



NORTH CAROLINA

SUMMARY

- As we continue to work with each of you on data quality and data reporting, we will continue to add relevant data to our joint understanding. We greatly appreciate the feedback and we use this to continually improve. This week, we have included the data reported to HHS from your hospitals regarding admissions and next, we will include PPE data reported.
- North Carolina is in the red zone for cases, indicating 101 or more new cases per 100,000 population last week, with the 23rd highest rate in the country. North Carolina is in the yellow zone for test positivity, indicating a rate between 5.0% and 7.9%, with the 25th highest rate in the country.
- North Carolina has seen an increase in new cases and stability in test positivity over the last week.
- The following three counties had the highest number of new cases over the last 3 weeks: 1. Mecklenburg County, 2. Wake County, and 3. Guilford County. These counties represent 18.4% of new cases in North Carolina.
- 71% of all counties in North Carolina have moderate or high levels of community transmission (yellow, orange, or red zones), with 19% having high levels of community transmission (red zone); case rates and test positivity are now highest in the micropolitan and non-core counties. Greene, Robeson, Edgecombe, Chowan, Nash, Caswell, Hyde, Scotland, Watauga, and Beaufort counties had the highest incidence, each above 250 cases per 100,000 population in previous 7 days.
- 71% of all counties in North Carolina have moderate or high levels of community transmission (yellow, orange, or red zones), with 19% having high levels of community transmission (red zone); test positivity seems to be increasing most rapidly in more rural counties.
- At the state level, 78% of inpatient beds are being used; multiple counties are seeing over 90% inpatient or ICU bed utilization.
- During the week of Oct 5 - Oct 11, 13% of nursing homes had at least one new resident COVID-19 case, 25% had at least one new staff COVID-19 case, and 5% had at least one new resident COVID-19 death. Two facilities in Shallotte and Nashville with over 20 cases, others in Carthage, Connelly Springs, Marion, Tarboro, and Arden with between 10 and 20 cases.
- North Carolina had 135 new cases per 100,000 population in the last week, compared to a national average of 117 per 100,000.
- Current staff deployed from the federal government as assets to support the state response are: 2 to support operations activities from FEMA; 7 to support operations activities from USCG; 4 to support medical activities from VA; and 1 to support operations activities from VA.
- Between Oct 10 - Oct 16, on average, 156 patients with confirmed COVID-19 and 323 patients with suspected COVID-19 were reported as newly admitted each day to hospitals in North Carolina. An average of greater than 95% of hospitals reported either new confirmed or new suspected COVID patients each day during this period.

RECOMMENDATIONS

- We have included cases, test positivity, and deaths by month in the back of your packet to show the time sequence in North Carolina and the country as a whole. These demonstrate the impact of comprehensive mitigation efforts when implemented effectively and that partial or incomplete mitigation leads to prolonged community spread and increased fatalities.
- Rural counties may be less likely to implement community mitigation behaviors; develop community messaging and policy by including community members and leaders in a discussion of local epi and hospital data and reviewing the rationale and efforts to protect the local community.
- Smaller, more intimate gatherings of family, friends, and neighbors are currently driving infection. Educational efforts should include recommendations to avoid gatherings wherever possible or, minimally, to maintain social distancing and face covering during indoor gatherings.
- Target community testing efforts to those most at risk by strategically selecting testing locations; ensure elderly and those at-risk and/or vulnerable to severe disease are being tested in sufficient volume.
- Ensure that groups at higher risk for infection, including Black, Hispanic, and Native American communities (Robeson County) are reached with specific messaging/education. Ensure adequate contact tracing and provision of spaces and supplies for isolation/quarantine; target those at higher risk for severe disease, such as those over age 65 years, with clear recommendations to maintain social distancing at all times and to avoid even small, familial social gatherings.
- Document that all clinical staff, even those in rural counties away from university centers, are trained on current treatment protocols, including early use of antibody and antiviral treatment for hospitalized patients, and proper use of high-flow oxygen, positioning, and use of glucocorticoids.
- Sensitive surveillance is key for detecting transmission early and adjusting mitigation policy; using antigen tests or other rapid testing, expand regular surveillance and increase frequency of testing critical staff who are most at-risk for infection, such as teachers, clinic staff and staff working at long-term care facilities and other congregate living settings, prisoners and prison staff, public transportation workers, and first responders. Expand wastewater surveillance.
- Work with all state and private institutions of higher education to ensure adequate surveillance, including testing of asymptomatic persons in high transmission counties, with adequate contact tracing and provision of spaces and supplies for isolation/quarantine.
- If necessary, expand contact tracing capacity by focusing the interview, developing scripts and clear algorithms, and task-shifting.
- Intensify efforts at nursing homes with 3 or more cases of COVID among staff and/or residents per week over any of the past 3 weeks (there are dozens); all should have mandatory inspection surveys conducted and immediate support for corrective action.
- Specific, detailed guidance on community mitigation measures can be found on the [CDC website](https://www.cdc.gov).



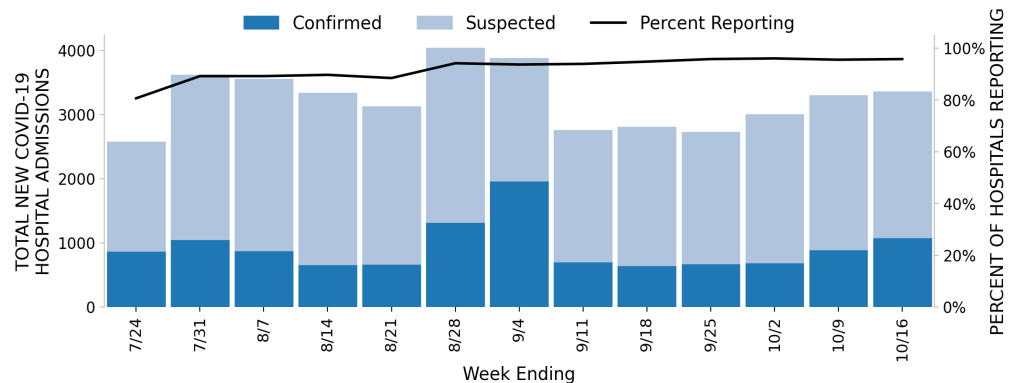


NORTH CAROLINA

STATE REPORT | 10.18.2020

	STATE, LAST WEEK	STATE, % CHANGE FROM PREVIOUS WEEK	FEMA/HHS REGION, LAST WEEK	UNITED STATES, LAST WEEK
NEW COVID-19 CASES (RATE PER 100,000)	14,192 (135)	+11%	81,128 (121)	383,209 (117)
VIRAL (RT-PCR) LAB TEST POSITIVITY RATE	6.3%	-0.1%*	6.7%	5.4%
TOTAL VIRAL (RT-PCR) LAB TESTS (TESTS PER 100,000)	223,628** (2,132)	+18%**	967,904** (1,447)	7,141,821** (2,176)
COVID-19 DEATHS (RATE PER 100,000)	162 (1.5)	+17%	1,518 (2.3)	4,931 (1.5)
SNFs WITH ≥1 NEW RESIDENT COVID-19 CASE (≥1 NEW STAFF CASE)	13% (25%)	-3%* (-1%*)	13% (26%)	10% (22%)
SNFs WITH ≥1 NEW RESIDENT COVID-19 DEATH	5%	-1%*	5%	4%

HOSPITAL ADMISSIONS



* Indicates absolute change in percentage points.

** Due to delayed reporting, this figure may underestimate total diagnostic tests and week-on-week changes in diagnostic tests.

DATA SOURCES – Additional data details available under METHODS**Note:** Some dates may have incomplete data due to delays in reporting. Data may be backfilled over time, resulting in week-to-week changes.**Cases and Deaths:** State values are calculated by aggregating county-level data from USAFacts; therefore, the values may not match those reported directly by the state. Data is through 10/16/2020; last week is 10/10 - 10/16, previous week is 10/3 - 10/9.**Testing:** CELR (COVID-19 Electronic Lab Reporting) state health department-reported data through 10/14/2020. Last week is 10/8 - 10/14, previous week is 10/1 - 10/7.**SNFs:** Skilled nursing facilities. National Healthcare Safety Network. Data are reported separately for cases among residents and staff. Last week is 10/5-10/11, previous week is 9/28-10/4. Facilities that are undergoing reporting quality review are not included in the table, but may be included in other NHSN analyses.**Hospitalizations:** Unified hospitalization dataset in HHS Protect. These data exclude psychiatric, rehabilitation, and religious non-medical hospitals. In addition, hospitals explicitly identified by states/regions as those from which we should not expect reports were excluded from the percent reporting figure.



NORTH CAROLINA

STATE REPORT | 10.18.2020

COVID-19 COUNTY AND METRO ALERTS*

Top 12 shown in table (full lists below)

METRO AREA (CBSA) LAST WEEK

COUNTY LAST WEEK

LOCALITIES IN RED ZONE

5

■ (+0)

Rocky Mount
Lumberton
Pinehurst-Southern Pines
Myrtle Beach-Conway-North Myrtle Beach
Washington

19

▲ (+6)

Robeson
Cumberland
Nash
Randolph
Lincoln
Moore
Edgecombe
Hoke
Beaufort
Greene
Caswell
Columbus

LOCALITIES IN ORANGE ZONE

7

▼ (-4)

Fayetteville
Wilson
Laurinburg
North Wilkesboro
Sanford
Mount Airy
Cullowhee

13

▼ (-12)

Gaston
Catawba
Caldwell
Wilson
Scotland
Brunswick
Wilkes
Lee
Surry
Pender
Halifax
Chowan

LOCALITIES IN YELLOW ZONE

20

▲ (+4)

Charlotte-Concord-Gastonia
Greensboro-High Point
Winston-Salem
Hickory-Lenoir-Morganton
Asheville
Greenville
Wilmington
Burlington
Jacksonville
Goldsboro
Shelby
New Bern

39

▲ (+4)

Mecklenburg
Guilford
Forsyth
Pitt
Alamance
Union
Onslow
Wayne
Davidson
Johnston
Cleveland
Cabarrus

Change from previous week's alerts:

▲ Increase

■ Stable

▼ Decrease

All Yellow CBSAs: Charlotte-Concord-Gastonia, Greensboro-High Point, Winston-Salem, Hickory-Lenoir-Morganton, Asheville, Greenville, Wilmington, Burlington, Jacksonville, Goldsboro, Shelby, New Bern, Albemarle, Forest City, Morehead City, Roanoke Rapids, Rockingham, Elizabeth City, Virginia Beach-Norfolk-Newport News, Brevard

All Red Counties: Robeson, Cumberland, Nash, Randolph, Lincoln, Moore, Edgecombe, Hoke, Beaufort, Greene, Caswell, Columbus, Yadkin, Avery, Alexander, Montgomery, Swain, Clay, Hyde

All Orange Counties: Gaston, Catawba, Caldwell, Wilson, Scotland, Brunswick, Wilkes, Lee, Surry, Pender, Halifax, Chowan, Perquimans

All Yellow Counties: Mecklenburg, Guilford, Forsyth, Pitt, Alamance, Union, Onslow, Wayne, Davidson, Johnston, Cleveland, Cabarrus, Craven, Rockingham, Harnett, Stanly, Rutherford, Henderson, Sampson, Carteret, Richmond, Duplin, Jackson, Stokes, Granville, Davie, Martin, Bladen, Person, Pasquotank, Macon, Bertie, Hertford, Ashe, Haywood, Transylvania, Warren, Alleghany, Currituck

* Localities with fewer than 10 cases last week have been excluded from these alerts.

Note: Lists of red, orange, and yellow localities are sorted by the number of new cases in the last 3 weeks, from highest to lowest. Some dates may have incomplete data due to delays in reporting. Data may be backfilled over time, resulting in week-to-week changes.

DATA SOURCES – Additional data details available under METHODS

Cases and Deaths: State values are calculated by aggregating county-level data from USAFacts; therefore, the values may not match those reported directly by the state. Data is through 10/16/2020; last week is 10/10 - 10/16, three weeks is 9/26 - 10/16.

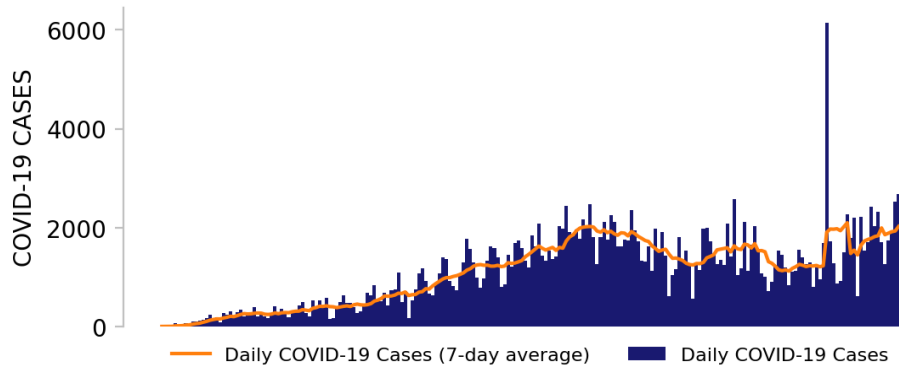
Testing: CELR (COVID-19 Electronic Lab Reporting) state health department-reported data through 10/14/2020. Last week is 10/8 - 10/14.



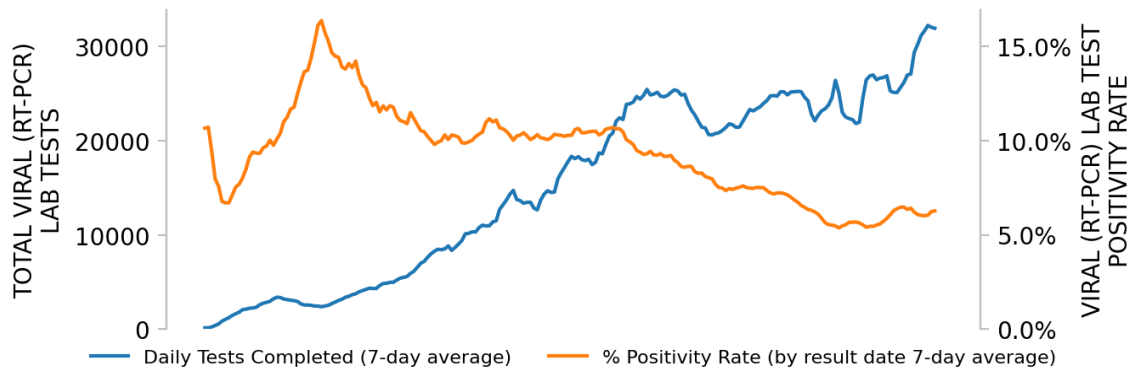
NORTH CAROLINA

STATE REPORT | 10.18.2020

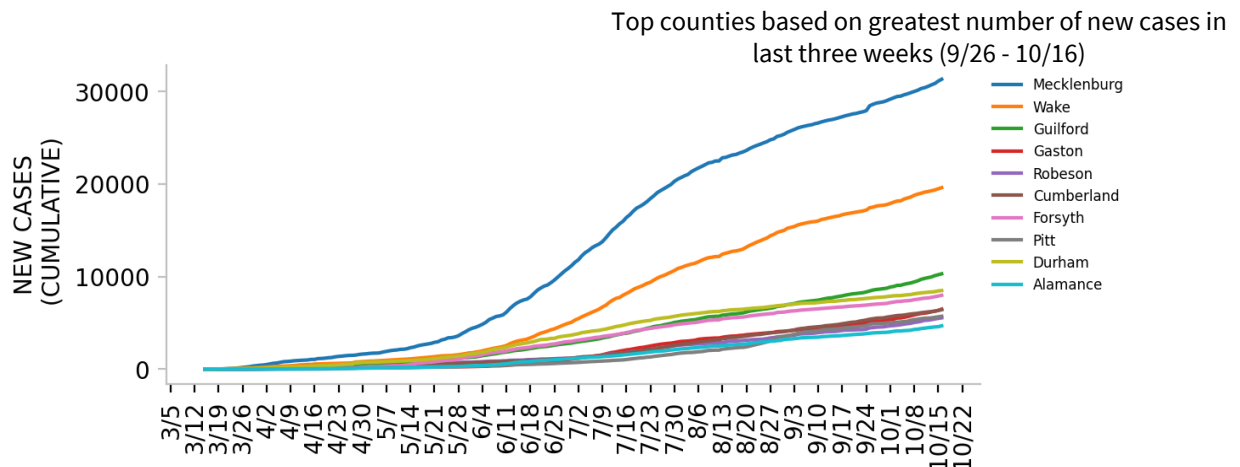
NEW CASES



TESTING



TOP COUNTIES



DATA SOURCES – Additional data details available under METHODS

Note: Some dates may have incomplete data due to delays in reporting. Data may be backfilled over time, resulting in week-to-week changes.

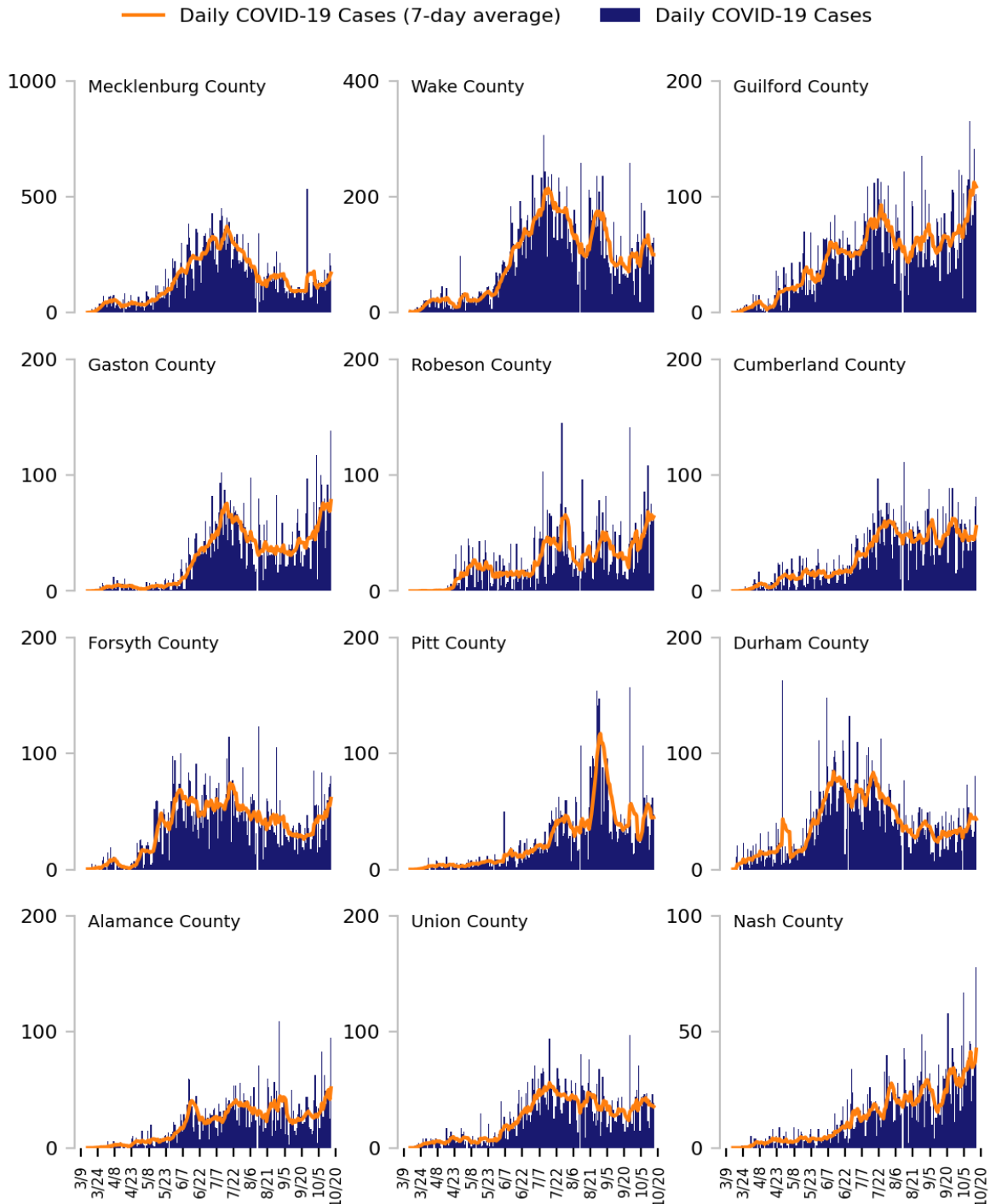
Cases: State values are calculated by aggregating county-level data from USAFacts; therefore, the values may not match those reported directly by the state. Data is through 10/16/2020.

Testing: CELR (COVID-19 Electronic Lab Reporting) state health department-reported data through 10/14/2020.



Top 12 counties based on number of new cases in the last 3 weeks

TOTAL DAILY CASES



DATA SOURCES – Additional data details available under METHODS

Cases: State values are calculated by aggregating county-level data from USAFacts; therefore, the values may not match those reported directly by the state. Data is through 10/16/2020. Last 3 weeks is 9/26 - 10/16.

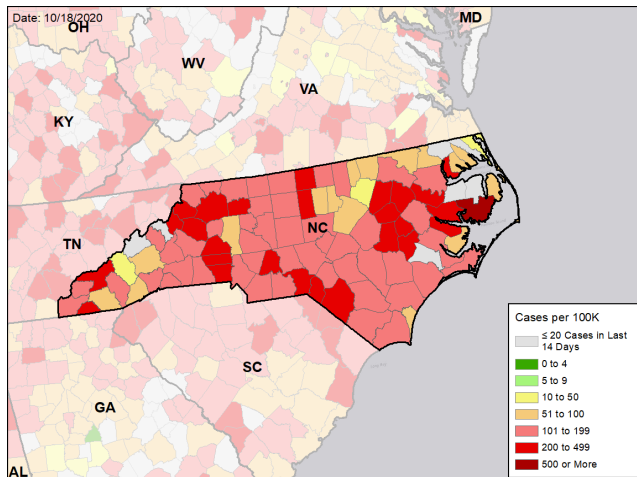


NORTH CAROLINA

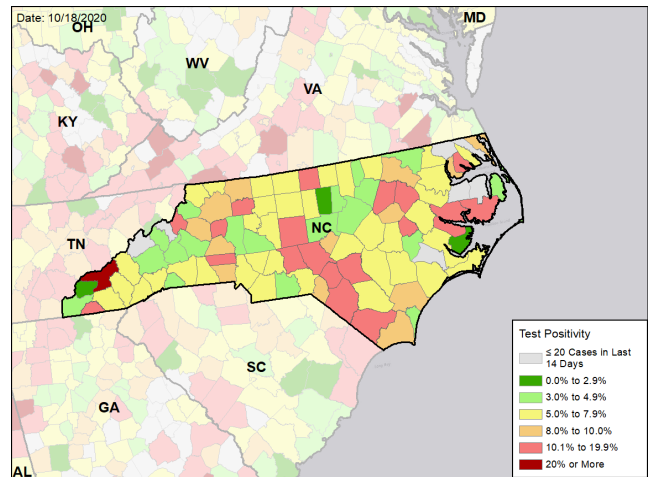
STATE REPORT | 10.18.2020

CASE RATES AND VIRAL LAB TEST POSITIVITY DURING THE LAST WEEK

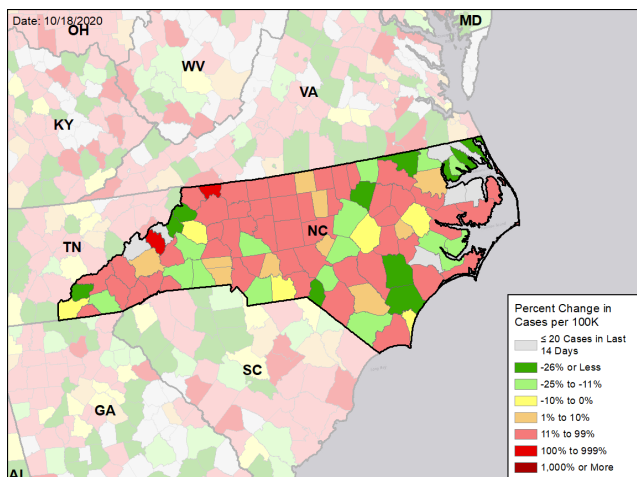
NEW CASES PER 100,000 DURING THE LAST WEEK



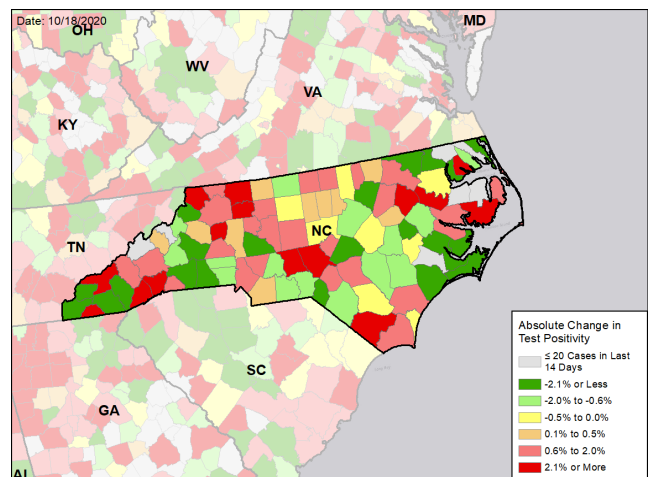
VIRAL (RT-PCR) LABORATORY TEST POSITIVITY DURING THE LAST WEEK



WEEKLY CHANGE IN NEW CASES PER 100,000



WEEKLY CHANGE IN VIRAL (RT-PCR) LABORATORY TEST POSITIVITY



DATA SOURCES – Additional data details available under METHODS

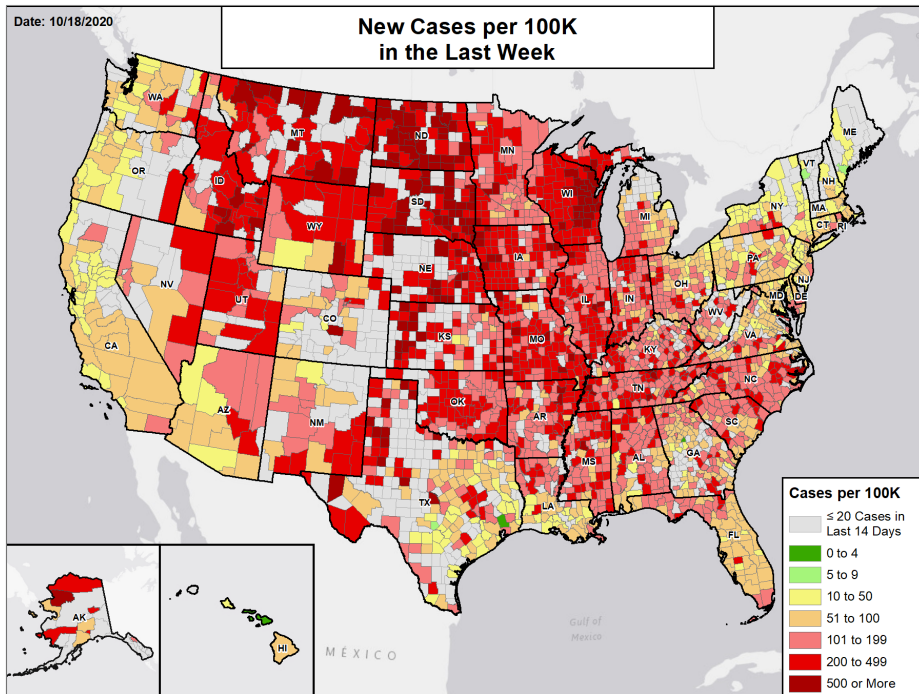
Note: Some dates may have incomplete data due to delays in reporting. Data may be backfilled over time, resulting in week-to-week changes.
Cases: State values are calculated by aggregating county-level data from USAFacts; therefore, the values may not match those reported directly by the state. Data is through 10/16/2020. Last week is 10/10 - 10/16, previous week is 10/3 - 10/9.

Testing: CELR (COVID-19 Electronic Lab Reporting) state health department-reported data through 10/14/2020. Last week is 10/8 - 10/14, previous week is 10/1 - 10/7.



National Picture

NEW CASES PER 100,000 LAST WEEK

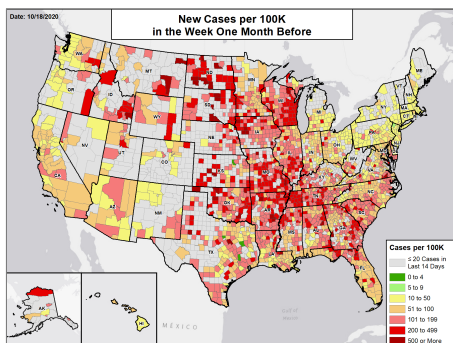


NATIONAL RANKING OF NEW CASES PER 100,000 LAST WEEK

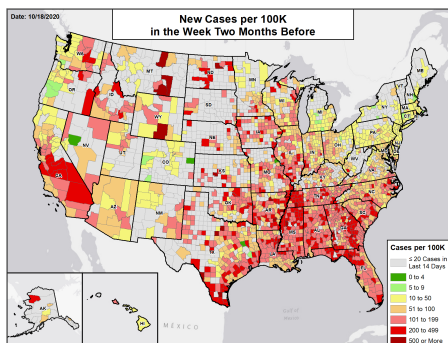
National Rank	State	National Rank	State
1	ND	27	CO
2	SD	28	MI
3	MT	29	TX
4	WI	30	WV
5	NE	31	OH
6	UT	32	DE
7	ID	33	FL
8	IA	34	VA
9	WY	35	GA
10	MO	36	LA
11	OK	37	CT
12	AR	38	PA
13	MS	39	AZ
14	AK	40	MD
15	IN	41	MA
16	TN	42	NJ
17	KS	43	WA
18	IL	44	DC
19	MN	45	OR
20	NM	46	CA
21	KY	47	NY
22	AL	48	NH
23	NC	49	HI
24	NV	50	ME
25	RI	51	VT
26	SC		

NEW CASES PER 100,000 IN THE WEEK:

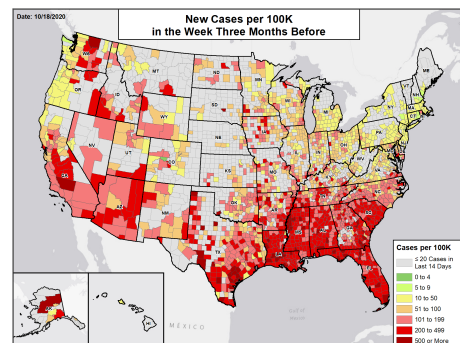
ONE MONTH BEFORE



TWO MONTHS BEFORE



THREE MONTHS BEFORE



DATA SOURCES

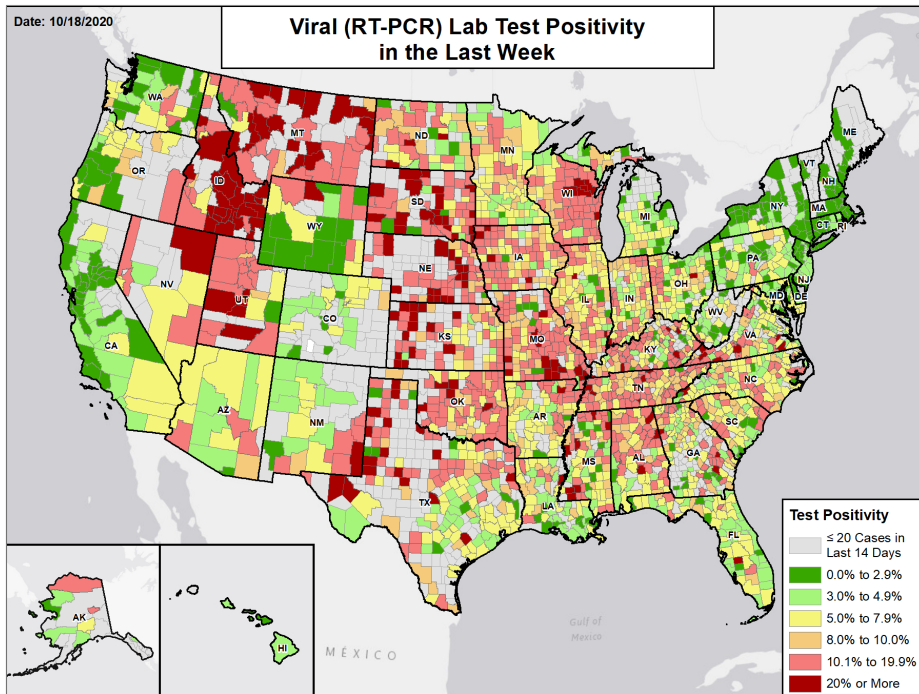
Note: Some dates may have incomplete data due to delays in reporting. Data may be backfilled over time, resulting in week-to-week changes.

Cases: County-level data from USAFacts through 10/16/2020. Last week is 10/10 - 10/16; the week one month before is 9/12 - 9/18; the week two months before is 8/15 - 8/21; the week three months before is 7/18 - 7/24.



National Picture

VIRAL (RT-PCR) LAB TEST POSITIVITY LAST WEEK

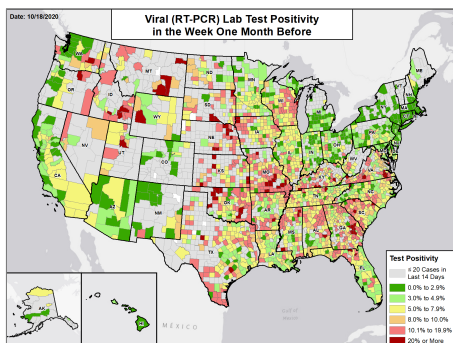


NATIONAL RANKING OF TEST POSITIVITY LAST WEEK

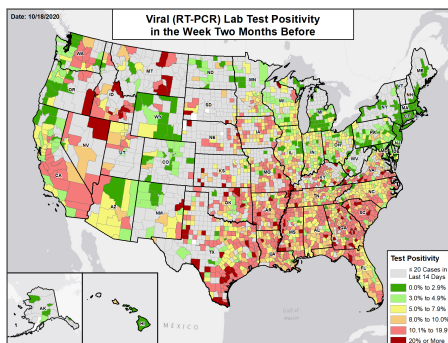
National Rank	State	National Rank	State
1	MT	27	GA
2	ID	28	AK
3	UT	29	AZ
4	SD	30	FL
5	NE	31	MI
6	WI	32	CO
7	OK	33	WY
8	MO	34	LA
9	IA	35	MD
10	KS	36	PA
11	TN	37	WV
12	MS	38	OH
13	AL	39	HI
14	KY	40	NJ
15	ND	41	CA
16	NV	42	WA
17	IN	43	CT
18	TX	44	DE
19	AR	45	NH
20	SC	46	RI
21	MN	47	NY
22	NM	48	MA
23	OR	49	DC
24	VA	50	ME
25	NC	51	VT
26	IL		

VIRAL (RT-PCR) LAB TEST POSITIVITY IN THE WEEK:

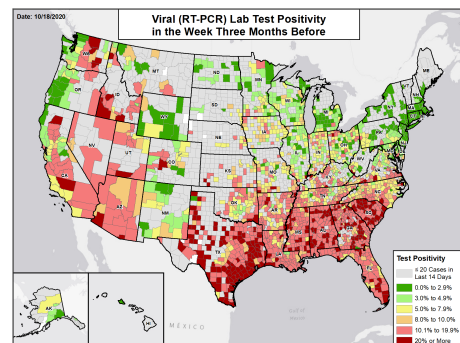
ONE MONTH BEFORE



TWO MONTHS BEFORE



THREE MONTHS BEFORE



DATA SOURCES

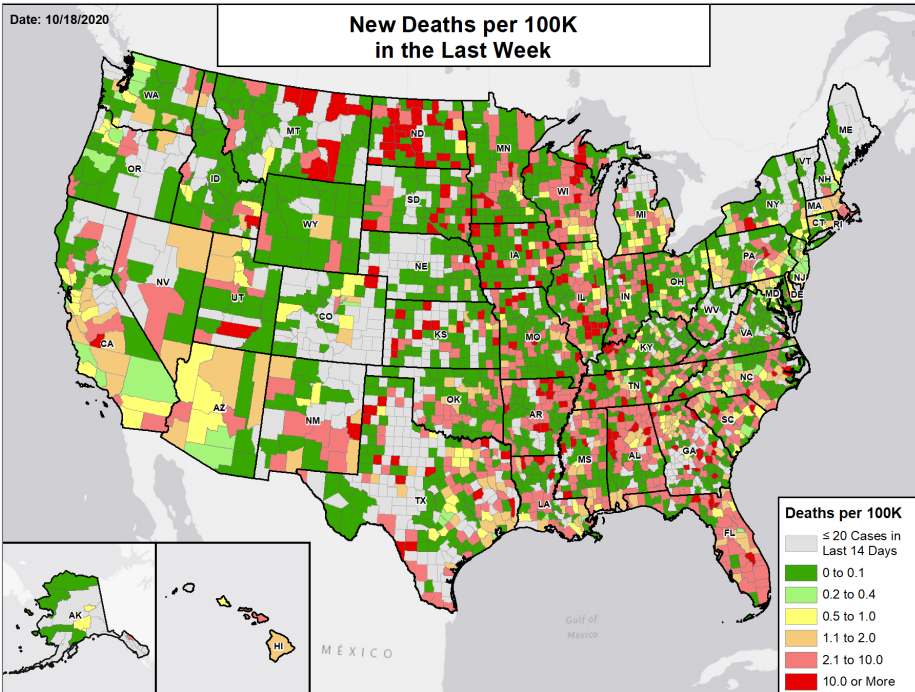
Note: Some dates may have incomplete data due to delays in reporting. Data may be backfilled over time, resulting in week-to-week changes.

Testing: Combination of CELR (COVID-19 Electronic Lab Reporting) state health department-reported data and HHS Protect laboratory data (provided directly to Federal Government from public health labs, hospital labs, and commercial labs) through 10/14/2020. Last week is 10/8 - 10/14; the week one month before is 9/10 - 9/16; the week two months before is 8/13 - 8/19; the week three months before is 7/16 - 7/22.



National Picture

NEW DEATHS PER 100,000 LAST WEEK

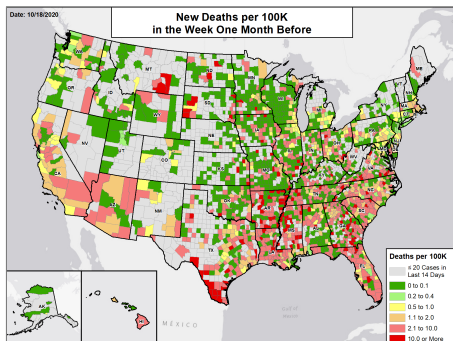


NATIONAL RANKING OF NEW DEATHS PER 100,000 LAST WEEK

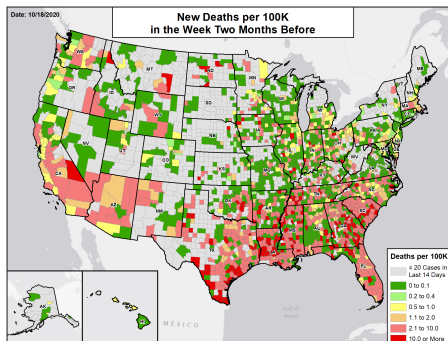
National Rank	State	National Rank	State
1	ND	27	KY
2	AR	28	NM
3	SD	29	CO
4	KS	30	MI
5	FL	31	PA
6	IA	32	DE
7	MS	33	WV
8	AL	34	CA
9	MT	35	NH
10	MO	36	UT
11	WI	37	DC
12	TN	38	ID
13	RI	39	AZ
14	GA	40	AK
15	IN	41	VA
16	LA	42	MD
17	MA	43	WY
18	IL	44	WA
19	NE	45	OH
20	TX	46	NY
21	SC	47	NJ
22	NV	48	OR
23	OK	49	CT
24	NC	50	ME
25	MN	51	VT
26	HI		

NEW DEATHS PER 100,000 IN THE WEEK:

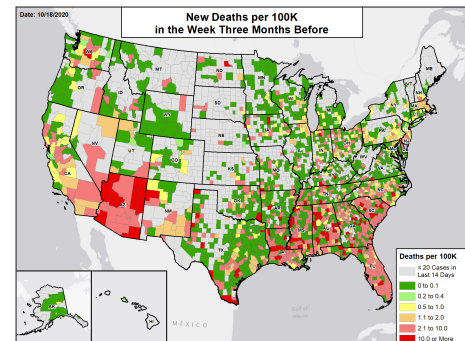
ONE MONTH BEFORE



TWO MONTHS BEFORE



THREE MONTHS BEFORE



DATA SOURCES

Note: Some dates may have incomplete data due to delays in reporting. Data may be backfilled over time, resulting in week-to-week changes.

Deaths: County-level data from USAFacts through 10/16/2020. Last week is 10/10 - 10/16; the week one month before is 9/12 - 9/18; the week two months before is 8/15 - 8/21; the week three months before is 7/18 - 7/24.



METHODS

STATE REPORT | 10.18.2020

COLOR THRESHOLDS: Results for each indicator should be taken in context of the findings for related indicators (e.g., changes in case incidence and testing volume). Values are rounded before color classification.

Metric	Dark Green	Light Green	Yellow	Orange	Red
New cases per 100,000 population per week	≤4	5 – 9	10 – 50	51 – 100	≥101
Percent change in new cases per 100,000 population	≤-26%	-25% – -11%	-10% – 0%	1% – 10%	≥11%
Diagnostic test result positivity rate	≤2.9%	3.0% – 4.9%	5.0% – 7.9%	8.0% – 10.0%	≥10.1%
Change in test positivity	≤-2.1%	-2.0% – -0.6%	-0.5% – 0.0%	0.1% – 0.5%	≥0.6%
Total diagnostic tests resulted per 100,000 population per week	≥2001	1001 – 2000	750 – 1000	500 – 749	≤499
Percent change in tests per 100,000 population	≥26%	11% – 25%	1% – 10%	-10% – 0%	≤-11%
COVID-19 deaths per 100,000 population per week	≤0.1	0.2 – 0.4	0.5 – 1.0	1.1 – 2.0	≥2.1
Percent change in deaths per 100,000 population	≤-26%	-25% – -11%	-10% – 0%	1% – 10%	≥11%
Skilled Nursing Facilities with at least one resident COVID-19 case, death	0%		1% – 5%		≥6%
Change in SNFs with at least one resident COVID-19 case, death	≤-2%		-1% – 1%		≥2%

DATA NOTES

- Some dates may have incomplete data due to delays in reporting. Data may be backfilled over time, resulting in week-to-week changes. It is critical that states provide as up-to-date data as possible.
- Cases and deaths:** County-level data from USAFacts as of 16:33 EDT on 10/18/2020. State values are calculated by aggregating county-level data from USAFacts; therefore, values may not match those reported directly by the state. Data are reviewed on a daily basis against internal and verified external sources and, if needed, adjusted. Last week data are from 10/10 to 10/16; previous week data are from 10/3 to 10/9; the week one month before data are from 9/12 to 9/18.
- Testing:** The data presented represent viral COVID-19 laboratory diagnostic and screening test (reverse transcription polymerase chain reaction, RT-PCR) results—not individual people—and exclude antibody and antigen tests, unless stated otherwise. CELR (COVID-19 Electronic Lab Reporting) state health department-reported data are used to describe county-level viral COVID-19 laboratory test (RT-PCR) result totals when information is available on patients' county of residence or healthcare providers' practice location. HHS Protect laboratory data (provided directly to Federal Government from public health labs, hospital labs, and commercial labs) are used otherwise. Some states did not report on certain days, which may affect the total number of tests resulted and positivity rate values. Because the data are deidentified, total viral (RT-PCR) laboratory tests are the number of tests performed, not the number of individuals tested. Viral (RT-PCR) laboratory test positivity rate is the number of positive tests divided by the number of tests performed and resulted. Resulted tests are assigned to a timeframe based on this hierarchy of test-related dates: 1. test date; 2. result date; 3. specimen received date; 4. specimen collection date. Resulted tests are assigned to a county based on a hierarchy of test-related locations: 1. patient residency; 2. provider facility location; 3. ordering facility location; 4. performing organization location. States may calculate test positivity other using other methods. Last week data are from 10/8 to 10/14; previous week data are from 10/1 to 10/7; the week one month before data are from 9/10 to 9/16. HHS Protect data is recent as of 08:09 EDT on 10/18/2020. Testing data are inclusive of everything received and processed by the CELR system as of 19:00 EDT on 10/17/2020.
- Hospitalizations:** Unified hospitalization dataset in HHS Protect. This figure may differ from state data due to differences in hospital lists and reporting between federal and state systems. These data exclude psychiatric, rehabilitation, and religious non-medical hospitals. In addition, hospitals explicitly identified by states/regions as those from which we should not expect reports were excluded from the percent reporting figure. The data presented represents raw data provided; we are working diligently with state liaisons to improve reporting consistency. Data is recent as of 16:54 EDT on 10/18/2020.
- Skilled Nursing Facilities:** National Healthcare Safety Network (NHSN). Data report resident and staff cases independently. Quality checks are performed on data submitted to the NHSN. Data that fail these quality checks or appear inconsistent with surveillance protocols may be excluded from analyses. Data presented in this report are more recent than data publicly posted by CMS. Last week is 10/5-10/11, previous week is 9/28-10/4. Facilities that are undergoing reporting quality review are not included in the table, but may be included in other NHSN analyses.
- County and Metro Area Color Categorizations**
 - Red Zone:** Those core-based statistical areas (CBSAs) and counties that during the last week reported both new cases at or above 101 per 100,000 population, and a lab test positivity result at or above 10.1%.
 - Orange Zone:** Those CBSAs and counties that during the last week reported both new cases between 51–100 per 100,000 population, and a lab test positivity result between 8.0–10.0%, or one of those two conditions and one condition qualifying as being in the “Red Zone.”
 - Yellow Zone:** Those CBSAs and counties that during the last week reported both new cases between 10–50 per 100,000 population, and a lab test positivity result between 5.0–7.9%, or one of those two conditions and one condition qualifying as being in the “Orange Zone” or “Red Zone.”