



A PRACTITIONER'S GUIDE FOR  
ADVANCING HEALTH EQUITY  
Community Strategies for Preventing Chronic Disease



HEALTHY FOOD AND BEVERAGE STRATEGIES



National Center for Chronic Disease Prevention and Health Promotion  
Division of Community Health



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## [WWW.CDC.GOV/HEALTHEQUITYGUIDE](http://WWW.CDC.GOV/HEALTHEQUITYGUIDE)

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## LETTER FROM THE DIVISION OF COMMUNITY HEALTH

### PUBLIC HEALTH PRACTITIONER,

There is a growing body of literature exploring how environments in this nation shape our health. To address this issue, public health practitioners are implementing chronic disease policy, systems, and environmental improvements where people live, learn, work, and play. Practitioners are also considering how to ensure such improvements are designed to reverse the negative trends of chronic health conditions among vulnerable population groups. In response to the mounting needs of practitioners seeking reliable tools to advance health equity, the Centers for Disease Control and Prevention (CDC) developed *A Practitioner's Guide for Advancing Health Equity: Community Strategies for Preventing Chronic Disease (Health Equity Guide)*.

The purpose of the *Health Equity Guide* is to assist practitioners with addressing the well-documented disparities in chronic disease health outcomes. This resource offers lessons learned from practitioners on the front lines of local, state, and tribal organizations that are working to promote health and prevent chronic disease health disparities. It provides a collection of health equity considerations for several policy, systems, and environmental improvement strategies focused on tobacco-free living, healthy food and beverages, and active living. Additionally, the *Health Equity Guide* will assist practitioners with integrating the concept of health equity into local practices such as building organizational capacity, engaging the community, developing partnerships, identifying health inequities, and conducting evaluations. The *Health Equity Guide* is designed for the novice interested in the concept of health equity, as well as the skillful practitioner tackling health inequities.

We encourage you to visit [www.cdc.gov/healthequityguide](http://www.cdc.gov/healthequityguide) for additional tools and resources that promote health and the integration of health equity into everyday practice. We hope you find the information and examples provided to be useful and an impetus in your efforts to reduce health disparities and advance health equity.

Sincerely,

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# INTRODUCTION



Heart disease, cancer, diabetes, and stroke are the most common causes of illness, disability, and death affecting a growing number of Americans.<sup>4</sup> Many of these chronic conditions tend to be more common, diagnosed later, and result in worse outcomes for particular individuals,<sup>5-7</sup> such as people of color, people in low-income neighborhoods, and others whose life conditions place them at risk for poor health.

(See Appendix A for list of population groups experiencing chronic disease disparities.)

Despite decades of efforts to reduce and eliminate health disparities, they persist—and in some cases, they are widening among some population groups.<sup>8-11</sup> Such disparities do not have a single cause. They are created and maintained through multiple, interconnected, and complex pathways. Some of the factors influencing health and contributing to health disparities include the following:<sup>12,13</sup>

- **Root causes or social determinants of health** such as poverty, lack of education, racism, discrimination, and stigma.
- **Environment and community conditions** such as how a community looks (e.g., property neglect), what residents are exposed to (e.g., advertising, violence), and what resources are available there (e.g., transportation, grocery stores).
- **Behavioral factors** such as diet, tobacco use, and engagement in physical activity.
- **Medical services** such as the availability and quality of medical services.

## INTRODUCTION (Continued)

**HEALTH EQUITY MEANS THAT EVERY PERSON HAS AN OPPORTUNITY TO ACHIEVE OPTIMAL HEALTH REGARDLESS OF:**

- THE COLOR OF THEIR SKIN
- LEVEL OF EDUCATION
- GENDER IDENTITY
- SEXUAL ORIENTATION
- THE JOB THEY HAVE
- THE NEIGHBORHOOD THEY LIVE IN
- WHETHER OR NOT THEY HAVE A DISABILITY<sup>3</sup>

While health disparities can be addressed at multiple levels, this resource focuses on **policy, systems, and environmental improvement strategies** designed to improve the places where people live, learn, work, and play. Many of the 20<sup>th</sup> and 21<sup>st</sup> century's greatest public health achievements (e.g., water fluoridation, motor vehicle safety, food safety) have relied on the use of laws, regulations, and environmental improvement strategies.<sup>14,15</sup> Health practitioners play an important role in these improvements by engaging the community, identifying needs, conducting analyses, developing partnerships, as well as implementing and evaluating evidence-based interventions.

These intervention approaches are briefly described below:

- **Policy improvements** may include “a law, regulation, procedure, administrative action, incentive, or voluntary practice of governments and other institutions.”<sup>16</sup>  
**Example:** A voluntary school wellness policy that ensures food and beverage offerings meet certain standards.
- **Systems improvements** may include a “change that impacts all elements, including social norms of an organization, institution, or system.”<sup>17</sup>  
**Example:** The integration of tobacco screening and referral protocols into a hospital system.
- **Environmental improvements** may include changes to the physical, social, or economic environment.<sup>17</sup>  
**Example:** A change to street infrastructure that enhances connectivity and promotes physical activity.



## INTRODUCTION (Continued)

Such interventions have great potential to prevent and reduce health inequities, affect a large portion of a population, and can also be leveraged to address root causes, ensuring the greatest possible health impact is achieved over time. **However, without careful design and implementation, such interventions may inadvertently widen health inequities.** To maximize the health effects for all and reduce health inequities, it is important to consider the following:

- Different strategies require varying levels of individual or community effort and resources, which may affect who benefits and at what rate.
- Certain population groups may face barriers to or negative unintended consequences from certain strategies (see Appendix B for a list of common barriers). Such barriers can limit the strategy's effect and worsen the disparity.
- Population groups experiencing health disparities have further to go to attain their full health potential, so even with equitable implementation, health effects may vary.
- Health equity should not only be considered when designing interventions. To help advance the goal, health equity should be considered in other aspects of public health practice (e.g., organizational capacity, partnerships, evaluation).

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*A Practitioner's Guide to Advancing Health Equity* provides lessons learned and practices from the field, as well as from the existing evidence-base. This resource offers ideas on how to maximize the effects of several policy, systems, and environmental improvement strategies with a goal to reduce health inequities and advance health equity. Additionally, the resource will help communities incorporate the concept of health equity into core components of public health practice such as organizational capacity, partnerships, community engagement, identifying health inequities, and evaluation.

This resource has four major sections:

- Incorporating Health Equity into **Foundational Skills** of Public Health
- Maximizing **Tobacco-Free Living** Strategies to Advance Health Equity
- Maximizing **Healthy Food and Beverage** Strategies to Advance Health Equity
- Maximizing **Active Living** Strategies to Advance Health Equity



# TERMINOLOGY



A clear understanding of definitions is important. The following definitions are offered as a starting place as you think through this issue and review this resource:

**Health equity:** Health equity is attainment of the highest level of health for all people. Achieving health equity requires valuing everyone equally with focused and ongoing societal efforts to address avoidable inequalities, historical and contemporary injustices, and the elimination of health and health care disparities.<sup>12</sup>

**Health disparities:** Health disparities are differences in health outcomes and their determinants between segments of the population, as defined by social, demographic, environmental, and geographic attributes.<sup>7</sup>

**Health inequalities:** Health inequalities is a term sometimes used interchangeably with the term health disparities. It is more often used in the scientific and economic literature to refer to summary measures of population health associated with individual- or group-specific attributes (e.g., income, education, or race/ethnicity).<sup>7</sup>

**Health inequities:** Health inequities are a subset of health inequalities that are modifiable, associated with social disadvantage, and considered ethically unfair.<sup>7,18,19</sup>

**Social determinants of health:** Social determinants of health are conditions in the environments in which people are born, live, learn, work, play, worship, and age that affect a wide range of health, functioning, and quality-of-life outcomes and risks.<sup>20</sup>



# SECTION 3

## Maximizing Healthy Food and Beverage Strategies to Advance Health Equity



### USE THE CONTENT TO:

- FOSTER DIALOGUE ON HEALTH EQUITY CONCERNS WITHIN A COMMUNITY.
- TRAIN STAFF AND PARTNERS ON EQUITY ISSUES SURROUNDING TOBACCO-FREE LIVING STRATEGIES.
- IDENTIFY WAYS TO ADDRESS HEALTH EQUITY IN THE DESIGN AND IMPLEMENTATION OF STRATEGIES.
- DEVELOP YOUR OWN APPROACH FOR ENSURING EFFORTS ARE ADDRESSING HEALTH INEQUITIES.

Rural areas, low-income communities, and communities of color are most affected by limited access to healthful food and beverages. Limited access to healthful foods makes it particularly difficult to make healthy choices in these environments.<sup>100</sup> Addressing inequities in healthy food and beverage environments may help address many chronic disease health disparities.

The Healthy Food and Beverage section of *A Practitioner's Guide for Advancing Health Equity* provides equity-oriented considerations, key partners, and community examples related to the design and implementation of the following strategies:

- Community Food Retail Environment
- Healthy Restaurants and Catering Trucks
- Healthy Food in School, Afterschool, and Early Care and Education Environments
- Food Access through Land Use Planning and Policies
- Breastfeeding Practices and Policies

The content presented is not exhaustive and is not intended to act as a “how-to” guide. Rather, this section is meant to stimulate ideas for ensuring healthy food and beverage strategies are designed to address the needs of populations experiencing health inequities. Refer to the disclaimer on page iii when using this Section.



## COMMUNITY FOOD RETAIL ENVIRONMENT

COMMUNITY FOOD RETAIL STRATEGIES CAN INCREASE ACCESS TO HEALTHY FOOD OR DECREASE ACCESS TO UNHEALTHY FOODS IN LOCAL STORES, SUPERMARKETS, FARMERS' MARKETS, AND OTHER FOOD RETAIL OUTLETS. SUCH STRATEGIES MAY INCLUDE DEVELOPING FULL-SERVICE GROCERY STORES, IMPROVING OFFERINGS IN SMALL STORES, AND STARTING OR EXPANDING FARMERS' MARKETS.

### MAKE THE CASE:

#### Why Is This A Health Equity Issue?

The issues below highlight the need for community food retail strategies that advance health equity:

- **Limited Access to Healthy Food in Underserved Communities:** Differences in geographic food access have been documented in several national studies.<sup>100,101</sup> For example, low-income communities, communities of color, and rural areas have been found to have fewer supermarkets than wealthier communities, predominantly white neighborhoods, and urban areas.<sup>102,103</sup>
- **Additional Barriers Exist for Many Underserved Communities in Accessing Healthy Food:** Barriers to accessing healthy foods may include dependence on public transit, difficulty transporting groceries due to lack of reliable transportation,<sup>100</sup> and lack of access to healthy options that reflect cultural food preferences. Additionally, higher costs of healthy foods,<sup>100,104-106</sup> and low-quality food selection in some communities,<sup>107,108</sup> may serve as barriers.
- **Improving Access to Healthful Food Can Provide Opportunities for Economic Development in Underserved Communities:** Strategies that increase access to healthy food in underserved communities can have positive effects beyond improved nutrition. Such strategies may create jobs, revitalize commercial areas, and provide tax revenues. For example, grocery stores may act as anchors for retail developments, spurring local economic development.<sup>100</sup>



## Design and Implement with Health Equity in Mind

To maximize health impact and advance health equity, consider these factors and others when designing, implementing, and evaluating community food retail strategies:

KEY FACTORS	BARRIERS OR UNINTENDED CONSEQUENCES	OPPORTUNITIES TO MAXIMIZE IMPACT
<p><b>COMMUNITY AWARENESS &amp; INVOLVEMENT</b></p> <p>Ensure community engagement in and awareness of healthy food retail projects</p>	<p>Decisions about food availability may not reflect the needs and desires of community residents including perceptions of what is culturally appropriate.</p>	<ul style="list-style-type: none"> <li>Engage populations experiencing health inequities in community food assessments, GIS mapping, and other efforts to assess food access.</li> <li>Ensure those selected for food policy councils and other food initiatives designed to improve the food environment have an understanding and the capacity to address health disparities affecting certain population groups.</li> <li>Increase residents' awareness of new healthy food retailers, incentives for purchasing healthy foods (e.g. Double Up Food Bucks program<sup>109</sup>), and healthy food preparation.</li> </ul>
<p><b>AFFORDABILITY</b></p> <p>Ensure affordable pricing for healthy food options and increase low-income residents' purchasing power</p>	<p>Low-income communities and communities of color may have higher food prices for healthy food than high-income and white communities.<sup>105,108,110,111</sup> Additionally, healthy food retailers may not accept SNAP and WIC as forms of payment.</p>	<ul style="list-style-type: none"> <li>Promote the use of food assistance programs (e.g., Supplemental Nutrition Assistance Program (SNAP) and the Women, Infant, and Children's Program (WIC)) at healthy food retailers.<sup>112</sup></li> <li>Lower retail costs by supporting efforts that encourage lower prices (e.g., streamlining distribution, facilitating bulk purchasing by multiple stores).<sup>112,113</sup></li> <li>Provide support to increase demand of healthy options (e.g., assist with marketing and displaying food) and reduce food waste due to spoilage (e.g., offer ways to store and refrigerate foods).<sup>112,113</sup></li> <li>Increase SNAP participant purchasing power by providing incentives for the purchase of healthy food (e.g., Double Up Food Bucks program<sup>109</sup>).</li> </ul>
<p><b>NEGATIVE PERCEPTIONS &amp; LIMITED CAPACITY</b></p> <p>Provide support for bringing food options to underserved communities</p>	<p>A barrier to attracting healthy food retailers to underserved communities may include perceptions that businesses may suffer financially due to poor customer base, theft, or safety issues. Additionally, small stores may lack space, equipment, or staff expertise to carry fresh produce or to handle perishable foods.</p>	<ul style="list-style-type: none"> <li>Find mechanisms to support healthy food retailers who locate in underserved communities (e.g., simplify applications and permit procedures, bundle land to encourage supermarkets to locate in both affluent and low-income areas).</li> <li>Provide support to help stores sell healthier options (e.g., staff training in handling perishable items, free local advertising).</li> </ul>



KEY FACTORS	BARRIERS OR UNINTENDED CONSEQUENCES	OPPORTUNITIES TO MAXIMIZE IMPACT
<p><b>ECONOMIC DEVELOPMENT</b></p> <p>Support local economic development through healthy food retail</p>	<p>Retailers in underserved communities may not understand how they can support and enhance local economic development.</p>	<ul style="list-style-type: none"> <li>• Connect local agriculture and food production directly to local markets to help keep food dollars in the community.</li> <li>• Establish workforce development programs to train local residents for high-quality jobs in a variety of food retail settings.<sup>114,115</sup></li> <li>• When making decisions about food retail, consider developing criteria to support businesses that contribute to local economic development (e.g., commitment to hire local residents).</li> </ul>
<p><b>TRANSPORTATION NEEDS</b></p> <p>Address transportation challenges to increase access to healthy food retail</p>	<p>Individuals who live in communities with poor access to healthy food retail and depend on public transit may have more difficulty transporting groceries—especially perishables and bulk packages. Even if affordable healthy food outlets are nearby, lack of transportation may prevent residents from accessing them.</p>	<ul style="list-style-type: none"> <li>• Increase connectivity between transit and healthy food retail by assessing and improving existing routes.</li> <li>• Develop safe pedestrian connectors that provide a direct link between food outlets and nearby transit.</li> <li>• In rural areas, and for populations with limited mobility (e.g., the elderly, people with disabilities), consider offering vanpools or shuttles to healthy food options.</li> <li>• Provide online ordering and home delivery of healthy options for customers with transportation limitations.</li> </ul>
<p><b>SAFETY &amp; CONCERNS OF VIOLENCE</b></p> <p>Address concerns of violence which may serve as a barrier to healthy retail use</p>	<p>Community violence, real or perceived, may be a barrier to shopping at healthy food retail in low-income communities.</p>	<ul style="list-style-type: none"> <li>• Consider violence prevention strategies to create safe routes and/or reduce concerns of safety on the way to healthy food destinations.</li> <li>• See <i>Preventing Violence Strategy</i> in Active Living Section of this guide.</li> </ul>

## Build the Team: Partnership for Success

Successful efforts to implement community food retail strategies depend on bringing a diverse set of partners to the table early, consistently, and authentically. These partners may include the following:

- Area Agencies on Aging
- Community development, revitalization, and redevelopment agencies and organizations
- Community members (of diverse abilities, ages, cultures, gender, income levels, race/ethnicity, and sexual orientation)
- Developers
- Food banks
- Health care systems, hospitals, community clinics, and health care providers
- Housing agencies
- Industry leaders
- Leaders and community champions from multiple sectors
- Local farmers and regional food distributors
- Organizations serving populations experiencing health inequities
- Public health agencies
- Public Works Department
- Retailers and vendors
- Social service agencies
- Zoning and Planning organizations





## Corner Store Initiative Supports Community Health and Local Store Owners

### Philadelphia, PA

The driving force for a citywide healthy corner store effort came about when school leadership expressed concerns that healthy food policies in schools might drive students to purchase less healthy snacks at nearby corner stores. What started out as a small-scale initiative by The Food Trust to increase the availability of healthy foods, has grown from 10 corner stores near schools to over 600 corner stores in low-income neighborhoods. Results from the Healthy Corner Store Initiative have brought health benefits not only to students, but also community residents who depend primarily on corner stores for food. These efforts have been supported by CDC's *Communities Putting Prevention to Work* and *Community Transformation Grant* programs, as well as other non-federal funding.

Health equity is a central tenet of the corner store efforts. Using existing relationships with local grocers associations (including mom-and-pop store owners), community groups, and school advocates, The Food Trust succeeded in establishing credibility with local corner store owners, making it easier to cultivate new relationships and get buy-in and support. By having

a constant presence in the community and working closely with store owners to figure out good solutions, The Food Trust staff created a program that was viable and profitable for the owners. For example, the menu approach taken includes whole foods (e.g., whole-grain tortillas, beans, tofu) and low-fat dairy products, in addition to fresh produce. This allows store owners to select options that fit the store's capacity, while being culturally appropriate for customers. Additionally, the program gave more stores a modest incentive to participate and allowed them to see the potential for increasing their profits. The process helped store owners see themselves as part of the community. The Food Trust is also focused on identifying sustainable solutions and offering additional supports for the most dedicated stores, such as cost-free training and technical assistance and larger infrastructure renovations (e.g., shelving, refrigeration) to accommodate more healthy food options.

Through this initiative, The Food Trust was able to build a meaningful program that continues to benefit store owners and increases availability of healthy food for many low-income neighborhoods throughout Philadelphia.



## Improving Food Access and the Local Economy through Farmers' Markets

### Southwest Georgia

The residents of Baker County in southwest Georgia (80% of whom are African American) live in a rural food desert. Over time, grocery store retailers abandoned the area, making it difficult for low-income residents with limited transportation to access healthy foods. The lack of grocery stores also impacted economic vitality in the community, leaving local farmers struggling to maintain their livelihood. To simultaneously address the resulting food access and economic issues, the East Baker Historic Society (EBHS) and the Southwest Georgia Project for Community Education began partnering with the Georgia StrikeForce Initiative and The Federation of Southern Cooperatives—organizations that assist African American and disadvantaged rural farmers—to repurpose unused public land for farmers' markets in all 22 counties of the southwest region in Georgia. These efforts were supported by the United States Department of Agriculture and CDC's *Communities Putting Prevention to Work: State and Territorial Initiative*.



The farmers' market development process began with identifying potential land. Next, community members, community-based organizations, local business owners, and government officials including commissioners and community development councils, participated in several strategic planning meetings, lending their input and getting approval to use public land. Disadvantaged farmers were identified and their needs were determined and addressed with training. When the market was ready to open, community activities, such as local high school band performances, were held to attract patrons. Residents with limited transportation now had access to nearby healthy food retail, African American and disadvantaged rural farmers gained customers to purchase their products, and town centers were revitalized with additional foot traffic from farmers' market customers.

By May 2012, four markets had opened. Southwest Georgia's food desert is being revived with fresh foods—one farmers' market at a time.



## HEALTHY RESTAURANTS AND CATERING TRUCKS

HEALTHIER RESTAURANTS AND CATERING TRUCKS ARE EXAMPLES OF FOOD AWAY FROM HOME THAT MAY SERVE AS A MAJOR SOURCE OF FOOD IN SOME COMMUNITIES.<sup>116,117</sup> STRATEGIES TO IMPROVE FOOD SELECTIONS IN THESE SETTINGS MAY INCLUDE PROMOTIONS AT THE POINT-OF-PURCHASE, INCREASING THE RANGE OF HEALTHY FOOD OFFERINGS, AND PROMOTING THESE BUSINESSES THROUGH MEDIA AND EDUCATIONAL INITIATIVES.

### MAKE THE CASE:

#### Why Is This A Health Equity Issue?

The issues below highlight the need for healthy restaurant and catering truck strategies that advance health equity:

- **Higher Concentration of Full-Service and Fast Food Restaurants in Low- and Middle-Income Communities and Communities of Color:** Low-income and middle-income communities and communities of color have been found to have more full-service and fast food or quick-service establishments compared to high-income communities.<sup>118-120</sup> Eating away from home in food retail venues such as these has been linked to a variety of poor nutritional and health outcomes.<sup>121</sup>
- **Time and Economic Pressures May Contribute to Reliance on Prepared Food Sources:** While time and economic pressures apply to most households, households with limited income may have a tighter budget for purchasing food. Members of these households may also have limited time because of working multiple jobs or having long commute times. Long distances to access resources may be even more common in rural areas.<sup>100,122</sup> These time and economic pressures may contribute to individuals relying on quickly prepared food sources found at restaurants and catering trucks.
- **Targeted Marketing to Youth of Color Influences Food Choices:** African American and Latino youth are often the target of ethnically-specific marketing initiatives by various food companies.<sup>123</sup> Targeted marketing may increase the likelihood that youth will prefer and consume food options that may be calorie-dense and nutrient-poor, which may negatively affect their diet, weight, and health.<sup>123</sup>



## Design and Implement with Health Equity in Mind

To maximize health impact and advance health equity, consider these factors and others when designing, implementing, and evaluating healthy restaurant and catering truck strategies:

KEY FACTORS	BARRIERS OR UNINTENDED CONSEQUENCES	OPPORTUNITIES TO MAXIMIZE IMPACT
<p><b>TRUST &amp; ENGAGEMENT</b></p> <p>Build relationships with retailers and overcome cultural barriers</p>	<p>Retailers, particularly those in underserved communities, may be overlooked for health-promoting initiatives due to cultural barriers and misperceptions about their willingness to participate.</p>	<ul style="list-style-type: none"> <li>• Identify residents or partners with cultural and community ties to engage and recruit retailers in health-related initiatives.</li> <li>• Build trust by helping retailers with various aspects of their business (e.g., training staff, incorporating healthy foods).</li> </ul>
<p><b>COST</b></p> <p>Prioritize cost-effective strategies for food preparation and food offerings</p>	<p>Many smaller full-service and quick-service restaurants and catering trucks operate on thin margins of profit and may be reluctant to modify menus for fear of losing customers and revenue.</p>	<ul style="list-style-type: none"> <li>• Suggest changes to food preparation and selection that are not only healthy, but also cost-effective (e.g., offer whole beans in addition to refried beans, switch from lard and margarine to oils).</li> </ul>
<p><b>PROMOTION</b></p> <p>Provide cost-free promotion for restaurants with healthy items</p>	<p>Some small local businesses may not have marketing budgets to promote healthy food options.</p>	<ul style="list-style-type: none"> <li>• Encourage business owners to adopt healthy practices by helping them with promotional efforts (e.g., point-of-purchase signs) and advertising (e.g., radio spots, newspaper ads).</li> </ul>
<p><b>VARIABLE IMPLEMENTATION &amp; ENFORCEMENT</b></p> <p>Ensure a comprehensive approach to nutrient labeling for non-chain, locally owned restaurants and catering trucks</p>	<p>Nutrient labeling may be burdensome for non-chain restaurants and catering trucks. These establishments may lack standardized recipes and may not have the resources to conduct nutrient analyses.<sup>124</sup> Furthermore, some community members may not be responsive to nutrient labeling.<sup>125</sup></p>	<ul style="list-style-type: none"> <li>• Assess whether nutrient labeling is a viable strategy for your community.</li> <li>• Find partners to help save on the cost of nutrient analysis.</li> <li>• Build customers' awareness and understanding of nutrient labeling and healthy food options (e.g., use symbols to simplify understanding of nutrient content, offer educational sessions).</li> </ul>

## Build the Team: Partnership for Success

Successful efforts to implement healthy restaurant and catering truck strategies depend on bringing a diverse set of partners to the table early, consistently, and authentically. These partners may include the following:

- Community-based organizations working on food systems, health, and/or agriculture
- Community development, revitalization, and redevelopment agencies and organizations
- Community members (of diverse abilities, ages, cultures, gender, income levels, race/ethnicity, and sexual orientation)
- Faith-based organizations
- Leaders and community champions from multiple sectors
- Local farmers and regional food distributors
- Public health agencies
- Public Works Department
- Regional or local restaurant associations/ethnic restaurants
- Restaurant and catering truck owners and managers
- Zoning and Planning organizations



## Carryout Project Brings Healthful Foods to Low-Income Neighborhoods

### Baltimore, MD

Low-income African Americans in Baltimore have been found to consume a significant portion of their calories from carryout facilities or restaurants.<sup>127</sup> These findings and others prompted Johns Hopkins researchers to create the Baltimore Healthy Carryout (BHC) project, with the goal of increasing healthy food options. The Baltimore Healthy Carryout intervention was funded by the Diabetes Research and Training Center, University of Maryland and Johns Hopkins University, as well as the Center for a Livable Future at Johns Hopkins University.

Being sensitive to restaurant owners' concerns that significant changes might drive away customers, BHC adopted a phased approach, implementing improvements over time. BHC staff maintained close contact with the owners, visiting each restaurant at least once a week. Through a series of discussions with community members, BHC staff members were able to gauge which healthy foods customers would want. These discussions guided the restaurant

owners toward culturally and seasonally acceptable side options such as collard greens, watermelon, broth-based soup with vegetables, yogurt, and fruit cups. Carryout restaurants eventually began offering healthy combo meals (e.g., a healthy entrée with a healthy side instead of fries, bottled water in place of soda) that matched the price of original combo meals, making them accessible to price-sensitive groups.

BHC also addressed concerns about potential profit loss by helping owners with promotion. Paper menus were replaced by more durable laminated signs. Literacy was considered during menu and poster creation, and images were used on the menus to help customers identify healthy choices. The modified menu boards and posters provided an aesthetic improvement, a co-benefit that business owners appreciated. BHC brought healthful foods to Baltimore residents in a way that supported existing local carryout businesses.





## Healthy Hometown Restaurant Initiative

### Louisville, KY

Many people generally consume a large portion of their calories outside of the home in Louisville, KY.<sup>126</sup> In an effort to promote healthy eating, Louisville Metro Public Health and Wellness (LMPHW), with support from CDC's *Communities Putting Prevention to Work* program, implemented the Healthy Hometown Restaurant Initiative to encourage restaurants to provide healthier options for their patrons. A voluntary menu-labeling resolution was implemented that included a nutrition analysis of meals with printed calorie information and recommendations for healthier menu choices.

LMPHW learned that the community's strong social connectedness provided a benefit when trying to get buy-in from restaurant owners. Restaurateurs were most motivated to join if they were approached by individuals they trusted, and if those individuals thought their customers wanted the change.

Initially, LMPHW conducted community surveys through the University of Louisville and local youth, hosted professional cooking demonstrations, and attended business association meetings. These activities helped spread the word about the restaurant initiative to residents and restaurant owners. However, only restaurants located in affluent neighborhoods were responding. To engage restaurant owners in Louisville's low-income neighborhoods, outreach coordinators conducted in-person visits to restaurants. LMPHW overcame owner hesitation by engaging champions including a neighborhood association and the owner of a local restaurant who had previously signed on to the initiative. The champions spread the word about the Healthy Hometown Initiative and encouraged other restaurateurs to join. Their local outreach led five additional restaurants to join the initiative.





## HEALTHY FOOD IN SCHOOL, AFTERSCHOOL, AND EARLY CARE AND EDUCATION ENVIRONMENTS

HEALTHY FOOD AND BEVERAGES STRATEGIES TO IMPROVE THE HEALTH OF CHILDREN MAY INCLUDE THE DEVELOPMENT AND IMPLEMENTATION OF POLICIES AND PRACTICES (E.G., WELLNESS POLICIES, NUTRITION STANDARDS FOR COMPETITIVE FOODS, WATER AVAILABILITY), IN SCHOOL, AFTERSCHOOL, AND EARLY CARE AND EDUCATION ENVIRONMENTS.

### MAKE THE CASE:

#### Why Is This A Health Equity Issue?

The issues below highlight the need for healthy food and beverage strategies that advance health equity:

- **Low-Income Children May Be More Dependent on Foods Provided in School, Afterschool, and Childcare Settings:** Many children benefit from and rely on meals served in school, afterschool, and childcare settings for much of the food they consume per day.<sup>128-132</sup> Specifically, many children from low-income households qualify for free or reduced-price meals and participate in food programs such as the National School Lunch Program, the School Breakfast Program, and the Child and Adult Care Food Program.<sup>132-135</sup> However, some barriers may keep children who qualify for free and reduced-price meal programs from enrolling and benefiting from these services.<sup>136-138</sup> For instance, lack of information about the application process, language and literacy challenges, lack of cultural sensitivity and appropriateness of the food served, and stigma associated with participating in these programs<sup>138,139</sup> may serve as barriers to enrollment and participation.
- **Settings May Differ in Their Capacity to Provide Healthy Food Environments:** The quality of food may vary substantially between and within different settings (e.g., school districts, public and private settings). Some settings may be more constrained by limited budgets, and others may have limited facilities in which to prepare and serve food. Additionally, some schools may rely on the revenues generated from competitive foods, including vending sales, to support various school functions and activities.<sup>140,141</sup> These constraints may contribute to less healthy food environments for children in these settings.



## Design and Implement with Health Equity in Mind

To maximize health impact and advance health equity, consider these factors and others when designing, implementing, and evaluating healthy food and beverage strategies:

KEY FACTORS	BARRIERS OR UNINTENDED CONSEQUENCES	OPPORTUNITIES TO MAXIMIZE IMPACT
<p><b>VARIABILITY IN IMPLEMENTATION</b></p> <p>Provide additional supports to under-resourced school, afterschool, and childcare settings</p>	<p>The resources available to institutions may affect their ability to improve their food environment.</p>	<ul style="list-style-type: none"> <li>• Provide additional staff training or technical assistance in settings with fewer resources. This assistance may help maximize enrollment in meal programs and preparation of healthy foods.</li> <li>• Explore alternatives for institutions with limited facilities for the preparation and storage of foods/snacks (e.g., develop agreements with nearby institutions to use their facilities, use mobile vending carts).</li> </ul>
<p><b>PARTICIPATION</b></p> <p>Reduce barriers to enrollment and increase overall participation in meal programs</p>	<p>Barriers may keep many eligible children from benefiting from these programs.<sup>136,137</sup> Additionally, time constraints and lack of sensitivity to cultural and religious food preferences may limit participation in meal programs.</p>	<ul style="list-style-type: none"> <li>• Make it easier for parents to enroll children by making them aware of eligibility and providing assistance with paperwork in multiple languages.</li> <li>• Take advantage of automatic or school-wide enrollment options, especially in low-income settings.</li> <li>• Adjust the time and length of meals to ensure children have time to get and eat lunch.</li> <li>• Train staff to be aware of the cultural backgrounds of students in preparation of a culturally appropriate food menu.</li> </ul>
<p><b>STIGMA</b></p> <p>Take steps to reduce stigma associated with meal programs</p>	<p>Stigma may act as a barrier to participation in meal programs.<sup>138,139</sup></p>	<ul style="list-style-type: none"> <li>• Work with stakeholders to identify efforts to prevent obvious identification of eligible students.</li> <li>• Consider avoiding separate lines for competitive foods and food programs. Provide the same food options to all students.</li> <li>• Explore a cashless point-of-sale system where all students have an account in a database.</li> </ul>
<p><b>LACK OF EXPOSURE</b></p> <p>Increase exposure to healthy foods</p>	<p>Many children may have limited access to and familiarity with healthy foods, particularly children from underserved communities.</p>	<ul style="list-style-type: none"> <li>• Find opportunities to increase students' exposure to healthy foods (e.g., farm-to-school partnerships, gardening programs).</li> <li>• Work with schools to serve as sites for farmers' markets on the weekends or during child pick-up hours to increase healthy food access.</li> <li>• Consider strategies to make healthy options more commonplace (e.g., discourage use of less healthy food as a reward, encourage fundraising activities that include healthy options, offer healthy competitive foods and vending).</li> </ul>

## Build the Team: Partnership for Success

Successful efforts to implement healthy food and beverages strategies in school, after-school, and childcare environments depend on bringing a diverse set of partners to the table early, consistently, and authentically. These partners may include the following:

- Board of Education members
- Childcare licensing agencies
- Childcare staff
- Community-based organizations such as YMCA, Boys and Girls Club, sports associations, Boy Scouts, Girl Scouts
- Community members (of diverse abilities, ages, cultures, gender, income levels, race/ethnicity, and sexual orientation)
- Food service managers and staff
- Local chefs
- Leaders and community champions from multiple sectors
- Local food organizations
- Parents and students
- Parks and recreation agencies (for afterschool and summer programs)
- Principals
- Public health agencies
- School district administrators
- School Health Councils
- Teachers
- Vendors



## Tailored Institutional Practices to Increase Access to Healthy Foods in Childcare Centers

### Southern Nevada

Many Southern Nevada children lack access to healthful food and opportunities for physical activity.<sup>142</sup> This fact, as well as the childhood obesity rates,<sup>143</sup> prompted the Southern Nevada Health District (SNHD) to support childcare centers in implementing institutional health-promoting practices and policies. Budgetary constraints spurred the district to explore no- to low-cost sustainable solutions.

With support from CDC's *Communities Putting Prevention to Work* program, the SNHD Community Health Division worked with the district's Division of Nursing to provide training to childcare center staff and one-on-one guidance in developing healthy food and physical activity practices and institutional policies. To ensure these efforts reached the children most in need, the district targeted high-need childcare centers, including casinos and other places with high rates of unemployment and participation in need-based programs.

By March 2012, more than 65 centers had implemented institutional nutrition and physical activity policies

informed by a best practice policy drafted by the Health District. Each center was able to craft an institutional policy that was most appropriate for it and most feasible for implementation. This flexibility gave each center ownership over its institutional practices instead of requiring a standardized approach that might not have accounted for each center's unique level of resources and needs.

Each participating center received a curriculum designed specifically for childcare centers and used it to help establish staff development opportunities. Worth at least four continuing education units (CEUs), the curriculum and related training provided an incentive to each center's support staff to learn how to promote healthy behaviors. Staff can work toward fulfilling a state law that requires licensed childcare professionals to attain 15 CEUs per year, with at least two of those hours in the areas of childhood obesity, physical activity, nutrition, or wellness. Childcare center staff now have the training, resources, and the incentive to have an impact on childhood obesity in Southern Nevada.



## Centralized Kitchen Facilitates Healthy Meals for All Schools

### Bibb County, GA

Helping students learn is part of the mission of the Bibb County School Nutrition program.<sup>144</sup> The program helps keep students focused and alert by ensuring every student has access to nutritious food. Through collaborative efforts with school nutrition, school administrators, and Title I Home-School Facilitators providing in-kind and other support, Bibb County, GA wanted to remove barriers to healthy food access in schools by encouraging all families to apply for free and reduced-price meals. They also implemented a meal accounting system for *all* students. The system is intended to reduce stigma and prevent obvious identification of students enrolled in the meal program.

Bibb County also built a centralized kitchen for basic prep work and cooking to ensure that each of the county’s 41 schools could serve healthy meals. The kitchen provides meals made from basic healthy ingredients, using little sugar, salt, and fat and no preservatives. The centralized kitchen has allowed each school to implement healthier food options without investing in significant kitchen equipment or staffing changes.

For example, schools can phase out fryers without purchasing new equipment.

Bibb County already had finishing kitchens in each school, and efforts focused on ensuring that equipment to prepare healthy meals was equitably available across the district. The district intentionally created a standardized menu to ensure that all schools serve healthy options without sacrificing taste, diversity, or appeal. Menu options have included “harvest of the month” items such as fresh beets, sweet potatoes, brussels sprouts, and locally grown strawberries.



Daily vegetarian options feature choices such as black bean empanadas or veggie burgers. For districts that cannot afford a centralized kitchen, Dr. Clela Long, Director of the Bibb County School Nutrition Program, suggests: “Centralize specific preparation within different schools... one school handles entrees, one school is a bakery, one makes sauce.” By creating a parallel distribution system, districts can still serve fresh, healthy food in every school even when kitchen equipment and staff are limited.



## FOOD ACCESS THROUGH LAND USE PLANNING AND POLICIES

LAND USE PLANNING AND POLICIES TO IMPROVE FOOD ACCESS MAY INCLUDE ATTRACTING HEALTHY FOOD RETAIL (E.G., SMALL BUSINESSES, MOBILE VENDING), LIMITING THE DENSITY OF LESS HEALTHY FOOD RETAIL, AND PERMITTING URBAN AGRICULTURE AND COMMUNITY GARDENS.

### MAKE THE CASE:

#### Why Is This A Health Equity Issue?

The issues below highlight the need for land use planning strategies that advance health equity:

- **Historical Land Use Policies and Practices Have Shaped Community Resources:** Historically, land use strategies, such as zoning regulations, were used to separate residential areas from industrial areas. However, some of these strategies were used to segregate groups of people based on race, ethnicity, or income status.<sup>145-147</sup> Such land use decisions and other issues have left many low-income and communities of color with limited access to essential services, facilities, and infrastructure,<sup>145,148-151</sup> including food resources.
- **Barriers to Healthy Food Options May Exist in Underserved Communities:** The density of fast food outlets has been found to be higher, and the availability of supermarkets is lower, in low-income communities and communities of color.<sup>108,110,120</sup> Additionally, low-income communities and communities of color may have higher food prices for healthy food than high-income and white communities.<sup>105,108,110,111</sup> The quality of healthy food may also be lower in these underserved communities.<sup>108,110,111</sup> Land use planning and policies can be used to improve the food options in a community.

**Note:** As many land use and zoning strategies fall in the purview of other sectors, public health agencies should work with appropriate partners when considering such strategies.



## Design and Implement with Health Equity in Mind

To maximize health impact and advance health equity, consider these factors and others when designing, implementing, and evaluating land use planning strategies to improve access to healthy food:

KEY FACTORS	BARRIERS OR UNINTENDED CONSEQUENCES	OPPORTUNITIES TO MAXIMIZE IMPACT
<p><b>COMMUNITY AWARENESS &amp; INVOLVEMENT</b></p> <p>Engage residents who lack access to healthy food in planning and policy development</p>	<p>Historically, low-income populations and communities of color have been excluded from, or not actively recruited into, land use planning and policy development.<sup>145</sup></p>	<ul style="list-style-type: none"> <li>Partner with organizations that have credibility and ties to residents to foster meaningful engagement.</li> <li>Provide training to build residents' leadership skills and increase their understanding of the planning process.</li> <li>Establish systematic processes to ensure that resident concerns are gathered and reflected in land use plans when they are updated.</li> </ul>
<p><b>DISPLACEMENT</b></p> <p>Make improvements to food retail in underserved communities with current residents in mind</p>	<p>Economic development including new food retail may result in increases in property values and rent. If such changes occur, existing residents may be displaced if they are unable to afford living there.</p>	<ul style="list-style-type: none"> <li>Ensure comprehensive plans outline how improvements in food access will affect other priorities such as housing and jobs (e.g., incentivize local hiring for new food retailers).</li> <li>Align transportation decisions (e.g., transit hub locations, bus routes), with food access needs, particularly for those who may depend on transit (e.g., people with disabilities, the elderly).</li> </ul>
<p><b>DISPROPORTIONATE NEGATIVE EFFECTS</b></p> <p>Be aware that the same methods used to attract healthy options may also be used to bring in less healthy options</p>	<p>Efforts to attract healthy food retail may inadvertently allow or incentivize less healthy options. For example, retailers in underserved communities may be accustomed to selling low-cost and less healthy food options, and may use any incentives to continue selling these items, instead of healthier options.</p>	<ul style="list-style-type: none"> <li>Consider linking specific requirements for healthy food to any incentives to attract or enhance food retail, particularly in underserved communities.</li> <li>Provide support to food retail outlets operating in food deserts that meet some established healthy food requirements (e.g., additional vending permits, training, Electronic Benefit Transfer (EBT) equipment).</li> </ul>

## Build the Team: Partnership for Success

Successful efforts to implement land use planning strategies to increase access to healthy food depend on bringing a diverse set of partners to the table early, consistently, and authentically. These partners may include the following:

- Community development, revitalization, and redevelopment agencies and organizations
- Community members (of diverse abilities, ages, cultures, gender, income levels, race/ethnicity, and sexual orientation)
- Developers
- Food system coalitions and organizations
- Leaders and community champions from multiple sectors
- Local economic development agency
- Local farmers and regional food distributors
- Public health agencies
- Organizations serving populations experiencing health inequities
- Public Works Department
- Retailers and vendors
- Social service agencies
- Zoning and Planning organizations



*Massachusetts Ave Project (MAP) Growing Green Youth listen as city officials introduce Buffalo's Green Code (form-based rezoning effort) during participation in a public meeting in Buffalo, NY. (2011). Photo courtesy of MAP.*

## Using Planning and Zoning to Create Access to Healthy and Affordable Foods

### Buffalo, NY

An unstable economy has left the once-thriving city of Buffalo with a declining population, unemployment,<sup>152</sup> high rates of poverty, and chronic disease.<sup>153</sup> It has also left a large number of vacant lots. While some may view vacant lots as blight, residents saw an opportunity to turn them into community gardens. However, the current comprehensive plan and zoning code was difficult for residents to navigate.

A team led by Dr. Samina Raja, Associate Professor at the University of Buffalo, works with the Massachusetts Avenue Project (MAP), a community-based organization, to tackle one of Buffalo's biggest challenges - food insecurity. In 2008, the University team mapped grocery stores and found there were fewer grocery stores in communities of color than predominately white communities. MAP took on this challenge by bringing a mobile market to neighborhoods without a grocery store to increase residents' access to healthy and affordable foods; but an existing zoning ordinance restricted where the vehicle could park.

Through a partnership with the Buffalo Niagara Medical Campus, several organizations including the University of Buffalo, MAP, and others formed

Healthy Kids, Healthy Communities (with support from the Robert Wood Johnson Foundation)—at a time when Buffalo was focusing its efforts on policy improvement strategies. Buffalo was undergoing an update of its land use plan and zoning code, and the partnership saw an opportunity to highlight the links between zoning and food access. Youth from MAP's programs and other groups in Buffalo were invited to help educate community stakeholders on the benefits of improving access to healthy food sources. They also discussed the impact of zoning codes on growing healthy and culturally appropriate food in the community.

As a result of these educational efforts, the mayor announced his support of strategies that promote access to healthy foods at the first Buffalo Food Policy Summit. The city of Buffalo will likely implement a zoning code that supports an equitable food environment by including strategies such as making market gardens a permissible land use. In addition, the Food Policy Council of Buffalo and Erie County was created by the Erie County Board of Health, and will provide support and act as a resource on food systems and its impact on the health of the community.



## How a Model for Social Change Led to Grocery Stores and a Fast Food Moratorium

### Los Angeles, CA

South Los Angeles residents suffer from disproportionate rates of chronic disease<sup>154</sup> and low life expectancy.<sup>155</sup> In 1992, the nonprofit organization Community Health Councils (CHC) formed to address the health care safety net crisis in Los Angeles. Seven years later, health disparities loomed large in South LA, and CHC explored the root causes of these inequities. Using a model for social change grounded in community engagement and coalition building, CHC focused on inequities surrounding food and the built environment. The group took the time to build key relationships, an important step for addressing unintended consequences as they arose.

Community members, churches, and community-based organizations, in collaboration with CHC, led an intensive assessment that documented disparities in food access with support from CDC's *Racial and Ethnic Approaches to Community Health* program. Over 100 residents participated, many traveling to West LA (an area with some of the best health outcomes in the county) to note differences in the types of food available. Compared with West LA, South LA lacked sufficient grocery stores that carried healthful foods and faced an overabundance of fast food restaurants. The inequity in access to healthy foods became apparent, and community forums spurred dialogue about environmental impacts on health.

Residents envisioned what a healthy South LA would look like and determined that healthy food options were critical. With this groundwork and support from the community, CHC explored strategies to address the density of fast food restaurants and attract grocery stores. The City Council approved a Grocery Store and Sit-Down Restaurant Incentive package that created economic incentives for attracting healthy food retailers to South LA. Building upon relationships with the local planning department, CHC also worked to support the implementation of other strategies to create a healthier food environment. In 2008, the Los Angeles City Council established an interim control policy that placed a moratorium on permits for new stand-alone fast food restaurants in the targeted neighborhoods for a maximum



Examples of food options predominant in South Los Angeles, CA. Photo courtesy of Community Health Councils.

two-year period. The moratorium later became a permanent policy in the form of a general plan amendment preventing the development of new stand-alone fast food restaurants within a half-mile of an existing establishment.

By focusing on the needs identified by community members, CHC made meaningful strides toward improving the food environment. Community members were involved in every step of the process. Lark Galloway Gilliam, Executive Director of CHC stated the key to a successful initiative: "Don't leave the community behind. Let the community lead."





## BREASTFEEDING PRACTICES AND POLICIES

SUPPORTIVE BREASTFEEDING STRATEGIES TO IMPROVE THE INITIATION, EXCLUSIVITY, AND DURATION OF BREASTFEEDING MAY INCLUDE ADDRESSING HOSPITAL PRACTICES (E.G., BABY-FRIENDLY HOSPITAL INITIATIVE<sup>156</sup>), SUPPORTING WORKPLACE ACCOMMODATIONS, AND BUILDING SUPPORTIVE COMMUNITY ENVIRONMENTS.

### MAKE THE CASE:

#### Why Is This A Health Equity Issue?

The issues below highlight the need for breastfeeding strategies that advance health equity:

- **Inadequate Access to Services and Support for Some Populations Experiencing Inequities:** Breastfeeding rates are lowest among African American mothers<sup>157,158</sup> and mothers living in rural areas.<sup>157,159,160</sup> Several factors may account for lower rates of breastfeeding among African American mothers, including how they are treated by health care providers with respect to breastfeeding encouragement and information.<sup>161</sup> For mothers in rural areas, factors such as poverty and inadequate access to needed maternity and health services may serve as barriers to breastfeeding.<sup>159,162</sup>
- **Limited Access to Breastfeeding Support in the Workplace:** Mothers returning to the workplace may face several barriers to breastfeeding due to workplace conditions (e.g., break time for pumping, onsite storage) and the level of benefits provided (e.g., maternity leave).<sup>157</sup> For instance, many mothers do not have paid maternity leave. Additionally, those with lower incomes and those in the service and manufacturing fields have been found to have even lower rates of paid maternity/family leave.<sup>157</sup> Breastfeeding may also be particularly challenging for hourly, low-wage mothers as they may have less flexibility and break options.<sup>157,163</sup>
- **Social Norms May Serve as a Barrier for Underserved Communities:** Social norms such as lack of support from family and friends<sup>161</sup> and not having examples of breastfeeding<sup>157,164</sup> may be barriers for some population groups. Additional barriers may include norms around the sexual role of breasts as opposed to their nurturing function of breastfeeding, and perceptions of breastfeeding as an unusual feeding option.<sup>157,164</sup>



## Design and Implement with Health Equity in Mind

To maximize health impact and advance health equity, consider these factors and others when designing, implementing, and evaluating breastfeeding strategies:

KEY FACTORS	BARRIERS OR UNINTENDED CONSEQUENCES	OPPORTUNITIES TO MAXIMIZE IMPACT
<p><b>LIMITED RESOURCES &amp; CAPACITY</b></p> <p>Address challenges to implementing hospital practices that increase breastfeeding initiation</p>	<p>The process required for achieving official Baby-Friendly Hospital designation may seem too rigorous for some facilities or present barriers within overburdened hospitals.</p>	<ul style="list-style-type: none"> <li>• Provide additional support to hospitals serving populations with disparities in breastfeeding to help them work toward Baby-Friendly Hospital designation.</li> <li>• Understand challenges to implementing Baby-friendly Hospitals and work with hospitals to identify and implement incremental steps toward encouraging breastfeeding.</li> </ul>
<p><b>VARIABILITY IN CARE PROVIDED</b></p> <p>Ensure sufficient breastfeeding support from health care providers and staff</p>	<p>Varying cultural and socioeconomic factors, as well as a lack of information on breastfeeding, may result in some women not receiving the support they need to initiate and continue breastfeeding.<sup>165</sup></p>	<ul style="list-style-type: none"> <li>• Train providers on breastfeeding disparities and approaches to address cultural and economic barriers to ensure they provide appropriate breastfeeding education to all.</li> <li>• Encourage hospitals to partner with the Women, Infants, and Children Program (WIC)<sup>166</sup> to ensure continuity of breastfeeding support for low-income mothers following discharge.</li> </ul>
<p><b>TRAINING NEEDS</b></p> <p>Provide adequate and culturally competent training for peer counselors who provide breastfeeding advice</p>	<p>Mothers may get discouraged from breastfeeding when they face challenges and do not have support from properly trained individuals.</p>	<ul style="list-style-type: none"> <li>• Encourage use of properly trained peer counselors, along with professional support, to provide culturally tailored support for breastfeeding.<sup>157,167</sup></li> <li>• Partner with WIC and other organizations to identify residents who reflect the cultural values of breastfeeding mothers and can be trained as peer counselors.</li> </ul>
<p><b>VARIABILITY IN ADOPTION &amp; IMPLEMENTATION OF BREASTFEEDING STRATEGIES</b></p> <p>Collaborate with community resources to enhance worksite breastfeeding support</p>	<p>Some employers, including those that employ low-wage staff, may not understand how to properly accommodate breastfeeding workers. They may also lack the resources and infrastructure (e.g., space, refrigeration) to comply with breastfeeding regulations.</p>	<ul style="list-style-type: none"> <li>• Reach out to employers, including those that employ low-wage staff, to address workplace barriers and provide support for breastfeeding accommodation.</li> <li>• For smaller businesses, consider addressing barriers by building partnerships among employers located close to one another to combine resources (e.g., establish one common space that can be used by all their employees).</li> <li>• Find creative solutions to provide information and accessible spaces for breastfeeding mothers (e.g., leverage existing community infrastructure such as faith-based institutions, libraries, childcare centers).</li> </ul>

## Build the Team: Partnership for Success

Successful efforts to implement supportive breastfeeding strategies depend on bringing a diverse set of partners to the table early, consistently, and authentically. These partners may include the following:

- Chambers of commerce
- Childcare centers and provider organizations (e.g., Head Start)
- Community-based organizations
- Community members (of diverse abilities, ages, cultures, gender, income levels, race/ethnicity, and sexual orientation)
- Cultural institutions and networks
- Faith-based organizations
- Family members
- Health care systems, hospitals, community clinics, and health care providers
- Local businesses
- Local/regional employers (particularly employers of low-income, hourly workers)
- Public health agencies
- Regional and local breastfeeding coalitions (e.g. La Leche League, lactation consultants)
- Social service agencies
- State and local WIC programs



## Promoting Baby-Friendly Hospitals to Increase Equity

### Los Angeles, CA

Of the 50 California counties where births occur, Los Angeles County ranked 43<sup>rd</sup> out of 50 for exclusive breastfeeding rates. Furthermore, Los Angeles County housed 9 of the 15 lowest scoring hospitals in the state.<sup>168</sup> In response, Breastfeed LA: Breastfeeding Task Force of Greater Los Angeles collaborated with the Regional Perinatal Programs of California to provide training and technical assistance to improve the quality of maternal care and guide hospitals toward the Baby-Friendly Hospital designation.

In 2008 and 2009, Breastfeed LA reached out to hospital decision makers, emphasizing breastfeeding as a quality improvement indicator and promoting baby-friendly practices. Focusing on three counties with the lowest rates of exclusive breastfeeding, the group provided bedside nurse and train-the-trainer workshops using the Birth and Beyond California<sup>169</sup> curriculum. Priority was given to hospitals with high birth rates, high rates of Medi-Cal (state Medicaid) use, and low breastfeeding rates. The funding for this project was from the California

Department of Public Health Federal Title V Maternal and Child Health Block Grant.

Hospital participation in some areas was sluggish at first. To overcome lack of interest, Breastfeed LA, with funding from First 5 LA, encouraged local public health officials to become champions by making the case to hospitals that breastfeeding is a public health issue. Grants were given to targeted hospitals from the First 5 LA Baby-Friendly Hospital Project, which helped these hospitals overcome the cost barrier for staff training and systems improvements. These hospitals primarily serve women of color and low-income women.



Collaborative learning has been a key strategy. Breastfeed LA and the Los Angeles County Department of Public Health are convening three Regional Hospital Breastfeeding Consortia where lower performing hospitals can learn from higher performing ones. Since the Consortia kickoff in April 2010, 11 LA hospitals have achieved Baby-Friendly Hospital designation. Many more are in the process.

**Note:** Breastfeed LA is a partner with the County of Los Angeles, Department of Public Health to continue the vital work of encouraging and guiding hospitals to improve maternity care practices and ultimately achieve Baby-Friendly designation. With support from CDC's *Communities Putting Prevention to Work* program, the three County Hospitals achieved the Baby-Friendly Designation, and technical assistance is being provided to 16 additional hospitals with support from CDC's *Community Transformation Grants* program.



Family participating in the Healthy Start Brooklyn program. Photo Courtesy of Healthy Start Brooklyn.

## Building Community Capacity to Support Breastfeeding

### New York, NY

Breastfeeding initiation rates in central Brooklyn hospitals were high,<sup>170</sup> but women may have found breastfeeding challenging to maintain and integrate into their daily routines.<sup>171</sup> With funding from the Health Resources and Services Administration, Healthy Start Brooklyn (HSB) found innovative ways to support these women. Coordinated efforts that focused on five low-income, predominantly African American and Latino neighborhoods created empowerment zones to shift breastfeeding practices and norms.

The By My Side program was developed to deliver low-cost services to low-income and immigrant women. It also opened up job opportunities for women living in the targeted neighborhoods. Women were trained as doulas, providing emotional, physical, and informational support to mothers during delivery and conducting home visits before and after birth. Doula services that are typically available to higher-wealth communities are now accessible by low-income families through By My Side. The doulas also serve as lactation consultants, offering guidance

on how to breastfeed and linking mothers to resources such as HSB's Breastfeeding 911! Hotline.

Program results show that mothers who have used a doula have higher rates of exclusive breastfeeding. In addition to integrating doula services into hospital practices, HSB has reached out to organizations with strong community ties to initiate culturally appropriate breastfeeding support, expanding the training program so organizations can offer their own doula services. By March 2012, the program had successfully trained more than 30 women in the community. These doulas, along with those already working for By My Side, have participated in more than 100 births.

HSB supports the continuation of breastfeeding behaviors beyond hospital doors by shifting community norms, creating new long-term economic opportunities, and improving the lives of women and their families overall. Some 125 faith-based institutions now have breastfeeding spaces and signs on their premises. Working with pharmacies to provide a space for breastfeeding in their stores is a next step.



# APPENDICES



## **APPENDIX A**

Health Disparities in Chronic Disease Risk Factors by Population Group

## **APPENDIX B**

Considerations for Health Equity-Oriented Strategy Selection, Design, and Implementation

## **APPENDIX C**

Example Resources for Identifying and Understanding Health Inequities

## **APPENDIX D**

*Health Equity Checklist: Considering Health Equity in the Strategy Development Process*



## HEALTH DISPARITIES IN CHRONIC DISEASE RISK FACTORS BY POPULATION GROUP

Despite decades of effort to reduce and eliminate health disparities, they have largely persisted—and in some cases are widening.<sup>9-11</sup> Specifically related to chronic diseases, there is a concentrated, disproportionate burden of chronic disease in many underserved populations and communities. The table below describes disparities in chronic disease risk factors by various population groups.


**PEOPLE OF COLOR  
(RACIAL/ETHNIC  
MINORITIES)**

According to the 2010 Census, approximately 16% of Americans identified themselves as Hispanic or Latino, 13% as Black, 5% as Asian, 1% as American Indian and Alaska Native, and 0.2% as Native Hawaiian and other Pacific Islander.<sup>231</sup> On a variety of health indicators, significant disparities among these racial and ethnic minorities continue to exist.<sup>7,232</sup> For example, adult obesity rates in the U.S. are higher among non-Hispanic African Americans (50%) and Mexican Americans (40%) than among non-Hispanic Whites (35%), and they are highest among African American women, at 59%.<sup>233</sup> In 2011, cigarette smoking among adults was highest among American Indian/Alaska Native populations (32%), compared to other racial/ethnic groups.<sup>234</sup>

**PEOPLE WITH  
MENTAL OR  
SUBSTANCE USE  
DISORDERS**

In the United States, adults with mental or substance use disorders comprise approximately 25% of the population. However, this population accounts for an estimated 40% of all cigarettes smoked resulting in a disproportionate burden from the health consequences of smoking.<sup>235</sup>

**PEOPLE LIVING  
IN RURAL  
COMMUNITIES**

Approximately 19%, or 60 million Americans, live in rural areas.<sup>236</sup> Rural residents are more likely to be elderly, in poverty, in fair or poor health, and to have chronic health conditions.<sup>48</sup> For example, the prevalence of obesity is higher in rural adults (40%) than urban adults (33%).<sup>237</sup> Adults living in non-metropolitan counties also have a higher average annual percentage of smoking (27%) than adults living in large metropolitan counties (18%).<sup>238</sup>

**PEOPLE WITH  
DISABILITIES**

Approximately 20% of U.S. adults have a disability.<sup>239</sup> Approximately 28% of adults with disabilities smoke, compared to 16% of those without a disability.<sup>31</sup> Adults with disabilities are more likely to be physically inactive (22%) than are adults without disabilities (10%).<sup>240</sup> Obesity is also higher among adults with a disability (38%) compared to those without a disability (24%), according to self-reported data.<sup>241</sup>

**PEOPLE WITH  
LOW-INCOME  
AND THOSE  
EXPERIENCING  
POVERTY**

In 2011, an estimated 15% of the U.S. population lived below the federal poverty level.<sup>152</sup> Poverty is correlated with perceived and actual poor health outcomes. People living in poverty are five times more likely to report their health as “poor” compared to high-income individuals.<sup>242</sup> People with a household income below the poverty line (29%) have a much higher prevalence of smoking compared to people with household incomes at or above the poverty line (18%).<sup>234</sup> Healthy eating (specifically fruit and vegetable consumption) is also lower among low-income populations compared to higher income populations.<sup>243</sup>

**PEOPLE WITH  
LESS THAN A  
HIGH SCHOOL  
EDUCATION**

Approximately 15 % of Americans 25 years old and older have not earned a high school diploma.<sup>244</sup> Those with undergraduate degrees have a lower prevalence of smoking (9%), compared to those with less than a high school education (25%) or only a high school diploma (24%).<sup>234</sup> Additionally, those with a GED have the highest prevalence of smoking (45%). Regarding obesity, college graduates or above had the lowest rate of obesity (28%) in 2009-2010, compared to those with less than a high school education (38%).<sup>245</sup>

**OLDER ADULTS**

The proportion of our nation’s population aged 65 years and older is expected to increase from approximately 13% of the population in 2010 to an estimated 19% in 2030.<sup>246</sup> In 2009–2010, 45% of adults aged 65 and over were diagnosed with two or more chronic conditions.<sup>247</sup> Regarding inequities, older adults living in poverty and isolation may be particularly vulnerable.<sup>248</sup>

**PEOPLE WHO  
IDENTIFY AS  
LESBIAN, GAY,  
BISEXUAL, OR  
TRANSGENDER  
(LGBT)**

The lesbian, gay, or bisexual population is estimated at 3.5% in the United States, with an additional 0.3% identifying as transgender.<sup>249</sup> Regarding sexual orientation, use of any tobacco products have been found to be higher among lesbian, gay, bisexual, and transgender populations (38.5%) compared to the heterosexual/straight population (25.3%).<sup>61</sup> Obesity prevalence has also been noted among the LGBT community, particularly among lesbians who have been shown to have a higher prevalence of being overweight and obese than heterosexual women who are overweight and obese.<sup>250</sup>

**NOTE:** This list is not exhaustive and the groups are not mutually exclusive; individuals may belong to more than one population group.



## CONSIDERATIONS FOR HEALTH EQUITY-ORIENTED STRATEGY SELECTION, DESIGN, AND IMPLEMENTATION

Policy, systems, and environmental improvement strategies have great potential to prevent and reduce health inequities, affect a large portion of a population, and can also be leveraged to address the underlying social determinants of health. **However, without careful design and implementation, such interventions may inadvertently widen health inequities.** Collaborate with partners and community members, including those experiencing health inequities, to identify possible barriers or negative unintended consequences that may limit a strategy’s effectiveness. Then, account for identified challenges in strategy development to maximize the health effects for all and reduce health inequities. Consider the following barriers, unintended consequences, and questions when selecting, designing, and implementing equity-oriented strategies:

1

### LIMITED COMMUNITY CAPACITY AND RESOURCES

Variability in community capacity and resources can influence decisions about which communities and community organizations to partner with, especially if resources are limited. While there are benefits to funding and collaborating with partners that can “hit the ground running,” it is also important to build the capacity of other groups through training and additional support.

- Has lack of capacity or resources kept critical partners away?
- What training opportunities can build the capacity of residents or organizations to make community improvements?
- Are the same organizations repeatedly benefiting from funds distributed in the community? What steps can you take to engage other organizations?

2

### VARIABILITY IN HEALTH LITERACY

Addressing health literacy means ensuring that all members of the community have the capacity to access and understand the information they need to engage in health improvement strategies or reap their health benefits.

- Will the improvements be understood by all community members?
- Is training needed to support and sustain the improvements?
- How will language, culture, and other differences be accommodated?

3

### LACK OF COMMUNITY ENGAGEMENT, AWARENESS, AND PARTICIPATION

A well-designed effort may fail to reach its full potential if residents are unaware of the improvements or were not invited to participate in the planning and implementation process. Community residents and stakeholders should be consulted and engaged from the very start, and this engagement should be sustained throughout the process.

- How will stakeholders representative of the community’s diversity be engaged?
- What steps will be taken to engage community members in planning, implementation, and evaluation?



4

#### COST, RESOURCES, AND OTHER FISCAL CONSIDERATIONS

There may be costs related to strategy implementation, either for the institutions making the improvements, or for the people who are the intended beneficiaries of these improvements. Examine how budget constraints may hinder implementation or uptake in underserved communities.

- Will costs prevent underserved populations from fully benefitting from the strategy? How can affordability be ensured for all?
- Which partners might be able to help provide required resources (e.g., funding, materials, staff, other assets) to implement the strategy?

5

#### TRANSPORTATION CHALLENGES

Lack of personal transportation, unaffordable or unreliable public transportation, or inadequate infrastructure may reduce access to goods, services, or environmental improvements, including tobacco cessation services and other health care services. Explore whether transportation issues such as access, cost, and proximity exist.

- Is lack of transportation a problem for the intended beneficiaries of the strategy?
- Are the locations where services are provided too distant, inconvenient, inaccessible, or unsafe?

6

#### POTENTIAL DISPLACEMENT EFFECTS

Changing community conditions may contribute to cycles of displacement. It is important to ensure that improvements will benefit residents rather than create conditions that displace them. Identify factors that may drive displacement and protections that can prevent it.

- How might community improvement strategies lead to displacement in the future?
- What protections can be put in place to preserve affordable housing and prevent displacement?
- How might concerns about displacement prevent residents from engaging in community improvements?

7

#### VARIABILITY IN IMPLEMENTATION

Uneven implementation of a policy or systems improvement may worsen inequities. Explore the factors (including those listed in this table) that might prevent consistent implementation of a strategy and develop solutions early in the planning process.

- Once your strategy is adopted or implemented, what steps will ensure proper implementation?
- How will you ensure implementation occurs where it's needed most?
- Which institutions need additional support to implement the improvements?

8

#### CRIME/SAFETY INFLUENCES (BOTH REAL AND PERCEIVED)

Even if effective strategies are put in place, fear of crime at locations where the intervention or service is being delivered may keep residents from using the new resources. Assess safety conditions and residents' perceptions of these conditions, and, if necessary, take steps to ensure participants' safety.

- How might concerns about safety prevent the community from benefitting from the strategy?
- Are there visible signs of crime and violence?

9

#### LACK OF AWARENESS OF DIVERSE NORMS AND CUSTOMS

Understanding the diversity in culture, norms, and customs among population groups can ensure that strategies are designed to be inclusive. Institutions also have their own customs and norms, and these should also be considered, as they might affect decision making.

- How will community members with different norms and customs be engaged in strategy design?
- Are differences in culture and norms understood in ways that result in respectful strategy development?



## EXAMPLE RESOURCES FOR IDENTIFYING AND UNDERSTANDING HEALTH INEQUITIES

This table describes several online resources that you may be able to use to identify and understand health inequities in your area. This list is not exhaustive and you should determine what best fits your local needs.

### BEHAVIORAL RISK FACTOR SURVEILLANCE SYSTEM (BRFSS)<sup>251</sup>

A state-based system of health surveys that collects information on health risk behaviors, preventive health practices, and health care access primarily related to chronic disease and injury.

### CENSUS DATA<sup>252</sup>

A database that provides demographic information on income, education, race/ethnicity, housing, and other factors that are viewable at multiple levels: national, state, county, and smaller geographic areas. Interactive features also allow cross tabulation of indicators and population groups.

### COMMUNITY COMMONS<sup>253</sup>

An online interactive mapping tool that provides free geographic information systems (GIS) data from the state level to the block group level. The Commons is linked to the National Prevention Strategy and provides a peer learning network and other resources.

### COMMUNITY HEALTH ASSESSMENT & GROUP EVALUATION (CHANGE): BUILDING A FOUNDATION OF KNOWLEDGE TO PRIORITIZE COMMUNITY NEEDS<sup>7</sup>

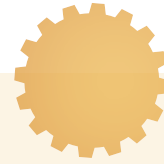
A tool to help community teams develop a community action plan. This tool provides steps for community team members to use in an assessment process. It also helps define and prioritize possible areas of improvement to address the root causes of chronic diseases, as well as related risk factors.

### COUNTY HEALTH RANKINGS: MOBILIZING ACTION TOWARD COMMUNITY HEALTH<sup>254</sup>

A ranking of counties in each of the 50 states according to summaries of a variety of health measures. Summary measures include health outcomes (mortality and morbidity) and health factors (health behaviors, clinical care, social and economic aspects, and physical environment).

**COMMUNITY  
HEALTH STATUS  
INDICATORS  
(CHSI)<sup>255</sup>**

A report that contains over 200 measures for each of the 3,141 U.S. counties. The report presents indicators for deaths due to heart disease and cancer as well as on behavioral factors such as tobacco use, diet, physical activity, alcohol and drug use, sexual behavior, and others that substantially contribute to these deaths.



**DATA SET  
DIRECTORY  
OF SOCIAL  
DETERMINANTS  
OF HEALTH AT THE  
LOCAL LEVEL<sup>256</sup>**

A directory that contains an extensive list of existing data sets that can be used to address social determinants of health. The data sets are organized according to 12 dimensions (broad categories) of the social environment.

**HEALTHY  
COMMUNITIES  
NETWORK (HCN)<sup>257</sup>**

A network that tracks over 200 health and quality-of-life indicators. It also provides guidance on 1,800-plus community-level interventions. Local information is collected and combined with other data.

**HEALTH  
DISPARITIES  
CALCULATOR<sup>258</sup>**

Statistical software from the National Cancer Institute that imports population-based health data and calculates different disparity measurements.

**HEALTH EQUITY  
INDEX<sup>259</sup>**

An online tool created by the Connecticut Association of Directors of Health that outlines and measures the social determinants of health with specific health outcomes. The index produces scores as well as GIS maps.

**HEALTH  
INDICATORS  
WAREHOUSE<sup>260</sup>**

A Web site maintained by CDC's National Center for Health Statistics. This resource provides data on communities' health status as well as different determinants. There are over 1,000 indicators that can be categorized by geography, initiative, or topic.

**THE TOOL FOR  
HEALTH AND  
RESILIENCE IN  
VULNERABLE  
ENVIRONMENTS  
(THRIVE)<sup>261</sup>**

A tool intended to help people understand and prioritize the factors within their own communities in order to improve health and safety. The tool identifies key factors around equitable opportunity, people, and place, and allows users to rate how important each factor might be in their community.



## HEALTH EQUITY CHECKLIST: CONSIDERING HEALTH EQUITY IN THE STRATEGY DEVELOPMENT PROCESS

*The Health Equity Checklist* provides questions for consideration when designing a strategy to ensure health equity remains central to all aspects of an initiative.

### STEP 1: IDENTIFY




Clearly identify health inequities and protective factors in both health outcomes and community conditions across population groups and geographic areas through the use of existing data, community input, and environmental assessments.

### STEP 2: ENGAGE

Include and meaningfully engage representatives of population(s)/area(s) defined in Step 1 in your partnerships, coalitions, or on leadership teams.

### STEP 3: ANALYZE

Ensure the selection, design, and implementation of strategies are linked to the inequities identified in Step 1, and will work to advance health equity. Consider the following:

-  Is the strategy TARGETED to a population group(s)/area(s) experiencing health inequities?
  - Is the outcome written in a way that allows you to measure the effect of efforts?
  - Is it culturally tailored to the unique needs of population group(s)/area(s) experiencing health inequities, and are potential barriers addressed?
-  Does the strategy rely on SITE SELECTION (e.g., selecting X number of sites for smoke-free cessation services, creating X number of farmers' markets)?
  - Do selection criteria for sites reflect populations/areas with the highest burden?
  - If not, are selection criteria logical and justified?
  - Are there additional supports provided for selected sites that might require them to be successful?
-  Is the strategy POPULATION-WIDE?
  - Have population(s)/area(s) experiencing health inequities been engaged in efforts to identify possible barriers and unintended consequences of the proposed strategy?
  - Are identified barriers regarding implementation and enforcement being addressed?
  - Have potential unintended consequences been considered and accounted for in proposed activities?

### STEP 4: REVIEW

Review evaluation and monitoring plans to ensure health equity-related efforts will be measured. Additionally, ensure appropriate data will be collected to conduct sub-analyses. These data will help in assessing the differential effects of each strategy across population group(s)/area(s), as well as the overall impact of strategies on reducing health inequities.

## REFERENCES

- Centers for Disease Control and Prevention. Anti-lobbying restrictions for CDC grantees. <http://www.cdc.gov/obesity/downloads/Anti-Lobbying-Restrictions-for-CDC-Grantees-July2012-508.pdf>. Accessed May 22, 2013.
- Centers for Disease Control and Prevention. Additional requirement #12. [http://www.cdc.gov/od/pgo/funding/grants/additional\\_req.shtm#ar12](http://www.cdc.gov/od/pgo/funding/grants/additional_req.shtm#ar12). Accessed May 22, 2013.
- Braveman PA, Kumanyika S, Fielding J, et al. Health disparities and health equity: the issue is justice. *Am J Public Health*. 2011;101(suppl 1):S149-S155.
- Centers for Disease Control and Prevention. Chronic diseases and health promotion. <http://www.cdc.gov/chronicdisease/overview/index.htm>. Accessed June 8, 2012.
- Smedley BD, Stith AY, Nelson AR. *Unequal Treatment: Confronting Racial and Ethnic Disparities in Healthcare*. Washington, DC: National Academies Press;2003.
- Williams DR. Race, socioeconomic status, and health: the added effects of racism and discrimination. *Ann N Y Acad Sci*. 1999;896(1):173-188.
- Centers for Disease Control and Prevention. CDC health disparities and inequalities report - United States, 2011. *MMWR Morb Mortal Wkly Rep*. 2011;60(Supplement):1-113.
- National Center for Health Statistics. *Healthy People 2010 Final Review*. Hyattsville, MD: National Center for Health Statistics;2012.
- Keppel KG, Percy JN, Heron MP. Is there progress toward eliminating racial/ethnic disparities in the leading causes of death? *Public Health Rep*. 2010;125(5):689-697.
- Orsi JM, Margellos-Anast H, Whitman S. Black-white health disparities in the United States and Chicago: a 15-year progress analysis. *Am J Public Health*. 2010;100(2):349-356.
- National Center for Health Statistics. *Health, United States, 2011: With Special Feature on Socioeconomic Status and Health*. Hyattsville, MD: National Center for Health Statistics;2012.
- Healthypeople.gov. Determinants of health. <http://www.healthypeople.gov/2020/about/DOHAbout.aspx#socialfactors>. Accessed February 26, 2013.
- US Department of Health and Human Services. Framework: the vision, mission, and goals of Healthy People 2020. <http://www.healthypeople.gov/2020/Consortium/HP2020Framework.pdf>. Accessed February 26, 2013.
- Centers for Disease Control and Prevention. Ten great public health achievements - United States, 1900-1999. *MMWR Morb Mortal Wkly Rep*. 1999;48(12):241-243.
- Centers for Disease Control and Prevention. Ten great public health achievements - United States, 2001-2010. *MMWR Morb Mortal Wkly Rep*. 2011;60(19):619-623.
- Centers for Disease Control and Prevention. State, tribal, local, and territorial public health professionals gateway: policy at CDC. <http://www.cdc.gov/stltpublichealth/Policy/index.html>. Accessed June 8, 2012.
- Centers for Disease Control and Prevention. Community Health Assessment and Group Evaluation (CHANGE) action guide: building a foundation of knowledge to prioritize community needs. <http://www.cdc.gov/healthycommunitiesprogram/tools/change.htm> Accessed May 22, 2013.
- Braveman P. Health disparities and health equity: concepts and measurement. *Annu Rev Public Health*. 2006;27:167-194.
- Braveman P, Gruskin S. Defining equity in health. *J Epidemiol Community Health*. 2003;57(4):254-258.
- US Department of Health and Human Services. Social determinants of health. <http://www.healthypeople.gov/2020/topicsobjectives2020/overview.aspx?topicid=39>. Accessed July 19, 2013.
- Alameda County Public Health Department. Organizational transformation. <http://www.acphd.org/social-and-health-equity/organizational-transformation.aspx>. Accessed June 11, 2012.

## REFERENCES (Continued)

22. Bay Area Regional Health Inequities Initiative. Local health department organizational self-assessment for addressing health inequities: toolkit and guide to implementation. <http://www.barhii.org/resources/toolkit.html>. Accessed August 21, 2012.
23. Mohan M. Personal Communication with Lark Galloway-Gilliam. In: Prevention Institute, ed2012.
24. Satcher D. Include a social determinants of health approach to reduce health inequities. *Public Health Rep.* 2010;125(Supplement 4):6-7.
25. Centers for Disease Control and Prevention. *Health Equity Checklist: Considering Health Equity in the Strategy Development Process*. Atlanta, GA: US Dept of Health and Human Services;2010.
26. Centers for Disease Control and Prevention. Health impact assessment. <http://www.cdc.gov/healthyplaces/hia.htm>. Accessed June 01, 2012.
27. Haber R. Health equity impact assessment: a primer. [http://www.threesource.ca/documents/March2011/health\\_equity.pdf](http://www.threesource.ca/documents/March2011/health_equity.pdf). Accessed May 22, 2013.
28. Mapping Our Voices for Equality (MOVE). Map. <http://www.mappingvoices.org/>. Accessed May 22, 2013.
29. Potvin L, Mantoura P, Ridde V. Evaluating equity in health promotion. In: McQueen D, Jones C, eds. *Global Perspectives on Health Promotion Effectiveness*. Atlanta, GA: Springer Science & Business Media; 2007:367-384.
30. Centers for Disease Control and Prevention. Cigarette smoking - United States 1965-2008. *MMWR Morb Mortal Wkly Rep.* 2011;60(Suppl):109-113.
31. Centers for Disease Control and Prevention. *Cigarette Smoking and People with Disabilities: A Tip Sheet for Public Health Professionals*. Atlanta, GA: National Center on Birth Defects and Development Disabilities;2009.
32. Centers for Disease Control and Prevention. *Best Practices for Comprehensive Tobacco Control Programs-2007*. Atlanta, GA: US Dept of Health and Human Services, Centers for Disease Control and Prevention, National Center for Chronic Disease Prevention and Health Promotion, Office of Smoking and Health;2007.
33. Centers for Disease Control and Prevention. State smoke-free laws for worksites, restaurants, and bars--United States, 2000-2010. *MMWR Morb Mortal Wkly Rep.* 2011;60(15):472-475.
34. American Nonsmokers' Rights Foundation. State, commonwealths, and municipalities with 100% smokefree laws in non-hospitality workplaces, restaurants, or bars. <http://www.no-smoke.org/pdf/100ordlist.pdf>. Accessed August 22, 2012.
35. US Department of Health and Human Services. *The Health Consequences of Involuntary Exposure to Tobacco Smoke: A Report of the Surgeon General*. Atlanta, GA: US Dept of Health and Human Services, Centers for Disease Control and Prevention, Coordinating Center for Health Promotion, National Center for Chronic Disease Prevention and Health Promotion, Office on Smoking and Health;2006.
36. Berman M, Post C, Tobacco Control Legal Consortium. Secondhand smoke and casinos. [http://publichealthlawcenter.org/sites/default/files/resources/tclc-syn-casinos-2007\\_0.pdf](http://publichealthlawcenter.org/sites/default/files/resources/tclc-syn-casinos-2007_0.pdf). Accessed May 2, 2013.
37. US Bureau of Labor Statistics. *Labor Force Characteristics by Race and Ethnicity, 2010*. Washington, D.C.: US Dept of Labor and US Bureau of Labor Statistics;2011.
38. Osypuk TL, Subramanian SV, Kawachi I, Acevedo-Garcia D. Is workplace smoking policy equally prevalent and equally effective among immigrants? *J Epidemiol Community Health.* 2009;63:784-791.
39. Gerlach KK, Shopland DR, Hartman AM, Gibson JT, Pechacek TF. Workplace smoking policies in the United States: results from a national survey of more than 100,000 workers. *Tob Control.* 1997;6(3):199-206.

## REFERENCES (Continued)

40. Moore RS, Annechino RM, Lee JP. Unintended consequences of smoke-free bar policies for low-SES women in three California counties. *Am J Prev Med*. 2009;37(suppl 2):S138-S143.
41. Substance Abuse and Mental Health Services Administration. *Results from the 2008 National Survey on Drug Use and Health: National Findings*. Rockville, MD: Substance Abuse and Mental Health Services Administration - Office of Applied Studies;2009.
42. Stevens S, Colwell B, Hutchison L. Tobacco use in rural areas. In: Gamm L, Hutchison L, Dabney B, Dorsey A, eds. *Rural Healthy People 2010: A Companion Document to Healthy People 2010*. Vol 2. College Station, TX: The Texas A&M University System Health Science Center, School of Rural Public Health, Southwest Rural Health Research Center; 2003.
43. Wood LE. *The Economic Impact of Tobacco Production in Appalachia*. Washington, DC: Appalachian Regional Commission; 1998.
44. Báezconde-Garbanati L, Beebe LA, Pérez-Stable EJ. Building capacity to address tobacco-related disparities among American Indian and Hispanic/Latino communities: conceptual and systemic considerations. *Addiction*. 2007;102(suppl 2):112-122.
45. Yerger VB, Malone RE. African American leadership groups: smoking with the enemy. *Tob Control*. 2002;11(4):336-345.
46. Portugal C, Cruz TB, Espinoza L, Romero M, Baezconde-Garbanati L. Countering tobacco industry sponsorship of Hispanic/Latino organizations through policy adoption: a case study. *Health Promot Pract*. 2004;5(Suppl 3):143S-156S.
47. Raebeck A, Campbell R, Balbach E. Unhealthy partnerships: the tobacco industry and African American and Latino labor organizations. *J Immigr Minor Health*. 2010;12(2):228-233.
48. Agency for Healthcare Research and Quality. *National Healthcare Disparities Report 2011*. Rockville, MD: Agency for Healthcare Research and Quality;2012.
49. Fagan P, Moolchan ET, Lawrence D, Fernander A, Ponder PK. Identifying health disparities across the tobacco continuum. *Addiction*. 2007;102(suppl 2):5-29.
50. Moolchan ET, Fagan P, Fernander AF, et al. Addressing tobacco-related health disparities. *Addiction*. 2007;102(suppl 2):30-42.
51. Centers for Disease Control and Prevention. Smoking & tobacco use: Montana. [http://www.cdc.gov/tobacco/data\\_statistics/state\\_data/state\\_highlights/2010/states/montana/index.htm](http://www.cdc.gov/tobacco/data_statistics/state_data/state_highlights/2010/states/montana/index.htm). Accessed July 17, 2013.
52. Montana Tobacco Prevention Advisory Board. Montana tobacco use prevention plan. [http://s3.amazonaws.com/zanran\\_storage/tobaccofree.mt.gov/ContentPages/43378690.pdf](http://s3.amazonaws.com/zanran_storage/tobaccofree.mt.gov/ContentPages/43378690.pdf). Accessed July 17, 2013.
53. US Department of Housing and Urban Development. Resident Characteristics Report: public housing. <https://pic.hud.gov/pic/RCRPublic/rcrmain.asp>. Accessed January 16, 2013.
54. Kraev TA, Adamkiewicz G, Hammond SK, Spengler JD. Indoor concentrations of nicotine in low-income, multi-unit housing: associations with smoking behaviours and housing characteristics. *Tob Control*. 2009;18(6):438-444.
55. DiFranza JR, Aligne CA, Weitzman M. Prenatal and postnatal environmental tobacco smoke exposure and children's health. *Pediatrics*. 2004;113(suppl 3):1007-1015.
56. King BA, Travers MJ, Cummings KM, Mahoney MC, Hyland AJ. Secondhand smoke transfer in multiunit housing. *Nicotine Tob Res*. 2010;12(11):1133-1141.
57. Helburn A. A case for smoke free housing. 2007. [http://www.hria.org/uploads/reports/HRIA-Smoke\\_Free\\_Housing\\_2007.pdf](http://www.hria.org/uploads/reports/HRIA-Smoke_Free_Housing_2007.pdf). Accessed April 19, 2013.
58. Fiore MC, Jaen CR, Baker TB, et al. *Treating Tobacco Use and Dependence: 2008 Update*. Rockville, MD: US Dept of Health and Human Services - Public Health Service;2008.

## REFERENCES (Continued)

59. Centers for Disease Control and Prevention. Quitting smoking among adults --- United States, 2001--2010. *MMWR Morb Mortal Wkly Rep.* 2011;60(44):1513-1519.
60. Centers for Disease Control and Prevention. Vital signs: current cigarette smoking among adults aged  $\geq 18$  years --- United States, 2005--2010. *MMWR Morb Mortal Wkly Rep.* 2011;60(35):1207-1212.
61. King BA, Dube SR, Tynan MA. Current tobacco use among adults in the United States: findings from the National Adult Tobacco Survey. *Am J Public Health.* 2012;102(11):e93-e100.
62. Lee JGL, Griffin GK, Melvin CL. Tobacco use among sexual minorities in the USA, 1987 to May 2007: a systematic review. *Tob Control.* 2009;18(4):275-282.
63. Ryan H, Wortley PM, Easton A, Pederson L, Greenwood G. Smoking among lesbians, gays, and bisexuals: a review of the literature. *Am J Prev Med.* 2001;21(2):142-149.
64. Lasser K, Boyd JW, Woolhandler S, Himmelstein DU, McCormick D, Bor DH. Smoking and mental illness: a population-based prevalence study. *JAMA.* 2000;284(20):2606-2610.
65. Armour BS, Campbell VA, Crews JE, Malarcher A, Maurice E, Richard RA. State-level prevalence of cigarette smoking and treatment advice, by disability status, United States, 2004. *Prev Chronic Dis.* 2007;4(4):1-11.
66. Kleykamp BA, Heishman SJ. The older smoker. *JAMA.* 2011;306(8):876-877.
67. Barbeau EM, Krieger N, Soobader M. Working class matters: socioeconomic disadvantage, race/ethnicity, gender, and smoking in NHIS 2000. *Am J Public Health.* 2004;94(2):269-278.
68. Levinson AH, Pérez-Stable EJ, Espinoza P, Flores ET, Byers TE. Latinos report less use of pharmaceutical aids when trying to quit smoking. *Am J Prev Med.* 2004;26(2):105-111.
69. Cokkinides VE, Halpern MT, Barbeau EM, Ward E, Thun MJ. Racial and ethnic disparities in smoking-cessation interventions: analysis of the 2005 National Health Interview Survey. *Am J Prev Med.* 2008;34(5):404-412.
70. Sonnenfeld N, Schappert SM, Lin X. Racial and ethnic differences in delivery of tobacco-cessation services. *Am J Prev Med.* 2009;36(1):21-28.
71. Doolan DM, Froelicher ES. Efficacy of smoking cessation intervention among special populations: review of the literature from 2000 to 2005. *Nurs Res.* 2006;55 (suppl 4):S29-S37.
72. Fu SS, Burgess DJ, Hatsukami DK, et al. Race and nicotine replacement treatment outcomes among low-income smokers. *Am J Prev Med.* 2008;35(6):S442-S448.
73. Fu SS, Burgess D, van Ryn M, Hatsukami DK, Solomon J, Joseph AM. Views on smoking cessation methods in ethnic minority communities: a qualitative investigation. *Prev Med.* 2007;44:235-240.
74. Cox LS, Okuyemi K, Choi WS, Ahluwalia JS. A review of tobacco use treatments in US ethnic minority populations. *Am J Health Promot.* 2011;25(suppl 5):11-30.
75. Bandi P, Cokkinides VE, Virgo KS, Ward EM. The receipt and utilization of effective clinical smoking cessation services in subgroups of the insured and uninsured populations in the USA. *J Behav Health Serv Res.* 2012;39(2):202-213.
76. Centers for Disease Control and Prevention. State medicaid coverage for tobacco-dependence treatments- United States, 2007. *MMWR Morb Mortal Wkly Rep.* 2009;58(43):1199-1204.
77. Blumenthal DS. Barriers to the provision of smoking cessation services reported by clinicians in underserved communities. *J Am Board Fam Med.* 2007;20(3):272-279.
78. Dickerson DL, Leeman RF, Mazure CM, O'Malley S. The inclusion of women and minorities in smoking cessation clinical trials: a systematic review. *Am J Addict.* 2009;18(1):21-28.



## REFERENCES (Continued)

79. US Department of Health and Human Services. *Preventing Tobacco Use Among Youth and Young Adults: A Report of the Surgeon General*. Atlanta, GA: US Department of Health and Human Services, Centers for Disease Control and Prevention, National Center for Chronic Disease Prevention and Health Promotion, Office on Smoking and Health;2012.
80. 111th Congress. Division A - Family Smoking Prevention and Tobacco Control Act Public Law 111-31. <http://www.fda.gov/TobaccoProducts/GuidanceComplianceRegulatoryInformation/ucm261829.htm>. Accessed June 12, 2012.
81. Institute of Medicine. *Ending the Tobacco Problem: A Blueprint for the Nation*. Washington, DC: The National Academies Press; 2007.
82. Siahpush M, Jones PR, Singh GK, Timsina LR, Martin J. The association of tobacco marketing with median income and racial/ethnic characteristics of neighbourhoods in Omaha, Nebraska. *Tob Control*. 2010;19(3):256.
83. John R, Cheney MK, Azad MR. Point-of-sale marketing of tobacco products: taking advantage of the socially disadvantaged? *J Health Care Poor Underserved*. 2009;20(2):489-506.
84. Laws MB, Whitman J, Bowser DM, Krech L. Tobacco availability and point of sale marketing in demographically contrasting districts of Massachusetts. *Tob Control*. 2002;11(suppl 2):ii71-ii73.
85. Sutton CD, Robinson RG. The marketing of menthol cigarettes in the United States: populations, messages, and channels. *Nicotine Tob Res*. 2004;6 (suppl 1):S83-S91.
86. Feighery EC, Ribisl KM, Clark PI, Haladjian HH. How tobacco companies ensure prime placement of their advertising and products in stores: interviews with retailers about tobacco company incentive programmes. *Tob Control*. 2003;12(2):184-188.
87. Federal Trade Commission. *Federal Trade Commission Cigarette Report for 2011*. Washington, DC: Federal Trade Commission;2013.
88. Feighery EC, Ribisl KM, Schleicher N, Lee RE, Halvorson S. Cigarette advertising and promotional strategies in retail outlets: results of a statewide survey in California. *Tob Control*. 2001;10(2):184-188.
89. Seidenberg AB, Caughey RW, Rees VW, Connolly GN. Storefront cigarette advertising differs by community demographic profile. *Am J Health Promot*. 2010;24(6):e26-e31.
90. Farrelly MC, Nonnemaker JM, Watson KA. The consequences of high cigarette excise taxes for low-income smokers. *PLoS ONE*. 2012;7(9):e43838.
91. Hyland A, Travers MJ, Cummings KM, Bauer J, Alford T, Wieczorek WF. Tobacco outlet density and demographics in Erie County, New York. *Am J Public Health*. 2003;93(7):1075-1076.
92. Schneider JE, Reid RJ, Peterson NA, Lowe JB, Hughey J. Tobacco outlet density and demographics at the tract level of analysis in Iowa: implications for environmentally based prevention initiatives. *Prev Sci*. 2005;6(4):319-325.
93. Siahpush M, Jones PR, Singh GK, Timsina LR, Martin J. Association of availability of tobacco products with socio-economic and racial/ethnic characteristics of neighbourhoods. *Public Health*. 2010;124(9):525-529.
94. Peterson NA, Yu D, Morton CM, Reid RJ, Sheffer MA, Schneider JE. Tobacco outlet density and demographics at the tract level of analysis in New Jersey: a statewide analysis. *Drugs Educ Prev Policy*. 2011;18(1):47-52.
95. PolicyLink, The Food Trust, The Reinvestment Fund. A healthy food financing initiative: an innovative approach to improve health and spark economic development. [http://www.policylink.org/atf/cf/%7B97c6d565-bb43-406d-a6d5-eca3bbf35af0%7D/HFFI\\_ADVOCACY3.PDF](http://www.policylink.org/atf/cf/%7B97c6d565-bb43-406d-a6d5-eca3bbf35af0%7D/HFFI_ADVOCACY3.PDF). Accessed May 22, 2013.
96. The Food Trust. What we do: in corner stores. <http://thefoodtrust.org/what-we-do/corner-store>. Accessed May 22, 2013.

## REFERENCES (Continued)

97. National Cancer Institute. Influence of tobacco marketing on smoking behavior. Tobacco Control Monograph No. 19. In: Davis RM, Gilpin EA, Loken B, Viswanath K, Wakefield MA, eds. *The Role of the Media in Promoting and Reducing Tobacco Use*. Bethesda, MD: National Cancer Institute, US Dept of Health and Human Services, National Institutes of Health; 2008:211-291.
98. Henriksen L, Schleicher NC, Feighery EC, Fortmann SP. A longitudinal study of exposure to retail cigarette advertising and smoking initiation. *Pediatrics*. 2010;126(2):232-238.
99. Carter OBJ, Mills BW, Donovan RJ. The effect of retail cigarette pack displays on unplanned purchases: results from immediate postpurchase interviews. *Tob Control*. 2009;18(3):218-221.
100. Treuhaft S, Karpyn A. The grocery gap: who has access to healthy food and why it matters. [http://www.policylink.org/site/c.lkIXLbMNJrE/b.5860321/k.A5BD/The\\_Grocery\\_Gap.htm](http://www.policylink.org/site/c.lkIXLbMNJrE/b.5860321/k.A5BD/The_Grocery_Gap.htm). Accessed August 22, 2012.
101. Larson NI, Story MT, Nelson MC. Neighborhood environments: disparities in access to healthy foods in the US. *Am J Prev Med*. 2009;36(1):74-81.
102. Moore LV, Diez Roux AV. Associations of neighborhood characteristics with the location and type of food stores. *Am J Public Health*. 2006;96(2):325-331.
103. Powell LM, Slater S, Mirtcheva D, Bao Y, Chaloupka FJ. Food store availability and neighborhood characteristics in the United States. *Prev Med*. 2007;44(3):189-195.
104. New Mexico Food and Agriculture Policy Council. Closing New Mexico's rural food gap. [http://farmtotablenm.org/wp-content/uploads/2013/03/closing\\_nm\\_food\\_gap\\_4pgs.pdf](http://farmtotablenm.org/wp-content/uploads/2013/03/closing_nm_food_gap_4pgs.pdf). Accessed September 9, 2013.
105. Jetter KM, Cassady DL. The availability and cost of healthier food alternatives. *Am J Prev Med*. 2006;30(1):38-44.
106. Liese AD, Weis KE, Pluto D, Smith E, Lawson A. Food store types, availability, and cost of foods in a rural environment. *J Am Diet Assoc*. 2007;107(11):1916-1923.
107. Andreyeva T, Blumenthal DM, Schwartz MB, Long MW, Brownell KD. Availability and prices of foods across stores and neighborhoods: the case of New Haven, Connecticut. *Health Aff (Millwood)*. 2008;27(5):1381-1388.
108. Zenk SN, Schulz AJ, Israel BA, James SA, Bao S, Wilson ML. Fruit and vegetable access differs by community racial composition and socioeconomic position in Detroit, Michigan. *Ethn Dis*. 2006;16(1):275-280.
109. Fair Food Network. Double Up Food Bucks program. 2011; <http://www.doubleupfoodbucks.org/about>. Accessed December 7, 2011.
110. Walker RE, Keane CR, Burke JG. Disparities and access to healthy food in the United States: a review of food deserts literature. *Health Place*. 2010;16(5):876-884.
111. Hendrickson D, Smith C, Eikenberry N. Fruit and vegetable access in four low-income food deserts communities in Minnesota. *Agric and Human Values*. 2006;23(3):371-383.
112. Flournoy R, PolicyLink. Healthy food, healthy communities: promising strategies to improve access to fresh, healthy food and transform communities. [http://www.policylink.org/atf/cf/%7B97c6d565-bb43-406d-a6d5-eca3bbf35af0%7D/HFHC\\_SHORT\\_FINAL.PDF](http://www.policylink.org/atf/cf/%7B97c6d565-bb43-406d-a6d5-eca3bbf35af0%7D/HFHC_SHORT_FINAL.PDF). Accessed May 22, 2013.
113. ChangeLab Solutions. Healthy corner stores: the state of the movement. <http://changelabsolutions.org/sites/default/files/documents/HCSRreport.pdf>. Accessed May 22, 2013.
114. ChangeLab Solutions. Getting to grocery: tools for attracting healthy food retail to underserved neighborhoods. <http://changelabsolutions.org/publications/getting-grocery>. Accessed August 23, 2012.

## REFERENCES (Continued)

115. The Food Trust. Building healthy communities: expanding access to fresh food retail. [http://prc.tulane.edu/uploads/REPORT\\_FINAL-1290013526.pdf](http://prc.tulane.edu/uploads/REPORT_FINAL-1290013526.pdf). Accessed August 23, 2012.
116. Poti JM, Popkin BM. Trends in energy intake among US children by eating location and food source, 1977-2006. *J Am Diet Assoc.* 2011;111(8):1156-1164.
117. Nielsen SJ, Siega-Riz AM, Popkin BM. Trends in energy intake in US between 1977 and 1996: similar shifts seen across age groups. *Obes Res.* 2002;10(5):370-378.
118. Block JP, Scribner RA, DeSalvo KB. Fast food, race/ethnicity, and income: a geographic analysis. *Am J Prev Med.* 2004;27(3):211-217.
119. Lewis LB, Sloane DC, Nascimento LM, et al. African Americans' access to healthy food options in South Los Angeles restaurants. *Am J Public Health.* Apr 2005;95(4):668-673.
120. Powell LM, Chaloupka FJ, Bao Y. The availability of fast-food and full-service restaurants in the United States: associations with neighborhood characteristics. *Am J Prev Med.* 2007;33(4):S240-S245.
121. Larson N, Story M, Nelson MC. Restaurant realities: inequalities in access to healthy restaurant choices. [http://www.healthyeatingresearch.org/images/stories/her\\_research\\_briefs/her\\_research\\_briefs/her%20restaurant%20realities\\_7-2008.pdf](http://www.healthyeatingresearch.org/images/stories/her_research_briefs/her%20restaurant%20realities_7-2008.pdf). Accessed January 16, 2013.
122. Creel JS, Sharkey JR, McIntosh A, Anding J, Huber Jr JC. Availability of healthier options in traditional and nontraditional rural fast-food outlets. *BMC Public Health.* 2008;8(1):395.
123. Cheyne A, Phil C, Dorfman L, Gonzalez P, Mejia P. Food and beverage marketing to children and adolescents: an environment at odds with good health. [http://www.healthyeatingresearch.org/images/stories/her\\_research\\_briefs/HER\\_RS\\_FoodMarketing\\_FINAL\\_4-6-11.pdf](http://www.healthyeatingresearch.org/images/stories/her_research_briefs/HER_RS_FoodMarketing_FINAL_4-6-11.pdf). Accessed June 12, 2012.
124. Britt JW, Frandsen K, Leng K, Evans D, Pulos E. Feasibility of voluntary menu labeling among locally owned restaurants. *Health Promot Pract.* 2011;12(1):18-24.
125. Elbel B, Kersh R, Brescoll VL, Dixon LB. Calorie labeling and food choices: a first look at the effects on low-income people in New York City. *Health Aff (Millwood).* 2009;28(6):w1110-w1121.
126. Mayor's Healthy Hometown Movement Food in Neighborhoods Committee. The state of food: a snapshot of food access in Louisville. <http://www.louisvilleky.gov/NR/rdonlyres/E8C0D055-E234-489D-A592-7792E323D106/0/StateofFoodFINAL.pdf>. Accessed July 19, 2013.
127. Gittelsohn J, Sharma S. Physical, consumer, and social aspects of measuring the food environment among diverse low-income populations. *Am J Prev Med.* Apr 2009;36(4 Suppl):S161-165.
128. Gordon A, Fox MK, Clark M, et al. *School Nutrition Dietary Assessment Study-III: Summary of Findings.* Washington, DC: US Department of Agriculture;2007.
129. Gleason P, Suitor C. *Children's Diets in the Mid-1990s: Dietary Intake and Its Relationship with School Meal Participation.* Alexandria, VA: US Dept of Agriculture, Food and Nutrition Service;2001.
130. Khan S, Pinckney RG, Keeney D, Frankowski B, Carney JK. Prevalence of food insecurity and utilization of food assistance program: an exploratory survey of a Vermont middle school. *J Sch Health.* 2011;81(1):15-20.
131. Story M, Kaphingst KM, French S. The role of child care settings in obesity prevention. *Future Child.* 2006;16(1):143-168.
132. US Department of Agriculture Food and Nutrition Service. *National School Lunch Program Fact Sheet.* Washington, DC: US Dept of Agriculture;2012.
133. US Department of Agriculture Food and Nutrition Services. *The School Breakfast Program - Fact Sheet.* Washington, DC: US Dept of Agriculture;2013.
134. US Department of Agriculture Food and Nutrition Services. Child & adult care food program. <http://www.fns.usda.gov/cnd/care/CACFP/aboutcacfp.htm>. Accessed May 9, 2013.

## REFERENCES (Continued)

135. US Department of Agriculture - Food and Nutrition Services Child Nutrition Programs. *Eligibility Manual for School Meals: Determining and Verifying Eligibility*. Washington, DC: US Dept of Agriculture;2012.
136. White House Task Force on Childhood Obesity. *Solving the Problem of Childhood Obesity Within a Generation - Section III*. Washington, DC: Executive Office of the President of the United States;2010.
137. National Council of La Raza. Profiles of Latino Health Series 3 - Issue 10: Hispanic participation in school-based nutrition programs. [http://www.nclr.org/images/uploads/pages/Jan12\\_Profiles\\_Issue\\_10.pdf](http://www.nclr.org/images/uploads/pages/Jan12_Profiles_Issue_10.pdf). Accessed June 10, 2012.
138. Stein K. Erasing the stigma of subsidized school meals. *J Am Diet Assoc*. 2008;108(12):1980-1983.
139. Mirtcheva DM, Powell LM. Participation in the National School Lunch Program: importance of school level and neighborhood contextual factors. *J Sch Health*. 2009;79(10):485-494.
140. United States Government Accountability Office. *School Meal Programs: Competitive Foods are Widely Available and Generate Substantial Revenue for Schools*. Washington, DC: Government Accountability Office;2005. GAO-05-563.
141. Story M, Kaphingst KM, French S. The role of schools in obesity prevention. *Future Child*. 2006;16(1):109-142.
142. Southern Nevada Health District. Community obesity survey: executive summary. <http://www.southernnevadahealthdistrict.org/download/white-papers/obesity-executive-report.pdf>. Accessed July 19, 2013.
143. Haboush A, Davidson D, Phebus T, Lopez E, Pitts C, Nevada Institute for Children's Research and Policy. Health status of children entering kindergarten in Nevada. [http://nic.unlv.edu/files/KHS%20Year%205%20Report\\_514.13\\_FinalRevised.pdf](http://nic.unlv.edu/files/KHS%20Year%205%20Report_514.13_FinalRevised.pdf). Accessed July 19, 2013.
144. Bibb County School District. Bibb County school nutrition program. <http://schools.bibb.k12.ga.us/Page/399>. Accessed April 6, 2012.
145. Arnold CA. *Fair and Healthy Land Use: Environmental Justice and Planning*. Chicago, IL: American Planning Association; 2007.
146. Ellickson R, Been V. *Land-Use Controls: Cases and Materials*. 3rd ed. New York, NY: Aspen Publishers; 2005.
147. Collin RW. Environmental equity: a law and planning approach to environmental racism. *Environ Law J*. 1992;11(495):496-546.
148. Haar CM, Fessler DW. *The Wrong Side of the Tracks: A Revolutionary Rediscovery of the Common Law Tradition of Fairness in the Struggle Against Inequality*. New York, NY: Simon and Schuster; 1986.
149. Bond KW. Toward equal delivery of municipal services in the central cities. *Fordham Urban Law J*. 1975;4(2):263-287.
150. Garcia R, Flores ES. Anatomy of the urban parks movement: equal justice, democracy, and livability in Los Angeles. In: Bullard RD, ed. *The Quest for Environmental Justice: Human Rights and the Politics of Pollution*. San Francisco, CA: Sierra Club Books; 2005:145-167.
151. Rossen LM, Pollack KM. Making the connection between zoning and health disparities. *Environ Justice*. 2012;5(3):119-127.
152. US Census Bureau. 2010 American Community Survey. <http://www.census.gov/acs/www/>. Accessed June 11, 2012.
153. Neuner K, Raja S. Healthy eating and active living: for children in the city of Buffalo. [http://foodsystmsplanning.ap.buffalo.edu/wp-content/uploads/2012/08/HKHC-Policy-Brief-1\\_whyhealthyliving.pdf](http://foodsystmsplanning.ap.buffalo.edu/wp-content/uploads/2012/08/HKHC-Policy-Brief-1_whyhealthyliving.pdf). Accessed July 19, 2013.

## REFERENCES (Continued)

154. Bassford N, Galloway-Gilliam L, Flynn G, CHC Food Resource Development Workgroup. Food desert to food oasis: promoting grocery store development in South Los Angeles. [http://chc-inc.org/downloads/PB\\_Food\\_Desert\\_2010.pdf](http://chc-inc.org/downloads/PB_Food_Desert_2010.pdf). Accessed July 1, 2013.
155. Los Angeles County Department of Public Health. Life expectancy in Los Angeles County: how long do we live and why?. [http://www.publichealth.lacounty.gov/epi/docs/Life%20Expectancy%20Final\\_web.pdf](http://www.publichealth.lacounty.gov/epi/docs/Life%20Expectancy%20Final_web.pdf). Accessed July 1, 2013.
156. Baby-Friendly USA. Baby-friendly hospital initiative. <http://www.babyfriendlyusa.org/about-us/baby-friendly-hospital-initiative>. Accessed May 22, 2013.
157. US Department of Health and Human Services. *The Surgeon General's Call to Action to Support Breastfeeding*. Washington, DC: US Dept of Health and Human Services, Office of the Surgeon General;2011.
158. Grummer-Strawn LM, Shealy KR. Progress in protecting, promoting, and supporting breastfeeding: 1984-2009. *Breastfeed Med*. 2009;4 (suppl 1):S31-S39.
159. Sparks PJ. Rural-urban differences in breastfeeding initiation in the United States. *J Hum Lact*. 2010;26(2):118-129.
160. Centers for Disease Control and Prevention. Breastfeeding trends and updated national health objectives for exclusive breastfeeding—United States, birth years 2000–2004. *MMWR Morb Mortal Wkly Rep*. 2007;56:760-763.
161. Ringel-Kulka T, Jensen E, McLaurin S, et al. Community-based participatory research of breastfeeding disparities in African American women. *Infant Child Adolesc Nutr*. 2011;3(4):233-239.
162. Flower KB, Willoughby M, Cadigan RJ, Perrin EM, Randolph G. Understanding breastfeeding initiation and continuation in rural communities: a combined qualitative/quantitative approach. *Matern Child Health J*. 2008;12(3):402-414.
163. Brown CA, Poag S, Kasprzycki C. Exploring large employers' and small employers' knowledge, attitudes, and practices on breastfeeding support in the workplace. *J Hum Lact*. 2001;17(1):39-46.
164. Gill SL, Reifsnider E, Mann AR, Villarreal P, Tinkle MB. Assessing infant breastfeeding beliefs among low-income Mexican Americans. *J Perinat Educ*. 2004;13(3):39-50.
165. American Academy of Family Physicians. Breastfeeding, family physicians supporting. <http://www.aafp.org/online/en/home/policy/policies/b/breastfeedingpositionpaper.html>. Accessed February 25, 2013.
166. United States Department of Agriculture - Food and Nutrition Service. Women, infants, and children (WIC). <http://www.fns.usda.gov/wic/>. Accessed May 22, 2013.
167. California WIC Association and UC Davis Human Lactation Center. *Increasing Exclusive Breastfeeding in WIC: The Power of Peer Counseling*. Sacramento, CA: CA WIC Association and UC Davis Human Lactation Center;2009.
168. California WIC Association and the UC Davis Human Lactation Center. Collaboration counts: improving hospital breastfeeding policies - California fact sheet: 2011 data. [http://calwic.org/storage/restricted/hospitalfactsheetsdata2011/statefactsheet2012\\_corrected.pdf](http://calwic.org/storage/restricted/hospitalfactsheetsdata2011/statefactsheet2012_corrected.pdf). Accessed July 19, 2013.
169. California Department of Public Health. Birth & Beyond California: hospital breastfeeding quality improvement and staff training demonstration project. <http://www.cdph.ca.gov/HealthInfo/healthyliving/childfamily/Pages/BirthandBeyondCaliforniaDescription.aspx>. Accessed May 22, 2013.
170. New York City Department of Health and Mental Hygiene. Breastfeeding in New York City hospitals, 2009. <http://www.nyc.gov/html/doh/downloads/pdf/ms/ms-breastfeeding-nyc.pdf>. Accessed July 19, 2013.
171. Kaufman L, Deenadayalan S, Karpati A. Breastfeeding ambivalence among low-income African American and Puerto Rican women in north and central Brooklyn. *Matern Child Health J*. 2010;14(5):696-704.

## REFERENCES (Continued)

172. Powell LM, Slater S, Chaloupka FJ, Harper D. Availability of physical activity-related facilities and neighborhood demographic and socioeconomic characteristics: a national study. *Am J Public Health*. 2006;96(9):1676-1680.
173. Centers for Disease Control and Prevention. Youth violence: national statistics - trends in homicide rates among persons ages 10-24 years, by race/ethnicity. [http://www.cdc.gov/ViolencePrevention/youthviolence/stats\\_at-a\\_glance/hr\\_trends\\_race.html](http://www.cdc.gov/ViolencePrevention/youthviolence/stats_at-a_glance/hr_trends_race.html). Accessed February 1, 2012.
174. Kelly CM, Schootman M, Baker EA, Barnidge EK, Lemes A. The association of sidewalk walkability and physical disorder with area-level race and poverty. *J Epidemiol Community Health*. 2007;61(11):978-983.
175. Zhu X, Lee C. Walkability and safety around elementary schools: economic and ethnic disparities. *Am J Prev Med*. 2008;34(4):282-290.
176. Powell LM, Slater S, Chaloupka FJ. The relationship between community physical activity settings and race, ethnicity and socioeconomic status. *Evidence-Based Prev Med* 2004;1(2):135-144.
177. Frank L, Kerr J, Rosenberg D, King A. Healthy aging and where you live: community design relationships with physical activity and body weight in older Americans. *J Phys Act Health*. 2010;7 (suppl 1):S82-S90.
178. Davison KK, Werder JL, Lawson CT. Children's active commuting to school: current knowledge and future directions. *Prev Chronic Dis*. 2008;5(3):1-11.
179. Lynott J, Taylor A, Twaddell H, et al. Planning complete streets for an aging America. <http://assets.aarp.org/rgcenter/ppi/liv-com/2009-12-streets.pdf>. Accessed May 16, 2013.
180. Harrell R, Brooks A, Nedwick T, AARP Public Policy Institute. Preserving affordability and access in liveable communities: subsidized housing opportunities near transit and the 50+ population. <http://assets.aarp.org/rgcenter/ppi/liv-com/2009-15x.pdf>. Accessed May 16, 2013.
181. Evenson KR, McGinn AP. Availability of school physical activity facilities to the public in four U.S. communities. *Am J Health Promot*. 2004;18(3):243-250.
182. Pincetl S, Wolch J, Wilson J, Longcore T. Toward a sustainable Los Angeles: a "nature's services" approach. [http://sustainablecommunities.environment.ucla.edu/wp-content/uploads/2012/10/Toward\\_Sustainable\\_LA\\_2003.pdf](http://sustainablecommunities.environment.ucla.edu/wp-content/uploads/2012/10/Toward_Sustainable_LA_2003.pdf). Accessed May 16, 2013.
183. Centers for Disease Control and Prevention. Physical activity levels among children aged 9-13 years - 2002. *MMWR Morb Mortal Wkly Rep*. 2003;52(33):785-788.
184. Choy LB, McGurk MD, Tamashiro R, Nett B, Maddock J. Increasing access to places for physical activity through a joint use agreement: a case study in urban Honolulu. *Prev Chronic Dis*. 2008;5(3):1-8.
185. National Policy & Legal Analysis Network to Prevent Childhood Obesity. NPLAN Joint Use Agreement Resources. [http://changelabsolutions.org/sites/default/files/Joint%20Use%20Agreement%20Resources\\_FINAL\\_090901.pdf](http://changelabsolutions.org/sites/default/files/Joint%20Use%20Agreement%20Resources_FINAL_090901.pdf). Accessed January 30, 2013.
186. Spengler JO, Young SJ, Linton LS. Schools as a community resource for physical activity: legal considerations for decision makers. *Am J Health Promot*. 2007;21(suppl 4):390-396.
187. Healthy people, healthy places: snapshots of where we live, learn, work, and play. <http://ochealthinfo.com/civicax/filebank/blobdload.aspx?BlobID=14814>. Accessed July 18, 2013.
188. Latino Health Access. Latino health access park and community center: promoting healthy living.
189. Aytur SA, Satinsky SB, Evenson KR, Rodriguez DA. Pedestrian and bicycle planning in rural communities tools for active living. *Fam Community Health*. 2011;34(2):173-181.
190. Tarko A, Azam MS. Pedestrian injury analysis with consideration of the selectivity bias in linked police-hospital data. *Accid Anal Prev*. 2011;43(5):1689-1695.

## REFERENCES (Continued)

191. US Department of Transportation Federal Highway Administration. *Guidelines and Recommendations to Accommodate Older Drivers and Pedestrians*. McLean, VA: US Department of Transportation;2001.
192. Black JL, Macinko J. Neighborhoods and obesity. *Nutr Rev*. 2008;66(1):2-20.
193. Wilcox S, Castro C, King AC, Housemann R, Brownson RC. Determinants of leisure time physical activity in rural compared with urban older and ethnically diverse women in the United States. *J Epidemiol Community Health*. 2000;54(9):667-672.
194. Reynolds KD, Wolch J, Byrne J, et al. Trail characteristics as correlates of urban trail use. *Am J Health Promot*. 2007;21(suppl 4):335-345.
195. Rimmer J. *Promoting Inclusive Physical Activity Communities for People with Disabilities*. Washington, DC: President's Council on Physical Fitness;2008. Series 9, No.2.
196. Walker JG, Evenson KR, Davis WJ, Bors P, Rodriguez DA. A tale of two trails: exploring different paths to success. *J Phys Act Health*. May 2011;8(4):523-533.
197. Rails to Trails Conservancy. Acquisition overview. [http://www.railstotrails.org/ourwork/trailbuilding/toolbox/informationsummaries/acquisition\\_overview.html](http://www.railstotrails.org/ourwork/trailbuilding/toolbox/informationsummaries/acquisition_overview.html). Accessed June 1, 2012.
198. National Institute of Crime Prevention. Crime prevention through environmental design. <http://www.cptedtraining.net/>. Accessed May 22, 2013.
199. Babey SH, Hastert TA, Brown ER, UCLA Center for Health Policy Research. Teens living in disadvantaged neighborhoods lack access to parks and get less physical activity. <http://healthpolicy.ucla.edu/publications/Documents/PDF/Teens%20Living%20in%20Disadvantaged%20Neighborhoods%20Lack%20Access%20to%20Parks%20and%20Get%20Less%20Physical%20Activity.pdf>. Accessed May 15, 2013.
200. Hammerschmidt P, Tackett W, Golzynski M, Golzynski D. Barriers to and facilitators of healthful eating and physical activity in low-income schools. *J Nutr Educ Behav*. 2011;43(1):63-68.
201. Murphy NA, Carbone PS, and The Council on Children with Disabilities. Promoting the participation of children with disabilities in sports, recreation, and physical activities. *Pediatrics*. 2008;121(5):1057-1061.
202. Cox L, Berends V, Sallis J, et al. Engaging school governance leaders to influence physical activity policies. *J Phys Act Health*. 2011;8(suppl 1):40-48.
203. Pollack S, Bluestone B, Billingham C. Maintaining diversity in America's transit-rich neighborhoods: tools for equitable neighborhood change. <http://www.bos.frb.org/commdev/necd/2010/issue1/diversity-transit-rich-neighborhoods.pdf>. Accessed September 9, 2013.
204. Bailey L. Aging Americans: stranded without options. <http://www.transact.org/report.asp?id=232>. Accessed January 11, 2013.
205. Wilson S, Hutson M, Mujahid M. How planning and zoning contribute to inequitable development, neighborhood health, and environmental injustice. *Environmental Justice*. 2008;1(4):211-216.
206. Stommes E, Brown D, Houston C. Moving rural residents to work: lessons learned from implementation of eight job access and reverse commute projects. <http://www.fta.dot.gov/3630.html>. Accessed February 1, 2013.
207. Barten F, Mitlin D, Mulholland C, Hardoy A, Stern R. Integrated approaches to address the social determinants of health for reducing health inequity. *J Urban Health*. 2007;84(suppl 3):i164-173.
208. Sanoff H. Participation Purposes. In: Sanoff H, ed. *Community Participation Methods in Design and Planning*. New York, NY: John Wiley & Sons, Inc; 2000:1-32.
209. Policylink. Equitable development toolkit. [http://www.policylink.org/site/c.lk1XLbMNJrE/b.5136575/k.39A1/Equitable\\_Development\\_Toolkit.htm](http://www.policylink.org/site/c.lk1XLbMNJrE/b.5136575/k.39A1/Equitable_Development_Toolkit.htm). Accessed June 18 2004.

## REFERENCES (Continued)

210. Snyder R, The Labor/Community Strategy Center. The Bus Riders Union transit model: why a bus-centered system will best serve US Cities. [http://www.thestrategycenter.org/sites/www.thestrategycenter.org/files/\[LCSC\]\\_BRU\\_Transit\\_Model\\_2009-04.pdf](http://www.thestrategycenter.org/sites/www.thestrategycenter.org/files/[LCSC]_BRU_Transit_Model_2009-04.pdf) Accessed August 22, 2012.
211. Rosenbloom S, Transportation Research News. The equity implications of financing the nation's surface transportation system. Accessed May 17, 2013.
212. Maryland Department of Health and Mental Hygiene. *Maryland Vital Statistics Annual Report*. Baltimore, MD: Maryland Department of Health and Mental Hygiene;2010.
213. MacDonald J, Golinelli D, Stokes RJ, Bluthenthal R. The effect of business improvement districts on the incidence of violent crimes. *Inj Prev*. 2010;16(5):327-332.
214. Casteel C, Peek-Asa C. Effectiveness of crime prevention through environmental design (CPTED) in reducing robberies. *Am J Prev Med*. 2000;18(suppl 4):99-115.
215. Bureau of Justice Assistance, Office of Justice Programs. *What Have We Learned From Evaluations of Crime Prevention Through Environmental Design Strategies?* Washington, DC: Center for Program Evaluation and Performance Measurement;2012.
216. Cozens PM, Saville G, Hillier D. Crime prevention through environmental design (CPTED): a review and modern bibliography. *Property Management*. 2005;23(5):328-356.
217. Skogan WG, Hartnett SM, Bump N, Dubois J. *Evaluation of CeaseFire-Chicago*. Rockville, MD: National Institute of Justice, National Criminal Justice Reference Service;2008. Document No. 227181.
218. Cohen L, Iton A, Davis RA, Rodriguez S, Prevention Institute. A time of opportunity: local solutions to reduce inequities in health and safety. <http://www.preventioninstitute.org/component/jlibrary/article/id-81/127.html>. Accessed August 22, 2012.
219. Wilkinson R. Why is violence more common where inequality is greater? *Ann NY Acad Sci*. 2004;1036:1-12.
220. Prevention Institute. Making the case: violence and health equity fact sheet. <http://www.preventioninstitute.org/component/jlibrary/article/id-311/127.html>. Accessed August 22, 2012.
221. Centers for Disease Control and Prevention. Youth violence: risk and protective factors. <http://www.cdc.gov/violenceprevention/youthviolence/riskprotectivefactors.html#3>. Accessed May 21, 2013.
222. Centers for Disease Control and Prevention (CDC). Youth violence national and state statistics at a glance. [http://www.cdc.gov/ViolencePrevention/youthviolence/stats\\_at-a\\_glance/index.html](http://www.cdc.gov/ViolencePrevention/youthviolence/stats_at-a_glance/index.html). Accessed February 1, 2012.
223. Centers for Disease Control Prevention (CDC). Youth risk behavior surveillance United States, 2011. *MMWR Morb Mortal Wkly Rep*. 2012;61(4):1-162.
224. Egerter S, Barclay C, Grossman-Kahn R, Braveman P, Robert Wood Johnson Foundation. Exploring the social determinants of health series: violence, social disadvantage and health. [http://www.rwjf.org/content/dam/farm/reports/issue\\_briefs/2011/rwjf70452](http://www.rwjf.org/content/dam/farm/reports/issue_briefs/2011/rwjf70452). Accessed August 22, 2012.
225. Sampson RJ, Morenoff JD, Gannon-Rowley T. Assessing "neighborhood effects": social processes and new directions in research. *Annu Rev Sociol*. 2002;28:443-478.
226. Sampson RJ, Raudenbush SW, Earls F. Neighborhoods and violent crime: a multilevel study of collective efficacy. *Science*. 1997;277(5328):918-924.
227. Boston Public Health Commission. Selected health indicators. [http://www.bphc.org/about/research/hob2010/Forms%20%20Documents/HOB11\\_Figs\\_4-13\\_SelHealthIndic\\_HOB11\\_PrintCopy\\_02Dec11.pdf](http://www.bphc.org/about/research/hob2010/Forms%20%20Documents/HOB11_Figs_4-13_SelHealthIndic_HOB11_PrintCopy_02Dec11.pdf). Accessed July 24, 2013.



## REFERENCES (Continued)

228. Boston Public Health Commission. Boston moves for health: an action plan for healthy weight and healthy community. <http://www.bphc.org/programs/cib/chronicdisease/bostonmovesforhealth/Documents/BMH%20Action%20Plan%20-%20April%202012.pdf>. Accessed July 24, 2013.
229. Cohen L, Davis R, Lee V, Valdovinos E. Addressing the intersection: preventing violence and promoting healthy eating and active living. <http://www.preventioninstitute.org/component/jlibrary/article/id-267/127.html>. Accessed August 22, 2012.
230. Smith P, Pennington M, Crabtree L, Illback R. Louisville Metro health equity report: the social determinants of health in Louisville Metro neighborhoods. <http://www.louisvilleky.gov/NR/rdonlyres/29925903-E77F-46E5-8ACF-B801520B5BD2/O/HERFINALJAN23.pdf>. Accessed July 24, 2013.
231. Humes K, Jones N, Ramirez R. *Overview of Race and Hispanic Origin: 2010*. Washington, DC: US Department of Commerce, Economics and Statistics Administration, US Census Bureau;2011.
232. US Department of Health and Human Services. *HHS Action Plan to Reduce Racial and Ethnic Health Disparities: A Nation Free of Disparities in Health and Healthcare*. Washington, D.C.: US Dept of Health and Human Services;2011.
233. Flegal KM, Carroll MD, Kit BK, Ogden CL. Prevalence of obesity and trends in the distribution of body mass index among US adults, 1999-2010. *JAMA*. 2012;307(5):491-497.
234. Centers for Disease Control and Prevention. Current cigarette smoking among adults -- United States, 2011. *MMWR Morb Mortal Wkly Rep*. 2012;61(44):889-908.
235. Substance Abuse and Mental Health Services Administration, Center for Behavioral Health Statistics and Quality. *The NSDUH Report: Adults with Mental Illness or Substance Use Disorder Account for 40 percent of All Cigarettes Smoked*. Rockville, MD: SAMHSA;2013.
236. US Census Bureau. 2010 Census. Number and percent of population: 2010 - United States -- urban/rural and inside/outside metropolitan and micropolitan Area. Summary File 1, Table P1. [http://factfinder2.census.gov/faces/tableservices/jsf/pages/productview.xhtml?pid=DEC\\_10\\_SF1\\_GCTP1.US26&prodType=table](http://factfinder2.census.gov/faces/tableservices/jsf/pages/productview.xhtml?pid=DEC_10_SF1_GCTP1.US26&prodType=table). Accessed February 13, 2013.
237. Befort CA, Nazir N, Perri MG. Prevalence of obesity among adults from rural and urban areas of the United States: findings from NHANES (2005-2008). *J Rural Health*. 2012(28):392-397.
238. Centers for Disease Control and Prevention, National Center for Health Statistics. Health indicators warehouse. [http://healthindicators.gov/Indicators/Cigarette-smoking-adults-percent\\_1498/Profile/Data](http://healthindicators.gov/Indicators/Cigarette-smoking-adults-percent_1498/Profile/Data). Accessed February 15, 2013.
239. Centers for Disease Control and Prevention. Prevalence and most common causes of disability among adults -- United States, 2005. *MMWR Morb Mortal Wkly Rep*. 2009;58(16):421-426.
240. Centers for Disease Control and Prevention. Physical inactivity and people with disabilities: a tip sheet for public health professionals. [http://www.cdc.gov/ncbddd/documents/physical-inactivity-tip-sheet-\\_phpa\\_1.pdf](http://www.cdc.gov/ncbddd/documents/physical-inactivity-tip-sheet-_phpa_1.pdf). Accessed July 11, 2012.
241. Centers for Disease Control and Prevention. Obesity and people with disabilities: a tip sheet for public health professionals. [http://www.cdc.gov/ncbddd/documents/Obesity%20tip%20sheet%20\\_%20PHPa\\_1.pdf](http://www.cdc.gov/ncbddd/documents/Obesity%20tip%20sheet%20_%20PHPa_1.pdf). Accessed June 06, 2012.
242. Braveman P, Egerter S, Robert Wood Johnson Foundation. Overcoming obstacles to health: report from the Robert Wood Johnson Foundation to the Commission to Build a Healthier America. <http://www.commissiononhealth.org/PDF/ObstaclesToHealth-Report.pdf> Accessed August 21, 2012.
243. Grimm K, Foltz J, Blanck H, Scanlon K. Household income disparities in fruit and vegetable consumption by state and territory: results of the 2009 Behavioral Risk Factor Surveillance System. *J Acad Nutr Diet*. 2012;112(12):2014-2021.

## REFERENCES (Continued)

244. Ryan CL, Siebens J, US Census Bureau. Educational attainment in the United States: 2009. <http://www.census.gov/prod/2012pubs/p20-566.pdf>. Accessed June 11, 2012.
245. US Department of Health and Human Services. Nutrition, physical activity, and obesity. <http://www.healthypeople.gov/2020/lhi/nutrition.aspx?tab=data>. Accessed July 19, 2013.
246. Vincent GK, Velkoff VA, US Census Bureau. The next four decades: the older population in the United States: 2010 to 2050. <http://www.census.gov/prod/2010pubs/p25-1138.pdf>. Accessed January 14, 2012.
247. Freid V, Bernstein A, Bush MA, National Center for Health Statistics. Multiple chronic conditions among adults aged 45 and over: trends over the past 10 years. <http://www.cdc.gov/nchs/data/databriefs/db100.pdf>. Accessed January 25, 2012.
248. Wallace S. Social determinants of health inequities and healthcare in old age. In: Prohaska T, Anderson L, Binstock R, eds. *Public Health for an Aging Society*. Baltimore, MD: Johns Hopkins University Press; 2012:99-118.
249. Gates GJ, Williams Distinguished Scholar; The Williams Institute; UCLA School of Law. How many people are lesbian, gay, bisexual, and transgender? <http://williamsinstitute.law.ucla.edu/research/census-lgbt-demographics-studies/how-many-people-are-lesbian-gay-bisexual-and-transgender/>. Accessed August 21, 2012.
250. Boehmer U, Bowen DJ, Bauer GR. Overweight and obesity in sexual-minority women: evidence from population-based data. *Am J Public Health*. 2007;97(6):1134-1140.
251. Centers for Disease Control and Prevention. Behavioral risk factor surveillance system. <http://www.cdc.gov/brfss/>. Accessed May 22, 2013.
252. United States Census Bureau. Census news. <http://www.census.gov/#>. Accessed May 22, 2012.
253. Community Commons. About Community Commons. <http://initiatives.communitycommons.org/About.aspx>. Accessed May 22, 2013.
254. County Health Rankings and Robert Wood Johnson Foundation. Rankings. <http://www.countyhealthrankings.org/>. Accessed May 22, 2013.
255. United States Department of Health & Human Services. Community health status indicators report. <http://wwwn.cdc.gov/CommunityHealth/homepage.aspx?j=1>. Accessed May 22, 2013.
256. Hillmeier M, Lynch J, Harper S, Casper M, Centers for Disease Control and Prevention. Data set directory of social determinants of health at the local level. [http://www.cdc.gov/dhdsp/docs/data\\_set\\_directory.pdf](http://www.cdc.gov/dhdsp/docs/data_set_directory.pdf). Accessed May 22, 2013.
257. Healthy Communities Institute. Healthy communities network. <http://new.healthycommunitiesinstitute.com/healthy-communities-network-2/>. Accessed May 22, 2013.
258. National Cancer Institute. Health disparities calculator (HD\*Calc). <http://seer.cancer.gov/hdcalc/>. Accessed May 22, 2013.
259. Connecticut Association of Directors of Health. Health equity index. <http://www.cadh.org/health-equity/health-equity-index.html>. Accessed May 22, 2013.
260. National Center for Health Statistics and Health Indicators Warehouse. About the HIW. <http://healthindicators.gov/About/AboutTheHIW>. Accessed May 22, 2013.
261. Prevention Institute. THRIVE: Tool for Health and Resilience In Vulnerable Environments. <http://thrive.preventioninstitute.org/thrive/about.php>. Accessed May 22, 2013.



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