Building Communities and Improving He

Finding New Solutions to an Old Problem

By Carolina Reid

ealth:

"It would occupy a long time to give an account of the progress of cholera over different parts of the world . . . and unless this account could be accompanied with a description of the physical condition of the places, and the habits of the people, which I am unable to give, it would be of little use."

—On the Mode of Communication of Cholera, John Snow, M.D.

In 1854, a cholera epidemic swept through Broad Street, in London, England. Within two weeks, more than 500 people had died, and the death rate of the St. Anne's, Berwick Street and Golden Square subdivisions of the parish had risen to 12.8 percent—more than double that for the rest of London. That it did not rise even higher was thanks only to Dr. John Snow, who through interviews with the families of the victims traced the outbreak not to a "miasma in the atmosphere," but to a water pump on the corner of Broad Street and Cambridge Street. Removing the water pump handle did more to temper the epidemic than the leeches, bleeding, or prayers common to medical interventions of the day, leading Snow to conclude that human behavior and the environment, the intersection between people and the places where they live, are inextricably linked to health outcomes.

Today, we have a much more sophisticated understanding of disease. We can trace the origin of pathogens across the globe down to individual tomatoes or meat processing plants, and we can map not only the neighborhoods where diseases occur but the structure of the human genome itself, down to the atomic scale where diseases first take hold. Smallpox and polio—once deadly diseases that exacted a huge human toll—are largely confined to pages in the history books. Every year, more than 3,000 people receive a heart transplant. Cancer mortality rates are down, despite an aging population. Yet, despite these advancements in the field of medicine, the intersection between people and place remains fundamental to human health. In fact, where someone lives—and the social and environmental conditions in their neighborhood—has a much greater influence on their health than whether or not they have health insurance. The recent cholera outbreak in Haiti provides stark evidence of the continuing inter-relationship between poverty, social dislocation, and disease.

It is not only in poor countries that socioeconomic inequalities—both at the individual and neighborhood level—result in dramatic differences in health outcomes. A study conducted by researchers at Harvard University poignantly illustrates the degree to which inequalities in the United States translate into disparate health outcomes. In the study, the researchers classified counties in the United States into "Eight Americas," distinguishing between urban and rural counties, their income levels, and the race and ethnicity of residents. They found striking differences in life expectancy among the different areas: Native American males in South Dakota had a life expectancy of 58 years, while Asian females in Bergen County, New Jersey had an average life expectancy of 91 years, a gap of 33 years.[1] For young African American men living in poor urban areas, average life expectancies were more similar to those in sub-Saharan Africa than to whites living just a few metro stops away.

This link between socioeconomic factors and health suggests that if we truly want to improve health outcomes in this country, increasing access to quality health care is only a first step, albeit an important one.

Equally important is reducing socioeconomic inequalities and tackling the neighborhood level factors that contribute to ill-health, including poverty, inadequate schools and housing, and crime. This is where community development comes in. Changing neighborhood conditions for the better—including empowering neighborhood residents—can have dramatic positive impacts on human health. As David Erickson of the Federal Reserve Bank of San Francisco argues, "The most important contribution of community development finance may be something we don't focus on or measure: the billions of dollars of social savings from fewer visits to the emergency room, fewer chronic diseases, and a population more capable of making a contribution as healthy productive citizens."[2] However, the community development and health fields have traditionally operated in silos, and have failed to work together towards the shared goal of healthier communities.

The intent of this issue of *Community Investments* is to help break down some of these silos by providing a detailed look at how health and community development intersect. This article provides an overview of what we know about health in lower-income communities, and seeks to describe how socioeconomic inequalities interplay with health outcomes. First, the article describes how socioeconomic inequalities shape access to health care and health insurance, and provides data on gaps in health care access across the 12th District. In the second section, the article explores the social and environmental determinants of health, and reviews the research that documents how neighborhood socioeconomic conditions shape exposure and susceptibility to health risks. Finally, the article looks at how community development interventions—such as high quality housing, grocery stores and parks, and community organizing—can help to reduce persistent health inequalities and create healthier communities for all.

Trends in Health Care Costs and Coverage

On March 23, 2010, after a highly partisan debate both in Congress and in the public sphere, President Obama signed the Patient Protection and Affordable Care Act into law. While the impact of the law, and its costs and benefits, are likely to be debated for some time to come, the push for health care reform was driven by concerns over the growing number of uninsured in the United States. In 2006, 46.5 million Americans—18 percent of the population under 65—did not have health insurance. Between 2000 and 2006, at a time when the economy was doing quite well, the number of uninsured grew by nearly 9.4 million.[3] Particularly troubling are the declines in health coverage for lower-income workers and children. Approximately one in five children living under 200 percent of the federal poverty line do not have health insurance coverage; in Nevada and Arizona, the ratio is one in four (see Figure 1).

In part, the growing lack of coverage is due to fewer employers offering health insurance coverage to their workers. Between 2001 and 2005, the share of working adults with incomes below the federal poverty level covered by employer provided health insurance dropped

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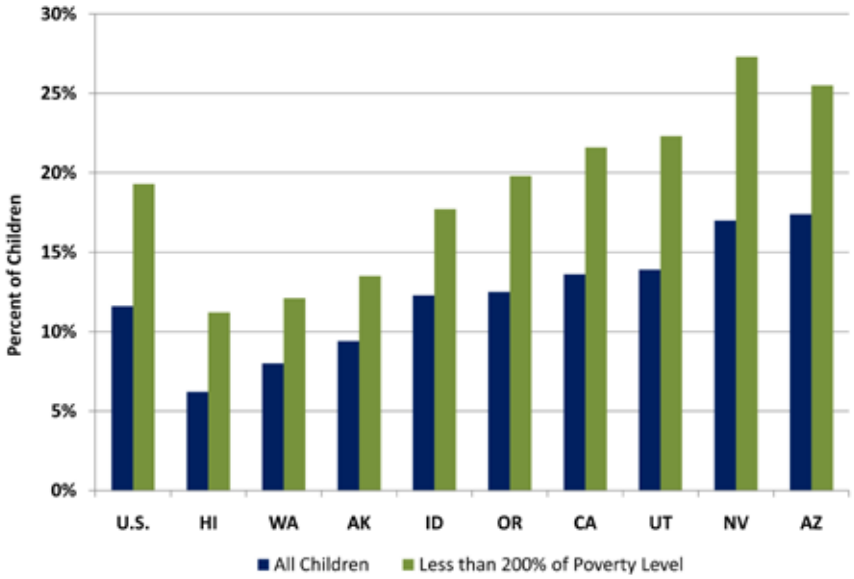
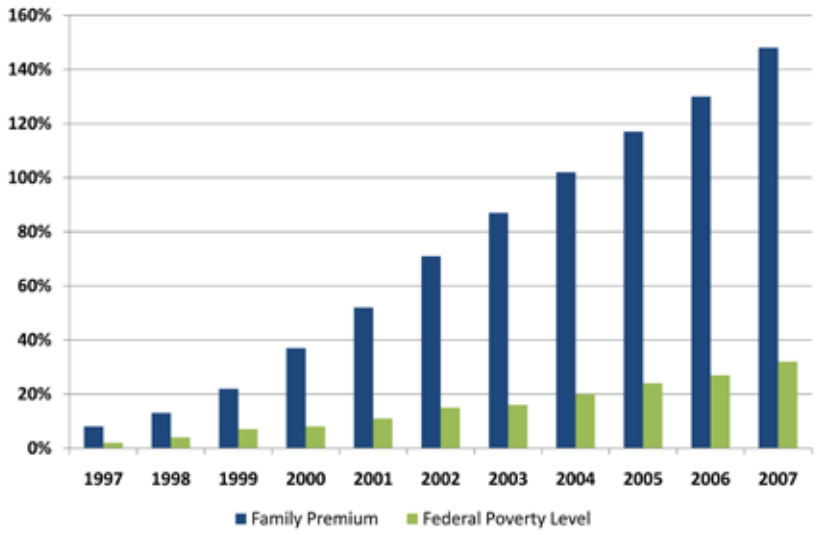
Figure 1 *Percent of Uninsured Children*



Source: "The Uninsured: A Primer." Hoffman, C., Karyn Schwartz, Jennifer Tolbert, Allison Cook, and Aimee Williams. Kaiser Commission on Medicaid and the Uninsured. October 2006.

Figure 2 *Cumulative Change in Family Health Insurance Premiums and the Federal Poverty Level since 1996*



Source: Agency for Healthcare Research and Quality, Medical Expenditure Panel Survey, 1996-2007.

"For families living near or just above the poverty line, health insurance premiums have increasingly soared out of reach."

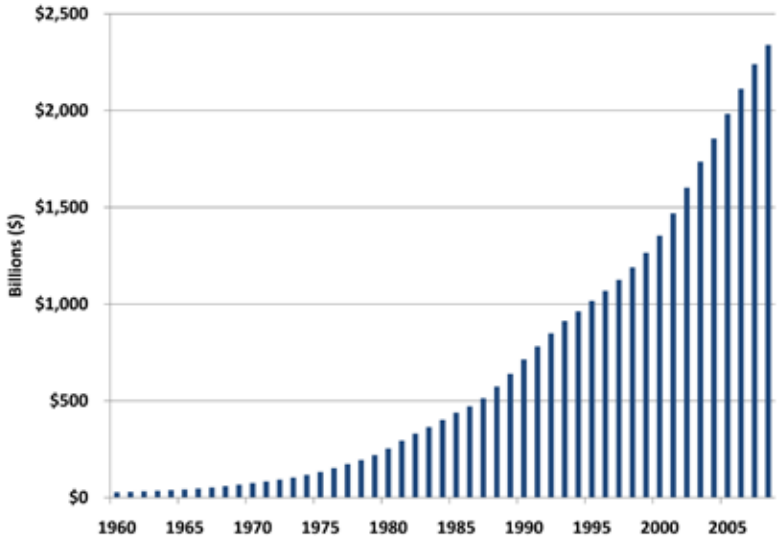
from 37 percent to 30 percent, while the share with no coverage rose from 47 percent to 54 percent. Health insurance costs have also been growing more rapidly than either wages or inflation. Between 2000 and 2006, family premiums grew by a cumulative 87 percent, on average, compared with a cumulative 20 percent for worker earnings and 18 percent for overall inflation. For families living near or just above the poverty line, health insurance premiums have increasingly soared out of reach (see Figure 2).[4] The economic consequences of inadequate health insurance coverage are often dire: unexpected health care expenses are one of the leading causes of bankruptcy in the United States[5], and one in five households reports financial distress related to medical bills, including using up their savings to pay for medical expenses, being unable to pay for basic necessities like food, heat or housing, or taking out a loan or another mortgage.[6]

The Patient Protection and Affordable Care Act of 2010 seeks to redress these gaps in health insurance coverage. Estimates suggest that by 2018, an additional thirty-two million Americans will acquire health insurance coverage, reducing the proportion of uninsured to about six percent of the U.S. population.[7] The Act will significantly benefit low- and moderate-income families. For example, Medicaid will be expanded to up to 133 percent of the poverty line, meaning that those families working for just a bit more than the minimum wage will now have health insurance coverage. In addition, individuals and families who have incomes that are too high to qualify for Medicaid, but below 400 percent of the poverty line, will receive "premium credits" to lower their health insurance costs.[8] Within the 12th District, the Act will help to offset health care costs for a large number of low- and moderate-income households, the exception being undocumented immigrants, who are not eligible for federal benefits. For legal immigrants, the law maintains the current five-year-or-more waiting period for Medicaid benefits, though they will not face a waiting period for enrolling in state insurance exchanges or premium tax credits.[9]

In addition to expanding health insurance coverage, a second goal of health care reform was to stabilize health care costs, which have been growing exponentially over the past 50 years (see Figure 3). In 1960, health care expenditures represented 5.2 percent of gross domestic product (GDP); in 2008, that share had risen to 16.2 percent, and if current trends continue, medical care costs will reach 20 percent of GDP by 2015.[10] Economists warn that if this trajectory continues, health care costs will comprise an increasingly large proportion of the U.S. economy, which is unlikely to be sustainable over the long-term. Indeed, the United States spends more on average per person on health care than any other nation, including high-income nations, and by a wide margin. Yet, despite these high expenditures, the United States ranks below average on a variety of measures of health status, even below some much lower-income countries (see Figure 4). Among the 192 nations for which data are available, the United States ranks 46th in average life expectancy from birth and 42nd in infant mortality.

This discrepancy between health care spending and health care outcomes has led researchers and policymak-

Figure 3 *Growth in National Health Expenditures, 1960 – 2008*



Source: Centers for Medicare and Medicaid Services, Office of the Actuary, National Health Statistics Group, compiled by the Kaiser Family Foundation.

". . . a second goal of health care reform was to stabilize health care costs, which have been growing exponentially over the past 50 years."

ers alike to think more critically about what matters for good health. Certainly, access to high quality and affordable medical care is essential, especially when someone is already sick. However, researchers now estimate that medical care prevents only about 10-15 percent of premature deaths.[11] Equally important are social factors such as education, income, and neighborhood quality, particularly when it comes to not getting sick in the first place.[12] The costs of failing to pay attention to these other determinants of health are extremely high. An analysis commissioned by the Robert Wood Johnson Foundation estimates that if the health of all Americans was equal to that of college graduates, the annual average savings to the U.S. economy would be in the order of $1 trillion through higher worker productivity, reduced spending on social programs, and increases in tax revenues. Certainly, education on its own won't guarantee good health, but the analysis does suggest that socioeconomic disparities in

Figure 4 *U.S. Spends More, but Life Expectancy Below Other Countries*

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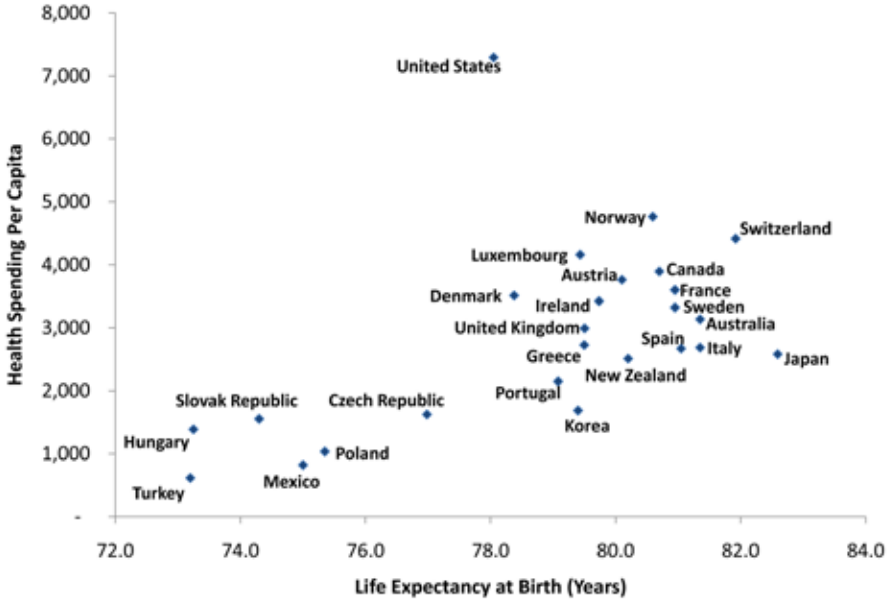

Source: OECD Health Data, 2008

health have major economic impacts.[13] In addition, analyses such as these are leading to a growing recognition that in order to reduce health disparities, there is a need to tackle the underlying causes of ill-health, such as poverty and socioeconomic disadvantage at both the individual and neighborhood level.

Community Matters: The Social Determinants of Health

As John Snow identified in his early maps of the cholera epidemic, disease is as much a function of neighborhood and behaviors as it is a function of germs and cells. This has become even more apparent as the leading causes of mortality in this country have shifted from infectious diseases such as cholera and malaria to chronic health issues such as heart disease and cancer. Nevertheless, it is very hard to disentangle the effects of social factors on health, and even harder to disentangle whether or not it is individual or neighborhood level factors that matter most when looking at health outcomes. Income, educational attainment, race, and neighborhood quality are all intertwined in complicated ways. Yet despite the fact that it is hard to come up with a precise estimate of the proportion of morbidity or mortality that can be attributed to each of these various elements, there is no doubt that socioeconomic disadvantage leads to poorer health outcomes. This relationship holds whether the measures of disadvantage are calculated using income, wealth, occupation, prestige, education, where one lives, or whether the measures are objective (e.g. income below the poverty line) or self-reported (e.g. "I earn less than those around me").[14] Some research also suggests that it's not just the absolute level of disadvantage that matters, but rather the relative level of disadvantage among different population groups.[15]

Importantly, socioeconomic disadvantage has been linked to a number of poor health outcomes, from overall mortality to the higher incidence and prevalence of chronic conditions such as diabetes, heart disease, and cancer. To provide just one example, babies whose mothers have less than 12 years of schooling (and are unlikely to have completed high school) are nearly twice as likely to die before their first birthdays as babies born to mothers with 16 or more years of schooling (most of whom are college graduates) (see Figure 5).[16] The links among socioeconomic status, disease, and mortality are especially strong among communities of color. Figure 6 presents infant mortality rates by race for states within the 12th District. In California, Arizona, Nevada and Hawaii, the infant mortality rate for non-Hispanic blacks is more than twice that of whites.[17]

As more and more of these health disparities have come to light, researchers are working to understand how socioeconomic disadvantage intersects with health outcomes. First, while behavioral factors account for approximately 40 percent of preventable deaths[18], behaviors are shaped as much by social context as they are by individual risk factors. Socioeconomic conditions, peer influences, marketing tactics, and policies and practices can all affect individual choices. For example, it is hard to eat healthy when the only place to buy groceries in the neighborhood is the corner liquor store; and it is hard to ensure that children are getting enough exercise if there is

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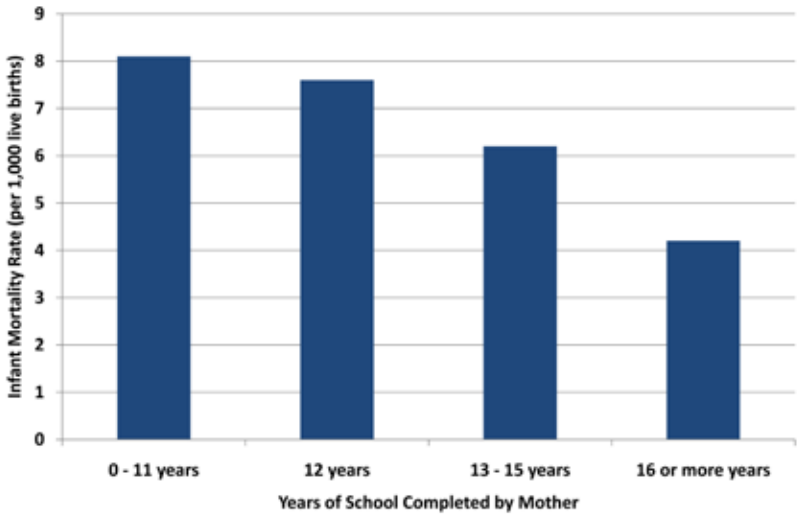
Figure 5 *Infant Mortality Rates are Closely Linked to their Mother's Educational Attainment*



Source: Robert Wood Johnson Foundation (2008). Overcoming Obstacles to Health. Report From the Robert Wood Johnson Foundation to the Commission to Build a Healthier America.

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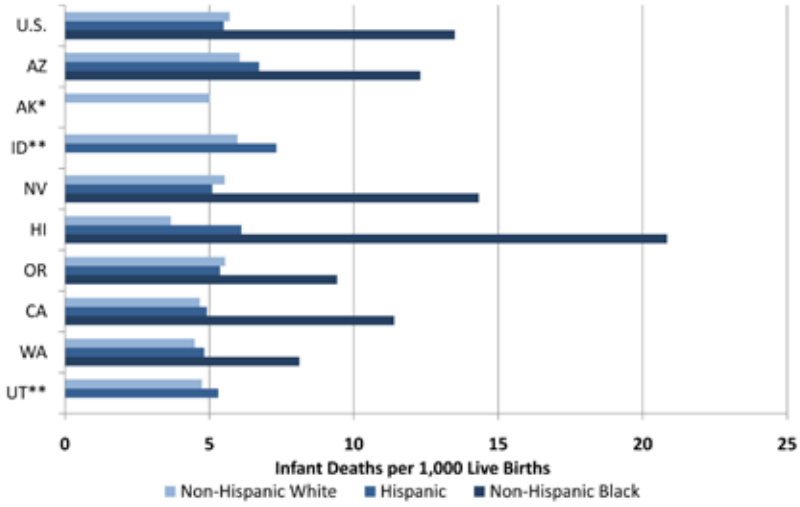
Figure 6 *Infant Mortality Rates by Race/Ethnicity In 12th District States*



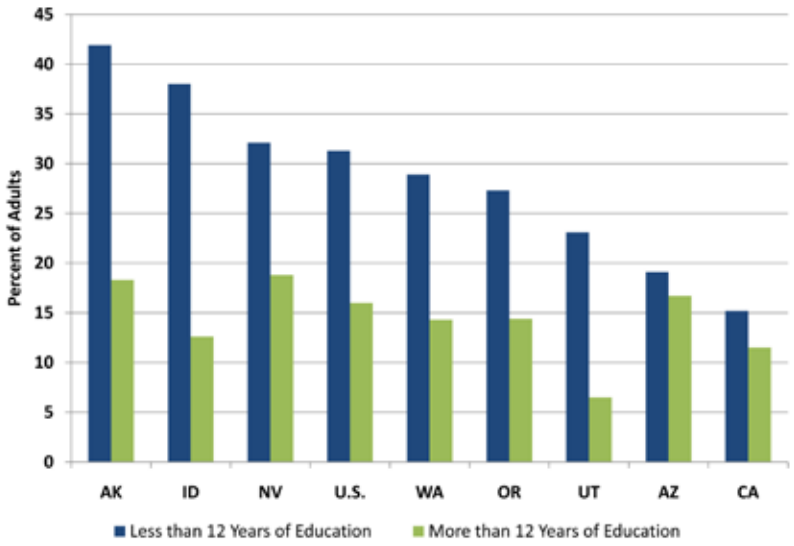
** Insufficient data for Hispanic and Non-Hispanic Black*
*** Insufficient data for Non-Hispanic Black*

Source: Matthews, TJ, M.S., et. al. Infant Mortality Statistics from the 2006 Period Linked Birth/Infant Death Data Set. Division of Vital Statistics. National Vital Statistics Report, Vol 58, No. 17, July 30, 2010.

no safe playground nearby. As a result, many of the behavioral changes that have led to health benefits over the past couple of decades have accrued more to higher-income households.[19] For example, cigarette smoking continues to be the leading cause of preventable morbidity and mortality in the United States. While overall smoking levels have decreased over the past three decades, adults in poor families or with lower levels of education saw the smallest reductions, and continue to be more likely to smoke than other adults. Figure 7 shows the percent of adults in the 12th District who smoke, comparing those who do not have a high school degree with those who have a high school degree and additional years of schooling. Across all the states, smoking is much more prevalent among those with less education. While some of this is due to individual choice, social context is critical in understanding this trend as well. Tobacco companies have increased their marketing campaigns in low-income neighborhoods and in communities of color, which in turn have the least information about the health risks of smoking, the fewest social supports, and the least access to cessation services. Policies also matter: smoke-free policies tend to cover white-collar workers more than blue-collar workers.[20] Education and income can also shape other factors that can influence behaviors and health, such as the knowledge and/or capability to access health resources, the effects of stress, and/or a different orientation towards the future.

Second, living in poverty can also expose someone to direct health hazards, such as violence or environmental contaminants such as mold or air pollution. Many of these health hazards are directly related to neighborhood and housing quality.[21] For example, in the 1970s, the federal government implemented numerous policies to reduce exposure to lead, especially among children. Research had shown that even very low levels of lead exposure could increase children's risk of adverse effects, including mental impairment, reading problems, attention deficit–hyperactivity disorder, school failure, and juvenile delinquency. While these federal policies significantly decreased exposure to lead, housing built before 1978, especially when not well-maintained, can still have lead based paint on the walls. Lower-income and minority households—those who are most likely to live in older, substandard housing—are thus at a much greater risk of lead exposure. In a recent study, an estimated 12.3 percent of African American children had elevated blood lead concentrations, compared with 2.3 percent of white children.[22] Evidence also shows that communities with the largest percentage of minority residents also have most of the toxic waste facilities, landfills, and superfund hazardous waste sites located nearby.[23] Certain lower-skilled occupations can also lead to differential exposures to health risks. For example, agricultural work is associated with a high fatality rate, with 21.3 deaths per 100,000 workers per year, compared with an overall rate of 3.9. In addition, agricultural workers have increased rates of nonfatal injuries, chronic pain, heart disease, many cancers, and chronic symptoms associated with pesticide exposure.[24]

Figure 7 *Smoking Prevalence among Adults in 12th District States, 2004*



Source: Centers for Disease Control and Prevention, Behavioral Risk Factor Surveillance System 2004. Data are not available for Hawaii.

"While overall smoking levels have decreased over the past three decades, adults in poor families or with lower levels of education saw the smallest reductions, and continue to be more likely to smoke than other adults."

Third, an emerging literature argues that it is the social aspects of the neighborhood—the social networks, political forces, organizations, and community values—that have perhaps one of the greatest influences on human health and well-being. Evidence has shown that individuals with weak social ties have higher rates of many types of diseases, even after controlling for other factors that might contribute to ill-health.[25] In addition, perceptions of control may also greatly influence health. Researchers are increasingly demonstrating that a low social status, coupled with a lack of control, may actually have a direct impact on the biological processes that make us more vulnerable to a wide range of different diseases.[26] For example, Len Syme, a distinguished researcher at UC Berkeley, has been examining the question of how social control and empowerment influences health. In a study of San Francisco bus drivers, he found that the bus drivers' health problems, including hypertension, back pain, gastrointestinal and respiratory difficulties, and high rates of alcohol use, were not easily solved through medical interventions. Instead, it was the job itself that was leading to these poor health outcomes—the computer timed bus schedule was unrealistic, leading to significant stress resulting from angry passengers, penalties for arriving late, and lack of control over traffic jams and terrible shift arrangements. Studies such as these have led Professor Syme to conclude that in order to improve health, there is a need to focus on interventions that help to empower people and give them more control over decisions that affect their lives.[27] He writes, "The evidence now shows that no matter how elegantly wrought a physical solution, no matter how efficiently designed a park, no matter how safe and sanitary a building, unless the people living in those neighborhoods can in some way participate in the creation and management of these facilities, the results will not be as beneficial as we might hope. It turns out that, for maximum benefit, physical improvements must be accompanied by improvements in the social fabric of the community."[28]

Linkages between Community Development and Health

For community development professionals, Professor Syme's observations resonate with something the field also learned the hard way: resident participation is vital to the success of any redevelopment effort. Early urban renewal efforts in the 1950s and 1960s did not include any affected residents or businesses in the planning process, and by all accounts failed to achieve either sustainable or equitable neighborhood revitalization. Today's community development efforts are much more likely to involve residents in the planning and design of their community, encompass a wide range of community groups and partners, and build on local economic priorities and assets. In addition, community development already focuses on many of the community pathways that influence health, including land use planning, housing, crime prevention, access to healthy foods, charter schools and childcare facilities, and entrepreneurship and small business develop-

ment. As a result, there is an incredible opportunity for the health and community development fields to work across conventional policy silos to engage in cross-sector partnerships and solutions, and to build on the two fields' complementary skills and resources.[29]

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There is already movement in that direction, at both the federal and the local level. For example, the Department of Housing and Urban Development, the Department of Transportation, and the Environmental Protection Agency have launched the Sustainable Communities initiative to coordinate federal investments in transportation, environmental protection, and housing to make neighborhoods safer, healthier, and more vibrant. The U.S. Departments of the Treasury, Agriculture, and Health and Human Services also announced the Healthy Food Financing Initiative, which allocates $400 million to help finance grocery stores in underserved communities. The initiative will help to expand community residents' choices of healthy food, as well as support community development goals by bringing new jobs to the neighborhood (see the "Healthy Food Financing Initiatives" article in this issue of *Community Investments*). Interagency collaboration has also started to happen at a more local level. In Washington State, for example, there have been explicit efforts to build collaboration across government agencies so that health concerns and a consideration of health equity are integrated into all aspects of city planning (for more information, see the next article, "Making Up for Lost Time: Forging New Connections between Health and Community Development"). Other collaborations are even more localized. In Arizona, for example, the Phoenix Neighborhood Services Department and the Phoenix Children's Hospital worked together to combine housing structural repairs with asthma education and the provision of asthma inhalers. Combining the housing rehab work with more traditional interventions focused on asthma reduction resulted in significant improvements to the families' health and safety. In Alameda County, California, the local public health department is employing community-based strategies, such as a neighborhood initiative for outreach and empowerment, to improve both health outcomes as well as educational, economic, and social outcomes (see "Community-based Strategies for Improving Health and Well-being" in this issue).

For community development, the jump to thinking about health outcomes should be a small one. Already, the field has been responsible for making investments in communities that can have positive effects on community health. The Corporation for Supportive Housing, for example, has found that providing housing for the homeless coupled with employment services and other social services on-site not only increases employment and earned income, but can also reduce emergency room visits and decrease emergency detoxification services.[30] Investments in early childhood education can also support long-term positive health outcomes.[31] Investments in green building, in addition to reducing utility costs for lower-income households, can also reduce household exposure to environmental toxins. Transit-oriented development can also yield improved health outcomes, especially when residents trade in their cars for walking and biking. Indeed, by many respects, CDFIs and other community development organizations have long been working to leverage public and private dollars to create social conditions for health, even if this goal has not always been explicit. As Lisa Richter from GPS Capital Partners has pointed out, the goals of community reinvestment and improving health outcomes are mutually reinforcing, as both sets of outcomes are enhanced by investments that increase access to quality child care, education, jobs, affordable housing, and other local services in a sustainable environment.[32] The challenge is to step out of established silos, and actively consider how all of these projects could be enhanced by developing new partnerships with organizations focused on health, and by explicitly choosing metrics that consider health as part of the outcomes we hope to achieve. Doing so would bring new resources to the table, and make both fields even more effective going forward. CI

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Building Communities and Improving Health: Finding New Solutions to an Old Problem

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32. Richter, L. (2009). Prescription for Healthy Communities: Community Development Finance. *Community Development Investment Review,* 3(9): 14 - 46. This article provides an extensive overview of how CDFIs and the field of community development finance can be better linked to the health field.