

# Data Brief

February 2012



**About one in every eight (12.4%)**

**Cleveland adults had diabetes from 2005 through 2009.** This is based on new analyses of data from the Cleveland-Cuyahoga County Behavioral Risk Factor Surveillance Survey (BRFSS). Over 6,300 Cleveland residents participated in five years of surveys.

## On the rise in Cleveland

The typical adult in Cleveland with diabetes in 2008-2009 was a 50 to 64 year-old, black/African American female. However, the rates of diabetes between men and women in this age group is virtually the same (13.9% for

women and 13.5% for men) for that time period.

The data also confirms the steady increase in diabetes prevalence as adults age. Diabetes prevalence triples from younger to older adults, reported among 8.1% of adults age 30-49 compared to 26.2% of adults age 65 years for survey years 2005-2009 (See Figure 4 on back).

Similar to national data, black/African American Clevelanders have a greater prevalence of diabetes. From 2005-07 to 2008-09, diabetes increased across all races in our area, however, black/African American residents remain the racial group with the highest number of adults with diabetes.

Cleveland adults age 30 to 64 who have diabetes are also more likely to

# Diabetes In Cleveland



have high blood pressure, ever had asthma or currently have asthma, and be obese and less physically active. The rise in diabetes in Cleveland adults may be connected to these other chronic conditions, although this has not been scientifically proven.

## Diabetes in Cleveland Neighborhoods

The neighborhoods with the most diabetes were the southeastern neighborhoods (14.2%) ; the least was on the far west side of Cleveland (11.3%) (see Figure 2). While these differences across neighborhoods were not statistically significant, it is clear that some neighborhoods are more affected by the disease than others.

Changes in diabetes from 2005-2007 to 2008-2009 were seen across neighborhoods (see Figure 2 on back). But the year to year changes were not statistically significant.

## How does Cleveland compare?

By 2009, there were more adults with diabetes in Cleveland (about one in seven adults, 13.9%), than in Pittsburgh, PA (one in ten, 9.5%) and in Ohio (one in ten, 10.1%). The amount of adults in Cleveland with diabetes was also higher than Cuyahoga County (10.1%) , and the U.S. at 8.3 % (see Figure 3).

For more detailed statistical figures, visit [www.prchn.org/brfss](http://www.prchn.org/brfss).

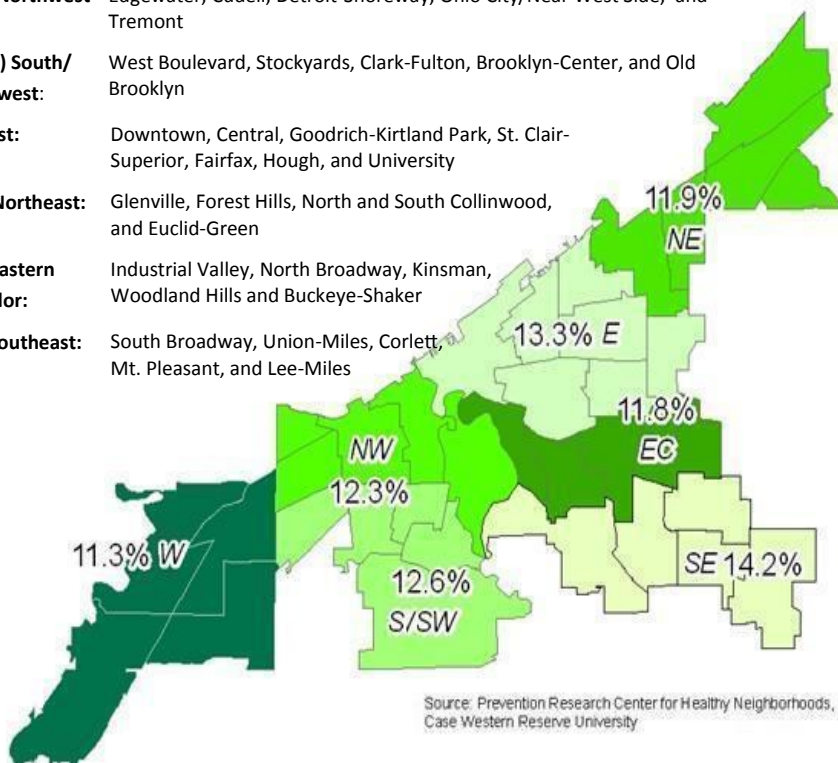
Figure 1.

## **Prevalence of diabetes in Cleveland neighborhoods, 2005-2009**

Source: Behavioral Risk Factor Surveillance System (BRFSS)

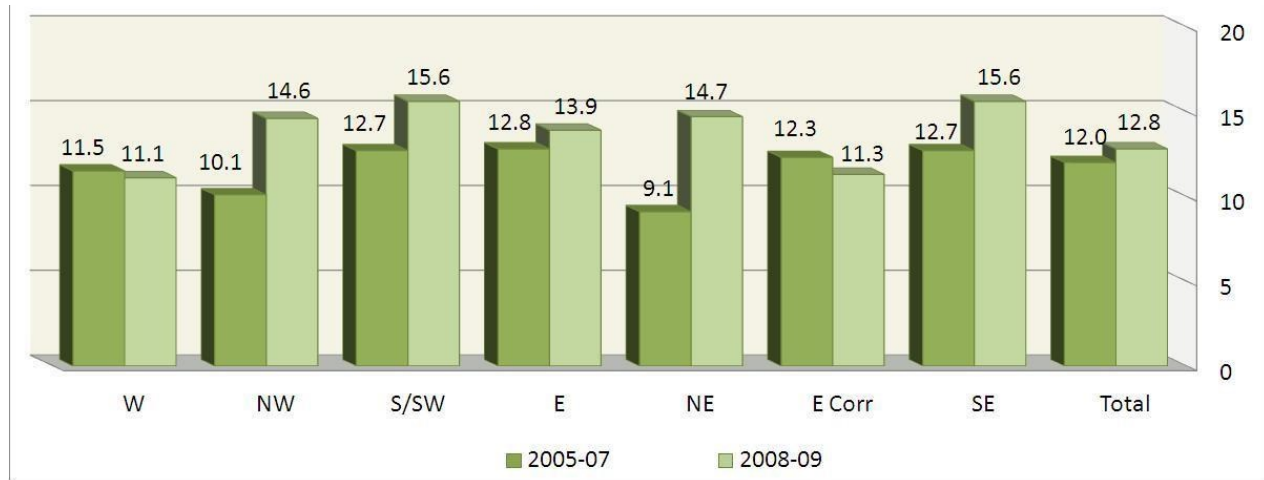
### Cleveland neighborhood clusters

<b>(W) West</b>	Riverside, Puritas-Longmead, Kamms Corner, and Jefferson
<b>(NW) Northwest</b>	Edgewater, Cudell, Detroit-Shoreway, Ohio City/Near West Side, and Tremont
<b>(S/SW) South/Southwest:</b>	West Boulevard, Stockyards, Clark-Fulton, Brooklyn-Center, and Old Brooklyn
<b>(E) East:</b>	Downtown, Central, Goodrich-Kirtland Park, St. Clair-Superior, Fairfax, Hough, and University
<b>(NE) Northeast:</b>	Glenville, Forest Hills, North and South Collinwood, and Euclid-Green
<b>(EC) Eastern Corridor:</b>	Industrial Valley, North Broadway, Kinsman, Woodland Hills and Buckeye-Shaker
<b>(SE) Southeast:</b>	South Broadway, Union-Miles, Corlett, Mt. Pleasant, and Lee-Miles



## How do Cleveland neighborhoods compare?

Figure 2. Diabetes (%) Among BRFSS Survey Respondents by Cleveland Neighborhood



## How does Cleveland/Cuyahoga County compare to other areas?

Figure 3. Prevalence of Diabetes in adults (percent, [95% confidence interval]) (Source: CDC, BRFSS and PRCHN)

BRFSS (year)	US*	Ohio	Cuyahoga County	Cleveland	Akron	Allegheny Co. (Pittsburgh)	Wayne Co. (Detroit)
2005	7.3%	7.7% (6.9-8.5)%	7.6% (5.7-9.6)%	10.3% (8.4-12.3)%	8.0 % <sup>+</sup> (4.8-11.1)%	9.0% (7.4-10.5)%	9.2% (7.7-10.8)%
2009	8.3%	10.1% (9.4-10.9)%	10.1% (7.6-12.3)%	13.9% (11.2-16.5)%	9.0% (6.4-11.5)%	9.5% (8.1-10.8)%	10.6 % (9.0-12.1)%

\*median

<sup>+</sup>2006

## Who has diabetes in Cleveland?

Figure 4. Diabetes prevalence by demographic characteristic

Demographics		Full Survey	Survey Periods	
		2005-2009	2005-2007	2008-2009
Total		12.4%	12.0%	12.8%
Age (yrs)	30-49	8.1%*	5.4%	10.8%
	50-64	19.5%	21.8%	17.2%
	65+	26.2%	23.8%	28.6%
Gender	male	11.6%	9.7%	13.5%
	female	13.4%	12.8%	13.9%
Race	white	11.7%	11.0%	12.4%
	black/Af Am	13.8%	12.1%	15.4%
	other	10.1%	9.8%	10.4%
Significantly different * between older groups				

**Methods:** We used the method of Korn and Graubard (Wiley, 1999) to adjust sampling weights necessary when combining multiple years of survey weighted data. Additional methods were developed to improve the precision of estimates and estimate the error (confidence intervals) for these neighborhood clusters. A more detailed description is available at our website, <http://prchn.org>.

**Contributors:** The information in this report was obtained from the 2005-2009 Cleveland-Steps to a Healthier Cleveland and Cuyahoga County Behavioral Risk Factor Surveillance Surveys (CLE-BRFSS and CC-BRFSS). These telephone-based surveys are modeled after the CDC state-based system of health surveys administered annually by each state department of health, and are comprised of telephone surveys of county adults aged 18 years and older who are asked about their health, behavior and opinions on topics related to living healthier lives. Locally, the surveys involved the Cleveland Department of Public Health and the Cuyahoga County Board of Health, with coordination by the Prevention Research Center for Healthy Neighborhoods (PRCHN) at Case Western Reserve University. Please refer to the Cleveland Steps and CC-BRFSS Methodology Briefs available at <http://prchn.org>. This data brief was prepared by the Prevention Research Center for Healthy Neighborhoods and authored by David Bruckman, MS, MT(ASCP), Jeri Jewett-Tennant, MPH and Elaine A. Borawski, PhD. For more information contact David Bruckman ([david.bruckman@case.edu](mailto:david.bruckman@case.edu)) or Dr. Elaine Borawski ([elaine.borawski@case.edu](mailto:elaine.borawski@case.edu)).

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