

BRFSS Brief

Number 0909

The Behavioral Risk Factor Surveillance System (BRFSS) is an annual statewide telephone survey of adults developed by the Centers for Disease Control and Prevention and administered by the New York State Department of Health. The BRFSS is designed to provide information on behaviors, risk factors, and utilization of preventive services related to the leading causes of chronic and infectious diseases, disability, injury, and death among the noninstitutionalized, civilian population aged 18 years and older.

Epilepsy

New York State Adults 2007

Introduction

Epilepsy is a disorder of the central nervous system resulting in unprovoked seizures that happen more than once. A seizure is a brief disruption of electrical activity in the brain that affects other brain functions. Epilepsy is not a mental illness or a sign of mental retardation, nor is it contagious. Having uncontrolled epilepsy can alter a person's life, however, since it is impossible to know when the next seizure will happen. This can cause problems at school, holding a job, or getting a driver's license. Persons with epilepsy may also face discrimination from others who sometimes do not understand what is happening during a seizure.

Epilepsy is the third most common neurological disorder in the United States after Alzheimer's disease and stroke.¹ It costs the nation about \$12.5 billion in

direct and indirect costs annually.² More than half the time, the cause of epilepsy is unknown. When the cause can be determined, it is most often due to head injury, infection or a tumor in the brain, a stroke, degenerative diseases such as Alzheimer's disease, substance abuse, or heredity. Epilepsy affects children and adults, men and women, and persons of all races, religions, ethnic backgrounds, and social classes. Individuals in certain populations are at higher risk. Most people learn they have epilepsy when they are young children or after age 65, but epilepsy can occur at any age. The risk of premature death in persons with epilepsy is two to three times higher than for the general population.³

BRFSS Questions

1. Have you ever been told by a doctor that you have a seizure disorder or epilepsy?

[If "yes"]

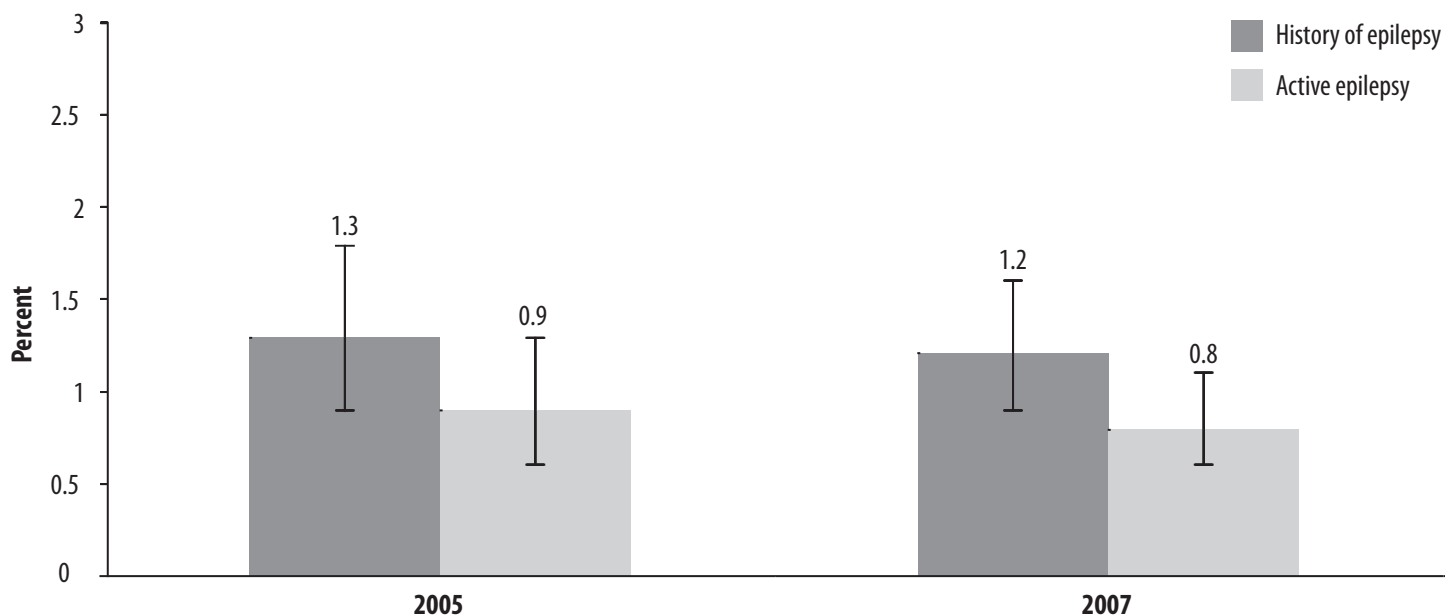
2. Are you currently taking any medicine to control your seizure disorder or epilepsy?
3. How many seizures have you had in the last three months? (none, one, two or more, no longer have epilepsy/seizure disorder)
4. During the past month, to what extent has epilepsy or its treatment interfered with your normal activities like working, school, or

socializing with family or friends? (not at all, slightly, moderately, quite a bit, or extremely)

5. During the past year, have you seen a neurologist or epilepsy specialist for your epilepsy or seizure disorder?

Responses to the first question provide an estimate of the lifetime prevalence, or history, of epilepsy. Among those with a history of epilepsy, those who are currently taking medication for seizure control (question #2) or who have had one or more seizures in the last three months (question #3) are defined as having active epilepsy.

History of epilepsy^a and active epilepsy^b among New York State adults: 2005 and 2007 BRFSS

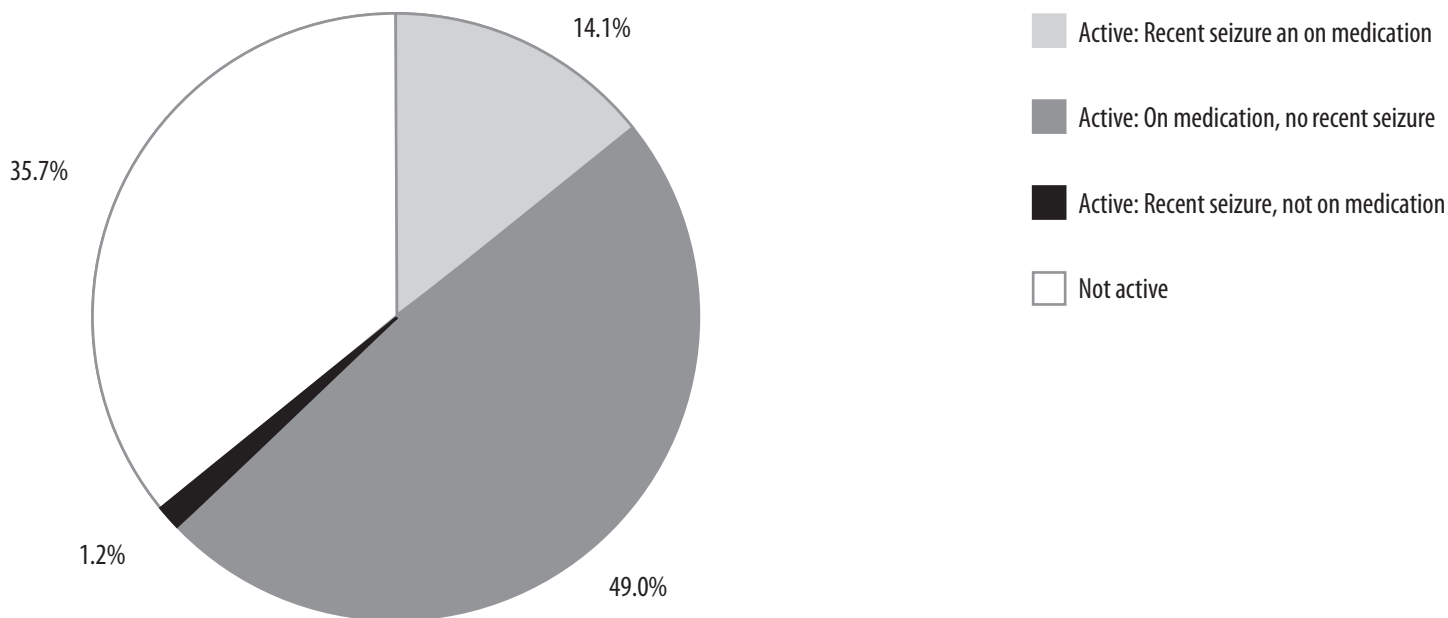


Note: Error bars represent 95% confidence intervals.

^a Ever told by doctor that have seizure disorder or epilepsy.

^b Currently taking medication to control epilepsy or had one or more seizures during past 3 months.

Current status of New York State adults with a history of epilepsy: 2007 BRFSS



Note: People who are currently taking medication to control epilepsy or had one or more seizures during past 3 months have "active epilepsy."

Prevalence of epilepsy among New York State adults: 2007 BRFSS

Demographic group	History of epilepsy ^a [n=78]		Active epilepsy ^b [n=47]	
	% ^c	95% CI ^c	%	95% CI
Total [N=6,525^d]	1.2	0.9-1.6	0.8	0.5-1.1
Sex				
Male	1.1	0.7-1.8	0.6	0.3-1.2
Female	1.2	0.9-1.8	0.9	0.6-1.3
Age (years)				
18-64	1.3	0.9-1.8	0.8	0.6-1.2
≥ 65	0.6	0.3-1.2	0.4	0.2-0.9

a If ever told by a doctor that respondent had a seizure disorder or epilepsy.

b If ever told by a doctor that respondent had a seizure disorder or epilepsy, and were currently taking medicine to control epilepsy or had one or more episodes of seizure during the preceding 3 months.

c % =Percentage; 95%CI =Confidence interval (at the 95 percent probability level). Percentages are weighted to population characteristics.

d Total number of respondents in survey.

Characteristics of New York State adults with a history of epilepsy [N=78]: 2007 BRFSS

	% ^a	95% CI ^a
Currently taking medication to control epilepsy	63.1	48.7-75.5
Number of seizures during preceding 3 months		
None	84.2	71.9-91.8
One	4.4	1.6-11.9
Two or more	11.3	5.0-23.8
Extent to which epilepsy or its treatment interfered with normal activities during past month		
Not at all / Slightly	85.8	73.3-93.0
Moderately / Quite a bit / Extremely	14.2	7.0-26.7
Saw neurologist or epilepsy specialist for epilepsy or seizure disorder during past year	54.4	40.4-67.8

Note: Usual guidelines for drawing inferences from BRFSS data include confidence intervals with a half-width of 10 or less. Consequently, users should pay particular attention to the size of the subgroup [N=78] and the resulting confidence intervals in the above table and exercise caution in drawing inferences.

a % =Percentage; 95% CI =Confidence interval (at the 95 percent probability level). Percentages are weighted to population characteristics.

Discussion

In 2007, 1.2 percent of New York adults reported a history of epilepsy and 0.8 percent had active epilepsy. These estimates were similar in 2005 and 2007. A detailed analysis of epilepsy-related characteristics was completed using the 2005 survey results and is available at http://www.health.state.ny.us/nysdoh/brfss/reports/docs/epilepsy_brfss_volume_13_number_1.pdf.

A Brief Report of the 2005 data has also been produced (see http://www.health.state.ny.us/nysdoh/brfss/reports/docs/brfssbrief_epilepsy_0708.pdf). Since the methods for collecting information about epilepsy in adults was the same during both years, the estimates can be compared.

References

1. Hauser A. Epidemiology of seizures and epilepsy in the elderly. In Rowan AJ, Ramsay RE (eds). *Seizures and epilepsy in the elderly 1997*; Boston: Butterworth-Heinemann, 7-18.
2. Begley CE, Famulari M, Annegers JF, Lairson DR, Reynolds TF, Coan S, Dubinsky S, Newmark ME, Leibson C, So EL, Rocca WA. The cost of epilepsy in the United States: an estimate from population-based clinical and survey data. *Epilepsia* 2000; 41:342-351.
3. Cockerell OC. The mortality of epilepsy. *Current Opinion in Neurology* 1996; 9:93-96.

Acknowledgement

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Order Information

Copies may be obtained by contacting:

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