

## Signs & Symptoms of Heart Attack and Stroke

Heart disease is the leading cause, and stroke is the third leading cause, of death in both Connecticut and the United States. Heart disease and stroke are also major causes of disability among adults.<sup>1</sup> The *Healthy People 2010* national objectives for both heart disease and stroke include increasing the proportion of persons who are aware of the early warning symptoms and signs of heart attack (objective no. 12.2) and stroke (objective no. 12.8) and the necessity of calling 911 when persons are suffering from either of these conditions.<sup>2</sup> Early recognition and calling 911 increase the likelihood of immediate emergency transport to the hospital and timely medical care that can reduce disability and death.

The Behavioral Risk Factor Surveillance System telephone survey (BRFSS) gathers information about heart attack and stroke awareness in its telephone survey of adults 18 years and older. Findings from the Connecticut 2007 BRFSS suggest that Connecticut adults are likely to recognize some signs of heart attack and stroke but not others. For example, about 96% of adults recognize chest pain or discomfort, but only about 58% of adults recognize jaw, neck or back pain as symptoms of heart attack (Table 1). About 97% of adults recognize sudden numbness or weakness of the face, arm, or leg, but only 72% recognize severe headache as signs of stroke (Table 2).

**Table 1: Percentage of Connecticut Adults Who Recognize Heart Attack Warning Signs and the Need to Call 911 (CT BRFSS, 2007)<sup>3</sup>**

Heart Attack Sign/Symptom	Percentage		
	All	Males	Females
Jaw, neck, back pain *	57.7	47.4	66.9
Lightheaded, faint	69.7	67.7	71.6
Shortness of breath *	88.4	85.5	91.0
Arm or shoulder discomfort *	90.0	88.1	93.4
Chest pain or discomfort *	95.8	94.5	96.9

\* Significant difference between men and women (p <0.05)

Females are more likely than males to recognize the signs and symptoms of heart attack and stroke. For example, about 93% of women but only about 88% of men recognize arm or shoulder discomforts as symptoms of a heart attack (Table 1). About 77% of women but only about 67% of men recognize severe headache with no apparent cause as a warning sign of stroke (Table 2).

**Table 2: Percentage of Connecticut Adults Who Recognize Stroke Warning Signs and the Need to Call 911 (CT BRFSS, 2007)<sup>4</sup>**

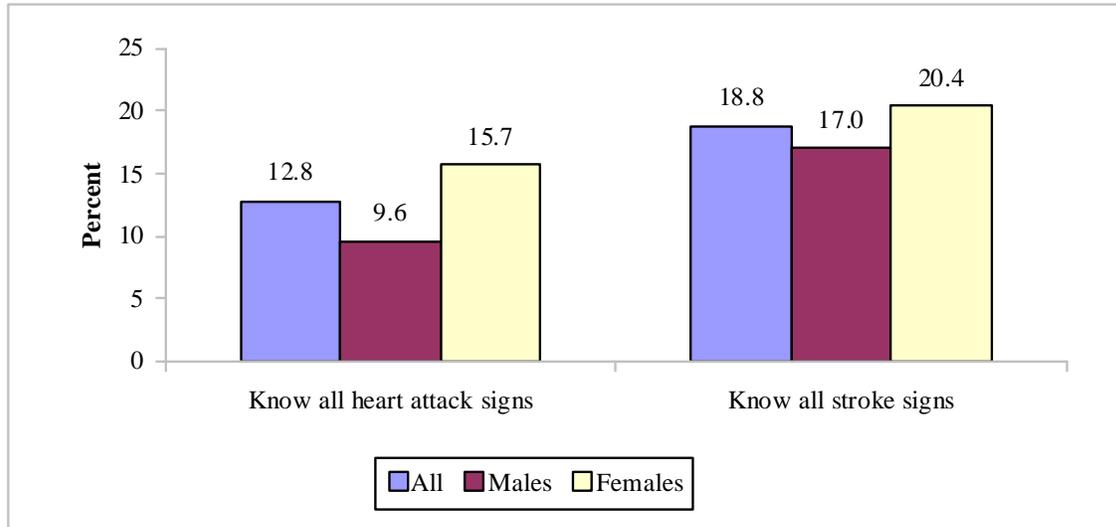
Stroke Sign/Symptom	Percentage		
	All	Males	Females
Severe headache with no known cause *	72.1	67.0	76.6
Trouble seeing in one or both eyes	86.7	84.8	88.4
Trouble walking, dizziness, or loss of balance	92.6	91.7	93.3
Confusion, trouble speaking	95.7	94.8	96.5
Sudden numbness/weakness of face, arm, or leg	97.3	96.6	98.0

\* Significant difference between men and women (p <0.05)

# Signs & Symptoms of Heart Attack and Stroke

People should know all the signs and symptoms for heart attack and stroke. The percentage of Connecticut adults who know all the signs and symptoms for heart and stroke tends to be very low. Overall, only 13% of Connecticut adults know all the proper heart attack signs and only 19% know all the proper stroke signs. Women are more knowledgeable than men about the signs and symptoms of heart attack ( $p < 0.0001$ ) and stroke ( $p < 0.01$ ) (Figure 1).

**Figure 1: Percentage of Connecticut Adults Who Know All the Signs and Symptoms of Stroke, by Gender (CT BRFSS, 2007)<sup>5</sup>**



The Connecticut Department of Public Health Heart Disease and Stroke Prevention Program (HDSP) works to reduce the burden of heart disease and stroke among Connecticut residents. The HDSP focuses on priorities and strategies established by the Centers for Disease Control and Prevention (CDC) to reduce the incidence of, and death and disability from, heart disease and stroke. For further information, contact the Connecticut Department of Public Health Heart Disease and Stroke Prevention Program at: 860-509-7801.<sup>6</sup>

<sup>1</sup> Awareness of Stroke Warning Signs – 17 States and the U.S. Virgin Islands, 2001. (May 7, 2004). MMWR 53(17): 359-362.

<sup>2</sup> *Healthy People 2010*. Heart Chapter 12 – Heart Disease and Stroke. (n.d.). Retrieved July 19, 2006, from: <http://www.healthypeople.gov/document/HTML/tracking/OD12.htm>.

<sup>3</sup> Connecticut BRFSS 2007 unpublished data. Connecticut Department of Public Health, Hartford, CT.

<sup>4</sup> Connecticut BRFSS 2007 unpublished data. Connecticut Department of Public Health, Hartford, CT.

<sup>5</sup> Connecticut BRFSS 2007 unpublished data. Connecticut Department of Public Health, Hartford, CT.

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