

## | 2011\*\* | 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 attack<sup>1</sup>.

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 ruptures<sup>2</sup>.

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 stroke<sup>2</sup>.

### PREVALENCE<sup>3</sup>

- During 2008-2010, approximately 2.4% (600) of all adults reported ever being diagnosed with a stroke.

### DEATH<sup>4</sup>

- Stroke was the **third leading cause of death** and claimed 20 lives, accounting for approximately 1 in every 15 deaths.
- Stroke death rates increase with age but 1 in 15 people who died from stroke between 2006 and 2010 was less than 65 years of age.
- The stroke age-adjusted death rate was 60% **higher** for men than women.

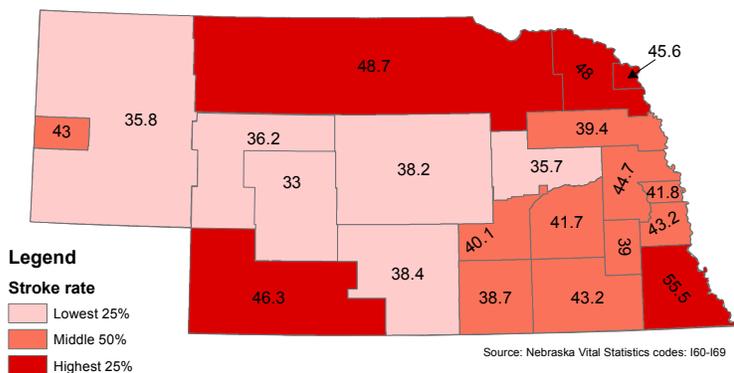
### HOSPITALIZATIONS<sup>5</sup>

- There were 24 hospitalizations among residents due to stroke.

**Stroke Hospitalizations Outcomes**  
Northeast Nebraska Public Health Department Residents, 2010

	Stroke Overall <sup>6</sup>	Ischemic Stroke <sup>7</sup>	Hemorrhagic Stroke <sup>8</sup>
Number of hospitalizations	24	20	4
Hospitalization rate(age-adjusted) <sup>8</sup>	5.7	4.8	1.0
Number of residents that received (one or more) hospitalizations	22	20	2
Average length of stay per hospitalization(in days)	3.4	2.9	6.0

**Stroke Mortality by Local Health Departments**  
Age-Adjusted Rates per 100,000 population 2006-2010



### ESTIMATED CHARGES<sup>5</sup>

- Total hospital charges for stroke increased by **\$300,000** between 2001 and 2010, from \$300,000 to \$600,000.
- The average charge per stroke hospitalization was \$23,800 in 2010.
- In 2010, Medicare was charged an estimated \$500,000 for hospitalizations due to stroke, accounting for approximately 83% of all hospitalization charges for stroke.

\* All information on this fact sheet is for persons that reside in counties served by Northeast Nebraska Public Health Department.

\*\* Published December 2011. All data is the most current data available at the time of publication.

# STROKE MODIFIABLE RISK FACTORS

## HIGH BLOOD PRESSURE<sup>3</sup>

- Approximately 1 in every 4 (26.3%) adults reported being told by a healthcare professional that they had high blood pressure for the years 2007 and 2009 combined.
- Over half (54.7%) of adults age 65 and older had high blood pressure for the years 2007 and 2009 combined.

## SMOKING<sup>3</sup>

- Approximately 1 in 5 adults (19.7%) reported smoking cigarettes for the years 2007-2010 combined.
- Native Americans are more likely (51.5%) than whites (16.3%) to report smoking cigarettes for the years 2007-2010 combined<sup>10</sup>.

## HIGH BLOOD CHOLESTEROL<sup>3</sup>

- Approximately 1 in every 3 (31.8%) adults had not had a blood cholesterol screening in the past five years for the years 2007 and 2009 combined.
- Of adults that reported having their blood cholesterol checked, more than 1 in every 3 (34.4%) reported being told by a healthcare professional that they had high blood cholesterol for the years 2007 and 2009 combined.
- Almost half (47%) of adults age 65 and older had high blood cholesterol for the years 2007 and 2009 combined.

## PHYSICAL INACTIVITY<sup>3</sup>

- 2 in 5 adults (42.9%) did not meet recommended guidelines for physical activity for the years 2007 and 2009 combined.

## UNHEALTHY EATING<sup>3</sup>

- 1 in 5 adults (22.2%) consumed five or more servings of fruits and vegetables per day for 2007 and 2009 combined.

## OVERWEIGHT & OBESITY<sup>3</sup>

- Approximately 2 in 3 adults were overweight (40.1%) or obese (30.1%) for the years 2007-2010 combined.
- Males (75.6%) were significantly more likely to be overweight or obese than females (64.9%) for 2007-2010 combined.
- Native Americans are more likely (51.1%) than whites (25.7%) to be obese for the years 2007-2010 combined<sup>10</sup>.

## DIABETES<sup>3</sup>

- Nearly 1 in 13 (7.9%) adults reported ever being diagnosed with diabetes for 2007-2010 combined.
- Almost 1 out of every 6 adults (16.1%) 65 and older reported ever being diagnosed with diabetes for the years 2007-2010 combined.
- Native Americans are more likely (25.8%) than whites (6.0%) to report having diabetes for the years 2007-2010 combined<sup>10</sup>.

## MULTIPLE RISK FACTORS<sup>3</sup>

- Among adults, more than 9 in 10 (95.4%) had one or more CVD risk factors, more than 2 in 3 (71.1%) had 2 or more CVD risk factors, and more than 2 in 5 (43.6%) had 3 or more CVD risk factors for 2007 and 2009 combined.

# 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

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2. Centers for Disease Control and Prevention [http://www.cdc.gov/stroke/types\\_of\\_stroke.htm](http://www.cdc.gov/stroke/types_of_stroke.htm)
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7. ICD-9 codes 433-434, 436
8. ICD-9 codes 430-432
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10. Data age-adjusted due to age differences in racial and ethnic groups.