospitalization data. Thus, the trend is likely to change as more hospitalization data is reported in the state surveillance database.

Fig. 20. COVID-19 Hospitalizations in Georgia State Daily (Averaged over 7 days)



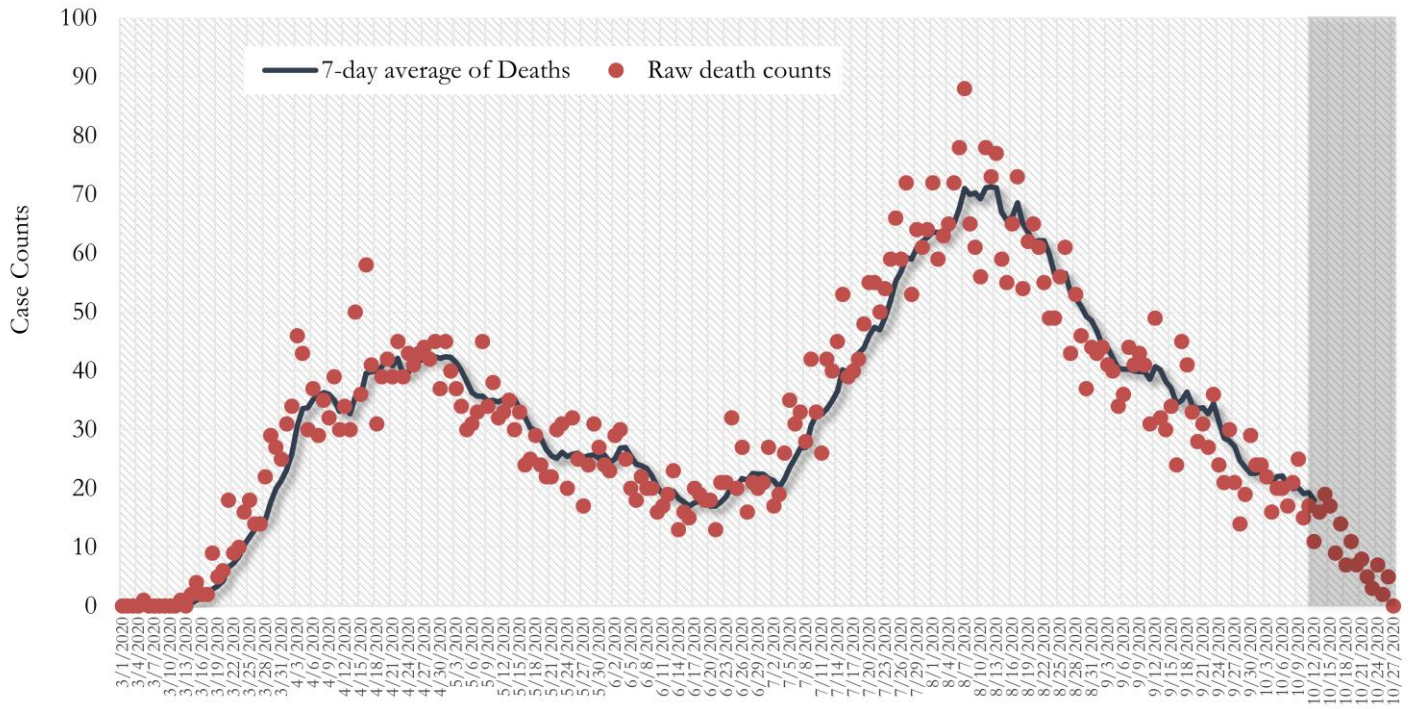
*Reported date of hospital admission used. Graph above reflects the trend in COVID-19 hospitalizations. Due to the high volume of new cases being added daily, there have been delays in reporting hospitalization data. Thus, the trend is likely to change as more hospitalization data is reported in the state surveillance database.

Fig. 21. COVID-19 Deaths in Fulton County Daily (Averaged over 7 days)



* Reported date of death used. Graph above reflects the trend in deaths attributed to COVID-19. The trend is likely to change as more data on deaths among persons with COVID-19 is reported in the state surveillance database.

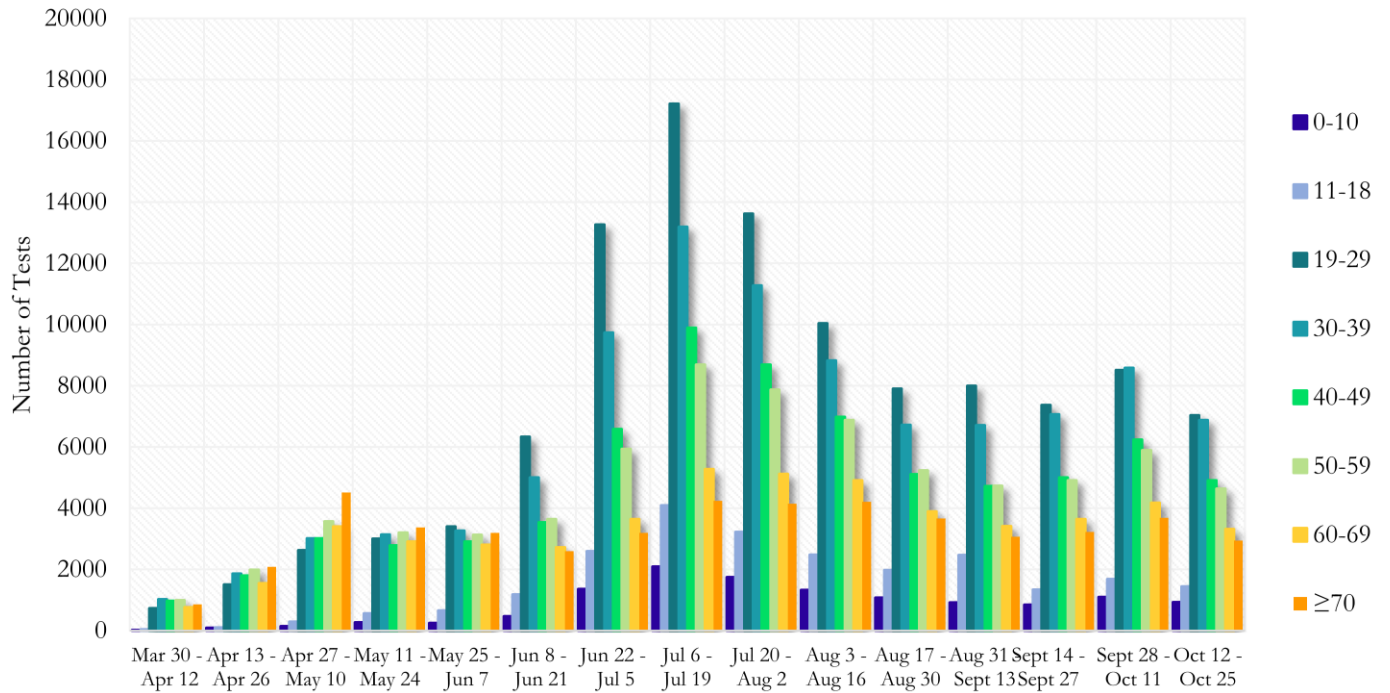
Fig. 22. COVID-19 Deaths in Georgia State Daily (Averaged over 7 days)



* Reported date of death used. Graph above reflects the trend in deaths attributed to COVID-19. The trend is likely to change as more data on deaths among persons with COVID-19 is reported in the state surveillance database.

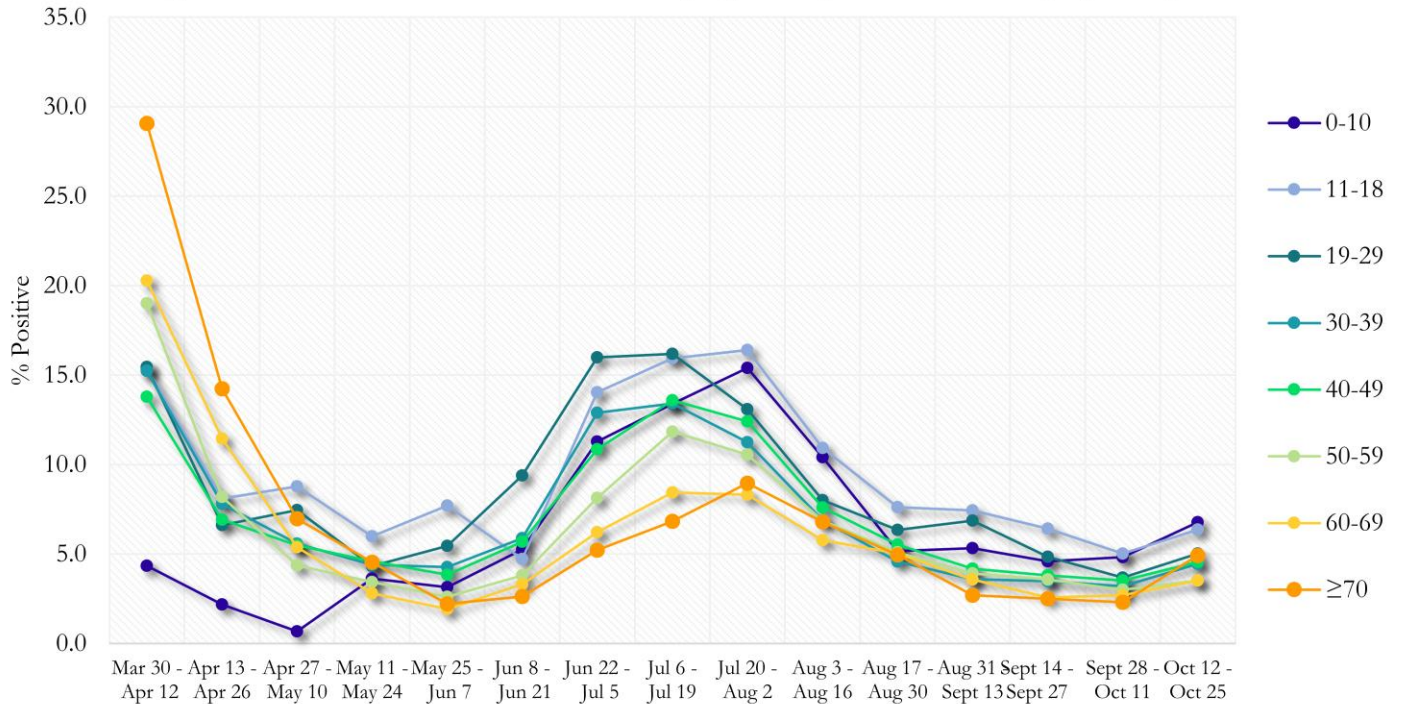
COVID-19 TESTING AND POSITIVITY IN FULTON COUNTY BY AGE AND RACE

Fig. 23. COVID-19 Tests by Age in Fulton County by 14-day Periods



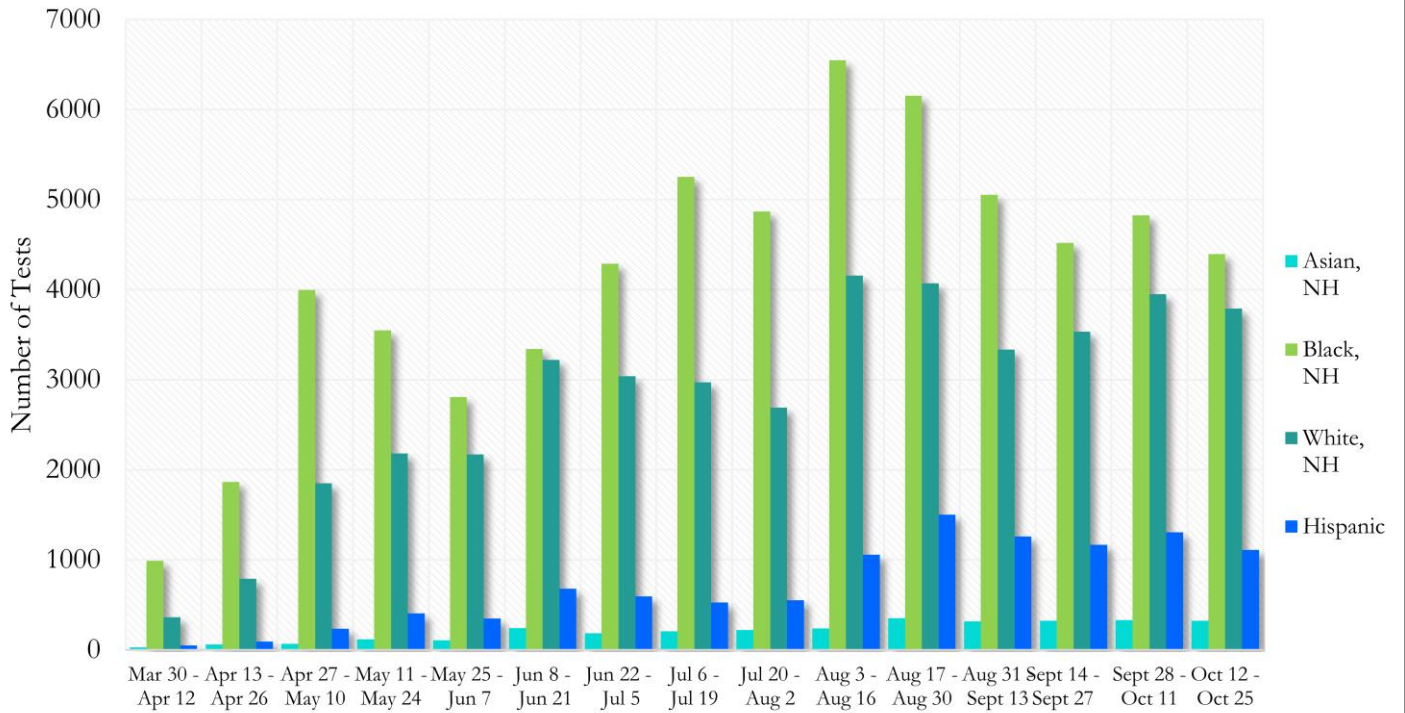
*Data on Polymerase Chain Reaction (PCR) tests only included.

Fig. 24. Percent Positive COVID-19 Tests by Age Group in Fulton County by 14-day Periods



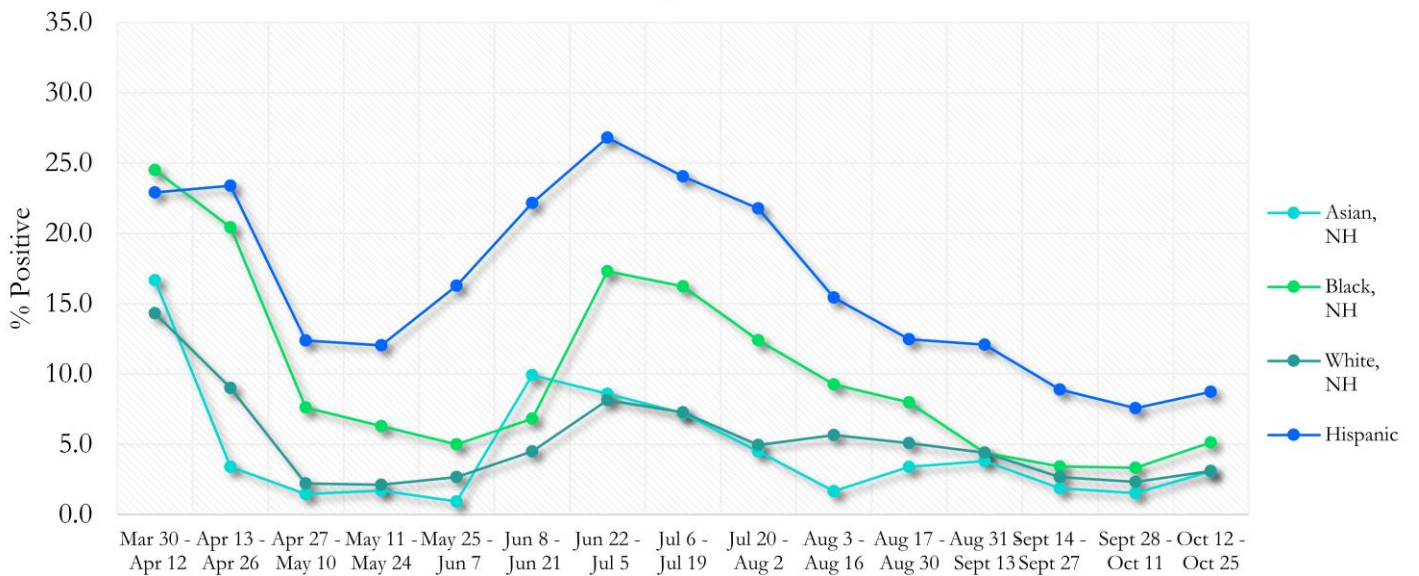
*Data on Polymerase Chain Reaction (PCR) tests only included.

Fig. 25. COVID-19 Tests by Race and Ethnicity in Fulton County by 14-day Periods



*Data on Polymerase Chain Reaction (PCR) tests only included.

Fig. 26. Percent Positive COVID-19 Tests by Race and Ethnicity in Fulton County by 14-day Periods



*Data on Polymerase Chain Reaction (PCR) tests only included.

COVID-19 CASE COUNTS BY ZIP CODE

	Prior (10/23/20)	Current Total (10/27/20)		New Cases (Period: 9/23/20 – 10/20/20) ¹		
	Count	Count	%	1st 14 days (Sept 23– Oct 6)	Last 14 d. (Oct 7 – Oct 20)	% change ²
All Fulton	30270	31023	100%	1057	1447	↑ 36.9%
30004	1013	1033	3.33%	63	32	↓ 49.2%
30005	568	583	1.88%	16	31	↑ 93.8%
30009	502	514	1.66%	21	18	↓ 14.3%
30022	1330	1368	1.05%	60	83	↑ 38.3%
30023	<10	<10	<0.1%	0	0	-
30024	14	15	<0.1%	<10	<10	-
30075	1178	1208	3.89%	50	56	↑ 12.0%
30076	1206	1230	3.96%	48	78	↑ 62.5%
30080	<10	<10	<0.1%	0	0	-
30097	289	305	0.98%	12	15	↑ 25.0%
30098	-	-	-	0	0	-
30135	<10	<10	<0.1%	0	0	-
30138	<10	<10	<0.1%	0	0	-
30139	-	-	-	0	0	-
30213	1171	1197	3.86%	43	58	↑ 34.9%
30268	205	206	0.66%	14	<10	↓ 64.3%
30291	837	856	2.76%	16	58	↑ 262.5%
30296	56	65	0.21%	0	10	↑ 100.0%
30301	12	11	<0.1%	0	<10	-
30303	401	409	1.32%	10	29	↑ 190.0%
30305	856	890	2.87%	31	45	↑ 45.2%
30306	368	377	1.22%	12	14	↑ 16.7%
30307	208	212	0.68%	<10	13	↑ 116.7%
30308	622	647	2.09%	20	42	↑ 110.0%
30309	905	945	3.05%	30	65	↑ 116.7%
30310	800	820	2.64%	20	33	↑ 65.0%
30311	837	855	2.76%	17	35	↑ 105.9%
30312	864	879	2.83%	31	34	↑ 9.7%
30313	322	325	1.05%	<10	<10	-
30314	599	612	1.97%	13	14	↑ 7.7%
30315	934	953	3.07%	21	47	↑ 123.8%
30316	406	415	1.34%	10	13	↑ 30.0%
30318	1872	1914	6.17%	60	72	↑ 20.0%
30319	163	165	0.53%	11	12	↑ 9.1%
30321	10	12	<0.1%	<10	<10	-
30324	978	1009	3.25%	35	42	↑ 20.0%
30326	263	277	0.89%	16	16	-
30327	625	649	2.09%	19	46	↑ 142.1%
30328	902	944	3.04%	52	48	↓ 7.7%
30331	1875	1898	6.12%	70	72	↑ 2.9%
30334	12	13	<0.1%	0	<10	-
30336	87	91	0.29%	<10	<10	-
30337	369	375	1.21%	11	17	↑ 54.5%
30338	105	106	0.34%	<10	<10	-
30339	262	265	0.85%	<10	<10	-
30340	32	31	<0.1%	0	<10	-
30341	30	31	<0.1%	0	0	-
30342	1285	1316	4.24%	53	44	↓ 17.0%
30344	975	991	3.19%	26	32	↑ 23.1%
30345	26	26	<0.1%	0	0	-

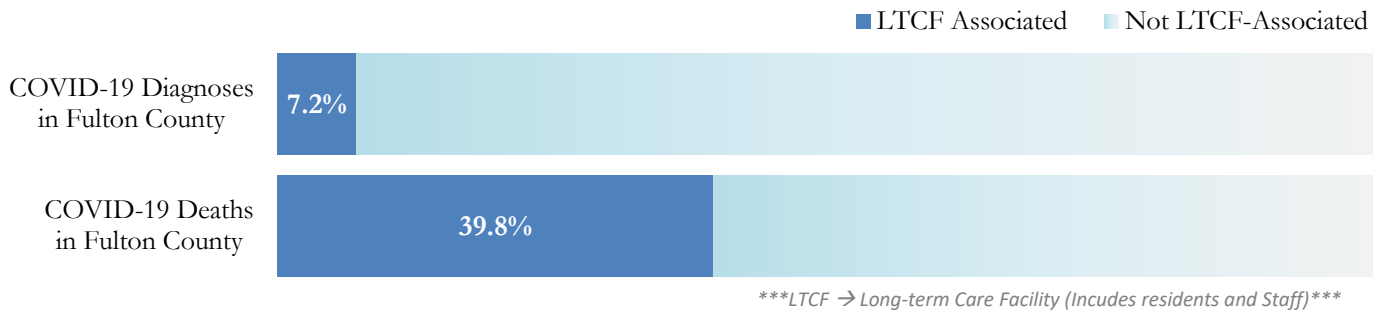
30349	1947	1987	6.40%	54	112	↑ 107.4%
30350	691	709	2.29%	40	31	↓ 22.5%
30354	458	473	1.52%	12	22	↑ 83.3%
30358	<10	<10	<0.1%	0	0	-
30363	74	78	0.25%	<10	10	↑ 150.0%
30374	31	31	<0.1%	0	0	-
30606	<10	<10	<0.1%	0	0	-
31131	<10	<10	<0.1%	0	0	-
31150	<10	<10	<0.1%	0	0	-
Unknown	1425	679	2.19%	18	22	-

¹**New cases:** Cases diagnosed in most recent 28 days (based on reported dates of positive sample collection). To allow for lag in reporting results of new diagnoses from samples collected in the most recent week, data used for incident diagnoses analyses were moved back by one week. ²**Percent change:** These reflect the percentage increase or decrease of new diagnoses between the 14 days preceding the past 7 days and the 14 days preceding that. Changes in ZIP codes with less than 10 cases in both 2 week intervals are not reported**Data cleaning (either during case interviews or address geo-coding) may lead to reassignment of few cases from one territory to another based on their corrected addresses. These may appear as “decreases” when compared to the previous day’s count. These do not reflect errors in the data collection or analysis process but only reflect the minor day-to-day fluctuations in case counts that arise in an evolving public health database like COVID’s. **Note:** Sharp increases in territorial COVID case counts often reflect new cases diagnosed at long term care facilities located in those territories during facility-wide /mass screening events **All data reported are preliminary and subject to change.**

COVID-19 IN LONG-TERM CARE FACILITIES IN FULTON COUNTY

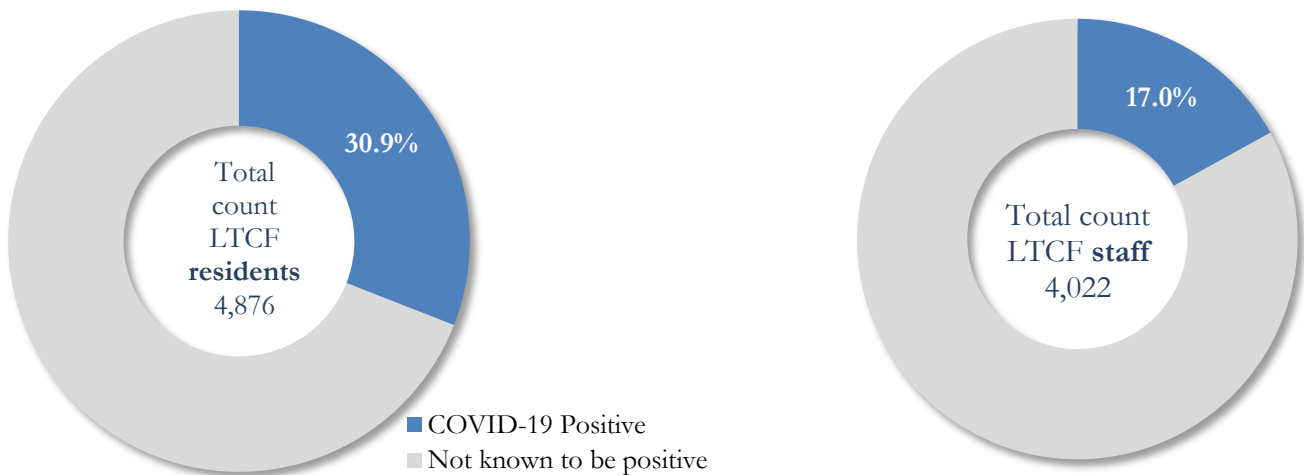
Older persons (aged 65 years and older) and persons who live in nursing homes or other long-term care facilities seem to be at higher risk for developing more serious complications from COVID-19. Extra precautions are recommended for individuals within this risk groups – Centers for Disease Control and Prevention (CDC 2020) <https://www.cdc.gov/coronavirus/2019-ncov/need-extra-precautions/people-at-higher-risk.html>

Fig. 27. COVID-19 Diagnoses and Deaths in Fulton County Associated with Long-Term Care Facilities



COVID-19 POSITIVITY:

Fig. 28. COVID-19 Positivity at 64 reporting Long-Term Care Facilities (LTCF) in Fulton County



COVID-19 Cases, Hospitalizations, and Deaths among 64 reporting Long-Term Care Facilities in Fulton County

	LTCF Residents (n=4,876)			LTCF Staff (n=4,022)		
	Cases	Hospitalizations	Deaths	Cases	Hospitalizations	Deaths
Average (count per fac.) ¹	23	5	4	11	1	<0.1
Median (count per fac.) ¹	10	2	1	8	0	0
Lowest counts	0	0	0	0	0	0
Highest counts	138	48	30	66	8	2
Total Count	1508 (30.9%)^a	310 (20.6%)^b	239 (15.8%)^b	683 (17.0%)^a	32 (4.7%)^b	5 (<1.0%)^b

^a Percentage shown reflects proportion of total residents/staff tested who were positive (i.e. COVID-19 Positivity). | ^b Percentages shown are proportions of persons residents/staff diagnosed with COVID-19 who were hospitalized or died after diagnoses.