

The Imperative of Reducing Health Disparities through Prevention:

Challenges, Implications, and Opportunities

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Putting prevention
at the center of community well-being

TABLE OF CONTENTS

Preface:
Improving Health with a Community Approach ii

Introduction:
Defining Disparities and the Imperative of Reducing Them. 1
 What are Health Disparities? 1
 The Imperative of Reducing Health Disparities 1

A Preventive Approach to Reducing Disparities 3
 The Health Disparities Trajectory: Understanding the Health Gap 3
 Take Two Steps Back: From Medical Conditions to Community Factors . . 5
 A Community Health Approach 7
 Methodology Related to the 13 Community Factors 7
 Community Health Factors. 8

A Community Health Approach Applied 10
 An Analysis of Three Critical Health Disparity Issues 10
 Violence 10
 Poor Nutrition and Physical Activity Related Health Problems 11
 Environmental Health Problems 13
 Emerging Approaches: Five Ways to Reduce Health Disparities 14
 The Built Environment 15
 Sustainable Agriculture 17
 Economic Development 18
 Norms Change 19
 Community-Based Participatory Efforts 20

Health and Public Health: A New Way of Doing Business. 22
 Advance Comprehensive Approaches 22
 Generate Interdisciplinary Approaches 23
 Foster Community Resilience 24

Conclusion:
Action Now for a More Promising Future 25

Endnotes 27

Prevention Institute

is a nonprofit, national center dedicated to improving community health and well-being by building momentum for effective primary prevention. Primary prevention means taking action to build resilience and to prevent problems before they occur. The Institute's work is characterized by a strong commitment to community participation and promotion of equitable health outcomes among all social and economic groups. Since its founding in 1997, the organization has focused on injury and violence prevention, traffic safety, health disparities, nutrition and physical activity, and youth development.

PREFACE

Improving Health with a Community Approach

Health Spending Rises to Record 15% of Economy *New York Times*¹

Manufacturing Jobs Dip in Region as Outsourcing Widens *Boston Globe*²

**High Costs Force Small Businesses to Drop Employees'
Health Insurance** *Fort Worth Star-Telegram*³

Diabetes an Epidemic in U.S. with More than 20 Million Affected
*Charleston Daily Mail*⁴

Housing Woes Set to Worsen *Chicago Tribune*⁵

Global Tension Pushes Oil to Record *USA Today*⁶

Serious Crime Rates on Rise; Dramatic Jumps in Rape, Murder
*Albuquerque Journal*⁷

GM Confirms that Cost of Health Care is a Crisis *Detroit Free Press*⁸

2 Studies Link Global Warming to Greater Power of Hurricanes
*New York Times*⁹

Studies See Epidemic of Domestic Violence *Seattle Times*¹⁰

These are the headlines that Americans are waking up to—and living with every day. They collectively threaten our assumptions of well-being and create concern that our children will experience a lower quality of life than we have. Already, for the first time in United States history, the life expectancy of children may be lower than that of their parents.¹¹

The impact of issues such as these on everyday living and health is the greatest for people of color and low-income communities. When gasoline, food, and medical costs go up, low-income people are hardest hit. When health-care funding is cut, the cuts start in communities of color and low-income communities. When violence prevention is ignored, everyone is affected, but disenfranchised communities are harmed most. Each of these issues impacts distressed communities in a number of ways. Combined, these issues lead to social and physical stress, or *weathering*, and the subsequent deterioration of health.

Yet as a nation we are not paying sufficient attention to equity and social justice. Perhaps we are overwhelmed by the scope of the problems revealed by just one of these headlines, let alone all of them. But we can't be paralyzed.

We cannot have a healthier and safer America without effectively addressing the marked disparities in health that we see today. Business as usual is not working.

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The tragic events that followed Hurricane Katrina unmasked the impact of race and poverty on opportunity and wellbeing. We need to take this understanding and turn it into an opportunity to make a difference and close the health gap.

All the news is not bad. There are promising building blocks for reducing the health gap and improving health for all—trends and approaches that we can emphasize to maximize our ability to stay healthy *in the first place*. Even in the midst of a crisis in health care, we know more than ever about what contributes to good health outcomes. Evidence is mounting about the role of key determinants underlying health and what can be done in neighborhoods and communities to improve health outcomes.

This paper summarizes what health disparities are and what contributes to them and, more importantly, builds on emerging research and practice regarding community health as a viable approach to close the health gap. Prevention Institute has conducted research and identified 13 key community factors that play a pivotal role in determining health and disparities. This paper identifies strategies and emerging approaches that can improve those factors in communities. The intention is not to provide an exhaustive explanation or substantiation through research, but rather a review of the issues, an overview of exciting emerging approaches, and a framework to guide potential action to reduce disparities.

Although treatment and technology have important roles to play in improving health outcomes, they are not the solution to health disparities. The real innovations are strategic efforts that embrace emerging thinking about transforming health at the community level. To be most effective, each strategy requires the application of a health lens and implementation with a particular emphasis on closing the health gap. Below are ten key disparity-reducing strategies and issues on which public health practitioners, advocates, and decision makers should be focused:

1. Primary prevention
2. Underlying determinants of health, particularly the 13 community factors identified by Prevention Institute
3. The built environment
4. Sustainable agriculture
5. Economic development
6. Social norms change
7. Community-based participatory efforts
8. Comprehensive approaches
9. Interdisciplinary collaboration
10. Community resilience

Although treatment and technology have important roles to play in improving health outcomes, they are not the solution to health disparities.

In sum, the main premise of this paper is that reducing disparities can only be achieved if attention is paid to eliminating and minimizing diseases and injuries *before* the need for treatment, therapy, and disease management, and this can only be done by changing fundamental conditions of the environment that arise from racial and economic injustice.

This community-oriented preventative approach will reduce both individual suffering and the burden on an overstressed medical system. A focus on community health and associated factors requires not just a new way of thinking but a new way of working. The five emerging approaches presented (the built environment, sustainable agriculture, economic development, social norms change, and community-based participatory efforts) all focus on improving different sets of the 13 factors. Which factors should be targeted, and which approaches to apply, depends on the health status, needs, and momentum in each community. The final section of the paper delineates some of the key shifts that health leaders must make—*from implementers of health care to facilitators of community-wide change*.

Health care is among the most expensive commitments of government, businesses, and individuals. Illness and injury also generate tremendous social costs in the form of lost productivity and expenditures for disability, workers' compensation, and public benefit programs. Eliminating racial and ethnic health disparities is imperative both as a matter of fairness and economic common sense. This tremendous challenge can—and must—be met with a focused commitment of will, resources, and cooperation to make change happen.

INTRODUCTION

Defining Disparities and the Imperative of Reducing Them

Despite steady improvement in the overall health of the U.S. population, racial and ethnic minorities, with few exceptions, experience higher rates of morbidity and mortality than non-minorities.¹²

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WHAT ARE HEALTH DISPARITIES?

Our nation spends nearly one trillion dollars a year on diagnosing and treating disease. Nevertheless, each year hundreds of thousands of deaths due to preventable causes occur—including nearly 400,000 deaths due to poor diet and inactivity; 85,000 deaths as a result of alcohol misuse; 55,000 attributable to toxic agents; and 29,000 attributable to firearms.¹³ These deaths and other associated health problems occur disproportionately among poor and minority populations.

The National Institutes of Health defines health disparities as “Differences in the incidence, prevalence, mortality, and burden of diseases and other adverse health conditions that exist among specific population groups in the United States.”¹⁴ Racial and ethnic health disparities are “*large, persistent, and even increasing* in the United States.”¹⁵ When elements of racism, poverty, and problematic community environments converge, greater overall threats to health and safety develop. When efforts are designed to address this convergence, disparities can be reduced.

THE IMPERATIVE OF REDUCING HEALTH DISPARITIES

According to the Institute of Medicine, “All members of a community are affected by the poor health status of its least healthy members.”¹⁶ Therefore, poor health is not only a burden to those affected but also to others. Conversely, by reducing disparities, the health care system would be enhanced for all. An excess of people with poor health overburdens the health care infrastructure, increases the spread of infectious diseases, and uses up public health and health care resources. Good health for all is precious; it enables us to be pro-

When elements of racism, poverty, and problematic community environments converge, greater overall threats to health and safety develop.

ductive, learn, and build on opportunities. Poor health jeopardizes our independence, responsibility, dignity, and self-determination.

The success of our communities, society, and economy also depends on good health. Healthy workers and a healthy emerging workforce are critical for social and economic progress. As a nation we are spending one out of every seven dollars of our Gross Domestic Product on health care, and it is anticipated that the proportion will soon rise to one out of every six dollars.^{17,18} Our health expenditures double those of any other nation.¹⁹ The strain is also taking a toll on government resources and consequently on taxpayers. When public money is used for medical care, less money is available for other vital services that enable us to thrive, such as education and transportation. But by spending primarily on the medical end—after people get injured or sick—we are not using our money wisely.

The prevalence of disparities may increase in the U.S. as the population becomes even more diverse. In coming years, achieving a healthy and productive nation will increasingly rely on our ability to keep all Americans healthy and reduce racial and ethnic disparities by improving the health of communities of color. A significant health gap exists in the U.S. We know the strategies that will be effective in closing it; many of them are described in this report. We have a social and moral responsibility to act.

A Preventive Approach to Reducing Disparities

The prevention of health disparities requires interventions that are holistic and address the allocation of public health and medical resources, quality of care, and the environments in which people live.²⁰

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THE HEALTH DISPARITIES TRAJECTORY: UNDERSTANDING THE HEALTH GAP

The trajectory below depicts three elements that contribute to inequitable health outcomes for people of color. First, individuals are born into a society that neither treats people nor distributes opportunity equally (*root factors*). These root factors, such as discrimination, poverty, and other forms of oppression, play out at the community level, affecting the overall community environment (*environmental factors*). People affected by health disparities more frequently live in environments with toxic contamination and greater exposure to high rates of joblessness, inadequate access to nutritious food and exercise, less effective transportation systems, and targeted marketing of unhealthy products. These kinds of environmental factors in turn shape behaviors (*behavioral factors*), such as eating and activity patterns, tobacco and alcohol use, and violence. The combination of environmental and behavioral factors contributes to an increased number of people getting sick and injured and requiring screening, diagnosis, and treatment (*medical services*). Inequities in access to and quality of medical services for people of color are well-documented and contribute to even greater disparities in health outcomes. The trajectory should not be read as a comprehensive representation (it does not account for complexities that exist such as reciprocal relationships) but rather a conception of the fundamental mechanisms producing health disparities.



Outraged by disparate health *and* treatment outcomes, researchers, advocates, and legislators look to reforming the health care delivery system to reduce disparities. Many people of color and/or low-income individuals have limited access to quality health care, further widening the gap in health outcomes between these communities and white and higher income groups. Ensuring that all individuals have access to quality medical care is one vital part of a comprehensive strategy to reduce health disparities. Quality health care means health care for everyone, culturally competent health care, and high levels of service for everyone. A quality health care system will provide preventive services; diagnose, treat, and manage disease and injury; and reduce the severity and repeat occurrences of disease. However, as critical as quality medical services are, improving them is only part of the solution to improving health outcomes and reducing health disparities. There are three reasons why addressing access to and quality of medical care *alone* will not significantly reduce disparities:

1. **MEDICAL CARE IS NOT THE PRIMARY DETERMINANT OF HEALTH.** Of the 30-year increase in life expectancy since the turn of the century, only about five years of this increase are attributed to medical care interventions. Even in countries with universal access to care, people with lower socioeconomic status have poorer health outcomes.
2. **MEDICAL CARE TREATS ONE PERSON AT A TIME.** By focusing on the individual and specific illnesses as they arise, medical treatment does not reduce the incidence or severity of disease among groups of people. The Institute of Medicine's report *Promoting Health: Intervention Strategies for Social and Behavioral Research* states that "One-to-one interventions do little to alter the distribution of disease and injury in populations because new people continue to be afflicted even as sick and injured people are cured."²¹
3. **MEDICAL INTERVENTION OFTEN COMES LATE.** Medical care is usually sought after people are sick. Today's most common chronic health problems, such as heart disease, diabetes, asthma, and HIV/AIDS, are never cured. Therefore it is extremely important to prevent them from occurring in the first place.

According to Drs. Wayne Giles and Leandris Liburd at the Centers for Disease Control and Prevention, "The elimination of health disparities requires attention to the physical, mental and dental health of all communities, as well as the social and political context in which health occurs or is threatened."²² A more preventive approach is vital and community prevention solutions play a clear role in strengthening health outcomes, as well as health care.

Many advocates and practitioners also look to addressing the root factors of health disparities. The weight of racism, oppression, and economic disparity takes its toll on health. As Michael E. Bird, former Director of the National Native American AIDS Prevention Center, has said, "I'll tell you how to eliminate disparities for Native Americans: give us our land back."²³ Working towards the elimination of social and economic inequalities is a critical aspect

PEOPLE AFFECTED BY HEALTH DISPARITIES MORE FREQUENTLY LIVE IN ENVIRONMENTS WITH:

- Toxic contamination and greater exposure to viral or microbial agents in the air, water, soil, homes, schools, and parks
- Inadequate neighborhood access to health-encouraging environments including affordable, nutritious food, places to play and exercise, effective transportation systems, and accurate, relevant health information
- Violence that limits the ability to move safely within a neighborhood, increases psychological stress, and impedes community development
- Joblessness, poverty, discrimination, institutional racism, and other stressors
- Targeted marketing and excessive outlets for unhealthy products including cigarettes, alcohol, and fast food
- Community norms that do not support protective health behaviors

of efforts to reduce health disparities. Further, understanding how these root factors play out at the community level and affect health contributes to a valuable understanding of why health disparities exist and what can be done to minimize the influence of root factors on health outcomes. In particular, understanding the key community factors that contribute to good or poor health provides a roadmap for what can be done to close the health gap.

TAKE TWO STEPS BACK: FROM MEDICAL CONDITIONS TO COMMUNITY FACTORS

One way to think about a prevention-oriented model for reducing health disparities is to think backwards from a given health problem or medical condition, such as diabetes, injury, or cancer. The first step back is from the injury or illness to what researchers McGinnis and Foege called “the actual causes of death.”²⁴ For instance, if diabetes is the medical problem, eating and activity patterns (as well as genetics) are the actual causes. If injury is the medical condition, car crashes, falls and violence are the actual causes. If lung cancer is the medical condition, the cause can often be traced back to smoking. As conceived by McGinnis and Foege, health problems result “from a combination of inborn (largely genetic) and external factors.”²⁵ Utilizing available analyses of the contributing factors to these fatal conditions, they identified a set of nine factors strongly linked to the major causes of death, referred to as actual causes of death (see Table 1), and estimated the number of deaths attributed to each.²⁶ As the list reveals, the ‘actual causes’ include specific environmental hazards—microbial and toxic agents—as well as factors related to human behavioral choices such as tobacco, diet and activity patterns, motor vehicles, firearms, and alcohol. They

TABLE 1.
THE RELATIONSHIP BETWEEN LEADING HEALTH PROBLEMS AND ACTUAL CAUSES OF DEATH

Actual Cause of Death Leading Health Problems and Medical Conditions

Tobacco	cancer, cardiovascular disease, low birth weight and other problems at infancy, and burns
Diet and Activity Patterns	cardiovascular and heart disease, cancers, and diabetes
Alcohol	risk factor for injuries (motor vehicle, home, work, burns, and drowning) and cancer (Alcohol is associated with an increased risk of violence which may include the use of firearms [see below] and increased risk taking behaviors which includes sexual behavior [see below]).
Microbial Agents	pneumococcal pneumonia and other bacterial infections, hepatitis, HIV, and other viral infections
Toxic Agents	cancer, cardiovascular disease, and diseases of the heart, lungs, kidneys, bladder, and neurological system
Firearms	homicide, suicide, and unintentional injury
Sexual Behavior	sexually transmitted diseases, excess infant mortality rates, cervical cancer, Hepatitis B and HIV infection
Motor Vehicles	injury and death to passengers and pedestrians
Illicit Use of Drugs	infant deaths, suicide, homicide, motor vehicle injury, HIV infection, pneumonia, hepatitis, and endocarditis

note that the origins of disease and injury are multi-factorial in nature, and that these factors may act independently or synergistically. For example, alcohol is a significant contributor to numerous unintentional and violent injuries, sexually transmitted diseases, cancers, and liver disease.

The second step back is from ‘actual causes’ to the community environment. The environment has a direct affect on health, as is reflected in the ‘actual causes’ of microbial agents and toxic agents. Environmental quality (air, water, and soil) tends to be worse in areas in which the population is either low-income or primarily people of color. Toxic sites are concentrated in areas where low income and minority populations reside.²⁷ Housing in these communities is more likely to be a source of lead, insects, dust, and other harmful contaminants.²⁸

Other physical and social neighborhood conditions also directly affect health by producing higher stress levels, which can contribute to poorer mental health and health outcomes. For example, children who hear gunshots may be more likely to experience asthmatic symptoms.²⁹ Chronic stress may contribute to other poor health outcomes such as cardiovascular disease and some forms of cancers. In her application of a *weathering* framework to explain disparate levels of morbidity and disability in African American women, University of Michigan professor Arline Geronimus lists multiple contributing circumstances which can be framed as environmental factors, including: “Cumulative exposure to environmental hazards and ambient or social stressors in residential and work environments and persistent psychosocial stress.”³⁰

Other aspects of the environment also affect health outcomes by shaping behaviors. Far more than air and water—though they are crucial to health—the environment is “anything external to individuals shared by members of the community,” including community behavioral norms.³¹ In an analysis of the forces influencing health outcomes, environmental conditions are “by far the most potent and omnipresent set of forces.”³² Seven of the ‘actual causes’ connote individual behavior and choice. However, according to McGinnis and Foege, “Behavioral change is motivated not by knowledge alone, but also by a supportive social environment and the availability of facilitative services.”³³

Increasingly, health professionals recognize that an exclusive focus on individual responsibility obscures the influence of environmental factors. According to Giles and Liburd, “Relying solely on public health programs that encourage individuals to adopt healthy behaviors is inadequate; emphasis on setting up social conditions that promote health must occur at the same time.”³⁴ Therefore, individual educational efforts will have greater impact if they are linked with efforts to change environmental conditions. For example, poor choices about diet and physical activity, which account for approximately a third of premature deaths in the U.S.,^{35,36} are not just based on personal preference or information about health risks. An individual will have a harder time changing behavior if he or she lacks sufficient income to purchase nutritious food, is targeted for the marketing of unhealthy products, and does not have

“It is unreasonable to expect that people will change their behavior so easily when so many forces in the social, cultural, and physical environment conspire against change”

—INSTITUTE OF MEDICINE

access to healthy foods.^{37,38} Similarly, it is much harder for people to be physically active when streets are unsafe and there are few gyms or parks.^{39,40,41} As The Institute of Medicine has stated, “It is unreasonable to expect that people will change their behavior so easily when so many forces in the social, cultural, and physical environment conspire against change.”⁴²

Many community leaders and health advocates intuitively understand that community conditions are a primary determinant of health. Further, given how root factors play out at the community level, they are also a key determinant of health disparities. Applying a community approach to advancing health outcomes remains an underutilized approach to reducing disparities and a tremendous opportunity to prevent illness and injury *before* their onset.

A COMMUNITY HEALTH APPROACH

Taking two steps back takes us from illness and injury to ‘actual causes’ to the community environments that contribute to poor health and health disparities. For the purposes of this analysis, “community” refers to a physical place—the geographic area that encompasses the places where people live, work, and socialize, although it can also refer to a group of people who identify around a particular characteristic or experience, such as immigration, faith, age, or sexual orientation. Research has now shown that after adjusting for individual risk factors, there are neighborhood differences in health outcomes⁴³ and it is the relationship of place, ethnicity, and poverty that can lead to the greatest disparities. Place-based strategies, with an emphasis on community participation, are extremely promising. Fundamentally, in order to close the health gap, we need to focus on the community environment; we need to foster community health.

A community health approach builds on strengths and assets within communities and advances community elements that have an impact on health and safety. Taking the second step back to address community conditions presents a key opportunity for prevention. This approach recognizes that root factors such as racism, poverty, and other forms of oppression play out at the community level, influencing the overall environment, shaping behaviors, and affecting health outcomes and the level of disparities. Environmental factors at the community level (community factors) comprise the pathways through which root factors play out on the community level. Identifying the factors that most influence health outcomes in a specific community, characterizing their interaction, and developing concrete examples of activities and approaches capable of addressing them, is essential to reducing health disparities. The community clusters and factors presented here are an important step in this process.

Methodology Related to the 13 Community Factors

The community factors are based on an iterative process conducted from July 2002 to March 2003 and supported by The California Endowment, a private health foundation. The process consisted of a scan of peer-reviewed literature

and relevant reports and interviews with practitioners and academics as well as an internal analysis that included brainstorming, clustering of concepts and information, and a search for supporting evidence as the analysis progressed. The literature scan began with *Healthy People 2010 Leading Health Indicators* (identified by Surgeon General Satcher as having a role in the elimination of health disparities⁴⁴) and the ‘actual causes of death’ identified by McGinnis and Foege.⁴⁵ The scan searched for information following these reports that linked the *Leading Health Indicators* with social, behavioral, and environmental elements. Based on the findings of this scan and analysis, the authors identified a set of community factors that could be linked to *Leading Health Indicators* through research. Further, the authors grouped the factors into interrelated clusters. The clusters and factors were reviewed and ratified by a national expert panel and incorporated into a tool, which was developed and piloted by Prevention Institute with support from the U.S. Office of Minority Health. With support from The California Endowment and the Community Technology Foundation of California, the clusters and factors were subsequently modified to reflect language that was less research-oriented and more community-friendly.

Community Health Factors

The resulting 13 key environmental factors either directly influence health and safety outcomes (e.g., air and water quality) or directly influence behaviors that in turn affect health and safety outcomes (e.g., the availability of healthy food affects nutrition). These same factors apply to every community because the differences between disenfranchised communities and more privileged communities is not that they suffer from different illnesses and injuries. Rather, for the most part, it’s the same health problems—*only more so, with greater frequency and severity*. The factors are organized into 3 interrelated clusters: equitable opportunity, people, and place.

EQUITABLE OPPORTUNITY: This cluster refers to the level and equitable distribution of opportunity and resources. Access and equity affect health in fundamental ways and over a lifetime. The availability of jobs with living wages, absence of discrimination and racism, and quality education are all important. Underlying economic conditions play out through a variety of effects⁴⁶ and poverty is closely associated with poor health outcomes.⁴⁷ Economic inequity, racism, and oppression can serve to maintain or widen gaps in socioeconomic status.⁴⁸ Individual income alone has been shown to account for nearly one-third of increased health risks among blacks.⁴⁹ Further, it has been suggested that other factors such as segregation make up the additional risk.^{50,51} Lower education levels are associated with a higher prevalence of health risk behaviors such as smoking, being overweight, and low physical activity levels.⁵² High school dropout rates correlate closely with poor health outcomes.⁵³

EQUITABLE OPPORTUNITY FACTORS

- Racial justice
- Jobs and local ownership
- Education

PEOPLE: This cluster refers to the relationships between people, the level of engagement, and norms, all of which influence health outcomes. Strong social networks and connections correspond with significant increases in physical and mental health, academic achievement, and local economic development, as well as lower rates of homicide, suicide, and alcohol and drug abuse.^{54,55} For example, children have been found to be mentally and physically healthier in neighborhoods where adults talk to each other.⁵⁶ Social connections also contribute to community willingness to take action for the common good which is associated with lower rates of violence,⁵⁷ improved food access,⁵⁸ and anecdotally with such issues as school improvement, environmental quality, improved local services, local design and zoning decisions, and increasing economic opportunity. Changes that benefit the community are more likely to succeed and more likely to last when those who benefit are involved in the process;⁵⁹ therefore, active participation by people in the community is important. Additionally, the behavioral norms within a community, “may structure and influence health behaviors and one’s motivation and ability to change those behaviors.”⁶⁰ Norms contribute to many preventable social problems such as substance abuse, tobacco use, levels of violence, and levels of physical activity. For example, traditional beliefs about manhood are associated with a variety of poor health behaviors, including drinking, drug use, and high-risk sexual activity.⁶¹

PLACE: This cluster refers to the physical environment in which people live, work, play, and go to school. Decisions about place, including look, feel and safety; transportation; open space; product availability and promotion; and housing can influence physical activity, tobacco use, substance abuse, injury and violence, and environmental quality. For example, physical activity levels are influenced by conditions such as enjoyable scenery,⁶² the proximity of recreational facilities, street and neighborhood design,⁶³ and transportation design.⁶⁴ A well-utilized public transit system contributes to improved environmental quality, lower motor vehicle crashes and pedestrian injury, less stress, decreased social isolation, increased access to economic opportunities, such as jobs,⁶⁵ increased access to needed services such as health and mental health services,⁶⁶ and access to food, since low-income households are less likely than more affluent households to have a car.⁶⁷ What is sold and how it’s promoted also plays a role. For example, for each supermarket in an African American census tract, fruit and vegetable intake has been shown to increase by 32%.⁶⁸ Further, the presence of alcohol distributors in a community is correlated with per capita consumption.⁶⁹ Poor housing contributes to health problems in communities of color⁷⁰ and is associated with increased risk for injury, violence, exposure to toxins, molds, viruses, and pests,⁷¹ and psychological stress.⁷²

PEOPLE FACTORS

- Social networks and trust
- Participation & willingness to act for the common good
- Acceptable behaviors and attitudes

PLACE FACTORS

- What’s sold & how it’s promoted
- Look, feel & safety
- Parks & open space
- Getting around
- Housing
- Air, water & soil
- Arts & culture

A Community Health Approach Applied

Evidence is emerging...that societal-level phenomena are critical determinants of health....Stress, insufficient financial and social supports, poor diet, environmental exposures, community factors and characteristics, and many other health risks may be addressed by one-to-one intervention efforts, but such interventions do little to alter the broader social and economic forces that influence these risks.⁷³

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AN ANALYSIS OF THREE CRITICAL HEALTH DISPARITY ISSUES

Health disparities exist across a broad spectrum of health outcomes. Based on a thorough and on-going analysis done by Prevention Institute of leading causes of *preventable* death and/or disability and areas in which there are great disparities, three critical issues have been chosen for in-depth discussion and analysis: violence, poor nutrition and activity related health problems, and environmental health problems. For each of the critical areas, a description of existing disparities is followed by an analysis of the social forces exacerbating disparities. These issues were chosen for two reasons: first because statistics and research verify that violence, poor nutrition and activity related health problems are fundamental sources of health disparities, which pose grave consequences in communities of color. Second, these issues are typical of other health issues faced by communities in that they are preventable and shaped by the 13 factors discussed previously, and attention to the underlying factors will result in a reduction in health disparities.

Violence

Violence permeates many communities and the disparate impacts of violence are evident in statistics. African American homicide rates are almost six times those of whites and Asians and Pacific Islanders.⁷⁴ Persons of Hispanic origin in 2000 experienced 11.0% of all violent crime committed against people 12 or older (greater than their percentage of the population).⁷⁵ Some studies show rates of intimate partner violence (IPV) incidence and deaths are significantly higher among African American women and in low-income communities.⁷⁶ According to the National Violence Against Women Survey (NVAWS), an

estimated 29.1% of African American females and 12.0% of African American males are victimized by IPV in their lifetime, defined by rape, physical assault or stalking. This rate is second only to the rate of IPV among American Indians and Alaska Natives (AI/AN: 37.5% females, 12.4% males).⁷⁷ Violence affects the entire community. Beyond the direct effects of physical injury and death, less direct effects include psychological trauma, stress, and social isolation. Violence shapes where we choose to live (for those who can afford to choose) and to shop, whether businesses are open, whether kids play in the streets or go to the parks, if parents can go the extra distance to a supermarket, and whether schools can attract more experienced teachers.

Violence rates are affected by a range of factors such as economic disparity and poverty, racism and other forms of oppression, school failure, and the availability of guns, alcohol, and drugs.^{78,79} Nationwide, alcohol is the drug most closely associated with violent incidents; some researchers estimate that it is implicated in 50 to 66% of all homicides,⁸⁰ 20 to 36% of suicides,⁸¹ and more than half of all cases of domestic violence.⁸² Methamphetamine use is associated with increases in intimate partner violence, inadequate child-parent attachments and child abuse, overburdening social services and the foster care system.⁸³ Violence rates are also affected by the general atmosphere and physical status of neighborhoods. For example, “Land-use patterns that encourage neighborhood interaction and a sense of community have been shown not only to reduce crime, but also create a sense of community safety and security.”⁸⁴ Poor and inadequate housing is associated with increased risk for violence.⁸⁵ When powerlessness and a sense of limited opportunity permeate neighborhoods, violence, both on the streets and in families, increases.

Violence is a learned behavior affected by the social environment. Gary Slutkin, the founder of CeaseFire, a Chicago-based violence prevention organization, states that, “[Violent behaviors are] learned by modeling what’s around you. In other words, what is the expectation if someone shows you disrespect, or looks at your girlfriend, or owes you money, or insults you? If the expectation is that you should shoot, then that’s what you do.”⁸⁶ These kinds of norms—or expectations about and models for behavior—are critical in influencing whether or not violence occurs. Boys are taught to be tough, take risks, not show emotion, and that a show of force is not only accepted but expected. Until recently, violence was mostly associated with males, but more recently, there is evidence that girls are becoming increasingly violent, and this has been attributed in part to the feminization of the superhero (increased media presentations of female characters that rely on violence resulting in confusing messages equating female violence with empowerment).⁸⁷

Poor Nutrition and Physical Activity Related Health Problems

Poor nutrition and physical activity-related diseases are accounting for an ever-increasing portion of national morbidity and mortality. Communities of color

What is the expectation if someone shows you disrespect, or looks at your girlfriend, or owes you money, or insults you? If the expectation is that you should shoot, then that’s what you do.

—GARY SLUTKIN

are experiencing the most severe increases in the most serious chronic conditions, including diabetes, cardiovascular disease, stroke, and certain cancers. Heart disease and stroke are the leading causes of death for all racial and ethnic groups in the United States. In 2000, rates of death from diseases of the heart were 29% higher among African American adults than among white adults, and death rates from stroke were 40% higher.⁸⁸ In 2000, American Indians and Alaska Natives were 2.6 times more likely to have diagnosed diabetes compared with non-Hispanic Whites, African Americans were 2.0 times more likely, and Hispanics were 1.9 times more likely.⁸⁹

Community environments, including the media and marketing, play a fundamental role in influencing eating and physical activity behaviors. In today's food environment, high-calorie, low-nutrient junk foods are most accessible, affordable, and heavily marketed, especially for households living on limited budgets. The phenomenon of supermarket flight—the gradual disappearance of supermarkets from inner cities and other low-income neighborhoods—within the past 40 years has left the typical low-income neighborhood with 30% fewer supermarkets than higher-income areas.⁹⁰ This lack of access is compounded by lower household car ownership and non-existent or cumbersome public transportation options. This leaves residents to rely on local mom-and-pop stores, corner liquor stores, and fast-food restaurants as key food sources. These sources offer limited produce and healthful fresh foods while featuring sweets, salty snacks, high-fat meals, and high-calorie beverages. The price of healthy foods may exert an additional barrier for low-income residents as emerging data indicates that healthy diets including lean meats, fish, and fresh produce may in fact be more expensive than high-fat, energy-dense diets.⁹¹

The physical space of communities influences patterns of life. The distances between home and work, the look and feel of a streetscape, the presence or lack of retail stores and parks influence whether people drive, walk, or bike and how they spend their leisure time. All too often, residents in low-income communities cope with inadequate sidewalks, inadequate access to public transportation, absence of bike lanes for cyclists, absence of walking and biking trails and absence or ill maintenance of parks,^{92,93,94} along with inaccessible recreational facilities and crime.^{95,96} Safety is a dominant concern leading parents to drive their children to school, rather than letting them walk, and to prohibit outdoor play.

The social environment also plays an important role in supporting healthy behavior. Built environment changes are necessary but not sufficient to change behavior. People are more likely to engage in healthy behavior with the encouragement of their peers. For example walking clubs have been demonstrated to increase participation in regular walking.⁹⁷ Social environments can sometimes discourage healthy behavior. Several fast food chains have initiated sophisticated advertising campaigns aimed at young men that associate overconsumption and large portions of high fat foods with manliness. In contrast,

Several fast food chains have initiated sophisticated advertising campaigns aimed at young men that associate overconsumption and large portions of high-fat foods with manliness.

one fast-food marketer has noted that salads or healthy food items are used to attract young women, in the hopes that they will return later when they have young children.⁹⁸ Fear of sweating or messing up hair has been noted as a reason that girls and young women do not participate in sports. To achieve neighborhood improvements, neighborhood residents need to band together to influence the actions of industry. For example, residents in the Upper Falls neighborhood of Rochester, New York formed Partners Through Food and successfully advocated with the Mayor and city officials to attract a supermarket retailer to redevelop a burned-out site that had previously housed the only supermarket in the area. This action drastically improved access to healthier foods.⁹⁹

Finally, there is an interaction between the presence of toxins in a neighborhood and physical activity. Low-income communities and communities of color are more likely to have poor air quality and toxic brownfield sites. Poor air quality prevents individuals from engaging in physical activity, especially if they have asthma or other respiratory illnesses. Contaminated empty lots, which could serve as badly needed parks and open space, frequently require large sums of money for sufficient clean-up.

Environmental Health Problems

The same environmental problems that contribute to poor air and water quality, and to blight and neighborhood deterioration, result in negative mental and physical health outcomes. Cancer, asthma, birth defects, developmental disabilities, infertility, and Parkinson's disease are on the rise, and they are linked to chemical exposures from air, water and soil, and products and practices used in our schools, homes, neighborhoods, and workplaces.¹⁰⁰ Low-income people and people of color are typically the most affected by environmental health concerns.¹⁰¹ Asthma prevalence is highest for Puerto Rican Americans (13.1%), and African Americans are four times more likely to be hospitalized and five times more likely to die of asthma than non-African Americans.¹⁰² African American children are five times more likely to be poisoned by lead than white children.¹⁰³ Toxic sites are concentrated in areas where low-income and minority populations reside¹⁰⁴ and low-income communities of color disproportionately located near industrial and toxic waste sites.¹⁰⁵ In a 2006 chapter entitled *Preventing Injustices in Environmental Health and Exposures*, Farquhar, Patel and Chidsey assert the following:

In 1987, the United Church of Christ's Commission on Racial Justice report showed race to be the most significant factor nationally in determining hazardous waste facility sites, with three out of every five African Americans and Hispanics living in a community in close proximity to unregulated toxic waste sites. More recent studies report a greater number of environmentally hazardous waste sites and polluting industries located in low-income communities and communities of color and a

Low-income people and people of color are typically the most affected by environmental health concerns.

higher risk of cancer associated with air toxics in socio-economically disadvantaged communities and African American communities.¹⁰⁶

A number of factors other than toxic sites contribute to poor environmental quality. The decreased green space and increased impervious man-made surfaces resulting from land development can disrupt natural water-filtration processes and threaten water quality. Rainfall in areas with less vegetation and more man-made surfaces cannot be absorbed and filtered and more often mixes with surface pollutants such as oil and becomes storm-water runoff. This unfiltered runoff reaches water sources such as streams and rivers more quickly than they can absorb it, and can result in waterborne disease outbreaks.¹⁰⁷ The siting of transportation corridors and depots in urban areas affects air quality in the communities in which they are located as a result of diesel and related particulate emissions from trucks, locomotives and shipyards. Further, low-income people of color frequently have higher exposure to toxins in their work environments and homes than other populations.¹⁰⁸ For example, old and decaying housing stock exposes people to toxins (lead), allergens (mold), and disease vectors (rats, mosquitoes). Also, pesticides which are used in conventional agriculture are particularly problematic for farm and agricultural workers. Occupational exposures to pesticides have been associated with health problems including miscarriages, birth defects, and decreased sperm counts.¹⁰⁹ Not only are pesticides and other industrial farming methods harmful to farmers and farmworkers, but these practices pose a health risk to the surrounding community. Non-sustainable methods of agricultural production contribute to poor air quality through pesticide drift, field dust, waste burning, gases from manure lagoons, and diesel exhaust from transporting food long distances.¹¹⁰ This can be a detriment to the health of families living near agricultural land, often affecting low-income migrant farmworker families. Hurricanes Katrina and Rita demonstrated how the conditions of people's lives prior to disasters—employment status, social support system, physical mobility and access to transportation, housing situation, financial resources, and political clout—contributes to their level of vulnerability.¹¹¹ Further, housing and work conditions impact exposure to environmental toxins. While low-income communities of color are disproportionately impacted by poor environmental quality, there are examples of community members coming together to insist on clean-up or ensure that hazardous facilities are not built.

EMERGING APPROACHES: FIVE WAYS TO REDUCE HEALTH DISPARITIES

Many major health problems, including the three discussed previously, are experienced disproportionately in communities of color and are preventable conditions shaped by the community environment. Indeed, there are links between the three health problems and all of the 13 community factors delineated earlier in this paper. The most promising approaches to close the health gap are those that target change in the community environment.

Not only are pesticides and other industrial farming methods harmful to farmers and farmworkers, but these practices pose a health risk to the surrounding community.

What are some of these promising approaches? Based on research about the community factors and health problems, as well as a review of trends in the field, the following five emerging strategies—the built environment, sustainable agriculture, economic development, social norms change, and community-based participatory efforts—have been identified. They constitute promising areas for action to close the health gap by addressing the community environment. Each of these strategies addresses multiple health issues, and is a vehicle for addressing a group of the community factors, demonstrating that a good solution solves multiple problems. No one strategy will, in isolation, solve the disparities crisis. These strategies all address different sets of community factors and in any given community the needs and assets are distinct.

These strategies should be further explored and supported with available resources, and training should be provided to ensure that efforts are maximized. The directions delineated below are not new ideas. In some cases they haven't received attention from the health sector; in other cases that attention has not been focused on reduction of disparities. What is new here, and what has the most promise for reducing disparities, is that each approach be promulgated with both a health lens and a focus on disparities. That is, each of these should be undertaken with attention not only to ensuring that actions are designed to bolster community factors to improve health but also to ensure that actions are specifically designed to close the health gap.

The Built Environment

Over the past decade there has been a growing recognition of the critical ways in which physical structures and infrastructure (the *built environment*) impact the physical and mental health of community residents. While these issues have traditionally been the purview of planning and not of health, there are clear and obvious health impacts. For people concerned about improving community health, it is critical to recognize the importance of community health factors related to the built environment and become engaged in changing them. Unfortunately, while some of what is known to many as 'smartgrowth' has flourished, it has primarily been focused—like many health innovations—on white, middle-class communities. Unquestionably, issues of design and of what is and isn't permissible use demand the attention of advocates interested in reducing disparities. Examples of actions that can be taken to improve health include: making parks available to increase physical activity, ensuring that power plants and other industrial facilities that emit pollutants leading to respiratory illness aren't situated in high-density neighborhoods, designing streets with pedestrian zones and traffic-calming measures to reduce crashes and injuries, and building high-quality housing to reduce exposure to toxins, allergens, and pests.

Land-use patterns that encourage neighborhood interaction and a sense of community have been shown not only to reduce crime, but also create a sense

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of community safety and security.¹¹² Residents of buildings with green space had a stronger sense of community, better relationships with neighbors, and reported less violence in dealing with domestic disputes.¹¹³ Neighbors visit each other more on small streets with little traffic.¹¹⁴ Relationships between neighbors and the general social climate are key factors in community resilience (*see pg. 24*). Neighbors who have strong social connections have a greater ability to identify and collectively respond to issues and do not experience the stress of social isolation. Momentum for long-term sustainable change can be generated through increases in community efficacy built on improved cohesion and trust.

Two tactics for transforming the built environment are emerging as important in reducing disparities. One is the building of campaigns to address existing deficits in the built environment in a community. The other is to create mechanisms for the assessment of the health implications of proposed investment that would alter existing infrastructure, such as new transit routes, new buildings, and changes to utility services. Both are necessary. An example of effective modification of the existing environment was carried out in Boyle Heights, a predominantly Latino neighborhood in Los Angeles. Neighborhood residents were concerned about the lack of open space and available walking paths. They partnered with the Latino Urban Forum to create a 1.5 mile walking/jogging path around the Evergreen Cemetery. Rates of physical activity increased, and the Evergreen Jogging Path has become a catalyst for further community improvement projects.¹¹⁵ In Boston a coalition of public and community partners formed the Boston Lead-Safe Yard Project to address high rates of lead poisoning among children in African American and Latino neighborhoods. The project developed cost-effective techniques for lead removal and mitigation that could be replicated in other communities and strategies for involving homeowners and landlords. The end result was a significant reduction in exposure in what has been described as the city's "lead belt."¹¹⁶

In terms of assessing proposed investment, there is a growing awareness of the need to expand existing mechanisms to provide communities with the tools necessary to critically analyze proposals. Traditional Environmental Impact Assessments capture some of the immediate physical consequences of proposed developments but lack the capacity to assess the broad range of potential health impacts. They fail to account for the social environment and require only that a project not cause harm instead of requiring contributions to community health. Locally, regionally, and nationally, leaders are developing policies that would broaden the scope of assessment of specific projects and provide guidance for evaluating the impact of the built environment on health. For example, Senator Barack Obama recently sponsored the "Healthy Places 2006 Act" that seeks to create national standards and policies incorporating physical and mental health considerations into decision-making about the built environment. This work is being watched carefully and replication is under consideration in states and communities across the country.¹¹⁷

Sustainable Agriculture

Sustainable agriculture can be characterized as emphasizing local, fresh, unprocessed, and chemical-free food. Ninety percent of children are exposed to an average of 13 insecticides in their food each day¹¹⁸ and our entire population is at increasing risk as the antibiotics given to livestock lead to new antibiotic-resistant bacteria that physicians have less and less ability to control. Sustainable agriculture is generally portrayed as a progressive middle-class white issue, but it is much broader than suburban dwellers desiring organic carrots for their children. The problems affect all Americans, but our current agricultural production and distribution system harms low-income populations, and people of color in particular, to a greater degree and in additional ways. Changing the current system must be a key aspect of any plan to reduce and eliminate health disparities.

The way that food is produced and distributed in the U.S. and the policies that shape production patterns have numerous effects on health. Impacts can be seen among the workers who pick and package the food (occupational exposures to pesticides have been associated with health problems including miscarriages, birth defects, and decreased sperm counts¹¹⁹) as well as residents of agricultural towns (the majority of whom are low-income Latino farmworkers) where pesticides are sprayed over fields and drift along with field dust into neighborhoods, and manure lagoons release gasses and leech waste into water supplies. California's San Joaquin Valley, a region known for industrial agriculture production, has the nation's most dangerous air, which translates into high rates of asthma and other chronic respiratory diseases. The majority of the pollution comes from agriculture.¹²⁰

The fact that food is frequently transported and consumed far from where it was grown is another aspect of our current agricultural system that harms human health. Diesel emissions are a major contributor to asthma, cancer and other diseases. While it is certainly necessary that virtually everyone eats food that has been transported, the U.S. system overemphasizes non-local food. The average food travels over 1,500 miles before purchase.¹²¹ This extensive shipping of food makes freeways frequented by agricultural trucks more dangerous and exposes residents of adjacent neighborhoods, who are disproportionately low-income people of color, to high levels of diesel emissions from bordering transportation corridors and truck depots.

Despite our agricultural system's emphasis on transporting food, residents of low-income communities have lower access to fresh fruits and vegetables than other communities, and a higher proportion of what is easily available, and heavily marketed, is high-fat high-sugar fast foods. This emphasis on unhealthy food of course affects everyone, but low-income people and people of color even *more so*. In the U.S., the retail cost of fruits and vegetables has increased nearly 40% since 1985, while the costs of fats and sugars have declined.¹²² Cost shifts affect all community residents' food options and children in particular,

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who are marketed to aggressively and eat high-fat school lunches made up of artificially low-cost meats, fats, and sugars.

The problem isn't that the health consequences of food production aren't known, it is that sustainable agriculture is not identified widely as a key public health strategy. In particular, it is not consistently recognized as a strategy for reducing disparities. However, looking at the health impacts of conventional agriculture it is clear that the burden falls disproportionately on communities of color both at the production (rural and small town, mostly) and distribution (urban communities with limited outlets for healthy food) ends of the process. In some communities initiatives are underway to incorporate sustainable agriculture principles into action. For instance, in the majority African American and Latino neighborhood of West Oakland, CA, the People's Grocery is working to change the local food landscape. The organization emphasizes locally produced, pesticide-free fruits and vegetables, and economic development through locally controlled small business and food-related enterprises.

Economic Development

Long-term poverty and lack of hope or opportunity can be devastating for individuals and communities. Being able to support oneself and one's family fosters self-sufficiency and dignity while reducing the stresses associated with poverty and being unemployed. When adults and youth cannot find appropriate employment, they are more likely to turn to crime and violence and associated illicit activities, such as selling drugs. Individuals and communities without resources are less likely to be able to develop strategic responses to health issues (for example, providing healthy food or eliminating lead from houses and soil). Establishing employment programs that link employees to their community fosters community ownership and connection and can result in positive changes for the neighborhood. Since the 1960s, government has invested in Community Development Corporations (CDCs) designed to provide agile, strategic assistance to neighborhoods with few resources. The most effective CDCs have been those that have brought together coalitions of community stakeholders. CDC-led citizen involvement has consistently created better neighborhoods. In many cases it also created a new cadre of energetic and skilled leaders, able to seize further opportunities to advance neighborhood interests.¹²³

While economic development is rarely recognized as a key strategy to reduce disparities, in fact, well-designed economic development efforts can address multiple community health issues simultaneously. Recognizing that residents of low-income communities in Philadelphia were experiencing high rates of diet-related chronic disease, the non-profit Philadelphia Food Trust (PFT) launched an effort to bring supermarkets into low-income areas where access to fresh food and produce was poor. The PFT concluded that the number of supermarkets in the lowest-income neighborhoods of Philadelphia was 156% fewer than in the highest-income neighborhoods.¹²⁴

While economic development is rarely recognized as a key strategy to reduce disparities, in fact, well-designed economic development efforts can address multiple community health issues simultaneously.

Leaders of the PFT inspired Food Marketing Task Force, along with two state representatives, pushed for the development of the Pennsylvania Fresh Food Financing Initiative in the fall of 2004. To date, the Pennsylvania Fresh Food Financing Initiative has committed resources to five supermarket projects and has committed \$6 million in grants and loans to leverage this investment. These five projects will result in the creation of 740 new jobs and represent \$22,378,000 in total project costs. In addition, there are currently over 20 projects in the financing pipeline, ranging from 6,000 square-foot corner stores to 60,000 sq. ft. full service supermarkets.¹²⁵

Applying a health lens to economic development is critical to ensuring that these efforts help close the health gap. This means ensuring that economic development efforts are designed to affect the 13 community factors. For example in many communities small corner stores are the primary food outlets. Many of these stores depend on alcohol sales to survive. Projects such as Literacy for Environmental Justice in San Francisco have worked to develop incentives and plans to help small stores transition to selling fresh food instead of junk food and liquor.¹²⁶ The impact is not only in terms of increased availability of fresh food but also reduced availability of alcohol (a key factor in violence) and support of local ownership.

Norms Change

Norms are collective beliefs, assumptions and standards.¹²⁷ They are shaped by peers, the actions of others, and by broader national forces, such as media. Within communities norms play a key role in defining behavior. Norms are one of the most powerful mechanisms through which environmental factors translate into behaviors that affect health. Typically health practitioners have tried to change behaviors by providing information on a topic—passing out brochures, holding health fairs, and so forth—but it is increasingly recognized that norms change can catalyze the transformation of knowledge about health into behavior change and can be the tipping factor in improving health. As D.H. Lawrence pointed out, “The ideas of one generation become the instincts of the next.” Changing organizational practices and policies is an important way to change norms and behavior, especially as recognition grows of the ways in which behavior patterns are influenced by rules and laws, organizational policies, advertising and product availability, and religious and cultural traditions. A good example of the potential impact of norms change is tobacco. In a very short time period acceptable behavior around tobacco has been dramatically altered. Part of the change has been the result of laws (on airplanes, in bars, etc.), but even in situations in which laws do not restrict smoking (with children present, outside of workplaces) expected behavior has changed.

A revealing example of applying a norms approach to reducing disparities is gender norms. Traditional gender norms of masculinity and femininity encourage a wide range of unhealthy behaviors such as risk-taking and over-

Norms are one of the most powerful mechanisms through which environmental factors translate into behaviors that affect health.

consuming among men and limiting physical activity and binge dieting among women. Gender norms affect all races and ethnicities and can exacerbate other risk factors. For example, social norms maintain that men should not need to seek help and can handle problems on their own.¹²⁸ Men who have more health problems are more likely to suffer from limited help seeking. Low income men and men of color experience more adverse health outcomes, and gender norms that discourage help seeking exacerbate these effects.

An example of a program that focuses on a disparity-related health issue is Men Can Stop Rape. Men Can Stop Rape is a national organization that mobilizes young men to challenge the harmful aspects of traditional masculinity and create new standards and norms of male strength that do not involve control and violence.¹²⁹ In Fulton County, Georgia, the Department of Health and Wellness sponsored a comprehensive personal empowerment program for African American women, the “Sisters Action Team.” The program works to change norms around physical activity through walking clubs and norms around unhealthy responses to stress through education and social support.

It is critical when considering norms (and community health in general) to be aware of the pervasive role of cultural dynamics. Cultural dynamics and practices influence individual behavior, community decision making and organization, and prevailing norms. Identical approaches will not be equally effective in all communities. Efforts to change norms will be much more effective if they are designed with an awareness of the cultural differences in and between, for instance, Native American and African American communities. The importance of cultural dynamics highlights the need for a flexible approach to health disparities that incorporates local knowledge and community involvement.

Community-Based Participatory Efforts

Disenfranchised communities have increasingly recognized that they need to organize and work together to receive equitable services and resources. It's no accident that some communities have fewer resources and services. While a complaining phone call in some neighborhoods might be enough to initiate action, in many low-income communities/communities of color, it takes a mobilized effort to catalyze change. When up against large companies, such as in the case of industrial pollution, it takes a concerted, long-term, organized effort. While elements of the physical environment might have the closest connection to health outcomes in the research literature, it seems increasingly clear that the health gap will not be closed without engaging the affected community members—in identifying the problem, solution, and priorities—for change. Community based participation not only unlocks the energy and knowledge that exists in a community around a specific issue, it also builds on community networks and capacity to address other issues. An important example of a health movement that has embraced the power of partnerships is the environmental justice movement.

The environmental justice movement has been building for a long time but has accelerated in the past 20 years. Though there is still much progress to be made, it represents a promising direction in addressing some of the conditions which account for worse health outcomes in communities of color. The U.S. Environmental Protection Agency (EPA) defines environmental justice as “the fair treatment and meaningful involvement of all people regardless of race, color, national origin, or income with respect to the development, implementation, and enforcement of environmental laws, regulations, and policies.”¹³⁰ Environmental justice provides the framework necessary to examine inequity in environmental exposure and decision making including the tools necessary to make change. It acknowledges that pollution and related health effects fall disproportionately on residents living in economically and politically disadvantaged communities.¹³¹ Furthermore, these same residents are often excluded from the very decisions and environmental policies that threaten their communities’ health and often face a multitude of environmental threats. In addition to lawsuits and public input processes, a tool that has been employed by environmental justice and other collaborative approaches is Community Based Participatory Research (CBPR).

CBPR is a collaborative approach to research that establishes equal partnerships between community members and academic investigators. Through CBPR academic researchers gain access to community knowledge and active partners in developing research and community researchers gain formal research skills and the prestige afforded academic research. CBPR has been an important tool of disenfranchised communities. Many disenfranchised communities have a history of being studied (and exploited) by academic institutions. While the ultimate goal of many of these studies has been community good, too often it has turned out that primary interests served are those of the academic and in some cases not only have the communities not benefited or been involved in decision making, they have been stigmatized and harmed. An example of effective CBPR in action on an environmental justice issue was the Southeast Halifax project, a partnership among the University of North Carolina at Chapel Hill, Concerned Citizens of Tillery, and the North Carolina Student Rural Health Coalition. This community-academic partnership determined that corporate hog operations were more concentrated in poor non-white areas and that there was a marked increase in reported headaches, runny nose, sore throat, excessive coughing, diarrhea, and burning eyes compared to residents of communities not located near intensive livestock operations.¹³² As a result of the evidence presented, Halifax County, where Tillery is located, passed the strictest laws in the state restricting hog production.

Environmental justice strategies involving the community in action are vital for many community health concerns and have been employed to address a wide range of issues. For example, in Los Angeles the South L.A. Community Coalition was formed to close liquor stores in the almost exclusively Latino and African American neighborhood. The Coalition represented a broad range of

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community residents and institutions (including religious groups, journalists, and community organizers) and used a variety of tactics (public hearings, letter writing, media stories, and demonstrations) to close liquor stores. The group successfully closed over 200 stores and documented a 27% decrease in crime within a four-block radius of each store that was closed.¹³³ Similar strategies have been employed to bring supermarkets into neighborhoods.

The notion that community participation is required to reduce disparities was confirmed with the pilot-testing of THRIVE (Tool for Health & Resilience In Vulnerable Environments). Developed initially by Prevention Institute for the U.S. Office of Minority Health, THRIVE is a community assessment tool that helps communities bolster factors that will improve health outcomes and reduce disparities experienced by racial and ethnic minorities. It provides a framework for community members, coalitions, public health practitioners, and local decision-makers to identify factors associated with poor health outcomes in communities of color, engage relevant stakeholders, and take action to remedy the disparities. Within months of piloting, several communities had initiated farmers' markets and youth programs.¹³⁴ These were strategies prioritized by community members and advanced through community action.

HEALTH AND PUBLIC HEALTH: A NEW WAY OF DOING BUSINESS

The analyses of community factors, trends, and directions that influence rates of disparities reveal the value of improving community conditions in order to close the health gap. This approach to improving health outcomes necessarily requires that the public health sector and health advocates approach health in a new way. It requires a new way of thinking and a new way of doing business. This is not an approach that identifies a medical condition and asks, "How do we treat this?" Rather, it requires understanding how the fundamental root causes of health disparities play out in the community in a way that affects health and asking, "Who do we need to engage and what do we need to do in order to *prevent* people from getting sick and injured?" The community factors and the directions delineated previously are the keys to improving health outcomes. Approaching health—and community—in this way requires a concerted focus on comprehensive approaches, interdisciplinary collaboration, and a resilience-based approach to working with communities.

Advance Comprehensive Approaches

It is important to understand that research is still examining which community factors may have greatest influence. However, it is clear that no single strategy, program, or policy is *the answer*. Multiple changes and a coordinated, multifaceted effort are needed to shift community norms toward healthier behaviors.

Improving health outcomes necessarily requires that the public health sector and health advocates approach health in a new way.

To understand the necessary range of activities, practitioners have used the *Spectrum of Prevention*,¹³⁵ a tool that enables people and coalitions to develop a comprehensive plan while building on existing efforts. The *Spectrum* encourages movement beyond the educational or “individual skill-building” approach to address broader environmental and systems-level issues. When activities occur at multiple levels simultaneously, they produce a more effective strategy than would be possible by implementing an initiative or program at one level in isolation. Synergy is generated as messages and activities targeting one level support efforts at other levels. For instance, fatalities from drunk driving declined when individuals understood the risks they were taking, bars took increased responsibility for their patrons, and laws were put in place increasing the penalties for offenses. The result is the delivery of complimentary messages that strengthen each other and a coherent sense of a changed norm.

TABLE 2. THE SPECTRUM OF PREVENTION¹³⁶

LEVELS OF THE SPECTRUM	DESCRIPTION
Strengthening individual knowledge and skills	Enhancing an individual’s capability of preventing injury or illness
Promoting community education	Reaching groups of people with information and resources in order to promote health and safety
Educating providers	Informing providers who will transmit skills and knowledge to others
Fostering coalitions and networks	Bringing together groups and individuals for broader goals and greater impact
Changing organizational practices	Adopting regulations and norms to improve health and safety; creating new models
Influencing policy and legislation	Developing strategies to change laws and policies in order to influence outcomes in health, education and justice

Generate Interdisciplinary Approaches

Improving community health cannot be achieved by any one organization. Reducing health disparities and improving health outcomes requires participation from key public and private institutions working in partnership with communities. For example, institutions, including banks, businesses, government, schools, health care, and community service groups, have a major influence on community environments. The decisions they make—such as whether to accommodate pedestrian and bicycle travel on city streets, where to locate

supermarkets or alcohol outlets, or what efforts to take to reduce hazardous emissions—influence health behaviors and health outcomes. As employers, investors, and purchasers, each has impact on the local economy. As providers of services, they influence what is and is not available to community residents. As prominent facilities within communities, they help establish norms for students, employees and the general public. By providing activity breaks, creating welcoming stairwells, or ensuring healthy affordable food options, these facilities can create an atmosphere that supports healthy behavior.

Foster Community Resilience

‘Community resilience’ is the ability of a community to recover from and/or thrive despite the prevalence of risk factors and adversity. A resilient community can be described as having social competence, problem-solving capacity, a sense of identity, and hope for the future. A resilient community provides a triad of protective factors: caring relationships, high expectations, and opportunities for participation. Prevention strategies have focused largely on reducing risk factors. Equally important is building upon and enhancing resilience in communities. Enhancing community resilience can have long-term, positive impacts on individual and community health. Studies show that resilience factors can counteract the negative impact of risk factors.^{137,138} For instance, while a high availability of firearms and alcohol within a community is a risk factor for violence, positive social norms can provide social controls that are protective against the use of weapons. One study demonstrates that the effects of protection on reducing problem behaviors become stronger as levels of risk exposure increase.¹³⁹ In effect, resilience factors moderated the negative effects of exposure to risk. Effective approaches need to include attention to both risk and resilience.^{140,141} While addressing risk factors results in the absence of factors that threaten health and safety, it does not necessarily achieve the presence of conditions that support health.

Every community has strengths and sources of resilience. Building on a community’s strengths can contribute to needed change. In order to substantially reduce health disparities, a long-term plan that consistently builds momentum and involves community partners is required. Focusing on building community capacity and resilience has three important results: 1) community members are brought into the process and feel a greater vested interest in successful change, 2) community members can apply new skills to address other health factors, and 3) community members gain skills and sense of efficacy that can permeate many aspects of their lives and improve broad life outcomes.

Reducing health disparities and improving health outcomes requires participation from key public and private institutions working in partnership with communities.

CONCLUSION

Action Now for a More Promising Future

A majority of health dollars are spent on treatment. Of the 5% of health dollars spent on health promotion and disease prevention,¹⁴² relatively few resources are devoted to prevention initiatives that address the underlying reasons that people become sick or injured. Yet, ensuring that resources are directed at the underlying reasons, at community factors, can improve health and reduce disparities.

Primary prevention, with an emphasis on community health, is an emerging craft that shapes comprehensive solutions to improve community factors. With its emphasis on a community orientation, multidisciplinary collaboration, and organizational and policy-level changes, this approach can significantly improve the health of the individuals, families, and communities who are most impacted by poor health and premature death.

The opportunity for leadership to reduce health disparities is palpable. Not only as a matter of economics but also as a moral imperative, we must take immediate and deliberate steps to improve health overall and reduce disparities. Health disparities are in part the result of a long history of governmental and institutional policies and practices that have put minorities at a higher risk of illness and injury. Reversing the impact of these policies and practices requires a long-term commitment to improve the environments in communities of color.

Combining this approach and genuine commitment, we can achieve success. This will involve developing a comprehensive and visionary plan for refocusing on the social determinants of health. It will require a long-term commitment and a complex multi-year effort. We recommend that the following steps (listed in order of priority) be initiated immediately to advance the philosophy and framework presented in this paper and build momentum for meaningful disparities reduction:

STATUS MEMO AND DESIGN MEETING: There is a perception that what is needed is extensive discussion and analysis before taking any action. The reality is that much is known about what causes disparities and much can be done immediately to reduce them and improve community health. A memo that identifies key patterns in current activity would be developed to inform a

design meeting convening leaders from multiple sectors that have a stake in health disparities (not just health care). The design meeting would further develop an implementation strategy that involves organizing, mobilizing additional sectors, media, funding, and policy. The next two stages should likely be 1) a major national meeting with a significantly expanded group of leaders would meet to review and refine the design from the first meeting, develop commitments and an action plan, 2) Putting the plan into effect—a multi-year coordinated effort to implement the action plan.

TRAINING/FAMILIARIZATION: Development of a plan for dissemination of the “disparity reduction through community-level prevention model” and accompanying training is a key next step. Dissemination and training should be targeted at key audiences such as academics, public health officials, staff of disparities initiatives, and students. Potential traction will only increase as increasing numbers of leaders and practitioners are familiar with and conversant in the model. These efforts should be targeted not only at building acceptance but also at developing active leaders who will push community-level approaches and strategies to addressing disparities.

CAPITALIZING ON EXISTING INITIATIVES: Key initiatives (such as REACH, STEPS, and Active Living by Design) present vital opportunities for incorporation and exploration of community approaches and the 13 factors. REACH, STEPS, and Active Living by Design (and other initiatives) results and data could be used to develop a research base, comparatively evaluate different strategies and efforts targeting different factors, identify best practices, and ultimately build the case for approaching disparities reduction through community health and community-level strategies.

COORDINATED RESEARCH: One of the frequent points that is raised about a community approach to addressing health disparities is the lack of comprehensive research and evidence demonstrating the connections between the community factors and improvements in health. In many cases solid data exists. In some other cases preliminary evidence is available; in others evidence of effectiveness has been established but not applied specifically to disparities; and in still others common sense and practice examples point toward potential results. A coordinated research effort would conclusively establish the links between the 13 community factors and improved health outcomes.

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