

city of
CINCINNATI
HEALTH DEPARTMENT



We know **health** matters

March 2011

Why do we die? City of Cincinnati Mortality Data Project Summary

Noble Maseru, Ph. D., MPH, Cincinnati Health Commissioner

Camille Jones, MD, MPH, Assistant Health Commissioner



*from the collection of the Public Library of Cincinnati and Hamilton County

Index

Page 1

Executive Summary

Page 4

Cincinnati Map—Age Adjusted Mortality Rates by Neighborhood

Page 5

Neighborhood Mortality Rates Compared to City of Cincinnati Rate

Page 6

Top 10 Causes of Death in Cincinnati and Crude Mortality Rates for Cincinnati and USA

Page 7

Heart Disease: Neighborhood Mortality Rates Compared to City of Cincinnati Rate

Page 8

Cancer Deaths: Neighborhood Mortality Rates Compared to City of Cincinnati Rate

Page 9

Stroke Deaths: Neighborhood Mortality Rates Compared to City of Cincinnati Rate

Acknowledgements

A special thank you to Dan Laughlin and Matt Malinak from Xavier University's XU Health Services Administration Graduate Program for their tireless work and extra effort on this project. Thanks also to Dr. Edmond Hooker, the faculty mentor at Xavier University for this project.

The City of Cincinnati Planning Department



Executive Summary

Cincinnati Health Department Neighborhood Mortality Data Project

The results of an unprecedented 2.5 year effort has produced the leading causes of death for Cincinnati and death rates in each of the 48 neighborhood groupings, by age, gender and race. The information includes the top 10 causes of death for the City. The top 10 causes of death for neighborhoods will be released shortly. This data has never been available before in Cincinnati. The information will be used to improve the quality, and extend the life of Cincinnatians.

The data was made available to the public at an announcement on Mar 30, 2011 at the Cincinnati Health Department, 3101 Burnet Avenue, 45229. In addition initial data is now available on the Health Departments website www.cincinnati-oh.gov.

The data will be used and analyzed by City of Cincinnati planners for the development of the City's Comprehensive Plan, as well as by community members, academics, researchers, public health professionals, social service agencies, community councils, health councils, hospitals, media, grant writers and anyone interested in understanding or working with issues of health, illness and disparity in Cincinnati.

The project was led by the Cincinnati Health Department and included close collaboration with students from Xavier University's Master of Health Administration program. The methodology adhered to strict academic research guidelines and research practices including review by the Health Department and Xavier's independent Institutional Review Boards*. The initial database and each step of the analysis were cross-checked by multiple researchers to assure a strong final product.

The best way to improve the health of communities is through local action. The Health Department will work with community agencies and partners to consider the implications of these findings and to develop long term plans to improve health outcomes in Cincinnati. This will include:

- Working with community councils to establish or support existing wellness committees focusing on the implications for specific neighborhoods and the region.
- Working with City staff on the ongoing development of the Cincinnati Comprehensive Plan by considering the impact of the built environment, placement of industry, walk and bike ability of communities etc.
- Partner with hospitals, academia and other civic organizations on ways to best turn this data and further research into positive health outcomes.

2

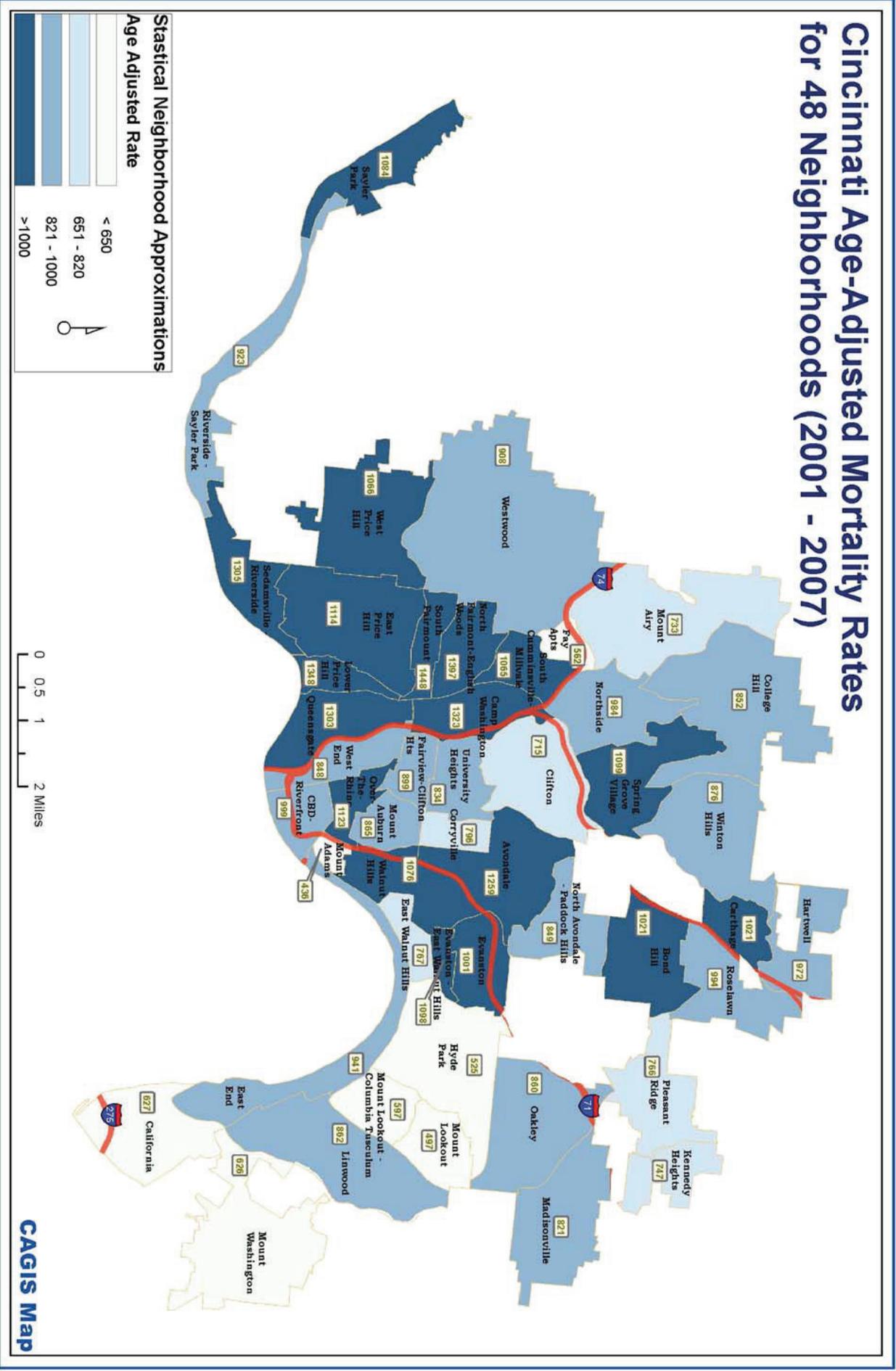
The release of this data represents the completion of the first phase of the project. In the coming months the Health Department will continue to analyze the data. Regular public release of additional analyses will take place as the information becomes available. Further plans are in place to develop a query-able dataset which will be available online for use by researchers, residents and anyone else interested in improving health outcomes.

*Methodology

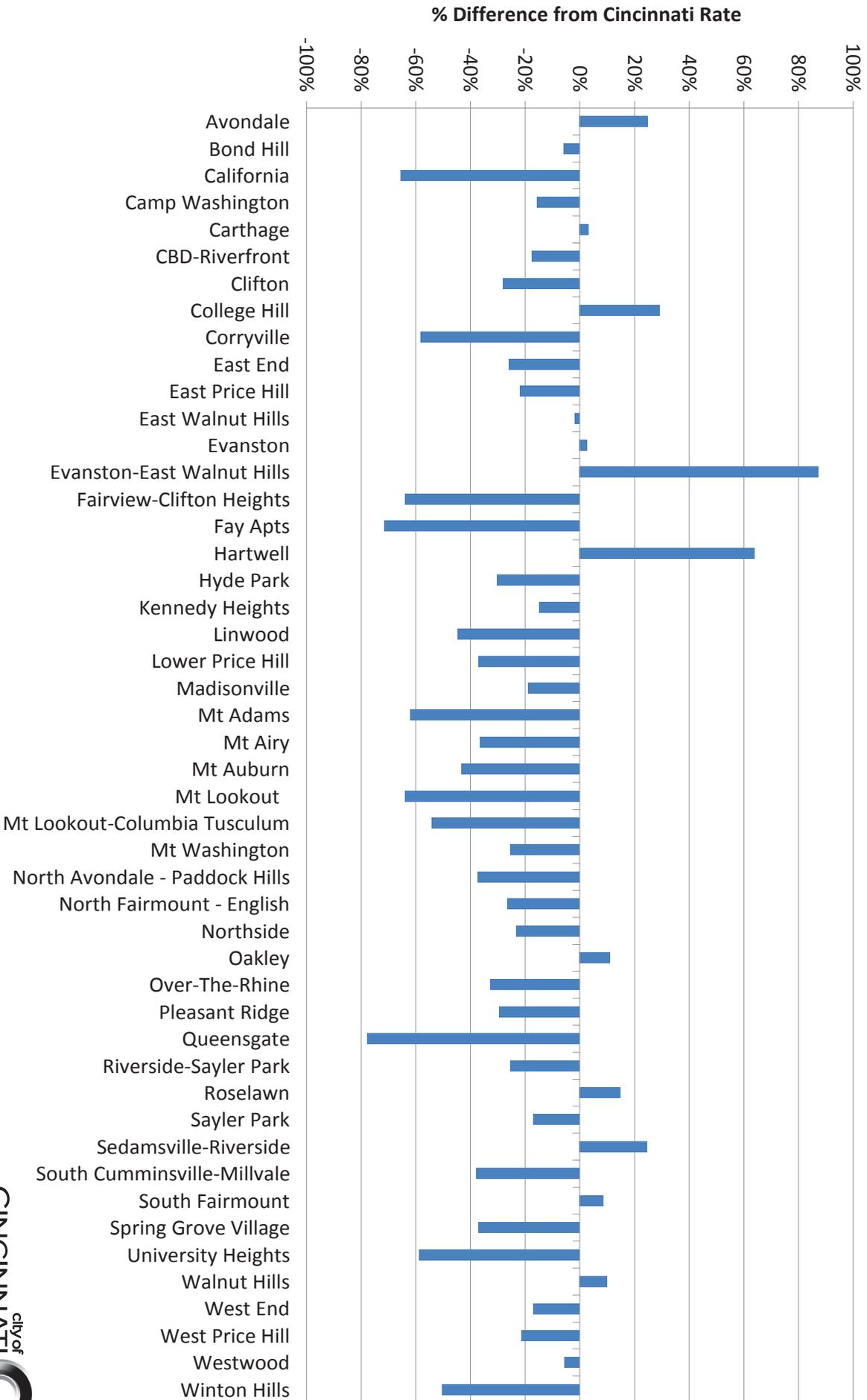
Death certificates filed by the Cincinnati Health Department's Vital Records office from 2001 to 2007 were compiled and assigned a census tract by the Ohio Department of Health. The research team was able to assign all deaths to their respective residential neighborhood using the Cincinnati Department of City Planning's definition by census tract of 48 statistical neighborhood approximations. The number of people living in each neighborhood in 2004 was estimated using data from the 2000 census and an adjustment methodology provided by the Department of City Planning. Standard formulas for calculating overall-, age-, race- and sex-specific (crude) death rates were utilized. Age-adjusted death rates were also calculated for each neighborhood, based on the Cincinnati population. The National Center for Health Statistics categorizations of underlying causes of death (50 major causes, 113 detailed causes) were used to develop the leading causes of death at the city and neighborhood levels.

A more detailed methodology is available upon request by calling 357-7482.

Cincinnati Age-Adjusted Mortality Rates for 48 Neighborhoods (2001 - 2007)



Neighborhood Crude Mortality Rates Compared to City of Cincinnati Rate (2001-2007)



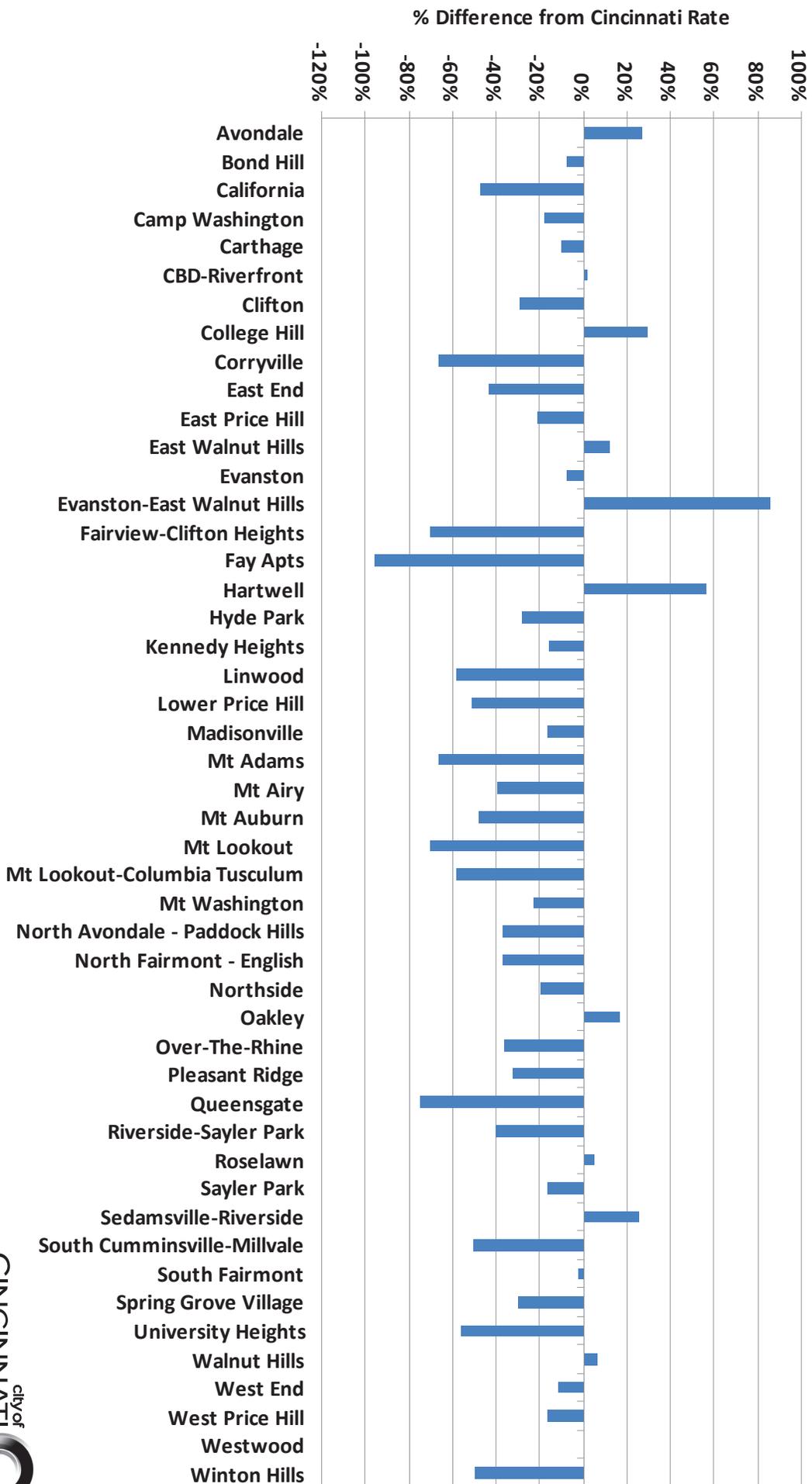
Top 10 Causes of Death in Cincinnati, 2001-2007

Crude Mortality Rates for Cincinnati and USA

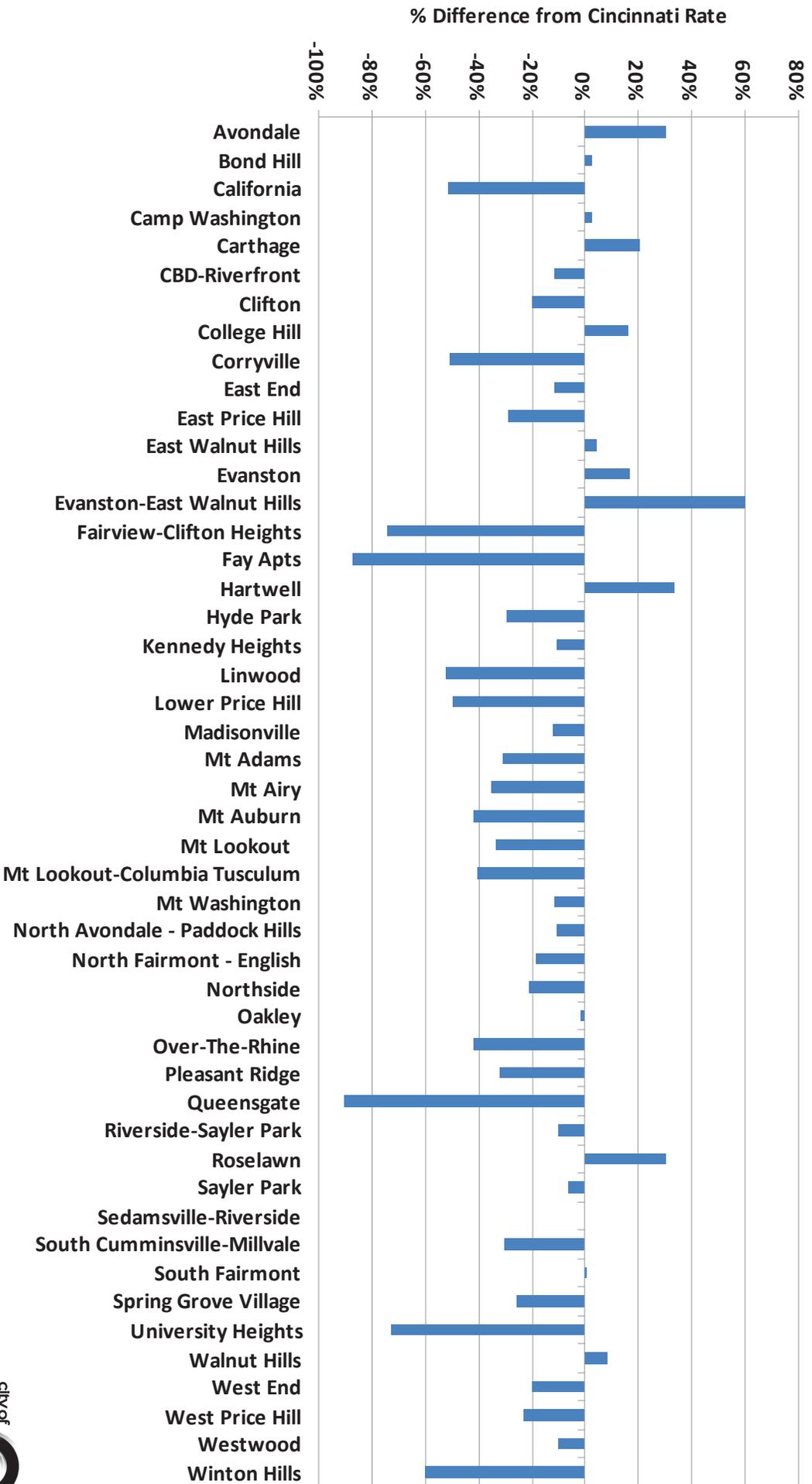
	Cause of Death	Cincinnati (deaths/100,000) 2001-2007	Ohio Large Metro (deaths/100,000) 1999-2007	Ohio (deaths/100,000) 1999-2007	USA (deaths/100,000) 2007
1	Heart Disease	265.2	269.9	265.9	204.3
2	Cancer	230.8	224.8	224.8	186.6
3	Cerebrovascular Disease (Stroke)	71.1	56.7	58.4	45.1
4	Chronic Lower Respiratory Disease	56.1	46.4	53.2	42.4
5	Diabetes (Sugar)	44.8	29.8	32.7	23.7
6	Accidents	42.6	31.4	29.2	41.0
7	Alzheimer's Disease	29.8	24.5	25.2	24.7
8	Nephritis/Nephrosis (Kidney Disease)	23.2	18.0	16.4	15.4
9	Influenza and Pneumonia	21.9	18.9	20.2	17.5
10	Assault (Homicide)	19.1	8.2	4.8	6.1
	ALL CAUSES	1095.3	949.9	946.2	803.6

Ohio and Ohio large metropolitan rates retrieved from CDC Wonder
U.S. rates retrieved from CDC National Vital Statistics Reports

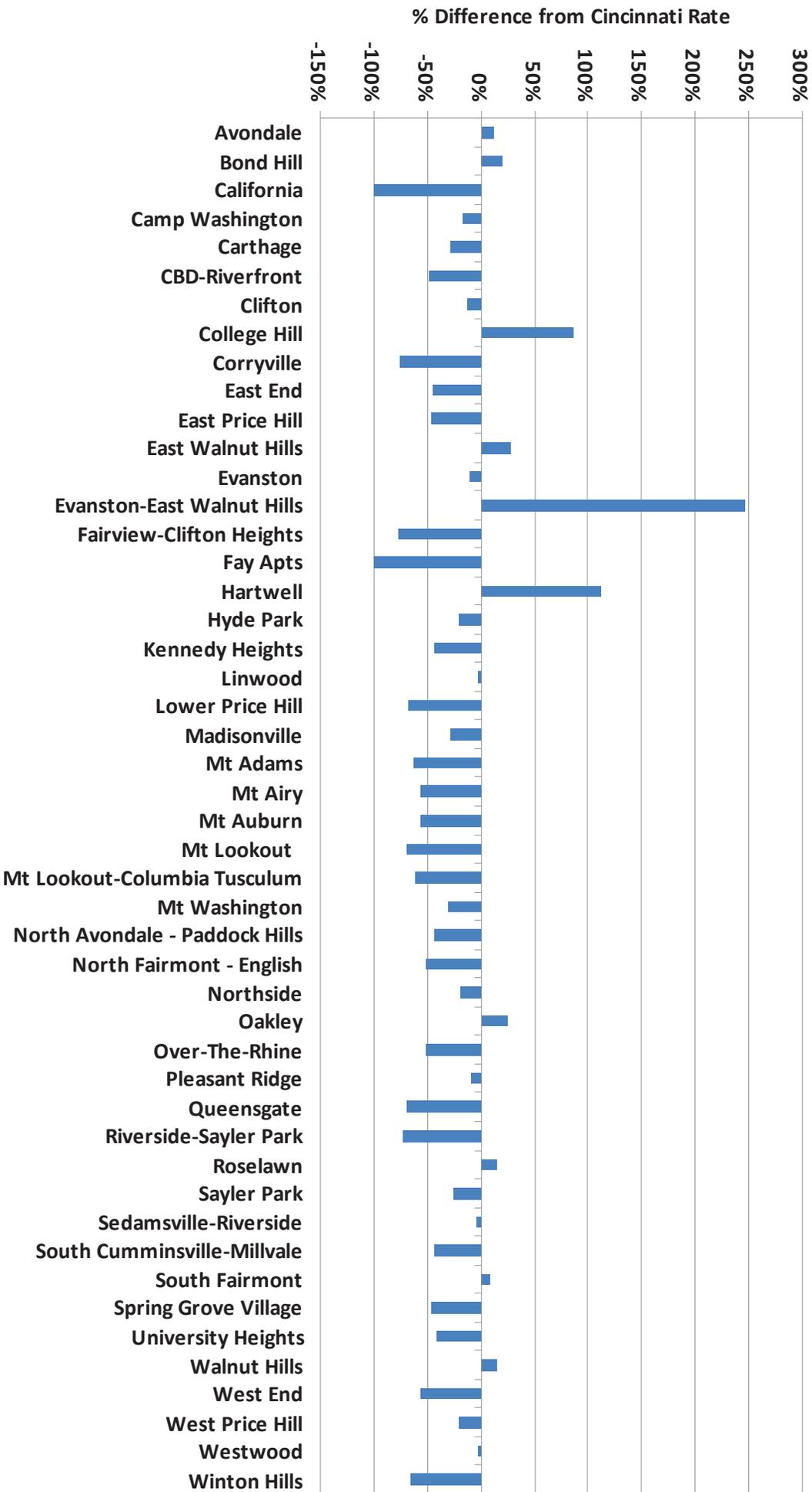
Heart Disease: Neighborhood Mortality Rates Compared to City of Cincinnati Rate (2001-2007)



Cancer Deaths: Neighborhood Mortality Rates Compared to City of Cincinnati Rate (2001-2007)



Stroke Deaths: Neighborhood Mortality Rates Compared to City of Cincinnati Rate (2001-2007)





We know **health** matters

**3101 Burnet Avenue
Cincinnati OH, 45229**

For more information:

- **Contact the Cincinnati Health Department at 513-357-7200**
 - **www.cincinnati-oh.gov**
- **Facebook: [www.facebook.com/Cincinnati Health Department](http://www.facebook.com/CincinnatiHealthDepartment)**
- **Follow us on Twitter: <http://twitter.com/CinciHealthDept>**