# *With Every Heartbeat is Life* Community Health Worker Cardiovascular Health Initiative

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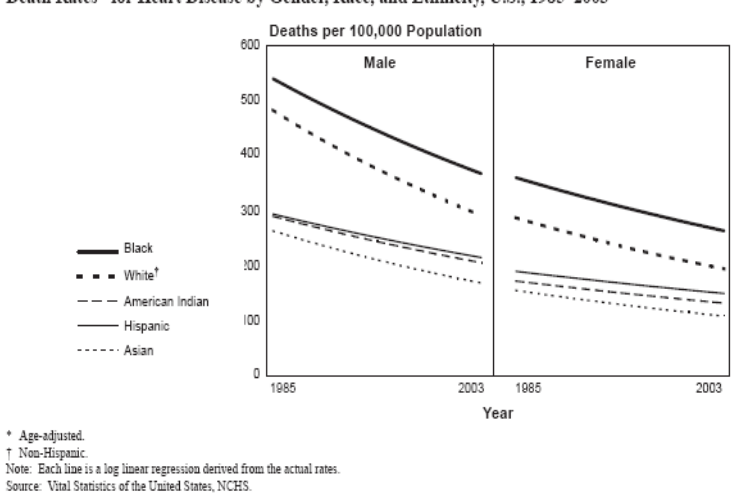
# Purpose of Presentation

- Describe the impact of cardiovascular disease (CVD) on the African American community
- Provide an overview of the NHLBI programs to improve cardiovascular health in the African American community
- Discuss implementation strategies and evaluation tools for each program

# Cardiovascular Health Risk

- Heart Disease and Stroke are two significant causes of death for all Americans
- Heart Disease is the number one cause of death for all minorities except Asians
- Stroke is the number three cause of death for Blacks
- Minority groups are making little or no progress in addressing risk factors
  - Physical activity
  - Overweight and obesity
  - Diabetes
  - High blood pressure

- In 1990, among states participating in the Behavioral Risk Factor Surveillance System, ten states had a prevalence of obesity less than 10% and no states had prevalence equal to or greater than 15%.

- By 1999, no state had prevalence less than 10%, eighteen states had a prevalence of obesity between 20-24%, and no state had prevalence equal to or greater than 25%.

- In 2009, only one state (Colorado) and the District of Columbia had a prevalence of obesity less than 20%. Thirty-three states had a prevalence equal to or greater than 25%; nine of these states (Alabama, Arkansas, Kentucky, Louisiana, Mississippi, Missouri, Oklahoma, Tennessee, and West Virginia) had a prevalence of obesity equal to or greater than 30%.

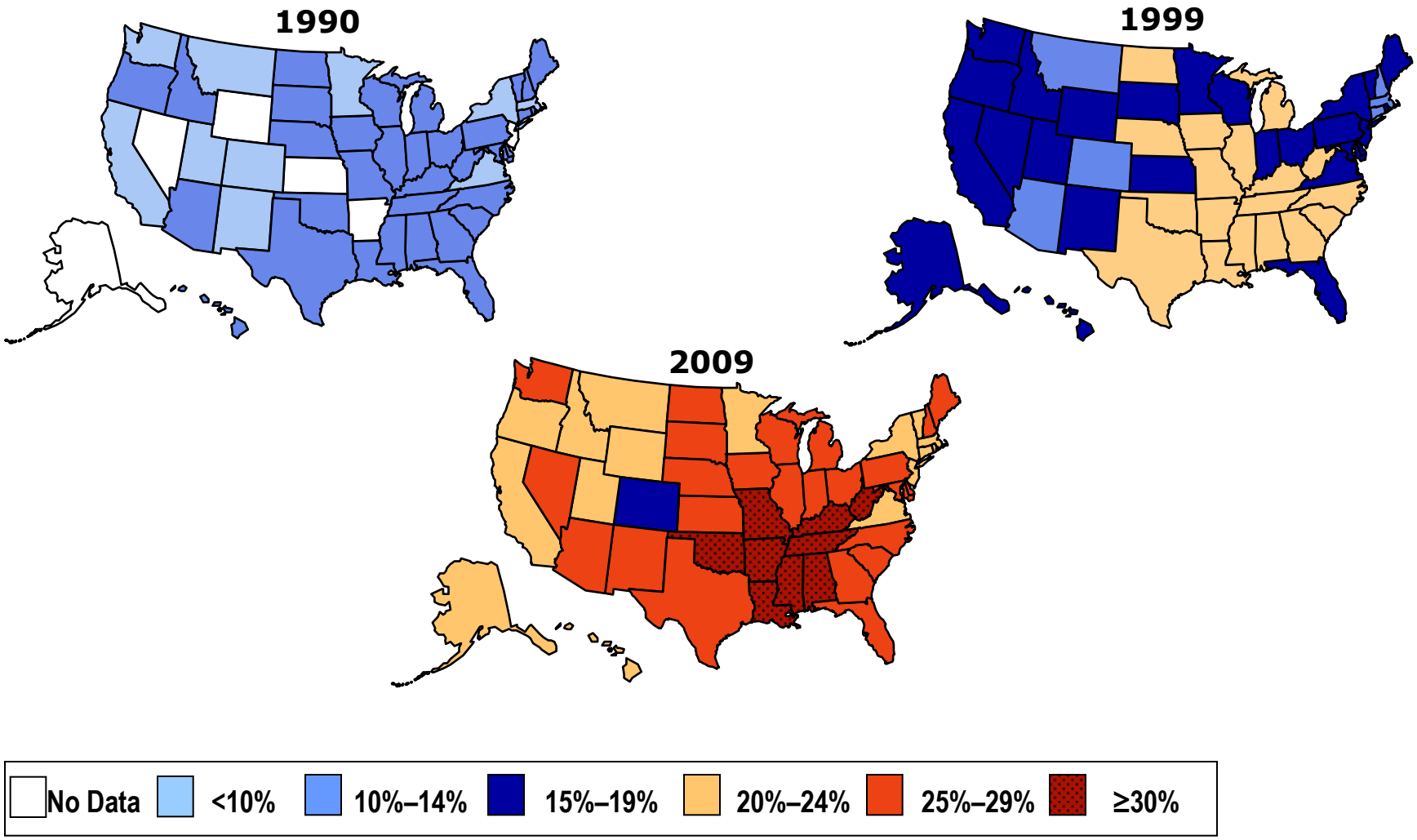
# Body Mass Index (BMI) Chart

| | Healthy Weight | | | | | | Overweight | | | | | Obese | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| **BMI** | **19** | **20** | **21** | **22** | **23** | **24** | **25** | **26** | **27** | **28** | **29** | **30** | **31** | **32** | **33** | **34** | **35** |
| **Height** | **Weight (in pounds)** | | | | | | | | | | | | | | | | |
| 4'10" | 91 | 96 | 100 | 105 | 110 | 115 | 119 | 124 | 129 | 134 | 138 | 143 | 148 | 153 | 158 | 162 | 167 |
| 4'11" | 94 | 99 | 104 | 109 | 114 | 119 | 124 | 128 | 133 | 138 | 143 | 148 | 153 | 158 | 163 | 168 | 173 |
| 5'0" | 97 | 102 | 107 | 112 | 118 | 123 | 128 | 133 | 138 | 143 | 148 | 153 | 158 | 163 | 168 | 174 | 179 |
| 5'1" | 100 | 106 | 111 | 116 | 122 | 127 | 132 | 137 | 143 | 148 | 153 | 158 | 164 | 169 | 174 | 180 | 185 |
| 5'2" | 104 | 109 | 115 | 120 | 126 | 131 | 136 | 142 | 147 | 153 | 158 | 164 | 169 | 175 | 180 | 186 | 191 |
| 5'3" | 107 | 113 | 118 | 124 | 130 | 135 | 141 | 146 | 152 | 158 | 163 | 169 | 175 | 180 | 186 | 191 | 197 |
| 5'4" | 110 | 116 | 122 | 128 | 134 | 140 | 145 | 151 | 157 | 163 | 169 | 174 | 180 | 186 | 192 | 197 | 204 |
| 5'5" | 114 | 120 | 126 | 132 | 138 | 144 | 150 | 156 | 162 | 168 | 174 | 180 | 186 | 192 | 198 | 204 | 210 |
| 5'6" | 118 | 124 | 130 | 136 | 142 | 148 | 155 | 161 | 167 | 173 | 179 | 186 | 192 | 198 | 204 | 210 | 216 |
| 5'7" | 121 | 127 | 134 | 140 | 146 | 153 | 159 | 166 | 172 | 178 | 185 | 191 | 198 | 204 | 211 | 217 | 223 |
| 5'8" | 125 | 131 | 138 | 144 | 151 | 158 | 164 | 171 | 177 | 184 | 190 | 197 | 203 | 210 | 216 | 223 | 230 |
| 5'9" | 128 | 135 | 142 | 149 | 155 | 162 | 169 | 176 | 182 | 189 | 196 | 203 | 209 | 216 | 223 | 230 | 236 |
| 5'10" | 132 | 139 | 146 | 153 | 160 | 167 | 174 | 181 | 188 | 195 | 202 | 209 | 216 | 222 | 229 | 236 | 243 |
| 5'11" | 136 | 143 | 150 | 157 | 165 | 172 | 179 | 186 | 193 | 200 | 208 | 215 | 222 | 229 | 236 | 243 | 250 |
| 6'0" | 140 | 147 | 154 | 162 | 169 | 177 | 184 | 191 | 199 | 206 | 213 | 221 | 228 | 235 | 242 | 250 | 256 |
| 6'1" | 144 | 151 | 159 | 166 | 174 | 182 | 189 | 197 | 294 | 212 | 219 | 227 | 235 | 242 | 250 | 257 | 265 |
| 6'2" | 148 | 155 | 163 | 171 | 179 | 186 | 194 | 202 | 210 | 218 | 225 | 233 | 241 | 249 | 256 | 264 | 272 |
| 6'3" | 152 | 160 | 168 | 176 | 184 | 192 | 200 | 208 | 216 | 224 | 232 | 240 | 248 | 256 | 264 | 272 | 279 |
| 6'4" | 156 | 164 | 172 | 180 | 189 | 197 | 205 | 213 | 221 | 230 | 238 | 246 | 254 | 263 | 271 | 279 | 287 |

# Obesity Trends* Among U.S. Adults

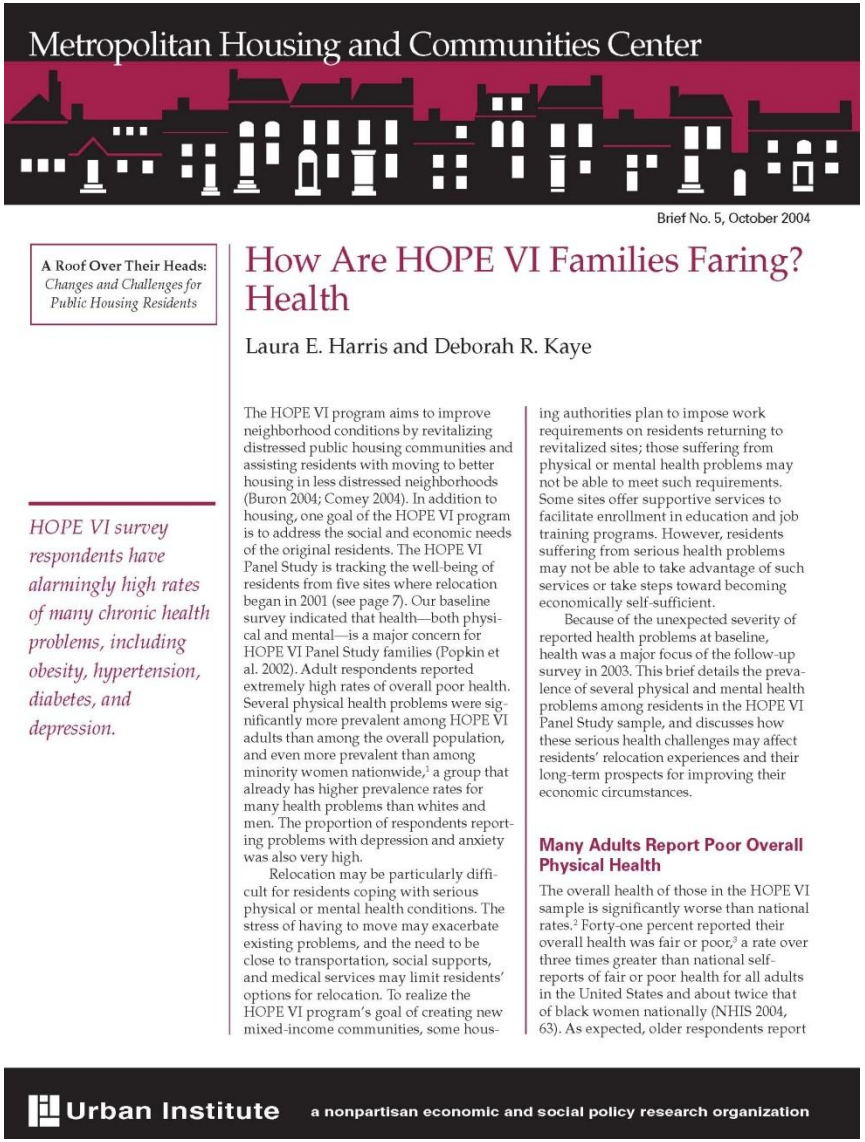
## BRFSS, 1990, 1999, 2009

(*BMI ≥30, or about 30 lbs. overweight for 5'4" person)



# Affordable and Assisted Housing

- Study of Public Housing Residents in 2004
  - Public housing residents consist largely of minority groups
  - Minority groups are at greater risk of cardiovascular disease
  - HOPE VI survey finds that public housing residents at even greater risk then other members of minority group



Metropolitan Housing and Communities Center

Brief No. 5, October 2004

A Roof Over Their Heads: *Changes and Challenges for Public Housing Residents*

## How Are HOPE VI Families Faring? Health

Laura E. Harris and Deborah R. Kaye

*HOPE VI survey respondents have alarmingly high rates of many chronic health problems, including obesity, hypertension, diabetes, and depression.*

The HOPE VI program aims to improve neighborhood conditions by revitalizing distressed public housing communities and assisting residents with moving to better housing in less distressed neighborhoods (Buron 2004; Comey 2004). In addition to housing, one goal of the HOPE VI program is to address the social and economic needs of the original residents. The HOPE VI Panel Study is tracking the well-being of residents from five sites where relocation began in 2001 (see page 7). Our baseline survey indicated that health—both physical and mental—is a major concern for HOPE VI Panel Study families (Popkin et al. 2002). Adult respondents reported extremely high rates of overall poor health. Several physical health problems were significantly more prevalent among HOPE VI adults than among the overall population, and even more prevalent than among minority women nationwide,[1] a group that already has higher prevalence rates for many health problems than whites and men. The proportion of respondents reporting problems with depression and anxiety was also very high.

Relocation may be particularly difficult for residents coping with serious physical or mental health conditions. The stress of having to move may exacerbate existing problems, and the need to be close to transportation, social supports, and medical services may limit residents' options for relocation. To realize the HOPE VI program's goal of creating new mixed-income communities, some housing authorities plan to impose work requirements on residents returning to revitalized sites; those suffering from physical or mental health problems may not be able to meet such requirements. Some sites offer supportive services to facilitate enrollment in education and job training programs. However, residents suffering from serious health problems may not be able to take advantage of such services or take steps toward becoming economically self-sufficient.

Because of the unexpected severity of reported health problems at baseline, health was a major focus of the follow-up survey in 2003. This brief details the prevalence of several physical and mental health problems among residents in the HOPE VI Panel Study sample, and discusses how these serious health challenges may affect residents' relocation experiences and their long-term prospects for improving their economic circumstances.

### Many Adults Report Poor Overall Physical Health

The overall health of those in the HOPE VI sample is significantly worse than national rates.[2] Forty-one percent reported their overall health was fair or poor,[3] a rate over three times greater than national self-reports of fair or poor health for all adults in the United States and about twice that of black women nationally (NHIS 2004, 63). As expected, older respondents report

Urban Institute a nonpartisan economic and social policy research organization

# There is hope!!!

- Assisted and Affordable Housing Residents can reduce the risk of heart disease by:
  - Understanding the risk factors
  - Becoming or staying physically active
  - Preventing or controlling high blood pressure
  - Losing weight
  - Preventing or controlling diabetes
  - Eating healthy
  - Quitting or never starting smoking

# World as it should be…..

"All of us driven by a simple belief that the world as it is just won't do – that we have an obligation to fight for the world as it should be." – Michelle Obama

# NHLBI *With Every Heartbeat is Life* Programs

- Address the commitment of the NHLBI to Healthy People 2010
- Provides a culturally sensitive way of reaching the communities
- Draws on the use of the Community Health Worker model
- Promotes capacity and partnership building through use of resources already established in the community

# Goals and Objectives of Program

- **Goal: Increase the utilization of community health workers in addressing cardiovascular health in communities with health disparities.**

- **Objectives:**
  - Train and equip Community Health Workers to conduct appropriate heart health education using cardiovascular health curricula and other heart health resources created by the National Heart, Lung and Blood Institute
  - Implement activities to promote cardiovascular health by addressing knowledge and behavioral change
  - Impetus of address health disparities:
    - Department of Health and Human Service
      - Healthy People 2010's overarching goal of 'eliminating health disparities'
    - NIH's Strategic Plan on Health Disparities
    - NHLBI's Strategic Plan on Health Disparities

# The Role of the National Heart, Lung and Blood Institute

***The National Heart, Lung and Blood Institute provides global leadership for a research, training, and education program to promote the prevention and treatment of heart, lung and blood diseases and to enhance the health of all individuals so that they can live longer and more fulfilling lives.****

National Heart Lung and Blood Institute

People Science Health

* NHLBI Strategic Plan:
  - 3.1.a. Develop and evaluate proven preventive and lifestyle interventions
  - 3.1.b. Develop and evaluate policy, environmental, and other approaches for use in community settings to encourage and support lifestyle changes
  - 3.1.c. Develop and evaluate interventions to improve patient, provider, and health care system behavior and performance in order to enhance quality of care and health outcomes

*Shaping the Future of Research: A Strategic Plan for the National Heart, Lung and Blood Institute

# Why Community Health Workers?

- Effective in reaching community residents that have been traditionally defined as “Hard to Reach.”
- “Change agents”, healers, **extenders of care**, “brokers” between community residents and the health care system
- Educators of patients and families and as trusted members of the community.
- People who are willing to understand the need of the community.
- Able to address social and cultural barriers and to facilitate change while ensuring access to health care services.

# Community Health Workers

- Community Health Workers National Workforce Study[1]:
  - Community Health Workers function in five models
    - Member of healthcare delivery team
    - Navigator
    - Screening and Health Education Provider
    - Outreach-Enrolling-Informing Agent
    - Organizer
  - Numbers of CHW's are increasing
    - 85,879 in 2000
    - 121,206 in 2005

1. Community Health Worker National Workforce Study; March 2007; U.S. DHHS; HRSA; ftp://ftp.hrsa.gov/bhpr/workforce/chw307.pdf

# NHLBI Community Health Worker Initiative

**Building Capacity**
through training & leadership development

**Mobilizing Communities**
toward an integrated and comprehensive approach to reducing the burden of CVD

Community Health Workers

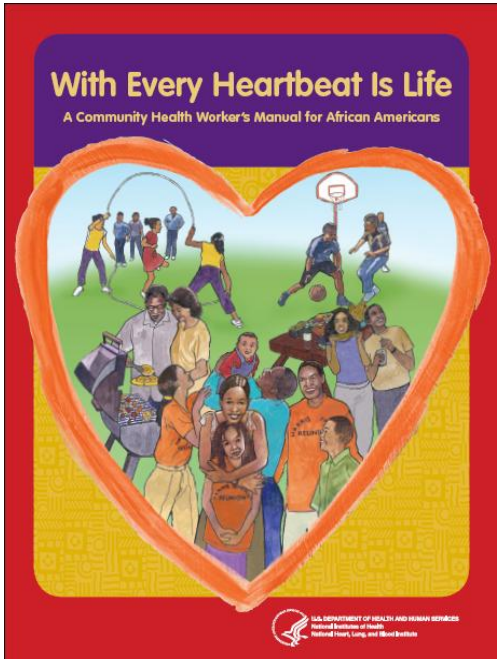
**Engaging Communities**
Through partnership development & Community Participatory Planning

**Systems Approach**
Linking community education with clinical management

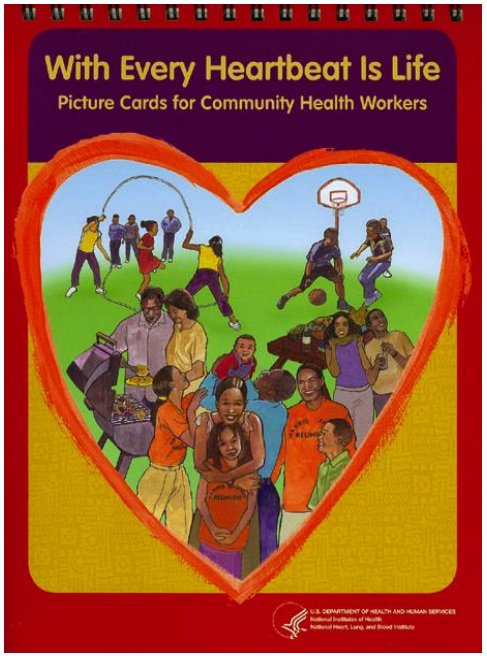
# *With Every Heartbeat is Life* Resources

National Heart Lung and Blood Institute
People Science Health

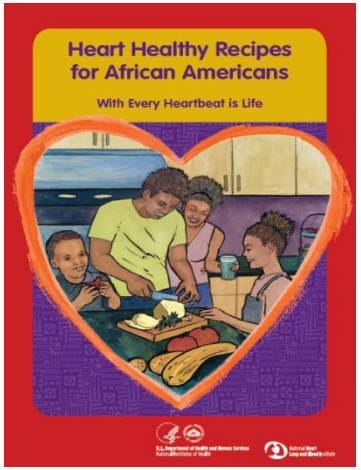
## Manuals



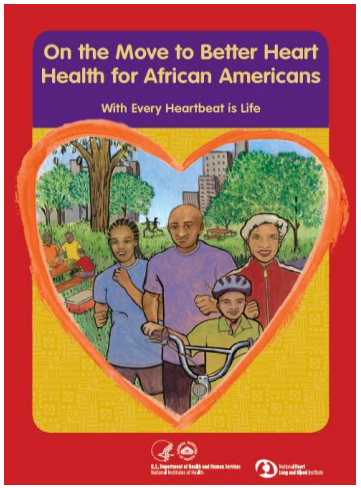

## Picture Cards




## Recipe Book

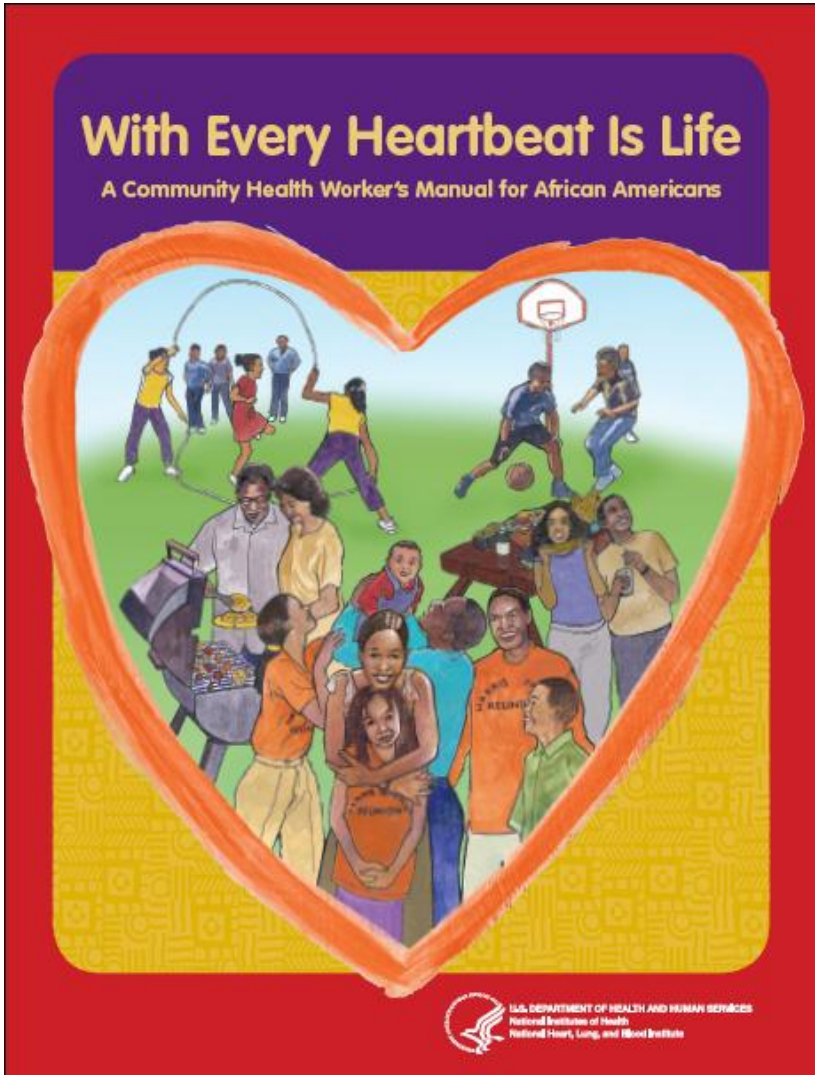



## Risk Factor Book



# With Every Heartbeat is Life

- With Every Heartbeat is Life
  - Comprehensive curriculum created by the National Heart Lung and Blood Institute
  - Culturally sensitive and language appropriate
  - 10 sessions of cardiovascular health information with two sessions of guidance for implementation
  - Integrates hands-on demonstrations, skill-building activities, handouts, heart-healthy recipes, and inspirational quotes by African Americans



# Risk Factors for Heart Disease

1. **High blood pressure**

2. **High blood cholesterol**


3. **Cigarette smoking**

4. **Diabetes**


5. **Overweight**

6. **Physical inactivity**


MACARONI & CHEESE
POTATO CHIPS
Packaged Noodle Soup

# Risk Factors for Diabetes

1. **Overweight**, especially if you have extra weight around the waist

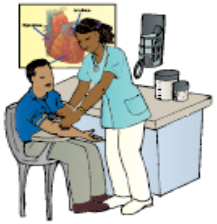
2. **Physically inactive**

3. **Family members** with diabetes

4. Have had **diabetes during pregnancy** (gestational diabetes)

5. **High blood pressure**

6. **Cholesterol levels that are not normal**



# Diabetes Symptoms

Feeling tired

Sores that don't heal

Increased thirst

Very dry skin

Frequent urination

"Pins and needles" feeling in the feet

Increased hunger

Blurry vision

Unexplained weight loss

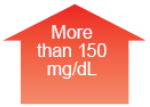
Feeling irritable

Picture Card 7.5

# Picture Card 5.5

**Three out of Five = Metabolic Syndrome**

1. High waist measurement




2. High triglyceride level


3. Low HDL cholesterol level

4. Blood pressure 130/85 mmHg or more

5. Fasting blood glucose higher than 100 mg/dL

Picture Card 5.5

# *Facts About Smoking*

- In the United States, about 440,000 people die each year from diseases related to smoking. This is more than 1,200 people each day.
- Smoking causes about 1 in every 5 deaths.
- Health care costs due to smoking are about $75 billion each year in the United States.
- Smokers use tobacco regularly because they become addicted to nicotine, which is a powerful drug. Nicotine is found in all tobacco products.
- Smoking can harm those around you! Cigarette smoking puts the health of your family, children, and friends at risk.

# Implementation and Evaluation Strategies for NHLBI Community Health Worker Programs

| Strategy | Measures |
|---|---|
| 1. Train-the-trainer: train community members how to use the curricula to delivery heart health messages | # and % of changes in knowledge and skills of community health workers |
| 2. Community Education<br>a. Teach manual to community<br><br>b. Teach manual + heart health screenings<br>For example: Blood pressure, blood cholesterol, glucose, BMI | # and % of changes in knowledge, attitude, & behavior<br># and % of changes in knowledge, attitude & behavior<br># and % referred & follow up with provider |
| 3. Lifestyle and clinical management (Help patients manage risk factors +lifestyle | # and % of changes in KAB; # and % of changes in Clinical values; # and % patients taking meds, and # and % of patients contacted for follow-up |

# Initiative Partners:
# 2007 HOPE VI Partners

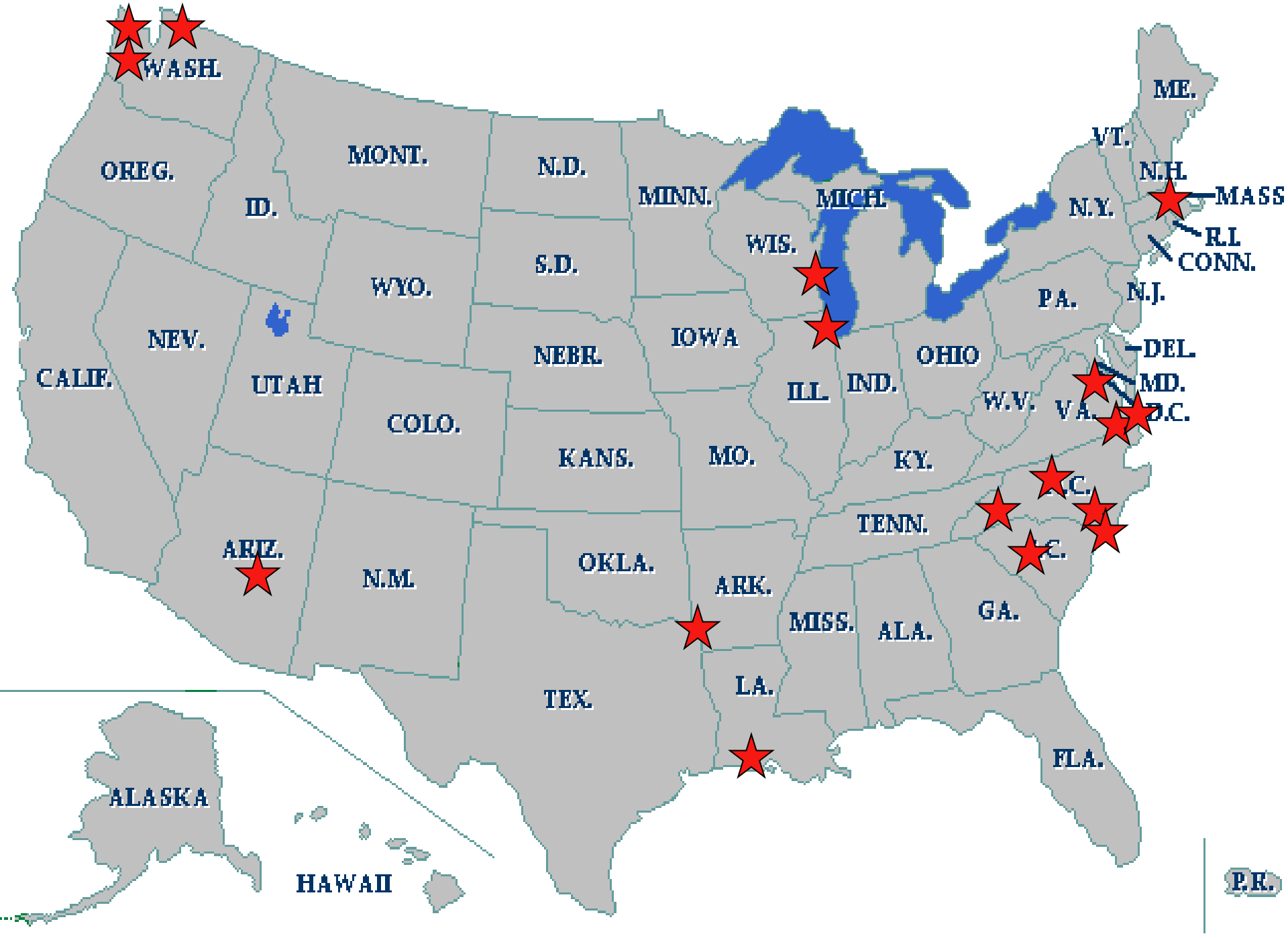
- **2007 HOPE VI Grant Sites**
  - Boston, MA
  - Fayetteville, N.C.
  - New Orleans, LA
  - Phoenix, AZ
  - Washington, D.C.

# Initiative Partners:
# 2008 HOPE VI Partners

- **2008 HOPE VI Grant Sites**
  - Bremerton, WA
  - Chicago, IL
  - King County, WA
  - Milwaukee, WI
  - Seattle, WA
  - Texarkana, TX

# Initiative Partners:
# 2008 HOPE VI Partners

- **Mid-Atlantic (Durham 6)**
  **Sites**
  - Charlotte, NC
  - Columbia, SC
  - Durham, NC
  - Norfolk, VA
  - Portsmouth, VA
  - Wilmington, NC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HAWAII
P.R.

# Partnering with Resident Organizations

- NHLBI has reached out to Resident Organizations and Housing Authorities to adopt the Community Health Worker Program

- NHLBI has partnered with the National

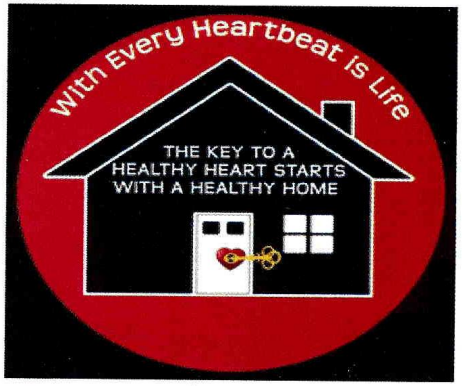
- Presentations have been given at three Resident Organization meetings:
  - Baltimore, Maryland
  - Springfield, Massachusetts
  - Pigeon Forge, Tennessee


# Demographics of Sheridan Terrace

- DCHA (Sheridan Terrace) is located in the nation's capitol, Washington, DC.
- The original potential caseload for Sheridan Terrace is 270 but currently 110 are enrolled in the CSSP.
- 100% African American/Black.
- Diabetes and High Blood Pressure are the main health issues.

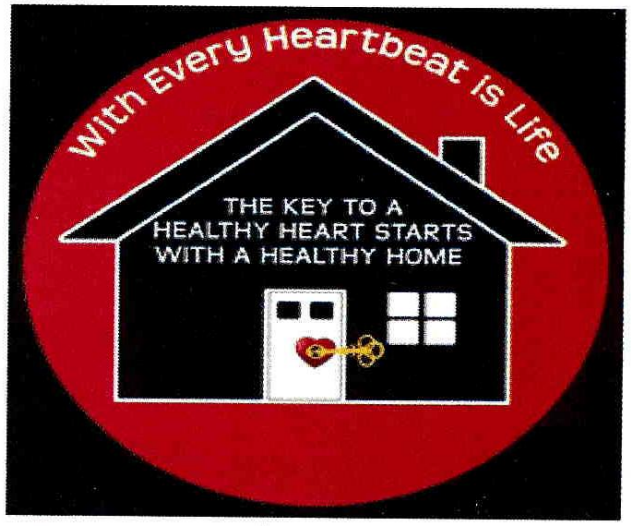
# Needs Assessment/Formative Research

- According to initial assessment done on 110 former Sheridan Terrace residents:
  - ➢23 out of 110 residents had Diabetes; and
  - ➢45 residents out of 110 had High Blood Pressure.



# Training Sessions in Washington, DC

| Type of Classes | Days | Time | Place |
|---|---|---|---|
| Train-the Trainer | Thursdays | 10:00am-4:00pm | Wheeler Creek Community Center |
| Single Sessions | Thursdays | 2:00pm-4:00pm | Dwelling Place Senior Center |
| Weekly Sessions | Thursdays | 1:30pm-4:30pm | Wheeler Creek Community Center/ Host Residents Home |



# Evaluation

- Twenty-one (21) individuals participated in WEHL training.
- 67% Completion rate.
- 21 completed Pre-test and 14 completed Post-test.
- Reporting: Monthly verbal report, weekly staff meeting with CSSP Administrator and annual written report.

# Implementation of a Community Health Worker Program

- Step 1: Introduction and Recruitment of Housing Authorities
- Step 2: Capacity Building and Preparation for Program
- Step 3: Training and Implementation
- Step 4: Evaluation and Maintenance

# Step 1: Introduction and Recruitment of Housing Authorities

- NHLDI and HUD will introduce the WEHL program to Housing Authorities through meetings and conferences

•NHLBI and HUD will recruit Housing Authorities that are interested in the program

•NHLBI and HUD will answer questions regarding program and provide resources for improved understanding of the program

# Step 2: Capacity Building and Preparation for Program

- NHLBI and HUD will work with Housing Authorities to perform Needs Assessment and Environmental Assessment

- NHLBI and HUD will work with Housing Authorities to build partnerships to conduct program

- Housing Authorities will form partnerships and pursue MOU with local groups to conduct program

- Housing Authorities will recruit residents to be trained to serve as Community Health Workers

# Step 3: Training and Implementation

- Recruited Housing Residents will attend and compete a With Every Heartbeat is Life Training

- Trained Housing Residents will return to community to work with Housing Authorities to implement program

- NHLBI and Housing Authorities will work with trained residents

- Trained Residents and partners will conduct education classes and other activities in the community

# Step 4: Evaluation and Maintenance

- NHLBI and HUD will work with Housing Authorities an Residents to evaluate the program on a regular basis

- NHLBI and HUD will work with Housing Authorities and Residents to make changes to program to improve implementation as necessary

- NHLBI and HUD will work with Housing Authorities and Residents to report and disseminate findings and

# Change……

"Change will not come if we wait for some other person or some other time. We are the ones we've been waiting for. We are the change that we seek." – Obama