UNNATURAL CAUSES ... is inequality making us sick?

A documentary and public engagement campaign from California Newsreel seen (3) PBS



PLACE MATTERS: RESEARCHING OUR NEIGHBORHOODS

Lesson plans for use with Episode 5: "Place Matters"

Curriculum developer Manon Parry is a museum exhibition curator and historian of medicine and has taught classes on health and human rights to high school and undergraduate students.

Grade Levels: 10th grade through college sophomore.

Subject Matter: Social Studies, Government, Geography, Sociology, City Planning and Urban Studies, Environmental Justice, Public Health.

Time Allotted: Four to seven lessons over three to five days, depending on class level and activities selected

Overview: We know that eating well and staying fit is important for health. But in fact, our economic and social environments are even bigger influences on health. Why is our street address or zip code such a powerful predictor of health? In these lessons, students research why residents of some neighborhoods live, on average, five, 10 or even 15 years longer than those in other neighborhoods. Students will gather and analyze data from their own neighborhood to identify features of their local economic, built, social, and service environments that promote or threaten the health of residents. They will learn how differences in neighborhood conditions tend to pattern along lines of class and race/ethnicity and give rise to corresponding differences in neighborhood health differences. Such neighborhood conditions are not a "natural thing," but rather are a product of government policy, corporate investment decisions, and imbalances in political power that favor some neighborhoods and harm others. Conditions have changed before, and we can change them again. After this lesson, students will better understand the role of economic factors, urban planning decisions, and community mobilization in shaping neighborhood determinants of health.

Lesson One: Examining Our Preconceptions. Students articulate their own preconceptions about community factors that impact health, view the UNNATURAL CAUSES episode "Place Matters," and then review the different ways neighborhoods might affect health.

Lesson Two: Investigating Health Indicators in Your Neighborhood. Students work in small groups to research their own school's neighborhood. They investigate aspects of the physical (built), economic, social, and service environments, identify and map demographic data and place-based health indicators, consider the potential health impacts of each factor, and "grade" the neighborhood on each factor.

<u>Lesson Three</u>: Using Graphs to Look for Clustering. Students either create their own graphs of demographic factors and health indicators or use graphs from the series website to look for patterns of resources and health across neighborhoods.

<u>Lesson Four</u>: The Role of Policy. Students use online interactivities to explore some historical sources of modern demographics and distribution of wealth, then interview residents of their own neighborhoods to learn how policy or lack of policy has shaped health indicators in their own neighborhoods.

Extension Activities: Students undertake a more thorough research into the history, politics, and/or demography of the area or use their findings to educate others, build connections, and/or make change in their neighborhoods.

Objectives:

By the end of the lesson students will be able to:

- Identify, collect, analyze, synthesize, and present relevant place-based data on factors influencing health.
- Utilize online databases and maps for research.
- Recognize how health outcomes form patterns along socioeconomic and racial lines, paralleling underlying inequities in social and economic conditions.
- Understand why it is easier or harder to engage in healthy behaviors depending on the environment in which you live.
- Appreciate that exposure to many health threats or health promoters have nothing to do with behavioral choice.
- Propose policy solutions to improve neighborhood health.

Materials:

- "Place Matters" episode of the documentary series UNNATURAL CAUSES: Is Inequality Making Us Sick?
- Downloadable materials and online activities on the companion web sites for *UNNATURAL CAUSES* and *RACE: The Power of an Illusion*
- Internet access for other online resources: Google maps, TOXMAP, Census Bureau databases, etc.

Readings:

- Why Place Matters: Building A Movement for Healthy Communities, PolicyLink http://www.policylink.org/documents/WhyPlaceMattersreport_web.pdf
- Where We Live Matters for Our Health: The Links Between Neighborhoods and Health. Robert Wood Johnson Commission for a Healthier America http://www.rwjf.org/files/research/commissionneighborhood102008.pdf
- Where We Live Matters for Our Health: The Links Between Housing and Health. Robert Wood Johnson Commission for a Healthier America http://www.rwjf.org/files/research/commissionhousing102008.pdf

Table of Contents

Place Matters: Researching Our Neighborhoods	1
Objectives:	<u>2</u>
Materials:	<u>2</u>
Readings:	2
Lesson One: Examining Our Preconceptions.	<u>5</u>
1. Brainstorm Neighborhood Features (10-15 min.).	5
2. Watch "Place Matters" (30 min.)	<u>5</u>
3. Amend the Neighborhood Features Table. (15-20 min.)	5
4. Comprehension Writing Exercise. (20-30 min.)	<u>5</u>
Lesson Two: Investigating Health Indicators in Your Neighborhood	6
1. Homework: Kinds of Environments.	<u>6</u>
2. Identify Health Indicators. (15-20 min.).	7
3. Developing a Research Plan. (15 min. to one hour, or homework)	8
4. Gather the Data. (One class session and/or homework)	<u></u> 9
5. Grade the Neighborhood. (15-20 min)	9
6. Share the Data. (30-45 min.)	9
7. Class Discussion: How does the neighborhood measure up? (10-15 min.)	10
Lesson Three: Using Graphs to Look for Clustering.	10
1. Graphing Assignment: Looking for "Clusters" (30-60 min.)	10
2. Writing Assignment or Class Discussion. (10-15 min.)	11
Lesson Four: The Role of Policy	12
1. Homework: What makes neighborhoods so different?	12
2. Class Discussion: A Natural Thing? (15 min.).	12
3. Homework Assignment: Examining Local History	
4. Class discussion: Drawing links between the past and the present. (20-45 min.)	
Extension Activities	
Connecting the Past and the Present.	13
How Do Neighborhoods Change? Conduct a Power Analysis.	13
"The House We Live In"	13
Share Results.	14
Take Action.	14
Form a Community Partnership.	<u>14</u>
Assessment	14
Writing:	14
Oral Presentation:	14
Data Analysis,	15
Group Work_	
Additional Resources.	
Learn more about the issues.	
Develop research.	
Take action.	16
National Educational Standards	17
Government.	
English Language Arts:	
Geography:	
Health Education:	18
School Library Media:	19
Science Education:	
Social Studies:	19

Appendix A: Neighborhood Features Table.	20
Appendix B: Health Indicator Data Sources	21
Appendix C: Health Indicators Table.	23
Appendix D: Health Indicator Grading Tables.	
Appendix E: Sample Neighborhood Questionnaire.	
Appendix F: Glossary.	30

LESSON ONE: EXAMINING OUR PRECONCEPTIONS

TIME: One class period, with optional homework extension.

1. Brainstorm Neighborhood Features (10-15 min.)

This pre-viewing activity will elicit student preconceptions about the connections between neighborhood features and health.

Ask the class to brainstorm neighborhood features that could have positive or negative impacts on health. In small groups or together as a class, they should put together a Features Table listing the feature and its potential health effects. (See Appendix A.) Have them try to list at least 10. Features may influence health directly or indirectly. For example, health benefits associated with local parks are exercise and community interaction.

2. Watch "Place Matters" (30 min.)

To prepare students for thoughtful viewing, ask them to consider the following questions as they watch the film (prepare as a handout or write the questions on the board):

- When we think about the environment, we usually think about air pollution, water quality, or toxic waste. What other things in our neighborhood environments might also affect our health?
- How does the film support or contradict the idea that the neighborhood factors you listed in Table One harm or promote health? What other factors could you add?
- Why do some neighborhoods expose residents to factors that are protective of health, while others expose residents to factors that can threaten their health?
- What public policy and private investment decisions have shaped the two neighborhoods in the film?
- What could be done to improve these neighborhoods in the future so they better promote residents' health and wellbeing?

3. Amend the Neighborhood Features Table. (15-20 min.)

After watching the film, have the class suggest additions or changes to the Features Table in light of what they have just learned. Remind them to include features that protect and promote health and wellbeing, not only risk factors.

4. Comprehension Writing Exercise. (20-30 min.)

As an in-class or homework assignment, have students spend 20-30 minutes writing answers to the viewing questions. After the assignment, have students discuss their thoughts in pairs or small groups.

LESSON TWO: INVESTIGATING HEALTH INDICATORS IN YOUR NEIGHBORHOOD

TIME: One to three class sessions, plus homework.

Note: Time will vary greatly depending on whether students identify their own data sources or are provided with the list, if research is done in class or as homework, and how formally the data is reported. Steps 2 and 3 (identifying health indicator and developing a plan for gathering the data) will take one or two class periods, depending on the level of the class. Step 4 (gathering the data) can happen mostly outside of class, over the period of a few days to a week.

In this lesson, the class expands the work they did on the Features Table by preparing a comprehensive grid of health indicators for neighborhoods in their area.

1. Homework: Kinds of Environments

The following reports provide additional background on the effects of environment on health. Assign reading *Why Place Matters* as homework, along with one or both of the others.

Why Place Matters: Building a Movement for Healthy Communities, PolicyLink (pages 6 – 10; pages 22 – 46. Students need not read the case studies). http://www.policylink.org/documents/WhyPlaceMattersreport_web.pdf

Neighborhoods and Health, Robert Wood Johnson Commission for a Healthier America (pages 1 – 8)

http://www.rwjf.org/files/research/commissionneighborhood102008.pdf

Health and Housing. Robert Wood Johnson Commission for a Healthier America http://www.rwjf.org/files/research/commissionhousing102008.pdf

Ask the students to provide a definition for each of environment and identify possible protective and risk features shaping living conditions and thus health. They should draw from the readings, their viewing of "Place Matters," and their work on the Features Table

Economic environment. The presence or absence of commercial investment and businesses that provide residents with adequate income (employment, tax base) and health-promoting goods and services (produce, banking).

Social environment. The presence or absence of interpersonal relationships, groups, and networks (church, neighborhood watch, community organizing) that provide support, solidarity, partnership, and sense of belonging for residents.

Physical (built) environment. Presence and quality of features of space and geography that determine access to health benefits or exposure to health risks (parks, housing, power plants, access to other communities).

Service environment. The presence or absence of adequate schools, police and fire protection, water and sewer systems, healthcare facilities, mass transit, and other services that allow residents to live healthy, safe, productive lives.

2. Identify Health Indicators. (15-20 min.)

Divide the class into five groups. Assign a different environment to each group, with the fifth group researching neighborhood health outcomes.

Note: Rather than assign a group to focus on health outcomes, you might invite a county or city public health officer to visit the class and present health outcome data for the neighborhood.

Ask each group to meet and compose a comprehensive list of possible health indicators for their assigned environment type. A **health indicator** is a measure that reflects, or indicates, the state of health of a defined population. This lesson focuses on local **environmental indicators**: neighborhood features that may protect or threaten the health of residents. Groups should develop their lists by referencing their Features Table, the "Place Matters" episode, and their readings. Group Five should compose a list of neighborhood health outcomes for which they believe data is tracked. Suggestions for each group's list follow.

Physical and Built Environment: farmers' markets, supermarkets, fast food restaurants, liquor stores; safe, well-tended parks; littered, empty lots; trees and green open spaces; pedestrian friendliness (able to walk to school and shops on safe sidewalks, clean streets); housing conditions (maintenance and quality, peeling or lead paint or mold, proper heating and cooling, adequate number of bedrooms for family size); bike lanes; condition of school buildings; neighborhood connected to rest of community, jobs; heavy traffic and freeways; polluting industries and toxic hazards; noise level; street plan / housing that isolates or connects residents, promotes or discourages social interaction.

Social Environment: crime rates or fear of crime; youth activities and community centers; places of worship; high school graduation rate; day and nighttime noise levels (affect stress levels, sleep quality); neighbors know and trust each other; resident participation in community-based organizations; elders feel cared-for or neglected; residents feel police are friendly and trustworthy or ineffective and abusive; responsiveness and accessibility of local government; connection of neighborhood to rest of community; degree of racial integration or segregation; experiences of discrimination.

Economic Environment: median household income; percentage of households living in poverty (or below 200% of the federal poverty level); percent of college graduates;

unemployment rate; population living in affordable housing (rent less than 30% of income); homeowners or renters; foreclosed or abandoned housing; shuttered shops; thriving retail areas; school spending per student; variety and type of job opportunities; hiring from within the neighborhood; new investment in construction, shops, offices, factories or infrastructure.

Service Environment: availability of reliable transit; public libraries; clinics and affordable healthcare services; banks vs. pawn shops and check-cashing services; museums and other cultural resources; youth centers and recreational activities; senior services (e.g., Meals on Wheels, senior centers); job training, literacy tutoring, and other community center services; childcare and pre-school facilities; parental assistance; reproductive health services.

Health Outcomes: average life expectancy; infant mortality rate; rates of chronic diseases, e.g., asthma, diabetes, obesity, heart disease, hypertension, kidney disease; pedestrian deaths; violent crime rates; HIV/AIDS

3. Developing a Research Plan. (15 min. to one hour, or homework)

The groups will work out how to gather the necessary information to develop a health profile of their neighborhood. The challenge is NOT to compose a scientifically rigorous set of health indicators that can withstand all scrutiny, but rather to develop a "snapshot" of the health-protective and health-threatening characteristics of the neighborhood for their assigned environment.

In order to understand the significance of their neighborhood's health indicators, the class will gather information on the neighborhood surrounding the school *and* the metropolitan, county, state, or national averages. Depending on your geographical context, you might choose to have the class investigate a dramatically different neighborhood in the area as well as or instead of your regional averages.

Looking over their lists of health indicators, groups should identify potential sources for information on each indicator. What data sources are already available? What kind of observations or surveys can they conduct themselves?

Have students begin organizing their research in a table with three columns: Health Indicators, Potential Data Sources, and Findings (See Appendix C).

Note: Depending on the level of the class, you may want to provide them with the list of potential data sources in <u>Appendix B</u>. Or, particularly for high school classes, it may be more appropriate to provide them with the table in <u>Appendix C</u>, which lists sources for each indicator. In this case, groups will need only to devise a strategy for dividing up the investigations.

Be sure that students are aware that different online databases use different geographic domains for the data the collect. In some cases they will use zip code, in others, census

tract, voting precinct, or even neighborhood by name. Some data will be available only for a larger geographic unit, such as county or metropolitan area. Students will need to take care that the geographic units they use correspond with the neighborhood surrounding their school. In some cases, the best way to gather the data will be for students to simply count resources (such as parks or grocery stores) using Google Maps or a walking tour of the neighborhood.

Students should decide which indicators they can realistically collect in the allotted time, and how to divide the work among the group members. You might remind them to consider possible efficiencies: for example, it's easiest to get information for multiple neighborhoods on one visit to an online database, but it's easiest to check multiple indicators on one walking tour of a neighborhood.

Visit with each group to provide suggestions and check that they are identifying appropriate methods to collect the data for each health indicator. Remind students that they aren't expected to obtain data for all their proposed indicators, but they should try to get enough to develop a rough profile for their neighborhood.

4. Gather the Data. (One class session and/or homework)

You can choose whether groups will have time in class to gather data or will work outside of class.

As they gather data, students should think about how to best present it: Tables? Graphs? Maps? Remind students to note how their neighborhood indicators compare to other neighborhoods or state and national averages to better understand the data's significance.

5. Grade the Neighborhood. (15-20 min)

Once the group has collected the data, they can give each of their Health Indicators a "grade" (<u>Appendix D</u>). Ask each group to review their findings and grade the neighborhood on each indicator according to the following scale:

- 1 = harmful or threatens health
- 2 = needs some improvement
- 3 = health protective

6. Share the Data. (30-45 min.)

NOTE: This plan has students present their research findings to the class relatively informally. Depending on your goals, the level of your class, and the time allotted to the lessons, you might choose to have students present their findings in more organized oral or written reports, and might have them make the presentations at any time during Lessons 2 through 5.

Have the research groups meet for 20 to 30 minutes to share the findings of their research and organize their report to the rest of the class. Each group will then add the findings for their environment to a class Neighborhood Indicators Chart (on the board or a large sheet of butcher paper) that lists all four environments and the health outcome data.

7. Class Discussion: How does the neighborhood measure up? (10-15 min.)

Look over the health indicator grades. Would you say this is a healthy neighborhood? What seem to be some of the biggest problems residents face? What are some of the best assets they have? How accurate or comprehensive do you think your data are?

LESSON THREE: USING GRAPHS TO LOOK FOR CLUSTERING

TIME: One class period.

Alternative: If your class did not compare neighborhoods in Lesson Two, you can instead lead a class discussion based the maps and graphs in "Profile of four individuals: Mapping health and inequities across Louisville," available from the UNNATURAL CAUSES website: http://www.unnaturalcauses.org/assets/uploads/file/louisvillemap.pdf

1. Graphing Assignment: Looking for "Clusters" (30-60 min.)

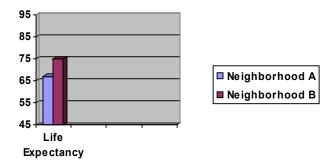
Share this quote from "Place Matters" on the blackboard, or distribute as a handout:

If we look at a map of almost any geographic area, but I'll just use the example of Richmond, California, and you map rates of obesity, for example, or of hypertension, or of low-birth weight, we'll see that these things overlap almost exactly. And if we overlay a map of environmental hazards, it fits in as well. And, it's very common to see all these dimensions cluster.

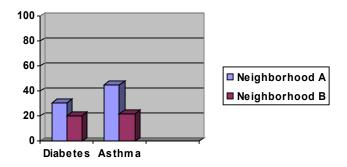
- Dr. Ana Diez Roux, Epidemiologist, University of Michigan

Have students, in groups or as a class, develop graphs that compare the health indicator findings in the two neighborhoods they've investigated, along with the regional, state, or national average where relevant. Students should graph at least five indicators or outcomes. Some possible examples are below:

Graph 1: Life Expectancy in Years



Graph 2: Percentage of Population Diagnosed with Diabetes and Asthma



To look for evidence that health outcomes cluster with socioeconomic and racial status of the neighborhood, ask students to also graph demographic data from the US Census, such as household income and race.

Graph 3: Average Household Income and Median House Price in Thousands of Dollars.



2. Writing Assignment or Class Discussion. (10-15 min.)

Ask students to summarize the results of the graph comparison. Does one neighborhood have better health outcomes than the other? Based on what you have learned about the health indicators for each, what can you say about each community's exposure to health promoters or health risks? What is the socioeconomic profile of each neighborhood, and how might that relate to these factors? Do you see evidence of "clustering"?

LESSON FOUR: THE ROLE OF POLICY

TIME: One to two class periods.

1. Homework: What makes neighborhoods so different?

Have students check out the following online interactivities:

Uncle Sam Lends a Hand The Downward Spiral

The Perfect Neighborhood: http://www.unnaturalcauses.org/interactivities-03.php

Students should do a 15 minute free-write of their impressions, commenting on how the information in these activities might relate to their neighborhood investigations.

2. Class Discussion: A Natural Thing? (15 min.)

Share this quote from "Place Matters" by writing it on the blackboard or distributing it as a handout:

I think we sometimes forget that people who live in more well-off communities have a lot of advantages... Why are these neighborhoods [Richmond and High Point] so different? And of course, these differences are not a natural thing. They arise as a result of policies or the absence of policies that create these enormous spatial inequalities in resources and in the environments that people live.

- Dr. Ana Diez Roux, Epidemiologist, University of Michigan

Discuss what Dr. Diez Roux means. What is "unnatural" about these differences? How might policies affect resource distribution and environments?

3. Homework Assignment: Examining Local History

What policies and investment decisions have changed neighborhood conditions over the decades, and why?

Ask students to interview a family member, neighbor, local merchant, community organization leader, or teacher who has lived in the area for more than 30 years. Students should draw questions from their health indicator tables, as in the sample questions in Appendix C. As students gather this information, they should consider not only how the neighborhood has changed, but what public policies and economic and social arrangements may have influenced or caused those changes.

It is common for people to attribute differences between neighborhoods to the people who live there. For example, someone might report that a neighborhood has "gone downhill" due to the influx of a particular ethnic or "racial" group. It's extremely important to acknowledge and discuss these beliefs as a class before students interview residents, so they are prepared to look beyond such explanations, asking more questions about specific policies, development, and investment.

4. Class discussion: Drawing links between the past and the present. (20-45 min.)

Either have groups make presentations on their findings from the neighborhood questionnaire or lead a general discussion to elicit findings around different issues (e.g., Do residents feel like the neighborhood is getting better or worse? What groups are influential today vs. 30 years ago? How have the demographics of the neighborhood changed?)

Post the class's community indicators chart. Ask the class to draw connections between the neighborhoods' health indicators and history:

- How might public policy and private investment decisions have shaped some of these indicators?
- What has drawn or lost businesses, stores and well-paying jobs?
- Does the racial / ethnic composition of a neighborhood seem to correspond with its wealth?
- What kinds of developments and advantages are built in wealthy neighborhoods vs. poorer neighborhoods?
- What are the health impacts of these changes?

You might also choose to have students write a final short paper summarizing their thoughts on the unit.

EXTENSION ACTIVITIES

Connecting the Past and the Present.

Ask students to investigate the history of racial segregation and economic investment in the neighborhoods they've studied, including zoning laws, state and local government spending on education and healthcare, and business development in the region. Use the "dissimilarity index" to measure how racially integrated the area region is: http://www.censusscope.org/us/s40/p75000/chart_dissimilarity.html

How Do Neighborhoods Change? Conduct a Power Analysis.

Who holds the cards in your community and why? How makes the decisions? Who's left out? How can that power balance be challenged? Conduct a "power analysis" by using this tool from The Praxis Project:

http://www.thepraxisproject.org/tools/Power_Analysis_Process.doc

"The House We Live In"

The third episode of the documentary series *RACE: The Power of an Illusion* looks at race not with regard to individual attitudes and behavior, but on the ways our institutions and policies advantage some groups at the expense of others (particularly considering the development of the white suburbs mid-20th century). The series' companion web site contains information on the film, along with many resources and interactivities: http://www.pbs.org/race

Share Results.

- Write about the issue in an article for the school paper or a letter to the editor for your local paper.
- Create a photo essay by taking photos of factors that promote or threaten health and explaining their impact. Publish the photo essay online.
- Make a PowerPoint presentation including photographs, health indicator data, and graphs in order to share the results of the class's research with a church; a community organization; the public health department; another class or club; a scouts or guides group; friends, family and neighbors; or local politicians.
- Set up an exchange with another school in the region, state, or country to compare your data. Create a web site where students can post their results and reports they produce, or organize an inter-school conference where schools from diverse neighborhoods can compare their data and evaluate its significance.

Take Action.

Now that students have identified elements in the community that can promote or undermine health, they can investigate how to get involved in improving the situation. Ask students to review their Health Indicator Grids and select a low-scoring indicator to target. They should then draft an action plan describing how to publicize the problem, who to contact to help, and what remedy they propose. For example, if there is little affordable healthy food available in the community, work on getting a community farmers market or encouraging corner stores to carry more produce. See <u>additional resources</u> below.

Form a Community Partnership.

Encourage students to connect with community leaders or organizers to collaboratively conduct a more formal review of health indicators in their neighborhood. For example, high-school-aged youth helped WE ACT (West Harlem Environmental Action) to measure residents' exposure to air pollution, building a strong case for policies to improve air quality in the neighborhood. The Connect Up! database lists profiles of organizations involved with the *UNNATURAL CAUSES* campaign for health equity: http://www.unnaturalcauses.org/connect_up.php

ASSESSMENT

Writing:

Lesson One: The writing assignment can be used to evaluate the student's comprehension of the film and their understanding of the neighborhood features that can make people healthy or sick.

Lessons Two Through Four: You may choose to have students prepare written reports of their findings. These may be used to evaluate their proficiency at using research tools and methods, identifying and gathering relevant data, and synthesizing and evaluating the significance of their findings.

Oral Presentation:

Lessons Two and Three: Group presentations may be used to evaluate their proficiency at using research tools and methods, identifying and gathering relevant data, and synthesizing and evaluating the significance of their findings.

Data Analysis

Lessons Two and Three: The class presentations and graphing assignment can be used to evaluate competency at representing complex data and analyzing its significance.

Group Work

Lessons Two through Four require that students combine individual and collective research to produce a group presentation. Requesting feedback on the process may help you evaluate student proficiency at working in groups.

ADDITIONAL RESOURCES

Learn more about the issues

RACE: The Power of an Illusion

UNNATURAL CAUSES: Is Inequality Making Us Sick?

Develop research

National Center of Health Statistics

National Health and Nutrition Examination Survey,

http://www.cdc.gov/nchs/nhanes.htm

National Health Interview Survey, http://www.cdc.gov/nchs/nhis.htm

National Vital Statistics System, http://www.cdc.gov/nchs/nvss.htm

Advanced students might be able to use this data and/or wade through the various studies on different indicators.

Community Health Councils' South L.A. Scorecard, Appendix 1:

http://www.chc-inc.org/chcRegionalNetworks.cfm

The scorecard illustrates a formal evaluation of health indicators for South Los Angeles as compared to West Los Angeles and the county average. Appendix 1 provides tables of all the indicators they used, with footnote listing the sources.

Life and Death from Unnatural Causes: Health and Society Inequity in Alameda County http://www.acphd.org/user/services/AtoZ_PrgDtls.asp?PrgId=90

This neighborhood by neighborhood study by the Alameda County Public Health Department (CA) offers a professional illustration of the use of health indicator data.

Bay Area Regional Health Inequities Initiative (BARHII) http://www.barhii.org/press/download/barhii report08.pdf

This BARHII report examines the patterning of health threats and outcomes in six San Francisco Bay Area counties along racial and socio-economic lines.

The Healthy Development Measurement Tool http://www.thehdmt.org/

Some communities are beginning to assess policies, development projects, laws and initiatives for their impact on health initiatives. The San Francisco Public Health Department has been at the forefront of developing Health Impact Assessment (HIA) tools to measure the consequences of urban development plans on the health of residents.

For a **comprehensive** list of data sources, see the *Data Set Directory of Social Determinants of Health at the Local Level*, available from the CDC: http://www.cdc.gov/dhdsp/library/data set directory/pdfs/data set directory.pdf

Take action

Connect Up!

http://www.unnaturalcauses.org/connect_up.php

This online database lists profiles of organizations involved with the *UNNATURAL CAUSES* campaign for health equity:

UNNATURAL CAUSES Policy Guide

http://www.unnaturalcauses.org/policy_guide.php.

This companion guide provides an extensive (though certainly not exhaustive) list of SDOHE issues and proposed areas for action.

Taking Community Action on Health Disparities

http://www.enddisparities.org/criticalmasstoolkit.html

This toolkit provides a great (and very thorough) guide for each step between identifying a problem to taking action. It also provides some advice on gathering data.

The THRIVE Tool – Prevention Institute

http://www.preventioninstitute.org/thrive/index.php

This online tool helps to prioritize issues, identify the health relevance of neighborhood factors, and develop ideas for action.

Promoting Healthy Public Policy through Community-Based Participatory Research http://www.policylink.org/documents/CBPR_final.pdf.

This report focuses on larger collaborations between research institutions and community organizations, but provides some interesting case studies for action ideas.

Bringing Good Food to Your Neighborhood

Neighborhood Store Watch in Los Angeles (http://www.chc-

<u>inc.org/chcRegionalHW.cfm</u>) and the Good Neighbor program in San Francisco (http://www.lejyouth.org/programs/food.html) provide useful examples of mobilizing young community members to work with stores to supply healthier food.

NATIONAL EDUCATIONAL STANDARDS

Government

Center for Civic Education, http://www.civiced.org/index.php?page=912toc

- III. How Does the Government Established by the Constitution Embody the Purposes, Values, and Principles of American Democracy?
 - C. How are state and local governments organized and what do they do?
 - 2. Organization of state and local governments. Students should be able to evaluate, take, and defend positions on issues regarding the relationships between state and local governments and citizen access to those governments.
 - 3. *Major responsibilities of state and local governments*. Students should be able to identify the major responsibilities of their state and local governments and evaluate how well they are being fulfilled.
 - E. How does the American political system provide for choice and opportunities for participation?
 - 1. *The public agenda*. Students should be able to evaluate, take, and defend positions about how the public agenda is set.
 - 5. Associations and groups. Students should be able to evaluate, take, and defend positions about the contemporary roles of associations and groups in American politics.
 - 6. Forming and carrying out public policy. Students should be able to evaluate, take, and defend positions about the formation and implementation of public policy. To achieve this standard, students should be able to
 - describe a current issue of public policy at local, state, or national level
 - identify the major groups interested in that issue and explain their positions
 - identify the points at which citizens can monitor or influence the process of public policy formation
- V. What are the Roles of the Citizen in American Democracy?
 - B. What are the rights of citizens?
 - 1. *Personal rights*. Students should be able to evaluate, take, and defend positions on issues regarding personal rights.
 - 2. *Political rights*. Students should be able to evaluate, take, and defend positions on issues regarding political rights.
 - 3. *Economic rights*. Students should be able to evaluate, take, and defend positions on issues regarding economic rights.
 - 4. *Relationships among personal, political, and economic rights.* Students should be able to evaluate, take, and defend positions on the relationships among personal, political, and economic rights.
 - C. What are the responsibilities of citizens?
 - 1. *Personal responsibilities*. Students should be able to evaluate, take, and defend positions on issues regarding the personal responsibilities of citizens in American constitutional democracy.

- 2. *Civic responsibilities*. Students should be able to evaluate, take, and defend positions on issues regarding civic responsibilities of citizens in American constitutional democracy.
- E. How can citizens take part in civic life?
 - 3. *Forms of political participation*. Students should be able to evaluate, take, and defend positions about the means that citizens should use to monitor and influence the formation and implementation of public policy.
 - 5. *Knowledge and participation*. Students should be able to explain the importance of knowledge to competent and responsible participation in American democracy.

English Language Arts:

American Library Association, American Association of School Librarians, http://www.ala.org/ala/mgrps/divs/aasl/aasleducation/schoollibrarymed/ala-aasl-slms2003.pdf

Reading for Perspective

Students read a wide range of print and non-print texts to build an understanding of texts, of themselves, and of the cultures of the United States and the world; to acquire new information; to respond to the needs and demands of society and the workplace; and for personal fulfillment.

Participating in Society

Participate as knowledgeable, reflective, creative and critical members of a variety of literacy communities.

Applying Language Skills

Use spoken, written, and visual language to accomplish their own purposes (e.g., for learning, enjoyment, persuasion, and the exchange of information).

Geography:

National Council for Geographic Education, http://ncge.net/publications/tutorial/standards/

The World in Spatial Terms

Understand how to use maps and other geographic representations, tools, and technologies to acquire, process, and report information from a spatial perspective.

Health Education:

American Association for Health Education, http://www.aahperd.org/aahe/pdf files/standards.pdf

- Students comprehend concepts related to health promotion and disease prevention.
- Students describe the interrelationships of mental, emotional, social and physical health throughout adulthood.

- Students analyze how public health policies and government health regulations influence health promotion and disease prevention.
- Students evaluate the effects of culture and media on personal, family, and community health.
- Students express information and opinions about health issues.

School Library Media:

- Students will be able to gather relevant information from appropriate resources.
- Students will be able to interpret information to generate new understanding and knowledge.
- Students will be able to communicate findings by producing materials in an appropriate format.

Science Education:

National Committee on Science Education Standards and Assessment, National Research Council, http://www.nap.edu/catalog.php?record_id=4962

- Science in personal and social perspectives.
- Personal and community growth.

Social Studies:

National Council for the Social Studies, http://www.socialstudies.org/standards

Culture

• Analyze and explain the ways groups, societies, and cultures address human needs and concerns.

Individual development and identity

- Analyze group and institutional influences on people, events, and elements of culture in both historical and contemporary settings.
- Describe personal connection to a place—as associated with community, nation, and the world.
- Relate personal changes to social, cultural, and historical contexts.
- Describe personal changes over time, such as those related to physical development and personal interests.

Power, Authority, and Governance

• Examine persistent issues involving the rights, roles, and status of the individual in relation to the general welfare

APPENDIX A: NEIGHBORHOOD FEATURES TABLE

Neighborhood Features that Can Impact Health Directly or Indirectly

NEIGHBORHOOD FEATURES	POTENTIAL HEALTH IMPACTS
Example: Living near a freeway or road	Asthma from diesel pollution; noise
with lots of truck traffic	disturbs sleep
Plenty of parks	
Lots of fast food restaurants	
Noise	

APPENDIX B: HEALTH INDICATOR DATA SOURCES

Online

American FactFinder

http://factfinder.census.gov

Social, economic, and housing characteristics and demographic estimates by town, city, county, or state. Under "Get a Fact Sheet for Your Community" at the top of the page in the middle, enter zip code and click "go." Consult the information under different sections.

CLIKS: Community-Level Information on Kids

http://www.kidscount.org/cgi-bin/cliks.cgi

Compiles data on wellbeing of children collected from state and local sources, at county level, with indicators for education, health, family economics, child welfare, parents' education, child demographics.

DiversityData.org

http://diversitydata.sph.harvard.edu

Provides data on wide range of indicators by metropolitan area: population demographics and diversity, health, housing opportunities, economic opportunities, education, poverty rates, residential integration and neighborhood characteristics, crime, physical environment.

Dynamic Maps of Nonprime Mortgage Conditions in the United States http://www.newyorkfed.org/mortgagemaps/

Shows foreclosure and other mortgage info by state. Click on "Share in Foreclosure" on right hand side, then scroll over your state. (Offers data at the county and zip code level, but feature not functioning at time of writing – Feb 2008).

Google Maps

http://maps.google.com/

Enter state and zip code in box at top of page and click on "search maps." You may then search for services or businesses such as "supermarket," "library," "park" or a specific fast food chain by entering the term in the box at the top of the page.

Health Justice Report Card

http://www.healthjustice.us/index.php

Provides indicators by county: infant mortality rates, racial residential segregation measurement, educational attainment rates, income inequality, index of medical service score, uninsured population, percentage of voters, retail liquor outlets, distribution of environmental burdens (populations of color vs. white).

Enter county information and view "grade" for each racial group. From grade, click on "To see the data, click here."

PolicyMap.org

http://www.policymap.org

Free registration provides access to a wealth of data on health, employment, economic, real estate, services, and other areas. Some of the maps will not appear fully without a paid subscription, but users can still get indicator data by clicking on the desired area.

$TOXMAP-Environmental\ Health\ e ext{-}Maps$

http://toxmap.nlm.nih.gov

On-site toxic releases and hazardous waste sites from the EPA's Toxics Release Inventory (TRI) and the Superfund National Priorities List (NPL). Also includes some data on chronic disease, cancer, and mortality rates.

Enter state and zip code in box on left of page and click on "search."

Local Information Sources

- Public health, housing, and human services departments
- Mayor's office
- Police or sheriff's department, courts
- State department of education, state public health department
- Chamber of Commerce
- Mass transit authority
- Local universities
- Community health center
- Hospitals (Community benefits office)
- Company annual reports
- Local community or nonprofit organizations
- Public library reference librarian

Surveys and Independent Investigation

- Document observations during walking or biking tours.
- Interview or survey residents and local business owners.
- Observe noise, traffic congestion, foul odors. If possible, borrow an instrument from university or local government department to measure noise levels or air quality.

APPENDIX C: HEALTH INDICATORS TABLE

HEALTH INDICATORS	POTENTIAL DATA SOURCES
A. Physical and Built Environment:	
Farmers markets and supermarkets vs. fast food joints, convenience and liquor stores	Use Google Maps or a walking tour of the area to count if there are supermarkets within walking distance, the number of fast food restaurants and liquor stores
Well equipped and tended parks that are considered safe; lots of trees and green open spaces,	Photograph state of disrepair or upkeep of the area's parks.
Proximity to heavy traffic (especially truck traffic) and freeways	Use Google Maps or a walking tour of the area to count areas of green space and number of freeways or major roads.
Pedestrian friendly: safe to walk to school and shops, good sidewalks, clean streets.	Walk or cycle to see if the area is easily navigable on foot or by bicycle, evaluate sidewalks and streets.
Bike lanes	Check with public health department or local dept. of housing. Survey residents
Housing conditions (in good repair, no peeling or lead paint, or mold, adequate number of bedrooms, cool in summer, warm in winter)	Use US Census data to find out average income and average rent, number of vacant homes.
Polluting industries, toxic dumps.	Visit TOXMAP to see if toxic industries are located nearby.
School buildings in good repair	Survey; ask principals what their yearly maintenance budget is and if it's adequate.
Noise	Observe, or use a sound level meter or dosimeter (may be able to borrow one from a municipal or university industrial hygiene,
Few empty or littered lots	audiology or acoustical engineering dept)
Street plans promote interaction	Google maps; observe
Neighborhood is connected to rest of community and jobs	Survey residents

B. Social Environment:

Crime rates or fear of crime

Noise interrupts sleep

Neighbors know and trust each other

Degree of racial integration

Youth activities and community centers

Places of worship

Residents participate in community-based organizations

Experience of discrimination

Neighborhood feels connected and part of the rest of the community.

Elders feel cared-for—or isolated

Residents feel police are friendly and trustworthy; local government is responsive

Research crime statistics. Interview residents about fear of crime, noise and disturbances in the area, and whether they feel safe and trust their neighbors.

Use US Census data to learn of area how diversity.

Google Maps

Check with organizations for volunteering numbers.

Survey residents

C. Economic Environment:

Median income

Percentage of household living in poverty (or under 200% of poverty rate)

High school graduation rate

% of residents with a college degree

Affordable housing (rent less than 30% of income)

Unemployment rate

Use US Census data to see average income and cost of rent, poverty rates, educational levels, etc.

http://Factfinder.census.gov

U.S. Bureau of Labor statistics, www.bls.gov, will only include unemployment rates for metropolitan area; query your local county public health department, city council, or board of

supervisors Foreclosed or abandoned housing Look up foreclosure data at the Federal Reserve. Thriving retail areas or shuttered shops; Observe. Photograph abandoned shops or thriving retail areas. Per pupil spending on schools State Department of Education Kind of job opportunities, hiring from Interview residents about the job within the neighborhood. opportunities in the community and whether employers hire people from the area. New investments in construction, shops, Check with local Chamber of Commerce offices, factories or infrastructure

D. Service Environment:	
Reliable public transit	Research the mass transit authority in your area to identify bus and train routes.
Public libraries	
Banking options: Banks, or pawn shops and check-cashing services	Google maps or a walking tour to identify public libraries, clinics, and other facilities.
Museums and other cultural institutions.	
Youth centers and activities	Check with local neighborhood organization
Senior centers and services (e.g. meals on wheels)	Local Dept of Human Services
Childcare and pre-school facilities	Contact child advocacy organizations like Children Now, or in CA: First Five
Family support services	Contact school nurse, Planned Parenthood,
Reproductive health services	teen clinics, State family planning and reproductive assistance;
Accessible, affordable, and culturally competent healthcare services	Interview residents about their access to and experience with healthcare services.

E. Health Outcomes:	
Average life expectancy	Check county public health department
Dates of:	The National Health and Nutrition
Rates of:	The National Health and Nutrition
asthma	Examination Survey
diabetes	
obesity	The National Health Interview Survey Data
heart disease	
kidney disease	National Vital Statistics system
cancers	
infant mortality	Look up diabetes, cancer, heart disease and
	mortality rates at TOXMAP.
Pedestrian deaths	
	Police departments and university security
Violent crimes	services may provide crime and accident
	statistics online.

APPENDIX D: HEALTH INDICATOR GRADING TABLES

A. Physical and Built Environment	Grade
Well-equipped and safe parks	
Plentiful green spaces	
Easily navigable for pedestrians and cyclists	
Distance from freeways and heavy traffic	
Distance from toxic sites and polluting industries	
Thriving retail areas	

B. Social Environment	Grade
Fear of crime	
High crime rate in relation to region	
Number of noise complaints to police or perception of noise disturbance	
that affects sleep or concentration	
Range of community centers with active community participation	
Integration (are 50% or more of the residents of one race)	
Neighbors know and trust each other	

C. Economic Environment	Grade
Availability of farmer's markets	
Local supermarkets	
Number of fast food restaurants	
Affordable housing (is rent less than 30% of income?)	
Abandoned shops and foreclosed homes	

D. Service Environment	Grade
Major bus or train routes	
Public libraries	
Affordable healthcare clinics	
Museums and other cultural institutions	
Banking options	

E. Health Outcomes:	Grade
Asthma rates	
Obesity rates	
Pedestrian safety	
Levels of violent crime in the region	

APPENDIX E: SAMPLE NEIGHBORHOOD QUESTIONNAIRE

Sample Neighborhood Questionnaire

- 1. Has the population been constant or has it changed? Has the area become wealthier or poorer? More or less racially and economically diverse?
- 2. How have the number and kinds of available jobs changed? What about patterns of commuting?
- 3. Where did people get their food and go shopping 30 years ago? How has that changed?
- 4. How have patterns of business investment changed? Bank lending patterns?
- 5. Have zoning or land use laws changed? For better or worse?
- 6. Have public works projects (freeway and bridge construction, building and maintenance of parks, sewage and water, schools, community centers, etc.) helped or harmed the neighborhood over the years?
- 7. Have there been "redevelopment" or "urban renewal" projects? What were their impacts?
- 8. Is local government more or less responsive to the needs of the community? If this has changed, why?
- 9. What kind of organizations were influential 30 years ago vs. today? Religious groups? Labor unions? Civil rights groups? Political clubs? Block councils? Chamber of Commerce or other business groups? Lobbyists? Service organizations? Which groups have the easiest time getting their voices heard and have the most power?
- 10. Do you know and trust your neighbors? Do you feel safe here? What about 30 years ago? Is the neighborhood a "happier" place?
- 11. What is working well in the area, and what would you like to see improved?
- 12. Overall, do you feel it's easier or harder for the residents of this neighborhood to lead a healthy and flourishing life today than 30 years ago?

APPENDIX F: GLOSSARY

Demographics. Selected population characteristics used in research, such as age, ethnicity, income, educational attainment, home ownership, and employment status.

Health indicator. A measure that reflects, or indicates, the state of health of a defined population.

Environmental indicator. A characteristic or feature of one's surroundings (e.g., neighborhood, workplace) that may promote or threaten health.

Health disparities. Differences in health status that occur among population groups defined by specific characteristics, such as wealth, race, or geography.

Health inequalities. A generic term referring to differences, variations, and disparities in health status and risk for individuals and groups.

Health inequities. Refers to inequalities in health that are deemed to be *unfair* or *unjust* because they stem from injustice.

Social determinants of health (SDOH). The economic and social conditions that influence the health of individuals, communities and groups as a whole. They determine the extent to which a person possesses the physical, social, and personal resources to identify and achieve personal aspirations, satisfy needs, and cope with the environment.

Social determinants of health equity (SDOHE). The economic and social conditions that influence the health equity of a population.

Source: Canada's Response to WHO Commission on Social Determinants of Health, Glossary. Public Health Agency of Canada. http://www.phac-aspc.gc.ca/sdh-dss/glos-eng.php