

Module 3: Identifying Health Problems

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Winston Liaw, MD, MPH has reported no conflicts of interest relative to this program.

Jennifer Rankin, PhD, MPH, MS, MHA has reported no conflicts of interest relative to this program.

Andrew Bazemore, MD, MPH has reported no conflicts of interest relative to this program.

Agenda

- Gathering quantitative data
- Gathering qualitative data
- Social determinants of health
- Prioritizing health problems

Objectives

- List the steps involved with gathering quantitative data about a community
- List the steps involved with gathering qualitative data about a community
- Define social determinants of health
- List the steps involved with prioritizing health problems



**“Winston – aka
Winnie”**

Age: 7 years

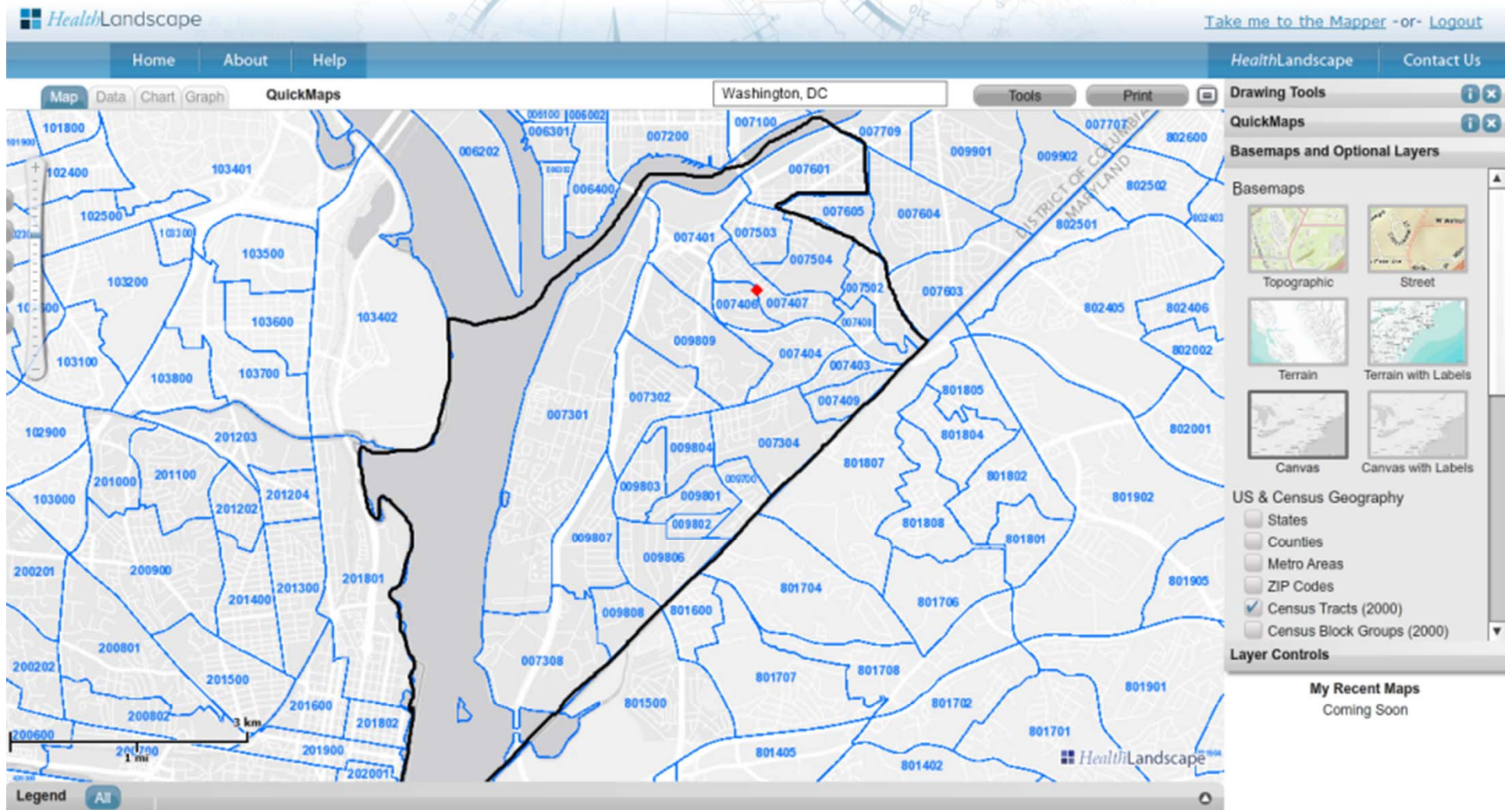
**Weight: 70
pounds (95%)**

**Body Mass
Index: 20 (> 95%)**

Refining community = Ward 8

The screenshot displays the HealthLandscape web application interface. At the top left, the logo "HealthLandscape" is visible. Below it are navigation links for "Home", "About", and "Help". A search bar contains "Washington, DC". To the right of the search bar are "Tools" and "Print" buttons. The main map area shows a detailed view of Washington, DC, with a red dot marking a location in Ward 8. The map includes labels for various neighborhoods and landmarks. On the right side, there is a sidebar with several sections: "Drawing Tools" (with an info icon), "QuickMaps" (with an info icon), "Basemaps and Optional Layers", "Basemaps" (with thumbnails for Topographic, Street, Terrain, Terrain with Labels, Canvas, and Canvas with Labels), "US & Census Geography" (with checkboxes for States, Counties, Metro Areas, ZIP Codes, Census Tracts (2000), and Census Block Groups (2000)), and "Layer Controls". At the bottom right of the sidebar, it says "My Recent Maps Coming Soon". The bottom left of the map area has a "Legend" button and a scale bar showing 5 miles and 10 kilometers.

Refining community = Census Tract 007407

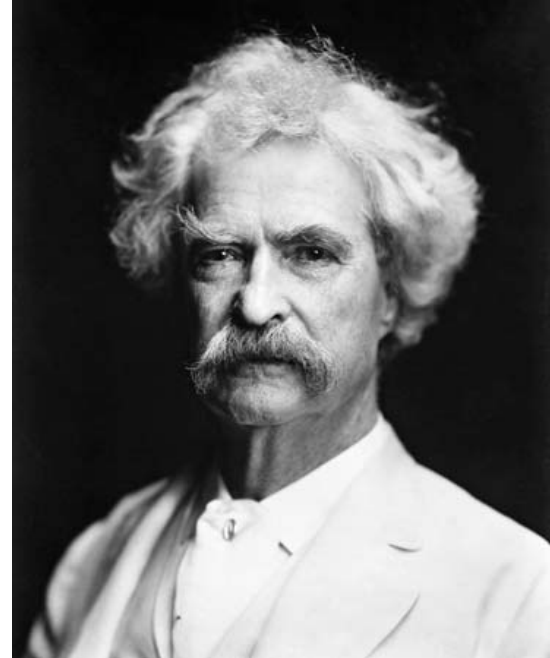


www.healthlandscape.org

STATS



STORIES



Mullan F, Focht C, Hayashi S, Gofin J, Gofin R, Neumark Y, Epstein L. Community oriented primary care: An implementation guide.

Demographic Data:

Data from DC Department of Health – State Center for Health Statistics Administration 1999

*Census data from Census 2000

	US	DC	Ward 8	Ward 3	Combined Census Tracts*
Total population	272,690,813	523,124	60,485	68,093	51,696
% of city		100%	11.56%	13.02%	9.88%
% Population<18	25.80%	18.40%	33.50%	18.60%	33.7%
% Population Black	12.80%	61.90%	89.60%	4.20%	95.20%
% Population White	82.40%	34.60%	8.30%	89.50%	2.8%
% Population Hispanic	11.50%	7.60%	2.30%	13.00%	0.80%

Number, age, gender, race

Lichtenstein C, et al. Community oriented primary care: Continuing the cycle at Good Hope Road. Unpublished report.

Births and Deaths

Data from DC Department of Health- State Center for Health Statistics, 1999

	US	DC	Ward 8	Ward 3
Live Births	3,959,417	7513	1237	854
Rate (per 1000 population)	14.5	14.5	20.40	12.5
Infant Mortality (per 1000)	7.1	15	27.5	5.9
% of infant deaths in city		100%	30.1%	4.4%
Deaths (all ages- per 100,000)	877	1162	952.1	925.2
# of deaths to children (1-19yo)	Not Avail	81	17	2
% of child deaths in city		100%	21%	2.50%

Lichtenstein C, et al. Community oriented primary care: Continuing the cycle at Good Hope Road. Unpublished report.

VITAL STATISTICS
OF THE
DISTRICT OF COLUMBIA

2005

CARLOS CANO, MD
INTERIM DIRECTOR, DEPARTMENT OF HEALTH

JOHN G. DAVIS-COLE, Ph.D., MPH
INTERIM SENIOR DEPUTY DIRECTOR
CENTER FOR POLICY, PLANNING, AND EPIDEMIOLOGY

FERN JOHNSON-CLARKE, PhD
CHIEF, RESEARCH AND ANALYSIS DIVISION
STATE CENTER FOR HEALTH STATISTICS

January 29, 2008

TABLE 3-16.--TOTAL DEATHS AND INFANT DEATHS BY CENSUS TRACT:
DISTRICT OF COLUMBIA, 2005

Census Tract	Deaths	
	All Ages	Under 1 Year of Age
Total	5,454	108
000	99	-
010	27	-
011/b	3	-
020	3	-
021	2	-
022	12	-
030	4	-
031/b	7	-
040	10	-
...	4	-

Table 1. Understanding Overweight and Obesity in the District

	Ward 1	Ward 2	Ward 3	Ward 4	Ward 5	Ward 6	Ward 7	Ward 8
% Overweight	39%	35%	31%	39%	38%	30%	33%	30%
% Obese ^a	19%	13%	12%	22%	30%	19%	40%	42%
% African American ^b	43%	30%	6%	78%	88%	69%	97%	92%
% Hispanic ^b	23%	9%	7%	13%	3%	2%	1%	2%
% Caucasian ^b	35%	56%	84%	10%	8%	27%	1%	6%
Average household income ^c	\$63,000	\$98,000	\$128,000	\$78,000	\$49,000	\$69,000	\$39,000	\$29,000
% consuming five servings of fruits and vegetables ^a	37	33	37	32	30	35	24	32
Number of grocery stores ^d	6	11	14	2	3	6	2	2
Food Access Score ^e	C-	C+	B	C+	C	B-	C	D-
Percentage getting recommended levels of moderate or vigorous physical activity ^a	70	81.4	84.9	61.7	59.2	84.9	58.5	54.7
Average distance to park ^f	132 m	135 m	165 m	157 m	206 m	127 m	170 m	254 m
Violent Crimes ^g	1341	906	124	911	1179	1102	1121	4596

^a Behavioral Risk Factor Surveillance Survey, 2007.

^b U.S. Census Bureau, 2000.

^c Social Compact, Washington, D.C. Neighborhood Market DrillDown, 2007.

^d Social Compact, Washington, D.C. Grocery Gap Analysis, 2008.

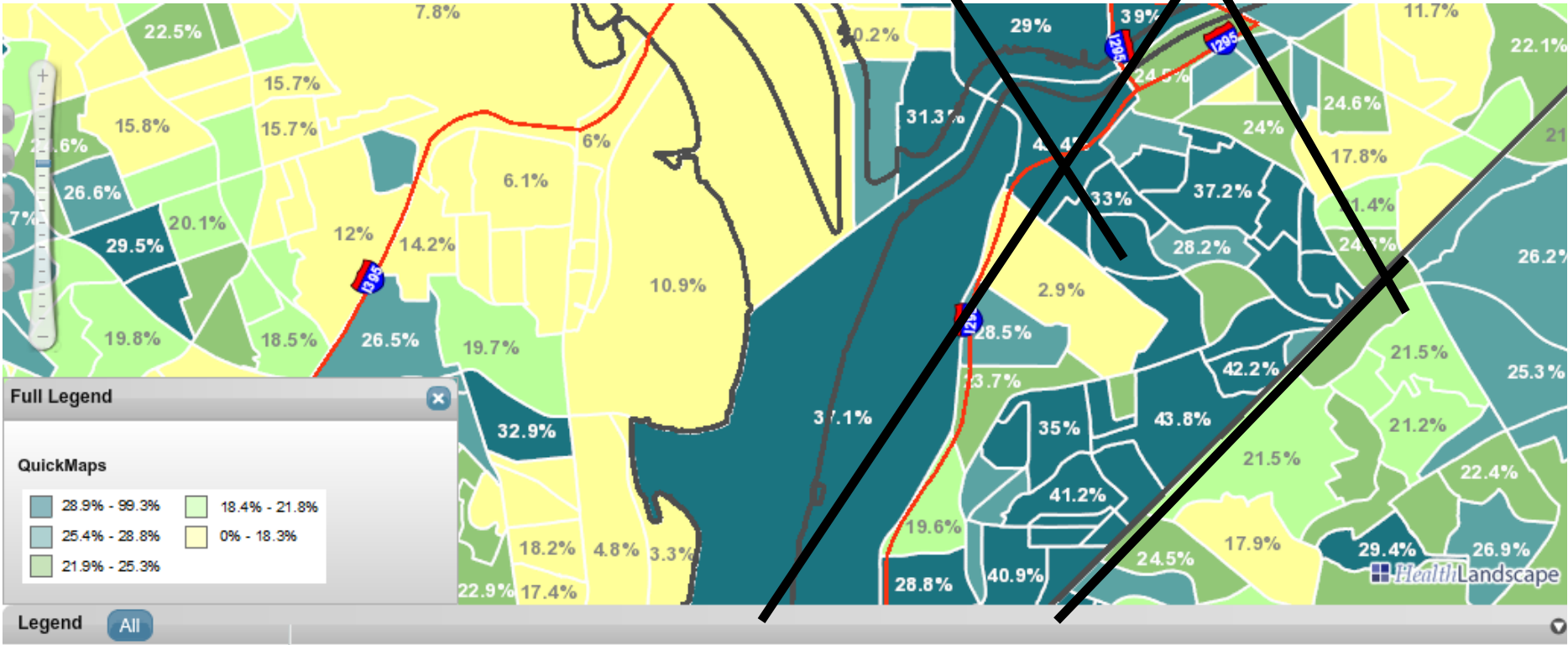
^e D.C. Hunger Solutions, Healthy Food, Healthy Communities, 2006.

^f D.C. Office of the Chief Technology Officer, 2007.

^g D.C. Metropolitan Police Department Geocoded Information Management System Preliminary Data (Violent Crime = Homicide, Sex Abuse, Robbery, Assault with a Deadly Weapon)



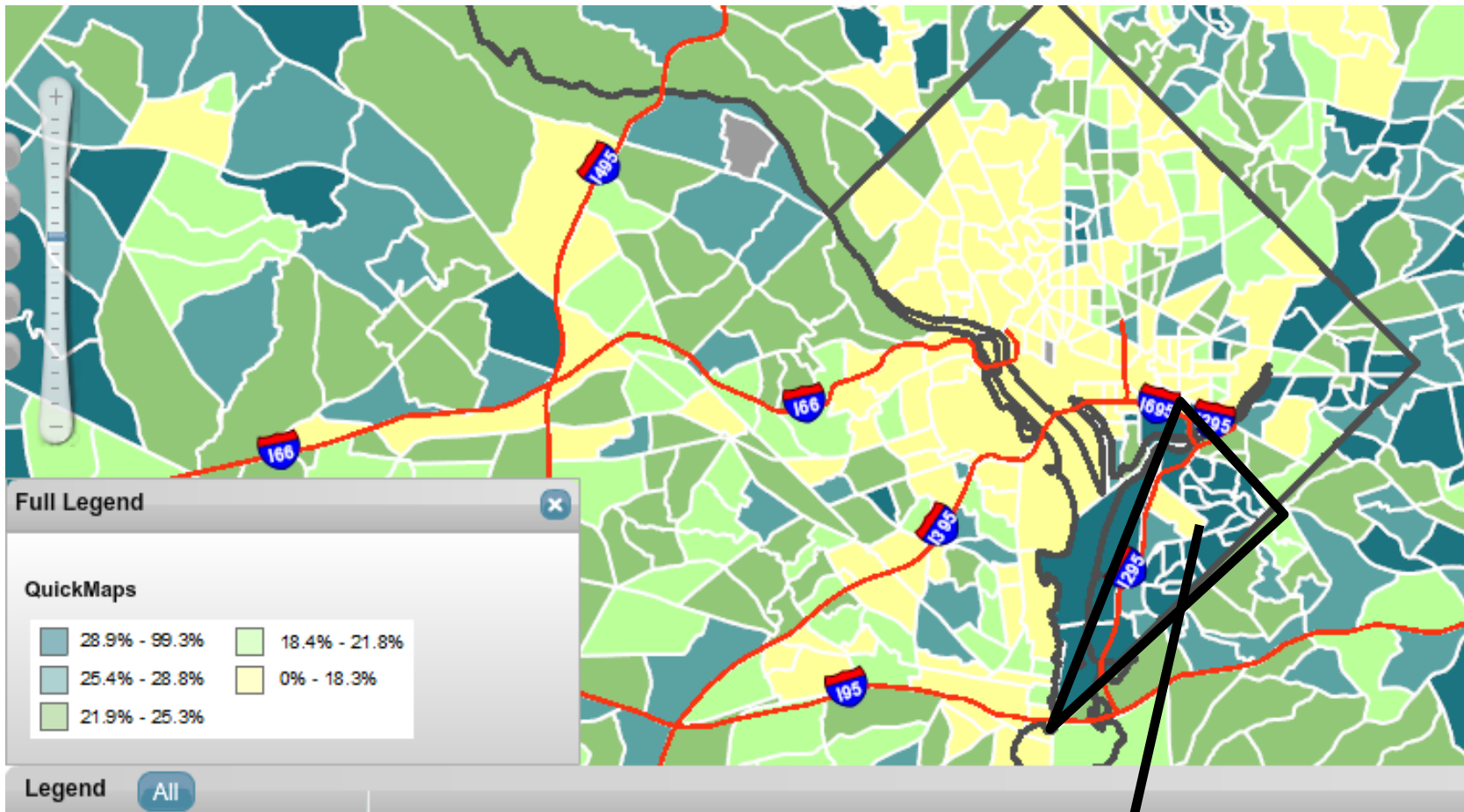
Ward 8



Legend All

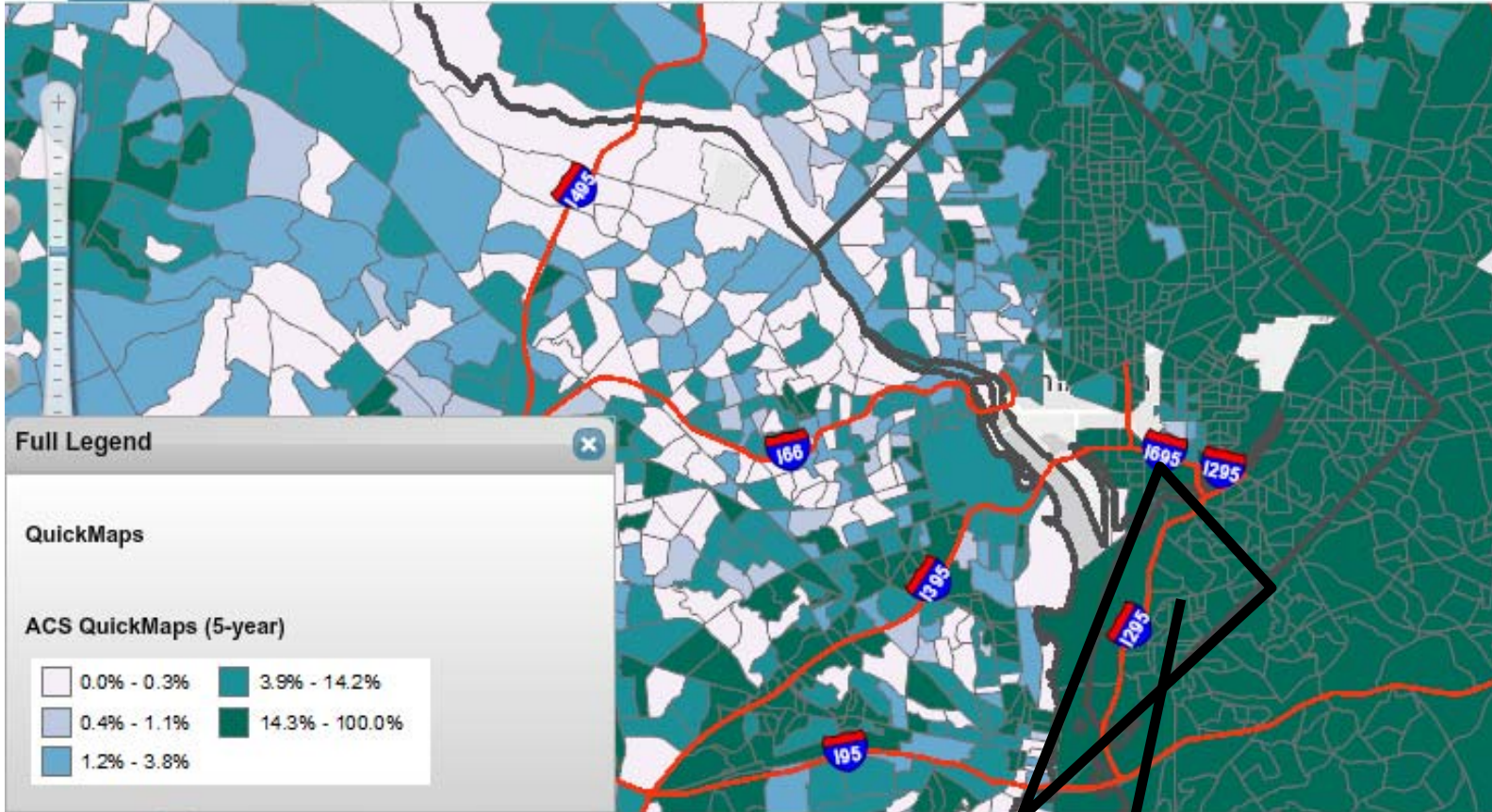
States States Interstates

This thematic map identifies locations of the population younger than age 18 in the United States in 2010. The age classification is based on the age of the person in complete years. This map identifies areas where there are concentrations of children. For more information on this layer go to <http://www.arcgis.com/home/item.html?id=22bfec05fc944a37ae033fa783e8f03b>



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Ward 8



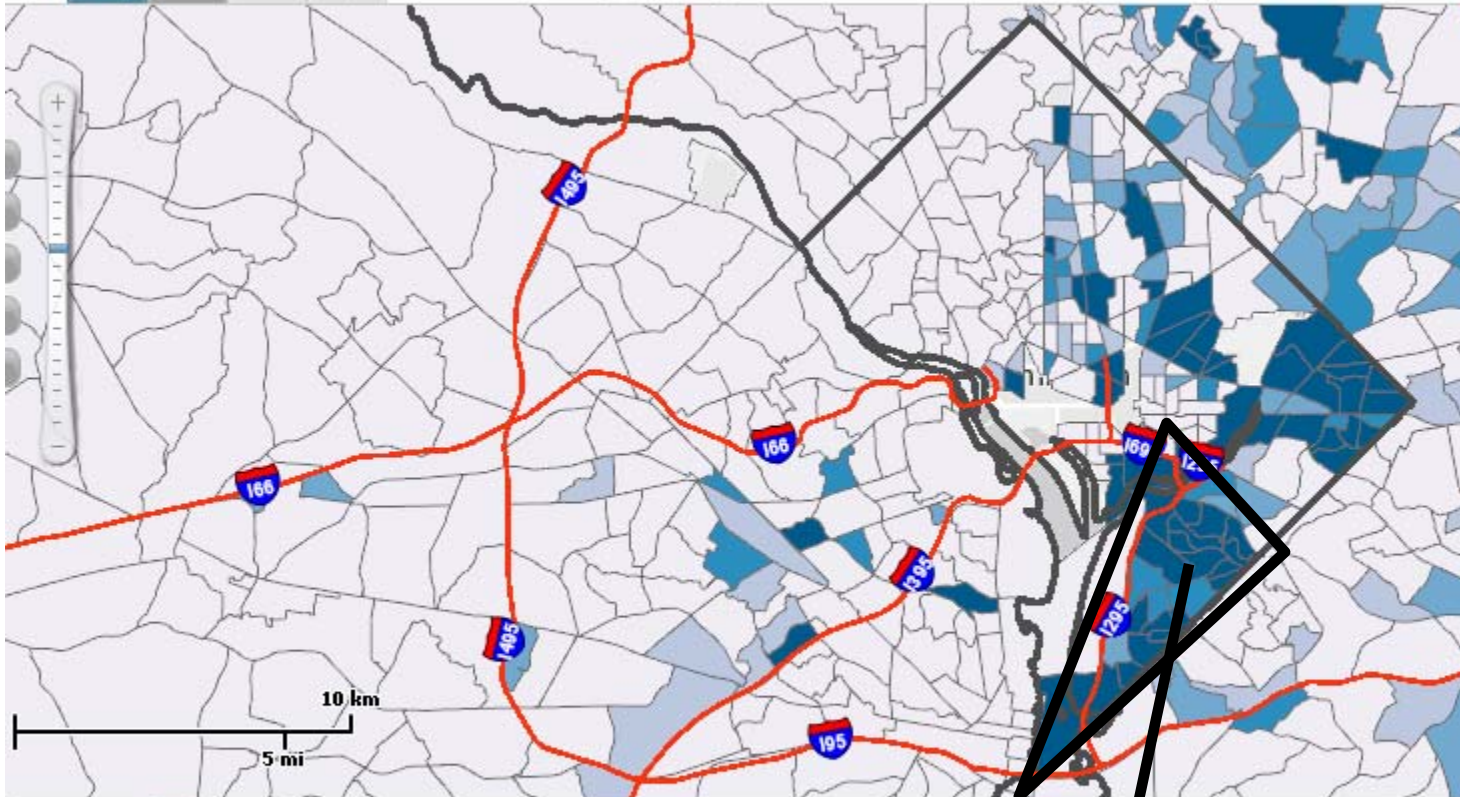
Legend **All**

States Interstates

States Interstates

The U.S. Census Bureau collects race data in accordance with guidelines provided by the U.S. Office of Management and Budget. The data are based on self-identification. For more information about this layer go to <http://www.census.gov>

Ward 8

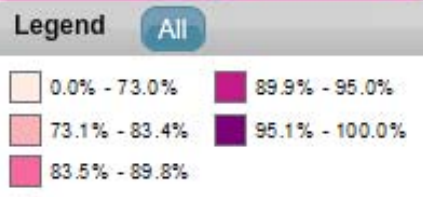
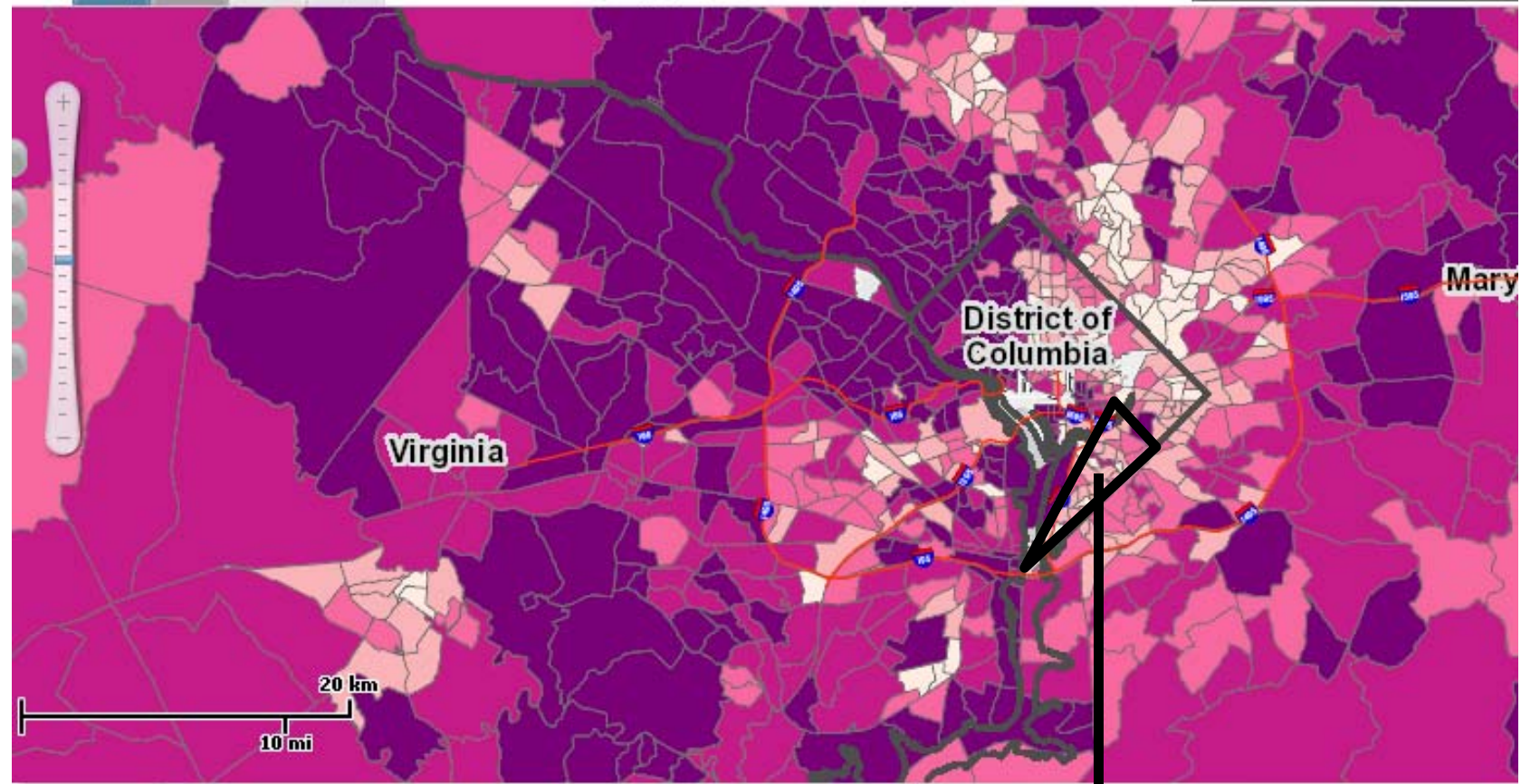


Legend All

- 0.0% - 28.5%
- 28.6% - 34.4%
- 34.5% - 39.4%
- 39.5% - 46.2%
- 46.3% - 100.0%

To determine a person's poverty status, one compares the person's total family income in the for that person's family size and composition. If the total income of that person's family is less person is considered "below the poverty level," together with every member of his or her family are obtained by multiplying the official thresholds by specific factor. For more information about

Ward 8



This category includes people whose highest degree was a high school diploma or its equivalent, pe degree, and people who received an associate's, bachelor's, master's, or professional or doctorate (12th grade but not receiving a diploma are not included. For more information about this layer go to [h](#)

Ward 8



Enter Address, City, County, State, or Zip

ADD DATA LAYER



Real Estate Analysis

Neighborhood Conditions

Lending Activity

Education

Money & Income

Demographics

Owners & Renters

Jobs & Economy

Health

Federal Guidelines



Limited Supermarket Access (LSA) status, as of 2011.

details ▾

United States > District of Columbia > Washington > 20019

Legend

Hide Legend

Change View

Change Year:

01 02 03 04 05 06 07 08 09
10 11

Change Variable

Type

Restore Defaults

Edit Ranges

- Insufficient Data
- LSA
- NOT LSA

Shade by: Block Group ▾

Change legend colors

Source: TRF

Clear Data Layer

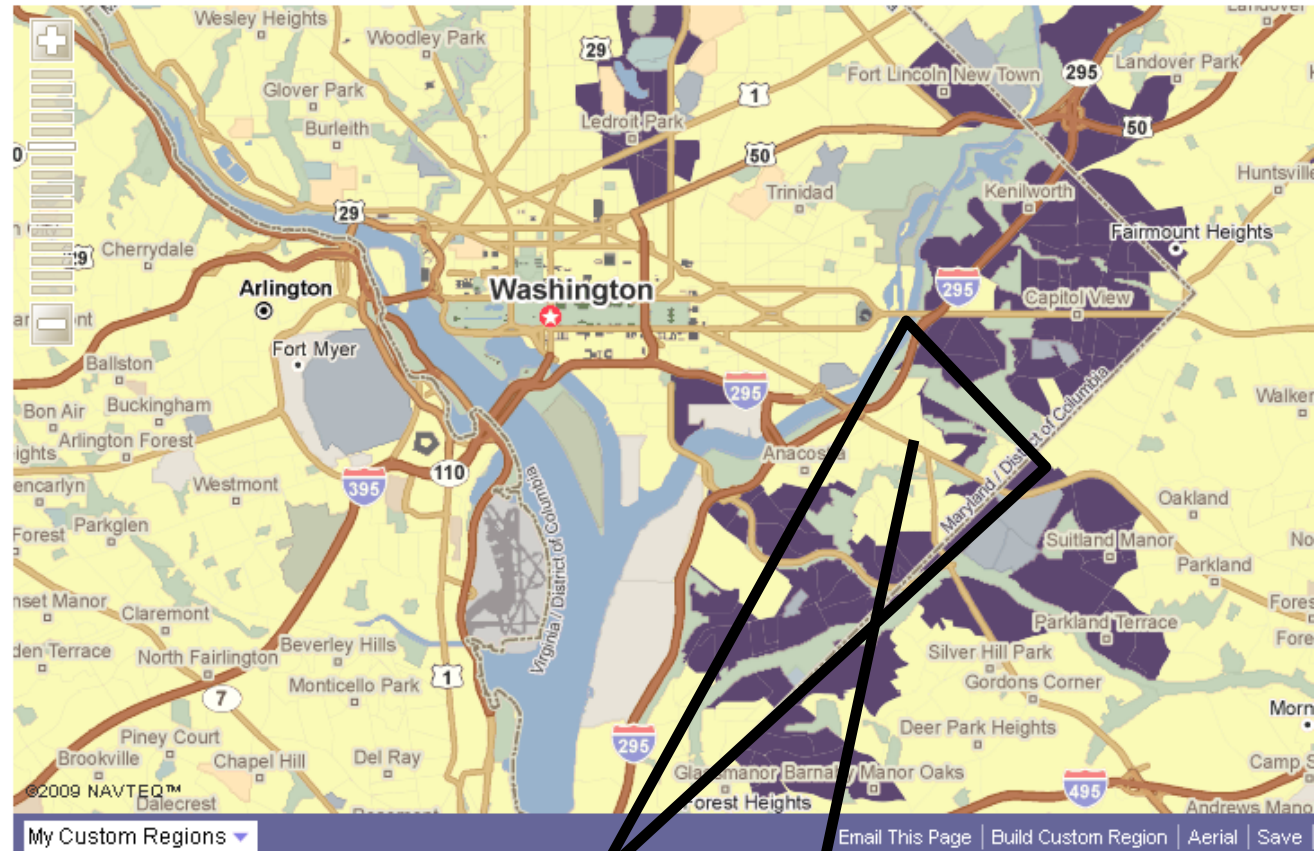


ADD SITES

My Sites

Subscriber-shared Sites

Federal Housing



Ward 8

State **Display** rates for 2009
 by Census Tract

2009 Rate of adults/adolescents living with an HIV or AIDS diagnosis per 100,000 population.

0 to 253	Data not shown*
254 to 439	
440 to 670	
671 to 953	
954 to 1,275	
1,276 to 1,650	
1,651 to 2,073	
2,074 to 2,588	
2,589 to 3,300	
3,301+	

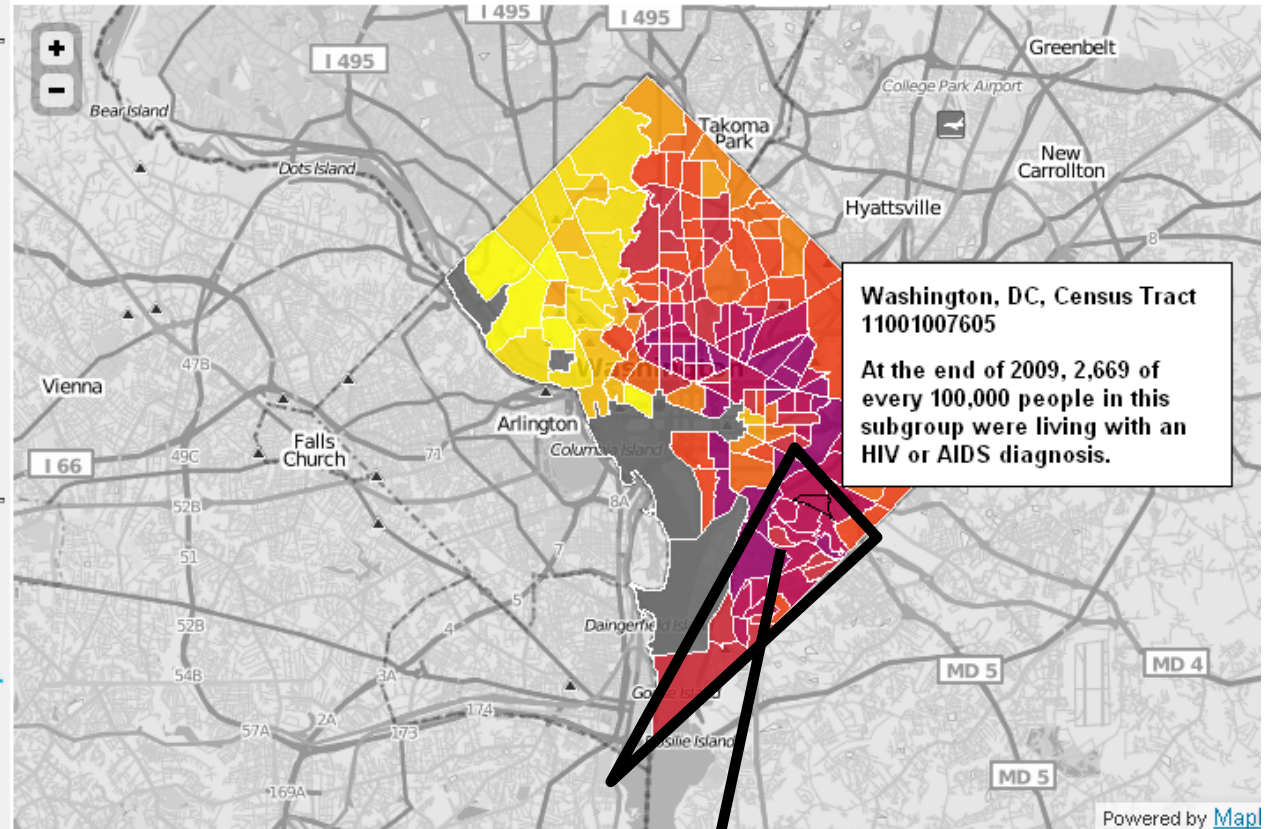
Overall / Race / Age / Sex
 Overall

HIV Testing, Prevention, and Treatment Sites

[Where do these data come from?](#)

Washington, DC - Persons Living with an HIV or AIDS Diagnosis, 2009

Select City



* Data are not shown to protect privacy because of a small number of cases and/or a small population size. See [Data Methods](#).

NOTE: Data represent persons living with an HIV or AIDS diagnosis in Washington, DC at the end of 2009 and who were reported as of 12-31-11.

Ward 8

State

Display **rates** for 2009

2009 Rate of adults/adolescents living with an HIV diagnosis per 100,000 population

County

- 0 to 40
- 41 to 54
- 55 to 66
- 67 to 81
- 82 to 102
- 103 to 133
- 134 to 173
- 174 to 248
- 249 to 385
- 386+

City

- Data not shown *
- Data not released to AIDSvu **
- Data not available ***

Overall / Race / Age / Sex

Overall

Social Determinants of Health

Income Inequality

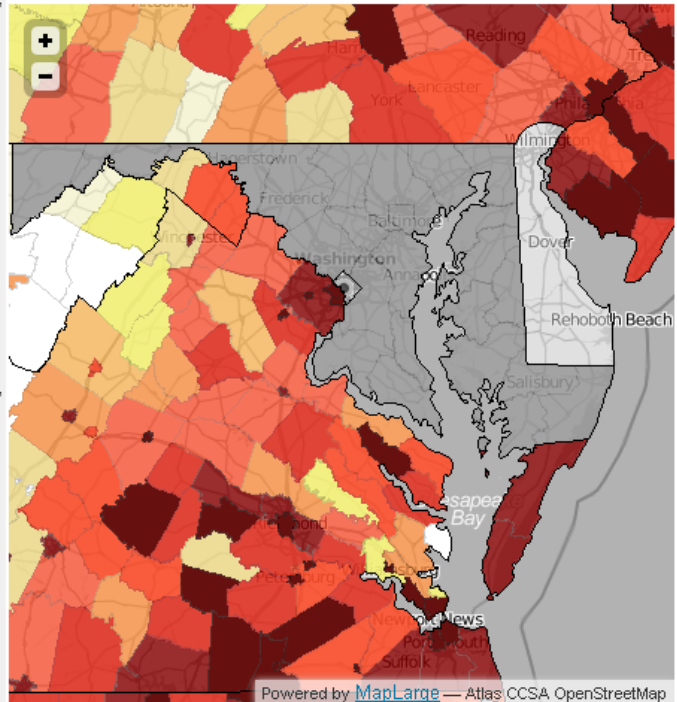
Gini Coefficient (Measure of Income Inequality), 2009

- 0.207 to 0.407
- 0.408 to 0.430
- 0.431 to 0.456
- 0.457 to 0.645

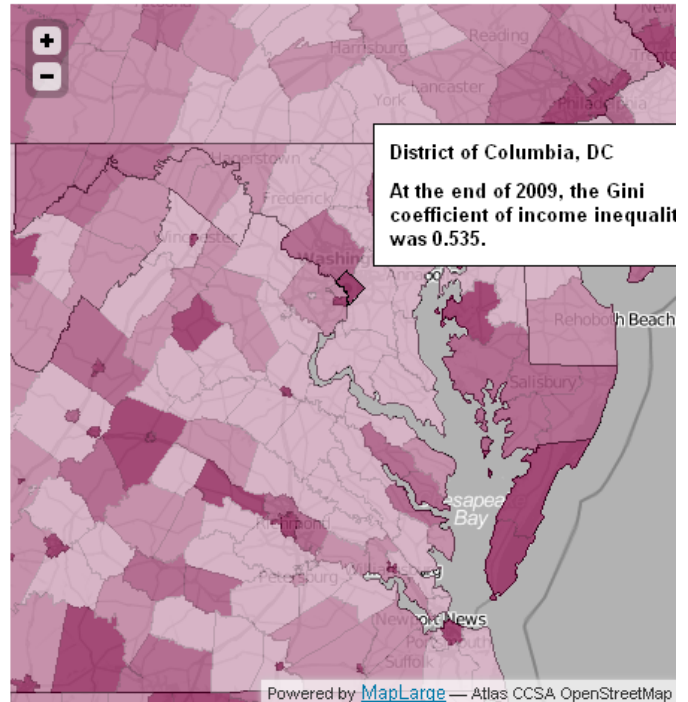
Data not Available†

Close Map

Persons Living with an HIV Diagnosis, 2009



Gini Coefficient (income inequality), 2009



Identifying Health Problems

- Qualitative
 - Key informant interviews
 - Social worker who works in Ward 8
 - Employee, nearby homeless shelter
 - Staffer, city council person
 - Director, local Boys and Girls Club chapter
 - Outreach specialist, local clergy partnership
 - Owner, local day care center
 - School nurse, nearby elementary school
 - Focus groups
 - Patients
 - Clinic staff

Mullan F, Focht C, Hayashi S, Gofin J, Gofin R, Neumark Y, Epstein L. Community oriented primary care: An implementation guide.

Identifying Health Problems

- Sample questions:
 - What are the strengths of the community?
 - What areas could be improved in the community?
 - What are the barriers to improvement?
 - What are the most pressing health concerns in the community?
 - What are the causes of these health problems?
 - What are the specific barriers to addressing these health problems?
 - Who do the people call in the community when they need help or advice?
 - Do you feel safe in the community? Why or why not?

Identifying Health Problems

- Brainstorming
- Nominal group technique
- Delphi
- Ringi

Nutting PA editor. Community-oriented primary care: From principle to practice. Washington, DC: US Department of Health and Human Services, 1987.

Identifying Health Problems

- Problems identified by the qualitative process:
 - School dropouts
 - HIV/AIDS
 - Lack of access to nutritional foods
 - Lack of access to safe areas to exercise
 - Teenage pregnancies
 - Dental caries
 - Asthma
 - Depression
 - Drug use
 - Crime
 - Job training
 - Affordable housing
 - Increasing rates of diabetes



Potential health issues to address



Social determinants:

Poverty
Education
Income



Medical conditions:

Diabetic nephropathy
Coronary artery
disease

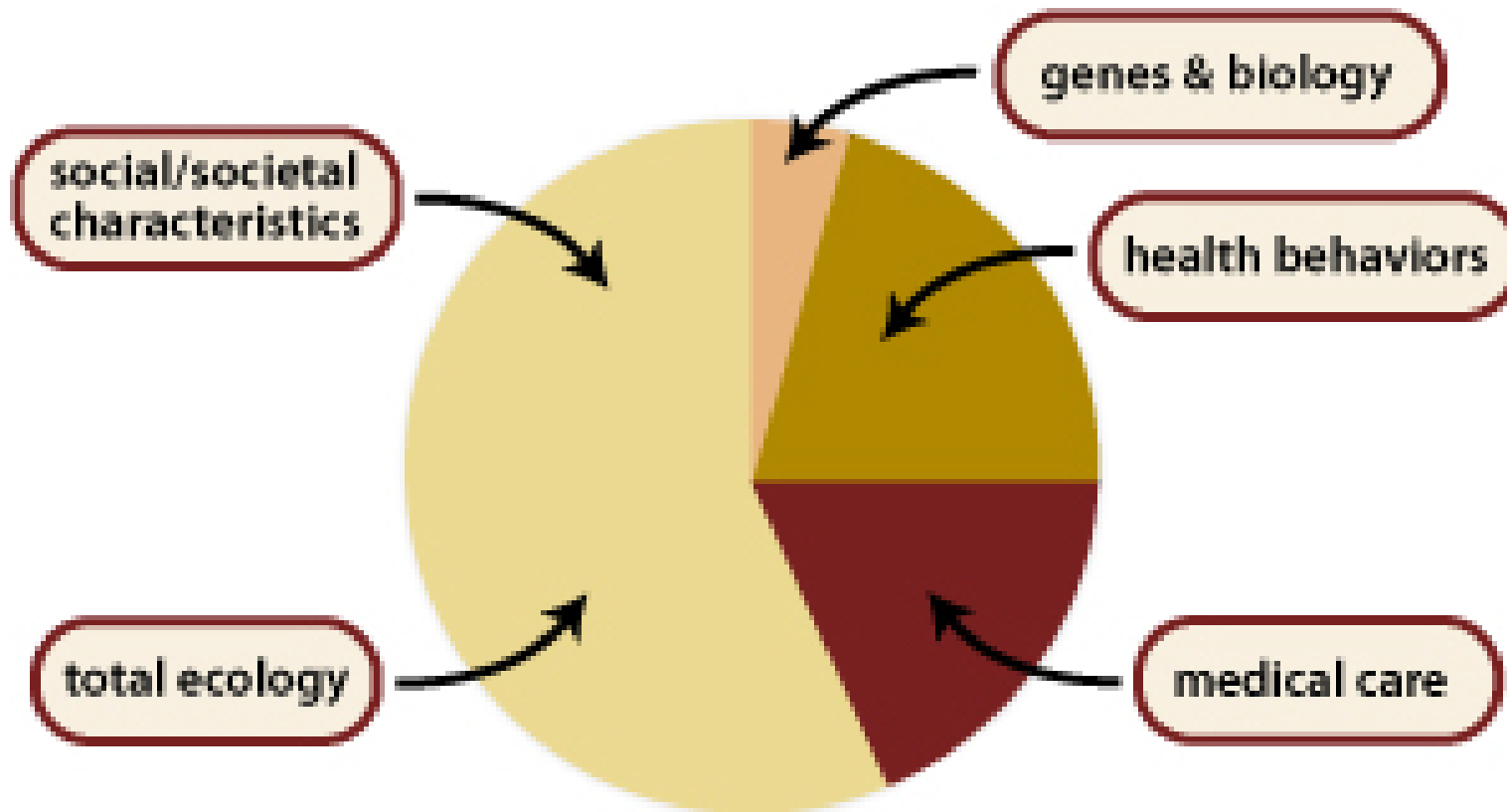
Determinants of Health

- 1) Genes and biology
- 2) Medical care
- 3) Health behaviors
- 4) Social characteristics



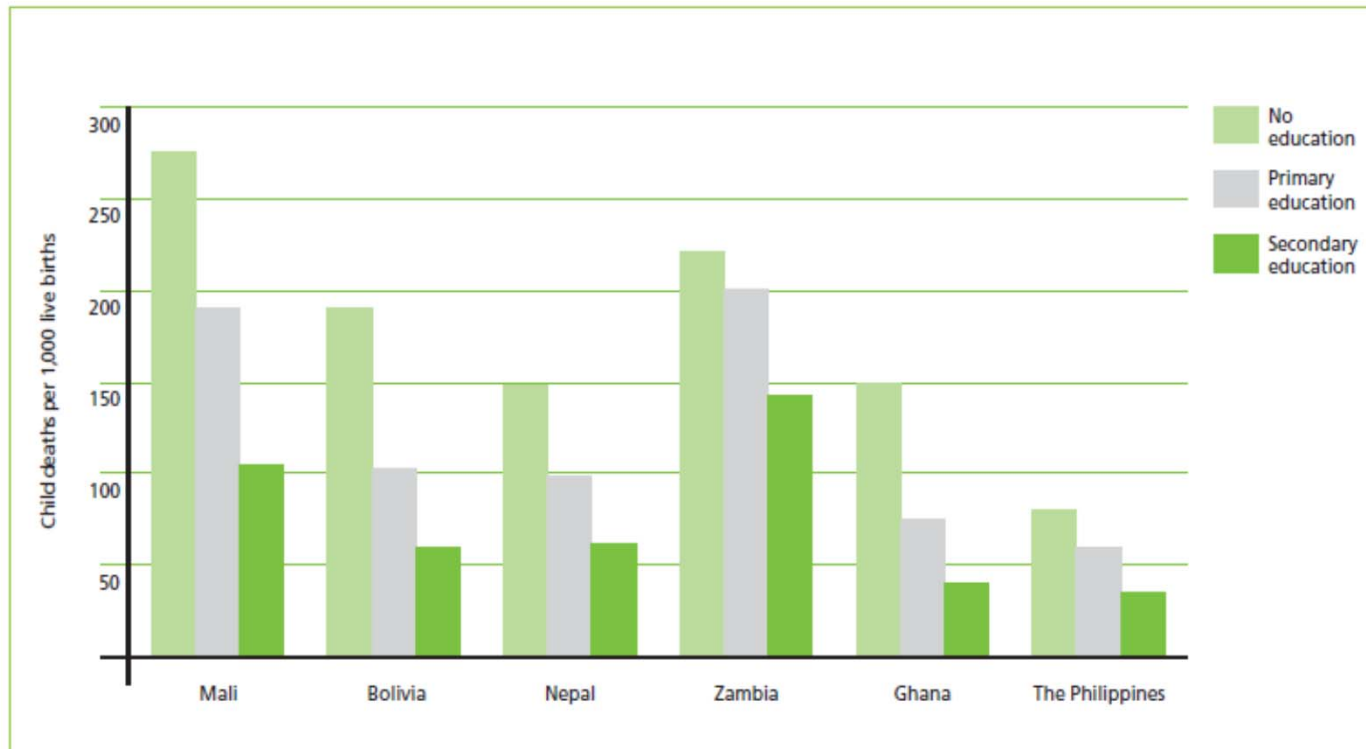
Blane D, Brunner E, and Wilkinson RG. Health and Social Organization. 1996

DETERMINANTS OF POPULATION HEALTH



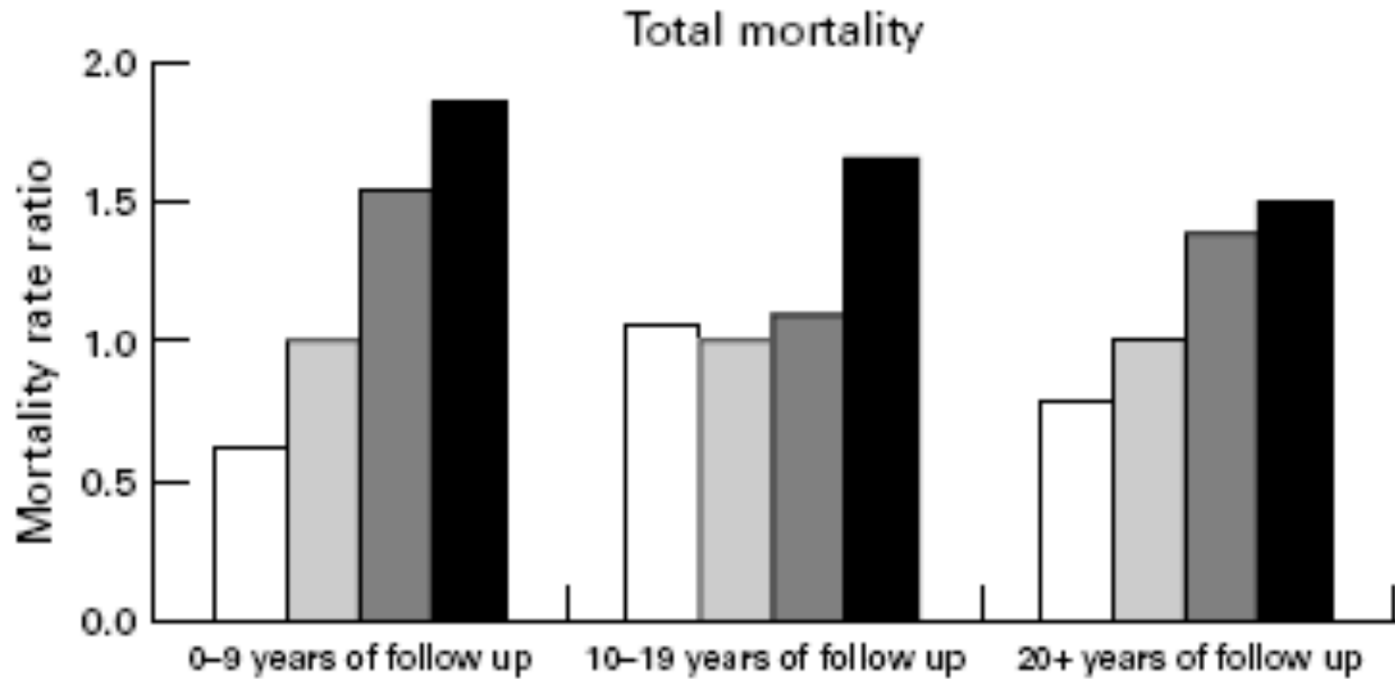
<http://www.cdc.gov/socialdeterminants/FAQ.html>

Child Mortality, By Maternal Education



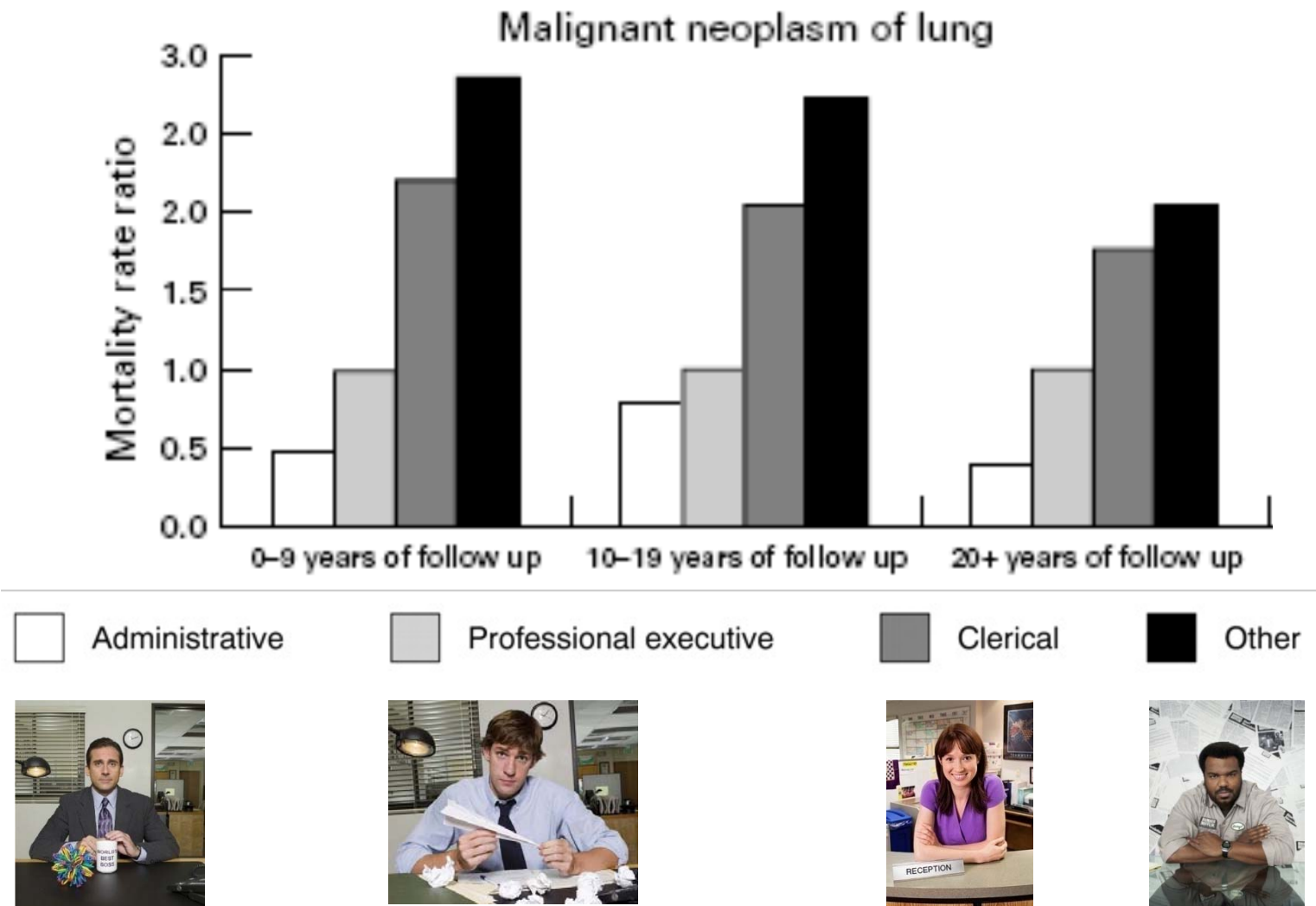
Watkins K. The Oxfam education report. Bath, England: Redwood Books, 2000.

Social Determinants of Health - Work



Rossum et al. Employment Grade Differences in cause specific mortality. A 25 year Follow up of civil servants from the first Whitehall study. *J. Epidemiol Community Health* 2000;54:178-184.

Social Determinants of Health - Work



Rossum et al. Employment Grade Differences in cause specific mortality. A 25 year Follow up of civil servants from the first Whitehall study. *J. Epidemiol Community Health* 2000;54:178-184.



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Strategic Plan



Vision, Mission, Goals, Sub-goals and Guiding Principles

Vision

Healthy Communities, Healthy People

Mission

To improve health and achieve health equity through access to quality services, a skilled health workforce and innovative programs.

Goal IV: Improve health equity

Sub-goals

- a. Reduce disparities in quality of care across populations and communities.
- b. Monitor, identify and advance evidence-based and promising practices to achieve health equity.
- c. Leverage our programs and policies to further integrate services and address the social determinants of health.
- d. Partner with diverse communities to create, develop, and disseminate innovative community-based health equity solutions, with a particular focus on populations with the greatest health disparities.

Prioritization

	Problem	Magnitude	Severity	Feasibility	Total
1	Increasing rates of HIV/AIDS among women				
2	Few safe areas for children to exercise				
3	Dental caries / oral health				
4	Job training				
5	Lack of access to nutritional foods				
6	School dropouts				

Prioritization

	Problem	Magnitude	Severity	Feasibility	Total
1	Increasing rates of HIV/AIDS among women	3.2	4.8	3.7	11.7
2	Few safe areas for children to exercise	4.8	4.7	4.2	13.7
3	Dental caries / oral health	4.3	3.5	3.2	11
4	Job training	4.1	4.1	2.1	10.3
5	Lack of access to nutritional foods	4.6	4.5	4.1	13.2
6	School dropouts	3.9	4.8	4.1	12.8

Take Home Messages

- Both quantitative and qualitative data are important to characterize your community
- Online mapping tools can help you visualize and communicate health problems more effectively
- Social determinants have a significant impact on health
- Involving the community in generating, validating, and prioritizing health problems is critical

Thank you for completing the module.

Please complete this evaluation survey to help us make it better!

<https://www.surveymonkey.com/s/5BP3MT6>

To obtain, CME credit, you must complete these two additional surveys (complete CME instructions are on the next slide):

1) Continuing Medical Education Form:

<https://www.surveymonkey.com/s/53NGY5S>

2) Module 3 Quiz:

<https://www.surveymonkey.com/s/5GRD3TD>

To Obtain CME Credit

- In order to obtain CME credit, you must complete the following tasks:
 - Complete the module(s) or case study.
 - Complete the post-activity quiz (There are quizzes for each module and case study).
 - The last question of the quiz provides a prompt to indicate your email address. **If you want to receive CME credit, you must provide your email address so that we can document the score of your quiz appropriately.**
 - Score at least 75% on the quiz (For quizzes with 4 questions, you must answer at least 3 questions correctly. For quizzes with 5 questions, you must answer at least 4 correctly).
 - Complete the CME certification form.
 - **In order to match the CME certification form with your quiz, you must provide the same email address that you provided during the post-activity quiz.**