University of Colorado Cancer Center

A NATIONAL CANCER INSTITUTE-DESIGNATED CONSORTIUM COMPREHENSIVE CANCER CENTER

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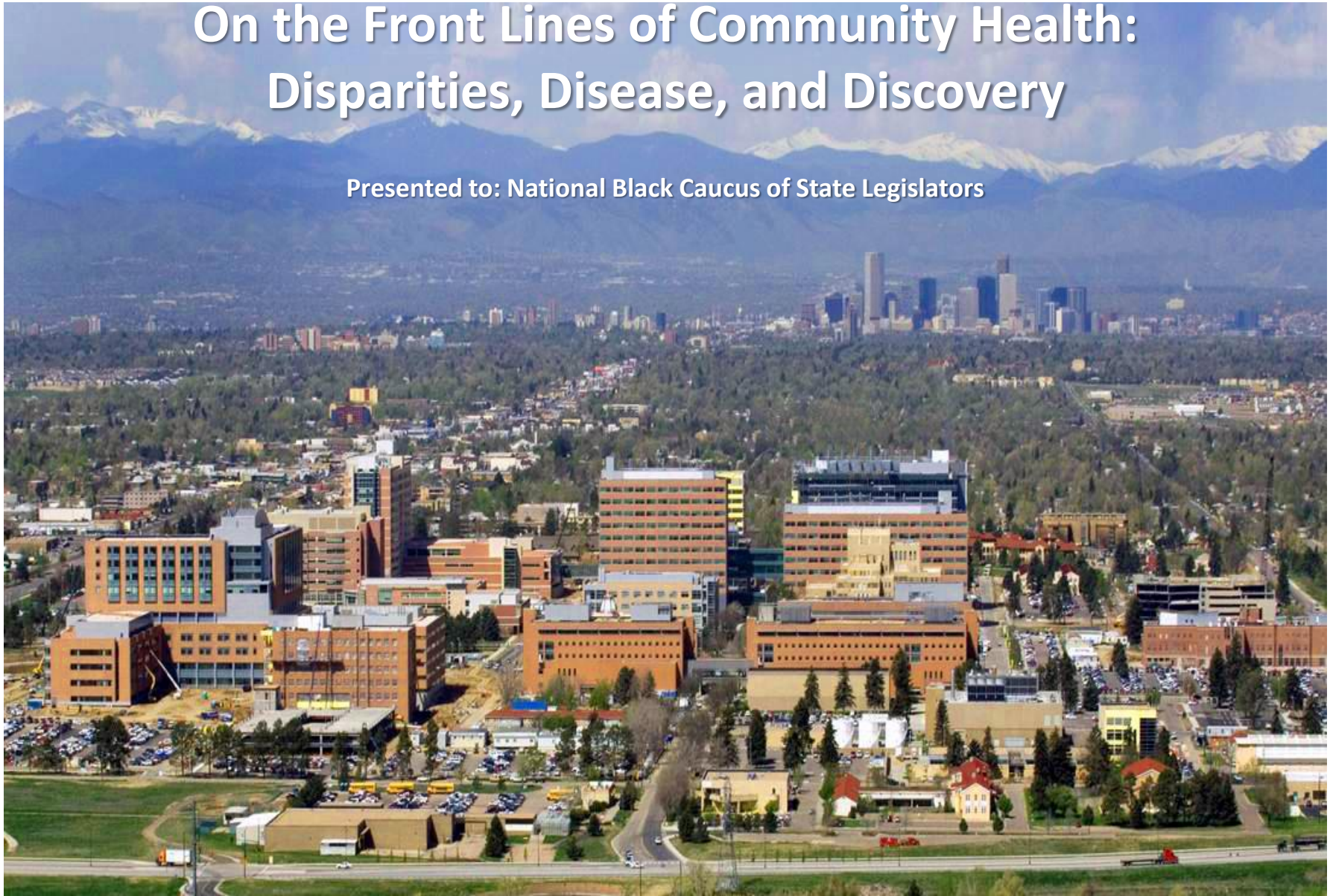
On the Front Lines of Community Health: Disparities, Disease, and Discovery

Presented to: National Black Caucus of State Legislators



Definition-Health Disparity

According to the National Institute of Health:

"Health disparities are differences in the incidence, prevalence, mortality, and burden of diseases and other adverse health conditions that exist among specific population groups in the United States."

Disparity

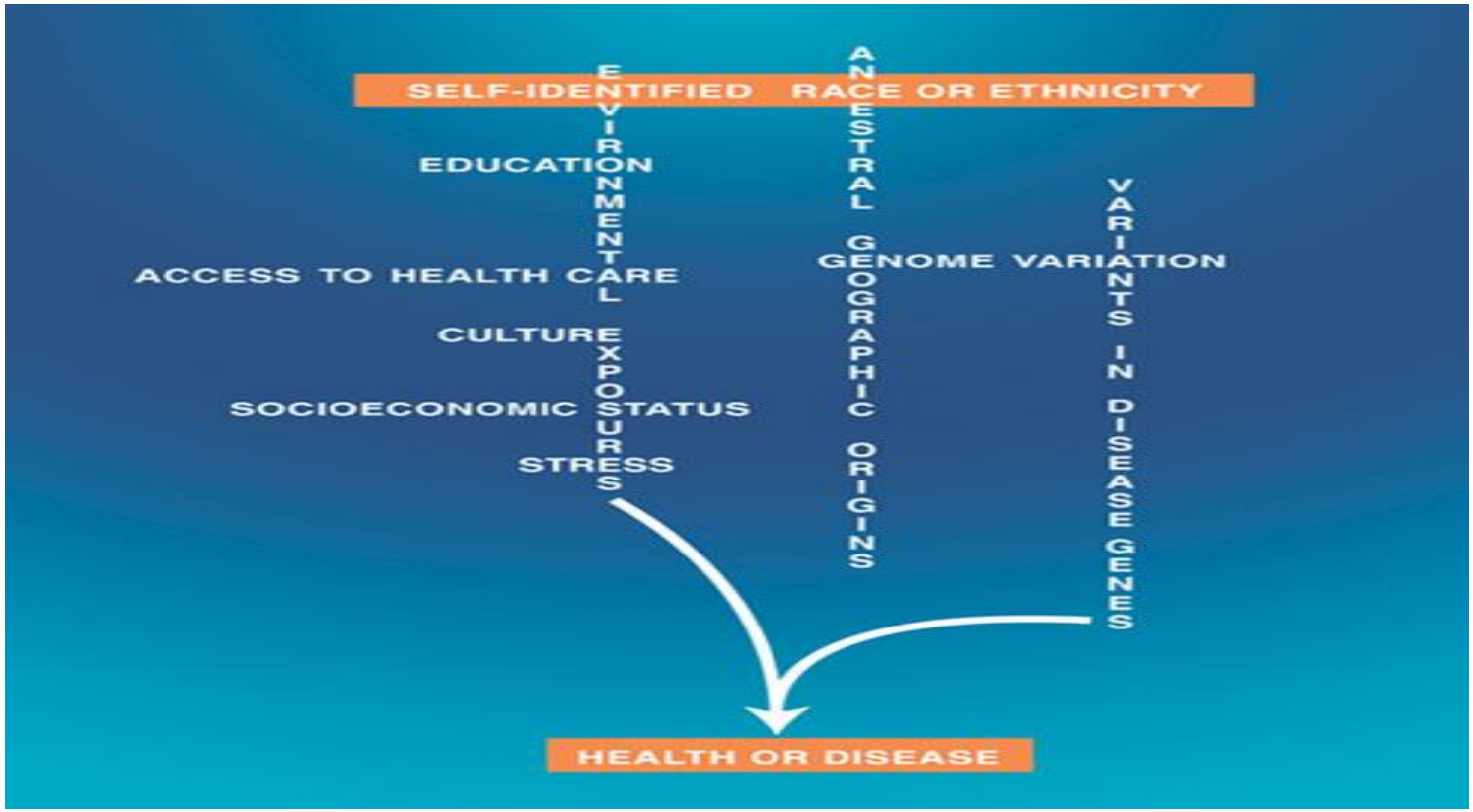
Many studies show racial/ethnic differences in the appropriate delivery of diagnostic tests and treatment for:

- Heart Disease
- Cancer
- Stroke
- Kidney Dialysis, Transplant
- HIV/AIDS
- Diabetes
- Mental Disease

~Unequal Treatment: Confronting Racial and Ethnic Disparities in Health Care; National Academy of Science

Disparity

Interconnections Between Self-Identified Race or Ethnicity and Health Status



What are Cancer Health Disparities?

One in four deaths in the United States is attributable to cancer, and one in three Americans will eventually develop some form of cancer. Each day, 3,400 people in America are diagnosed with cancer and another 1,500 die from the disease. But the burden of cancer is too often greater for the poor, ethnic minorities, and the uninsured than for the general population

Disparity

Specific Cancer Death Rates by Race, Ethnicity and Gender per 100,000 Population

Group	Lung		Colon/Rectal		Upper GI Cancer Male		Prostate
	Male	Female	Male	Female	Liver Male	Stomach Male	
African American	**101.3**	**39.9**	**34.0**	**24.1**	**9.5**	**12.8**	**68.1**
White	75.2	41.8	24.3	16.8	6.2	5.6	27.7
Hispanic/ Latino	38.7	14.8	17.7	11.6	10.7	9.5	23.0
American Indian / Alaska N.	47.0	27.1	16.2	11.8	7.9	7.3	18.3
Asian/ Pacific Islander	39.4	18.8	15.8	10.6	15.4	11.2	12.1

Disparity

African American Geographic Regional Selected Cancer Death Rates per 100,000 Population 1997 - 2001

Geographic Region	All Cancers		Lung Cancer		Colon/Rectum		Prostate	Breast
	male	female	male	female	male	female	male	female
United States	347.3	196.5	104.1	39.9	34.3	24.5	70.4	35.4
Louisiana	389.0	211.2	127.0	42.0	39.5	24.9	68.1	38.3
District of Columbia	374.6	221.7	101.9	47.0	36.1	26.0	63.2	41.8
California	311.5	197.6	92.6	44.6	31.4	23.7	61.4	34.2
Colorado	297.8	180.6	80.3	42.8	28.4	22.6	67.7	32.9
New York	273.9	169.3	71.5	30.8	29.4	21.1	60.7	31.7

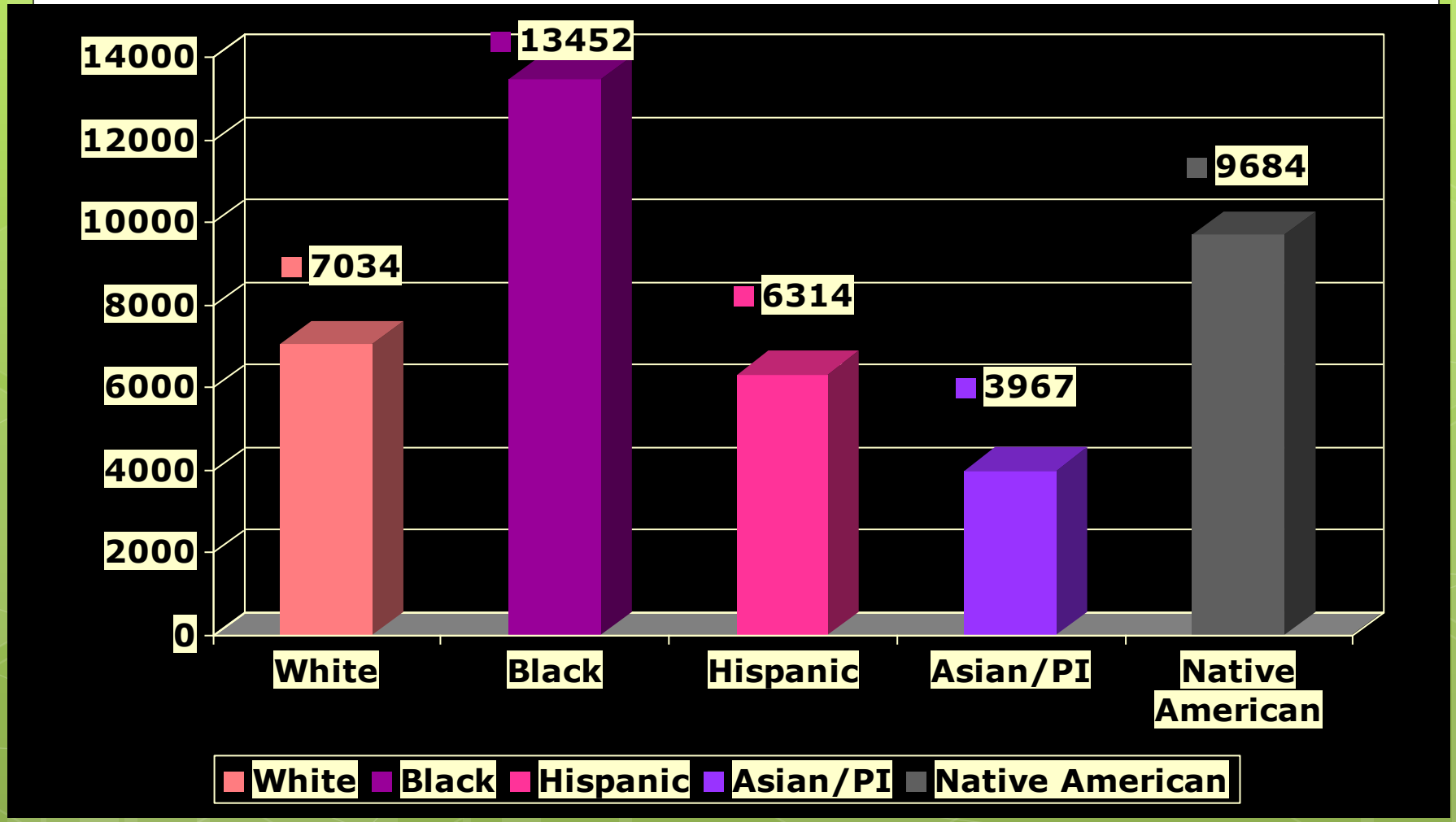
Disparity

Quality of Care and Access to Care Comparisons by Selected Racial Groups
2000-2001
National Healthcare Disparities Report 2004 (AHRQ)

	Blacks	Hispanics	AI/AN	Asians	Poor
% lower quality of care compared to whites	Approx. 66%	Approx. 50%	Approx 33%	Approx. 10%	Approx . 60%
% lower access to care than whites	Approx. 40%	Approx. 90%	Approx 50%	Approx. 33%	Approx . 80%

Health Disparities Years Loss in Life

Years of Potential Life lost Before Age 75
Selected Years 1980 – 1999 per 100,000 pop.



Centers for Disease Control and Prevention, National Center for Health Statistics, National Vital Statistic System

Solutions to Eliminate Health Disparities

- **Universal Health Care System (Access):**
  - Guarantee all citizens basic health access and coverage.
- **Health Resources Restructuring (Resource Inequities):**
  - Prioritize and re-allocate greater health resources to the specific populations with the greatest health disparities and worst health outcomes.
- **Social Re-engineering (Social Inequities):**
  - Establish a livable minimum wage.
  - Government and private sector jobs for qualified low income citizens.
  - Adequate and affordable housing for low income citizens.
  - Economic diversity in schools to improve education disparities.
  - Increase workforce diversity
  - Increase underrepresented minorities in the health professions.
- **Health Disparities Institutions (Research):**
  - Create an integrated approach with health institutes designed to find and implement best practice solutions for the elimination of health disparities through research, health policy, advocacy, education and community mobilization with both a local and national focus.

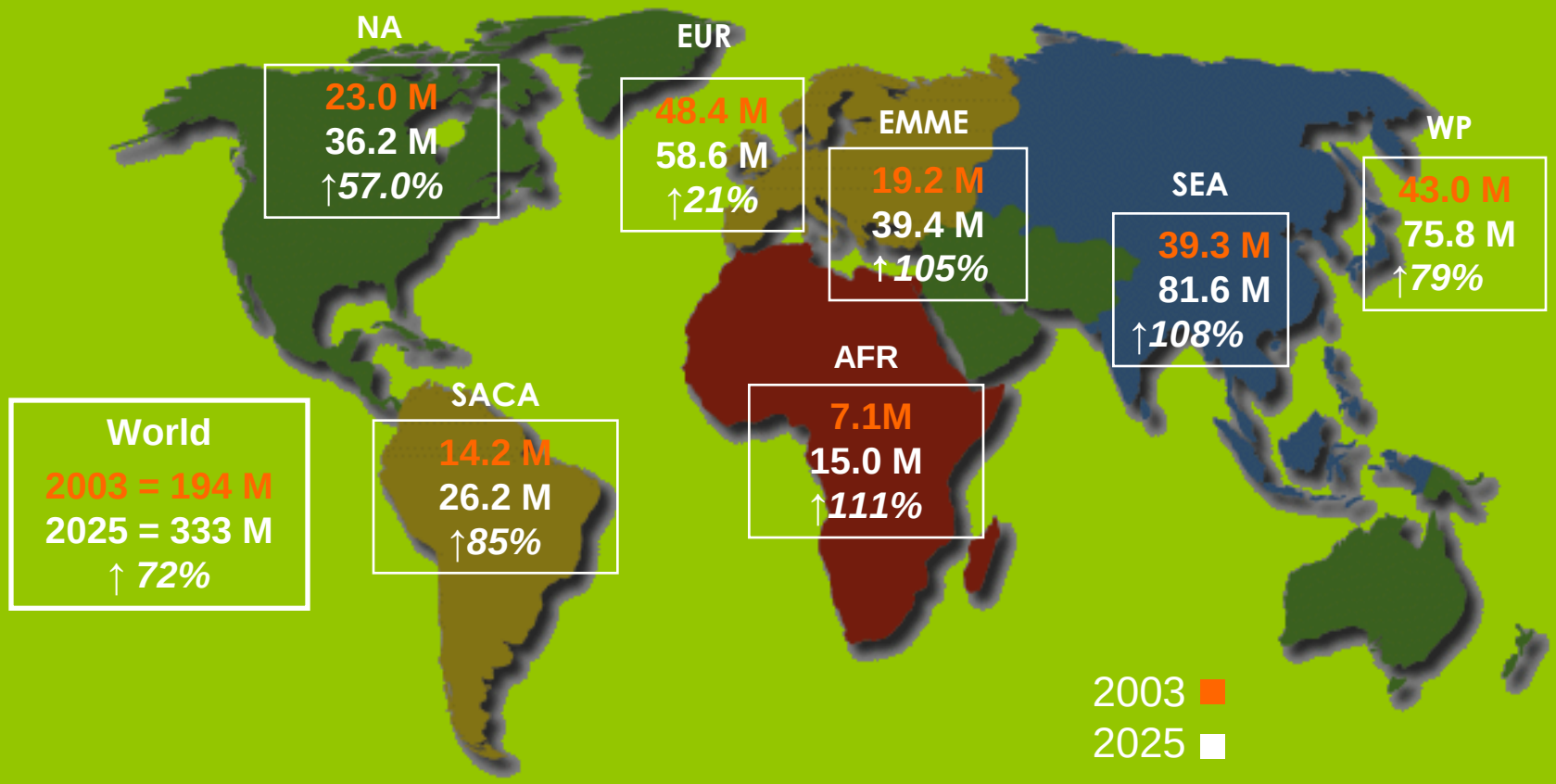
Disease

National Health Data by Race & Ethnicity
"Healthy People 2010 Target Goals"
Deaths per 100,000 population

	Overall Cancer 1999	Breast Cancer 1999	Prostate Cancer 1999	Colorectal Cancer 1999	Infant Mortality 1999	Heart Disease 1999	Strokes 1999	DM 1999	Overall Death Rate All Causes 1999
Healthy People 2010	**158.7**	**22.2**	**28.7**	**13.9**	**4.5**	**166**	**48**	**45**	**NA**
Black	262↑	37.7↑	71.1↑	28.8↑	13.4↑	257↑	82↑	130↑	1184 (1)
White	202↑	28↑	31.1↑	21.1↑	6.4↑	214↑	60↑	70↑	881 (2)
Native American	132↓	13.1↓	19.3↓	14.5↑	7.9↑	134↓	39↓	107↑	725.5 (3)
Hispanic	126↓	17.8↓	20.8↓	12.8↓	6.5↑	151↓	40↓	86↑ 115*↑ Mexican*	613 (4)
Asian/PI	127↓	12.6↓	14.5↓	13.5↓	4.6↑	125↓	55↑	62↑	532.5 (5)

Disease

Global Projections for the Diabetes Epidemic: 2003 - 2025

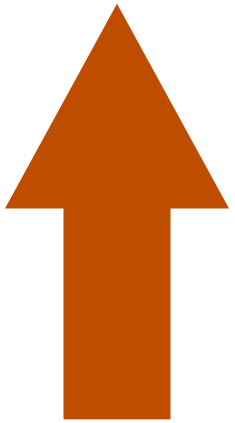


M = million, AFR = Africa, NA = North America, EUR = Europe,
SACA = South and Central America, EMME = Eastern Mediterranean and Middle East,
SEA = South-East Asia, WP = Western Pacific
Diabetes Atlas Committee. *Diabetes Atlas 2nd Edition:* IDF 2003.

Disease

Diabetes is the Epidemic of Our Times

- 18.2 million Americans have diabetes
- 6.3% of adults have diabetes



- Diabetes increased 70% among people age 30-39 in the last decade

http://www.aace.com/pub/StateofDiabetes/stateofdiabetes.php

STATE OF DIABETES IN AMERICA™

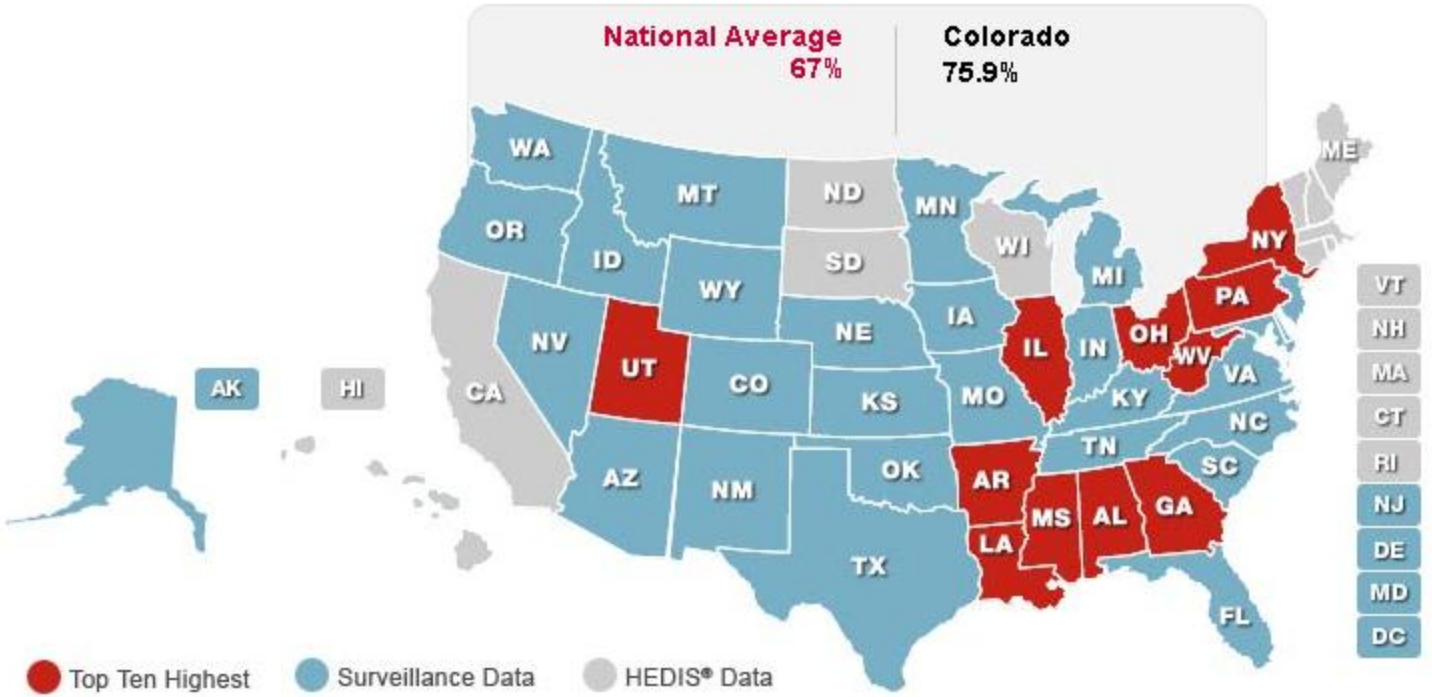
STRIVING FOR BETTER CONTROL

State of Diabetes Health

A new Report - "State of Diabetes in America" - issued by the American Association of Clinical Endocrinologists (AACE) examined blood sugar control across the United States as measured by the HbA1c, also known as the A1C test. The findings revealed that two out of three Americans with type 2 diabetes analyzed in a study did not reach the AACE-recommended target blood sugar goal in 2003 and 2004.*

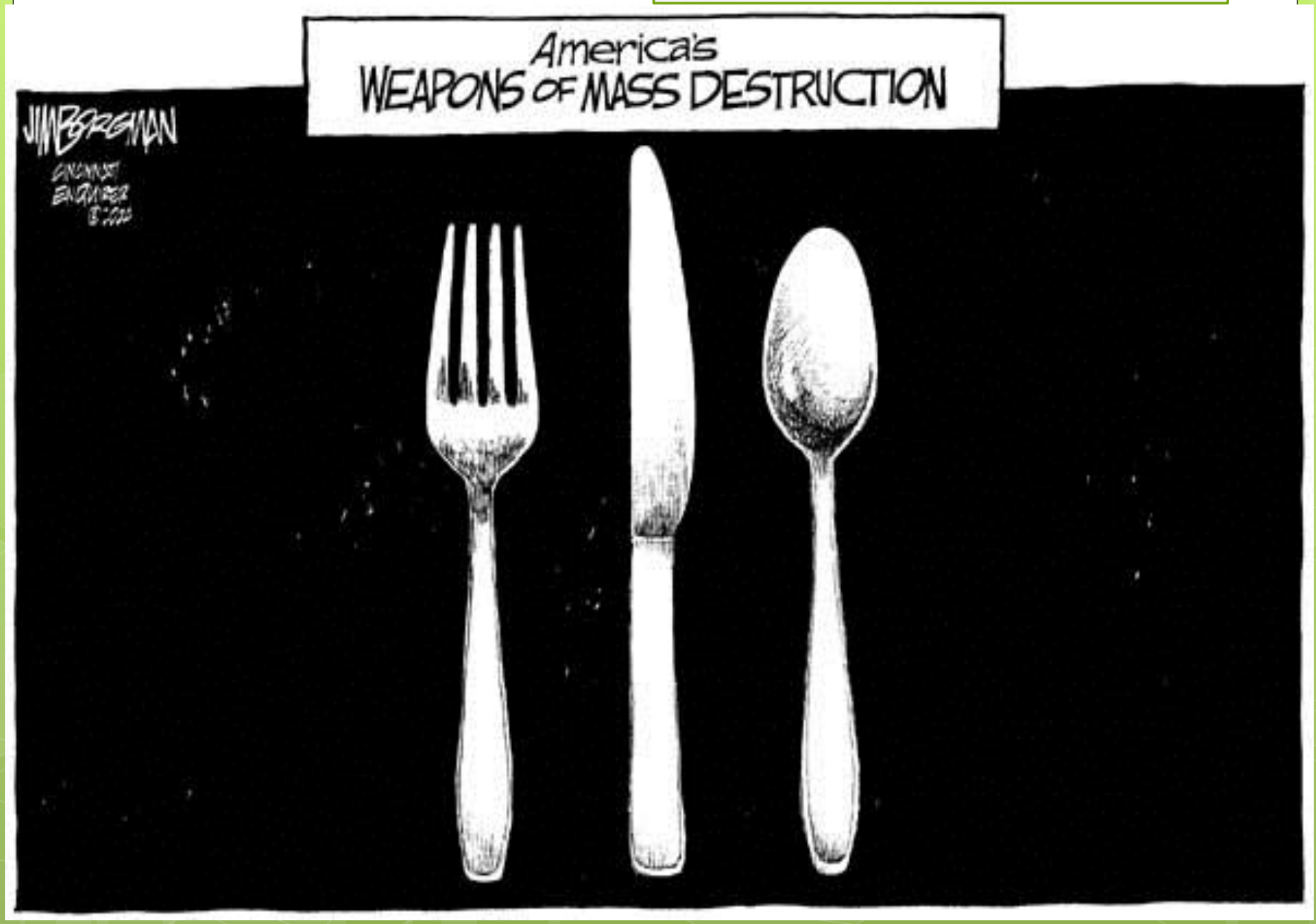
Nationally, 67% of people with type 2 diabetes were not in control of their blood sugar, with blood sugar levels exceeding the AACE-recommended A1C goal of 6.5% or less. This U.S. map shows the percentage of people analyzed in the study in each state above the 6.5% or less target. The study included more than 157,000 people with type 2 diabetes.

Rollover your state to see how it compares against the national average.**

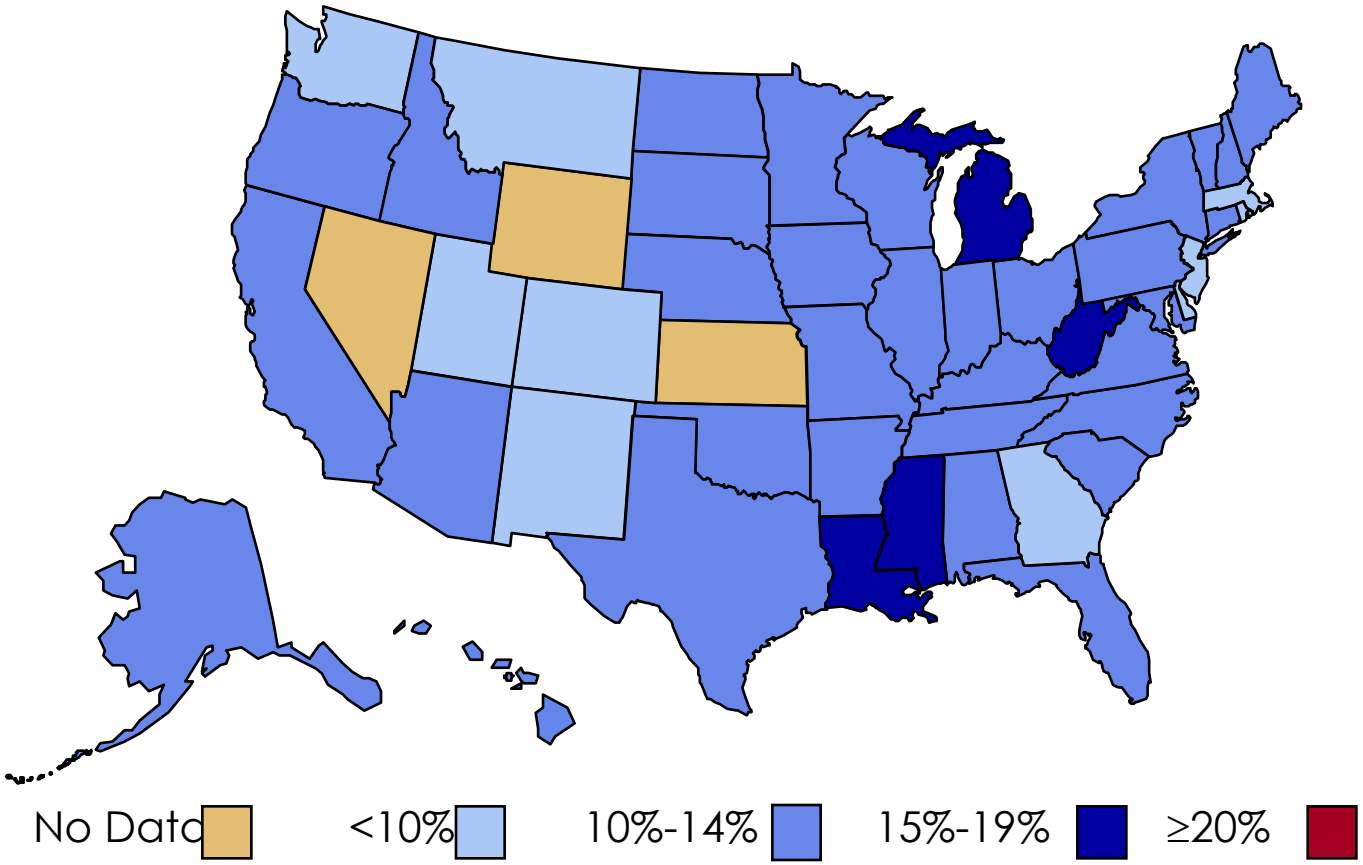


Red States: Top 10 states with highest percentage of people studied with type 2 diabetes above A1C goal of 6.5% or less, according to SDI data

Disease



Obesity Trends* Among US Adults
BRFSS 1991

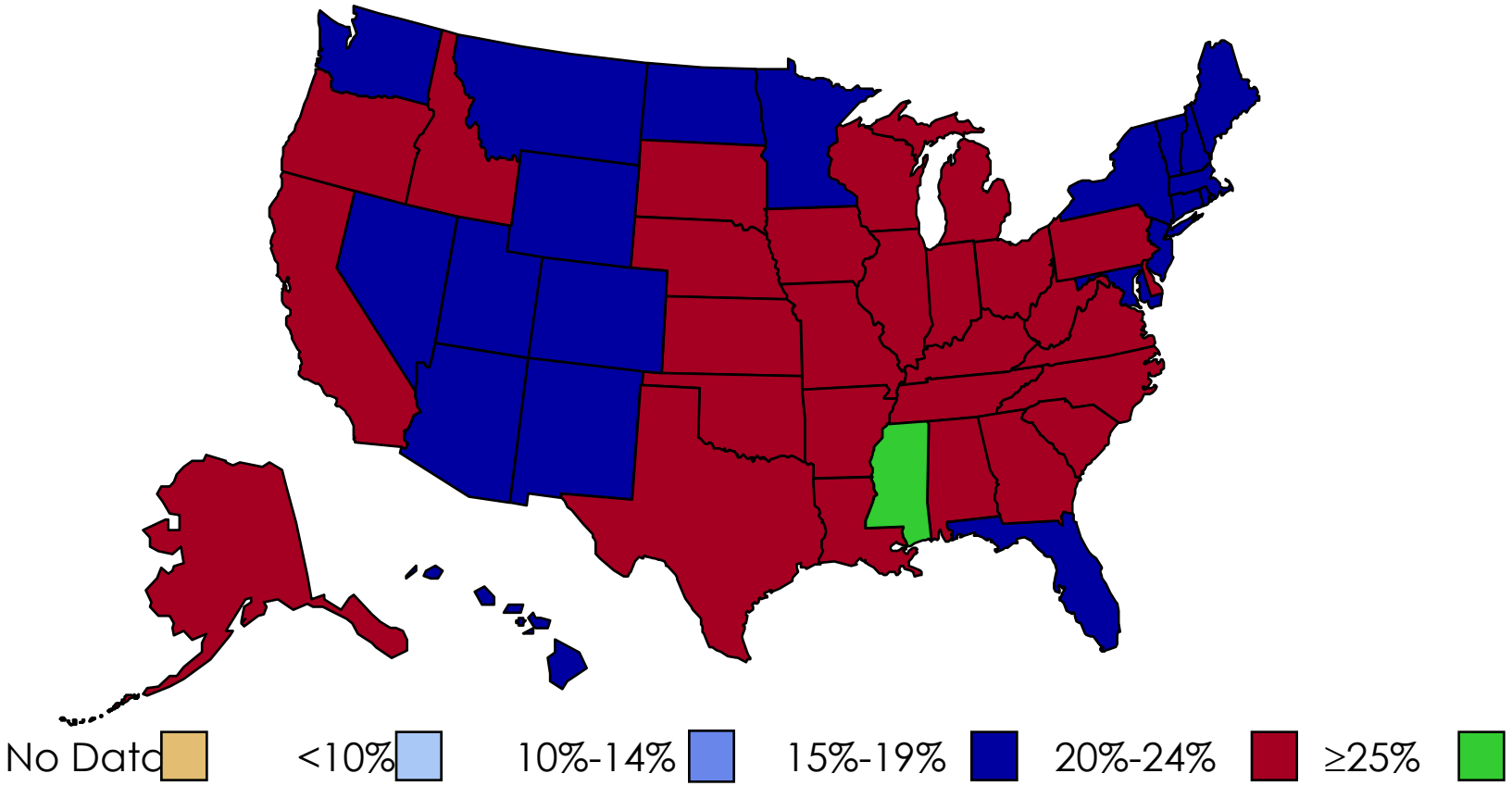


*Body mass index (BMI) ≥30, or ~30 lbs overweight for 5'4" woman.
BRFSS=behavioral risk factor surveillance system.

Mokdad AH et al. *J Am Med Assoc.* 1999;282:1519-1522.

Disease

Obesity Trends* Among US Adults, BRFSS 2001



BMI ≥30, or ~30 lbs overweight for 5'4" woman.

Mokdad AH et al. *J Am Med Assoc.* 2003;289:76-79.

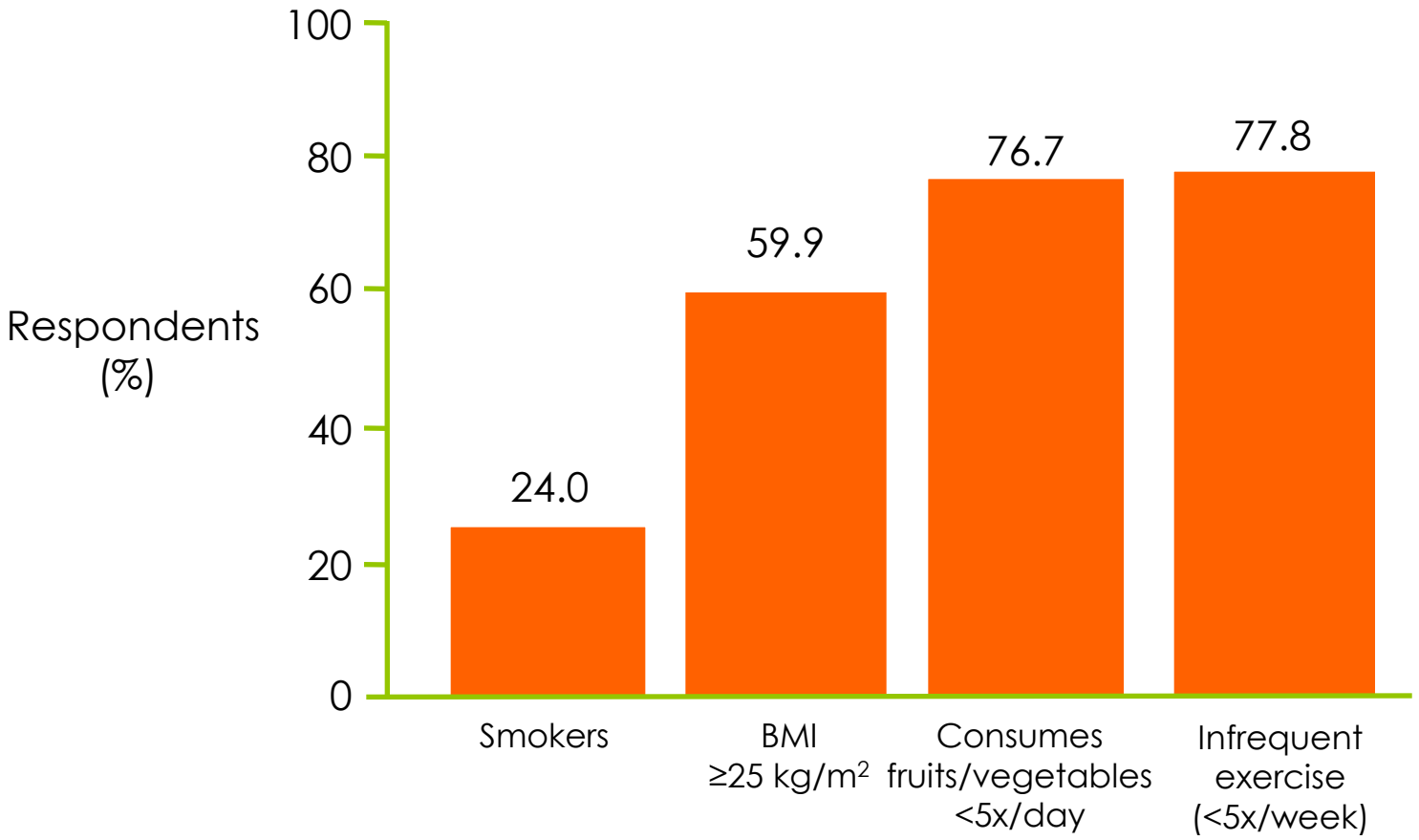
Disease

Walking the dog – A Physical Activity Rx

Disease

Majority of Americans do not follow a healthy lifestyle

2000 Behavioral Risk Factor Surveillance System, N = 153,805



Reeves MJ and Rafferty AP. *Arch Intern Med*. 2005;165:854-7.

Discovery

What is the NCI definition of Cancer Prevention and Control Research?

"Cancer control science is basic and applied research in behavioral, social and population sciences to create or enhance interventions that…will reduce cancer risk, incidence, morbidity and mortality and improve quality of life."

Discovery

Why is cancer prevention and control research so important to the NCI?

How much of the cancer mortality burden in this country, currently estimated at 570,000 deaths this year (2010), can be attributed to behavioral and lifestyle factors (e.g., smoking, poor diet/nutrition practices, sedentary lifestyle, non-adherence to cancer screening guidelines, etc.)?

60-65%

Discovery

Overview of the Living Well By Faith Health and Wellness Program

- Funded by the National Center for Minority Health and Health Disparities, NIH
- Three year capacity-building grant that would lead to a pilot study to reduce health disparities
- Emphasis on CBPR
- Primary community partner: Center for African American Health, Denver Colorado
  - Faith and Health Ministries

Discovery

Key Challenge: How to Implement CBPR?

- Community partner: Churches affiliated with Faith and Health Ministries of the Center for African American Health
- Four half-day community summits convened over a 15-month period
- Smaller research working group with community partners to help design the *Living Well By Faith* program

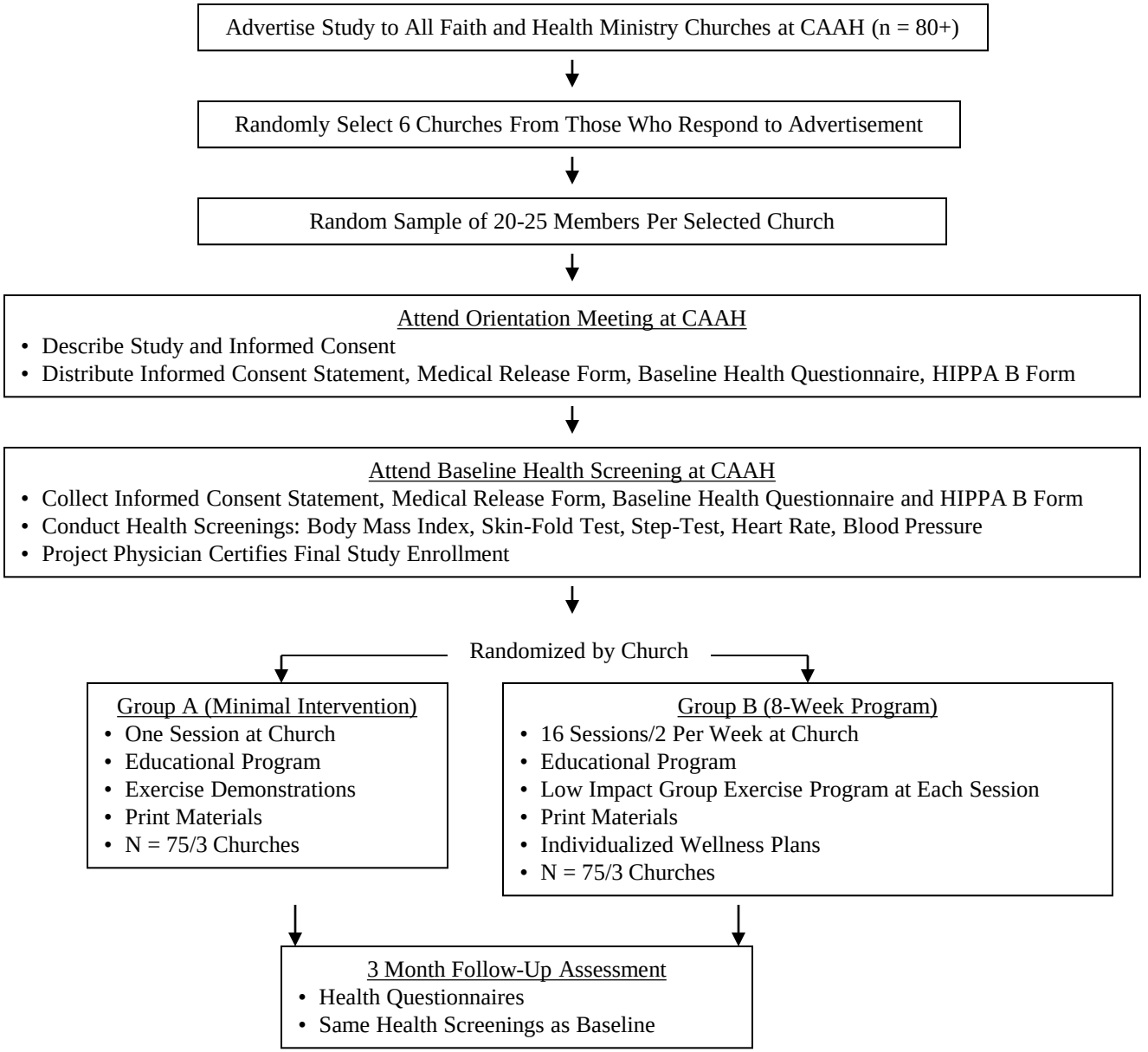
Discovery

What we learned from Community Summits…

- Strong preference for H & W program(84%-88%)
- Delivered 2-3 times/week (60%)
- Wanted buddy system (84%)
- Information about food preparation (97%)
- Walking groups (58%)
- Strength/resistance training (53%)
- Church is preferred venue (90%)
- Assessing clinical endpoints would not be a barrier (94%)

Figure 1

Overview of Study Schema



Discovery

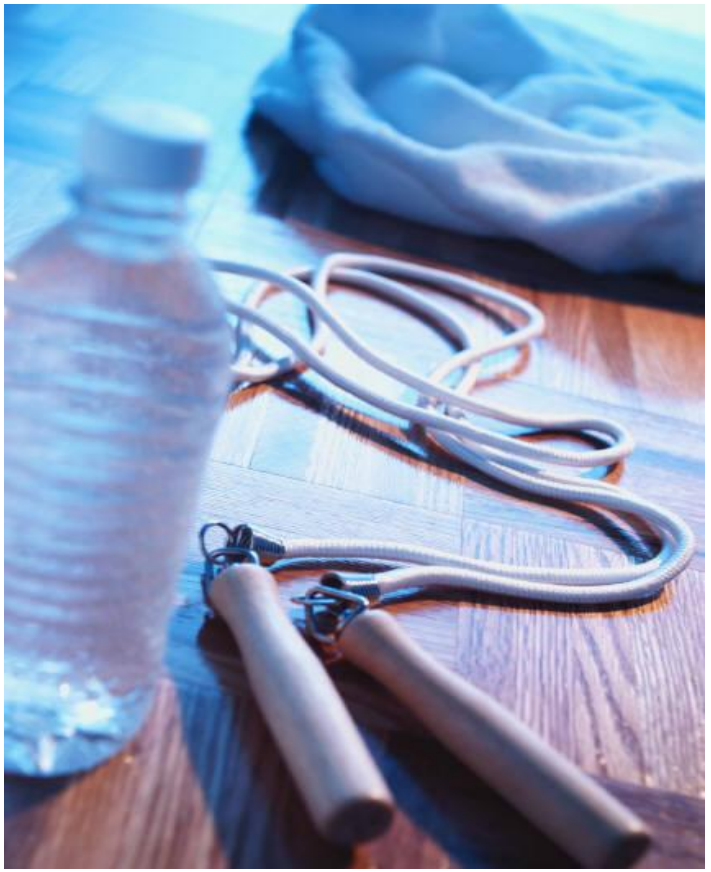
Baseline Assessments

- Blood Pressure/RHR
- Height/Weight
- BMI
- Percent Body Fat
- Fitness Step Test
- Health Questionnaire

Discovery

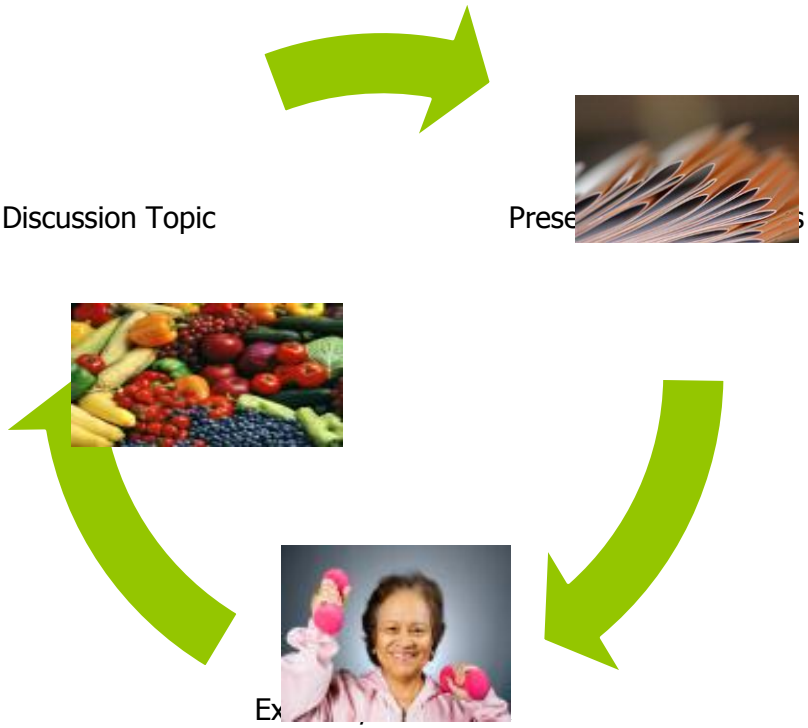
Program Variables

- Eight Week Program
- Meeting 2 x week
- Session 90 minutes
- Combo workshop and exercise
- Exercise segment 30 minutes
- Cardio & Strength
- Individual Wellness Forms

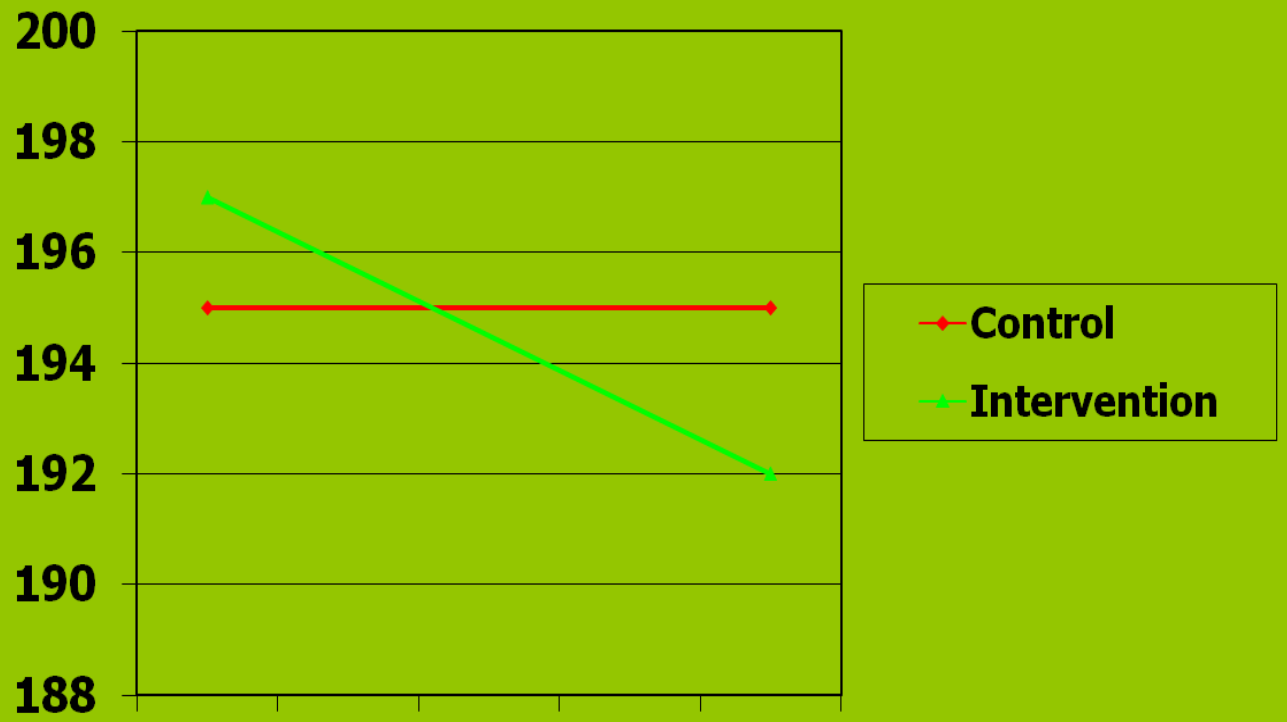


A Look into the Classroom

- Arrival/Refreshments
- Discussion
- Presentation
- Handouts
- Exercise
- Homework/Close

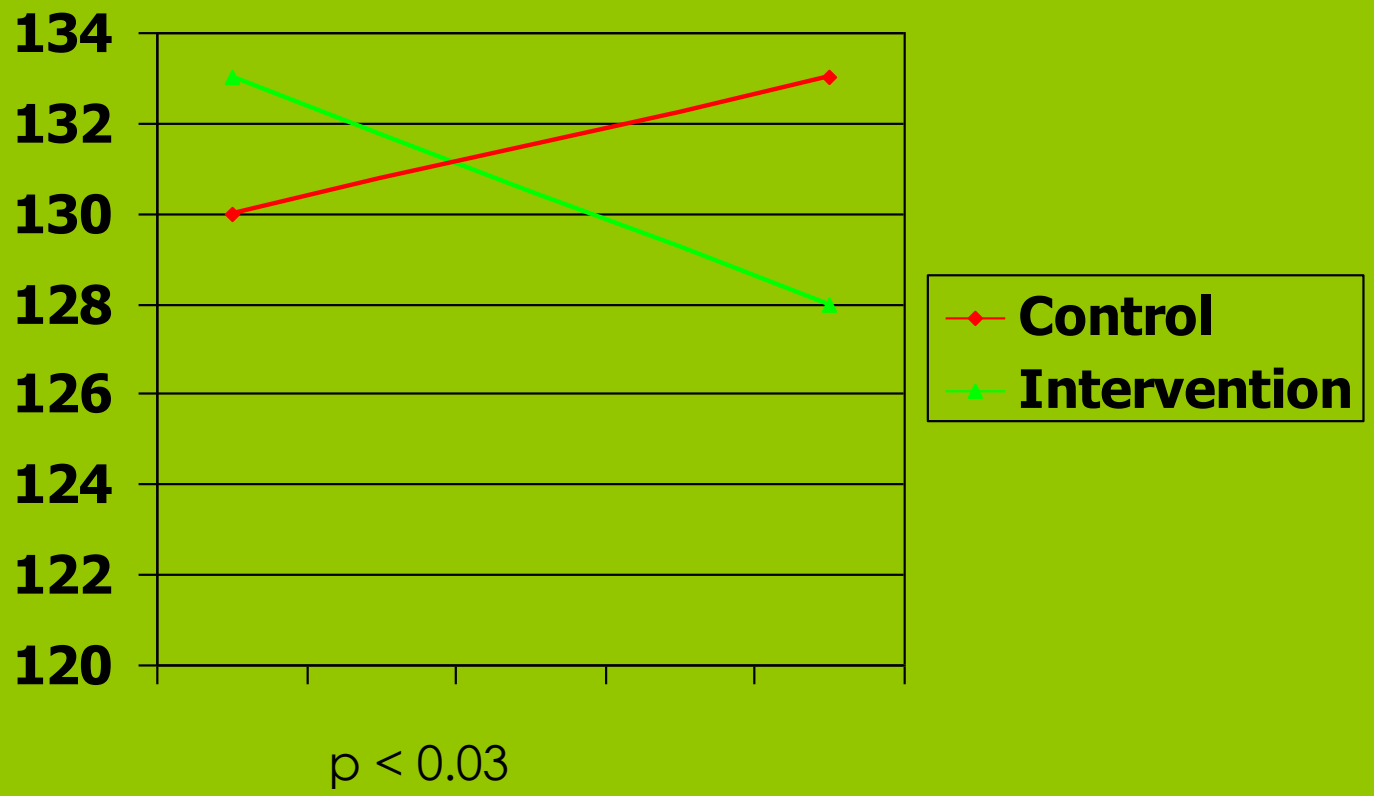


Discovery

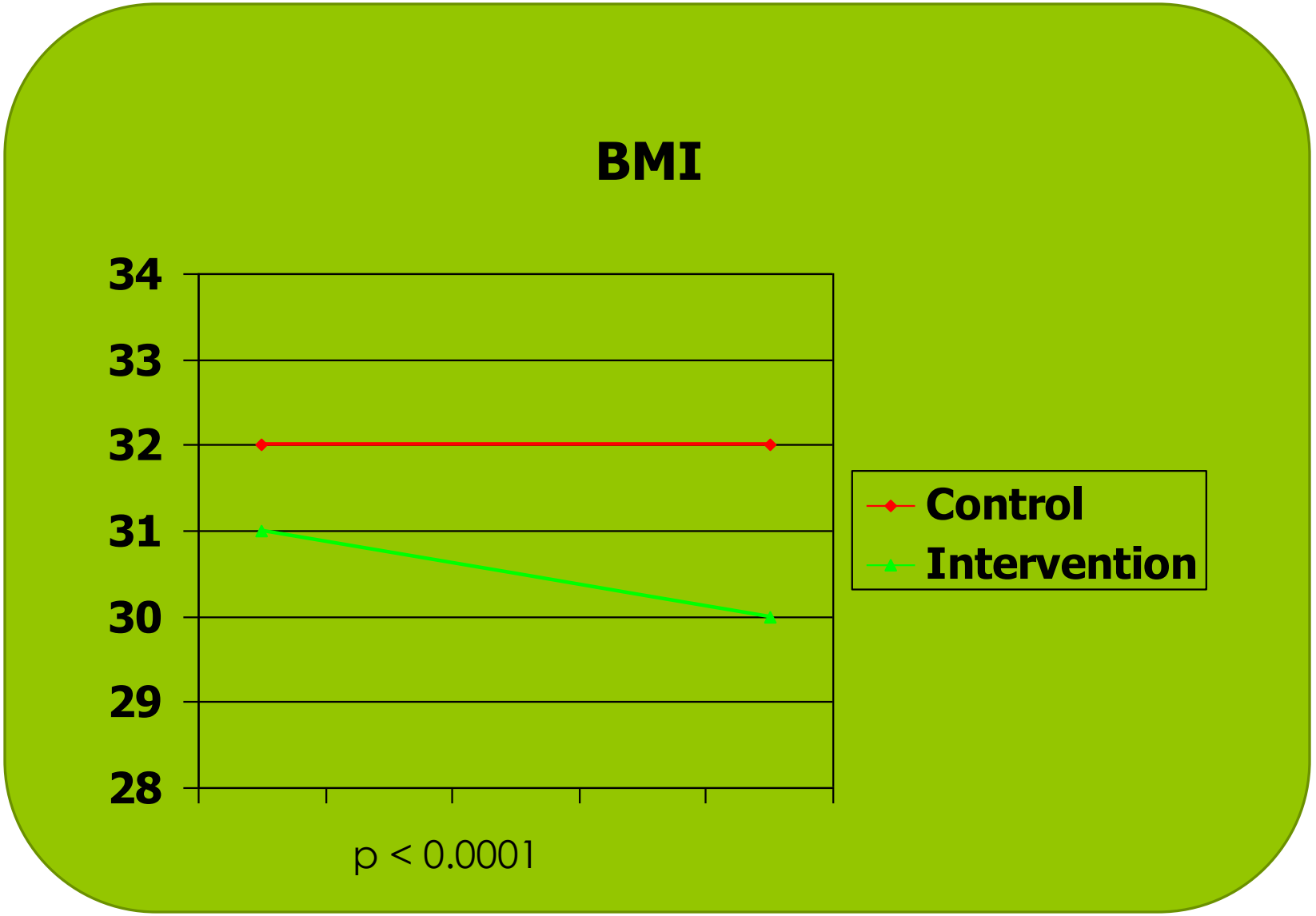


$p < 0.0001$

Discovery

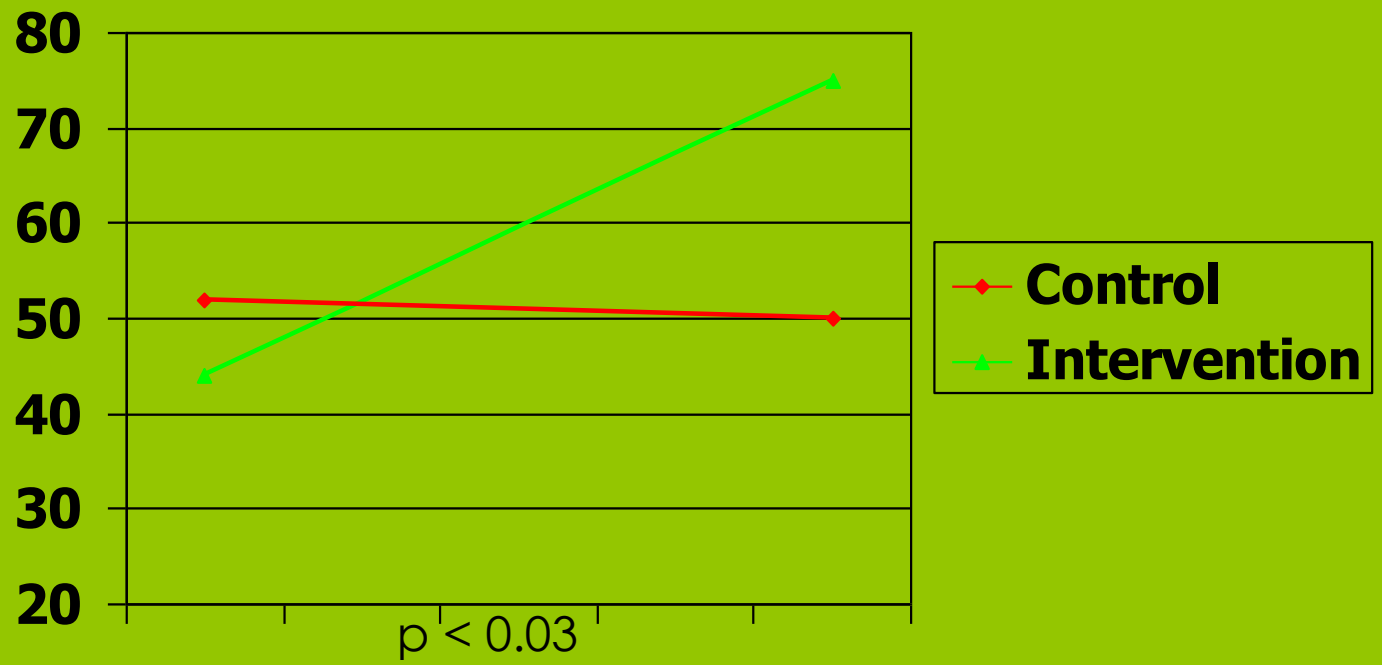

Systolic Blood Pressure
134
132
130
128
126
124
122
120
Control
Intervention
p < 0.03

Discovery



Discovery

Step Test/Physical Fitness: % Average or Better



Observations from the Field

- Importance of health screenings goes beyond research program evaluation
  - *Helps motivate participants*
  - *Can detect undiagnosed health problems*

- Many participants had low levels of knowledge of risk factors, cancer screening guidelines and some had undiagnosed health problems

  - *Not necessarily related to lack of health insurance or a lack of access to a regular doctor*

Observations from the Field

- Participants very enthusiastic about program
- Such programs would be well received in underserved communities
- Partnerships with churches was key to establishing credibility, participation and trust
- Having program staff and trainers from the community also key
- Learning should be interactive, experiential and "hands-on"
- Significant interest from community to continue and expand program

Closing Thoughts

Life is filled with golden opportunities, carefully disguised as irresolvable problems.

-- John Gardner

former Secretary of Health, Education & Welfare