Mental Health: The Role of Public Health and CDC

Ali H. Mokdad, Ph.D.
Chief
Behavioral Surveillance Branch
Division of Adult and Community Health
Centers for Disease Control and Prevention
Centers for Disease Control and Prevention
Chronic Diseases and Related Risk Factors

Leading Causes of Death*
United States, 2000

- Heart Disease
- Cancer
- Stroke
- Chronic lower respiratory disease
- Unintentional Injuries
- Diabetes
- Pneumonia/influenza
- Alzheimer’s disease
- Kidney disease

Actual Causes of Death†
United States, 2000

- Tobacco
- Poor diet/Physical inactivity
- Alcohol consumption
- Microbial agents
- Toxic agents
- Motor vehicles
- Firearms
- Sexual behavior
- Illicit drug use

Leading Causes of Disability Among Persons Aged 15 Years and Older
United States, 1999

- Arthritis or rheumatism
- Back or spine problem
- Heart trouble
- Lung or respiratory trouble
- Deafness or hearing trouble
- Stiffness or deformity of limb
- Mental or emotional problem
- Diabetes
- Blindness or other visual impairment
- Stroke

Source: CDC. MMWR 2001;50(7):120–5
Chronic Disease

- Chronic diseases are becoming increasingly prevalent causes of morbidity and mortality in the world, not just the US
- As the population continues to age these trends will get worse
HOW DO THEY INTERACT?
Links Between Physical Health and Chronic Conditions

- Depression is associated with risk-taking behaviors such as smoking, substance use, unsafe sex, and not following prescribed medical regimens.
- Rates of depression are higher in people with chronic disease (e.g., diabetes, arthritis, asthma, cardiovascular disorders, cancer), as are rates of suicide.
Not the risk factors alone

- Major depression can precipitate chronic disease or be exacerbated by it
- Individuals with depression at greater risk for developing cancer or cardiovascular disease
- Mortality rates from disease increase significantly in people with depression, and there is evidence that treatment can improve survival rates for conditions such as heart disease
Increased Risk for Development of CVD in Persons with Depression

Relative Risk of Developing CVD

Nondepressed (referent)  Depressed

<table>
<thead>
<tr>
<th></th>
<th>Nondepressed</th>
<th>Depressed</th>
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<tbody>
<tr>
<td>Risk Factor</td>
<td>1.0</td>
<td>1.6</td>
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Consequences of Post-MI Depression

- Less likely to adhere to lifestyle and behavioral changes
- May foster a “vicious cycle”
- Cardiac rehabilitation improves depressive symptoms

Sources: Ziegelstein et al., Arch Int Med, 2003; Milani et al., Am J Cardiol, 1998
Use of Antidepressants in Patients with Cancer is Growing

1979: 1% of all *psychotropic* prescriptions written for cancer patients were antidepressants

2003: Survey of prevalence of antidepressant use in community cancer care:

- breast cancer: 19.2%
- colon cancer: 11.0%
- lung cancer: 13.7%

Sources: Derogatis et al., *Cancer*, 1979; Ashbury et al., *Support Care Cancer*, 2003
Global and US Burden of Disease

- Among non-fatal diseases, depression is the leading cause of years of life lived with disability in the world
- In the US, unipolar major depression is the 2nd leading cause of disability-adjusted life-year (DALY) for women; 10th for men

Something **Can Be Done** ....
The BRFSS a unique venue for population health surveillance and prevention program planning and evaluation—including elements of...

- socioeconomic status and demography
- chronic diseases and health behaviors
- disability and activity limitation
- health-related quality of life
- mental health and illness
• State-based system

• BRFSS data are: (Fast, Flexible, and Relevant)
Applications of BRFSS

- Identify emerging health problems
- Establish and track health objectives
- Develop and evaluate public health programs
- Support health policies legislation
- Respond to public emergencies
Identify Emerging Health Problems:
(*BMI ≥30, or about 30 lbs overweight for 5’4” person)

1990

1996

2004

No Data <10% 10%-14% 15%-19% 20%-24% ≥ 25%

CDC

Centers for Disease Control and Prevention
Prevalence of Obesity* Among U.S. Adults

(*BMI ≥30, or about 30 lbs overweight for 5’4” person)

1990

1996

2004

No Data  <10%  10%–14%  15%–19%  20%–24%  ≥25%

Prevalence of Diabetes* Among U.S. Adults

(*Includes gestational diabetes)

1990

1996

2004

No Data  <4%  4%-6%  6-8%  8-10%  >10%
Prevalence of Multiple Risk Factors* for Heart Disease and Stroke Among U.S. Adults

Percent of Population with 2 or More Risk Factors, Age-adjusted to 2000 U.S. Population

1991

1995

1999

No Data <22% 22%–24.9% ≥25%–29.9% ≥30%

* Risk factors include high blood pressure, high blood cholesterol, smoking, obesity and diabetes.
Establish and Track Health Objectives

- *Healthy People 2010 Objectives*
- Chronic Disease Indicators
- State Goals & Objectives
Develop Public Health Programs: Heart Disease and Stroke Prevention

Welcome to the Heart Highway!

Love Your Heart and "Go Red" for Women's Heart Disease

Heart disease and stroke are the No. 1 and No. 3 killers of women in Utah, killing six women each day in the state, and they’re killing more women than men. The good news is that heart disease and stroke can largely be prevented if women join together in taking time out to love their hearts and taking action through assessment and a healthy lifestyle. For this reason, the American Heart Association and the Utah Department of Health are urging women to empower themselves and Go Red in their own fashion this month.

Join the Movement

- Wear Red on Friday, February 3. Whether you don your favorite red nail polish, a red suit, a red handbag, or a tie—join women and men nationwide and wear red in your own fashion to show your support of education and research for women’s heart disease. Pick up a Red Dress Kit at your local Go Red event or get one free by calling 1-888-MY-HEART and joining the movement. When people ask you about your color choice of attire you can help spread the word.
- Look out for local events supporting Go Red for Women.

Find Go Red Activities In Your Area
Support Policies and Legislation:

Mandatory Insurance Coverage for Screening Mammography

- No mandatory insurance coverage for screening mammography.
- Mandatory insurance coverage for screening mammography.

Prevalence of Women Who Never Had a Mammogram, Ages 40 and Older

BRFSS 1990-2004

Nationwide Median %


0 10 20 30 40
Support Policies and Legislation:
Prevalence of Safety Belt Use, 2002

- **Prevalence > 80% of always using a safety belt among persons aged > 18 years.**
- **Prevalence < 80% of always using a safety belt among persons aged > 18 years.**

Develop Local Programs and Policies:

SMART BRFSS in Fargo

- Fargo, ND – 24.9% binge drinking vs. 16.4% nationwide
- Formed community coalition: AMP (Alcohol Misuse Prevention)
- Mission: Reduce alcohol use among those under 21 in the Fargo-Moorhead area.
  - Anti-binge drinking campaign
  - Policy change sanctioning facilities
  - Intervention with ER doctors
Respond to Public Health Emergencies:

**Flu Vaccine**

- Vaccine shortage announced October 5, 2004
- Worked with state coordinators and National Immunization Program
- In November, all states incorporated new questions
- Data submitted weekly
- Helped shape public health messages to target priority risk groups
Respond to Public Health Emergencies: Questionnaire Modifications

- Hurricanes Katrina and Rita module
- General preparedness module
Respond to Public Health Emergencies: Future Implications

- Estimates of burden for Strategic National Stockpile
- Role of chronic disease in emergency preparedness
Mental Health Surveillance and the BRFSS

- 2004 SAMHSA Administrator’s letter to the CDC Director asking for more mental health coverage on the BRFSS.
- 2005 SAMHSA-CDC Interagency Agreement
- 2006 Depression and Anxiety module in BRFSS
- 2007 Mental Illness & Stigma Module in BRFSS
...Examine time trends

1. Not all states included HRQOL questions for all years. Missing data indicates that there were no HRQOL data for that year or that sample size <100. 2. Graphs for subgroups such as race/ethnicity, only include data points for which there is a minimum sample size of at least 100 cases.
Mean mentally unhealthy days by month
U.S. adults, 2001 BRFSS

Days

Jan Feb Mar Apr May Jun Jul Aug Sep Oct Nov Dec
September 11, 2001

- New York, New Jersey, and Connecticut added questions to their ongoing BRFSS from October 2001-December 2001
- Questions addressed emergent and critical health issues and assessed the psychological and emotional effects of the attack
State Findings

• Results suggested widespread psychological and emotional effects in all segments of the populations of each state
• 88% reported having problems following the attack
• Only 11% reported seeking some form of help from family or friends
• Increased smoking and alcohol use
BRFSS 2006 Findings

- 2006 Depression and Anxiety module in BRFSS
Depression Severity by Gender

Includes 38 states, the District of Columbia, Puerto Rico, and the Virgin Islands.
Lifetime Diagnosis of Depressive and Anxiety Disorders by Gender

Includes 38 states, the District of Columbia, Puerto Rico, and the Virgin Islands.
Prevalence of Depression Severity and Lifetime Diagnosis of Depression and Anxiety by Diabetes Status

- Depression severity score GE 10: 14.5%
- Lifetime diagnosis of depression: 22.4%
- Lifetime diagnosis of anxiety: 15.3%

Includes 38 states, the District of Columbia, Puerto Rico, and the Virgin Islands.
Prevalence of Depression Severity and Lifetime Diagnosis of Depression and Anxiety by Cardiovascular Disease Status

Includes 38 states, the District of Columbia, Puerto Rico, and the Virgin Islands.
Prevalence of Depression Severity and Lifetime Diagnosis of Depression and Anxiety by Asthma Status

Includes 38 states, the District of Columbia, Puerto Rico, and the Virgin Islands.
Prevalence of Adverse Health Behaviors and Obesity by Depression Severity

Includes 38 states, the District of Columbia, Puerto Rico, and the Virgin Islands.
Prevalence of being dissatisfied/very dissatisfied with life and rarely/never receiving social and emotional support by depression severity

Includes 38 states, the District of Columbia, Puerto Rico, and the Virgin Islands.
Prevalence of Lifetime Diagnosis of Depression by Depression Severity

Includes 38 states, the District of Columbia, Puerto Rico, and the Virgin Islands.