The Case For Place-Based Public Health Practice and Working To Create Health Equity

Part 4

Marin County Meeting
10-4-10

Tony Iton, M.D., J.D., MPH
Senior Vice President
The California Endowment
“The American high school is obsolete.... If we keep the system as it is, millions of children will never get a chance to fulfill their promise because of their zip code, their skin color, or the income of their parents. That is offensive to our values, and it’s an insult to who we are.”

- Bill Gates addressing the National Governors Assoc. 2005
“A review of the scientific literature shows associations between education and health across a broad range of illnesses, including coronary heart disease, many specific cancers, Alzheimer's disease, some mental illnesses, diabetes, and alcoholism.”

NIH RFA OB-03-001-PATHWAYS LINKING EDUCATION TO HEALTH
Race/ethnicity

Class

Gender

Discriminatory Belief Systems → Institutional Power → Neighborhood Conditions → Risk Behaviors → Disease and Injury → Mortality

Immigration status
Results of the statistical comparison of weather and deaths over 12 years show that blacks and those with a high school education or less are most likely to die on extremely hot days.

— Harvard School of Public Health study of almost 8 million deaths in 50 cities from 1989 to 2000.
“The heat wave was a particle accelerator for the city: It sped up and made visible the hazardous social conditions that are always present but difficult to perceive.”

“Yes, the weather was extreme. But the deep sources of the tragedy were the everyday disasters that the city tolerates, takes for granted, or has officially forgotten.”

Eric Klineberg, author of Heat Wave
High school grads: 90%
Unemployment: 4%
Poverty: 7%
Home ownership: 64%
Non-White: 49%

High school grads: 81%
Unemployment: 6%
Poverty: 10%
Home ownership: 52%
Non-White: 59%

High school grads: 65%
Unemployment: 12%
Poverty: 25%
Home ownership: 38%
Non-White: 89%

Life Expectancy

>80
74.3 - 80
<74.3

Schools
Jobs
Crime
Segregation
Housing
Toxins
A Framework for Health Equity

**Socio-Ecological**

UPSTREAM
- Discriminatory Beliefs (ISM)
  - Race
  - Class
  - Gender
  - Immigration status
  - National origin
  - Sexual orientation
  - Disability

Social Factors

- Corporations & other businesses
- Government
- Schools

Social Inequities
- Neighborhood conditions
- Social factors
  - Residential segregation
  - Workplace conditions

DOWNSTREAM
- Individual Health Knowledge
- Genetics

Health Inequities
- Risk Factors & Behaviors
  - Smoking
  - Nutrition
  - Physical activity
  - Alcohol
  - Chronic Stress

Health Disparities
- Infectious disease
- Chronic disease
- Injury
  (intentional & unintentional)

Mortality
- Infant mortality
- Life expectancy

Health Status

Healthcare Access

- Adapted by ACPHD from the Bay Area Regional Health Inequities Initiative, Summer 2008
A Framework for Health Equity

- Adapted by ACPHD from the Bay Area Regional Health Inequities Initiative, Summer 2008
A Framework for Health Equity

Socio-Ecological

Medical Model

UPSTREAM

Discriminatory Beliefs (ISMS)
- Race
- Class
- Gender
- Immigration status
- National origin
- Sexual orientation
- Disability

Institutional Power
- Corporations & other businesses
- Government agencies
- Schools

Social Inequities
- Neighborhood conditions
  - Social
  - Physical
- Residential segregation
- Workplace conditions

School Absence/Truancy
Grade Failure
Drop-Out

DOWNSTREAM

- Adapted by ACPHD from the Bay Area Regional Health Inequities Initiative, Summer 2008
Our Community Partners

The California Endowment

[Map of California with specific regions and cities marked, including Del Norte County and adjacent Tribal Lands, Richmond East Oakland, South Sacramento, Southwest Merced East Merced County, Central West Fresno City, East Salinas, South Kern County, Boyle Heights, Central Long Beach, Central Santa Ana, Coachella, South Figueroa Corridor Vermont Manchester, City Heights.]
1. All children have health coverage
2. Families have improved access to a “health home” that supports healthy behaviors
3. Health and family-focused human services shift resources toward prevention
4. Residents live in communities with health-promoting land-use, transportation and community development
5. Children and their families are safe from violence in their homes and neighborhoods
6. Communities support healthy youth development
7. Neighborhood and school environments support improved health and healthy behaviors
8. Community health improvements are linked to economic development
9. Health gaps for boys and young men of color are narrowed
10. California has a shared vision of community health
Local Policy Agenda

Creating A New Narrative

BUILDING A HEALTHY COMMUNITY

Community Power Building
Human Development Concept

EXPANDED opportunities and choices

HUMAN DEVELOPMENT

CONSTRAINED opportunities and choices

WELL-BEING

TIME
# Top-Ranked Countries in Human Development 1980–2005

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<thead>
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<tbody>
<tr>
<td>1</td>
<td>Switzerland</td>
<td>1 Canada</td>
<td>1 Canada</td>
<td>1 Norway</td>
<td>1 Norway</td>
<td>1 Iceland</td>
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<td>2</td>
<td>U.S.</td>
<td>2 U.S.</td>
<td>2 U.S.</td>
<td>2 Canada</td>
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<td>3</td>
<td>Iceland</td>
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<td>3 Australia</td>
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<td>4</td>
<td>Norway</td>
<td>4 Norway</td>
<td>4 Japan</td>
<td>4 Netherlands</td>
<td>4 Netherlands</td>
<td>4 Canada</td>
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<tr>
<td>5</td>
<td>Canada</td>
<td>5 Iceland</td>
<td>5 Switzerland</td>
<td>5 Australia</td>
<td>5 Iceland</td>
<td>5 Ireland</td>
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<td>6</td>
<td>Japan</td>
<td>6 Japan</td>
<td>6 Netherlands</td>
<td>6 U.S.</td>
<td>6 Canada</td>
<td>6 Sweden</td>
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<tr>
<td>7</td>
<td>Netherlands</td>
<td>7 Netherlands</td>
<td>7 Norway</td>
<td>7 Belgium</td>
<td>7 Switzerland</td>
<td>7 Switzerland</td>
</tr>
<tr>
<td>8</td>
<td>Denmark</td>
<td>8 Sweden</td>
<td>8 France</td>
<td>8 Japan</td>
<td>8 Belgium</td>
<td>8 Netherlands</td>
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<tr>
<td>9</td>
<td>Sweden</td>
<td>9 Denmark</td>
<td>9 Finland</td>
<td>9 UK</td>
<td>9 U.S.</td>
<td>9 Japan</td>
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<tr>
<td>10</td>
<td>France</td>
<td>10 France</td>
<td>10 Sweden</td>
<td>10 Switzerland</td>
<td>10 Japan</td>
<td>10 Finland</td>
</tr>
<tr>
<td>11</td>
<td>Belgium</td>
<td>11 Finland</td>
<td>11 Belgium</td>
<td>11 France</td>
<td>11 Finland</td>
<td>11 France</td>
</tr>
<tr>
<td>12</td>
<td>Australia</td>
<td>12 Belgium</td>
<td>12 Austria</td>
<td>12 Iceland</td>
<td>12 France</td>
<td>12 U.S.</td>
</tr>
</tbody>
</table>
Americans Have Shorter Lives Than Expected Based on Income

Life expectancy is shorter in the U.S. than in some countries with per capita incomes half as large as ours. Based on per capita income, U.S. life expectancy at birth should be nearly three years longer.
A Potential Decline in Life Expectancy in the United States in the 21st Century

S. Jay Olshansky, Ph.D., Douglas J. Passaro, M.D., Ronald C. Hershow, M.D., Jennifer Layden, M.P.H., Bruce A. Carnes, Ph.D., Jacob Brody, M.D., Leonard Hayflick, Ph.D., Robert N. Butler, M.D., David B. Allison, Ph.D., and David S. Ludwig, M.D., Ph.D.

ABSTRACT

Forecasts of life expectancy are an important component of public policy that influence age-based entitlement programs such as Social Security and Medicare. Although the Social Security Administration recently raised its estimates of how long Americans are going to live in the 21st century, current trends in obesity in the United States suggest that these estimates may not be accurate. From our analysis of the effect of obesity on longevity, we conclude that the steady rise in life expectancy during the past two centuries may soon come to an end.
<table>
<thead>
<tr>
<th>Country</th>
<th>Life Expectancy</th>
</tr>
</thead>
<tbody>
<tr>
<td>US White</td>
<td>78 years</td>
</tr>
<tr>
<td>Chile</td>
<td>78 years</td>
</tr>
<tr>
<td>Costa Rica</td>
<td>78 years</td>
</tr>
<tr>
<td>Cuba</td>
<td>78 years</td>
</tr>
<tr>
<td>Slovenia</td>
<td>78 years</td>
</tr>
<tr>
<td>Kuwait</td>
<td>78 years</td>
</tr>
</tbody>
</table>
US Whites Living Shorter Lives Than:

- **79 years**: Belgium, Denmark, Finland, Malta, Portugal, Spain, Sweden, U.K., Korea
- **80 years**: Austria, Cyprus, Germany, Greece, Ireland, Netherlands, Norway, New Zealand, Singapore
- **81 years**: Canada, France, Iceland, Israel, Italy
- **82 years**: Switzerland, Australia
- **83 years**: Japan

- 26 countries
US White Infant Mortality

= 5.7 per 1000 live births (NCHS)

➢ Worse Than:

Canada, Cuba, Croatia, Estonia, U.K., Australia, New Zealand

➢ Substantially Worse Than:

Austria, Belgium, Czech Republic, Denmark, Finland, France, Germany, Greece, Iceland, Ireland, Israel, Italy, Netherlands, Norway, Portugal, Spain, Sweden, Switzerland, Japan, Singapore
Self-reported Health by Education and Income in England and the United States, Ages 55-64 Years*

<table>
<thead>
<tr>
<th></th>
<th>England</th>
<th>United States</th>
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<tbody>
<tr>
<td></td>
<td>Low</td>
<td>Medium</td>
</tr>
<tr>
<td>Diabetes</td>
<td>7.7</td>
<td>6.2</td>
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<tr>
<td>Hypertension</td>
<td>37.6</td>
<td>32.9</td>
</tr>
<tr>
<td>All heart disease</td>
<td>12.2</td>
<td>8.3</td>
</tr>
<tr>
<td>Myocardial infarction</td>
<td>4.8</td>
<td>4.0</td>
</tr>
<tr>
<td>Stroke</td>
<td>2.7</td>
<td>2.3</td>
</tr>
<tr>
<td>Lung disease</td>
<td>7.7</td>
<td>5.4</td>
</tr>
<tr>
<td>Cancer</td>
<td>4.9</td>
<td>5.3</td>
</tr>
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</table>

<table>
<thead>
<tr>
<th></th>
<th>Income, Percent Distribution</th>
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</thead>
<tbody>
<tr>
<td></td>
<td>Low</td>
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<td>Diabetes</td>
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<td>Hypertension</td>
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<td>Cancer</td>
<td>5.7</td>
</tr>
</tbody>
</table>

*Adjusted for risk factors so that everyone has same as average US risk factors but coefficients are country specific. Source: English data are from first wave of English Longitudinal Survey of Aging, and US data are from the 2002 wave of the Health and Retirement Survey. See Table 1 for sample sizes and definitions of income and education groups. All data are weighted.

†P<.01 vs data from England.
‡P<.05 vs data from England.

**HTN Social Gradient US Whites vs. British**

<table>
<thead>
<tr>
<th>Income Group</th>
<th>US Whites</th>
<th>Medium</th>
<th>High</th>
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<tbody>
<tr>
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<td>16.8</td>
<td>11.4</td>
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<tr>
<td>Medium</td>
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<td>7.7</td>
<td>6</td>
</tr>
<tr>
<td>High</td>
<td>9.2</td>
<td>6</td>
<td>3.1</td>
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**Diabetes Social Gradient U.S. Whites vs. British**

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<th>Medium</th>
<th>High</th>
</tr>
</thead>
<tbody>
<tr>
<td>Low</td>
<td>46.1</td>
<td>42.8</td>
<td>38.2</td>
</tr>
<tr>
<td>Medium</td>
<td>42.8</td>
<td>35.8</td>
<td>31.6</td>
</tr>
<tr>
<td>High</td>
<td>38.2</td>
<td>31.6</td>
<td>31.6</td>
</tr>
</tbody>
</table>
Disease and Disadvantage in the United States and in England

James Banks, Michael Marmot, Zoe Oldfield, James P. Smith,

- White Americans are much sicker than White Britons.
- “differences in socioeconomic groups between the two countries were so great that those in the top education and income level in the U.S. had similar rates of diabetes and heart disease as those in the bottom education and income level in England”.
Promoting Health Equity
A Resource to Help Communities Address
Social Determinants of Health
A documentary series & public impact campaign

www.unnaturalcauses.org

Produced by California Newsreel with Vital Pictures
Presented on PBS by the National Minority Consortia of Public Television
Impact Campaign in association with the Joint Center Health Policy Institute
PLACE

POLICY

LEADERSHIP
"Health inequity really is a matter of life and death, but health systems will not naturally gravitate towards equity. Unprecedented leadership is needed that compels all actors, including those beyond the health sector, to examine their impact on health."

– Dr. Margaret Chan. WHO Director-General
Contact Information

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(510) 271-4300
Interventions for Health Equity Across the Life Course

<table>
<thead>
<tr>
<th>Life Course Stages</th>
<th>Age 0-5</th>
<th>12</th>
<th>20</th>
<th>24</th>
<th>44</th>
<th>65</th>
<th>80+</th>
</tr>
</thead>
</table>

**BARHII Health Equity Framework**

- Discriminatory Beliefs
- Institutional Power
- Social Inequalities
- Risk Factors & Behaviors
- Disease & Injury
- Mortality

**Optimal Life Course**

**Life Course impacted by inequity**
Figure 2: All-Cause Mortality Rate by Neighborhood Poverty, Alameda County

Figure 7: All-Cause Mortality Rate by Neighborhood Poverty Group and Race/Ethnicity, Alameda County

Source: Alameda County vital statistics files, 2001-2005.
Los Angeles County

Age-Adjusted Mortality Rate

- African American
- White
- All
- Hispanic/Latino
- Asian

Neighborhood Poverty Group

- <10%
- 10%-19.9%
- 20%-29.9%
- 30+%