FALLING BEHIND
West Virginia & USA
Playing the Game of Health Without a Scoreboard

Stephen Bezruchka MD, MPH
Departments of Global Health & Health Services
School of Public Health
University of Washington
The 2012 West Virginia Public Health Symposium:
Prevention, Surveillance and Response
My History

Mathematics
Medical school
Remote Nepal: *infections there among poorest*
Emergency Medicine *of poverty*
US health status
Efforts since

Thanks Danae Bixler, MD, MPH
  Director, Infectious Disease Epidemiology
  Bureau for Public Health
AGENDA

SURVEILLANCE Quiz

West Virginia

Why is our health status so poor
- Inequality is killing us
- First 1000 days matter most for our health

PREVENTION Challenge to everyone

RESPONSE
- Make comparisons with healthier nations
- Inform all of us
- Push policies

WORKSHOP
VITAL signs

Individual
- Infant
- Child
- Adult

Community

State

Country
Killer Facts
A 15 year old girl in the US has a smaller chance of dying before reaching age 60 than a similarly aged girl in Sri Lanka.
During the period of 1987 to 2007 life expectancy for women declined in almost 30% of US counties (which was not so for the previous 20 years).

Female

Male

Change in years of life expectancy in US counties from 1987 to 2007

Change in years of life expectancy in US counties from 1987 to 2007
Maternal mortality in the US has increased 50% over the last 15 years.
Australia, Canada, Japan, Sweden
US Maternal Mortality 1970-2010
SURVEILLANCE
All-time Olympic medal standings

U.S.: 2406

USSR: 1,122

U.K.: 790.5

FRANCE: 667

GERMANY: 702.5

Source: NBC.com

Time magazine July 30, 2012 + web update
How healthy is the US?

Health Olympics

Number one **Gold**  16-20  ________
1-5  ________  21-25  ________
6-10  ________  26-30  ________
11-15  ________  31+  ________
### Table 20. Infant mortality rates and international rankings: Organisation for Economic Co-operation and Development (OECD) countries, selected years 1960–2008


[Data are based on reporting by OECD countries.]

<table>
<thead>
<tr>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>Australia</td>
<td>20.2</td>
<td>17.9</td>
<td>10.7</td>
<td>8.2</td>
<td>5.2</td>
<td>4.7</td>
<td>4.2</td>
<td>4.1</td>
<td>6</td>
<td>21</td>
</tr>
<tr>
<td>Austria</td>
<td>37.5</td>
<td>25.9</td>
<td>14.3</td>
<td>7.8</td>
<td>4.8</td>
<td>4.0</td>
<td>3.9</td>
<td>3.7</td>
<td>20</td>
<td>13</td>
</tr>
<tr>
<td>Belgium</td>
<td>31.4</td>
<td>21.1</td>
<td>12.1</td>
<td>8.0</td>
<td>4.8</td>
<td>4.0</td>
<td>3.9</td>
<td>3.7</td>
<td>18</td>
<td>13</td>
</tr>
<tr>
<td>Canada</td>
<td>27.3</td>
<td>18.8</td>
<td>10.4</td>
<td>6.8</td>
<td>5.3</td>
<td>5.0</td>
<td>5.1</td>
<td>-</td>
<td>-</td>
<td>-</td>
</tr>
<tr>
<td>Chile</td>
<td>120.3</td>
<td>79.3</td>
<td>33.0</td>
<td>16.0</td>
<td>8.9</td>
<td>7.6</td>
<td>8.3</td>
<td>7.8</td>
<td>28</td>
<td>28</td>
</tr>
<tr>
<td>Czech Republic</td>
<td>20.0</td>
<td>20.2</td>
<td>16.9</td>
<td>10.8</td>
<td>4.1</td>
<td>3.3</td>
<td>3.1</td>
<td>2.8</td>
<td>5</td>
<td>7</td>
</tr>
<tr>
<td>Denmark</td>
<td>21.5</td>
<td>14.2</td>
<td>8.4</td>
<td>7.5</td>
<td>5.3</td>
<td>3.5</td>
<td>4.0</td>
<td>4.0</td>
<td>9</td>
<td>19</td>
</tr>
<tr>
<td>Finland</td>
<td>21.0</td>
<td>13.2</td>
<td>7.6</td>
<td>5.6</td>
<td>3.8</td>
<td>2.8</td>
<td>2.7</td>
<td>2.6</td>
<td>3</td>
<td>3</td>
</tr>
<tr>
<td>France</td>
<td>27.7</td>
<td>18.2</td>
<td>10.0</td>
<td>7.3</td>
<td>4.5</td>
<td>3.8</td>
<td>3.8</td>
<td>3.8</td>
<td>14</td>
<td>15</td>
</tr>
<tr>
<td>Germany</td>
<td>35.0</td>
<td>22.5</td>
<td>12.4</td>
<td>7.0</td>
<td>4.4</td>
<td>3.8</td>
<td>3.9</td>
<td>3.5</td>
<td>19</td>
<td>11</td>
</tr>
<tr>
<td>Greece</td>
<td>40.1</td>
<td>29.6</td>
<td>17.9</td>
<td>9.7</td>
<td>5.9</td>
<td>3.7</td>
<td>3.5</td>
<td>2.7</td>
<td>21</td>
<td>5</td>
</tr>
<tr>
<td>Hungary</td>
<td>47.6</td>
<td>35.9</td>
<td>23.2</td>
<td>14.8</td>
<td>9.2</td>
<td>5.7</td>
<td>5.9</td>
<td>5.6</td>
<td>24</td>
<td>24</td>
</tr>
<tr>
<td>Iceland</td>
<td>13.0</td>
<td>13.2</td>
<td>7.7</td>
<td>5.9</td>
<td>3.0</td>
<td>1.4</td>
<td>2.0</td>
<td>2.5</td>
<td>1</td>
<td>1</td>
</tr>
<tr>
<td>Ireland</td>
<td>29.3</td>
<td>19.5</td>
<td>11.1</td>
<td>8.2</td>
<td>6.2</td>
<td>3.6</td>
<td>3.1</td>
<td>3.8</td>
<td>16</td>
<td>15</td>
</tr>
<tr>
<td>Israel</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>15</td>
</tr>
<tr>
<td>Italy</td>
<td>43.9</td>
<td>29.6</td>
<td>14.6</td>
<td>8.1</td>
<td>4.3</td>
<td>3.6</td>
<td>3.5</td>
<td>3.3</td>
<td>23</td>
<td>8</td>
</tr>
<tr>
<td>Japan</td>
<td>30.7</td>
<td>13.1</td>
<td>7.5</td>
<td>4.6</td>
<td>3.2</td>
<td>2.6</td>
<td>2.6</td>
<td>2.6</td>
<td>17</td>
<td>3</td>
</tr>
<tr>
<td>Mexico</td>
<td>92.3</td>
<td>80.9</td>
<td>52.6</td>
<td>39.2</td>
<td>19.4</td>
<td>16.2</td>
<td>15.7</td>
<td>15.2</td>
<td>27</td>
<td>30</td>
</tr>
<tr>
<td>Netherlands</td>
<td>16.5</td>
<td>12.7</td>
<td>8.6</td>
<td>7.1</td>
<td>5.1</td>
<td>4.4</td>
<td>4.1</td>
<td>3.8</td>
<td>3</td>
<td>15</td>
</tr>
<tr>
<td>New Zealand</td>
<td>22.6</td>
<td>16.7</td>
<td>13.0</td>
<td>8.4</td>
<td>6.3</td>
<td>5.1</td>
<td>4.8</td>
<td>5.0</td>
<td>11</td>
<td>23</td>
</tr>
<tr>
<td>Norway</td>
<td>16.0</td>
<td>11.3</td>
<td>8.1</td>
<td>6.9</td>
<td>3.8</td>
<td>3.2</td>
<td>3.1</td>
<td>2.7</td>
<td>2</td>
<td>5</td>
</tr>
<tr>
<td>Poland</td>
<td>54.8</td>
<td>36.7</td>
<td>25.5</td>
<td>19.3</td>
<td>8.1</td>
<td>6.0</td>
<td>6.0</td>
<td>5.6</td>
<td>25</td>
<td>24</td>
</tr>
<tr>
<td>Portugal</td>
<td>77.5</td>
<td>55.5</td>
<td>24.3</td>
<td>10.9</td>
<td>5.5</td>
<td>3.3</td>
<td>3.4</td>
<td>3.3</td>
<td>26</td>
<td>8</td>
</tr>
<tr>
<td>Republic of Korea</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>11</td>
</tr>
<tr>
<td>Slovak Republic</td>
<td>28.6</td>
<td>25.7</td>
<td>20.9</td>
<td>12.0</td>
<td>8.6</td>
<td>6.6</td>
<td>6.1</td>
<td>5.9</td>
<td>15</td>
<td>26</td>
</tr>
<tr>
<td>Spain</td>
<td>43.7</td>
<td>28.1</td>
<td>12.3</td>
<td>7.6</td>
<td>4.4</td>
<td>3.5</td>
<td>3.5</td>
<td>3.3</td>
<td>22</td>
<td>8</td>
</tr>
<tr>
<td>Sweden</td>
<td>16.6</td>
<td>11.0</td>
<td>6.9</td>
<td>6.0</td>
<td>3.4</td>
<td>2.8</td>
<td>2.5</td>
<td>2.5</td>
<td>1</td>
<td>1</td>
</tr>
<tr>
<td>Switzerland</td>
<td>21.1</td>
<td>15.1</td>
<td>9.1</td>
<td>6.8</td>
<td>4.9</td>
<td>4.4</td>
<td>4.0</td>
<td>4.0</td>
<td>8</td>
<td>19</td>
</tr>
<tr>
<td>Turkey</td>
<td>189.5</td>
<td>145.0</td>
<td>117.5</td>
<td>51.5</td>
<td>35.6</td>
<td>16.5</td>
<td>15.9</td>
<td>14.9</td>
<td>29</td>
<td>29</td>
</tr>
<tr>
<td>United Kingdom</td>
<td>22.5</td>
<td>18.5</td>
<td>12.1</td>
<td>7.9</td>
<td>5.6</td>
<td>5.0</td>
<td>4.8</td>
<td>4.7</td>
<td>19</td>
<td>27</td>
</tr>
<tr>
<td>United States</td>
<td>26.0</td>
<td>20.0</td>
<td>12.6</td>
<td>9.2</td>
<td>6.9</td>
<td>6.7</td>
<td>6.8</td>
<td>6.6</td>
<td>-</td>
<td>-</td>
</tr>
</tbody>
</table>
Causes of mortality in young people
Selected countries, deaths of 10- to 24-year-olds per 100,000 population, 2009*

- Traffic accidents
- Violence
- Suicide
- Other

United States
New Zealand
Portugal
Ireland
Greece
Finland
Canada
Slovenia
Austria
Malta
Luxembourg
Spain
Israel
Iceland
Cyprus
Britain
Australia
Norway
France
Italy
Denmark
South Korea
Sweden
Germany
Switzerland
Japan
Netherlands
Singapore

Source: The Lancet, George Patton, Murdoch Children’s Research Institute and University of Melbourne

*Or latest available
# US Health Rankings

## Table 1-1: U.S. Health Rankings

<table>
<thead>
<tr>
<th>Source</th>
<th>Life Expectancy</th>
<th>Infant Mortality</th>
<th>Maternal Mortality</th>
</tr>
</thead>
<tbody>
<tr>
<td>UN</td>
<td>28/146 (2005-2010 data)</td>
<td>32/146 (2005-2010 data)</td>
<td>n/a</td>
</tr>
</tbody>
</table>

*NOTE: n/a = not available.*

### 1st & 4th yr US medical student knowledge of Population Health (2002)

<table>
<thead>
<tr>
<th>Question</th>
<th>INCORRECT</th>
</tr>
</thead>
<tbody>
<tr>
<td>US has higher life expectancy than any other nation?</td>
<td>32%</td>
</tr>
<tr>
<td>US has lower infant mortality than any other nation?</td>
<td>34%</td>
</tr>
</tbody>
</table>

How healthy is the US?

Health Olympics

Number one

Gold

1-5

6-10

11-15

Beijing 2008

vancouver 2010

London 2012
SUMMARY

AT BEST our health in USA that of middle-income country

All of us die younger than we should

History of political choices regarding sharing societal resources PRIME REASON

Early life is critical for adult health

Need set health goals for nation

US states and local jurisdictions need inform

National response is required
Playing Game of Health without a scoreboard
Health not a goal in the USA

Desired End Points?
Life, Liberty, Pursuit
POPULATION HEALTH

Health Inequalities (poorer people have poorer health)

Early Life: critical for adult health
Survival Ratio on the Titanic

- Crew: 24%
- 3rd Class: 25%
- 2nd Class: 40%
- 1st Class: 60%
PRIMAL PREVENTION
THE SPIRIT LEVEL
Why Greater Equality Makes Societies Stronger

RICHARD WILKINSON and KATE PICKETT
Foreword by Robert B. Reich
Health and Social Problems are Worse in More Unequal Countries

Index of:
- Life expectancy
- Math & Literacy
- Infant mortality
- Homicides
- Imprisonment
- Teenage births
- Trust
- Obesity
- Mental illness – incl. drug & alcohol addiction
- Social mobility

People who create INEQUALITY KILL
## Deaths attributable to excess income inequality

<table>
<thead>
<tr>
<th>Country</th>
<th>Gini</th>
<th>Excess deaths</th>
<th>Fraction of estimated 14 million averted deaths (%)</th>
<th>Relative risk for mortality due to excess income inequality</th>
</tr>
</thead>
<tbody>
<tr>
<td>Reference countries</td>
<td>0.225 to 0.293</td>
<td>0</td>
<td>0</td>
<td>1 / 3</td>
</tr>
<tr>
<td>Canada</td>
<td>0.301</td>
<td>103</td>
<td>0.007</td>
<td></td>
</tr>
<tr>
<td>Ireland</td>
<td>0.304</td>
<td>8</td>
<td>0.0065</td>
<td></td>
</tr>
<tr>
<td>Australia</td>
<td>0.305</td>
<td>219</td>
<td>0.01</td>
<td></td>
</tr>
<tr>
<td>Japan</td>
<td>0.314</td>
<td>23 163</td>
<td>1.5</td>
<td></td>
</tr>
<tr>
<td>South Korea</td>
<td>0.316</td>
<td>4861</td>
<td>0.3</td>
<td></td>
</tr>
<tr>
<td>UK</td>
<td>0.326</td>
<td>11 818</td>
<td>0.8</td>
<td></td>
</tr>
<tr>
<td>Spain</td>
<td>0.329</td>
<td>6971</td>
<td>0.5</td>
<td></td>
</tr>
<tr>
<td>New Zealand</td>
<td>0.337</td>
<td>78</td>
<td>0.0005</td>
<td></td>
</tr>
<tr>
<td>Greece</td>
<td>0.345</td>
<td>674</td>
<td>0.04</td>
<td></td>
</tr>
<tr>
<td>Italy</td>
<td>0.347</td>
<td>16 513</td>
<td>1.1</td>
<td></td>
</tr>
<tr>
<td>Portugal</td>
<td>0.356</td>
<td>938</td>
<td>0.01</td>
<td></td>
</tr>
<tr>
<td>US</td>
<td>0.357</td>
<td><strong>883 914</strong></td>
<td>57</td>
<td></td>
</tr>
<tr>
<td>Poland</td>
<td>0.367</td>
<td>22 849</td>
<td>1</td>
<td></td>
</tr>
<tr>
<td>Turkey</td>
<td>0.439</td>
<td>144 723</td>
<td>9</td>
<td></td>
</tr>
<tr>
<td>Mexico</td>
<td>0.480</td>
<td>425 759</td>
<td>28</td>
<td></td>
</tr>
<tr>
<td>Total</td>
<td></td>
<td><strong>1 542 591</strong></td>
<td><strong>100</strong></td>
<td></td>
</tr>
</tbody>
</table>

(9.6% of total OECD population)

Kondo et al. 2009
West Virginia SURVEILLANCE
West Virginia State Outcomes
Better Compared to other states

Homicide
Incarceration
Teenage births
West Virginia State Outcomes Poor Compared to other states

Obesity
Child obesity
Child conflict
Doing better in a fist fight
High school drop outs
Mathematics & literacy scores age 15
Trust
Women’s status
Life expectancy
Infant Mortality
% reporting they would do better than average in a fist fight
Women's Status & Inequality among US States

Women's Status

Index of women's status

Income Inequality

Wilkinson & Pickett 2009 Spirit Level
WHERE IS OUR HEALTH
HIGH low US County **Female** Life Expectancy 2009
McDowell WV County Male Life Expectancy

Male Life Expectancy, 2007

Welch, WV, McDowell county seat
Mean # Healthy days & Inequality of Healthy Days

Source: Gini index and mean of number of healthy days was estimated by using data retrieved from the Behavioral Risk Factor Surveillance System, 2007. Available at http://www.cdc.gov/BRFSS.
Mechanisms through which inequality impacts health

Stress
Inflammation
Early life lasts a lifetime
Womb to Tomb

First 1000 days

9 months
– maternal grandmother

First two years outside

HALF of adult health programmed
Disease relative poverty in early life
PUBLIC HEALTH

Assessment

Policy Development

Assurance
RESPONSE
Dave Carpenter...

"WE HAVE GOOD NEWS AND BAD NEWS. THE GOOD NEWS IS WE'VE DEVELOPED A CREDIBLE SPIN FOR THE BAD NEWS..."
What to do?

Inform the public

Make comparisons with healthier nations

Level the playing field

Support early life
What Determines Health?

Key Determinants
Income and Social Status
Social Support Networks
Education and Literacy
Employment/Working Conditions
Social Environments
Physical Environments
Personal Health Practices and Coping Skills
Healthy Child Development
Biology and Genetic Endowment
Health Services
Gender
Culture
What Makes Canadians Healthy or Unhealthy?

The National Health Forum
What Makes Canadians Healthy or Unhealthy?
Underlying Premises and Evidence Table

This deceptively simple story speaks to the complex set of factors or conditions that determine the level of health of every Canadian.

"Why is Jason in the hospital?
Because he has a bad infection in his leg.
But why does he have an infection?
Because he has a cut on his leg and it got infected.
But why does he have a cut on his leg?
Because he was playing in the junk yard next to his apartment building and there was some sharp, jagged steel there that he fell on.
But why was he playing in a junk yard?
Because his neighborhood is kind of run down. A lot of kids play there and there is no one to supervise them.
But why does he live in that neighborhood?
Because his parents can't afford a nicer place to live.
But why can't his parents afford a nicer place to live?
Because his Dad is unemployed and his Mom is sick.
But why is his Dad unemployed?
Because he doesn't have much education and he can't find a job.
But why ...?"

- from Toward a Healthy Future: Second Report on the Health of Canadians
Do we want health or health care?
"As dramatic and consequential as medical care is for individual cases and for specific conditions, much evidence suggests that such care is not and probably never has been the major determinant of levels or changes in population health."
SUMMARY

AT BEST our health in USA that of middle-income country

All of us die younger than we should

History of political choices regarding sharing societal resources PRIME REASON

Early life is critical for adult health

Need set health goals for nation

US states and local jurisdictions need inform

National response is required
Stephen Bezruchka
sabez@uw.edu

Resources: readings

http://depts.washington.edu/eqhlth/pages/resources.html
PRIMAL PREVENTION

RESPONSE
PRIMAL PREVENTION
What to do?

Inform the public

Make comparisons with healthier nations
  – How many of you do this to policy makers now?

Level the playing field

Support early life
What to do?

Inform the public

Make comparisons with healthier nations

Level the playing field

Support early life
Oh, that three billion dollars.
Leveling playing field

INCREASE GOVERNMENT REVENUE

Corporate: Individual Taxes

$1.50: $1 1950s,
$0.25: $1 now

Individual taxes (1950s 91% marginal rate)
Raise cap on social security
Tax other forms of property (stocks, bonds, savings)
Leveling playing field

SOCIAL SPENDING

Early life focus
Child Poverty
Before and after taxes/transfers
USA Canada

Measuring child poverty
New league tables of child poverty in the world's rich countries
What to do?

Inform the public

Make comparisons with healthier nations

Level the playing field

Support early life
  – Antenatal, maternal leave
Mapping Paid Maternity Leave:
How many weeks do other nations provide compared to the US?

Source: NationMaster.com

Think Progress
Realistic issues

Collect

Analyze
– data on various health, ses & social measures

– Health disparities (Health INEQUALITIES)

Report comparing other areas, countries

Highlight socioeconomic gradient
– Focus on income-health
    Not income inequality – poor health
Smoking & Income
% of Vermont adult smokers, by Federal Poverty Level • 2008

lower income

higher income

< 1¼ times poverty level: 37%
1¼ - 2½ times poverty level: 21%
2½ - 3½ times poverty level: 15%
> 3½ times poverty level: 9%

Smoking during Pregnancy
% pregnant Vermonters who smoked during pregnancy

low income women (WIC participants)

women not participating in WIC

ODDS AGAINST TOMORROW

HEALTH INEQUITIES in SPOKANE COUNTY

Life isn’t just better at the top, it’s longer and healthier.

Letter from Dr. Joel McCullough, Health Officer
Odds Against Tomorrow

Health Inequities in Spokane County

Mortality Rate (age-adjusted) 2005-9

<table>
<thead>
<tr>
<th></th>
<th>Spokane County</th>
<th>Washington State</th>
</tr>
</thead>
<tbody>
<tr>
<td>AIAN NH</td>
<td>1,101.8</td>
<td>1,136.5</td>
</tr>
<tr>
<td>API NH</td>
<td>774.9</td>
<td>924.2</td>
</tr>
<tr>
<td>Black NH</td>
<td>499.0</td>
<td>577.8</td>
</tr>
<tr>
<td>Hispanic</td>
<td>624.5</td>
<td>648.5</td>
</tr>
<tr>
<td>White NH</td>
<td>766.1</td>
<td>722.5</td>
</tr>
</tbody>
</table>
"This is our generation's Sputnik moment,"

State of the Union
Jan 25, 2011
SPUTNIK MOMENT

State
or
County Level
Interventions
A Call to Action for Individuals & Their Communities

WES T V R I G NIA

Ranking: West Virginia is 41st this year; it was 43rd in 2010.

Highlights:
• In the past year, the rate of preventable hospitalizations decreased from 105.4 to 100.7 discharges per 1,000 Medicare enrollees.
• Unlike other states, smoking has not declined in the last ten years; 293,000 adults still smoke in West Virginia.
• In the past ten years, obesity increased from 22.7 percent to 32.9 percent of adults, with 462,000 obese adults in the state.
• In the past ten years, diabetes increased from 7.6 percent to 11.7 percent of the population. Now 171,000 West Virginia adults have diabetes.

Health Disparities:
In West Virginia, obesity is more prevalent among non-Hispanic blacks at 29.5 percent than non-Hispanic whites at 32.1 percent and Hispanics at 29.7 percent. Diabetes also varies by race and ethnicity in the state, 15.2 percent of non-Hispanic blacks have diabetes compared to 11.8 percent of non-Hispanic whites and 11.7 percent of Hispanics.

State Health Department Web Site: www.wvdhhr.org

WEST VIRGINIA

Overall Rank: 41

Change: ▲ 2
Determinants Rank: 34
Outcomes Rank: 47

Strengths:
• Low prevalence of binge drinking
• High per capita public health funding
• Low incidence of infectious disease

Challenges:
• High prevalences of smoking, obesity and diabetes
• High rate of preventable hospitalizations
• Many poor mental and physical health days per month

For a more detailed look at this data, visit www.americashealthrankings.org/WV
<table>
<thead>
<tr>
<th>Health Outcomes</th>
<th>McDowell County</th>
<th>Error Margin</th>
<th>National Benchmark*</th>
<th>West Virginia</th>
<th>Trend</th>
<th>Rank (of 55)</th>
</tr>
</thead>
<tbody>
<tr>
<td>MORTALITY</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td>55</td>
</tr>
<tr>
<td>Premature death</td>
<td>18,680</td>
<td>16,595-20,765</td>
<td>5,466</td>
<td>9,587</td>
<td></td>
<td>55</td>
</tr>
<tr>
<td>MORBIDITY</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td>53</td>
</tr>
<tr>
<td>Poor or fair health</td>
<td>35%</td>
<td>30-41%</td>
<td>10%</td>
<td>22%</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Poor physical health days</td>
<td>7.1</td>
<td>6.0-8.2</td>
<td>2.6</td>
<td>4.9</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Poor mental health days</td>
<td>5.6</td>
<td>4.5-6.8</td>
<td>2.3</td>
<td>4.5</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Low birthweight</td>
<td>12.5%</td>
<td>11.1-14.0%</td>
<td>6.0%</td>
<td>9.3%</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Health Factors</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td>55</td>
</tr>
<tr>
<td>HEALTH BEHAVIORS</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td>51</td>
</tr>
<tr>
<td>Adult smoking</td>
<td>35%</td>
<td>30-41%</td>
<td>14%</td>
<td>26%</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Adult obesity</td>
<td>33%</td>
<td>28-38%</td>
<td>25%</td>
<td>33%</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Physical inactivity</td>
<td>44%</td>
<td>38-50%</td>
<td>21%</td>
<td>33%</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Excessive drinking</td>
<td>7%</td>
<td>4-12%</td>
<td>8%</td>
<td>10%</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Motor vehicle crash death rate</td>
<td>34</td>
<td>25-42</td>
<td>12</td>
<td>22</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Sexually transmitted infections</td>
<td>163</td>
<td>84</td>
<td>84</td>
<td>199</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>
FOCUS?

Disease prevention
Disease screening & treatment

Behavior Change
POPULATION health, INDIVIDUAL health, CELL health

individual

cardiac muscle cell
Risk factor approach

Birth

DEATH

CHRONIC DISEASE RISK
PRIMAL PREVENTION
Making Health a goal in the USA

Desired End Points
Long Healthy Life
AUSTRALIA:
THE HEALTHIEST COUNTRY
BY 2020

A discussion paper prepared by the National Preventative Health Taskforce
The primary determinants of disease are mainly economic and social, and therefore its remedies must also be economic and social. Medicine and politics cannot and should not be kept apart.