

December 2025

# 2025 GEORGIA STROKE REPORT



# CONTENTS

DEFINITIONS .....	3
BACKGROUND .....	4
COVERDELL-MURPHY ACT.....	6
REQUIRED REPORTING .....	7
SUMMARY OF DATA FINDINGS.....	8
MAP 1: ACUTE CARE HOSPITALS DESIGNATED AS STROKE CENTERS, GCASR, NOVEMBER 2025 .....	9
TABLE 1: PERFORMANCE MEASURES FOR DESIGNATED STROKE CENTERS, GCASR, 2022-2024.....	10
ACCESS TO STROKE CARE .....	11
STROKE SPECIALISTS.....	12
RURAL HOSPITAL COVERAGE .....	13
MAP 2: RURAL COUNTIES IN GEORGIA WITH A HOSPITAL OR A STROKE SPECIALTY .....	14
DISCUSSION .....	15
REFERENCES .....	16



# DEFINITIONS

- **Recombinant tissue plasminogen activator (rtPA – alteplase, Tenecteplase):** FDA-approved clot-busting drug for stroke. This drug can reduce disability by 30 percent in stroke sufferers if given to eligible patients within 3 hours of symptom onset.
- **Anticoagulation and Antithrombotic Medications:** Medications that reduce blood clotting.
- **Atrial fibrillation:** A disorder resulting in an irregular and often rapid heart rate. It predisposes blood clotting and increases the risk of stroke, coronary heart disease and other heart-related complications.
- **Door-to-Needle Time:** Time elapsed from when an eligible stroke patient arrives at the hospital to when rtPA is administered. Eligible patients must receive rtPA within 3 hours of symptom onset.
- **Dysphagia Screening:** Screening for difficulty in swallowing. This identifies patients who need targeted treatment to improve their ability to swallow, so they do not aspirate or take fluid into the lungs. Aspiration of fluid can lead to pneumonia.
- **Hemorrhagic Stroke:** A stroke caused by a blood vessel rupturing and bleeding in the brain. Hemorrhagic strokes are often fatal.
- **Ischemic Stroke:** A stroke caused by a clot or blockage in a blood vessel supplying blood to the brain. The majority of strokes in Georgia are ischemic.
- **Statin medications:** High cholesterol is a risk factor for stroke and statins lower blood cholesterol level.
- **Stroke ICD-10 Codes:** GCASR uses the following ICD-10 codes to define stroke and TIA – I60, I61, I63, I64, G45, and G46.
- **Venous Thrombosis:** When a blood clot forms in a vein, usually in the leg. If the clot breaks off, it can cause serious complications and even death.

# BACKGROUND

## Why should we care about stroke in Georgia?

- **Georgia’s age-standardized stroke death rate in 2024 was 44.7 per 100,000** which is **11.8 percent higher** than the national average (**40.0 per 100,000**) and **33.8 percent higher** than the Healthy People 2030 target (**33.4 per 100,000**).<sup>1,2</sup>
- **In 2024, Georgia had the 14<sup>th</sup>–highest stroke death rate** in the U.S.<sup>1</sup>
- **Stroke is the fourth-leading cause of death** in Georgia (**5,226 stroke deaths in 2024**).<sup>1</sup>
- **In 2024, about 16.6 percent of Georgia stroke deaths were premature**, i.e., among persons under the age of 65 years.<sup>1</sup>
- **In 2024, the age-adjusted stroke death rate for Blacks in Georgia was 58.5 per 100,000 population**, which was **44 and 70 percent higher than** the rate for Whites and Asians, respectively.<sup>1</sup>
- Stroke is a **leading cause of disability**.<sup>3</sup> Treatment of eligible stroke patients with the drug called recombinant tissue plasminogen activator (rtPA) can reduce disability by 30 percent, but the drug should be administered in the first three hours after symptom onset.<sup>4</sup>
- **In 2024, Georgians had more than 27,500 stroke-related hospitalizations.**
  - The median charge per hospitalization was **\$58,811**.
  - The total stroke-related hospitalization charges **were about \$3 billion**.
- **Georgia is in the “Stroke Belt,”** an area in the southeastern U.S. with stroke death rates that are approximately **30 percent higher than** the rest of the U.S. The coastal plains of Georgia are in the “buckle” of the Stroke Belt, an area with stroke death rates about **40 percent higher** than the rest of the nation.<sup>3</sup>
- The higher stroke death rates seen in the Stroke Belt can be collectively attributed, in large part, by demographic and socioeconomic factors and the prevalence of stroke risk factors and chronic diseases like diabetes and hypertension.<sup>5</sup>
- **In 2022, 63 percent** of adult Georgians knew all three signs of stroke – facial droop, arm weakness, and slurred speech – and the importance of calling 911 immediately.
- **Georgia stroke patients have higher prevalence rates for stroke-related risk factors than adult Georgians overall.** The 2024 and 2023 Georgia Behavioral Risk Factor Surveillance System (GA-BRFSS) and 2024 Georgia Coverdell Acute Stroke Registry (GCASR) data showed:<sup>6</sup>

Risk Factor	Acute Stroke Patients (%) <sup>a</sup>	Adult Georgians (%) <sup>b</sup>
Hypertension	78.5	35.7*
Dyslipidemia	47.3	36.9*
Diabetes Mellitus	36.2	12.8

Coronary Artery Disease/Prior Myocardial Infarction	18.7	7.1
Atrial Fibrillation/Flutter	14.5	--
Smoking	19.0	11.2

---

- a: GCASR 2024 b: 2024 BRFSS data (\*2023 data)



# COVERDELL-MURPHY ACT

---

Georgia Coverdell Acute Stroke Registry (GCASR)



# REQUIRED REPORTING

To assure that patients are receiving the appropriate level of care and treatment in each designated stroke center, Georgia's Coverdell-Murphy Act (GA-CMA), Senate Bill 549, enacted in 2008 and amended in 2016 (House Bill 853), requires reporting of stroke care-related data to the Georgia Department of Public Health (DPH) as part of the Georgia Coverdell Acute Stroke Registry (GCASR).<sup>7,8</sup> The required data elements are used to generate performance measures that monitor the quality of stroke care among the designated stroke centers. Currently 9 acute care hospitals are designated as comprehensive stroke centers, 2 as thrombectomy-capable stroke centers, 45 as primary stroke centers, and 27 as remote treatment stroke centers ([Map 1](#)). In 2024, the 83 total designated stroke hospitals received 97 percent of Georgians admitted with acute stroke across the state.



# SUMMARY OF DATA FINDINGS

Based on 2008-2019 hospital discharge data from 19 designated Remote Treatment Stroke Centers, acute ischemic stroke patients **treated after the hospitals were designated** had **48 percent lower odds of in-hospital death** compared to patients **admitted when the hospitals were not participating** in the Georgia Coverdell Acute Stroke Registry, which aims to improve the quality of stroke care.

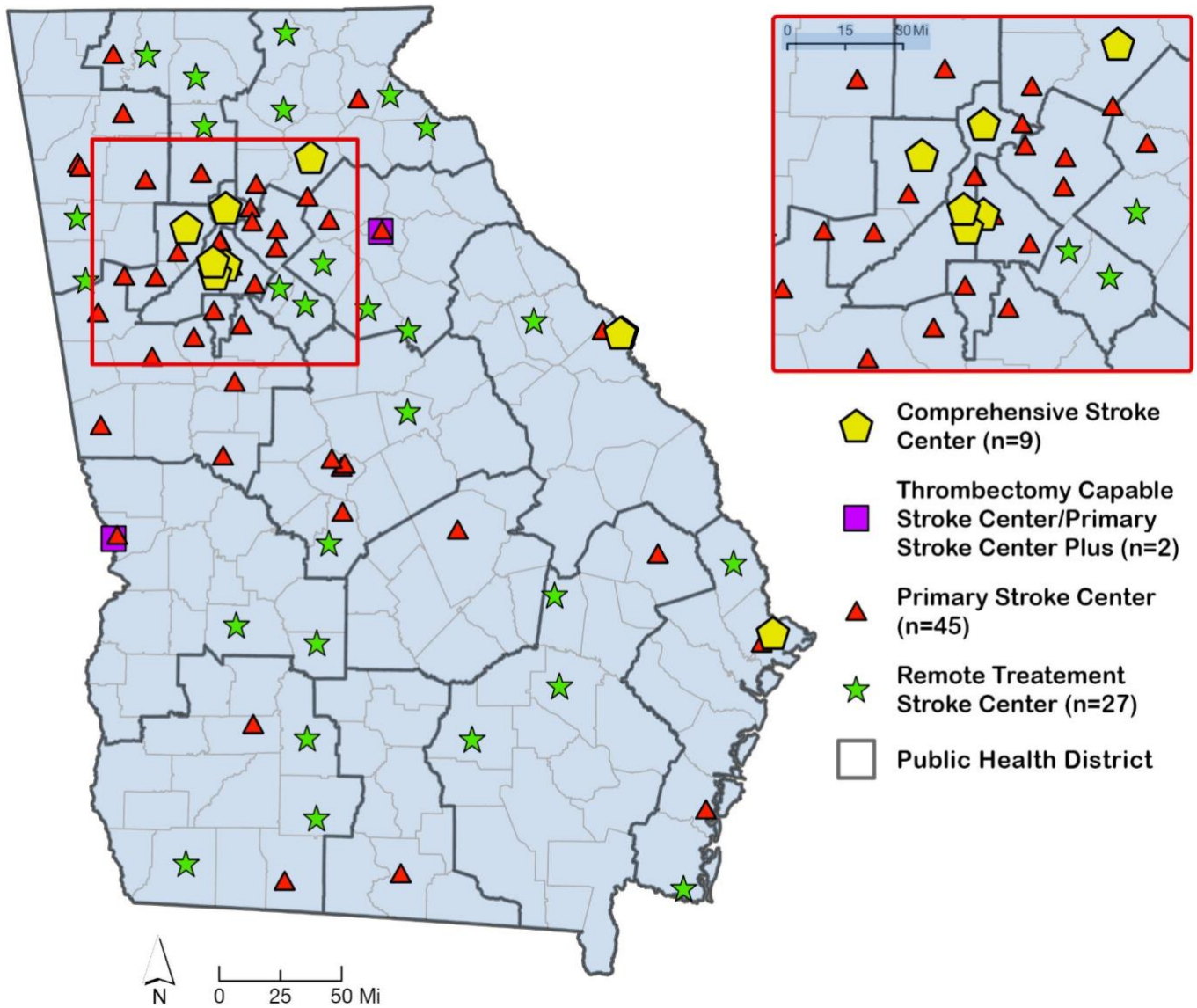
From 2022 to 2024, Georgians received high quality stroke care consistently.

- **95 percent** of eligible ischemic stroke patients received the clot-busting drug rtPA intravenously within 3 hours of last seen well.
- Around **90 percent** of eligible ischemic stroke patients received rtPA within 60 minutes of hospital arrival and **60 percent** in the first 45 minutes of hospital arrival.

Numbers for other quality indicators, such as venous thromboembolism prophylaxis, antithrombotic medication, stroke education and discharge on appropriate medication, remained **consistently high (above 90 percent)** from 2022 to 2024.

However, **only about half (56%)** of the stroke patients were transported to hospitals by EMS and around **a third (33%)** of the patients arrived at hospital **in the first two hours of symptom onset** during 2024. This indicates the need to raise public awareness to identify stroke in the community, call 911, and transport patients to designated centers rapidly.

# ACUTE CARE HOSPITALS DESIGNATED AS STROKE CENTERS, GCASR, NOVEMBER 2025



Map 1. Designated Stroke Centers in Georgia

**TABLE 1: PERFORMANCE MEASURES FOR DESIGNATED STROKE CENTERS, GCASR, 2022-2024**

Performance Measure	2022	2023	2024
<b>Reach</b>			
% of state acute stroke admissions in designated GCASR hospitals	94	94	97
<b>Public Awareness</b>			
% of patients presenting to ED with acute stroke or TIA that arrive by EMS	56	57	56
% of patients with acute stroke or TIA who arrive at ED in less than 2 hours from time last known to be well (LKW)	34	33	33
<b>Quality of In-Hospital Stroke Care</b>			
<b>Early phase</b>			
% of stroke patients who have brain imaging performed within 25 minutes of hospital arrival	74	76	76
% of ischemic stroke patients whose disease severity was assessed and documented using NIH stroke scale score	94	95	95
% of acute stroke patients who had dysphagia screening	85	86	87
% of acute stroke patients who received venous thromboembolism prophylaxis the day of or the day after admission	95	92	96
% of acute ischemic stroke patients who arrived at the hospital within 2 hours from time LKW and received IV rtPA within 3 hours of time LKW	95	94	95
% of eligible acute ischemic stroke patients who received IV rtPA within 60 minutes of hospital arrival	89	89	88
% of ischemic stroke patients who received antithrombotic medication by the end of hospital day two	97	97	97
<b>Later and at discharge</b>			
% of ischemic stroke patients with medical history of smoking who received smoking cessation advice or counseling	99	99	99
% of ischemic stroke patients who were prescribed antithrombotic at discharge	99	99	99
% of ischemic stroke patients with atrial fibrillation who received anticoagulation therapy	97	97	98
% of eligible ischemic stroke patients who were discharged on statin medication – cholesterol reducing medication	99	99	99
% of stroke patients who were assessed for rehabilitation services	99	99	99
<b>Patient Education</b>			
% of patients and/or caregivers that received educational materials during the hospital stay addressing all stroke education areas <sup>1</sup>	96	96	97
<b>Aggregate</b>			
% of patients with defect-free <sup>2</sup> in-hospital care	78	79	81
<b>Total number of patients</b>	<b>24,008</b>	<b>25,330</b>	<b>28,512</b>

Abbreviation: **ED** – Emergency Department; **EMS** – Emergency Medical Service; **GCASR** – Georgia Coverdell Acute Stroke Registry; **LKW** – Last Known Well; **NIH** – National Institute of Health; **TIA** – Transient Ischemic Attack; **rtPA** – Recombinant tissue plasminogen activator

<sup>1</sup>Stroke education areas include activation of EMS, follow-up after discharge, medication adherence, risk factors, and sign and symptoms of stroke.

<sup>2</sup>Defect-free care is defined as the delivery of care meeting all quality indicators for which a patient is eligible.



# ACCESS TO STROKE CARE

---

Physician Workforce and Rural Hospital Coverage



# STROKE SPECIALISTS

Georgia continues to face shortages in physicians specializing in stroke care (e.g., neurologists, neurosurgeons, and neuroradiologists), impacting hospital performance on key stroke-care performance measures.<sup>9</sup>

- **Workforce shortage:** Overall, Georgia has **253.5 physicians per 100,000** residents<sup>10</sup>, below the U.S. average of **302 per 100,000**.<sup>11</sup>
- **Limited stroke specialists:** The state reports only **6.3 stroke care physicians per 100,000** residents<sup>12</sup>, compared to **8.6 nationally**<sup>13</sup>, limiting access to stroke-trained experts.
- **Regional disparities:** The highest stroke care physician rate was **777 per 100,000** in Richmond County and the lowest was **55 per 100,000** in Paulding County<sup>12</sup>, excluding the **115 counties with no physicians** in a stroke specialty. Out of those 115 counties, **110 of them are classified as rural**.
- **Uneven distribution:** In 2023/2024, **only 3.3 percent** of neurological specialty physicians practiced in non-MSAs (Metropolitan Statistical Areas), which is a decrease from 2019/2020 (4.1%).<sup>12</sup>
- **Impact on outcome:** Gaps in stroke-care coverage delay treatment, and coordination of care – factors that directly influence recovery and survival of stroke patients.<sup>14</sup>

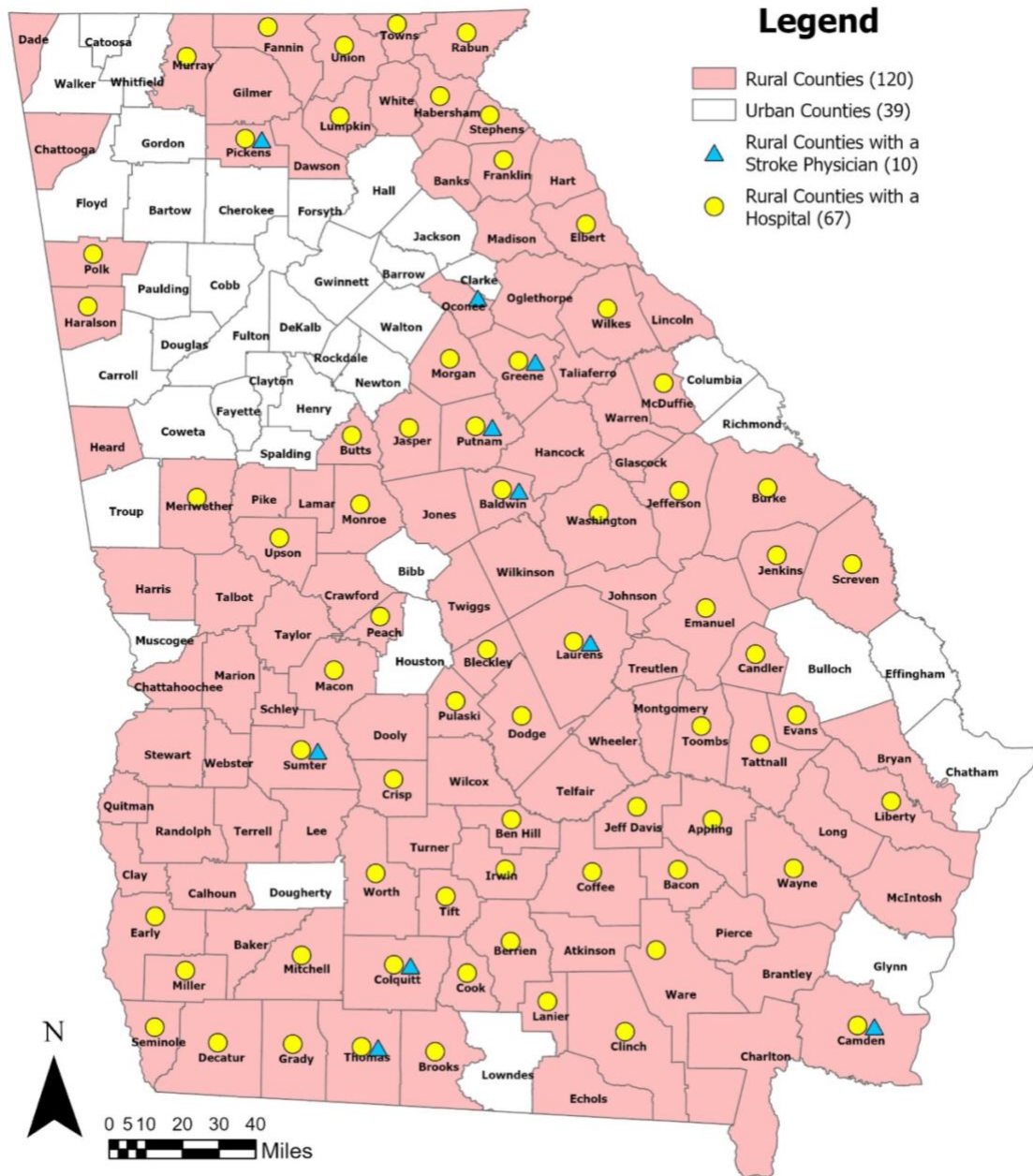


# RURAL HOSPITAL COVERAGE

**Georgians living in rural parts of the state face an increased burden when it comes to stroke care due to geographical isolation from healthcare facilities and transportation barriers.**

- **Distance to care:** Increased distance to the nearest hospital means patients in need of immediate medical attention may not get the treatment they need in a timely manner. This is significant, especially for conditions such as stroke that require treatment as soon as possible for the best outcomes.<sup>15</sup>
- **Limited access:** 1 in 5 Georgians live in one of the 120 rural counties of Georgia<sup>16</sup>. Many of these areas lack hospitals equipped for 24/7 stroke care.
- **Facility shortages:** Out of the 83 designated stroke centers in Georgia, only 23 of them reside in rural counties and 53 out of the 120 rural counties have no hospital at all ([Map 2](#)).<sup>17</sup>
- **Mortality gap:** In 2024, rural counties in Georgia had a 6.4 percent higher stroke-mortality rate compared with urban areas.

# RURAL COUNTIES IN GEORGIA WITH A HOSPITAL OR A STROKE SPECIALTY PHYSICIAN, NOVEMBER 2025



Map 2. Rural Counties with Hospitals and Stroke Specialty Physicians



# DISCUSSION

Currently, 83 acute care facilities in Georgia are designated as stroke centers, of which 27 as Remote Treatment Stroke Centers, and they already have a major impact on the lives of Georgians by reducing mortality and limiting disability from stroke.<sup>18,19</sup> Designated hospitals and associated EMS agencies are working to strengthen the existing relationships and developing new approaches to deliver the best stroke care at all levels of the patient care continuum.

Shortening the time between symptom onset and hospital arrival is crucial for better patient outcomes. Currently, 67 percent of patients arrived at hospitals two hours or later after symptom onset and 44 percent transport themselves to a hospital; therefore, it is critical that all stakeholders exert a concerted effort to increase public awareness about the signs of acute stroke and the importance of calling 911 for a swift transfer of patients to one of the designated and appropriate level stroke centers.

Moreover, we must continue to improve stroke prevention and treatment across the state by reducing the prevalence of stroke risk factors in Georgia. Adults 55 years and older have a higher risk for stroke.<sup>20</sup> Based on the National Center for Health Statistics projection, 16 percent of Georgia residents are expected to be 65 years and older by the 2030, which is a 2 percent increase from 2023.<sup>21</sup> Thus, the number of Georgians affected by stroke is expected to rise over the next few years.

To address the shortage of stroke specialty physicians and hospitals, particularly in rural counties within Georgia, it is important to strengthen the stroke-care workforce through retention incentives, training programs, enhancing tele-medicine capacities, and establishing stroke systems of care.

Stroke is a major cause of disability, and adequate post-hospital care contributes significantly to reducing late complications of the acute incident. It is imperative, therefore, to monitor the quality of post-hospital stroke care as well.

## **Funding**

The Georgia Coverdell Acute Stroke Registry (GCASR) had been financially supported by the Centers for Disease Control and Prevention (CDC) for 20 years, until July 2024. DPH received approximately \$600,000 in federal funds from the CDC annually for the past twenty years to measure, monitor, and improve the quality of stroke care across the state. About 88 acute care hospitals and more than 60 EMS agencies in Georgia joined the stroke registry during this time; of these, 83 facilities are designated as stroke centers at various level of the stroke systems of care. The registry greatly contributed to improving the quality of stroke care over the past two decades. The partnership with other stakeholders like EMS agencies and hospitals increased the proportion of eligible ischemic stroke patients receiving thrombolytics within three hours of last known well by 272% from 34.9% in 2008 to 95% in 2024. It is important that the achievements registered in the past are maintained to ensure that Georgians are receiving the best evidence-based quality stroke care across the state.

# REFERENCES

1. Centers for Disease Control and Prevention, National Center for Health Statistics. [National Vital Statistics System, Provisional Mortality on CDC WONDER Online Database](#). Data are from the final Multiple Cause of Death Files, 2018-2023, and from provisional data for years 2024 and later, as compiled from data provided by the 57 vital statistics jurisdictions through the Vital Statistics Cooperative Program. Accessed Dec 5, 2025.
2. Office of Disease Prevention and Health Promotion. [Reduce stroke deaths — Data. Healthy People 2030](#). Accessed September 25, 2025.
3. Martin SS, Aday AW, Almarzooq ZI, et al. 2024 Heart Disease and Stroke Statistics: A Report of US and Global Data From the American Heart Association. *Circulation*. 2024;149(8):e347-e913. doi:10.1161/CIR.0000000000001209
4. The National Institute of Neurological Disorders and Stroke rt-PA Stroke Study Group. Tissue Plasminogen Activator for Acute Ischemic Stroke. *N Engl J Med*. 333(24):1581-1588. doi:10.1056/NEJM199512143332401
5. Liao Y, Greenlund KJ, Croft JB, Keenan NL, Giles WH. Factors Explaining Excess Stroke Prevalence in the US Stroke Belt. *Stroke*. Published online October 1, 2009. doi:10.1161/STROKEAHA.109.561688
6. Georgia Department of Public Health. [Georgia Behavioral Risk Factor Surveillance System \(BRFSS\) Data 2023 and 2024](#). Accessed October 1, 2025.
7. Thomas D. [Georgia Coverdell-Murphy Act.](#); 2008.
8. Hawkins L, Cooper S, Beverly J, Weldon T, Randall N, Maxwell H. [Amendment to Georgia Coverdell-Murphy Act.](#); 2016.
9. Majersik JJ, Ahmed A, Chen IHA, et al. A Shortage of Neurologists – We Must Act Now. *Neurology*. 2021;96(24):1122-1134. doi:10.1212/WNL.00000000000012111
10. Georgia Board of Health Care Workforce. [2023-2024 Physician Rate and Rank by Georgia County, Primary Care and Core Specialties](#). Published online 2024.
11. Association of American Medical Colleges. [U.S. Physician Workforce Data Dashboard: 2024 Key Findings and Definitions](#). AAMC. Accessed October 8, 2025.
12. Georgia Board of Health Care Workforce. [State of Georgia Physician Workforce](#). Accessed September 25, 2025.
13. Association of American Medical Colleges. [U.S. Physician Workforce Data Dashboard. AAMC](#). Accessed October 8, 2025.
14. Schieb L. Disparities in Timely Access to Certified Stroke Care Among US Census Tracts, by Prevalence of Health Risk Factors. *Prev Chronic Dis*. 2025;22. doi:10.5888/pcd22.240429
15. Marchese G, Prochazka B, Widimsky P. The importance of time: Time delays in acute stroke. *Acute Ischemic Stroke*. 2016;58(2):e225-e232. doi:10.1016/j.crvasa.2016.03.002
16. Tanner D. Rural Georgia in Focus. [University of Georgia Carl Vinson Institute of Government; 2021](#).
17. State Office of Rural Health. [Georgia Rural Counties with Rural Hospitals, Critical Access Hospitals, Rural Emergency Hospitals, and Rural Counties without a Hospital](#).
18. Ido MS, Bayakly R, Frankel M, Lyn R, Okosun IS. Administrative Data Linkage to Evaluate a Quality Improvement Program in Acute Stroke Care, Georgia, 2006 - 2009. *Prev Chronic Dis*. 2015;12. doi:10.5888/pcd12.140238
19. Ido MS, Okosun IS, Bayakly R, et al. Door to Intravenous Tissue Plasminogen Activator Time and Hospital Length of Stay in Acute Ischemic Stroke Patients, Georgia, 2007-2013. *J Stroke Cerebrovasc Dis*. 2016;25(4):866-871. doi:10.1016/j.jstrokecerebrovasdis.2015.12.025

20. Sacco RL, Benjamin EJ, Broderick JP, et al. Risk Factors. Stroke. 1997;28(7):1507-1517.  
doi:10.1161/01.STR.28.7.1507
21. Population Projections, United States, [2004 - 2030, by state, age and sex, on CDC WONDER Online Database](#), September 2005.

