

STROKE BURDEN

A stroke occurs when the blood supply to part of the brain is blocked or when a blood vessel in the brain bursts, causing damage to part of the brain. A stroke is sometimes called a brain attack¹.

There are two main types of stroke. An ischemic stroke occurs when there is blockage in a blood vessel supplying oxygen to the brain. Approximately 85 percent of all strokes fall into this category. A hemorrhagic stroke occurs when a blood vessel in the brain ruptures².

A transient ischemic attack (TIA) is a temporary interruption in the blood supply to the brain. Sometimes a TIA is called a mini-stroke. It starts just like a stroke, but symptoms clear within 24 hours. A TIA is a warning that the person is at risk for a more serious stroke².

PREVALENCE³

- In 2009, 2.3 percent (between 26,000 and 36,000) of Nebraska adults reported that they had a stroke.

DEATH⁴

- In 2008, stroke was the **fourth leading cause of death** in Nebraska and claimed the lives of 825 Nebraska residents, accounting for approximately 1 in every 20 deaths.
- Stroke death rates increase with age but 1 in 9 persons who died from stroke between 2006 and 2008 was less than 65 years old.
- In 2008, the stroke death rate was **15% higher** for men than women.
- Stroke death rates were **63% higher** for African Americans and **24% higher** for Native Americans than whites from 2004-2008.
- From 2004-2008 there were 273 deaths due to ischemic stroke and 295 deaths due to hemorrhagic stroke.

HOSPITALIZATIONS⁵

- In 2008, 3,453 hospitalizations occurred among Nebraska residents due to stroke.

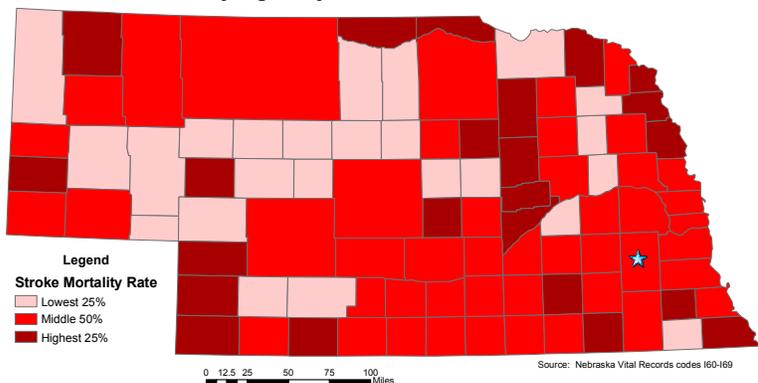
Stroke Hospitalization Outcomes, Among Nebraska Residents, 2008

	Stroke Overall ⁶	Ischemic Stroke ⁷	Hemorrhagic Stroke ⁸
Number of Hospitalizations	3,453	2,651	563
Hospitalization Rate(age-adjusted) ⁹	17.4	13.3	2.9
Number of Residents that received (one or more) hospitalizations	3,109	2,449	513
Average Length of Stay per Hospitalization(in days)	4.6	3.9	7.3

ESTIMATED CHARGES⁵

- Total hospital charges for stroke increased by over **\$44.4 million** between 2001 and 2008, from \$54.4 to \$98.8 million.
- The average charge per stroke hospitalization was \$28,600 in 2008.
- In 2008, Medicare paid an estimated \$64 million for hospitalizations due to stroke, accounting for approximately 65% of all hospitalization charges for stroke.
- In 2007 Nebraska paid an estimated \$38.1 million for medical costs due to stroke for Medicaid enrollees¹⁰.

Stroke Mortality in Nebraska by Age-Adjusted Rates 2004-2008



CVD MODIFIABLE RISK FACTORS

HIGH BLOOD PRESSURE³

- Approximately 1 in every 4 (27.1%) Nebraska adults reported having been told by a healthcare professional that they have high blood pressure.
- African Americans (35.4%) are significantly more likely than whites (25.6%) to have diagnosed high blood pressure for the years 2007 & 2009 combined¹¹.
- Over half (58.1%) of Nebraskans age 65 and older have high blood pressure.

SMOKING³

- Approximately 1 in 6 Nebraska adults (16.7%) reported currently smoking cigarettes.
- Significantly more Native American adults (41.4%) than all other racial and ethnic populations reported smoking cigarettes for the years 2007-2009 combined¹¹.

HIGH BLOOD CHOLESTEROL³

- Approximately 1 in every 4 (26.1%) Nebraska adults has not had a blood cholesterol screening in the past five years.
- Of Nebraska adults that report having had their blood cholesterol checked, more than 1 in every 3 (37.4%) reported having been told by a healthcare professional that they have high blood cholesterol.

PHYSICAL INACTIVITY³

- Nearly 1 in 3 adults did not meet recommended guidelines for physical activity.

UNHEALTHY EATING³

- Less than 1 in 4 Nebraska adults (20.9%) consumed five or more servings of fruits and vegetables per day in 2009.

OVERWEIGHT & OBESITY³

- Nearly 2 in 3 Nebraska adults (64.8%) were overweight or obese.
- Males (74.3%) were significantly more likely to be overweight or obese than females (55.4%).
- African Americans (37.2%) and Native Americans (40.5%) were significantly more likely to be obese than whites (26.4%) for the years 2002-2009 combined¹¹.

DIABETES³

- Nearly 1 in 13 (7.5%) Nebraska adults reported ever being diagnosed with diabetes.

MULTIPLE RISK FACTORS³

- Among Nebraska adults, more than 9 in 10 (96.2%) have one or more CVD risk factors, 7 in 10 (70.8%) have 2 or more CVD risk factors, and more than 2 in 5 (42.0%) have 3 or more CVD risk factors.

SIGNS & SYMPTOMS

HEART ATTACK

- Chest discomfort: Most heart attacks involve discomfort in the center of the chest that lasts for more than a few minutes or goes away and comes back. The discomfort can feel like uncomfortable pressure, squeezing, fullness, or pain.
- Discomfort in other areas of the upper body: Can include pain or discomfort in one or both arms, the back, neck, jaw, or stomach.
- Shortness of breath: Often occurs along with chest discomfort, but it also can occur before chest discomfort.
- Other symptoms: May include breaking out in a cold sweat, nausea, or light-headedness.

STROKE

- Sudden numbness or weakness of the face, arm or leg, especially on one side of the body.
- Sudden confusion, trouble speaking or understanding.
- Sudden trouble seeing in one or both eyes.
- Sudden trouble walking, dizziness, loss of balance or coordination.
- Sudden, severe headache with no known cause.

For more information, contact:

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REFERENCES

1. Centers for Disease Control and Prevention <http://www.cdc.gov/stroke/>
2. Centers for Disease Control and Prevention http://www.cdc.gov/stroke/types_of_stroke.htm
3. Nebraska Behavioral Risk Factor Surveillance System. Year 2009. Nebraska Department of Health and Human Services. Financial Services, Research and Performance Management. Public Health Support Unit.
4. Nebraska Vital Records. Year 2008. Nebraska Department of Health and Human Services. Financial Services, Research and Performance Management.
5. Nebraska Hospital Discharge Data. Year 2008.

6. ICD-9 codes 430-434, 436-438

7. ICD-9 codes 433-434, 436

8. ICD-9 codes 430-432

9. Age-adjusted per 10,000 population (2000 U.S. standard population)

10. Estimated from CDC Chronic Disease Cost Calculator at

<http://www.cdc.gov/nccdphp/resources/calculator.htm>

11. Data age-adjusted due to age differences in racial and ethnic groups

