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

The introduction provides an overview of the importance of active living strategies in enhancing health equity. It sets the stage for the subsequent sections, highlighting the need for multi-sectoral approaches to address health disparities.

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# Section 4: Maximizing Active Living Strategies to Advance Health Equity

This section delves into specific strategies that can be implemented to promote active living and health equity. Each strategy is accompanied by a detailed description and examples of successful implementation.

## Joint Use Agreements

- Beyond Conventional Joint Use: Farmers’ Market and Trails in Public Housing Communities—San Antonio, TX
- Using a School Playground as a Community Resource—Santa Ana, CA

## Safe and Accessible Streets for All Users

- Creating Safe Routes in a Rural Community—Sault Ste. Marie, MI
- Transportation Framework Supports Health Equity and Sustainability—Multnomah County, OR

## Trails and Pathways to Enhance Recreation and Active Transportation

- Trails Upgraded to Better Connect People and Destinations—Mid-Ohio Valley, WV
- Trails and Pathways Increase Connectivity for All in Alabama—Jefferson County, AL

## Physical Activity Opportunities in School, Afterschool, and Early Care and Education Settings

- Volunteer Services Increase Physical Activity in Afterschool Programs—California
- Playworks: Using Recess as a Place to Play and Be Active—Detroit, MI

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Heart disease, cancer, diabetes, and stroke are the most common causes of illness, disability, and death affecting a growing number of Americans. Many of these chronic conditions tend to be more common, diagnosed later, and result in worse outcomes for particular individuals, 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. 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:

• **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

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 20th and 21st 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. 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.”
  
  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.”
  
  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.
  
  Example: A change to street infrastructure that enhances connectivity and promotes physical activity.
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).

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
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.\(^2\)

**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.\(^7\)

**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).\(^7\)

**Health inequities:** Health inequities are a subset of health inequalities that are modifiable, associated with social disadvantage, and considered ethically unfair.\(^7\)^{18,19}

**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.\(^20\)
Maximizing Active Living 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 regarding active 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.

Not all communities have equal access to physical activity resources or environments that support an active lifestyle. Low-income communities and communities of color have been found to have limited facilities and spaces for physical activity, poor sidewalk and street infrastructure, and disproportionate exposure to violence. These hindrances may deter or limit opportunities for those populations to engage in physical activity. Additionally, the physical activity infrastructure that does exist in many communities, low-income or not, may not be developed with all potential users in mind. As a result, populations with special needs such as the elderly and people with disabilities may not be properly accommodated.

The Active Living 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:

- Joint Use Agreements
- Safe and Accessible Streets for All Users
- Trails and Pathways to Enhance Recreation and Active Transportation
- Physical Activity in School, Afterschool, and Early Care and Education Settings
- Neighborhood Development that Connects Community Resources to Transit
- Preventing Violence

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

JOINT USE (OR SHARED USE) AGREEMENTS CAN INCREASE RESIDENTS’ ACCESS TO SAFE PHYSICAL ACTIVITY RESOURCES BY ALLOWING RESIDENTS TO USE EXISTING COMMUNITY FACILITIES (E.G., PLAYGROUNDS, GYMS, POOLS).

MAKE THE CASE:

Why Is This A Health Equity Issue?
The issues below highlight the need for joint use agreements that advance health equity:

- **Differential Access to Physical Activity Resources**: Access to physical activity resources (e.g., parks, bike paths, playgrounds) may differ by community, socioeconomic status, and race.\(^{176,181,182}\) For example, lower-income neighborhoods and communities of color generally have fewer such facilities.\(^{176}\)

- **Additional Challenges to Using Physical Activity Resources**: Even when physical activity resources are geographically close and appear accessible, some residents may encounter barriers which may limit the use of these resources. Barriers may include neighborhood safety concerns, lack of transportation, lack of time, or expenses related to the facility.\(^{183}\) Additionally, existing social and community norms or a lack of universally accessible facilities for older adults and those with mobility issues can be barriers.

- **Fewer Joint Use Agreements in Underserved Communities**: After-hours access to facilities such as schools may differ depending on communities’ socioeconomic and racial/ethnic composition. For example, certain communities may experience or perceive more barriers to implementation of joint use agreements. These barriers may include concerns about crime and vandalism, as well as costs related to liability, maintenance, or operations.\(^{184-186}\)
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 joint use agreements:

<table>
<thead>
<tr>
<th>KEY FACTORS</th>
<th>BARRIERS OR UNINTENDED CONSEQUENCES</th>
<th>OPPORTUNITIES TO MAXIMIZE IMPACT</th>
</tr>
</thead>
</table>
| **SAFETY**  | Concerns about neighborhood safety and vandalism can keep physical activity resources locked or underutilized after-hours, particularly in areas where physical activity resources are needed most. | • Engage violence prevention partners during planning to address safety concerns.  
• If possible, implement joint use agreements near or in facilities where residents already feel safe.  
• Use environmental design strategies (e.g., improving lighting, limiting or maintaining shrubbery) to enhance safety. |
| **LIABILITY CONCERNS** | Under-resourced communities may have heightened liability concerns due to factors such as older facilities and higher crime rates. Such concerns may hinder facilities from implementing joint use agreements. | • Identify and address barriers and concerns of community partners who may be resistant to joint use agreements.  
• Assess existing coverage status of joint use partners, as many schools and recreation partners may already be sufficiently covered. |
| **FUNDING LIMITATIONS** | Under-resourced communities may have concerns regarding funding, personnel, and maintenance to keep facilities open outside of normal business hours. | • Combine resources from multiple partners to create stable funding for initial implementation, as well as ongoing operations, maintenance, and programming.  
• Consider multiple funding sources to support joint use agreements (e.g., grants, state/local bonds, developer fees, tax increment financing).  
• When funds become available, direct funds to low-resource communities where physical activity opportunities are needed most. |
| **COMMUNITY AWARENESS & INVOLVEMENT** | Joint use agreements may not be enough to encourage the use of facilities (e.g., school gym) by communities that have gone years without access to such resources beyond normal business hours. | • Use educational initiatives, social media, and partners to increase awareness of existing facilities that are now available to the community.  
• Encourage use by involving residents in developing programs (e.g., dance classes, walking clubs) that are culturally and age appropriate.  
• Assess user activity regularly to ensure residents’ needs are met and multiple users (e.g., the elderly, people with disabilities, young girls) benefit from the resource. |
| **EQUITABLE ACCESS** | The physical activity opportunities created by joint use agreements may mask the need for more permanent physical activity resources (e.g., parks), particularly in underserved communities. | • Identify inequities in physical activity resources by conducting an assessment of the distribution, hours, and pricing of such resources.  
• Understand decision-making processes for physical activity resource allocation.  
• Work with partners to examine additional strategies to increase options for physical activity in communities with the greatest need and ensure options accommodate differing levels of mobility (e.g., older adults, people in wheelchairs). |
Build the Team: Partnership for Success

Successful efforts to implement joint use agreements 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-based organizations such as Boys and Girls Club, sports associations, YMCA, Boy Scouts, Girl Scouts
- Community members (of diverse abilities, ages, cultures, gender, income levels, race/ethnicity, and sexual orientation)
- Custodians
- Faith-based organizations
- Health care systems, hospitals, community clinics, and health care providers
- Law enforcement
- Land trusts or conservancies
- Organizations serving populations experiencing health inequities
- Public agencies, including public health, parks and recreation, housing authority, libraries
- School districts, universities, and community colleges
- Union leaders

HEALTH EQUITY IN ACTION

Beyond Conventional Joint Use: Farmers’ Market and Trails in Public Housing Communities

San Antonio, TX

The San Antonio Metropolitan Health District (SAMHD) was not afraid to “be bold, and try new things.” It teamed up with the San Antonio Housing Authority (SAHA)—the landlord for 70 different public housing communities—to think creatively about using existing resources to create opportunities for low-income children, adults, elderly residents, and those with disabilities to be healthy. The results of a community health assessment revealed that SAHA residents were already well aware that a healthier diet and more physical activity would improve their health, but they did not have access to fresh produce or a safe place to be active.

Moving beyond the conventional idea of a joint use agreement, SAHA took advantage of its unique position to provide the space and infrastructure that could nurture ideas for improving health. In response to residents’ identified needs, the partnership initiated an effort to develop walking trails on five SAHA sites. This project benefits not only residents living in public housing, but the neighboring community as well. To address concerns about the availability of healthy foods, the partnership collaborated with the San Antonio Food Bank to successfully establish a farmers’ market in one of the public housing communities. SAHA residents felt strongly that it should be easily accessible and located where they live. This much-needed farmers’ market now provides access to affordable, healthy fruits and vegetables in a neighborhood that lacks a grocery store.

Through this joint use partnership with the housing authority, SAMHD was able to directly reach residents who were most in need. These efforts were supported by CDC’s Communities Putting Prevention to Work program.

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Using a School Playground as a Community Resource

Santa Ana, CA

Santa Ana is a community with a predominantly Latino, low-income population that faces high rates of chronic disease, including diabetes. The city has only one acre of parks per 1,000 Santa Ana residents, leaving little open space for much-needed recreation. Many of the few existing parks are small, not within walking distance of residential neighborhoods, and perceived as places that attract crime.

Working with residents and with support from the California Endowment, Latino Health Access (LHA) pursued a community access agreement at the neighborhood Roosevelt Elementary School, which was accessible and familiar to residents. Joint use agreements allowed community residents to use school grounds outside of school hours. However, existing agreements did not provide free access to recreational spaces to the community at large. They primarily accommodated sports leagues, most of which required a fee. For most residents living below the poverty line, these programs were not a viable option. LHA and residents were able to establish a community access agreement at Roosevelt in partnership with the Santa Ana Unified School District so that everyone in the community, not just those who could pay, gained free access to recreational space. As LHA staff member Nancy Mejia put it, “We are creating a more equitable environment by providing physical activity access for the whole community.”

Community engagement was central to this success. LHA led parent focus groups to identify programming needs, resulting in ideas such as martial arts classes and art workshops. Parent feedback underscored the importance of opening the school on weekends to ensure a majority of residents could use the space. A community resident board led the project, bringing awareness to the new space and actively engaging other community members in activities, such as a walking audit around the school, skill building, and a driver safety educational initiative. The success of the project motivated the city and the school district to jointly apply for state funding that could provide a community center at Roosevelt Elementary. The City was awarded $5 million from California Prop 84 funds for the construction of a 10,000 square-foot community center at Roosevelt Elementary. The site serves as a best-practice model that could open other schoolyards in Santa Ana—providing even more physical activity opportunities for everyone in the community.
SAFE AND ACCESSIBLE STREETS FOR ALL USERS

STREET INFRASTRUCTURE AND TRANSPORTATION STRATEGIES MAY INCLUDE COMPLETE STREETS POLICIES, SAFE ROUTES TO SCHOOL POLICIES AND PROGRAMS, AND COMMUNITY DESIGN STANDARDS. THESE STRATEGIES CAN HELP ENSURE THAT STREETS ARE ROUTINELY DESIGNED, MODIFIED, AND UPDATED TO SUPPORT ALL FORMS OF TRANSPORT, INCLUDING ACTIVE TRANSPORT. ACTIVE TRANSPORTATION INCLUDES MODES OF HUMAN POWERED TRANSPORTATION SUCH AS WALKING, BIKING, AND USING A WHEELCHAIR.

MAKE THE CASE:

Why Is This A Health Equity Issue?

The issues below highlight the need for street infrastructure and transportation strategies that advance health equity:

• Inadequate Infrastructure for Active Transportation Exists in Many Low-Income Communities and Communities of Color:
  Low-income communities and communities of color have been found to have poorly maintained sidewalk and street infrastructure, higher rates of crime, and increased dangers from traffic. These barriers may discourage some residents from engaging in active transportation or make it difficult and unsafe for those that depend on such infrastructure.

• Challenges for Active Transportation Exists in Many Rural Communities:
  Rural communities, including rural tribal lands, may experience unique infrastructure inequities. These communities may have less pedestrian and bicycling plans and infrastructure than urban communities, and rural roads are some of the most dangerous for pedestrians. Additionally, the long distances between key institutions/settings may present challenges to active transportation.

• Street Design May Neglect Users with Special Needs:
  There are a variety of potential users to consider in street infrastructure and transportation strategies (e.g., the elderly, those with a disability, children). For example, older adults often have difficulty navigating busy, traffic-heavy roads, areas with obstructed or difficult to read signage, and inadequate sidewalks. Significant barriers may also exist for people with strollers and people with disabilities (e.g., those with hearing and vision impairments, those using wheelchairs).

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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 street infrastructure and transportation strategies:

<table>
<thead>
<tr>
<th>KEY FACTORS</th>
<th>BARRIERS OR UNINTENDED CONSEQUENCES</th>
<th>OPPORTUNITIES TO MAXIMIZE IMPACT</th>
</tr>
</thead>
<tbody>
<tr>
<td>COMMUNITY AWARENESS &amp; INVOLVEMENT</td>
<td>Community members may face barriers (e.g., language, time constraints, lack of transportation) that prevent them from being engaged in infrastructure and transportation planning processes.</td>
<td>• Organize events (e.g., walk and roll audits) to increase awareness of and participation in planning processes among underserved communities.</td>
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<tr>
<td>• Encourage community participation and leadership</td>
<td>• Work with partners to address barriers to participation (e.g., provide venues for input at convenient times and locations, hold forums in prevalent languages or with interpreters, provide childcare if needed).</td>
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<tr>
<td>• Organize events (e.g., walk and roll audits) to increase awareness of and participation in planning processes among underserved communities.</td>
<td>• Engage representatives from organizations who are trusted by underserved populations to commit to long-term participation in planning processes.</td>
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<td>INCLUSIVE DECISION MAKING &amp; DESIGN</td>
<td>People with special needs, such as the elderly and people with disabilities, may be overlooked in the design and implementation of street infrastructure and transportation strategies.</td>
<td>• Work with transportation planners to engage people with special needs in planning and implementation processes.</td>
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<tr>
<td>• Ensure decision processes accommodate people with special needs</td>
<td>• Encourage transportation planners to include guidelines and strategies developed specifically for people with special needs.</td>
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</tr>
<tr>
<td>• Use inclusive language when discussing such strategies (e.g., “walk, bike, and roll” has been used to include those in wheelchairs).</td>
<td>• Leverage existing funds to make necessary improvements and enhancements (e.g., incorporate street improvements into routine road maintenance procedures).</td>
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<td>RESOURCE LIMITATIONS</td>
<td>Funding may not be available for street improvements, particularly in underserved communities. Additionally, residents of these communities may lack the time and resources to apply for funding that addresses infrastructure.</td>
<td>• Provide technical support and training to underserved communities to enhance their capacity to apply for infrastructure funding.</td>
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<td>• Find ways to address funding limitations for street improvements in underserved communities</td>
<td>• When evaluating proposals for funding, use criteria that prioritize communities in greatest need.</td>
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<tr>
<td>DISPLACEMENT</td>
<td>When a community becomes a popular place to walk, bike, or use other modes of active transportation safely, local businesses may benefit. A possible result is that property values may increase and current residents may be displaced if they are no longer able to afford living there.</td>
<td>• Conduct an assessment (e.g., health impact assessment) to examine the possibility of displacement with all street improvement policies.</td>
</tr>
<tr>
<td>• Account for the potential displacement effects of street improvement strategies</td>
<td>• Utilize supportive mechanisms and community benefits agreements (e.g., affordable housing protections, local hiring ordinances) to ensure current residents are not displaced and can benefit from infrastructure improvements.</td>
<td></td>
</tr>
</tbody>
</table>

(Also see Neighborhood Development that Connects Community Resources to Transit on page 96)
Build the Team: Partnership for Success

Successful efforts to implement street infrastructure and active transportation strategies depend on strong partnerships that bring 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)
- Environmental and climate change groups
- Leaders and community champions from multiple sectors
- Local transportation planning department
- Organizations serving populations experiencing health inequities
- Program evaluators
- Public health agencies
- Public Works Department
- School districts, universities, and community colleges
- Transit agencies
- Transportation organizations
- Zoning and Planning organizations

HEALTH EQUITY IN ACTION

Creating Safe Routes in a Rural Community

Sault Ste. Marie, MI

The service area of the Sault Ste. Marie Tribe of Chippewa Indians covers seven rural counties in Michigan’s Eastern Upper Peninsula. These counties have higher percentages of low-income populations than other places in the state. Limited infrastructure options often force residents who live in tribal housing to drive to local stores, schools, childcare, and employment, even though these resources are within walking or biking distance. Rising gas prices coupled with limited household incomes prompted the Sault Tribe Community Health Program, with support from the CDC’s Strategic Alliance for Health program, to explore infrastructure improvements that would support active transportation.

The Sault Tribe’s Strategic Alliance for Health Project staff and coalition members conducted walking audits in tribal housing, as well as the broader community. Pictures taken by community members illustrated the need for bicycle and pedestrian improvements. The presentations were effective in educating community stakeholders about the need for pedestrian and bicycle facilities, resulting in construction of a sidewalk connecting tribal housing in one community to a major employment center. In another neighborhood, a need was identified for a midblock crossing near a childcare center to allow caregivers to take young children on walks during the day. The Strategic Alliance for Health Project also facilitated a partnership between tribal transportation planners and the City of St. Ignace to invest in sidewalk improvements that will connect housing to a nearby high school athletic field.

Key partnerships among tribal transportation planners, tribal housing authority, local government, and school systems fostered success. These partnerships were instrumental in implementing strategies that will support the creation of complete streets in five communities and in the seven-county region, focus on safe bicycle and pedestrian projects in the regional transportation plans, and address health and safety needs of all residents.
Transportation Framework Supports Health Equity and Sustainability

Multnomah County, OR

When Multnomah County Health Department staff realized the tremendous impact of transportation decisions on the health of Oregon’s residents, they wanted to get involved. They wanted to ensure transportation projects would contribute to—not detract from—their health and equity goals. With funding from CDC’s Communities Putting Prevention to Work program, the health department leveraged their relationships with local transportation leaders and other community-based organizations and began working with Upstream Public Health (a Portland-based public health policy organization), the City of Portland Bureau of Transportation, and the North American Sustainable Transportation Council. One goal of the cross-sector partnership was to create a system to ensure health, multimodal safety, and equity outcomes are improved in the planning, analysis, and operation of transportation plans and projects.

In 2010, the North American Sustainable Transportation Council developed the Sustainable Transportation Analysis and Rating System (STARS) pilot project application manual. STARS is a framework for developing and rating transportation projects, plans, and programs. It is a performance-based system with a multimodal focus that allows planners to compare and improve performance across all modal strategies. The STARS project manual currently consists of 12 core credits that encompass the “triple bottom line,” also known as the “three Ps” of access (people), climate and energy (planet), and cost effectiveness (prosperity). Projects that achieve at least nine of the 12 core credits are qualified for STARS certification. Through Multnomah County’s collaborative effort, three new STARS credits have been developed to increase the likelihood that transportation projects improve key health, safety, and equity criteria.

With health equity as a driving principle, STARS gives credit for meaningful engagement of the communities most affected by the transportation project. Focusing on meaningful engagement ensures residents have a say in how transportation projects are planned and implemented. Credits are also awarded to projects that are planned so that transportation-disadvantaged communities gain improved access to meet daily needs and are not burdened disproportionately. Plans and projects that earn safety, health, and equity credits take one step closer to becoming STARS certified, providing an incentive for transportation planners and project managers to integrate health, safety, and equity into their work. Certified projects may be prioritized for government funding. Communities across the country can use STARS to ensure that their own transportation projects and plans include health and multimodal safety, while maximizing efforts to achieve equitable outcomes.
TRAILS AND PATHWAYS TO ENHANCE RECREATION AND ACTIVE TRANSPORTATION

TRAILS AND PATHWAYS CAN PROVIDE A VENUE FOR RECREATIONAL PHYSICAL ACTIVITY, AS WELL AS ACTIVE TRANSPORTATION (E.G., WALKING, BIKING, USING WHEELCHAIRS) TO WORK, SCHOOL, AND COMMUNITY RESOURCES.

MAKE THE CASE:
Why Is This A Health Equity Issue?
The issues below highlight the need for trail and pathway strategies that advance health equity:

• **Limited Access to Physical Activity Resources in Many Underserved Communities:** Communities with higher poverty rates and higher proportions of people of color have been found to have few physical activity resources. Additionally, rural communities may have less access to resources such as recreational facilities and sidewalks.

• **Barriers to the Use of Trails and Pathways May Exist for Some Population Groups:** Trail use may be deterred by litter issues, excessive noise from the street, the presence of tunnels, safety concerns, and vegetation density. Additionally, trail use may be challenging for older adults and people with disabilities if trails are not designed to consider their needs. For example, barriers to physical activity among these populations may include physical obstacles (e.g., narrow paths, low lighting, uneven or soft surfaces that make wheelchair use more difficult), logistical challenges (e.g., lack of transportation to facilities), and poor visibility (e.g., unmarked entry points to trails).
### 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 trail and pathway strategies:

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| **RESOURCE LIMITATIONS**  
Pursue creative financing strategies and enhance existing trails and pathways in underserved communities | Developing a new trail or pathway may be unrealistic in certain communities given the complexity of the project, financial resources required, and geographic constraints.\(^{196,197}\) |  
• Leverage land trusts to navigate the financing and real estate aspects of securing land for public good.  
• Pursue public-private partnerships and creative financing strategies, (e.g., railbanking, local finance measures, block grants) to support trail development.  
• Expand or improve existing trails, sidewalks, or paths when resources and/or physical space are limited. |
| **COMMUNITY AWARENESS & INVOLVEMENT**  
Engage residents in planning and monitoring decisions relevant to trails and pathways | Participation in local and regional planning processes can be a challenge due to time, logistical barriers, and the technical knowledge required for full participation. |  
• Partner with trusted organizations to identify residents to serve as community liaisons in planning processes.  
• Train community liaisons to serve as spokespeople, monitor the processes, inform others about input opportunities, and collect data as needed. |
| **SAFETY**  
Improve or maintain safety to maximize trail usage in underserved communities | Real or perceived concerns about safety may deter people from using trails and paths. |  
• Conduct ongoing maintenance (e.g., clear vegetation and trash, remove graffiti) to promote safety of paths.  
• Engage community groups and residents to provide long-term trail maintenance.  
• Use approaches such as Crime Prevention through Environmental Design (CPTED)\(^{198}\) to create safer environments. |
| **SOCIAL AND OTHER SUPPORTS**  
Provide supports that enhance trail use | Residents who have historically lacked access may not be aware of trails or may need additional support to make trail use a part of their routine. |  
• Develop initiatives to encourage trail use (e.g., health education initiatives, physician referrals, walking clubs).  
• Partner with local agencies to host events and activities that use paths and trails.  
• Partner with local law enforcement to promote safety.  
• Enhance existing trails to facilitate access between community resources (e.g., housing, transit stations, parks, schools, retail centers). |

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Build the Team: Partnership for Success

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

- Area Agencies on Aging
- Chambers of commerce
- Community-based organizations
- 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
- Health care systems, hospitals, community clinics, and health care providers
- Land trusts or conservancies
- Leaders and community champions from multiple sectors
- Local businesses
- Local governments
- Local department of transportation
- Local organizations of those with differing abilities
- Parks and recreation department
- Public health agencies
- Public Works Department
- Real estate developers
- Social services agencies
- State department of conservation
- State department of natural resources
- State department of transportation
- Zoning and Planning organizations

HEALTH EQUITY IN ACTION

Trails upgraded to better connect people and destinations

Mid-Ohio Valley, WV

“If you build it, they will come” did not ring true for the miles of underutilized trails in rural Mid-Ohio Valley, partly because low-income residents lacked access to these pathways. This lack of access presented a real barrier to active transportation. To understand how to promote more trail usage, the Mid-Ohio Valley Regional Health Department, with support from CDC’s Communities Putting Prevention to Work program, conducted mapping and community assessments. Results highlighted the need for better connectivity between trails and desirable destinations, mile markers, and informative signage such as kiosks in parks with maps of trails denoting wheelchair accessibility and level of trail difficulty.

Capitalizing on the diversity of partner expertise, the health department worked with the West Virginia Parks and Recreation Department, the Regional Council, county commissioners, and others to develop a master plan with a strong emphasis on improving existing trails. Community coalitions, faith-based organizations, and youth organizations were also engaged to ensure low-income residents were engaged throughout the planning process. Community members had a vote in which trail improvements were the highest priorities. By May 2012, the master plan was adopted by five of the six counties in Mid-Ohio Valley.

Strong collaboration and leveraging funds were keys to success for implementation and sustainability. Local churches granted access to their property where portions of the trails crossed. In Pleasants County, the health department partnered with the Department of Education to connect the county’s elementary school track to a nearby community and nursing home for public use. Smaller communities dealing with budgetary restraints were able to leverage Complete Streets policy and transportation enhancement efforts for trail improvements.
Trails and Pathways Increase Connectivity for All in Alabama

Jefferson County, AL

A mapping assessment showed that many people lacked access to places for physical activity in Jefferson County—a jurisdiction in Alabama with many African American and low-income populations. Residents experiencing the highest rates of chronic disease and the lowest levels of activity live in neighborhoods where connectivity to trails and greenways was limited.

To address this lack of access, Freshwater Land Trust (FWLT), a local greenway conservation organization teamed up with the Health Action Partnership and the Jefferson County Department of Health to lead development of the Red Rock Ridge and Valley Trail System Master Plan. These efforts were supported by CDC’s Communities Putting Prevention to Work program. Collaborating with established community organizations helped to drive the project’s success. Churches spread the word to congregations about opportunities to be involved in planning, and a consulting firm with deep community connections facilitated stakeholder meetings in the smallest towns in the county. Over 40 meetings were held at convenient and neutral locations including churches, local museums, city halls, and the Civil Rights Institute in Birmingham—the largest city in the county. An online interactive map provided opportunities to participate and add suggestions virtually.

Over 3,000 residents contributed suggestions in the development of the Master Plan, which connects more than 200 miles of greenways and trails to nearby homes, schools, churches, and businesses. Wendy Jackson, Executive Director of FWLT underscored the impact of the community-driven planning process: “If you want to know where people want to walk but there is no trail, you have to ask them. There were many connections that would not have been made if it were not for [community participation].” The coalition’s “Our One Mile” planning process inspired residents, businesses, and local organizations to embrace the Master Plan.
PHYSICAL ACTIVITY STRATEGIES FOR CHILDREN AND YOUTH INCLUDE A RANGE OF POLICY AND ENVIRONMENTAL IMPROVEMENTS SUCH AS PHYSICAL EDUCATION (PE) REQUIREMENTS, PHYSICAL ACTIVITY BREAKS, AND ACTIVE COMMUTING OPTIONS IN SCHOOL, AFTERSCHOOL, AND EARLY CARE AND EDUCATION SETTINGS.

MAKE THE CASE:

Why Is This A Health Equity Issue?

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

• **Opportunities for Physical Activity Outside of School Are Limited in Many Underserved Communities:** Access to affordable, culturally appropriate physical activity opportunities outside of school time such as gyms, clubs, and recreation facilities is limited in under-resourced communities. Factors such as unsafe recreation areas, lack of open space, violence, perceptions of violence, inadequate walking and biking paths, and dangers from traffic may also play a role in discouraging children from physical activity.

• **Many Institutions Have Limited Resources to Implement Physical Activity Programming:** Even when supportive institutional policies are in place, differential access to resources can make implementing physical activity opportunities a challenge for institutions in low-income communities. Insufficient funding, inadequate or inaccessible recreation facilities and equipment, and lack of qualified staff can decrease the ability of institutions to offer quality programming.

• **Needs Differ Among Children of All Abilities:** Children with disabilities may have some restrictions that limit participation in certain activities. Understanding their ability to access equipment, space, and infrastructure is essential for promoting physical activity. Additionally, gender and cultural norms and preferences should be considered to ensure the appropriateness of physical activity opportunities.
## 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 physical activity strategies:

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<td><strong>EQUITABLE IMPLEMENTATION &amp; ENFORCEMENT</strong></td>
<td>Even if a policy is in place, under-resourced settings may have difficulty implementing quality physical activity improvements and policies, resulting in children in these settings receiving fewer benefits from the programs and policies.</td>
<td>• Put accountability measures in place to monitor and enforce implementation efforts across settings. Address the needs of under-resourced institutions. • Prioritize professional development, continuing education, and training opportunities for staff working in underserved communities. • Consider allocating technical and financial resources to under-resourced settings to implement physical activity improvements.</td>
</tr>
<tr>
<td><strong>LIMITED RESOURCES (STAFF &amp; INFRASTRUCTURE)</strong></td>
<td>Limited staff, space, and facilities may be obstacles to implementing physical activity, particularly in under-resourced settings.</td>
<td>• Partner with nearby schools, public health agencies, faith-based organizations, and local businesses to locate funding for activities or leverage alternative sites for physical activity near the school. • Combine resources to hire physical education (PE) specialists that rotate to different schools and afterschool programs to provide quality instruction and help train staff. • Explore play activities that require minimal equipment or consider integrating physical activity into classroom instruction.</td>
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<tr>
<td><strong>LIMITED CAPACITY</strong></td>
<td>Home-based childcare facilities are relied on heavily by low-income and single-parent families. These facilities, along with other small childcare facilities, may have limited capacity to adequately implement or may not be included in physical activity program or policy requirements.</td>
<td>• Identify small and home-based childcare providers and engage them to help develop feasible physical activity practices in these settings. • Understand challenges and provide technical assistance and continuing education programs to build capacity among providers. • Promote cost-neutral physical activity strategies and find creative ways to leverage existing resources in these settings.</td>
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<tr>
<td><strong>COMMUNITY AWARENESS &amp; INVOLVEMENT</strong></td>
<td>Lack of parent/guardian engagement may make it difficult for settings to prioritize physical activity or have the voluntary supports to make improvements. Competing responsibilities and language needs may also make it difficult for some parents/guardians to participate in school meetings.</td>
<td>• Engage parents/guardians and provide leadership and decision-making opportunities about wellness policies, PE, recess, intramural sports, afterschool programs, and other physical activity-related issues. • Schedule school forums at convenient times and provide additional support, such as language interpretation and childcare services to maximize participation. • Develop feedback tools such as surveys, so families can provide input outside of formal meetings.</td>
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Build the Team: Partnership for Success

Successful efforts to implement physical activity strategies in school, afterschool, and early care and education settings depend on bringing a diverse set of partners to the table early, consistently, and authentically. These partners may include the following:

- Afterschool providers (e.g., Boys and Girls Club, YMCA)
- Childcare centers and provider organizations (e.g., Head Start)
- Childcare licensing agencies
- 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
- Organizations serving populations experiencing health inequities
- Parent-teacher associations and organizations
- Parks and recreation department
- Public health agencies
- School districts, universities, and community colleges
- School district administrators, teachers, and PE specialists
- Social service agencies
- State departments of education, particularly agencies focused on early childhood development
- Youth development organizations

Volunteer Services Increase Physical Activity in Afterschool Programs

California

With the goal of improving health, educational, and social outcomes, Coaching Corps partners with low-resourced schools, community organizations, and institutions of higher learning across California to increase students’ access to high-quality sports activities. Coaching Corps works directly with these organizations to improve afterschool programming and coordination among physical education teachers, recess supervisors, and afterschool providers to ensure that each student engages in quality physical activity for at least 60 minutes a day.

A trained and supportive coach can significantly increase the number of students who participate in sports activities. Coaching Corps’ previous model provided funds to hire sports coaches for low-resourced afterschool programs. However, once that funding ended, programs were often unable to afford coaches and could no longer provide these opportunities.

Recognizing that this model was unsustainable, Coaching Corps began partnering with local colleges and universities to recruit and train college students as volunteers. Partnerships with these academic institutions enable Coaching Corps to continue providing ongoing free support to low-resourced schools and afterschool programs. At the same time, the student volunteers build leadership and technical skills, establish meaningful relationships with young people, and give back to the community.

Even with limited staffing and fiscal resources, these efforts have been successful in increasing physical activity among underserved children and youth. Working with the Evelyn and Walter Haas Jr. Fund and generous individual donors, Coaching Corps has placed nearly 2,500 coaches in afterschool programs, reaching nearly 20,000 students since 2005.
Playworks: Using Recess as a Place to Play and Be Active

Detroit, MI

The long winters in Detroit, coupled with the lack of safe places to play, make physical activity during the school day challenging. But Playworks Detroit has turned these challenges into opportunities. A national nonprofit, Playworks partners with low-resource schools in local communities to provide organized recess using games that are highly adaptable, require few resources, and promote positive behavior. In 2010, Playworks Detroit was launched to address the activity needs of local students, and has since served 18,000 students. With support from the Robert Wood Johnson Foundation and other local foundations, corporations and individuals, Playworks is able to implement strategies using physical activity and safe meaningful play to improve the well-being of children in the community.

Playworks has found ways to use spaces, from hallways and parking lots to auditoriums and gyms, as places for play. Games that require very few pieces of equipment have come in handy for smaller spaces. For example, Playworks can make games fun and action-packed with as little as a ball, a few hula hoops, and a couple of safety cones.

During recess, Playworks coaches organize stations with games such as tag, four square, and kickball, which can be modified to include students of all abilities. Playworks coaches model positive behavior, and this creates a shared understanding among students. This shared understanding leads to fewer conflicts on the playground and more productive classroom time.

In addition to working in schools, Playworks Detroit plays with the community once a month by partnering with local organizations, the police department, and the mayor’s office to host events such as Recess Days. During one Recess Day, Detroit’s mayor joined hundreds of students in downtown Detroit as they learned how to play safely while having fun. “Getting kids to be physically active is a good place to start. Then you can begin a conversation on how do we as a community create more safe places to play,” says Jeannine Gant, Executive Director of Playworks Detroit. By providing trained coaches, working with a wide variety of partners, and demonstrating that children can play anywhere if they are supported, Playworks Detroit is getting students and the larger Detroit community to play again.
NEIGHBORHOOD DEVELOPMENT THAT CONNECTS COMMUNITY RESOURCES TO TRANSIT

TRANSIT-ORIENTED DEVELOPMENT (TOD) AND MIXED-USE ZONING ARE TWO INTERRELATED STRATEGIES THAT CAN FACILITATE AVAILABILITY OF AFFORDABLE HOUSING CLOSE TO PUBLIC TRANSPORTATION, PHYSICAL ACTIVITY INFRASTRUCTURE, HEALTHY FOOD RETAIL, AND OTHER HEALTH-PROMOTING SERVICES AND COMMUNITY INSTITUTIONS. THESE STRATEGIES CAN ALSO HELP FACILITATE OPPORTUNITIES FOR ACTIVE TRANSPORT SUCH AS WALKING, BIKING, AND USING A WHEELCHAIR.

MAKE THE CASE:
Why Is This A Health Equity Issue?
The issues below highlight the need for TOD and mixed-use zoning strategies that advance health equity:

• Accessible and Affordable Public Transit Is a Need for Many Underserved Populations: Public transit may be a necessity for individuals who cannot afford the cost of an automobile and the associated owning, operating, and maintenance expenses. Additionally, individuals with a low-income, older adults, and people with disabilities may also need to rely heavily on public transportation for reaching services, employment, and recreation.

• Negative Consequences of Zoning Strategies May Exist in Underserved Communities: Over time, zoning and other factors have contributed to the differential distribution of community resources (e.g., healthy food and physical activity opportunities), and ultimately health inequities. Zoning strategies such as transit-oriented development may also lead to changes in neighborhood demographics and housing values. Such changes may lead to the displacement of some populations, possibly placing them further away from quality employment opportunities, schools, and health-promoting resources such as healthy food retail and parks.

• Rural Communities Face Unique Issues Related to Transportation and Access to Goods and Services: Many residents in rural areas frequently lack or have limited access to public transportation options. Further, long commute times, infrequent service, cost, and lack of infrastructure to facilitate transit use may present additional barriers to reliable transportation for rural public transit users.

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 transit-oriented development and mixed-use zoning strategies:

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<tr>
<td><strong>INCLUSIVE ANALYSIS</strong></td>
<td>Zoning and transit projects may move ahead without a clear understanding of potential outcomes for health and health inequities.</td>
<td>• Use health and equity impact assessments to identify potential unintended negative consequences of all community improvement efforts.</td>
</tr>
<tr>
<td><strong>COMMUNITY AWARENESS &amp; INVOLVEMENT</strong></td>
<td>Underserved residents may be left out of planning processes,(^{207}) which may result in development decisions that fail to encompass diverse perspectives. Planning processes can also be time consuming and technical,(^{208}) which may present a barrier to resident participation.</td>
<td>• Diversify leadership on boards and commissions to ensure multiple perspectives in decision-making processes.</td>
</tr>
<tr>
<td><strong>DISPLACEMENT</strong></td>
<td>Transit investments may drive up median area income, housing values, and rents. A possible result of such changes is that existing residents and small business owners may no longer be able to afford living or doing business there.</td>
<td>• Conduct an assessment (e.g., health impact assessment) to examine the possibility of displacement with TOD and mixed-use zoning strategies.</td>
</tr>
<tr>
<td><strong>TRANSPORTATION NEEDS</strong></td>
<td>Many TOD efforts are centered on rail with little focus on bus transit or bus rapid transit. Rail projects can be resource-intensive, may often serve more affluent populations, and could divert funds from bus transit upgrades.(^{209,211})</td>
<td>• Utilize supportive mechanisms and community benefits agreements (e.g., affordable housing protection, local hiring ordinances, tax credits) to ensure current residents are not displaced and can benefit from improvements.</td>
</tr>
<tr>
<td><strong>EXISTING OPPORTUNITIES</strong></td>
<td>Transit-oriented development and mixed-use zoning may not explicitly address community conditions like access to healthy food and physical activity opportunities, or other social determinants such as safety, jobs, and housing.</td>
<td>• Consider TOD and mixed-use zoning strategies near transit hubs, transit connections, and intersections that are served by multiple bus routes in communities where rail is limited.</td>
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\(^{207}\) Underserved residents may be left out of planning processes,\(^{207}\) which may result in development decisions that fail to encompass diverse perspectives. Planning processes can also be time consuming and technical,\(^{208}\) which may present a barrier to resident participation. Transits investments may drive up median area income, housing values, and rents. A possible result of such changes is that existing residents and small business owners may no longer be able to afford living or doing business there. Many TOD efforts are centered on rail with little focus on bus transit or bus rapid transit. Rail projects can be resource-intensive, may often serve more affluent populations, and could divert funds from bus transit upgrades.\(^{209,211}\) Transit-oriented development and mixed-use zoning may not explicitly address community conditions like access to healthy food and physical activity opportunities, or other social determinants such as safety, jobs, and housing. Transits investments may drive up median area income, housing values, and rents. A possible result of such changes is that existing residents and small business owners may no longer be able to afford living or doing business there. Many TOD efforts are centered on rail with little focus on bus transit or bus rapid transit. Rail projects can be resource-intensive, may often serve more affluent populations, and could divert funds from bus transit upgrades.\(^{209,211}\) Transit-oriented development and mixed-use zoning may not explicitly address community conditions like access to healthy food and physical activity opportunities, or other social determinants such as safety, jobs, and housing.
Build the Team: Partnership for Success

Successful efforts to implement transit-oriented development and mixed-use zoning 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-based organizations
- Community development corporations
- Community finance institutions
- Community members and residents affected by transit investments (of diverse abilities, ages, cultures, gender, income levels, race/ethnicity, and sexual orientation)
- Developers
- Funders
- Local businesses
- Local, state, and regional governments
- Metropolitan planning organizations
- Public health agencies
- Public Works Department
- Regional transit agencies
- Zoning and Planning organizations

HEALTH EQUITY IN ACTION

Addressing Equitable Development through a Health Impact Assessment of a Zoning Code

Baltimore, MD

Many Baltimore neighborhoods have higher rates of homicide and chronic disease than the rest of Maryland. The investigators of the Zoning for a Healthy Baltimore Health Impact Assessment (HIA) argued that truly tackling health disparities in Baltimore required addressing factors in the zoning code related to crime and violence, with the goal of enabling walkable, mixed-use neighborhoods. They made the case that environmental changes to address safety concerns could increase walking and activity for neighborhood residents.

The Public Health Working Group at Johns Hopkins University and the Baltimore City Health Department conducted a HIA funded by Robert Wood Johnson Foundation, in order to address the intersection of urban planning and public health by emphasizing that zoning can influence health. The HIA was used to identify which elements of the Baltimore zoning code (in its first rewrite since 1971) might promote or inhibit health—both generally and related to childhood obesity in particular.

The HIA began with a detailed literature review. One of the several findings was that the density of alcohol outlets in an area is linked to increased rates of violence. Several steps were already being taken to improve walkability and food access, however, the HIA helped draw attention to the role alcohol outlets might play in affecting neighborhood health. An evaluation of how the zoning regulations might change, reviews of the scientific literature, and interviews with stakeholders and urban health experts made it clear: addressing the number and location of alcohol outlets in certain neighborhoods could begin to shift perceptions of safety and impact physical activity rates to reduce the wide health disparities in Baltimore.

By using neighborhood health profiles, violent crime statistics, and alcohol outlet location data, the HIA team was able to demonstrate the need for additional consideration of alcohol outlet locations in the city’s rewrite of the zoning code. Working with a variety of stakeholders including the departments of Law, Planning, and Health, the HIA team developed recommendations to address the density of alcohol outlets. Since the development of the recommendations, Baltimore City has revised its zoning code to incorporate dispersal standards and other strategies for new and existing alcohol outlets.

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Job Opportunities and Services Come to a Neighborhood via Transit-Oriented Development

Oakland, CA

In the early 1990s, Bay Area Rapid Transit (BART) announced a plan to build a massive parking garage near the Fruitvale transit station in Oakland. The proposed garage would have increased single-occupant automobile traffic and isolated the Fruitvale neighborhood, a largely immigrant community of households living below the federal poverty level. In response, residents worked closely with The Unity Council, a community development corporation that helps families and individuals build wealth and assets, to develop an alternative plan for the Fruitvale Transit Village. This village was one of the first transit-oriented developments in the United States.

The new transit village development provides housing, services, and jobs to low-income residents in a central location. The Unity Council leveraged funding from several federal, state, local and private sources. The Council also partnered with BART and the City of Oakland to address concerns regarding public safety, walkability, affordable housing, and economic development.

Businesses and organizations in the Fruitvale Transit Village now cater to residents, commuters, and visitors. The Village has a daycare center, clinic, high school, senior center, library, and sit-down restaurants. It also hosts a weekly farmers’ market and one of the largest Day of the Dead festivals in the nation. Five hundred jobs are provided onsite and several thousand people receive services in the Village each day.

The Fruitvale Transit Village has become a safe haven, bringing generations—preschoolers, teenagers, and older adults—together and fostering a collective sense of respect for the community space. The Unity Council has begun the next phase of the project: more housing and a large community center that will be open seven days a week, with culturally appropriate youth-focused programming at low or no cost. Careful planning has helped protect against displacement of residents, encouraging a flourishing mixed-income neighborhood through job opportunities, services, and affordable housing.
PREVENTING COMMUNITY VIOLENCE IS CRITICAL TO CHRONIC DISEASE PREVENTION AS VIOLENCE (REAL OR PERCEIVED) MAY BE A BARRIER TO HEALTHY BEHAVIORS SUCH AS WALKING AND BICYCLING, USING PARKS AND RECREATIONAL SPACES, AND ACCESSING HEALTHY FOOD OUTLETS. PREVENTING COMMUNITY VIOLENCE REQUIRES BRINGING TOGETHER MULTI-SECTOR PARTNERS AND THE COMMUNITY TO SELECT AND IMPLEMENT POLICY, ENVIRONMENTAL, AND STRUCTURAL INTERVENTIONS BASED ON THE BEST AVAILABLE EVIDENCE AND THE COMMUNITY CONTEXT. SUCH INTERVENTIONS MAY INCLUDE COMMUNITY ECONOMIC DEVELOPMENT STRATEGIES (E.G., BUSINESS IMPROVEMENT DISTRICTS\textsuperscript{213}), BUILT ENVIRONMENT STRATEGIES (E.G., CRIME PREVENTION THROUGH ENVIRONMENTAL DESIGN\textsuperscript{214-216}), AND STREET OUTREACH AND COMMUNITY MOBILIZATION (E.G., CURE VIOLENCE – FORMERLY KNOWN AS CEASEFIRE CHICAGO\textsuperscript{217}).

MAKE THE CASE:

Why Is This A Health Equity Issue?

The issues listed highlight the need for violence prevention strategies that advance health equity:

- Some Communities Have A Disproportionate Burden of Violence: Inequities in violence-related outcomes (e.g., homicides, injuries, incarceration) are related to a variety of systemic issues.\textsuperscript{218,219} While violence is a reality in all communities, some communities and groups are far more exposed to diminished neighborhood conditions (e.g. neighborhood poverty, high alcohol outlet density, social isolation) that give rise to violence, and violence can thus become the norm.\textsuperscript{220,221}

- A Disproportionate Burden of Violence Exists for Some Youth of Color: The risk of experiencing violence varies significantly by race and ethnicity. For example, in 2010, among 10-to-24 year-olds, homicide was the leading cause of death for African Americans, second leading cause of death for Hispanics, third leading cause of death for American Indians/Alaska Natives, and the fourth leading cause of death among Asian/Pacific Islanders and non-Hispanic Whites.\textsuperscript{222} The disparity in ranges of violence extend beyond homicide, as a higher percentage of African American/Black high school students (40%) and Hispanic (37%) youth report that they have been in at least one physical fight in the previous year than non-Hispanic White students (29%).\textsuperscript{223}
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 strategies to prevent violence:

**KEY FACTORS**

<table>
<thead>
<tr>
<th><strong>DIVERSE PARTNERSHIPS</strong></th>
</tr>
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<tbody>
<tr>
<td>Work with systems that have been part of the Pipeline* to get to different outcomes</td>
</tr>
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<table>
<thead>
<tr>
<th><strong>BARRIERS OR UNINTENDED CONSEQUENCES</strong></th>
</tr>
</thead>
<tbody>
<tr>
<td>Racism, discrimination, and stigma may exist in many institutional practices, and may perpetuate prejudicial treatment. For example, practices related to school discipline, media portrayal, and the criminal justice system might foster differential outcomes for youth of color.</td>
</tr>
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</table>

<table>
<thead>
<tr>
<th><strong>OPPORTUNITIES TO MAXIMIZE IMPACT</strong></th>
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<tbody>
<tr>
<td>• Build multi-sector partnerships to change institutional practices that have a disproportionate effect on certain population groups.</td>
</tr>
<tr>
<td>• Ensure school discipline practices are consistent for all students.</td>
</tr>
<tr>
<td>• Encourage positive media coverage of young people in communities affected by violence.</td>
</tr>
<tr>
<td>• Address policies and practices in the criminal justice system that result in higher rates of involvement in the criminal justice system for young men of color.</td>
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<table>
<thead>
<tr>
<th><strong>ECONOMIC OPPORTUNITY</strong></th>
</tr>
</thead>
<tbody>
<tr>
<td>Promote economic opportunities and growth to build viable and stable communities</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th><strong>LIMITED ECONOMIC AND OCCUPATION OPPORTUNITIES</strong></th>
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</thead>
<tbody>
<tr>
<td>Limited economic and occupation opportunities may drive residents away, creating instability and a higher concentration of low-income residents. These factors may increase the risk for youth to resort to violence.</td>
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<table>
<thead>
<tr>
<th><strong>OPPORTUNITIES TO MAXIMIZE IMPACT</strong></th>
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<tbody>
<tr>
<td>• Learn about and partner with agencies with experience in community economic development strategies.</td>
</tr>
<tr>
<td>• Create opportunities to support business investments and community development to create an economically viable community.</td>
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<thead>
<tr>
<th><strong>SAFE SPACES</strong></th>
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<tbody>
<tr>
<td>Create a safe physical environment and provide spaces to strengthen social relationships</td>
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<table>
<thead>
<tr>
<th><strong>VISIBLE SIGNS OF DISORDER AND NEGLECT</strong></th>
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</thead>
<tbody>
<tr>
<td>Visible signs of disorder and neglect in a community make it more appealing as a venue for crime and violence.</td>
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</table>

<table>
<thead>
<tr>
<th><strong>OPPORTUNITIES TO MAXIMIZE IMPACT</strong></th>
</tr>
</thead>
<tbody>
<tr>
<td>• Consider changing the physical characteristics of housing, schools, and community areas to improve perceived and actual safety, and to reduce opportunities for crime and violence.</td>
</tr>
<tr>
<td>• Consider Crime Prevention through Environmental Design (CPTED) strategies (e.g., improved lighting, unobstructed sights lines, improved landscaping, graffiti removal, increased video and natural surveillance) to address crime and safety concerns.</td>
</tr>
<tr>
<td>• Partner with law enforcement to improve safety and increase spaces for social interaction.</td>
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<table>
<thead>
<tr>
<th><strong>SOCIAL COHESION</strong></th>
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<tbody>
<tr>
<td>Facilitate the social cohesion of the community</td>
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<tr>
<th><strong>THE RISK OF VIOLENCE IS HIGHER</strong></th>
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<tbody>
<tr>
<td>The risk of violence is higher in communities where individuals, groups, and organizations do not interact with each other in positive ways.</td>
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<table>
<thead>
<tr>
<th><strong>OPPORTUNITIES TO MAXIMIZE IMPACT</strong></th>
</tr>
</thead>
<tbody>
<tr>
<td>• Provide opportunities for residents to form positive relationships and contribute to the well-being of the community.</td>
</tr>
<tr>
<td>• Engage youth in activities, since they are particularly vulnerable to experiencing negative health and safety outcomes associated with a disorganized community.</td>
</tr>
<tr>
<td>• Consider street outreach and community mobilization strategies to promote positive interactions.</td>
</tr>
</tbody>
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* The Children’s Defense Fund has named the trajectory that results in disproportionate incarceration rates for African American and Latino males ‘The Cradle to Prison Pipeline’. http://www.childrensdefense.org/programs-campaigns/cradle-to-prison-pipeline/
## KEY FACTORS

### COMMUNITY AWARENESS & INVOLVEMENT
Engage community members and local organizations in a meaningful way.

### RESOURCE LIMITATIONS
Integrate efforts to prevent violence within multiple community initiatives.

## BARRIERS OR UNINTENDED CONSEQUENCES

- Individuals most affected by violence may not be included in violence prevention efforts in meaningful ways. Additionally, resources directed to the violence prevention efforts may not reach local organizations serving communities in need.

- Communities in greatest need may not have sufficient resources to address issues of violence.

## OPPORTUNITIES TO MAXIMIZE IMPACT

- Provide support and build capacity for local groups to be involved in violence prevention efforts.
- Train residents in identifying risk and protective factors for violence, and implementing strategies to prevent violence.
- Find ways to engage youth and survivors of violence who offer a unique perspective.
- Integrate violence prevention efforts into other strategies addressing chronic illness, economic and community development, and educational attainment.
- Explore creative solutions for leveraging related initiatives and resources.

---

### Build the Team: Partnership for Success

Successful efforts to implement community violence prevention 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
- Community members, including former gang members, survivors of violence, and youth
- Faith-based organizations
- Family members, including caregivers
- Health care systems, hospitals, community clinics, and health care providers
- Local businesses
- Media
- Police, criminal, and juvenile justice agencies
- Public health agencies
- School districts, universities, and community colleges
- Social service agencies
- Youth development organizations

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### HEALTH EQUITY IN ACTION

#### Building Community Capacity to Foster Healthy and Safe Communities

**Louisville, KY**

Residents of the Shawnee neighborhood of Louisville experience more negative health outcomes and higher rates of violence compared to some other local communities. Many of the neighborhood’s violent assaults have been linked to poor community conditions, including an overabundance of alcohol and community blight. When the Louisville Center for Health Equity, the Shawnee Neighborhood Association, and local youth joined together to reduce violence, they promoted a sense of safety by working with local businesses to decrease the presence of alcohol promotions, increase street lighting, and eliminate graffiti and blight. These improvements, which were supported by the...
Convergence Partnership, were aimed at creating an environment where residents could walk around safely, increasing access to their local grocery store and recreational spaces.

The project cultivated leadership by working with youth as well as adult residents, encouraging them to become active in their own community. Shawnee youth engaged in conversations confronting equity issues—exploring how oppression and institutional racism make communities unsafe and unhealthy. The youth took this analysis to heart, shifting their focus from individual issues toward broader community solutions.

Using Crime Prevention Through Environmental Design and digital storytelling, youth and adults identified environmental determinants that influenced safety and physical activity. Poignant photos and videos captured neighborhood assets and concerns and informed recommendations to decision makers. Over 18 months, the Shawnee neighborhood saw many improvements: neighborhood blight decreased, retailers removed tobacco and alcohol advertisements from storefronts, and the city facilitated major street repair.

**Building a Culture of Peace through Resident Engagement**

**Boston, MA**

Some communities in Boston experience disproportionate rates of violence. Such violence may create concerns for businesses, such as grocery stores, to locate in these communities and for residents who may want to walk and be active in their neighborhood. To address this issue, the Boston Public Health Commission (BPHC) uses a public health approach to prevent violence in these communities with support from a variety of federal and local funds. BPHC focuses on engaging community members, building autonomy in neighborhoods, and fostering connectedness between residents.

In November 2007, the mayor, health commissioner, and police commissioner decided to make violence prevention a Boston priority. This commitment was key to ensuring that resources and support were allocated to the issue. With the help of more than 100 city staff across all agencies plus a large number of volunteers, BPHC led a neighborhood assessment and educational initiative, visiting every single house in neighborhoods heavily impacted by violence. BPHC provided more than 1,100 backpacks filled with information about BPHC and preventing violence. Residents also completed more than 700 surveys. The results identified community policing, communities working together, and youth programs as possible ways to prevent violence in their neighborhoods.

Using results from the assessment, BPHC developed the Violence Intervention and Prevention Initiative (VIP), which supports community-based organizations bringing together neighborhood coalitions including youth, long-time residents, and local businesses. Through community education, VIP coalitions work to ensure residents have the knowledge and resources to drive sustained improvements that decrease violence where they live. Each local coalition developed neighborhood violence prevention plans tailored to the community’s needs and priorities. Dr. Barbara Ferrer, BPHC Executive Director noted, “Resident engagement was so important for us [because preventing violence is] about a culture of building peace.”

BPHC provides funding and technical assistance for a community organizer and block captains in each neighborhood. BPHC also supports a network of coalitions across all the neighborhoods. The network enables residents to share lessons learned and continue to build their capacity to address violence.
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
Despite decades of effort to reduce and eliminate health disparities, they have largely persisted—and in some cases are widening. 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.

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

<table>
<thead>
<tr>
<th>Population Group</th>
<th>Risk Factors Disparities</th>
</tr>
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<tbody>
<tr>
<td><strong>PEOPLE OF COLOR (RACIAL/ETHNIC MINORITIES)</strong></td>
<td>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. On a variety of health indicators, significant disparities among these racial and ethnic minorities continue to exist. 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%. In 2011, cigarette smoking among adults was highest among American Indian/Alaska Native populations (32%), compared to other racial/ethnic groups.</td>
</tr>
<tr>
<td><strong>PEOPLE WITH MENTAL OR SUBSTANCE USE DISORDERS</strong></td>
<td>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.</td>
</tr>
<tr>
<td><strong>PEOPLE LIVING IN RURAL COMMUNITIES</strong></td>
<td>Approximately 19%, or 60 million Americans, live in rural areas. Rural residents are more likely to be elderly, in poverty, in fair or poor health, and to have chronic health conditions. For example, the prevalence of obesity is higher in rural adults (40%) than urban adults (33%). Adults living in non-metropolitan counties also have a higher average annual percentage of smoking (27%) than adults living in large metropolitan counties (18%).</td>
</tr>
<tr>
<td><strong>PEOPLE WITH DISABILITIES</strong></td>
<td>Approximately 20% of U.S. adults have a disability. Approximately 28% of adults with disabilities smoke, compared to 16% of those without a disability. Adults with disabilities are more likely to be physically inactive (22%) than are adults without disabilities (10%). Obesity is also higher among adults with a disability (38%) compared to those without a disability (24%), according to self-reported data.</td>
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</table>

[cdc.gov/healthequityguide](http://cdc.gov/healthequityguide)
In 2011, an estimated 15% of the U.S. population lived below the federal poverty level. 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. 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%). Healthy eating (specifically fruit and vegetable consumption) is also lower among low-income populations compared to higher income populations.

Approximately 15% of Americans 25 years old and older have not earned a high school diploma. 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%). 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%).

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. In 2009–2010, 45% of adults aged 65 and over were diagnosed with two or more chronic conditions. Regarding inequities, older adults living in poverty and isolation may be particularly vulnerable.

The lesbian, gay, or bisexual population is estimated at 3.5% in the United States, with an additional 0.3% identifying as transgender. 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%). 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.

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

**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.

<table>
<thead>
<tr>
<th>Resource</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>BEHAVIORAL RISK FACTOR SURVEILLANCE SYSTEM (BRFSS)</strong>&lt;sup&gt;251&lt;/sup&gt;</td>
<td>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.</td>
</tr>
<tr>
<td><strong>CENSUS DATA</strong>&lt;sup&gt;252&lt;/sup&gt;</td>
<td>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.</td>
</tr>
<tr>
<td><strong>COMMUNITY COMMONS</strong>&lt;sup&gt;253&lt;/sup&gt;</td>
<td>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.</td>
</tr>
<tr>
<td><strong>COMMUNITY HEALTH ASSESSMENT &amp; GROUP EVALUATION (CHANGE): BUILDING A FOUNDATION OF KNOWLEDGE TO PRIORITIZE COMMUNITY NEEDS</strong>&lt;sup&gt;257&lt;/sup&gt;</td>
<td>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.</td>
</tr>
<tr>
<td><strong>COUNTY HEALTH RANKINGS: MOBILIZING ACTION TOWARD COMMUNITY HEALTH</strong>&lt;sup&gt;254&lt;/sup&gt;</td>
<td>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).</td>
</tr>
</tbody>
</table>

[cdc.gov/healthequityguide](http://cdc.gov/healthequityguide)
| **COMMUNITY HEALTH STATUS INDICATORS (CHSI)** | 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** | 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)** | 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** | Statistical software from the National Cancer Institute that imports population-based health data and calculates different disparity measurements. |
| **HEALTH EQUITY INDEX** | 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** | 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)** | 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.

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