

Alameda County Public Health Department

LIFE AND DEATH FROM UNNATURAL CAUSES

HEALTH AND SOCIAL INEQUITY IN ALAMEDA COUNTY



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Causes." In Alameda County, access to proven health protective resources like clean air, healthy food, and recreational space, as well as opportunities for high quality education, living wage employment, and decent housing, is highly dependent on the neighborhood in which one lives. These inequities cluster and accumulate over people's lives and over time successfully conspire to diminish the ultimate quality and length of life in these neighborhoods. Some of the social inequities that are associated with poor health are:

- A retail salesperson would need to work nearly 100 hours per week to afford fair market rent for a 2bedroom apartment.
- Households earning less than \$20,000 per year spend over half of their income on transportation.
- A teacher of poorer students in Oakland Unified School District makes \$14,000 less than a teacher of wealthier students in Piedmont Unified School District.
- West Oakland residents breathe air that contains 3 times more diesel particles than in the rest of the Bay area.
- African Americans are sentenced to prison for drug offenses at a rate 34 times that for Whites even though they use illicit drugs at about the same rate.
- Latinos are 5 times as likely as Whites to lack health insurance.

The full report on which this executive summary is based 1) documents the health disparities found in Alameda County by neighborhood, income level, and race/ethnicity; 2) illustrates the links between these disparities and existing economic and social inequities; and 3) suggests goals and cross-sector policies that can lessen the inequities in our county.

Compared with a White child in the Oakland Hills, an African American born in West Oakland

is 1.5 times more likely to be born premature or low birth weight, 7 times more likely to be born into poverty, 2 times as likely to live in a home that is rented, and 4 times more likely to have parents with only a high school education or less.

As a toddler, this child is 2.5 times more likely to be behind in vaccinations. By fourth grade, this child is 4 times less likely to read at grade level and is likely to live in a neighborhood with 2 times the concentration of liquor stores and more fast food outlets. Ultimately, this adolescent is 5.6 times more likely to drop out of school and less likely to attend a 4-year college than a White adolescent.

As an adult, he will be 5 times more likely to be hospitalized for diabetes, 2 times as likely to be hospitalized for and to die of heart disease, 3 times more likely to die of stroke, and twice as likely to die of cancer.

Born in West Oakland, this person can expect to die almost 15 years earlier than a White person born in the Oakland Hills.

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Tackling the Challenge of Health, Race, Place, and Income

Health, disease and death are not randomly distributed. The evidence in this report demonstrates that illness concentrates among low-income people and people of color residing in certain geographical places. In Alameda County, this phenomenon is particularly stark among low-income African

Americans in certain neighborhoods within Oakland.
A just society does not consign whole populations to foreshortened and sicker

"Achieving equity in health is ultimately a political process based on a commitment to social justice rather than to survival of the fittest."

health.

— Barbara Starfield²

Deliberate public and private policy helped create the inequitable conditions and outcomes that confront us today. Consequently, deliberate new policy is needed to unmake inequitable neighborhood conditions and decouple health from race and place. Examples of

will need to look far beyond the health and medical

sectors of society and focus on the root causes of poor

such action might include formal legislative policies to encourage mixed-income housing, universal pre-

school, and equitable transportation funding. Local, state and federal governments must mandate and fund cross-sectoral and interagency collabora-

tion focused on clear and measurable health equity outcomes. New partnerships of health departments working across disciplines and sectors with a range of government agencies and community organizations with experience working in these diverse areas must emerge.

lives based on skin color and bank account size. If we are a just society, we must tackle the challenge of poor health and its linkage to race, social class and place. Our goal is health equity.

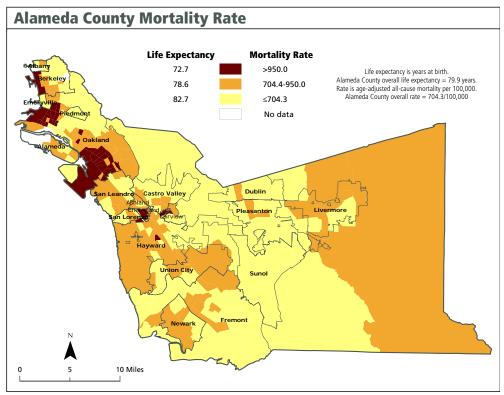
Health inequity is related both to a history of overt discriminatory actions, as well as present-day practices and policies that perpetuate diminished opportunity for certain populations. Inequities in economic, social, physical and service environments continue to create and maintain clear patterns of poor health in Alameda County, statewide, and nationally. *Social inequity causes health inequity*.

Inequities in health are related to much more than access to health care. Although health care is important, a narrow focus on curative medical services will fail to eliminate health inequities. David Satcher, former Surgeon General of the United States, recently stated that "Although critical to eliminating disparities, access [to health care] only accounts for 15% to 20% of the variation in morbidity and mortality that we see in different populations in this country." To change the factors that account for the other 80% to 85%, we

Learning From Community, Learning From Research

Voices from the community

When Alameda County residents, youth, community partners, local politicians, and Public Health Department staff were asked what makes communities healthy, they answered with remarkable consistency. Elements of economic, social, and physical environments, as well as community services, were all considered necessary to health. Having access to good jobs, home ownership, safety, trust, good relationships with police, being free of racism, having social supports, clean air, and water, safe places to walk and play, access to healthy foods, and quality affordable



Source: CAPE, with data from vital statistics 2001-2005

housing, were all put on the list. In terms of services, people mentioned health care, health information, excellent schools, and convenient transportation. When economic, social, physical, and service environments are weak, the health of people suffers. When policies create inequitable environments, the result is profound and persistent disparities in community health based on place, race, and class.

Evidence from health equity research

Though there is a large amount of research literature on the social determinants of population health, relatively little is helpful for prioritizing actions and policies to eliminate inequities. Nevertheless, a few generalizations in a recent review article point to some promising approaches and can therefore set the stage for action in Alameda County.³

• There is no basis for assuming a single community characteristic or set of characteristics is the

- most influential in causing inequities in health. We should look at influences at all levels—neighborhood, local, state, and national.
- to have relatively greater impact on the *occur-rence* of illness in the first place, whereas health care policies—especially those directed at early detection and stopping progression of illness—are likely to have strong impacts in reducing disparities in the *severity* of illness.
- Early childhood is when the basis for many health inequities is established. Social disadvantage is hazardous at any stage of life, but is especially damaging when experienced early. Priority should be given to policies that influence the lives of infants, children, and adolescents.
- Policies that are directed to structural changes in society and systems tend to be more effective than interventions targeted at individual behavior.

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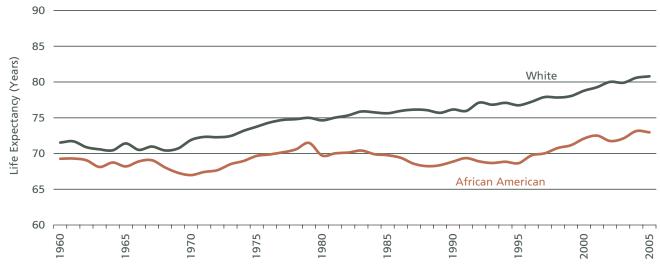
Public Policies to Correct the Course in Alameda County

This report examines relationships between health and social inequities in income, employment, education, housing, transportation, air quality, access to healthy foods, opportunities for physical activity, criminal justice and crime, social support and cohesion, and access to health care. The report also identifies a spectrum of policies that can make a difference in decreasing premature death and health inequities. Listed below are several *policy principles* that provide guidance for how and with whom Alameda County takes on the challenge of addressing root causes of health inequities.

- Understanding the historical forces that have left a legacy of racism and segregation is key to moving forward with the structural changes needed to provide living wages, affordable housing, excellent education, clean air, and other social conditions in neighborhoods that now experience disadvantage.
- Working across multiple sectors of government and society is key to making the structural changes necessary. Such work should be in partnership

- with community advocacy groups that continue to pursue a more equitable society.
- Measuring and monitoring the impact of social policy on health to ensure gains in equity is essential. This will include instituting systems to track governmental spending by neighborhood and tracking changes in measures of health equity over time and place to help identify the impact of adverse policies and practices.
- Groups that are the most affected by inequities must have a voice in identifying policies that will make a difference as well as in holding government accountable for implementing these policies. *Meaningful public participation* is needed with attention to outreach, follow-through, language, inclusion, and cultural understanding. Government and private funding agencies should actively support efforts to build resident capacity to engage.
- Acknowledging the *cumulative impact of stress-ful experiences and environments* is crucial. For some families, poverty lasts a lifetime and is perpetuated to next generations, leaving its family members with few opportunities to make healthful decisions.





Source: Alameda County vital statistics files, 1960-2005.

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- The developmental needs and transitions of all age groups should be addressed. While infants, children, youth, adults, and elderly require ageappropriate strategies, the largest investments should be in early life because important foundations of adult health are laid in early childhood.
- Changing community conditions requires extensive work on land use policy to address the location of toxic sites, grocery and liquor stores, affordable housing and transportation, the primacy of the automobile, access to opportunities for physical exercise and building social supports, and overall quality of life.
 - "(5) no person or persons of the Mexican race, neighborhoods needs or other than the CAUCASIAN race shall use or to be strengthened. occupy any building or any lot, except that this covenant shall not prevent occupancy by domesti Residents need to servants of a different race domiciled with an be connected and owner, tenant or occupant thereof. supported and feel

Matthews vs. Andrade, 1946, Alameda County Superior Court

- The social fabric of that they hold power
 - to improve the safety and well-being of their families. All residents need to have a sense of belonging, dignity, and hope.
- While low-income people and people of color face age-old survival issues, new challenges brought on by the global economy, climate change, U.S. foreign policy, and the need for immigration reform and energy alternatives are also relevant and should be addressed in the context of equity.
- Because of the cumulative impact of multiple stressors, our overall approach should shift toward changing community conditions and away from blaming individuals or groups for their disadvantaged status. Eliminating inequities in Alameda County is a huge opportunity to invest in community. Inequity among us is no longer politically and morally acceptable and we all stand to gain by eliminating it.

The policy goals and implications that follow are grouped into 2 arenas consistent with a new report, Reaching for a Healthier Life: Facts on Socioeconomic Status and Health in the U.S.: a) policies that affect opportunity for increasing income and wealth, educational attainment and occupational mobility and b) policies that address adverse community conditions.4

Policies that affect income, wealth, education, and work

A main way that place is linked to health is through geographic concentration of poverty. People clustered in low-income neighborhoods struggle with public

and private disinvestment, fewer job opportunities, lower-quality housing and schools, toxic contamination, higher levels of crime, and more social isolation—all of which take their toll on health. The combined impact of these socio-economic and physical realities limits the quality of life and life chances for residents of such neighborhoods.

In Alameda County, the highest poverty areas are in parts of North Oakland, West Oakland, and East Oakland. This geographic distribution of poverty is strikingly consistent with the geographic patterns of death and disease. African Americans and Latinos are highly concentrated in these high-poverty areas, a result of racist institutional policies that led to physical separation of races in most of U.S. cities. From racial restrictive covenants to redlining to racial steering, U.S. policies systematically denied people of color from homeownership opportunities while simultaneously expanding them for lower income Whites.

While such policies are no longer sanctioned and the federal government has taken some affirmative steps to end residential segregation, inequalities associated with this shameful history persist. To help those who have been oppressed to rise out of poverty and gain access to a higher quality of life, sound economic and educational policies are needed.

Income, wealth, and employment

- Raise incomes of the poor, especially those with children: Increase enrollment in income support programs; expand access to earned-income tax credits; raise the state minimum wage; implement local living wage ordinances.
- Assist poor people to accumulate assets: Provide education and financial counseling to increase access to savings accounts and investment programs; expand home ownership and micro-enterprise opportunities.
- Support job creation and workforce
 development: Negotiate community benefits
 agreements, preserve industrial land for goodpaying jobs, and expand local green-collar jobs;
 increase access to education, training, and career
 ladders; fund job readiness and skill-building
 programs especially for African Americans, Latinos, and youth.

Education

- Invest in early childhood: Provide high quality and affordable child care and preschools; ensure equitable distribution of and access to preschools and provide subsidies.
- Reform school funding: Finance to equalize access to quality education in K-12; create incentives for teachers to work in disadvantaged schools; ensure accountability, adequate facilities and highly qualified teachers and administrators.

- Invest in recruiting, training and retaining child care providers and teachers for K-12.
- Provide supports to schools and students and parents in need: Provide positive interventions for at-risk middle and high school students; invest in youth development programs; create greater support for low-income parents of color to participate in their child's education.



Policies that address adverse community conditions

Segregation and systematic exclusion from decision-making venues paved the way for inequitable community conditions. Continued power imbalances at the individual and community levels are the legacy of these conditions and affect health through many pathways. Residents must be given more power and support to improve their community conditions.

The physical design as well as social and business structures of neighborhoods determine some health pathways. Our choices are often limited by our environments. For example, where there is a high concentration of "unhealthy" goods and services, such as liquor stores and fast food restaurants, people's health behaviors and perceptions about the neighborhood

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are shaped accordingly. Similarly, the locating of pollution-releasing facilities (diesel bus depots, hazardous waste sites) in residential areas reveals land use decisions that disproportionately burden low-income communities with an excess of air toxics that, in turn, result in serious health problems. Good housing, health-conscious zoning, and strong crime prevention can make communities healthier and safer. Access to health care, reliable and affordable transportation, social supports and a fair criminal justice system will help buffer the impacts of living in poorer neighborhoods. A broad range of policies can shape much better community conditions.

Housing

Increase affordability and stability: Ensure affordable housing for all by protecting existing stock, increasing production, and funding the EveryOne Home Plan. Protect affordable housing stock including just rent control laws and condominium conversion policies, as well as maintaining single room occupancy hotels. Increase production including increasing the redevelopment tax increment for affordable housing and affordable housing bond measures.



 Support homeownership: Use policies such as establishing community land trusts, increasing funds for and utilization of first-time home buyer programs, and establishing inclusionary zoning ordinances. Decrease foreclosure and displacement: Utilize strategies such as increasing funding for emergency housing assistance, partnering with community organizations to target preventative outreach to at risk households, and implementing Just Cause for Eviction ordinances.

Transportation

- Increase affordability: Utilize policies such as free bus passes for students 17 and under and low-income bus passes.
- Improve accessibility and reliability: Strategies include equalizing public transit subsidies and expanding bus service in the Metropolitan Transportation Commission identified communities of concern by implementing and funding community-based transportation plans.
- Decrease driving: Policies include equitable roadpricing strategies and transit-oriented development.
- Decrease pedestrian and bicyclist injuries: Utilize tools such as fully funded regional, county, and city pedestrian and bicycle strategic plans.

Air quality

- Reduce exposure to diesel particulates by eliminating diesel trucks in residential neighborhoods; enforcing the no-idling law near schools, requiring the use of clean technology in new ships and trucks; reducing emissions in existing fleets; and implementing existing state and federal emissions reductions regulations.
- Study trucking and shipping operations, including expanded monitoring around school sites, to assess the impact on low-income and vulnerable populations.
- Engage communities in decision-making about locally wanted and unwanted land use.

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 Incorporate public health input on air pollution impacts in local land use planning and development decisions.

Food access and liquor stores

• Limit number and density of fast food restaurants, especially in low-income areas.



- Increase healthy food availability: Retain and attract supermarkets and full-service grocery stores through tax write-offs and other incentives. Encourage neighborhood stores to carry healthy foods through tax incentives, streamlined permitting and zoning variances, and local government support. Strengthen alternative sources of fresh produce such as farmers' markets and community- and school-based produce stands.
- Establish and enforce regulations to restrict the number of liquor stores in census tracts with an over-concentration of off-sale premises. Enforce regulations to limit nuisance activity (litter, prostitution, drug dealing) in and around stores. Limit the hours of operation and restrict the sale of cheap, fortified alcohol products.

Physical activity and neighborhood conditions

- Develop and promote venues for active recreation—parks, playgrounds and school facilities—especially in low-income communities. Improve access to public facilities for physical activity, such as facilitating after-hour use of school facilities. Promote regular physical activity in schools such as physical education programs and increasing funding for teachers and equipment in low-income communities.
- Engage policy makers, law enforcement agencies, residents, and community organizations in the development of zoning laws and general plans to improve safety of parks and other recreational facilities in high crime and low-income communities.
- Increase land use mix in urban and suburban areas as a strategy to promote walking and biking to work, entertainment, shops, and schools. Increase public transport access and improve walking and biking routes to schools.

Criminal justice

- Reform crime laws: Decriminalize addiction and implement community programs for drug offenders in lieu of prison. Eliminate three-strikes laws.
- Address the root causes of disproportionate incarceration rates for African Americans, Latinos, and low-income people.
- Support re-entry programs and combine probation with social services, health, and other programs to ensure a support system for probationers.

Access to health care

• Support state and local legislative proposals for universal access to quality health care.

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- Streamline public health insurance enrollment and improve affordability of services within existing public programs such as Medi-Cal.
- Support legislation to improve affordability of critical prevention services such as childhood immunization.
- Promote culturally appropriate cancer screening programs for specific populations—for example, Asian women for cervical cancer—and support implementation of targeted breast and prostate cancer screening programs among low-income and lower literacy groups.

Social relationships and community capacity

- Strengthen community capacity building efforts using a place-based approach.
- Build social capital in vulnerable communities by empowering residents to take action in partnership with city and county governments and community-based organizations to improve their neighborhood conditions.
- Facilitate neighborhood-level strategies to address unfavorable neighborhood social conditions, increase protective and resiliency factors.

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Summary

People's health cannot be separated from the environment in which they live. A toxic mixture of conditions such as poverty, pollution, poor education, substandard housing, a shortage of grocery stores, cheap fast food, violence, unemployment, and racism combine to make people sick. Residents of Alameda County must work together with public officials to correct the course, all the while remembering these 10 points from the documentary series, *Unnatural Causes*.⁵

Health is more than health care.

Health is tied to the distribution of resources.

Racism imposes an added burden.

The choices we make are shaped by the choices we have.

High demand + low control = chronic stress.

Chronic stress can be deadly.

Inequality—economic and political—is bad for our health.

Social policy is health policy.

Health inequities are not natural.

We all pay the price for poor health.

References

- 1. Satcher D, Higginbotham EJ. The Public Health Approach to Eliminating Disparities in Health. *American Journal of Public Health*. 2008;98(3): 400-403.
- 2. Starfield B. State of the Art in Research on Equity in Health. Journal of Health Politics, Policy and Law, 2006;31(1): 14.
- 3. Ibid. 14-17.
- 4. Adler NE, Stewart J, et al. *Reaching for a Healthier Life: Facts on Socioeconomic Status and Health in the U.S.* The John D. and Catherine T. MacArthur Foundation Research Network on Socioeconomic Status and Health, 2007: 43.
- 5. The California Endowment and NACCHO. *Unnatural Causes: A Documentary Series and Public Impact Campaign*. Produced by California Newsreel with Vital Pictures. 2008. Available at http://www.unnaturalcauses.org. Accessed March 2008.



David Satcher, former Surgeon General of the United States, recently stated that "Although critical to eliminating disparities, access [to health care] only accounts for 15% to 20% of the variation in morbidity and mortality that we see in different populations in this country." To change the factors that account for the other 80% to 85%, we will need to look far beyond the health and medical sectors of society and focus on the root causes of poor health.

This report aims to identify health inequities in Alameda County, explore their underlying causes and propose possible actions to eliminate inequities. Specific economic and social policies are suggested to achieve greater health equity in our county. The importance of, and our commitment to, working collaboratively across sectors and with various stakeholders—neighborhood residents, community-based organizations, advocacy groups, local planners, and government agencies—to influence policy change is underscored.

Following this Introduction, Part One (Health Inequities) describes the nature and magnitude of health inequities in Alameda County as they specifically relate to place, income, and race. Part Two (Social Inequities) examines inequities in key economic, social, physical, and service environments that contribute to the health inequities described in Part One, including 1) segregation; 2) income and employment; 3) education; 4) housing; 5) transportation; 6) air quality; 7) food access and liquor stores; 8) physical activity and neighborhood conditions; 9) criminal justice; 10) access to health care; and 11) social relationships and community capacity. For each of these eleven areas, the connections to health are explained, relevant county-level data are provided, and policy goals and implications for action are proposed.

How and Why Is Alameda County Public Health Department Involved?

To tis the role of the Alameda County Public Health Department (ACPHD) to inform the public and public officials of what research and local data reveal about health inequities in Alameda County. While acknowledging that the political will for implementing some of the suggested policies is limited, it is important that the ACPHD offer our professional judgment about how to bring equal resources and opportunities to all communities. We are committed to working with stakeholders and decision makers across sectors to identify, prioritize, and advocate for policy solutions based on analysis of potential health and social equity impacts.

In order to move forward to address the root causes of health inequities and improve the health of all people in the county, ACPHD undertook a participatory process of strategic planning in 2007. We conducted internal discussions on racism, gender discrimination, and class exploitation; held seven community forums including one for Spanish-speaking residents; had dialogues with the Public Health Commission, ACPHD staff, and Alameda County youth about their vision for a healthy Alameda County; interviewed the Board of Supervisors and other key stakeholders; created an on-line survey to get input from all ACPHD staff; and held two planning retreats to finalize the plan. Our efforts to address health inequities are guided and supported by our strategic plan (summarized on page 4).

ACPHD is using the Bay Area Regional Health Inequities Initiative's (BARHII) Framework for Health Equity (Figure 1 on page 4) to understand and address the multiple pathways that lead to stark differences in health outcomes. Traditionally, public health departments work on the right side of the chart—providing immunizations, diabetes education, smoking cessation, and other services to individuals in need. Health

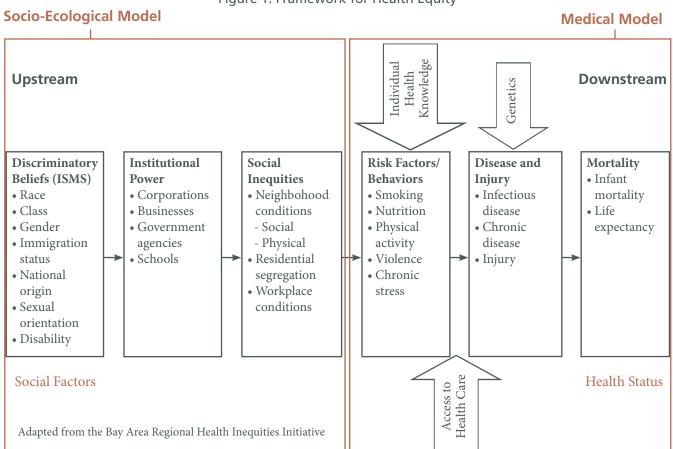
Alameda County Public Health Department Strategic Plan 2008-2013

- 1. Transform our organizational culture and align our daily work to achieve health equity.
- 2. Enhance public health communications internally and externally.
- 3. Ensure organizational accountability through measurable outcomes and community involvement.
- Support the development of a productive, creative, and accountable workforce.
- 5. Advocate for policies that address social conditions impacting health.
- Cultivate and expand partnerships that are community-driven and innovative.

education and access to health care can influence, but only partially explain, different health outcomes. These public health strategies are essential because they affect risk behaviors and access to health care services, which we know influence health outcomes. However, one can see by moving "upstream," that health inequities do not merely arise from individual variation in genes, health knowledge, and risk behaviors. The economic, social, and physical environment, as well as available services in neighborhoods all shape behavioral choices and disease risks. The policies and practices of powerful institutions strongly influence the environments where people live, work, and play. Finally, broad social inequalities create and structure differential access to power, resources, life chances, and opportunities—all of which determine the distribution of health and disease within the population.

To address the root causes of health inequities, ACPHD is bridging downstream and upstream public health activities highlighted in the BARHII framework

Figure 1: Framework for Health Equity



(Figure 1). Public health work continues to address the downstream factors—"Individual Health Knowledge" and "Risk Behaviors" and "Health Care Access." Moving more to the upstream side, the City-County Neighborhood Initiative is designed to change "Social Inequities"; institutional change work is intended to lessen "Social Inequities" as well as to influence institutional decision-making ("Institutional Power"); and policy change activities are designed to address all three upstream levels—"Discriminatory Beliefs," "Social Inequities", and in particular "Institutional Power."

The City-County Neighborhood Initiative (CCNI) builds the capacity of neighborhood residents to assess and address violence and other health inequities. Founded in 2004, the CCNI is a place-based partnership between the ACPHD, City of Oakland, community-based organizations, and neighborhood resident groups. The CCNI community capacity-building approach builds upon existing neighborhood assets. City and county staff work closely with residents to increase their leadership skills and build their social, political and economic power. Residents can leverage this power to create healthier neighborhoods. For example, residents have advocated successfully for cleaning up local parks and reining in nuisance liquor stores. More details about this initiative appear in the Social Relationships and Community Capacity section.

Institutional change within ACPHD is a crucial component of our work. As staff members are called upon to address increasingly complex health equity issues, mechanisms must be in place to build internal capacity. Staff continue to work with national, state, and local partners, universities, and others to increase our understanding of and ability to address these issues. In addition, we have created a five-module Public Health 101 training series for all staff that covers 1) the history of public health; 2) cultural competency and cultural humility; 3) undoing racism; 4) health inequities; and 5) community capacity building. Trainings on policy are offered to staff who are engaging in more focused

policy work. Staff members have offered recommendations that will be incorporated into future trainings.

Policy change to affect health inequities is a central focus of our work. Place Matters is a national initiative of the Joint Center for Political and Economic Studies, Health Policy Institute, designed to improve the health of participating communities by addressing social conditions that lead to poor health. Addressing these root causes of health through action and policy development and using data to look at changes in the social conditions that affect health are at the heart of the Place Matters work. As a partner in the Place Matters initiative, the role of ACPHD is to develop a local policy agenda. This report, Life and Death from Unnatural Causes: Health and Social Inequity in Alameda County, informs that agenda and reflects our commitment to inspire and inform necessary policy changes. For more information about the health equity work of the ACPHD, go to http://www.acphd.org/healthequity/ index.htm.

Unnatural Causes: Is Inequality Making Us Sick? is a recently released documentary film series that has informed and inspired this report. Produced by California Newsreel, the oldest non-profit, social issue, documentary film center in the country, Unnatural Causes: Is Inequality Making Us Sick? is intended as a tool to help communities discuss health inequities and their root causes. In partnership with the National Association of County and City Health Officials (NACCHO), our local partners and over 100 health departments and other organizations across the country, ACPHD uses this tool to promote discussion of root causes of poor health in Alameda County.²

The documentary as well as a recent report by the MacArthur Foundation Research Network compare societies to ladders, explaining that "the rungs of the ladder represent the resources that determine whether people can live a good life—prosperous, healthy, and secure—or a life plagued by difficulties—insufficient income, poor health, and vulnerability." People stand-

ing on the top rungs have the most access to the economic, social, physical, and service resources to help them maintain good health, while people on the bottom rungs lack access to many or all of these material benefits and power. The report also notes that while people in the middle may fare better than those on the bottom, they still have worse health than those at the top. Policy decisions can impact how long and steep the ladder is, or how much inequity there is between those on the top and the bottom. The report states that "of all the outcomes determined by your position on the ladder, none is more fundamental than this: *it predicts how long you will live and how healthy you are during your lifetime.*"³

What Makes Communities Healthy?

uring the 2007 strategic planning process, the Alameda County Public Health Department asked this question of community residents and partners, local politicians, and ACPHD staff. Answers came back with remarkable consistency. Participants identified priorities in four arenas: first, the economic environment, including access to good jobs, diverse businesses that support the neighborhood, as well as policies that facilitate home ownership. Second, crucial elements of the social environment, such as safety, trust, good relationships with police, policies that address structural racism, and social support for everyone, especially those most in need, such as youth. Third, they told us about aspects of the physical environment that help make communities healthy, such as clean air and water, safe places to walk and play, access to healthy foods, and quality affordable housing. Finally, they mentioned the service environment that is needed to have a healthy community, including not only access to health care and information about health, but also other services that can affect health,

A Framework for Healthy Communities⁴

- 1. Economic environment
- 2. Social environment
- 3. Physical environment
- 4. Service environment

like access to quality education and reliable transportation. This framework for organizing the factors essential for community health is consistent with that developed by PolicyLink, a national research and action institute. PolicyLink suggests that the four aspects of neighborhood environments provide a helpful framework for shaping healthier communities.⁴

Why Are Some Communities Healthier Than Others?

When one or more of the four environments—economic, social, physical, and service—are weak, the health of the community suffers. Many of the people we heard from during the strategic planning process observed that the broader determinants of health are not equally distributed throughout the population. Some communities are rich in resources and as a result, have created and sustained health, whereas other communities struggle to be healthy because of inadequate resources. They also recognized that policy decisions determine the resources available to communities and that a more equitable balance of power in decision-making is critical for eliminating health inequities.

Research is amassing nationwide which establishes that health outcomes are linked to place (where people live) and the level of resources and opportunities for health available to them based on race, income and

6

a. The Aspen Institute states the term structural racism is "used to describe the ways in which history, ideology, public policies, institutional practices, and culture interact to maintain a racial hierarchy that allows the privilege associated with whiteness and the disadvantages associated with color to endure and adapt over time." See page 27 for a full explanation.

education. Low-income people and people of color are more likely to be burdened by poor environments, which often include substandard housing, poor schools, and pollution. These are some of the disparate community conditions that have direct and profound consequences on residents' health.

Overall, the health of most groups in Alameda County is improving—people are living longer, healthier lives—but there are still large, persistent, and in some cases growing health inequities. For example, some groups living in the Oakland flats can expect to die, on average, more than a decade before other groups living in the Oakland hills and this gap in life expectancy

appears to be increasing. This is clearly not a random statistic and reflects inequities in opportunities and exposures in these two areas. The residents of the Oakland flats, predominately low-income African Americans and Latinos, deserve the same opportunity to live in a healthy environment as the residents of the Oakland hills.

Poor health in populations is more than² specific diseases. People at lower levels of income not only have more illnesses, but they also have more comorbidity...

Because morbidity clusters in particular vulnerable subgroups rather than being randomly distributed, overall improvements in equity in health are likely to require generic interventions rather than ones directed at specific manifestations of ill health (such as diseases).

—Barbara Starfield⁵

County-level data reveal large and persistent disparities in the economic and social factors that underlie these health inequities we see in Oakland. The gaps between Alameda County's haves and have-nots actually increased during the 1990s. In other words, the county experienced greater concentration of wealth in the hands of a few, decreased housing affordability, increased school segregation, and a loss of decent-paying jobs.

Current research can inform our understanding of broad health determinants and guide our attempts to advocate for policies that provide more equal opportunities and resources in all Alameda County communities. The following list, "10 Things to Know about Health," taken from California Newsreel's documentary, *Unnatural Causes: Is Inequality Making Us Sick?*, summarize current research findings and should guide our collective work.²

1. Health is more than health care. Doctors treat us when we're ill, but what makes us healthy or sick in the first place? Research shows that social conditions—the jobs we do, the money we're paid, the schools we attend, the neighborhoods we live in—are as important to our health as our genes, our behaviors and even our medical care.

the alth is tied to the distribution of resources.

The single strongest predictor of our health is our position on the class ladder. Whether measured by income, schooling, or occupation, those at the top have the most power and resources and on average live longer and healthier lives. Those at the bot-

tom are most disempow-

ered and get sicker and die younger. The rest of us fall somewhere in between. On average, people in the middle are twice as likely to die an early death compared to those at the top; those on the bottom, 4 times as likely. Even among people who smoke, poor smokers have a greater risk of dying prematurely than rich smokers.

3. Racism imposes an added health burden. Past and present discrimination in housing, jobs, and education means that today people of color are more likely to be lower on the class ladder. But even at the same rung, African Americans typically have worse health and die sooner than their White counterparts. In many cases, so do other popula-

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- tions of color. Segregation, social exclusion, encounters with prejudice, one's degree of hope and optimism, differential access, and treatment by the health care system—all of these can affect health.
- 4. The choices we make are shaped by the choices we have. Individual behaviors—smoking, diet, drinking, and exercise—matter for health. But making healthy choices isn't just about self-discipline. Some neighborhoods have easy access to fresh, affordable produce; others have only fast food joints, liquor and convenience stores. Some have nice homes, clean parks, safe places to walk, jog, bike or play, and well-financed schools offering gym, art, music and after-school programs, and some don't. What government and corporate practices can better ensure healthy spaces and places for everyone?
- 5. High demand + low control = chronic stress. It's not CEOs who are dying of heart attacks, it's their subordinates. People at the top certainly face pressure, but they are more likely to have the power and resources to manage those pressures. The lower in the pecking order we are, the greater our exposure to forces that can upset our lives—insecure and low-paying jobs, uncontrolled debt, capricious supervisors, unreliable transportation, poor child-care, no health care, noisy and violent living conditions—and the less access we have to the money, power, knowledge and social connections that can help us cope and gain control over those forces.
- 6. Chronic stress can be deadly. Exposure to fear and uncertainty trigger a stress response. Our bodies go on alert: the heart beats faster, blood pressure rises, glucose floods the bloodstream—all so we can hit harder or run faster until the threat passes. But when threats are constant and unrelenting, our physiological systems don't return to normal. Like gunning a car, this constant state of arousal, even if low level, wears down our engines over time, increasing our risk for disease.
- 7. *Inequality—economic and political—is bad for our health.* The United States has by far the high-

- est inequality in the industrialized world—and the worst health. The top 1% now holds as much wealth as the bottom 90%. Tax breaks for the rich, deregulation, the decline of unions, racism and segregation, outsourcing and globalization, as well as cuts in social programs, destabilize communities and channel wealth and power—and health—to the few at the expense of the many. Economic inequality in the United States is now greater than at any time since the 1920s.
- 8. Social policy is health policy. Average life expectancy in the United States improved by 30 years during the 20th century. Researchers attribute much of that increase not to drugs or medical technologies but to social reforms—for example, improved wage and work standards, universal schooling, and civil rights laws. Social measures like living wage jobs, paid sick and family leave, guaranteed vacations, universal preschool and access to college, and guaranteed health care can extend our lives by improving our living conditions. These are as much health issues as diet, smoking, and exercise.
- 9. Health inequalities are not natural. Health disparities that arise from our racial and class inequities result from decisions we as a society have made—and can make differently. Other industrialized nations already have, in 2 important ways: they make sure absolute inequality is less (e.g., Sweden's relative child poverty rate is 4%, compared to our 22%), and they guarantee that everyone has a chance for prosperity and good health regardless of a family's personal resources (e.g., good schools and health care are available to everyone, not just the affluent). As a result, they live healthier, longer lives than we do.
- 10. We all pay the price for poor health. It's not only the poor but also the middle classes whose health is suffering. We already spend \$2 trillion a year to patch up our bodies, more than twice per person than what the average industrialized country spends, and our health care system is strained to

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the breaking point. Yet our life expectancy is 30th in the world, infant mortality 31st, and lost productivity due to illness costs businesses more than \$1 trillion a year.²

As a society, we have a choice: reduce poverty, increase incomes and job security, and improve equality today or pay to repair our bodies tomorrow.

How Can We Work Together to Create Healthy Communities?

The people participating in our community forums expressed a variety of ideas about what we could do collectively to improve the health of all Alameda County residents. An overarching principle is that in order to truly eliminate health inequities in Alameda County, we must break free of traditional "silos", sectors, and agency divisions to address the complex and multi-dimensional root causes of health inequities. Other key considerations of forum participants included the following:

- Historically, policy decisions shaped both the positive and negative environments in which Alameda County residents live and work; therefore, policy change and enforcement is essential to reverse these trends, address social inequities, and improve health outcomes. Formal, legislative policies are needed as well as informal institutional policies that are not legally required, but that can improve our collective ability to address inequities.
- Residents must be involved in this process, not just as the recipients of services, but as leaders and participants in structural-level change. Decision-making must be transparent. Agencies, officials, and staff must carefully address the forces and policies that have prevented residents from engaging in decision-making in the past. Professionals and bureaucrats must be willing to share power with community residents.

Eliminating health inequities will require sustained interventions that go beyond typical public health programs. We will need to partner with residents, politicians, elected public officials, and other professionals and activists in the sectors of housing, city and regional planning, education, transportation, criminal justice, business and others in order to create structural change. In some of these areas, the public health sector has built solid partnerships that are already helping us get to the root of the problem; in other areas, we have yet to start. In all areas, there is much more to be done.



Conclusion

Wide and persistent inequities exist in the economic, social, physical and service environments where residents of Alameda County live and these environments affect health. Collectively, Alameda County has the opportunity to address inequities and ensure that our residents do not face death from "unnatural causes." The Alameda County Public Health Department is committed to forming multi-sector partnerships in working with community residents to identify and advocate for policies that will reduce social and health inequities. Using our data and policy analysis capacity to evaluate the potential health and social equity impacts of proposed policies, we will track progress toward achieving health for all.

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References

- 1. Satcher D, and Higginbotham EJ. The Public Health Approach to Eliminating Disparities in Health. *American Journal of Public Health*. 2008;98(3): 400-403.
- 2. The California Endowment and NACCHO. *Unnatural Causes: A Documentary Series and Public Impact Campaign*. Produced by California Newsreel with Vital Pictures. 2008. Available at http://www.unnaturalcauses.org. Accessed March 2008.
- 3. Adler NE, Stewart J, et al. *Reaching for a Healthier Life: Facts on Socioeconomic Status and Health in the U.S.* The John D. and Catherine T. MacArthur Foundation Research Network on Socioeconomic Status and Health, 2007: 1-52.
- 4. Bell J, and Rubin V. *Why Place Matters: Building a Movement for Healthy Communities.* Oakland: PolicyLink. 2007. Available at: www.policylink.org/documents/WhyPlaceMattersreport_web.pdf. Accessed March 2008.
- 5. Starfield B. State of the Art in Research on Equity in Health. Journal of Health Politics, Policy and Law, 2006;31(1):16,23.
- 6. Marmot MG, and Wilkinson R, eds. *Social Determinants of Health: The Solid Facts, 2nd ed.* World Health Organization Regional Office for Europe, Copenhagen, Denmark. 2003.
- 7. National Association of County and City Health Officials. NACCHO Exchange. Winter 2003;1(4).
- 8. Bell JD, Bell J, et al. *Reducing Health Disparities Through a Focus on Communities*. 2002. Available at: http://www.policylink.org/Research/HealthDisparities/. Accessed March 2008.
- 9. Smedley BD, and Syme SL. Introduction. In: Smedley BD and Syme SL, eds. *Promoting Health: Intervention Strategies from Social and Behavioral Research*. Washington, D.C.: Institute of Medicine, National Academy of Sciences. 2000.

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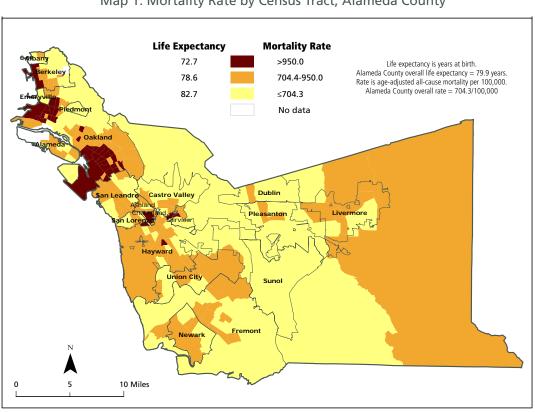


ver the past 4 decades, the overall health outlook in Alameda County has improved. Health benefits, however, are not experienced equally in the county and across population subgroups. Profound and persistent health inequities exist by place, income, and race. This section examines the nature and magnitude of these inequities—first by place, next by income, and then by race.^a These factors are then analyzed together to illustrate the complex ways they are related to each other and to the health of our county.

Place Matters: Health **Inequities by Where People Live**

s discussed in the Introduction, place matters because structural conditions of inequality have

concentrated resources and opportunities for health in certain places. The resulting unequal neighborhood conditions affect individual and community health. Higher rates of mortality^b occur in certain geographic areas, as seen in Map 1, which shows the spatial distribution of death from all causes by census tract. The highest rates of mortality (shown in dark red) are largely concentrated in parts of West Berkeley, North Oakland, West Oakland, and East Oakland, as well as a few areas in Cherryland, Fairview, and Hayward. People living in these areas have mortality rates that are 1.4 times higher than the county-wide rate of 704.3 per 100,000. The corresponding life expectancy^c in these high-mortality areas is up to 10 years less than other areas of the county (shown in yellow).



Map 1: Mortality Rate by Census Tract, Alameda County

Source: Alameda County vital statistics files, 2001-2005.

a. The health indicators and data shown in this section are intended to illustrate inequities by place, income, and race. Other health inequities exist beyond those portrayed.

b. Mortality or death rates are the number of deaths per 100,000 persons. They are adjusted to allow comparisons among populations with different age distributions.

c. Life expectancy at birth is the number of years someone born today can expect to live if exposed to current death rates during their life.

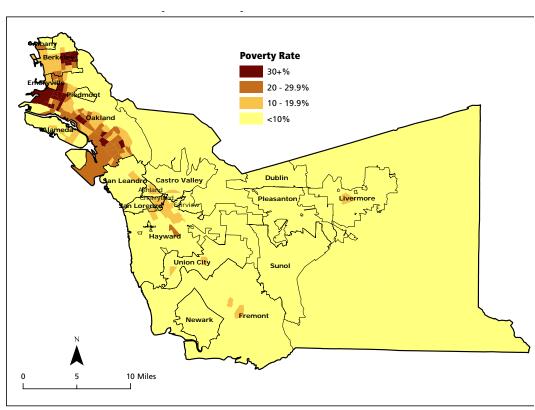
Income Matters: Health Inequities by Neighborhood and Household Poverty

ne of the main ways in which place is linked to health is through geographic concentrations of poverty. In Alameda County, poverty is highly concentrated in certain neighborhoods (Map 2). The areas with the highest neighborhood poverty levels^d are clustered together in parts of North Oakland, West Oakland, and East Oakland.^e This geographic distribution of poverty is consistent with spatial patterns of death discussed above (Map 1 on page 13).

When health outcomes are compared across areas of varying poverty levels, a strong social gradient is

observed. This means that rates of death increase with each step up in neighborhood poverty level. Neighborhoods with over 30% of people living in poverty have more death than neighborhoods with 20% to 29.9% in poverty, which, in turn, have more death than neighborhoods with 10% to 19.9% in poverty or neighborhoods with less than 10% in poverty. Figure 2 on page 15 illustrates that as neighborhood poverty levels rise, so do all-cause mortality rates. The mortality rate increases 55% from 636 (per 100,000 persons) in the lowest neighborhood poverty areas to 984 (per 100,000 persons) in the highest neighborhood poverty areas.

In addition to neighborhood poverty, social gradients are also found when comparing health outcomes by household poverty level based on household income.



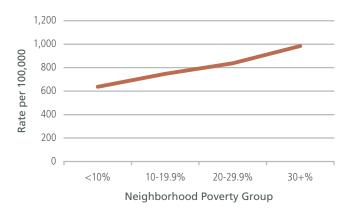
Map 2: Neighborhood Poverty Rate, Alameda County

Source: Census 2000.

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d. Neighborhood poverty is defined by the percentage of persons in a census tract living below the federal poverty level. In Census 2000, the 1999 federal poverty threshold of \$17,029 annually for a family of 4 was used. Census tracts with less than 10% of residents living in poverty represent low neighborhood poverty. Census tracts with 30% or more of residents living in poverty represent high neighborhood poverty. e. Areas concentrated around the UC Berkeley campus in the eastern part of Berkeley are high poverty, but residents are predominantly students.

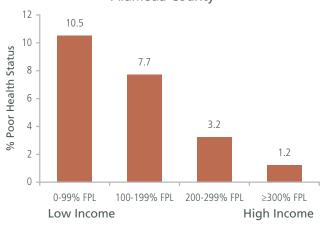
Figure 2: All-Cause Mortality Rate by Neighborhood Poverty, Alameda County



Source: Alameda County vital statistics files, 2003-2005.

Figure 3 shows a gradient in poor self-reported health status by household income expressed as a percentage of the federal poverty level (FPL). Adults from low-income households are over 8 times as likely to report being in poor health than those from high-income

Figure 3: Poor Self-Reported Health Status by Income, Adults, Alameda County



Source: California Health Interview Survey 2003.

households. The proportion of adults reporting poor health status ranges from 1.2% among households with high incomes to 10.5% among those with incomes below the federal poverty level.

A Note on Race/Ethnicity in this Report

This report provides data about the major racial/ethnic groups in Alameda County, including: Whites (the largest racial/ethnic group, comprising 37% of county residents based on California Department of Finance estimates); Asians comprise 23% and and Latinos/Hispanics comprise 23% of county residents); and Blacks or African Americans comprise 12% of county residents. Some of the smaller groups include: Native Hawaiian and Other Pacific Islanders (<1%), American Indians and Alaska Natives (<1%), and people of multiple races (3%). In this report, data are often limited to the four largest racial/ethnic groups because the numbers of events (for instance births and deaths) in the smaller groups are too small to calculate reliable rates. Unless otherwise specified, mutually exclusive racial categories are used for simplicity. Latinos/Hispanics of any race are used as a separate category.

Within this report, terms used to classify racial/ethnic groups may vary depending on the data source. For the purpose of brevity, some category names have been shortened. For example, the term *African American* is used to refer to people who are Black or African American (and abbreviated AfrAmer); the term *American Indian* refers to people of Native American, American Indian, and Alaska Native heritage (and abbreviated AmerInd); and the term *Pacific Islander* describes people of Native Hawaiian or other Pacific Island origins (and abbreviated PacIsl). In some cases, Native Hawaiian/Other Pacific Islanders are combined with (cont).

f. The federal poverty threshold is used to define income groups in terms of poverty level, a measure of material deprivation. A household between 0 and 99% of the federal poverty level is considered low income; households at or above 300% of the federal poverty level are considered high income.

Asians and called Asian/Pacific Islanders (abbreviated API) because racial classifications used prior to Census 2000 combined the two groups. The term *Latino* refers to people of Hispanic or Latino ethnicity.

There is considerable variation within these racial/ethnic groups (e.g., Chinese, Japanese, Korean, Vietnamese, Cambodian, Thai, Laotian, Hmong, Indian, and Filipino subgroups within Asians; Mexican, Puerto Rican, Cuban, and Central or South American subgroups within Latinos). While we recognize that there are culturally important differences among these subgroups, measuring differences in health outcomes is not feasible in this report due to a variety of factors—small numbers, the nature of the data compiled, and population estimates that are not available.

Throughout the report, the phrase *people of color* is commonly used to denote racial/ethnic groups other than Whites. The terms *minority* or *minorities* and *non-White* are used less frequently since people of color are not in the minority within Alameda County, and non-White tends to set up Whites as the norm against which other groups are compared. We recognize that the terms used to describe specific or other-than-White racial/ethnic groups have limitations as well.

Race and Racism Matter: Health Inequities by Race/Ethnicity

profound racial/ethnic disparities in health are observed in Alameda County. Race is a social construct—largely defined by society and culture, rather than genes and biology.1 As such, most health inequities by race reflect social processes that create racial differences in health, rather than innate biological differences. The relationship between race and health has long been shaped by residential segregation and other forms of racial discrimination. Covert and overt institutional policies have separated people by race in residential contexts, with lasting impacts on neighborhood conditions and ultimately on health (see Segregation section). While segregation has declined, African Americans remain highly concentrated in high-poverty areas of Alameda County. Health inequities are rooted in this and other legacies of discrimination.

Over the past 4 decades, the gap in all-cause mortality between Whites and African Americans has widened (Figure 4 on page 17). In 1960, the African American mortality rate was 4% higher than the White rate in Alameda County. This gap grew to 14% in 1970, 20% in 1980, 35% in 1990, 42% in 2000, and 53% in 2005.

The trend in life expectancy mirrors the trend in mortality, with African Americans living an average of 7.8 years less than Whites in 2005 (Figure 5 on page 17).

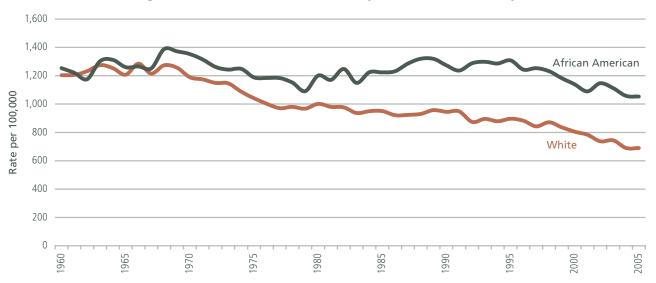
Figure 6 (page 17) is a snapshot of all-cause mortality rates in 2003-2005. African Americans had substantially higher all-cause mortality compared to all other racial/ethnic groups. The African American rate was 2.5 times higher than that of Asians, twice that of Latinos, and 1.5 times that of Whites. Pacific Islanders also had notably higher mortality rates than all racial/ethnic groups except African American. In addition to all-cause mortality, African Americans fare worse than other racial/ethnic groups across a broad range of other health conditions, including coronary heart disease, stroke, diabetes, major cancers (lung, colorectal, breast, and prostate cancer), asthma, and low birth weight.

It is important to recognize that there are notable differences within the racial/ethnic groups, which are comprised of subgroups that vary in socioeconomic, cultural, and linguistic characteristics as well as im-

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Health Inequities

Figure 4: Historical All-Cause Mortality Rate, Alameda County



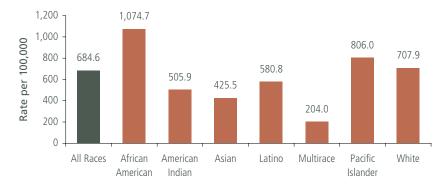
Note: White and African American defined regardless of Latino origin. Source: Alameda County vital statistics files, 1960-2005.

Figure 5: Historical Life Expectancy at Birth, Alameda County



Note: White and African American defined regardless of Latino origin. Source: Alameda County vital statistics files, 1960-2005.

Figure 6: All-Cause Mortality Rate by Race/Ethnicity, Alameda County



Source: Alameda County vital statistics files, 2003-2005.

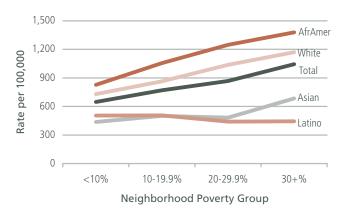
migration status—attributes that strongly influence health care use and health outcomes. All-cause mortality rates were significantly higher for the Cambodian subgroup (among Asians), for Samoans (among Pacific Islanders), and for Puerto Ricans (among Latinos) in 1999-2001 (data not shown). The sidebar titled "Immigration Status and Health" on page 20 describes how immigration status influences health outcomes.

A Deeper Look at Health by Place, Income, and Race

Previously, health inequities by place, by income, and by race were looked at separately. Here these factors will be analyzed together in order to explore the interrelationships of how concentrated neighborhood poverty and racial experiences play roles in shaping health inequities.

As described earlier, social gradients in health exist in Alameda County—as neighborhood poverty levels increase, so do rates of disease and death. Figure 7 displays this gradient for different racial/ethnic groups—the neighborhood poverty social gradient for all-cause mortality by race/ethnicity.

Figure 7: All-Cause Mortality Rate by Neighborhood Poverty Group and Race/Ethnicity, Alameda County



Source: Alameda County vital statistics files, 2001-2005.

The social gradient holds true across most racial/ethnic groups. African Americans, Asians, and Whites living in poorer neighborhoods die at higher rates compared to their counterparts living in more affluent neighborhoods. Whether living in poor or rich neighborhoods, African Americans experience the highest rates of death compared to other groups. Death rates rise substantially for Asians in the highest poverty neighborhoods. Latinos appear to be the exception, with about the same mortality observed regardless of poverty level. Some possible explanations of the health advantage among Latinos despite their economic disadvantage are described in the sidebar on page 20. It is important to note that African Americans, followed by Latinos, are most likely to live in higher poverty neighborhoods (with over 20% of residents living in poverty). In 2003 (used in the analysis shown in Figure 7), about 40% of African Americans and 28% of Latinos resided in higher poverty neighborhoods, compared to 11% of Asians and 4% of Whites (see Segregation section for details).

Although death is inevitable, deaths that occur before the age of 75 are considered to be premature. In Alameda County, the social gradient is even more pronounced for premature mortality (data not shown). In the period 2001-2005, the rates of premature mortality among Whites and African Americans living in the highest poverty neighborhoods were more than twice the rates of Whites and African Americans living in the lowest poverty neighborhoods.

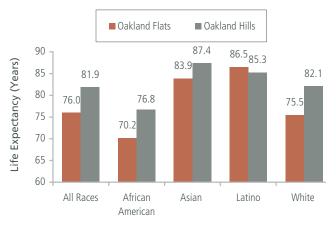
Using the 2001-2005 age-specific death rates (before age 75) of Whites in the lowest poverty neighborhoods of Alameda County as the reference group for comparison, if African Americans had experienced that same low age-specific death rate, 68% of the 208 annual deaths among African Americans living in the highest poverty neighborhoods and 34% of the 228 annual

deaths among those living in the lowest poverty neighborhoods would have been prevented. Comparing Whites across different neighborhood poverty groups, if Whites living in the highest poverty neighborhoods had experienced the same age-specific death rates as Whites in the lowest poverty neighborhoods, 64% of the 33 annual deaths in the high-poverty neighborhoods would have been prevented. The magnitude of preventable "excess" deaths is even greater when Asians are the reference group because they have the lowest mortality of all groups. About 82% of the 208 annual deaths among African Americans living in the highest poverty neighborhoods would have been prevented compared to Asians living in the lowest poverty neighborhoods.

The analysis just described illustrates how race/ethnicity is related to income and place in complex ways. While Latinos appear to be protected against detrimental health effects of living in high-poverty neighborhoods, African Americans are not protected and they experience ill health to a much greater extent than Whites and Asians. Regardless of where they live, African Americans tend to be burdened by higher rates of death than other racial/ethnic groups. This underscores the powerful influence of race/ethnicity and racism on their life chances. The combined effects of race, place, and income on the health of African Americans are profound. As described earlier, about two-thirds of deaths among African Americans in the highest poverty areas could have been prevented if they had the same death rates as Whites living in the lowest poverty areas.

Another illustration of the interplay of place, income, race, and health is seen when comparing life expectancy in the Oakland hills (high income) versus the flatlands (low income) (Figure 8). On average for all race/ethnicities, people who live in the wealthier hills live 5.9 years longer than those who live in the poorer flats. By race, the gap in life expectancy is most pronounced for African Americans and Whites (6.6 years). The largest gap that can be found between any

Figure 8: Life Expectancy at Birth, Oakland Flats and Hills



Source: Alameda County vital statistics files, 2001-2005.

two groups in this chart is between Asians living in the wealthier hills and African Americans living in the poorer flats—a difference of 17 years. What is clear from these comparisons is that factors beyond poverty appear to be negating health among African Americans—as the life expectancy of African Americans living in the wealthy hills is about the same as the life expectancy of Whites in the poor flats. Unlike African Americans, Latinos living in the flats and hills have about the same life expectancy.

The data presented above clearly illustrate the complex and striking health inequities by place, race/ethnicity, and income in Alameda County. Part Two of this report will explore why—what are these unnatural causes that determine chances at life and death in Alameda County? The underlying social inequities that create and maintain health inequity will be examined in-depth.

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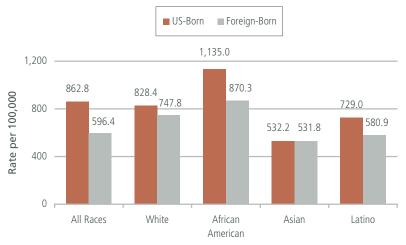
Immigration Status and Health

Despite their generally lower socioeconomic status, foreign-born persons (immigrants) in the United States have a considerable advantage over U.S.-born persons on several health outcomes. This health advantage—referred to as the "Immigrant Health Paradox" —has been shown among recent or first-generation immigrants in the major racial/ethnic groups; however it is not observed universally across health measures or racial/ethnic subgroups. Immigrants can vary widely in their socioeconomic background and cultural characteristics by country of origin. Their immigration experience in the United States can also vary based on circumstances, criterion for immigration (skill, refugee, family reunification), and immigration policies in effect at the time of immigration. Thus understanding the immigrant health paradox to better address the public health needs of populations experiencing persistent health disparities is crucial and complex.²⁻⁵

Figure 9 illustrates that in Alameda County, immigrants have lower all-cause mortality than their U.S.-born racial/ethnic counterparts. The health advantage among immigrants is also observed in the lower prevalence of several chronic diseases and their risk factors such as hypertension, asthma, heart disease, obesity and smoking among immigrants compared to U.S.-born persons in the county (data not shown).

Researchers propose several hypotheses to explain the observed immigrant health advantage. Among the ac-

Figure 9: All-Cause Mortality Rate Among U.S.- and Foreign-Born Persons by Race/Ethnicity, Alameda County



Source: Alameda County vital statistics files, 1999-2001.

cepted explanations is the "healthy migrant effect" or the selective migration of healthier persons from their countries of origin. Evidence supporting this explanation is largely from studies showing that U.S. immigrants have better health outcomes than comparable groups resident in their countries of origin. Another explanation for lower mortality among immigrants is the "salmon bias" or selective return migration of less healthy, older immigrants to their native countries—a hypothesis that is plausible, but not well substantiated. However there is more consistent and compelling evidence for the hypothesis that immigrants have healthier behaviors (e.g. lower smoking prevalence, healthier diet) and thus a much lower risk profile for a number of chronic health conditions than U.S.-born persons. ^{2,8}

Consistent with national findings, in Alameda County, Latino immigrants have much lower mortality than U.S.-born Latinos (Figure 9). This health advantage may be explained in part by migratory factors and healthier behaviors (discussed earlier) among immigrant Latinos, which are also observed among other immigrant groups. Additional findings suggest that there may be cultural factors unique to Latinos that are health-protective.^{8,9}

As described previously in this section, lower socioeconomic status is associated with poorer health among most racial/ethnic groups; however, Latinos appear to be the exception. In the United States and in Alameda County, Latinos have higher poverty rates, less education, and more limited access to health care compared to Whites, but much lower all-cause mortality. This is in contrast to African Americans, who like Latinos have a lower socioeconomic profile than Whites, but much higher all-cause mortality. This health advantage among Latinos despite lower socioeconomic status is referred to as the "Latino Health Paradox." There is considerable evidence of the mortality paradox among Mexican immigrants; a paradox has also been observed for other health outcomes among several Latino subgroups, e.g., infant mortality. In Alameda County, among the U.S.-born, Latinos have much lower all-cause mortality compared to Whites despite their socioeconomic disadvantage. In addition, they have lower all-cause mortality than African Americans who have a comparable socioeconomic profile (Figure 9).

Several studies suggest that the health paradox among Latinos may be better explained by factors that are social in origin. Cultural protective factors unique to Latinos may buffer against the racial and economic marginalization they might experience. Strong ethnic identity and positive identification with native culture among Latinos may confer health benefits. Furthermore, aspects of Latino culture such as strong social networks and close-knit, cohesive ethnic neighborhoods may have a powerful health-protective effect.^{8,9}

The distinct health advantage among recent immigrants erodes over time for most groups. In general, immigrants become less healthy the longer they live in the United States. Decline in health outcomes is also observed among subsequent generations born in the United States. This decline is largely explained by the process of acculturation, defined as the "process by which an individual raised in one culture enters the social structures and institutions of another, and internalizes the prevailing attitudes and beliefs of the new culture."8 It is a complex process that can influence health through social factors such as the degree of social support and networks, social acceptance, and changes in socioeconomic status. Acculturation can also influence health directly through its effect on health risk behaviors and access to the health care system. The impact of acculturation on health status varies among immigrant groups and by health outcome due to factors such as circumstances of immigration, living conditions in countries of origin or cultural protective factors.^{8,10}

Understanding the protective factors in the immigrant health paradox and the health effects of acculturation is critical to developing public health strategies for disadvantaged immigrant groups to achieve health equity.

References

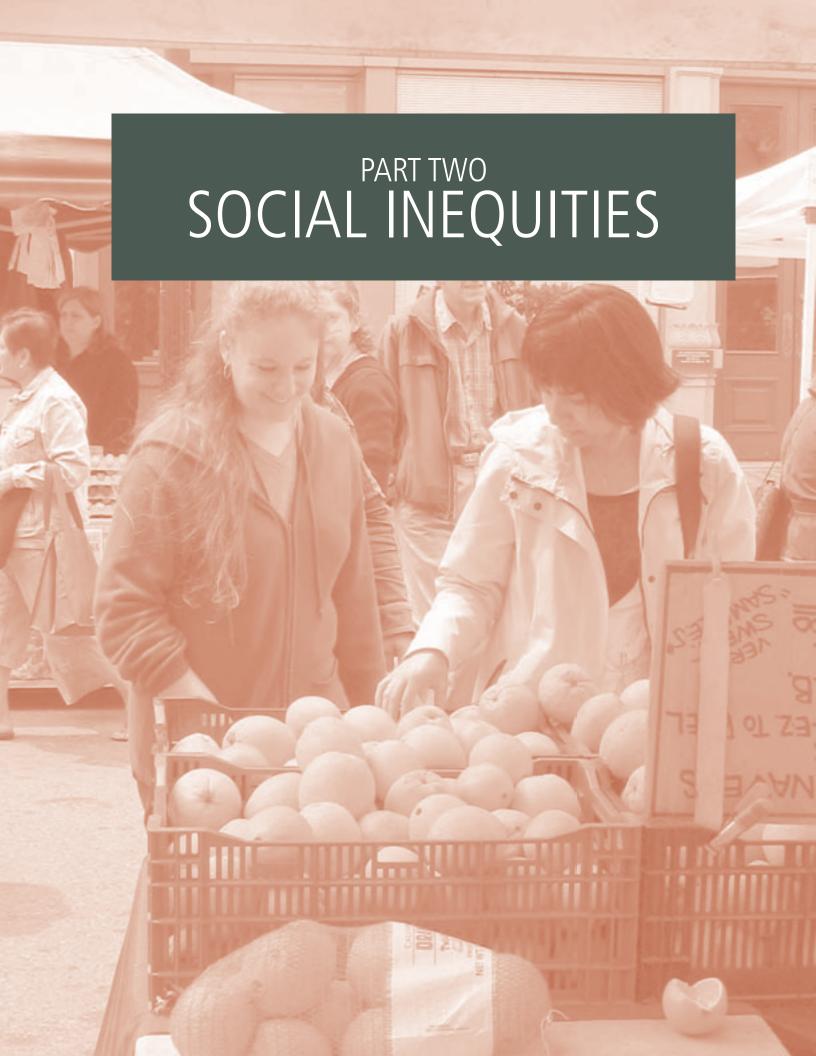
- 1. Randall V. Dying While Black. Dayton, OH: Seven Principles Press. 2006.
- 2. Dey AN, and Lucas JW. Physical and Mental Health Characteristics of U.S.- and Foreign-Born Adults, United States, 1998-2003. *Advance Data from Vital and Health Statistics, Number 369*. Hyattsville, MD: National Center for Health Statistics. 2006.
- 3. David RJ, and Collins JW. Differing Birthweight Among Infants of U.S.-Born Blacks, African-Born Blacks, and U.S.-Born Whites. In: LaVeist T, ed. *Race, Ethnicity and Health: A Public Health Reader.* Jossey-Bass, 2002: 252-264.
- 4. Singh G, and Yu SM. Adverse Pregnancy Outcomes. Differences Between U.S.- and Foreign-Born Women in Major U.S. Racial and Ethnic Groups. In: LaVeist T, ed. *Race, Ethnicity and Health: A Public Health Reader.* Jossey-Bass, 2002: 265-279.
- 5. Frisbie WP, Cho Y, and Hummer RA. Immigration and the Health of Asian and Pacific Islander Adults in the United States. In: LaVeist T, ed. *Race, Ethnicity and Health: A Public Health Reader.* Jossey-Bass, 2002: 231-251.
- 6. Fennelly K. The "Healthy Migrant" Effect. Minnesota Medicine: Clinical and Health Affairs. March 2007.
- 7. Lucas JW, Barr-Anderson DJ, Ward S. Health Status, Health Insurance, and Health Care Utilization Patterns of Immigrant Black Men. *American Journal of Public Health*. 2003;93(10): 1740-1747.
- 8. Franzini L, Rible RC, Keddie AM. Understanding the Hispanic Paradox. In: LaVeist T, ed. *Race, Ethnicity and Health: A Public Health Reader.* Jossey-Bass, 2002: 280-310.
- 9. Abraído-Lanza AF, Dohrenwend BP, Ng-Mak DS, and Turner JB. The Latino Mortality Paradox: A Test of the "Salmon Bias" and Healthy Migrant Hypotheses. *American Journal of Public Health*. 1999;89(10): 1543-1548.
- 10. Derose KP, Escarce JJ, and Lurie N. Immigrants and Health Care: Sources of Vulnerability. *Health Affairs*. 2007;26(5): 1258-1268.

Data Sources

- 1. Alameda County Public Health Department Automated Vital Statistics System and State of California Statistical Master Death File. *Vital Statistics*. Computer Files.
- 2. U.S. Census Bureau. Census 2000. Available at: http://www.factfinder.census.gov/.
- 3. California Health Interview Survey. *CHIS 2003 Adult Special Use File, Release 1.* Computer File. Los Angeles, CA: UCLA Health Policy Research. February 2005.

LIFE AND DEATH FROM UNNATURAL CAUSES

Health Inequities



Social Inequities: Root Causes of Health Inequities

A Worker's Speech to a Doctor

When we come to you
Our rags are torn off us
And you listen all over our naked body.
As to the cause of our illness
One glance at our rags would
Tell you more. It is the same cause that wears out
Our bodies and our clothes.

The pain in our shoulder comes
You say, from the damp; and this is also the reason
For the stain on the wall of our flat.
So tell us:
Where does the damp come from?

—Bertolt Brecht

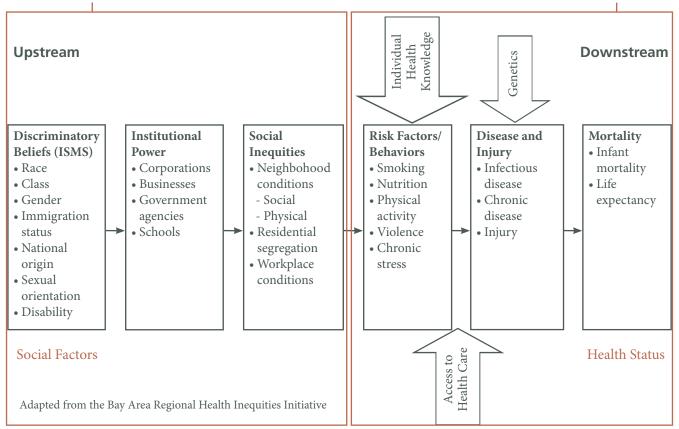
Understanding the Pathways From Social Inequities to Health Inequities

Social inequities are disparities in power and wealth, often accompanied by discrimination, social exclusion, poverty and low wages, lack of affordable housing, exposure to hazards and community social decay. In the framework developed by the Bay Area Regional Health Inequities Initiative (BARHII) shown on page 26, social inequities are represented in a broad sense on the left, 'upstream' side of Figure 10 and labeled So-

cial Factors. The right side shows the more immediate medical causes of death, diseases and risk behaviors, which BARHII describes as 'downstream.'

Most of this report focuses on the social causes—those that are considered the root causes of health inequities. While these factors are resistant to change because they form the very structure of society, they can be changed through intentional public and private policies with equity as the goal.

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With social *equity*, resources and opportunities are shared more widely. When groups that have traditionally been excluded from decision-making are able to participate in problem-solving and exercise their power in order to leverage resources from powerful institutions, they are more likely to see positive changes to their household and neighborhood conditions. Such changes can, in turn, affect the health of these groups.

Epidemiologist Nancy Krieger explains how unequal social and neighborhood conditions work through biological factors to determine the distribution of health: "While how we bring the world into us depends in part on our biological constitution (...exposure, development, growth, and gene expression), what we bring in is historically and socially contingent. Otherwise, there would be no variation in population health across time, place, and social groups." Krieger identifies five ways this process occurs.

- 1. Economic and social deprivation, including lack of access to adequate food, housing, and physical and social recreation.
- Toxic substances, pathogens and hazardous conditions, at work, in the neighborhood, and more generally.
- Social trauma, including institutional and interpersonal discrimination and violence, plus additional psychosocial stressors.
- 4. Targeted marketing of commodities that can harm health, e.g. junk food and psychoactive substances (alcohol, tobacco, and other licit and illicit drugs).
- 5. Inadequate or degrading medical care.1

These five pathways are evident in the specific social inequalities addressed in Part Two of this report: 1) segregation; 2) income and employment; 3) education; 4) housing; 5) transportation; 6) air quality; 7) food access and liquor stores; 8) physical activity and neigh-

borhood conditions; 9) criminal justice; 10) access to health care; and 11) social relationships and community capacity. This overview describes these inequities and how they work together to cause health inequities.

History and Legacy Create and Sustain Social Inequities

Historical factors must be taken into account in order to understand today's social inequalities, concentrations of institutional power, and hazardous neighborhood conditions. In the case of American society, the history of racism, slavery, and oppression and the legacy these original scars left in the form of overt or unintended biased policies, must be acknowledged and addressed. The important concept of *structural racism*, explained in the accompanying box, is helpful for reaching this understanding.²

What Is Structural Racism and How Do We Play a Part in Eliminating It?

Many organizations are currently engaged in researching the impacts of structural racism and working to mediate its effects and eliminate the policies that perpetuate it. The selected definitions and examples provide a brief explanation of what structural or institutional racism is and how it impacts many of the factors discussed in this report.

"Racism in twenty-first century America is harder to see than its previous incarnations because the most overt and legally sanctioned forms of racial discrimination have been eliminated. Nonetheless, subtler racialized patterns permeate the political, economic, and socio-cultural structures of America in ways that generate differences in well-being between people of color and whites. Structural racism, then, refers to the system in which public policies, institutional practices, cultural representations, and other norms work in various, often reinforcing ways to perpetuate racial group inequity in every key opportunity area, from health, to education, to employment, to income and wealth."

For example, "a government agency decides that low-income housing must be built, which will house low-income African Americans and Latinos. It fails to look for locations near jobs and important infrastructure, like working schools, decent public transportation and other services. In fact, it is built in a poor, mostly African American and Latino part of town. When the housing is built, the school district, already underfunded, has new residents too poor to contribute to its tax base. The local government spends its limited resources on transportation to connect largely White, well-to-do suburban commuters to their downtown jobs. The public housing residents are left isolated, in under-funded schools, with no transportation to job centers. Whole communities of people of color lose opportunities for a good education, quality housing, living wage jobs, services and support-systems." 12

"The structural arrangements produced by the walling off of resources and opportunities produces the racial disparities we see today—like higher poverty rates, greater infant deaths and lower high school graduation rates in communities of color. Racial disparities are the symptoms of our collective illness—structural racism. Whether it's education reform, the environment, the workplace, urban planning and development, affordable housing or health care, we must make the role of race visible and understand the structures our institutions construct so that we may rebuild them to create opportunities for us all."

Economic and Social Resources Shape Health from Before Birth and Onward

The resources we gain through education, income, and the type of jobs we hold determine our health, our children's health, and the likelihood of being healthy in the future. As summarized in a recent MacArthur Foundation Research Network report,³ poor pregnant women tend to get less timely prenatal care, experience more stress, and deliver more premature and low weight babies than women with higher incomes. For their children, this inequity results in increased risk of infant death, slower cognitive development, hyperactivity, breathing problems, overweight, and heart disease. The longer people remain in poor social environments, the worse their physical and mental functioning will be later in life.^{4,5} Low-income children who are denied quality early education and preschool experiences are more likely to struggle socially and academically in the first years of primary school. These same children are those who are more likely to perform poorly on reading and math tests by the middle school years and to drop out in high school.⁶⁻⁸ Those who lack a high school degree are more likely to be unemployed, to be limited to working low-wage jobs, and to be unable to overcome conditions of poverty.

Long-Term Health Impacts of Inequities in Neighborhood Conditions

Many health problems emerge from childhood. Some health inequities, therefore, are explained by different exposures of children living in poor neighborhoods relative to children higher on the social ladder. Poor children are more likely to experience lead, air and noise pollution, unstable housing that disrupts school attendance and social ties, fast food consumption that contributes to obesity, and violence in school and on the street that causes chronic anxiety. Poor children experience less timely health and dental care and less access to libraries, playgrounds and other safe places for play, physical activity, and socializing. Children's

exposure to such hazards is not a matter of parental choice, but partly a function of community design—design that can be altered through shifts in public policy.

Over the last decade, researchers have taken great interest in studying the relationship between the built environment (the way neighborhoods are designed and maintained) and residents' physical condition. Results indicate that neighborhood conditions affect the quality of the air we breathe, the kind of goods and services (either health-promoting or health-negating) we can access, and the extent to which we exercise, play outdoors, and connect socially with others.

Land use decisions affect air quality. Air quality can be compromised by the placement of pollution-releasing facilities (such as diesel bus depots or hazardous waste sites) in communities as well as low-density development that increases reliance upon automobiles—a leading source of air pollution. Studies have shown that the communities most affected by environmental pollution (air, 4 water, 5 and noise 6,17) are low-income, low-education, and high-minority. For example, rates of premature death are higher in environments with excesses of small particulate matter, or diesel pollution.

Where an individual lives and what modes of transport he or she has access to determine the quantity and quality of retail goods and services available as well as opportunities for physical exercise.¹⁸ Living in an environment where there is a lack of healthy foods yet a high concentration of "unhealthy" goods and services, such as liquor stores and fast food restaurants, shapes health behaviors and perceptions about the neighborhood. With regards to opportunities for physical exercise, neighborhoods designed with stores, theaters, and other destinations within walking distance of home and work have the potential to promote physical activity. Neighborhoods that have parks, multiuse trails, and appealing sidewalks or public spaces for walking may also promote active recreation.¹⁹ Physical environments designed to facilitate commuting to

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work or school by foot, bicycle, or public transit help promote physical activity by incorporating walking or biking into people's daily routine. 18,20

Through planning code regulations and ordinances, local governments across the country have attempted to control the prevalence of unhealthy goods and services in their communities and to remove barriers to physical activity.²¹ Few, however, have fully integrated planning and public health in land use decisions. Interventions through land use represent some of the most effective and immediate policies that local governments can take to improve community health.

Community-Level Leadership Needed for Structural Change

The multiple hazardous neighborhood conditions and the lack of social and economic resources experienced by the very poor contribute to breakdowns in neighborhood social cohesion and diminished individual and community power to make change. The people who are most affected by poverty, run-down and toxic neighborhoods and limited community resources are rarely at the table when decisions are made. What will it take to change the social and built environments when they are so embedded in powerful economic and social structures? One approach that is being adopted as a health strategy by increasing numbers of communities is *community capacity building*.

Initiatives focused on community-level leadershsip, exercise of community power, and increasing community capacity are strategies that have been shown to make a difference in poor neighborhoods. ²²⁻²⁵ A respected health scholar, Nina Wallerstein, describes empowerment as "a social action process that promotes participation of people, organizations, and communities toward the goals of increased community control, political efficacy, improved quality of life and social justice." ²⁶ Such social action processes exist in Alameda County and can serve as case studies for learning and replicating. Engaged, empowered community groups

can leverage resources to address neighborhood problems.^{27,28}

Professionals—whether planners, academics, elected officials, government, or private bureaucrats—wield considerable social and political power relative to poor residents. By partnering and yielding power to community groups and their leaders, institutions can create a social context that encourages connection, respect and productive problem solving and decision-making. Such partnerships can inspire more community participation and especially gain momentum if they are organized on the basis of *place*.²⁹⁻³²

A local example of such placed-based positive partnerships is the City-County Neighborhood Initiative (CCNI). The Alameda County Public Health Department has partnered with the City of Oakland and community groups, using the following strategies to build community capacity and achieve residents' priorities for action.

- Developing local leaders.
- Establishing resident action councils.
- Supporting community initiatives through minigrants.
- Promoting positive youth development.
- Rebuilding the community social fabric through the Sobrante Park Time Bank.
- Promoting healthy lifestyles.

The specific activitiees related to these strategies are described in the last section of Part Two, Social Relationships and Community Capacity.

Looking back the Framework for Health Equity (Figure 10 on page 26), empowering residents and building community capacity can be seen as an intervention between "Institutional Power" and "Neighborhood Conditions." The assumption is that communities with skilled leaders and empowered advocates who partner

with existing local institutions in on-going decisionmaking will be able to influence policy priorities and leverage funding in order to improve the environments in which they live.

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References

- 1. Krieger N. Introduction: Embodiment, Inequality, and Epidemiology: What Are the Connections? In: Krieger N, ed., *Embodying Inequality: Epidemiologic Perspectives*. Amityville, New York: Baywood Publishing Company. 2005: 2-3.
- 2. Center for Social Inclusion. *Structural Racism*. Available at: http://www.centerforsocialinclusion.org./struct_racism.html. Accessed April 2008.
- 3. Adler NE, Stewart J, et al. *Reaching for a Healthier Life: Facts on Socioeconomic Status and Health in the U.S.* The John D. and Catherine T. MacArthur Foundation Research Network on Socioeconomic Status and Health, 2007.
- 4. Galobardes B, Lynch JW, and Davey-Smith G. Childhood Socioeconomics Circumstances and Cause-Specific Mortality in Adulthood: Systematic Review and Interpretation. *Epidemiologic Reviews*. 2004;26: 7-21.
- 5. Case A, and Paxson C. The Lasting Impact of Childhood Health and Circumstance. *Journal of Health Economics*. 2005:24(2): 365-389.
- 6. Willms JK. Quality and Inequality in Children's Literacy: The Effects of Families, Schools, and Communities. In: Keating DP, and Hertzman C, eds. *Developmental Health and the Wealth of Nations: Social, Biological, and Educational Dynamics.* New York: The Guilford Press. 1999: 72-93.
- 7. Brooks-Gunn J, Duncan GJ, and Britto PR. Are Socioeconomic Gradients for Children Similar to Those for Adults?: Achievement and Health of Children in the United States. In: Keating DP, and Hertzman C, eds. *Developmental Health and the Wealth of Nations: Social, Biological, and Educational Dynamics.* New York: The Guilford Press. 1999: 94-124.
- 8. Case R, Griffin S, and Kelly WM. Socioeconomic Gradients in Mathematical Ability and their Responsiveness to Intervention during Early Childhood. In: Keating DP, and Hertzman C, eds. *Developmental Health and the Wealth of Nations: Social, Biological, and Educational Dynamics.* New York: The Guilford Press. 1999: 125-149.
- 9. Adler NE, Stewart J, et al. *Reaching for a Healthier Life: Facts on Socioeconomic Status and Health in the U.S.* The John D. and Catherine T. MacArthur Foundation Research Network on Socioeconomic Status and Health. 2007.
- 10. Case A, Lubotsky D, and Paxson C. Economic Status and Health in Childhood: The Origins of the Gradient. *American Economic Review.* 2002;92:1308-1334.
- 11. Lawrence K, Sutton S, Kubisch A, Susi G, and Fulbright-Anderson K. *Structural Racism and Community Building*. Aspen Institute Roundtable on Community Change. Washington, D.C.: The Aspen Institute. 2004.
- 12. Center for Social Inclusion. *Structural Racism: Definition*. Available at:: http://www.centerforsocialinclusion.org./struct_racism.html. Accessed April 2008.
- 13. Frumkin H. Urban Sprawl and Public Health. Public Health Reports. 2002;117(3): 201-217.
- 14. Brooks N, and Sethi R. The Distribution of Pollution: Community Characteristics and Exposure to Air Toxics. *Journal of Environmental Economics and Management*. 1997;32(2): 233-250.
- 15. Calderon RL. Health Risks from Contaminated Water: Do Class and Race Matter? *Toxicology and Industrial Health*. 1993;9(5): 879-900.
- 16. U.S. Environmental Protection Agency. The Urban Noise Survey. EPA 550/9-77-100. 1997.
- 17. Stansfeld SA. Noise Pollution: Non-Auditory Effects on Health. British Medical Bulletin. 2003;68: 243-257.
- 18. Wrigley N. Food Deserts in British Cities: Policy Context and Research Priorities. Urban Studies. 2002;39(11): 2029.
- 19. Frumkin H, Frank L, and Jackson R. *Urban Sprawl and Public Health: Designing, Planning, and Building for Healthy Communities.* Washington, DC: Island Press. 2004.
- 20. Frank LD, Engelke PO, and Schmid TL. Physical Activity and Public Health. In: Frank LD, Engelke PO, and Schmid TL, eds. *Health and Community Design: Impact of the Built Environment on Physical Activity.* Washington, DC: Island Press. 2003.
- 21. Ashe M. Land Use Planning and the Control of Alcohol, Tobacco, Firearms, and Fast Food Restaurants. *American Journal of Public Health*. 2003;93(9): 1404-1408.
- 22. Minkler M. Community Organizing and Community Building for Health. New Brunswick: Rutgers University Press. 1997.
- 23. Eng A, and Parker E. Measuring Community Competence in the Mississippi Delta: The Interface between Program Evaluation and Empowerment. *Health Education Quarterly.* 1994: 199-220

- 24. Wallerstein N, and Sanchez-Merki V. Freirian Praxis in Health Education Research: Results from an Adolescent Prevention Program. *Health Education Research*. 1994:9: 105-118.
- 25. Israel BA. Social Networks and Social Support: Implications for Natural Helper and Community Level Interventions. *Health Education Quarterly.* 1985;12: 65-80
- 26. Wallerstein N. Powerlessness, Empowerment and Health: Implications for Health Promotion Programs. *American Journal of Health Promotion*. 1992;6: 197-205.
- 27. Zimmerman MA, and Rappaport J. Citizen Participation, Perceived Control and Psychological Empowerment. *American Journal of Community Psychology.* 1988:16: 725-750.
- 28. Scultz AJ, Israel BA, Becker AB, and Hollis RM. It's a 24-Hour Thing...A Living-For-Each-Other Concept: Identity, Networks, and Community in an Urban Village Health Worker Project. *Health Education and Behavior*. 1997;24: 465-480.
- 29. Hawe P. Making Sense of Context-Level Influences on Health. Health Education Research. 1998;13(6): i-iv.
- 30. Dovey K, Downton P, and Missingham G. *An Ecology of Place and Place-Making: Structures, Processes, Knots of Meaning.* Melbourne: Royal Melbourne Institute of Technology. 1985.
- 31. Curtis S, and Rees Jones I. Is There a Place for Geography in the Analysis of Health Inequality? In: Bartley M, Blanc D and Davey-Smith G, eds. *The Sociology of Health Inequalities*. Oxford: Blackwell Educational. 1998.
- 32. Kearns RA, and Gesler WM. Putting Health into Place: Landscape, Identity and Well Being. New York: Syracuse University Press. 1998.

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Segregation

Historical Overview

The neighborhood conditions in which many Americans live today were created neither by chance nor individual choice. Intentional social processes designed to separate African Americans, Asians, Latinos, and others away from Whites formed the historical basis of a unique system of racial apartheid. The system was reinforced by statute, judicial decree, official government policy, as well as overt and covert real estate practices. Over time, the system produced generations of residential racial segregation which, to this day, help explain the spatial and racial patterns of disparate funding formulae and unequal access to housing, schools, parks, roadways, critical infrastructure, and even health care services across neighborhoods. The powerful legacy of segregation is the continuing pattern of unequal resources and opportunities. The absence of resources and opportunities in some neighborhoods is what leads directly to poorer health and earlier death in those neighborhoods relative to others.

The American system of racial segregation operated at multiple levels. First, the law allowed certain races and ethnicities to settle only in defined areas of towns and cities. Second, banks commonly refused to grant loans for the purchase of homes in certain areas based on racial/ethnic composition. This practice, known as redlining, helped define the racial and ethnic makeup of neighborhoods. Beginning in the early 1930s, the practices of the federal Home Owner's Loan Corporation legitimized the redlining practices by lenders and home insurance agents. Finally, long after racial restrictive covenants on land were ruled unconstitutional, realtors engaged in racial steering to keep non-Whites away from White neighborhoods. They also played active roles in block-busting, or encouraging White owners to sell by giving the impression that African Americans were moving into the neighborhood.

Such policies and practices systematically denied people of color homeownership opportunities while expanding them for lower income Whites. Exclusionary policies and practices were so widespread and well documented that the federal government acknowledged in 2000, "[f] or many years, the federal government itself was responsible for promoting racial discrimination in housing and residential policies." While these policies are no longer sanctioned and the federal government has taken affirmative steps to end residential segregation and housing discrimination, inequalities in access to quality, affordable housing and profound disparities in homeownership between Whites and people of color persist.

What Research Tell Us

No Home Ownership, No Wealth for Generations

Investment in homeownership has been the primary long-term strategy to build wealth in the United States and we know that wealth is one of the strongest determinants of health. ^{2,3} Moreover, homeownership supports inter-generational wealth—assets that are passed from parents to children, ensuring continued and improved access to opportunities. Over time, home values in segregated and politically neglected neighborhoods have stayed stagnant or decreased relative to other communities and have resulted in wider disparities in wealth.

Wealth is the primary portal through which people access a variety of critical social and material benefits—high quality education, employment, housing, childcare, recreational opportunities, nutrition, medical care, and safer and cleaner neighborhoods. African-American and Latino households have less than 10 cents for every dollar in wealth owned by White households.⁴ Approximately one-third of African-American households and one-quarter of Latino households have zero or negative net wealth.5 Nationwide, the percentage of Whites who own their homes is about 75%, whereas homeownership rates for African Americans and Latinos is about 47%.5 These racialized patterns of wealth distribution are consistent from community to community across the United States, including Alameda County.

Segregation, Concentrated Poverty, and Multiple Health Problems

Where there is high segregation, there are also pockets of high poverty. As with wealth, the spatial concentration of poverty has also increased sharply in the United States. Between 1970 and 1990, the percentage of poor Americans living in neighborhoods with 20% to 40% of people living in poverty increased from 38% to 41%, and the proportion living in neighborhoods of

over 40% poverty increased from 17% to 28%.⁶ While this trend reversed itself somewhat between 1990 and the boom year of 2000, there was still much higher concentrated poverty in 2000 than in 1970 or 1980.⁷

Segregation is what inextricably ties neighborhood to health. Important health outcomes can be predicted largely on the basis of neighborhood of residence, or place. Above and beyond the effects of race/ethnicity and poverty, living in racially segregated neighborhoods has been associated with higher infant mortality, 8-10 overall mortality, 11-13 and crime rates. 14

There are many reasons for these health differences. Freeways and heavily traveled roadways frequently run through low-income neighborhoods, disproportionately exposing residents to noise and air pollution. Politicians and policy-makers frequently assign undesirable land uses such as power plants and factories, sources of toxins, and bus yards to low-income communities of color.14 Residents of these communities do not receive the same level of municipal services as those in more affluent neighborhoods. Neighborhoods of high income, more educated and more politically savvy residents have more access to lawmakers and other avenues of influence than the poor neighborhoods.^{5,16} In addition, access to transportation, quality affordable housing, adequate parks and recreational opportunities, and grocery stores is often very limited in poor communities. These same neighborhoods generally have more than their share of poorly funded schools and student populations with high dropout rates.

The Risk of Re-Segregation of Schools

Residential segregation perpetuates school segregation. While gains were made in the desegregation of African American students in the 1960s, 1970s, and 1980s, a movement toward re-segregation of both African American and Latino students since 1990 has been documented nationwide. A series of Supreme Court decisions, the most recent of which came in June 2007,

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have rolled back desegregation plans, including voluntary ones, now making it unconstitutional to take race into account in addressing school segregation.^{17,18}

The racial and ethnic composition of the United States is shifting and becoming more diverse. The proportion of Whites has declined, and in many areas of the country Whites no longer are a majority. In the West, for instance, the percentage of White students declined



from 59% in 1990 to 45% in 2005, while the percentage of non-White groups increased (with the exception of American Indians). The largest growth in the West has been among Latinos, who grew from 25% in 1990 to 38% in 2005.

As student populations of color grow relative to White populations it is imperative that through our policies we"

"transform diversity into an asset for all children and society, rather than continuing to separate children in a way that harms both those excluded from better schools and White students in those schools who are not being prepared for success in multiracial communities and workplaces of the future."

Despite an increasingly diverse population, schools continue to be segregated by race and class, particularly in the inner cities. This is due in part to an increase in the number of poor children of all races and in part to a large migration of African American and Latino middle class families to the suburbs. The net result is

concentrated poverty in many urban schools. These are the same schools that have low student achievement, less-experienced teachers, fewer course offerings, less competition, less stable enrollment, and lower graduation rates. Racial segregation of schools continues to be strongly linked to unequal educational opportunities (see Education section).

In 2003-2004, 29% of the nation's White public school students (K-12) attended Title I schools (where 40% or more of students are eligible for Free or Reduced Price Meal Programs). In stark contrast to this, 71% of African American students and 73% of Latino students attended such public schools nationally.²⁰

A Look at Alameda County

Racial Segregation

esidential segregation in Alameda County may The measured in two ways—dissimilarity and entropy. Dissimilarity is the proportion of a county population that would have to move in order for each neighborhood to have the same percentages of each group as has the county overall.21 This measure ranges between 0.0 (complete integration) and 1.0 (complete segregation). Entropy measures the difference of each neighborhood from the county's racial/ethnic composition, which is greatest when each racial/ethnic group is equally represented in each neighborhood. Entropy also ranges between 0.0 (when all neighborhoods have the same composition as the county) and 1.0 (when each neighborhood contains only one racial/ethnic group). The two segregation indices are shown in Table 1 (page 36) for Alameda and neighboring Bay Area counties.

Bay Area counties have a multigroup dissimilarity index²² that ranges between 0.285 in Sonoma County (the lowest segregation) and 0.431 in San Mateo County (the highest segregation). Alameda County's dissimiliarity index is relatively high at 0.396, suggesting that Alameda County is one of the more segregated

Table 1: Segregation Indices for Bay Area Counties

	Alameda	Contra Costa	Marin	Napa	San Francisco	San Mateo	Santa Clara	Solano	Sonoma
Multigroup dissimilarity	0.396	0.381	0.339	0.287	0.397	0.431	0.384	0.295	0.285
White entropy	0.190	0.188	0.155	0.063	0.167	0.217	0.176	0.109	0.082
AfrAmer entropy	0.263	0.242	0.285	0.188	0.259	0.167	0.045	0.097	0.051
Latino entropy	0.128	0.141	0.198	0.079	0.175	0.188	0.197	0.046	0.101
Asian entropy	0.135	0.073	0.028	0.135	0.147	0.182	0.130	0.134	0.041

Source and Notes: Calculated at the census tract level with data from Census 2000.

counties in the Bay Area. From the entropy indices, it can be seen that African Americans are the most segregated within Alameda County, with an entropy of 0.263. Historically, African Americans were much more segregated, as entropy in 1970 was 0.513.

Map 3 illustrates racial/ethnic plurality—the race/ethnicity that has the highest proportion of people, but not necessarily the majority—for each Census block group in the county. The geographic concentration of racial/ethnic groups reflects historical segregation and more recent immigration patterns in the county. Before World War II, African Americans were confined to West Oakland; during the war, the rising numbers of immigrant workers found housing in East Oakland. Asian immigrants were confined to Chinatown in Oakland, and they were later allowed to move to the China Hill area. More recently, Latinos have settled in Fruitvale and parts of Hayward and Newark, while Asians have moved to Fremont and Union City. We find high concentrations of these groups in these areas today.

Plurality Asian (125 areas) Latino (128 areas) African American (167 areas) White (560 areas) No people (3 areas) Dublin 10 Miles

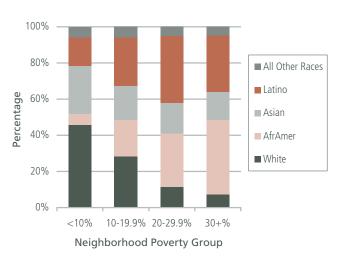
Map 3: Racial/Ethnic Plurality, Alameda County

Source: Census 2000.

Economic Segregation and Poverty

As explained earlier, a consequence of racial segregation is economic segregation. In Alameda County, Whites are the largest group in the lowest poverty neighborhoods. In contrast, African Americans are the largest group by far in the highest poverty areas. The percentage of Whites and Asians is lower with increasing neighborhood poverty, while the reverse is true for African Americans (Figure 11).

Figure 11: Racial/Ethnic Composition of Neighborhood Poverty Groups, Alameda County, 2006

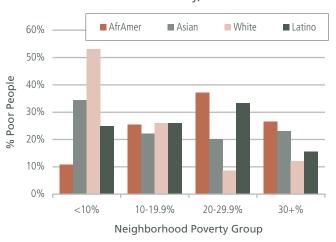


Sources: DOF, ABAG Projections 2007, Claritas, Census 2000.

Figure 12 shows a slightly different picture and a particularly important one when thinking about health inequities. Poor people living in poor neighborhoods experience a double disadvantage. Living in a poor household in a high-poverty neighborhood means having very few personal opportunities and few community resources. In contrast, living in a poor household in an affluent neighborhood is less likely to have the same negative consequences because there are more shared resources and opportunities to influence community conditions. In Alameda County, poor people and people of color are more likely to live in poor neighborhoods. Figure 12 shows the distribution of poor people by neighborhood poverty level. For

instance, only 10% of poor African Americans live in low-poverty neighborhoods (<10% poverty), while the majority (63.7%) live in high-poverty neighborhoods: 37.2% in neighborhoods of 20 to 29.9% poverty, and 26.5% in neighborhoods of 30% or greater poverty. In contrast, over half (53%) of Whites who are poor live in neighborhoods with less than 10% poverty.

Figure 12: Percentage of Poor Residents by Race/ Ethnicity Living in Neighborhood Poverty Groups, Alameda County, 2006



Sources: DOF, ABAG Projections 2007, Claritas, Census 2000.

Segregation in Alameda County Public Schools

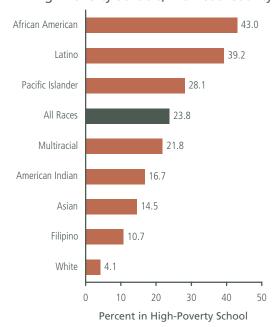
Alameda County is racially and ethnically diverse, with people of color comprising over 60% of its total population and 75% of its public school population. As a result, the large majority of children in Alameda County public schools attend schools where over half of students are non-White. Many schools in the county, however, are racially segregated, and the schools that are the poorest tend to be the most segregated. In Alameda County, 23.8% of all K-12 public school students attend high-poverty schools (schools where 60% or more of the students are enrolled in the Free or Reduced Price Meal Program). Figure 13 shows that

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a. Neighborhood poverty is defined by the percentage of persons in a census tract living below the federal poverty level. In Census 2000, the 1999 federal poverty level was \$17,029 (\$20,444 in 200^) for a family of 4. Census tracts with less than 10% of residents living in poverty represent low neighborhood poverty. Census tracts with 30% or more of residents living in poverty represent high neighborhood poverty.

43.0% of African American children, 39.2% of Latino children, and 28.1% of Pacific Islander children attend high-poverty schools. In contrast, only 4.1% of White children attend such high-poverty schools, which is one-tenth the percentage of African Americans. High-poverty schools tend to have less experienced teachers, fewer course offerings, less competition, less stable enrollment, low student achievement, and lower graduation rates (see Education section).

Figure 13: Percentage of K-12 Students Enrolled in High-Poverty Schools, Alameda County



Source: California Department of Education, 2007-2008.

Data to Action: Policy Implications

Neighborhood conditions have been created neither by chance nor choice. Historical segregation practices account for today's patterns of racial/ethnic and income segregation. Restrictive covenants ensured that certain race/ethnicities were allowed to settle only in prescribed areas. Through redlining, banks denied loans for the purchase of homes in neighborhoods of color, and realtors participated in keeping non-Whites away from White neighborhoods. Today's residents in poor neighborhoods have limited access to reliable transportation, quality affordable housing, adequate

parks and recreational opportunities, full-service grocery stores, clean air, quality child care and schools and social cohesion. Municipal services are less responsive than those in the better-off neighborhoods.

The legacy of historical racism and segregation is that poor people of color tend to live in poor neighborhoods. The cumulative effect of multiple problems and stressors takes a heavy toll on their health and wellbeing. Clearly there is a need for more equity in the distribution of and access to resources between poor and rich areas. A few policy goals implied by this need include the following:

- Systematically track and report social and economic opportunities at the neighborhood level.
- Improve unequal neighborhood conditions in segregated neighborhoods, especially schools, parks, and location of undesirable land uses.
- Institute systems to track governmental infrastructure spending by neighborhood in order to track inequities.
- Reduce low-density-only zoning to make more homes affordable in more areas.
- Support inclusionary zoning policies.
- Implement the Environmental Protection Agency's environmental justice directives including Executive Order 12898 (Federal Actions to Address Environmental Justice in Minority Populations and Low-Income Populations).

Many more relevant policy suggestions appear in the following sections of this report.

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References

- 1. Initial Report of the United States of America to the United Nations Committee on the Elimination of Racial Discrimination, at 49, delivered to the U.N. Committee on the Elimination of Racial Discrimination. September 2000. Available at http://www.ushernetwork.org/pubs/CERD/USA.pdf. Accessed March 2008.
- 2. Huie B, Patrick SA, Krueger M, Rogers RG, and Hummer RA. Wealth, Race, and Mortality. *Social Science Quarterly*. 2003;84(3): 667-84.
- 3. Wenzlow AT, Mullahy J, Robert SA, and Wolfe BL. *An Empirical Investigation of the Relationship between Wealth and Health Using the Survey of Consumer Finances*. Russell Sage Foundation. Available at: http://www.russellsage.org/publications/workingpapers/wealthhealth/document. Accessed May 2008.
- 4. Kochhar R. *The Wealth of Hispanic Households: 1996 to 2002.* Pew Hispanic Center Report. October 2004. Available at: http://www.pewhispanic.org. Accessed April 2008.
- 5. Williams DR, and Collins C. Racial Residential Segregation: A Fundamental Cause of Racial Disparities in Health. *Public Health Reports*. 2001(116): 404-417.
- 6. Jargowsky PA. Poverty and Place: Ghettos, Barrios, and the American City. 1997. New York: Russell Sage Foundation.
- 7. Jargowsky PA. Stunning Progress, Hidden Problems: The Dramatic Decline of Concentrated Poverty in the 1990s. May 2003. The Brookings Institution.
- 8. LaVeist TA. Segregation, Poverty, and Empowerment: Health Consequences for African Americans. *Milbank Quarterly*. 1993;71:41-64.
- 9. Polednak AP. Black-White Differences in Infant Mortality in 38 Standard Metropolitan Statistical Areas. *American Journal of Public Health.* 1991;81(11): 1480-1482.
- 10. Polednak AP. (1996). Trends in U.S. Urban Black Infant Mortality, by Degree of Residential Segregation. *American Journal of Public Health*. 1996;86(5), 723-726.
- 11. Fang J, Madhaven S, Bosworth W, and Alderman MH. Residential Segregation and Mortality in New York City. *Social Science and Medicine*. 1998;47: 469-476.
- 12. Collins CA, and Williams DR. Segregation and Mortality: The Deadly Effects of Racism? *Sociological Forum.* 1999;14(3): 495-523.
- 13. Hart KD, Kunitz SJ, Sell RR, and Mukamel DB. Metropolitan Governance, Residential Segregation, and Mortality among African Americans. *American Journal of Public Health*. 1998;8(88), 434-438.
- 14. Shihadeh ES, and Flynn N. Segregation and Crime: The Effect of Black Isolation on the Rates of Black Urban Violence. *Social Forces.* 1996;74: 1325-1352.
- 15. Maantay J. Zoning, Equity, and Public Health. American Journal of Public Health. 2001;91: 1033-1041.
- 16. Bullard RD. Dumping in Dixie: Race, Class, and Environmental Quality. Boulder: Westview; 1990.
- 17. Parents Involved in Community Schools v. Seattle School District #1, et al., with companion case Meredith, Crystal (next friend for McDonald, Joshua) v. Jefferson County Bd. of Education, et al. No. 05-908. Supreme Court Decision. Argued December 4, 2006—Decided June 28, 2007.
- 18. Orfield G, and Lee C. *Historic Reversals, Accelerating Resegregation, and the Need for New Integration Strategies.* A Report of the Civil Rights Project/Proyecto Derechos Civiles, UCLA. August 2007: 21. Available at: http://www.civilrightsproject.ucla.edu/research/deseg/reversals_reseg_need.pdf. Accessed April 22, 2008.
- 19. Orfield G, and Lee C. *Racial Transformation and the Changing Nature of Segregation*. Cambridge: The Civil Rights Project, Harvard University. January 2006.
- 20. U.S. Housing Scholars and Research and Advocacy Organizations. *Residential Segregation and Housing Discrimination in the United States: Violations of the International Convention on the Elimination of All Forms of Racial Discrimination.* The Poverty & Race Research Action Council and The National Fair Housing Alliance. 2008.
- 21. Iceland J, Weinberg DH, and Steinmetz E. *Racial and Ethnic Residential Segregation in the United States: 1980-2000.* U.S. Census Bureau, Series CENSR-3. Washington, DC: U.S. Government Printing Office. 2002.
- 22. Reardon SF, and Firebaugh G. Measures of Multigroup Segregation. Sociological Methodology. 2002;32: 33-67.

Data Sources

- 1. U.S. Census Bureau. Census 2000. Available at: http://www.factfinder.census.gov/.
- 2. California Department of Finance. *E-1 City/County Population Estimates*. 2006. Available at: http://www.dof.ca.gov/Research/Research.php.
- 3. Association of Bay Area Governments. *Projections 2007 by Census Tract.* 2007. Computer File. Information available at: http://abag.ca.gov/projections.asp.
- 4. Claritas. *Demographic Data*. Computer File. 2005. Information available at: http://www.claritas.com/claritas/Default. jsp?ci=3&si=1&pn=demographics.
- 5. California Department of Education. *Enrollment and Free and Reduced Price Meal Program*. Computer File. Available at: http://www.ed-data.k12.ca.us/welcome.asp, http://data1.cde.ca.gov/dataquest/, and http://www.cde.ca.gov/ds/sd/cb/.

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Segregation

Income Employment

"We can have democracy in this country, or we can have great concentrated wealth in the hands of a few. But we cannot have both." —Supreme Court Justice Louis Brandeis

Historical Overview

Tracing historical patterns of income inequality in the United States strengthens understanding of the relationship between income and population health. In the 1960s, civil rights legislation and Great Society anti-poverty, education, and health programs narrowed the rich-poor gap and contributed to declining inequities in premature and infant mortality, especially among people of color, in the period between 1966 and 1980. Over the past three decades, however, declining welfare benefits, regressive tax cuts, and the erosion of workers' collective bargaining power have led to growing income inequality and a widening rich-poor gap in life expectancy.¹⁻⁴ Tax rates have declined for the wealthiest Americans, even after increases in their income and wealth.⁵ Shifts in the economy from manufacturing to services have led to rising wage inequality and more workers in lower-paying jobs without benefits.^{3,6,7} From 1975 to 1995, wages remained stagnant or fell for the bottom 60% of wage earners and rose modestly for higher-wage workers. Meanwhile, the very highest earners greatly prospered.³ The average pay for CEOs grew from 42 times median worker pay in 1980 to 431 times in 2004.⁵

Income and wealth inequality has risen to its highest since the 1920s, with the top 1% of Americans now possessing more wealth than the bottom 90% combined.^{3,4,8} The health consequences of this widening richpoor gap and rising poverty are apparent. The United States spends more per capita on health care than any other industrialized nation, but ranks 29th in the world in terms of life expectancy and 31st based on infant mortality.⁴

Income and Employment LIFE AND DEATH FROM UNNATURAL CAUSES

What Research Tells Us

Poverty: A Fundamental Cause of Health Inequality

ocioeconomic status (SES, usually measured by income, education, or occupation) is one of the most powerful predictors of health. 9-11 Research shows that each step up the SES ladder correlates with increasingly favorable health. Those with higher SES tend to live longer and experience fewer health problems across the life course, including adverse birth outcomes (e.g., low birth weight), disease risk factors (e.g., unhealthy diet, hypertension), chronic and infectious diseases (e.g., diabetes, HIV/AIDS), and mental illnesses. 10,11 Socioeconomic status is a "fundamental cause" of health outcomes because it provides access to a wide range of resources such as "money, knowledge, power, prestige, and beneficial social connections"—all of which can be leveraged to avoid risks and protect health.¹² With each step down the SES ladder, resources and opportunities for health diminish.

Both individual poverty (being poor) and neighborhood poverty (living in a poor neighborhood) are linked to poorer health outcomes. 10,13,14 Children living in poverty are 7 times more likely to have poor health than children living in high-income households.15 Childhood poverty has detrimental and long-lasting effects. Diminished physical and emotional health affect academic success, which then influences earning potential and risk of passing on poverty and associated problems to the next generation.¹⁰ Poverty limits access to important health-enabling resources, including proper nutrition, good medical care, stable health insurance, and favorable housing. 16,17 In their everyday struggle with low wages and high costs of living, lowincome people are forced to make difficult choices like paying for housing, health care, or food.¹⁸

Living in high-poverty neighborhoods also takes a toll on individual and community health. High crime, air pollution, blighted streets, substandard housing, and poorly maintained schools are some of the en-

vironmental conditions that negate health in these neighborhoods. This is combined with a lack of health protective factors, like high-paying jobs, healthy food options, safe parks and streets, and reliable transportation. ^{16,17,19} Being exposed to multiple stressors and having limited support networks to cope with stress affects mental well-being. People who are low-income or living in high-poverty neighborhoods are more likely

to experience mental health problems and less likely to be able to access services to address them.²⁰⁻²² The cumulative effects of individual and neighborhood poverty have enormous impacts on



health and health equity.

Income Inequality: Health Consequences of a Widening Rich-Poor Gap

A growing body of literature argues that what matters besides absolute levels of poverty or wealth is how evenly income is distributed within the population. ²³⁻²⁶ Rising income inequality has negative effects on overall health of the population. When the richpoor income gap widens, the loss of health to the poor offsets any gain in health among the rich. ²⁴⁻²⁶ Research at national and state levels suggests that increasing income inequality has adverse effects on population health, although studies at the sub-state level (metropolitan areas, counties, census tracts) have had mixed results. ^{25,26}

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Income and Employment

The links between income equality and health are still being explored and debated. Bigger rich-poor gaps may lead to spatial concentrations of race and poverty that produce poorer health outcomes. ²⁶ Another possible link is based on psychosocial pathways. As the rich-poor gap increases, perceptions of relative disadvantage can produce negative emotions that "get under the skin" and affect physical health. Feelings of relative deprivation can increase antisocial behaviors while decreasing health-protective social cohesion within areas. ^{24,25} Finally, in more stratified societies, the elite wield influence in political decision-making, which often results in an underinvestment in public goods like health care and education. Reduced social spending ultimately leads to poorer overall health. ^{25,26}

Employment: Health Benefits Mediated by Wage Levels and Job Quality

The labor market in the United States has been affected by globalization (movement of jobs overseas), suburbanization (movement of jobs from cities to the suburbs), and structural changes in the national economy (shifts from manufacturing to service jobs).^{3,4,7} While technological advances have increased workforce productivity (output of goods and services per hour worked), wages have remained stagnant for many workers, especially those at the middle and lower end of the pay scale.³ The decline in manufacturing has led to a loss of good-paying jobs for less-educated people; meanwhile, the low-wage services sector has grown. As a result, substantial barriers to work exist for low-income urban populations. The low-skilled and less-educated increasingly face a skills mismatch, with new jobs requiring greater levels of education and training.7,27

Additionally, the right to organize and secure higher wages and benefits through collective bargaining has been eroded. A recent Chicago study revealed that

many employers are using illegal and legal tactics to undermine workers' right to organize. Among employers faced with organizing campaigns, 30% fired workers engaged in union activities, 49% threatened to close the work site if workers elected to form a union, and 82% hired union-busting consultants to launch anti-union campaigns.²⁸

One outcome of labor market conditions has been increased unemployment, which poses serious health risks. Unemployment is associated with higher mortality rates, especially from cardiovascular disease and suicide. The stress of unemployment can lead to anxiety, depression, substance abuse, and poor mental health.^{29,30} Unemployment can also affect community life and well-being. As levels of joblessness increase, social networks and collective engagement in solving neighborhood problems are weakened.³¹ Furthermore, when people (particularly youth) cannot find work, they are more likely to turn to crime and the street economy (e.g., drug dealing, sex work) to make money.^{31,32}

While unemployment has health-negating effects, poor work conditions can also pose physical and psychosocial risks. This is especially true for low-wage jobs. In addition to getting inadequate wages, low-wage workers often receive little to no benefits (e.g., health, disability, or life insurance, pension plans). They frequently work in unsafe or unhealthy conditions and experience higher rates of occupational injury.¹⁰ Ongoing job strain (high job demands but low freedom to make decisions), poor job security, and little to no occupational mobility can also take a toll on physical and mental health. 10,11,27 In addition to improving these work conditions, raising income to at least living wage standards can produce substantial health benefits for workers and increased life opportunities for their children.33

Income and Employment LIFE AND DEATH FROM UNNATURAL CAUSES 4

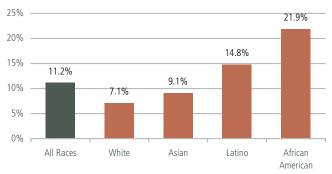
A Look at Alameda County

Unequal Poverty Rates

In 2006, over 1 in 9 (11.2%) residents of Alameda County lived in poverty (Figure 14). It is important to recognize that this figure may underestimate the true extent of poverty in the county. It is based on the federal poverty threshold, which fails to take into account regional differences in costs of living and actual income levels required to make ends meet. To cover basic living expenses (e.g., housing, utilities, food, childcare) in Alameda County, a two-parent family with two children would need to earn \$53,075 annually if one parent works and \$77,069 if both parents work—which far exceeds the federal poverty threshold of \$20,444 for that same household.³⁴

Poverty is not evenly distributed within the population. Other groups are more likely to live in poverty than Whites (Figure 14). The most heavily affected group is African Americans. In 2006, over 1 in 5 (21.9%) African Americans lived in poverty—a rate over 3 times that of Whites. Poverty rates among Latinos were over twice the White rate. Although the poverty rate for immigrants and for U.S. born was about the same (11.1% and 11.4%, respectively), more

Figure 14: Percentage Living in Poverty by Race/Ethnicity, Alameda County



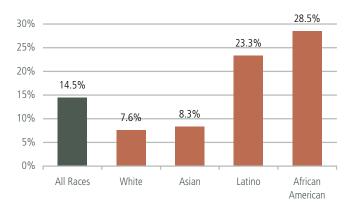
Note: Asian and African American defined regardless of Latino origin. Source: American Community Survey, 2006.

immigrants lived at less than 200% of the federal poverty level than U.S. born (19.2% vs. 13.6%).

Even Greater Disparities in Child Poverty

The level of poverty is greater and racial/ethnic disparities are more pronounced among children (Figure 15). In 2006, 1 in 7 (14.5%) children lived in poverty. Rates of child poverty are three to four times greater for Latino and African American children compared to White children.

Figure 15: Percentage of Children Under Age 5 Living in Poverty by Race/Ethnicity, Alameda County



Note: Asian and African American defined regardless of Latino origin. Source: American Community Survey, 2006.

Racial/Ethnic Gaps in Income

Central to unequal poverty rates are racial/ethnic gaps in income (Figure 16 on page 45). In 2006, the median household income in Alameda County was \$64,424. Some racial/ethnic groups (Asians and Whites) earned considerably more, and other racial/ethnic groups (Latinos and African Americans) earned much less. The income gap was greatest between African Americans and Asians (a \$40,000 difference) followed by Latinos and Asians (a nearly \$25,000 difference). Based on median earnings for full-time, year-round workers, there is also an income gap between U.S.-born and immigrant workers. In 2006, U.S.-born workers earned

Income and Employment

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a. The federal poverty threshold was \$20,444 in 2006 for a four-person household (with two related children under 18 years old). b. Census 2000 data indicated that 15.4% of Native American/Alaskan Natives and 8.2% of Native Hawaiian/Other Pacific Islanders in Alameda County lived in poverty.

Figure 16: Median Household Income by Race/ Ethnicity, Alameda County



Note: Asian and African American defined regardless of Latino origin. Source: American Community Survey, 2006.

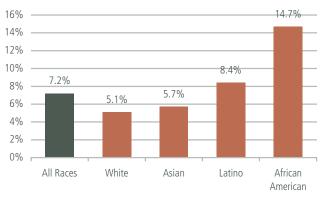
about \$10,000-\$15,000 more per year than foreign-born workers. This is especially important to recognize since immigrants represent a large and growing portion of the Alameda County workforce, comprising 38% of the civilian employed in 2006 according to the American Community Survey. Gaps in income based on race/ethnicity and immigrant status are likely to reflect multiple factors, including differences in levels of educational attainment, labor force discrimination, varying levels of unemployment, and unequal access to good-paying jobs (more details and supportive data are provided below).

Rising and Unequal Unemployment Rates

In Alameda County (as in California overall), unemployment has increased substantially from historic lows in 2000. The unemployment rate has doubled from 3.6% in 2000 to 7.2% in 2006. Poverty persists and grows under conditions of unemployment. Unemployment is highest among those racial/ethnic groups that are most heavily burdened by poverty (Figure 17). In 2006, African Americans were nearly 3 times more likely to be unemployed compared to Whites. Latinos also experience notably higher unemployment rates.

A main factor contributing to racial/ethnic differences in joblessness is the fact that unemployment is highly concentrated in high-poverty neighborhoods

Figure 17: Unemployment Rate by Race/ Ethnicity, Alameda County

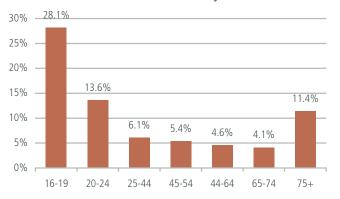


Note: Asian and African American defined regardless of Latino origin. Source: American Community Survey, 2006.

of West Oakland and East Oakland (Map 4 on page 46), which are largely populated by African Americans and Latinos. Opportunities for high-quality education (which often determines employment success) and stable, good-paying jobs, as well as reliable transportation to get to work, are more limited in these areas (see Education and Transportation sections).

Youth (ages 16-24) have been especially hard hit by unemployment (Figure 18). Unemployment rates have been substantially higher among youth (especially teens ages 16-19) compared to those among adults. As newer and less experienced entrants to the labor market, youth are often the hardest hit by depressed labor market conditions and the least likely to find and obtain work. There is clear need to boost job opportu-

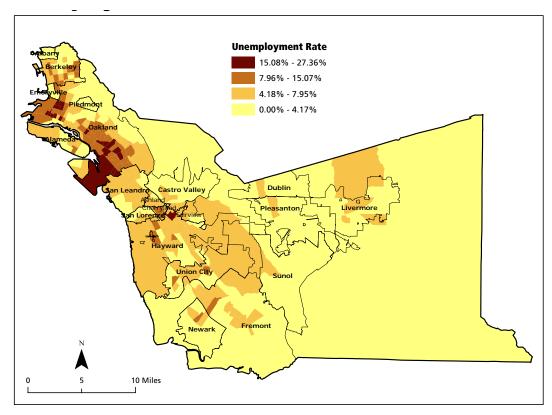
Figure 18: Unemployment Rate by Age Group, Alameda County



Source: American Community Survey, 2006.

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Map 4: Unemployment Rate, Alameda County



Source: Census 2000.

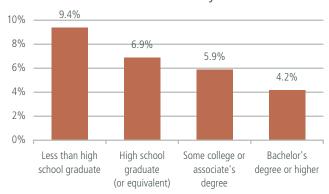
nities for youth and reinvest in youth employment and training programs that have been scaled back over the past few decades.³⁵

Educational attainment is a critical determinant of success in obtaining employment. Those with less than a high school degree are twice as likely to be unemployed compared to those with a bachelor's degree or higher (Figure 19). Lower levels of education contribute to higher rates of unemployment among racial/ethnic minorities and youth. Labor force development goes hand-in-hand with equal access to high-quality schools and higher education opportunities.

Lack of Job Opportunities with Adequate Wages

In Alameda County, the cost of living tends to be higher than on average statewide—especially due to housing, childcare, health care, and tax expenditures.

Figure 19: Unemployment Rate by Education Level,
Alameda County



Source: American Community Survey, 2006.

As such, many are struggling just to make ends meet. Basic family wages required to achieve a modest standard of living without public assistance in Alameda County range from \$14.25 to \$31.67 per hour, depending on the number of people per household and their working status (Table 2 on page 47).

c. The basic family wages determined by the California Budget Project are estimates of living wages required in Alameda County.

Table 2: Estimated Monthly and Annual Expenditures and Required Basic Family Wages, Alameda County

		Single Working Parent	2 Parent Family (with 2 Children,	2 Parent Family (with 2 Children,
	Single Adult	(with 2 Children)	1 Working)	2 Working)
Expenses per month	\$2,469	\$5,489	\$4,423	\$6,422
Expenses per year	\$29,633	\$65,864	\$53,075	\$77,069
Basic family wage	\$14.25	\$31.67	\$25.52	\$18.53

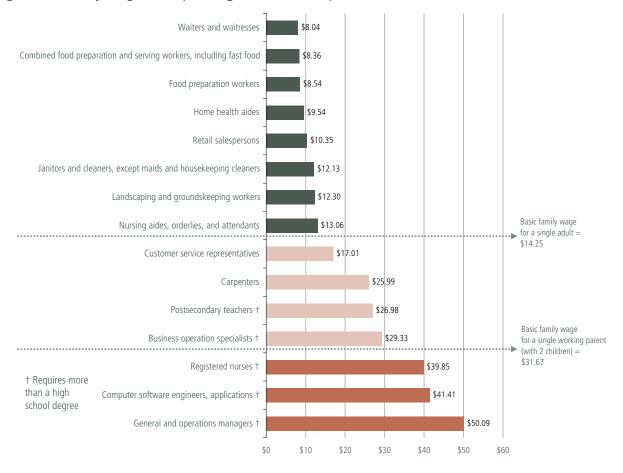
Notes: Basic family wage is hourly. Assumes 40 hrs/wk, 52 wks/yr of work. 2 working parent wage is the hourly wage for each individual parent working full-time. Source: California Budget Project, 2007.

Many jobs provide insufficient wages to cover basic living expenses and lift people out of poverty. When looking at the highest growth occupations in the East Bay (those projected to create more than 750 jobs by 2014), 42% of jobs created in these occupational areas will not pay high enough wages to lift a single adult out of poverty and 79% will not pay enough wages to support a single working parent with 2 children. Of the jobs paying above the basic hourly wage of \$14.25

for a single adult, only about 1 in 3 jobs (35%) will be available to those with a high school degree or less. All of the jobs paying above the basic wage of \$31.67 per hour for a single working parent with 2 children require education beyond high school.

The top 15 high-growth occupations in Alameda and Contra Costa counties are shown in Figure 20. The graph illustrates that most of these occupations (12 of

Figure 20: Hourly Wages of Top 15 High-Growth Occupations, Alameda and Contra Costa Counties



Source and Note: California Employment Development Department, 2008. Projections for 2004-2014; wage data for 2006.

15) will pay less than basic family wages, and many of the higher-paying jobs (5 of 7) will require more than a high school education. Without wage increases or newly created better-paying jobs, less-educated and low-skilled workers will continue to be relegated to jobs that do not pay enough to make ends meet or to remain on unemployment and public assistance rolls. Shifts in the economy from manufacturing to services have made it especially difficult for workers with lower levels of education to command a living wage. The low-wage services sector has been growing over time, representing over one-third of jobs in 2000 (Figure 21). Manufacturing, an industry with relatively high wages for less-educated workers, has been decreasing over time.

100% ■ Government (incl military) 90% Manufacturing 80% Services 70% ■ Finance, insurance, real estate 60% ■ Retail trade 50% 40% ■ Wholesale trade 30% ■ Transportation, public utilities 20% ■ Construction 10% ■ Other 0% 1979 1989 2000

Figure 21: Employment by Industry, Alameda County

Source: Bureau of Economic Analysis Regional Economic Information System (REIS).

Table 3: Racial/Ethnic Distribution of Occupations, Alameda County

			African		American	Pacific	
Occupational Category	White	Latino	American	Asian	Indian	Islander	Multirace
Management, Business, and Financial Workers	59%	9%	10%	18%	0%	0%	4%
Science, Engineering, and Computer Professionals	50%	5%	4%	38%	0%	0%	3%
Health Care Practitioner Professionals	55%	5%	11%	25%	0%	0%	3%
Other Professional Workers	61%	9%	12%	15%	0%	0%	3%
Technicians	43%	10%	13%	29%	0%	1%	4%
Sales Workers	50%	14%	12%	18%	1%	1%	6%
Administrative Support Workers	43%	15%	18%	19%	1%	1%	4%
Construction and Extractive Craft Workers	45%	35%	9%	6%	1%	1%	3%
Installation, Maintenance, and Repair Craft Workers	46%	22%	9%	18%	1%	1%	4%
Production Operative Workers	26%	30%	8%	32%	0%	1%	4%
Transportation and Material Moving Operative Workers	35%	26%	21%	12%	1%	1%	4%
Laborers and Helpers	28%	42%	16%	10%	0%	1%	3%
Protective Service Workers	44%	13%	28%	10%	0%	1%	5%
Service Workers, except Protective	31%	27%	18%	19%	1%	1%	5%
Unemployed, No Civilian Work Experience Since 1995	23%	24%	30%	16%	0%	1%	6%

Note: Top 2 occupational areas for each race/ethnicity are highlighted. Source: Census 2000 Equal Employment Opportunity Data.

The likelihood of obtaining high- versus low-wage employment differs by race/ethnicity and results in substantial wage inequalities within the population. Differences in language, education, training, and employment access (based on where people live), as well as labor market discrimination are possible explanatory factors. Table 3 (on page 48) shows the racial/ethnic distribution of workers by occupational area, with the top two areas highlighted for each race/ethnicity. Whites represent the greatest percentage of workers in higher-paying management, business, and financial positions as well as other professional jobs. Asians represent large shares of workers in science, engineering, and computer and production operative work. Latinos are the racial/ethnic group that most often works as low-wage laborers and helpers and in construction and extractive craft occupations. African Americans comprise the largest share of the unemployed and are also substantially represented among protective service workers.

The right of workers to organize and collectively bargain has been instrumental in closing racial/ethnic wage gaps, raising wages of blue-collar and less-educated workers, and improving job quality through health and pension benefits.³ While Alameda County data were not available for this report, Table 4 illustrates the positive pressures that unions have been able to exert on workers' wages and benefits in California.³⁶

Table 4: Union Effect on Wages and Employer-Provided Benefits, California

Wages of union vs. non-union workers (% higher wages)					
Private sector	16%				
Retail	8%				
Manufacturing	14%				
Public sector	17%				
Benefits of union vs. non-union workers (% higher coverage)					
Health insurance 52°					
Pension plan	42%				

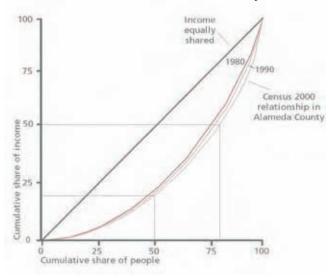
Source: Dube A. 2002.

Growing Income Inequality

Shifts in the labor market, de-unionization, and rising wage inequality have all led to increased income inequality in Alameda County, as well as in the broader San Francisco Bay Area, statewide, and nationally. This is based on the Gini coefficient, a measure of income distribution that ranges from 0 (meaning all income is perfectly distributed) to 1 (meaning one household has all the income). In Alameda County, the Gini coefficient increased from 0.396 in 1980 to 0.427 in 1990 and to 0.448 in 2000. This indicates greater concentration of wealth among fewer individuals over the last two decades.

Increasing income inequality is also illustrated by the Lorenz curve, which shows the cumulative percentage of income earned by the cumulative percentage of households (Figure 22). The level of income inequality is indicated by how far the curve bows out from the 45° line when income is equally shared by all households. In Alameda County, the curve has been moving further away from equal income over the past 2 decades. In 2000, the richest 20% of households received 50% of the total income, while the poorest 50% received only 20% of total income. As wealth becomes increasingly concentrated, health inequities are likely to grow.

Figure 22: Income Inequality as Shown by the Lorenz Curve, Alameda County



Source: Census 1980, 1990, and 2000.

Data to Action: Policy Implications

Poverty, income inequality, and employment are main economic forces driving health inequities. In Alameda County, large racial differences exist in poverty, household income, and unemployment rates. Job opportunities are lacking that provide sufficient wages to cover basic living expenses and lift people out of poverty, especially among the less-educated and low-skilled. The following strategies and policies are recommended to support greater economic equality.

- Quality job creation: Implement local policies and development plans that encourage creation of good-quality jobs—jobs that offer paid sick leave and health insurance regardless of wage or whether full-or part-time, safe work conditions, and prospects for upward mobility. Land that has been zoned for industrial uses should be preserved to attract well-paying manufacturing and emerging green-collar jobs. 37,38 Local hire policies can be established that direct new businesses, especially those receiving public subsidies, to employ local residents. Priority can be given to hiring residents who are low-income or from high-poverty communities that are most in need of employment. 39,40 Socio-economic impact reports should be developed that detail the caliber of jobs that certain types of development will bring to the county. In addition, policy makers should set development project standards related to types of jobs, wages, and benefits provided, known as community benefits agreements. 40,41
- Workforce development: For those with a high school degree or less, occupations that pay enough to support a single adult (hourly wage >\$14.25 per hour)³⁴ and offer the highest projected job growth in the East Bay include: carpenters, customer service representatives, secretaries and administrative assistants, sales representatives, truck drivers, and construction and maintenance workers. Workforce

- investment boards and one-stop career centers should be supported in preparing individuals for entry into better-paying fields and developing career ladders that enable upward mobility. ⁴² A high area of need is job readiness and skill-building programs that reach out to key target populations, including minorities (African Americans and Latinos in particular), youth, and the less-educated.
- Living wages: Require that employers pay adequate wages (and benefits) to live on. California's minimum wage has been raised to \$8.00 per hour,43 but this is still far from the wages needed to cover basic living expenses in Alameda County (\$14.25 per hour for a single adult and \$31.67 per hour for a single working parent with 2 children).34 A further increase in the state minimum wage or a county living wage ordinance would help close the affordability gap for low-income workers. City governments and community coalitions can also take action to promote living wages, particularly among businesses that hold city or county service contracts, receive public subsidies, or occupy public land. Living wage ordinances have been passed in Berkeley, Emeryville, Hayward, Oakland, Richmond, and San Leandro.⁴⁴ Moving forward, emphasis should be placed on raising substandard wages in occupations with high projected job growth in the East Bay, including retail salespersons, janitors and cleaners, waiters and waitresses, and food preparation and serving workers.
- Right to organize and collectively bargain: Strengthen workers' right to organize and collectively bargain through labor peace agreements. Cardcheck and neutrality agreements (CCNAs) can be encouraged as an expedited, non-adversarial means of determining whether employees want union representation. When county and city governing bodies have a proprietary interest (e.g., the government owns land that is being developed or has lent funds to a development project), they should require that businesses agree to CCNAs. When no proprietary interest exists, policy makers

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- and community leaders can still encourage businesses to negotiate CCNAs. 45,46
- Asset development: Help low-income people to accumulate assets through increased savings and investments. A variety of savings accounts and incentive programs are designed to help build assets among low-income people, including individual development accounts (IDAs), children's savings accounts (CSAs), and the Family Self-Sufficiency (FSS) program. Financial counseling can be provided to help them to plan for asset development. Home ownership and micro-enterprise are longer-term investment opportunities for people who are able to accumulate enough capital.⁴⁷
- Income support programs: Expand enrollment of eligible families and ensure cost of living increases in programs that provide direct income or benefits to support basic life needs. In Alameda County, some of the main programs offered include: Cal-WORKS (California Work Opportunity & Responsibility to Kids), SSI (Supplemental Security Income), Medi-Cal and Healthy Families, WIC (Women, Infants, and Children), General Assistance, Food Stamps, and Section VIII Housing.⁴⁷
- Earned income tax credits: Raise the income of the working poor through earned income tax credits (EITC). The federal EITC is a refundable credit that low-income workers can receive as a tax refund. The EITC encourages low-income people to work and is credited with lifting millions of people out of poverty across the nation. Alifornia should emulate other states by implementing a state EITC, which would help working families to better make ends meet.

References

- 1. Pear R. Gap in Life Expectancy Widens for the Nation. The New York Times. March 23, 2008.
- 2. Kreiger N, Rehkopf DH, Chen JT, Waterman PD, Marcelli E, and Kennedy M. The Fall and Rise of U.S. Inequities in Premature Mortality: 1960-2002. *PLOS Medicine*. 2008 Feb;5(2): e46.
- 3. Mishel L, Bernstein J, and Allegretto S. *The State of Working America 2006/2007*. An Economic Policy Institute Book. Ithaca, NY: ILR Press, an imprint of Cornell University Press; 2007. Excerpts available at: http://www.stateofworkingamerica.org/excerpt.html.
- 4. California Newsreel. *In Sickness and In Wealth* [transcript]. "Unnatural Causes." Public Broadcasting Service. March 27, 2008.
- 5. Lui M, Robles B, Leondar-Wright B, Brewer R, and Adamson R. *The Color of Wealth: The Story Behind the U.S. Racial Wealth Divide.* United for a Fair Economy. New York, NY: The New Press; 2006.
- 6. Pontusson J. Inequality and Prosperity: Social Europe vs. Liberal America. Ithaca, NY: Cornell University Press; 2005.
- 7. Neighborhood Funders Group. *NFG Jobs Toolbox: A Funder's Guide to Jobs*. Neighborhood Funders Group website. Available at: http://www.nfg.org/toolbox. Accessed February 27, 2008.
- 8. Piketty T, and Saez E, Income Inequality in the United States, 1913-1998. *Quarterly Journal of Economics*. 2003; 118(1): 1-39.
- 9. Williams DR. *Moving Upstream: Health Inequities and How to Effectively Tackle Them.* National Association of Chronic Disease Directors website. 2007. Available at: http://www.chronicdisease.org/files/public/GeneralMemberCall_May07Williams.ppt. Accessed February 20, 2008.
- 10. Adler N, Stewart J, et al. *Reaching for a Healthier Life: Facts on Socioeconomic Status and Health in the U.S.* John D and Catherine T MacArthur Research Network on Socioeconomic Status and Health. 2007. Also available at: http://www.macses.ucsf.edu/News/NEWS.html.
- 11. Adler N, and Newman K. Socioeconomic Disparities in Health: Pathways and Policies. Health Affairs. 2002; 34(1): 6-14.
- 12. Link BG, Phelan JC. Social Conditions as Fundamental Causes of Disease. *Journal of Health and Social Behavior.* 1995; 35: 80-94.
- 13. Anderson RT, Sorlie P, Backlund E, Johnson N, and Kaplan GA. Mortality Effects of Community Socioeconomic Status. *Epidemiology.* 1997;8: 42-47.
- 14. Haan M, Kaplan GA, and Camacho T. Poverty and Health: Prospective Evidence from the Alameda County Study. *American Journal of Epidemiology.* 1987;125: 989-998.
- 15. California Newsreel. *Health Equity Quiz*. Available at: http://www.unnaturalcauses.org/assets/uploads/file/quiz.pdf. Accessed March 1, 2008.
- 16. Iton, A. Tackling the Root Causes of Health Disparities through Community Capacity Building. In: Hofrichter R, ed. *Tackling Health Inequities Through Public Health Practice: A Handbook for Action.* Washington, DC: The National Association of County & City Health Officials and The Ingham County Health Department. 2006: 115-136. Available at: http://www.naccho.org/topics/justice/documents/NACCHO_Handbook_hyperlinks_000.pdf. Accessed March 2008.
- 17. Hofrichter, R. The Politics of Health Inequities: Contested Terrain. In: Hofrichter R, ed. *Health and Social Justice: Politics, Ideology, and Inequity in the Distribution of Disease.* San Francisco, CA: Jossey-Bass; 2003: 1-55. Also available at: http://media.wiley.com/product_data/excerpt/35/07879673/0787967335.pdf.
- 18. Alameda County Community Food Bank. *Hunger: The Faces & The Facts*. 2006. Available at: http://www.accfb.org/pdfs/hunger_full_06.pdf. Accessed March 16, 2008.
- 19. Bell J, and Rubin V. Why Place Matters: Building a Movement for Healthy Communities. Oakland, CA: PolicyLink and The California Endowment, 2007. Available at: http://www.policylink.org/documents/WhyPlaceMattersreport_web.pdf. Accessed March 2008.
- 20. Bourdon KH, Rae DS, Narrow WE, Manderschild RW, and Regier DA. *National Prevalence and Treatment of Mental and Addictive Disorders*. In Mandershild R and Sonnenschein A, eds. *Mental Health: United States*. Washington, DC: Center for Mental Health Services. 1994: 22-51.

- 21. Levanthal T, and Brooks-Gunn J. Moving to Opportunity: an Experimental Study of Neighborhood Effects on Mental Health. *American Journal of Public Health*. 2003;93(9): 1576-1582.
- 22. Cunningham P, McKenzie K, and Taylor EF. The Struggle to Provide Community-Based Care to Low-Income People with Serious Mental Illnesses. *Health Affairs*. 2006;25(3): 694-705.
- 23. Wilkinson RG. Income Distribution and Life Expectancy. British Medical Journal. 1992;304 (6820):165-168.
- 24. Kawachi I, and Kennedy BP. Income Inequality and Health: Pathways and Mechanisms. *Health Services Research*. 1999;34(1 Pt 2): 215-227.
- 25. Kawachi I. Income Inequality and Health. In: Berkman L and Kawachi I, ed. *Social Epidemiology*. New York, NY: Oxford University Press. 2000; 76-94.
- 26. Subramanian S, and Kawachi I. Income inequality and health: what have we learned so far. *Epidemiologic Reviews*. 2004; 26: 78-91.
- 27. Urban Institute. *The Low-Wage Labor Market*. Urban Institute website. 2000. Available at: http://www.urban.org/UploadedPDF/lowwage_labor_FR.pdf. Accessed March 10, 2008
- 28. Mehta C, and Theodore N. *Undermining the Right to Organize: Employer Behavior During Union Representation Campaigns*. Chicago, IL: Center for Urban Economic Development. 2005. Available at: http://www.americanrightsatwork.org/dmdocuments/ARAWReports/UROCUEDcompressedfullreport.pdf. Accessed April 10, 2008.
- 29. Dooley D, Fielding J, and Levi L. Health and Unemployment. Annual Review of Public Health. 1996;17: 449-465.
- 30. Blakely T, Collings S, and Atkinson J. Unemployment and Suicide: Evidence for a Causal Association? *Journal of Epidemiology and Community Health*. 2003;57: 594-600.
- 31. Wilson WJ. When Work Disappears: The World of the New Urban Poor. New York, NY: Random House. 1997.
- 32. Mydans S. The Young Face of Inner City Unemployment. The New York Times. March 22, 1992.
- 33. Bhatia R, and Katz M. Estimation of Health Benefits From a Local Living Wage Ordinance. *American Journal of Public Health*. 2001;91(9): 1398-1402.
- 34. Calfornia Budget Project. *Making Ends Meet: How Much Does it Cost to Raise a Family in California?* 2007. Available at: http://www.cbp.org/pdfs/2007/0710_mem_003.pdf. Accessed March 1, 2008.
- 35. Sum A, Khatiwada I, Pond N, Trub'skyy M, Fogg N, and Palma S. *Left Behind in the Labor Market: Labor Market Problems of the Nation's Out-of-School, Young Adult Populations.* Chicago, IL: Alternative Schools Network; 2003. ERIC Document Reproduction Service ED475681.
- 36. Dube A. *The Union Difference in 2002 California*. 2002. Available at: http://laborcenter.berkeley.edu/healthcare/union_difference02.pdf. Accessed April 9, 2008.
- 37. Cornu S. Keep Oakland's Industrial Land for Industry. Oakland Tribune. March 5, 2008.
- 38. Pinderhughes R. *Green Collar Jobs: An Analysis of the Capacity of Green Businesses to Provide High Quality Jobs for Men and Women with Barriers to Employment.* 2007. Available at: http://www.ellabakercenter.org/downloads/rtf/v12OctoberFullReport.pdf. Accessed April 13, 2008.
- 39. The Partnership for Working Families. *Local Hiring in East Palo Alto—A Success Story.* Available at: http://www.communitybenefits.org/article.php?id=574. Accessed April 10, 2008.
- 40. Gross J, LeRoy G, and Janis-Aparicio M. *Community Benefits Agreements: Making Development Projects Accountable.* Washington DC: Good Jobs First and the California Partnership for Working Families. 2005. Available at: http://www.communitybenefits.org/downloads/CBA%20Handbook%202005%20final.pdf. Accessed April 10, 2008.
- 41. East Bay Alliance for a Sustainable Economy. *Community Benefits*. Available at: http://www.workingeastbay.org/article.php?list=type&type=14. Accessed April 9, 2008.
- 42. Alameda County Workforce Investment Board. *Alameda County Workforce Investment Board*. Available at: http://www.acwib.org/. Accessed April 12, 2008.
- 43. Industrial Welfare Commission. *History of the California Minimum Wage*. Available at: http://www.dir.ca.gov/iwc/MinimumWageHistory.htm. Accessed March 16, 2008.

Income and Employment LIFE AND DEATH FROM UNNATURAL CAUSES

- 44. East Bay Alliance for a Sustainable Economy. *Living Wage and Workplace Standards*. Available at: http://www.workingeastbay.org/article.php?list=type&type=15. Accessed March 20, 2008.
- 45. American Rights at Work. *Fact Over Fiction: Opposition to Card Check Doesn't Add Up.* Available at: http://www.americanrightsatwork.org/dmdocuments/ARAWReports/IBFactOverFictFinal.pdf. Accessed April 10, 2008.
- 46. UNITE HERE. Joining a Union Should be Simple. Factsheet. n.d.
- 47. Alameda County Community Asset Network. *ACCAN Income and Asset Development Framework: Strategies and Activities, August 2007.* Available at: http://www.urbanstrategies.org/programs/econopp/documents/IncomeandAssetDevelopmentFramework8107. Accessed March 20, 2008.
- 48. Greenstein R. *The Earned Income Tax Credit: Boosting Employment, Aiding the Working Poor.* Available at: http://www.cbpp.org/7-19-05eic.htm. Accessed March 22, 2008.
- 49. Nagle A, and Johnson N. *A Hand Up: How State Earned Income Tax Credits Help Working Families Escape Poverty in 2006.* Available at: http://www.cbpp.org/3-8-06sfp.htm. Accessed March 22, 2008.

Data Sources

- 1. American Community Survey. ACS 2006. Available at: http://www.factfinder.census.gov/.
- 2. U.S. Census Bureau. Census 1990, 2000. Available at: http://www.factfinder.census.gov/.
- 3. U.S. Census Bureau. 1980 Census of Population, Characteristics of the Population. San Francisco-Oakland SMSA.
- 4. California Budget Project.??
- 5. California Employment Development Department. *Alameda and Contra Costa Counties Occupational Employment Projections 2004-2014*. Available at: http://www.labormarketinfo.edd.ca.gov/.
- 6. U.S. Department of Commerce, Bureau of Economic Analysis. *Regional Economic Information System*. Available at: http://www.bea.gov/bea/regional/reis/.
- 7. Census 2000 Equal Employment Opportunity Data. *Alameda County EEO Occupational Groups by Race/Ethnicity*. Available at: http://www.census.gov/eeo2000/.
- 8. Dube A. *The Union Difference in 2002 California*. 2002. Available at: http://laborcenter.berkeley.edu/healthcare/union_difference02.pdf. Accessed April 9, 2008.

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Education

"American racism persists even without racists. The lingering affects of Jim Crow still haunt our institutions, isolating minorities in ghetto neighborhoods and in decrepit schools that don't send kids to college."

—Anthony P. Carnevale¹

Historical Overview

In 1954, the Supreme Court ruled in Brown v. Board of Education to end racial segregation in public schools. Despite this promise of equal educational opportunity, the conditions of California's schools have deteriorated since the 1980s with the most serious problems in low-income communities of color.² In 1978, California voters passed Proposition 13 which capped property tax and eliminated it as the main and stable source of education funding. This made it harder for school districts to get the funding they needed to maintain their schools. People who live in wealthier districts have been able to use political power to find alternative funding sources for schools, while the lower income districts have been "left behind".² California spends about \$7,000 per student which is much less money per student than spent by other states. It now ranks 46th in spending and about \$1,900 below the national average per student.³ While California once had high student achievement scores, California's 8th graders now rank 47th in reading and 45th in math.⁴ No Child Left Behind legislation attempted to achieve educational equity by holding schools and students accountable for their performance on standardized tests without addressing the inequitable conditions between schools. Academic performance continues to vary markedly by race/ethnicity and income.

In 1998, California voters passed Proposition 10 which led to the creation of First 5 California Children and Families Commission. First 5 funds local counties to promote early childhood development from prenatal to age 5 in areas such as school readiness, quality childcare and health care coverage. It provides resources important to school success that are less available to low-income and people of color. It is unclear whether these efforts are sufficient to reduce achievement gaps.

What Research Tells Us

Education: Critical to Wealth and Health

A strong relationship exists between income and health (see Income and Employment section) and educational attainment is one of the strongest predictors of income.^{5,6} Although a high school education is not a guarantee of financial stability, people who graduate from high school earn much higher salaries and are twice as likely to be employed than people who have not graduated from high school. Families headed by those with a high school diploma or less are steadily falling into the bottom 20% of family incomes.⁷

Education has been considered the great equalizer in American society. Education opens up employment opportunities to higher quality work, which in turn can increase "wealth, health and happiness."8 Even independent from income, education is associated with improved health outcomes. Studies have shown that each additional year in school is associated with increased life expectancy and better health.9 Just how education is linked to better health is not clear. Research suggests that people who complete higher levels of education have better cognitive and psychological resources, such as problem solving, practice with teamwork, dependability, structure and routine.10 Other research suggests that the working conditions of low-skilled, low-wage jobs are significantly more dangerous, stressful,11 offer the worker less control,12 and are more unhealthy than jobs for more highly educated workers. 13,14

Health also affects education. Health conditions are a common contributor to the decision to leave school; pregnancy, parental or sibling illness, chronic conditions (such as asthma), learning disability and physical disability are all examples of health-related reasons for dropout.⁵

Children Get Uneven Starts in Life

The ability to succeed in school and later in life is heavily influenced by factors that are determined even before a child starts school. The window between the prenatal period and the first few years of life is critical to a child's brain development and health. Stable and supportive family environments and safe and stimulating physical environments are essential. Young children are particularly susceptible to the effects of stress and poverty conditions that are often experienced by people of color and families headed by single parents.

Given that one of the strongest predictors of tenth grade reading ability is the knowledge of the alphabet in kindergarten, it is clear that schools alone cannot completely make up the gap that is already apparent by the time children reach school age. Investment in early childhood development has been shown as an effective long-term strategy to increase school achievement, improve health, reduce crime and reduce reliance on public assistance.^{5,19}

Unequal Opportunities for School Success

The historical forces that led to racial segregation and poverty for high proportions of people of color have left today's students of color with fewer opportunities to attend good schools. Nationally, almost half of African American and nearly 40% of Latino students attend high schools in which graduation is not the norm.¹³ In California, the statewide Healthy Kids Survey concluded that schools with the highest percentage of African American and Latino students "face a double jeopardy of educational disadvantages both in terms of poverty and the more negative school environments that are less conducive to learning."20 Another study concluded that these schools are "so seriously inadequate that they do not provide an equal opportunity for a quality education."21 It found that these schools were much more likely to have: a lack of qualified teachers, high teacher turnover rates, poor

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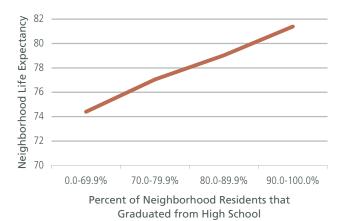
working conditions for teachers, serious shortages of educational materials, rundown physical facilities and a lack of programs involving parents.²¹ These unequal school conditions are mirrored by unequal student performances.

A Look at Alameda County

Educational Attainment and Life Expectancy

The higher the high school graduation rate of a neighborhood the longer its residents are likely to live (Figure 23). Alameda County residents who live in neighborhoods with less than a 70% high school graduation rate live on average 7 years fewer than residents in neighborhoods with at least a 90% high school graduation rate. According to Census 2000, 82.4% of Alameda County adults (25 years and older) had graduated from high school.

Figure 23: Neighborhood High School Graduation Rate and Life Expectancy

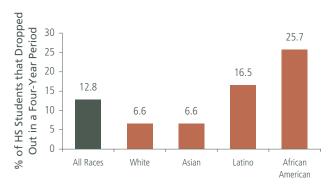


Sources: Alameda County Vital Statistics 1999-2001, Census 2000.

Unequal Dropout Rates by Race/Ethnicity

In the 2005-2006 school year, 12.8% of Alameda County high school students had dropped out of school by 12th grade (Figure 24).^a African Americans and Latinos had the highest dropout rates: 1 in 4 African Americans and 1 in 6 Latinos had dropped out. Whites and Asians had much lower dropout rates; only 1 in 15 White or Asian students dropped out of high school.

Figure 24: High School Dropout Rate by Race/Ethnicity, Alameda County



Source: California Department of Education 2005-2006.

Reading and Math Proficiency by Race/Ethnicity

Using English Language Arts (ELA) and Math testing, California schools classify students into 1 of 5 levels of performance expected for their grade level: advanced, proficient, basic, below basic, and far below basic. ELA is tested annually from 2nd to 11th grade and Math is tested from 2nd to 7th grade. The achievement goal set by the State Board of Education is for all students to meet either the proficient or advanced level.

Recent test scores show a large and persistent racial/ ethnic gap in both reading and math proficiency. Asians and Whites far outperformed African Americans and Latinos. Achievement declined steadily for all racial/ethnic groups starting in the 4th grade until the end of testing in the 11th grade (Figure 25 on page 58). In the 4th grade, about 8 out of 10 White or Asian students scored proficient or advanced in ELA for their

a. This is the 4-year dropout rate. The dropout rate is considered to be an underestimate because it is not always known whether a student has transferred or dropped out. Many schools assume for reporting purposes that missing students have transferred.

grade, while fewer than 4 in 10 African American or Latino students achieved this standard. By 11th grade, only 6 in 10 White or Asian students and only 2 in 10 African American or Latino students could read at the targeted level.

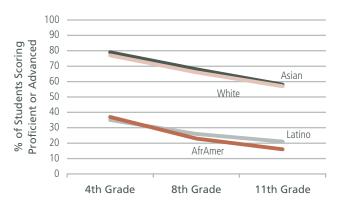
Math achievement followed the same pattern as reading (Figure 26). White and Asian students far outperformed African American and Latino students, and the percentage scoring proficient or better decreased by grade level.

White and Asian 3rd graders had the same reading scores as African American and Latino 7th graders. The same was true of math scores. This means that African Americans and Latinos are performing at 4 grade levels lower than Whites and Asians (Figure 27). Unequal educational environments are likely to contribute to these gaps in achievement.

Academic Performance Index by School Poverty Level

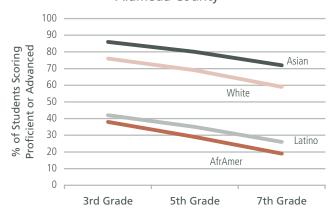
The Academic Performance Index (API), the cornerstone of the state's accountability system, is a weighted

Figure 25: English Language Arts Level by Grade and Race/Ethnicity, Alameda County



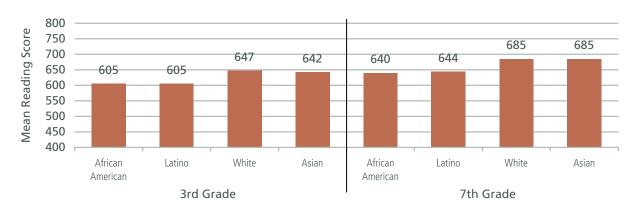
Source: California Department of Education 2007.

Figure 26: Math Level by Grade and Race/Ethnicity, Alameda County



Source: California Department of Education 2007.

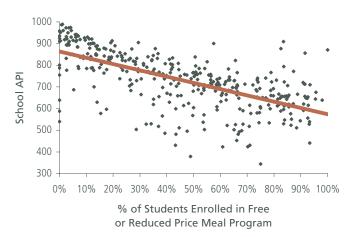
Figure 27: Reading Scores by Grade and Race/Ethnicity, Alameda County



Source: California Department of Education 2007.

index based on schools' student subject-specific scores on California standards-based tests and other indicators. Figure 28 shows a pattern of lower school API scores as school student enrollment in the Free or Reduced Price Meal Program (FRPMP) goes up. Schools with higher rates of students enrolled in the FRPMP, an indicator of school poverty, had lower academic performance. In many cases, these are the same

Figure 28: School Performance and School Free or Reduced Price Meal Program Enrollment, Alameda County



Note: Each dot represents one Alameda County public school. Source: California Department of Education 2006-07.

schools that predominantly serve African American and Latino students.

Unequal School Conditions

While data are not available at the school level, we see striking inequalities in teaching and learning conditions at the level of school district. Table 5 compares the 2006-2007 profile of students, teachers and academic performance of a relatively poor school district (Oakland) with an affluent one (Piedmont). Compared to student enrollment in Piedmont, Oakland had 15 times more Latino and African American students, 9 times more English Learners, and more than 200 times more students enrolled in the Free or Reduced Price Meal Program. With regards to teacher experience and pay, Oakland teachers were 8 times more likely to be without full credentials, were 6 times more likely to be in their first or second year of teaching and were paid, on average, \$13,500 less than Piedmont teachers. The high school dropout rate was 1 in 5 in Oakland whereas there were no dropouts in Piedmont. Based on a scale from 200 to 1000, the API of Oakland was 651 while Piedmont averaged more than 250 points higher, with an API of 916. Finally, 7th grade students

Table 5: Comparison of Two School Districts: Oakland and Piedmont

		Oakland	Piedmont
Students	Number enrolled	47,012	2,589
	Percent Latino	34.8%	2.7%
	Percent African American	38.2%	2.0%
	Percent English Learners	28.4%	3.0%
	Percent FRPMP	68.6%	0.3%
Teachers	Percent without full credentials	13.5%	1.7%
	Percent in their 1st or 2nd year of teaching	20.4%	3.4%
	Lowest salary	\$38,778	\$42,116
	Highest salary	\$69,714	\$81,937
	Average salary	\$53,869	\$67,402
Performance	4-yr dropout rate	27.4%	0%
	Academic Performance Index	651	916
	Percent 7th grade ELA proficient or better	29%	85%
	Percent 7th grade Math proficient or better	23%	81%

Source and Notes: California Department of Education, 2006-07. Dropout rate is for 2005-06. API scale ranges from 200 to 1000.

were 3 to 4 times more likely to be proficient in reading and in math if they attended a school in Piedmont instead of Oakland.

Based on seniority, teachers with more experience often transfer to more affluent schools and school districts where there are usually better conditions and fewer challenges. For example, teachers in Oakland are more likely than teachers in Piedmont to work in schools where a high proportion of students face serious barriers to learning such as poverty, community violence or trauma and health issues like asthma, obesity and teen pregnancy.²² The steady pull of experienced teachers away from high-need schools means that African American, Latino and low-income students are more likely to be taught by less experienced teachers.²¹ These inequities in teacher experience are even more pronounced when comparing individual schools.²³

Self Reported Measures of Youth Well-Being and Academic Performance

The California Healthy Kids Survey (CHKS) provides a rich resource for examining associations between self-reported experiences of well being and protective factors and self-reported academic achievement. The CHKS defines protective factors, also known as assets, in three major categories:

- *Caring relationships:* supportive connections to others, having a person who is "there" and who listens non-judgmentally.
- High expectations: the consistent communication
 of messages that the student can and will succeed, a belief in a youth's innate resilience, and the
 provision of guidance that is youth-centered and
 strengths-focused.
- *Meaningful participation:* the involvement of the student in relevant, engaging and interesting ac-

Been in a Physical Fight at Student-Reported Grades 27% School 35% ■ Mostly As, some Bs Lack of Well-Being ■ Mostly Bs, some Cs Moved in the Last Year 32% ■ Mostly Cs, Ds, or Fs Depression 33% 32% Skipped Breakfast 44% 22% **Lacks High Expectations** 36% Lack of Protective Factors 47% 33% Lacks Caring Relationships 43% 54% 48% Lacks Meaningful 72% Participation 85% 0% 10% 20% 30% 40% 50% 60% 70% 80% 90% Percent of 7th, 9th and 11th graders

Figure 29: Student-Reported Well-Being and Protective Factors by Grades Received, Alameda County

Source: California Healthy Kids Survey 2004-2006.

tivities; having the opportunities for responsibility and contribution.

Figure 29 on page 60 represents the survey responses from Alameda County 7th, 9th, and 11th graders. Students who reported that they did better academically in school were less likely to have been in a physical fight at school; moved in the last year; been depressed or skipped breakfast. In other words, their well-being was higher and may have influenced their school performance. Similarly, the perceived levels of access to caring relationships, high expectations and meaningful participation were associated with academic success. These findings demonstrate how strengthening protective factors in the home, community, and school environments of youth can support greater and more equal academic achievement.

Data to Action: Policy Implications

African American and Latino students are more likely to attend schools with the fewest resources, and to have the lowest achievement scores and highest dropout rates. In order to address these gaps in resources and achievement, we need bold policies that are focused at the level of community and school institutions. Serious investments in early childhood development, youth development, and reforms in school funding will support learning from the early years of childhood all the way through high school graduation and beyond. The following strategies are recommended.

Invest in early childhood development

 Provide high quality and affordable child care and preschool for all children. An example of this effort was Proposition 82, defeated in 2006, that would have paid for universal preschool in California. Ensure equitable geographical location of preschools and provide subsidized tuition, especially in impoverished and predominantly African American and Latino communities.

Reform K-12 school funding

- Tie school funding to student needs, especially among the most vulnerable. Give priority to closing the opportunity gap between low and highincome students, and between African American/ Latino and White/Asian students.
- Invest in recruiting, retaining and supporting teachers for preschool and K-12. Fund competitive salaries and high-quality teacher education, mentoring, and ongoing professional development including cultural competency for all teachers.
- Fund low performing schools to offer support services to students and their families, especially at the elementary level when parents tend to be more actively involved.

Ensure equitable access to high quality instruction, school curricula and programs

- Create incentives for teachers to work in disadvantaged schools.
- Provide sufficient and equitable funding and ensure accountability, adequate facilities, instructional materials, and highly qualified teachers and administrators.²⁴
- Improve student college readiness and reduce dropout rates beginning in 5th grade with college mentoring, academic tutoring, and after-school enrichment programs that include families, especially in low performing schools.
- Create partnerships with higher education, community, business, philanthropy, and government in order to develop academic enrichment programs for both students and their families.

Provide positive interventions for vulnerable schools, students and their families

- Through strengthened youth development programs, create personal connections with caring adults to ensure that students successfully transition through school and graduate.²⁴
- Provide rigorous and relevant programs to keep students engaged in meaningful and challenging work.²⁴
- Support children and their families in attaining successful life and educational outcomes by coordinating an array of mental and physical health services in the schools.²⁵

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References

- 1. Carnevale AP. Confessions of an Education Fundamentalist: Why Grade 12 is Not the Right End Point for Anyone. In Hoffman N, Vargas J, Venezia A, and Miller MS, eds. *Minding the Gap: Why Integrating High School with College Makes Sense and How to Do It.* Cambridge, Massachusetts: Harvard Education Press. September 2007.
- 2. Oakes J, Rogers J, Silver D, and Goode J. Separate and Unequal 50 Years After Brown: California's Racial "Opportunity Gap." UCLA/IDEA. May 8, 2004.
- 3. Education Week. *Quality Counts 2008*. Available at: http://www.capousd.org/fiscal/fundinganalysis.pdf. Accessed March 2008.
- 4. UCLA/IDEA and UC/ACCORD. *California Educational Opportunity Report 2007*. November 2007. Available at: http://www.edopp.org. Accessed March 2008.
- 5. Freudenber N, Rugis J. Reframing School Dropout as a Public Health Issue. *Preventing Chronic Disease*. Center for Disease Control and Prevention. 2007;4(4): 1-11. Available at: http://www.cdc.gov/pcd/issues/2007/oct/07_0063.htm. Accessed March 2008.
- 6. Ross CE, and Mirowsky J. Refining the Association between Education and Health: The Effects of Quantity, Credential, and Selectivity. *Demography.* 1999;36(4): 445-460.
- 7. Introduction. In Hoffman N, Vargas J, Venezia A, and Miller MS, eds. *Minding the Gap: Why Integrating High School with College Makes Sense and How to Do It.* Cambridge, Massachussets: Harvard Education Press. 2007.
- 8. Hartog J. Health, Wealth and Happiness: Why Pursue a Higher Education? *Economics of Education Review.* 1998;7(3): 245-256.
- 9. Lleras-Muney A. The Relationship Between Education and Adult Mortality in the United States. *Review of Economics Studies*. 2005;72:189-221.
- 10. Ross CE and Wu CL. The Links Between Education and Health. American Sociological Review. 1995;60(5):719-745.
- 11. Karasek RA. Job Demands, Job Decision Latitude, and Mental Strain: Implications for Job Redesign. *Administrative Science Quarterly.* 1979;24(2):285-308.
- 12. Mirowsky. Age and the Sense of Control. Social Psychology Quarterly. 1995;58(1):31.
- 13. Bureau of Labor Statistics. *Highest Incidence Rates of Total Nonfatal Occupational Injury and Illness Cases, Private Industry,* 2006. Available at: http://www.bls.gov/iif/oshwc/osh/os/ostb1753.txt. Accessed April 2008.
- 14. Bureau of Labor Statistics. *Incidence Rates of Nonfatal Occupational Illness by Industry and Category of Illness, Private Industry, 2006.* Available at: http://www.bls.gov/iif/oshwc/osh/os/ostb1760.txt. Accessed April 2008.
- 15. Haskins R, and Rouse C. Closing Achievement Gaps. The Future of Children Policy Brief. Spring 2005.
- 16. Shonkoff JP, and Phillips DA, ed. *Neurons to Neighborhoods: The Science of Early Childhood Development, Executive Summary.* National Academies Press. 2000.
- 17. Hertzman C. The Case for an Early Childhood Development Strategy. *ISUMA: Canadian Journal of Policy Research.* 2000;1(2): 11-18.
- 18. White House. Early Childhood Education. Good Start. Grow Smart: President Bush's Plan to Strengthen Early Learning. Early Childhood Development Guide. Available at: http://www.whitehouse.gov/infocus/earlychildhood/. Accessed April 2008.
- 19. Shonkoff JP. *The Science of Early Childhood Development: Closing the Gap Between What We Know and What We Do to Build a Strong Foundation for a Prosperous and Cohesive Society.* A Concept Paper for the Board of Directors of Thrive By Five. July 2006.
- 20. Austin G, Hanson Y, Bono G, and Cheng Z. *The Achievement Gap, School Well-Being, and Learning Supports.* CHKS Factsheet #8. Los Alamitos, CA: WestEd. 2007.
- 21. Harris L, with the Peter Harris Research Group. Report on the Status of Public School Education in California 2004: With Special Emphasis on the Status of Equality in Public School Education. A Survey of a Cross-Section of Classroom Teachers in California Public Schools. Prepared for the William and Flora Helwett Foundation. May 2004.
- 22. Brown J, Garcia J, Jain S, and Wright W. *Youth Health and Wellness in Alameda County*. Alameda County School-Based Health Center Coalition and Alameda County Public Health Department. December 2006.

- 23. The Education Trust-West. *Hidden Teacher-Spending Gaps in Oakland Unified School District: A Tale of Two Schools.* 2005. Available at: http://www.hiddengap.org. Accessed April 2008.
- 24. Children Now. *California Report Card* 2008: *The State of the State's Children*. Education Chapter. Available at: http://www.childrennow.org. Accessed March 2008.
- 25. Interagency Children's Policy Council. *Overview*. Available at: http://www.acgov.org/icpc/ourkids/overview.htm. Accessed March 2008.

Data Sources

- 1. California Department of Education. *Public School Data*. Computer Files. Available at: http://www.ed-data.k12.ca.us/welcome.asp and http://data1.cde.ca.gov/dataquest/ and http://www.cde.ca.gov/ds/sd/cb/.
- 2. U.S. Census Bureau. Census 2000. Available at: http://www.factfinder.census.gov/.
- 3. WestEd. *California Healthy Kids Survey, Alameda County 2004-2006*. Computer File. Information available at: http://www.wested.org/hks.

LIFE AND DEATH FROM UNNATURAL CAUSES

Education

Housing

"Everyone has the right to a standard of living adequate for the health and wellbeing of themselves and their family...including housing."

—Universal Declaration of Human Rights, Article 25

Historical Overview

Historically, federal housing policy increased housing stability for Whites while increasing instability and displacement for people of color. Federal policies and programs, such as the Federal Housing Authority (FHA) established in 1934 and the GI Bill passed in 1944, were instrumental in expanding homeownership opportunities to middle class households. However, lending practices such as redlining (see Segregation section) precluded many middle class African Americans and other people of color from realizing the American Dream. The Housing Act of 1949 provided federal funding to cities to acquire and redevelop areas perceived as slums. In practice, this displaced whole communities of color and, without affordable alternatives, they were relegated to public housing, thereby reinforcing segregation. Finally, FHA-backed loans through the 1960s were biased toward funding suburban housing, facilitating "White flight" from cities to the suburbs, while under-funding loans for construction of rental units for low-wage workers.²

The Fair Housing Act of 1968 outlawed discrimination in housing practices, and the Home Mortgage Disclosure Act of 1975 mandated bank disclosure of lending practices by race and location of loan applications for home purchasing, refinancing, or improvements. Despite the passage of these laws, the legacy of decades of unfair and inequitable housing policies persists. These historical factors, combined with diminishing federal funding for affordable housing, have contributed to situations in which low-income people and people of color continue to suffer from housing instability and displacement, and the associated health consequences.

What Research Tells Us

Affordable Housing and Links to Health and Stability

Tousing is considered affordable when monthly ▲ housing costs, including utilities, are no more than 30% of total household income.3 Across the United States, housing-related costs are the largest household expenditure for most households. The Bay Area housing market, both rental and ownership, is unaffordable to many households for a variety of reasons. Rents, home sales prices, and the cost of living in general are increasing faster than wages. Marketrate housing production far outpaces production of affordable units just as the existing affordable housing stock in many places is decreasing. As a result, there is a mismatch between household income and the cost of housing—a mismatch between the need for and supply of housing that is affordable to low-income people. This housing crisis is characterized by renters and homeowners struggling and sometimes failing to meet monthly housing costs, as well as diminishing homeownership opportunities.

A lack of affordable housing has serious health consequences. The stress due to a lack of affordable housing is associated with a greater likelihood of developing hypertension, lower levels of psychological well-being, and increased visits to the doctor. ^{4,5} Many households unable to secure affordable housing are forced to dedicate more than 30% of monthly income to housing, a situation known as cost-burden. Cost-burdened households have less disposable income for the prerequisites for good health—health insurance, nutritious food, childcare, and other important goods and services. ⁶ Research shows that overpayment on housing is linked to inadequate nutrition, especially among children. ⁶

A lack of affordable housing forces many to live in overcrowded conditions or substandard housing. Overcrowding is linked to tuberculosis, respiratory infections, poorer self-rated health, and increased stress.⁷

Common substandard housing conditions, such as drafts, dampness, mold, old carpeting, lead paint, and pest infestations, are linked to recurrent headaches, fever, nausea, skin disease, sore throats, and respiratory illness such as asthma. Without affordable housing alternatives and with code compliance systems often either too overwhelmed or unresponsive to tenants' needs, many tenants endure deplorable conditions.

When costs of housing are too high, people are often forced to move, a situation known as displacement. Displacement can result in the breaking of health protective social connections, posing a threat to health. Moving frequently is associated with higher rates of stress, mental health issues and child abuse and neglect. Housing stability is also associated with self-rated health status; as housing stability decreases, so does self-rated health status. Finally, the long commutes of workers who are forced to move away from their jobs to more affordable suburbs encroach on quality family time, as well as contribute to increases in greenhouse gases, both of which have health implications for generations to come.



The ultimate result of a lack of affordable housing options and the accompanying risk of displacement is homelessness. Homelessness is linked to higher rates of mortality and increased morbidity due to respiratory infections and poor nutrition.⁷ In addition, home-

lessness and living in temporary housing have been linked to behavioral problems and depression among children.⁷

Housing Assistance Can Make a Difference

A variety of government and non-profit led efforts are aimed at increasing the stock of affordable housing in the Bay Area. The majority of affordable housing funding is directed toward increasing access to rental housing because more high need and low-income people can be served. Homeownership programs are very expensive and, as a result, serve fewer people and usually target moderate income households. Housing assistance programs include: housing vouchers, known as Section VIII; public housing; supportive housing with employment, medical, or counseling services included; and a variety of programs and developments supported by non-profit agencies.

Affordable housing programs can positively affect health. Low-income families in subsidized housing, either receiving housing vouchers or living in public housing are more likely to obtain necessary medical care than those with comparable incomes living in unsubsidized and unaffordable housing.¹² Children in low-income families that lack housing subsidies are more likely to have iron deficiencies and to be underweight than children in similar families receiving housing subsidies. 13,14 Special needs populations (those exiting foster care, the homeless, those suffering from serious mental illness, the differently abled, seniors, and individuals with HIV/AIDS) who have subsidized housing are more likely to be consistent users of necessary services, including medical care than those not receiving subsidies. Subsidized affordable housing for special needs populations has also been shown to partially or even fully pay for itself through reduced utilization of emergency services. 15,16 For poor people who have recently moved from low-income neighborhoods to higher income neighborhoods, use of housing vouchers is linked to better mental health outcomes

relative to the mental health of persons using vouchers but remaining in poor neighborhoods.¹⁷

Housing Discrimination, Sub-Prime Lending and Health

People of color, particularly African Americans and Latinos, continue to experience discrimination in the housing market, and are thus denied access to the health benefits that are associated with homeownership. African Americans and Latinos are less likely to receive prime—or regular rate—loans for home purchase, refinancing, and repair than Whites. These differences are not adequately explained by differences in characteristics such as income, education, wealth, marital status, or household size. Is Ironically, discrimination against borrowers of color has been so pervasive that the sub-prime lending market was initially welcomed because it promised to increase access to mortgage credit and homeownership.

Sub-prime loans are those offered at a higher interest rate—or with more unfavorable terms—than regular (or prime) loans. Many sub-prime loans were distributed to borrowers who had little chance of completing repayment. Such loans are called *predatory* because borrowers often are not completely aware of the conditions of the loans unless they read all the fine print or ask complex clarifying questions.¹⁹

African Americans and Latinos were targeted to receive sub-prime loans for home purchase, as well as for home improvement and home refinancing. 19-21 Overall, sub-prime loans were aggressively marketed to people of color, including those who should have qualified for prime loans. 20 High-cost home purchase loans account for 52.9% of loans to African Americans, 47.3% of Latinos, 24.3% of Asians, and only 17.0% of loans to Whites. 22 Even controlling for income, people of color tended to receive the most expensive sub-prime loans, and the disparities by race were worse at higher income levels. 22 Such borrowers may have taken sub-prime loans because of discrimination in the prime market. Sub-prime loans have been more likely than

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prime loans to end in foreclosure, and since sub-prime loans were disproportionately distributed in low-income communities of color, such communities are particularly affected.

Homeownership ending in foreclosure increases displacement and instability, exposing households and communities to a variety of health risk factors. For households facing foreclosure—when a bank or creditor reclaims a property for which the mortgage holder failed to make payments—the sudden loss of lifetime investments, savings, and stability is devastating. Foreclosures are a source of stress that can result in mental health problems.7 Foreclosures can also lead to community decline. One study found that an increase of 2.8 foreclosures for every 100 owner-occupied properties was associated with a 6.7% increase in violent crimes in those neighborhoods.²⁰ Along the same lines, a single family home left vacant because of foreclosure depressed the home values within oneeighth of a mile by 1.4% in low- to moderate-income communities.²⁰ Foreclosures cost cities in the form of lost revenue from unpaid property taxes and falling property values.²⁰ Finally, foreclosures displace households, exposing them to the same health risks as those displaced for other reasons as described above.

Benefits and Additional Risks of Homeownership

For those able to access mortgage credit at a good rate, investment in homeownership can be a long-term investment in health. In the short term, the wealth accumulation associated with homeownership improves access to neighborhoods with more health promoting assets, such as grocery stores, places to exercise, good schools, and so on, as well as to higher quality housing.²³ More long-term, homeownership supports inter-generational wealth—wealth that is passed from parents to children, helping to ensure stability and continued improved access to opportunities (see Income and Employment section).

Studies show that homeownership confers health benefits on homeowners and on communities. Relative to renters, for instance, homeowners have better physical health outcomes, lower child unintentional injury rates, higher self-esteem and lower levels of distress, and more positive mental health which is associated with lower blood pressure.²⁴⁻²⁷ These benefits accrue independent of socioeconomic status, such that poor homeowners have better health outcomes than poor renters.²⁶ Positive health-related social outcomes are also observed among the children of homeowners. For instance, they are more likely to graduate from high school and score higher on standardized tests than the children of renters.²⁸ Finally, high rates of homeownership are associated with neighborhood well-being. Homeowners are more likely to be active in community associations and to vote than their renting counterparts in a given geographic area.²⁸ Civic engagement is essential for securing the goods and services neighborhoods and their residents need to thrive.

Despite the benefits, homeownership is not free of health risks. Studies show that homeownership increases stress as the size of the associated mortgage increases. ²⁶ Furthermore, households facing large mortgage payments may use risky housing strategies, such as dedicating too much income to housing, overcrowding, or neglecting needed repairs in order to stay afloat financially. Those unable to keep up with the mortgage payments face foreclosure.

The benefits associated with homeownership are also tempered by the conditions of the neighborhood where the house is located. Historical patterns of segregation and the current location of the bulk of affordable housing force many low- to moderate-income families to purchase homes in neighborhoods that are distressed. Such neighborhoods pose many risks to residents' health (see Segregation and Income and Employment sections). Furthermore, wealth accumulation related to home appreciation is slower in distressed neighborhoods, delaying or reducing some of the health benefits of homeownership.

LIFE AND DEATH FROM UNNATURAL CAUSES

Housing

A Look at Alameda County

The legacy of discriminatory housing policies, as well as present day rising rents, stagnating wages, and discrimination in lending practices have contributed to rising housing instability and the unequal distribution of unhealthy housing-related conditions among Alameda County residents.

Lack of Affordable Housing: Wages, Prices, and Production

Access to healthy housing conditions is largely determined by peoples' ability to find affordable units. Unfortunately, many low-income residents are unable to afford the housing in the current market due to low wages and the high cost of living in the Bay Area. According to one study, 53% of Alameda County renters are unable to afford the fair market rent for a two-bedroom apartment.²⁹ Given recent employment trends, this situation is likely to get worse if left unaddressed. For instance, head-of-household workers in Alameda County's three fastest growing employment sectors would have to hold two full-time jobs (or more) in order to afford a fair market rent for a two-bedroom apartment (Table 6).

rental market is driving up rental prices. In the absence of protective policies and available affordable housing, rising rents may displace or threaten to displace current renters.

In addition, the average median sales price of single-family homes in Alameda County increased at a much faster rate than median household income between 1999 and 2006 (Figure 30). During this time median sales prices increased by 131% while median household income increased by only 15%.

Figure 30: Median Sales Price vs. Median Household Income, Alameda County



Sources: DataQuick 2008; American Community Survey 1999-2006.

Table 6: Wages vs. Fair Market Rents

Employment Type	Median Hourly Wage (\$2007)	Fair Market Rent for 2-Bedroom Apartment (2007)	Housing Costs as % of Income	Work Hours/Week Required for Rent
Retail salesperson	\$11.37	\$1,250	30%	98
Cashiers	\$10.42	\$1,250	30%	108
Office clerks	\$15.48	\$1,250	30%	69

Source and Note: CA Employment Development Department, 2008. U.S. Department of Housing and Urban Development for the Oakland-Fremont HUD Metro FMR Area.

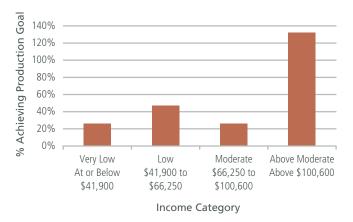
The current mismatch between wages and housing costs is part of a larger trend. As city living has become more popular and redevelopment has attracted new, higher income residents to downtown areas, lower rental vacancy rates have driven-up rental prices in many cities in Alameda County.³⁰ Further complicating things, the flood of foreclosed owners into the

In order to address the mismatch between wages and housing costs, and in accordance with state law, the Association of Bay Area Governments (ABAG) sets housing production goals to meet the housing needs of all income levels. Between 1999 and 2006, Alameda County exceeded its housing production targets for high-income households, but fell short for very low-,

Housing LIFE AND DEATH FROM UNNATURAL CAUSES

low-, and moderate-income households (Figure 31). Alameda County jurisdictions that issued building permits for less than 30% of their allocations for very low-income households include Albany, Hayward, Livermore, Oakland, Piedmont, Pleasanton, and the unincorporated areas. Low production of affordable housing can occur for a variety of reasons, including a shortage of discretionary funds and zoning restrictions for multi-family housing.

Figure 31: Percentage of ABAG-Defined Housing Production Goal Achieved, Alameda County, 1999-2006



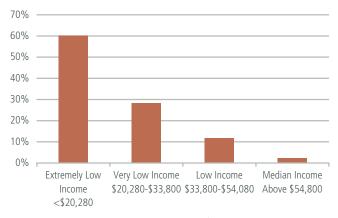
Note: Income ranges listed are for a family of 4 in the Oakland-Fremont-Hayward MSA 2007.

Source: Association of Bay Area Governments, 2007.

In 2006, 82% of all Alameda County households earning \$50,000 or less were forced to spend more than 30% of their income on housing costs, while only 13.4% of households earning \$50,000 or more did so.³¹ Furthermore, households earning between \$20,000 and \$35,000 spent an average of 39% of total income on housing costs, and those earning \$20,000 or less spent an average of 65% of income on housing.³² Of particular concern is the number of households under severe cost burden, those dedicating more than 50% of household income to housing costs. As expected, as household income decreases, severe cost burden increases (Figure 32).

Renters, primarily those concentrated in low-income communities and communities of color, are more af-

Figure 32: Severe Housing Cost Burden by Income Group, Renters and Owners, Alameda County, 2000



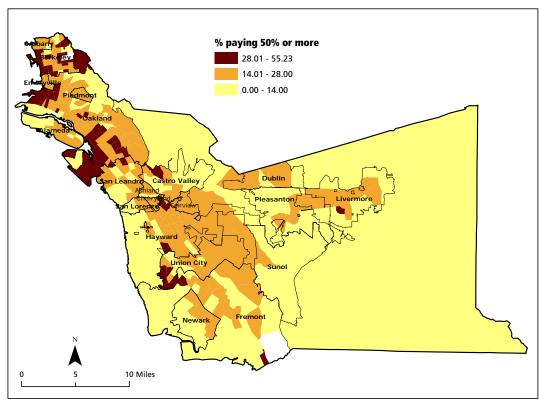
Notes: Severe cost burden are those paying 50% of their income to housing. Income categories refer to the income limits set by HUD for Alameda County in each of the listed income categories.

Source: U.S. Department of Housing and Urban Development.

fected by severe cost burden than owners. Map 5 (page 71) shows the concentration of renter households experiencing severe cost burden (darker colors on the map indicate greater cost burden). The concentration of extremely low-income households under severe cost burden for housing is alarming because of the associated risks of displacement and increased instability in these areas. Jurisdictions often consider extremely low-income households under severe cost burden to be at high risk of homelessness.³³ Homelessness combined with growing transience as families are displaced to more affordable areas contributes to community instability and decreased community power in decision-making arenas.

While the cause of homelessness is multifaceted, affordability is undeniably a factor. According to the Alameda Countywide Shelter and Services Survey conducted in 2003, the primary reason for homeless status given by users of homeless-related services was 'total income not enough to afford housing." The same survey reported that 4,460 homeless adults utilized services, accompanied by 1,755 children. While it is not possible to know homelessness rates among Alameda County's different racial/ethnic groups, the race/ethnicity breakdown among the service users is displayed in Figure 33 (page 71). The racial/ethnic

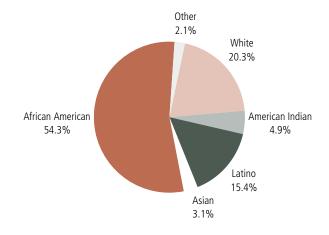
Map 5: Renting Households Under Severe Cost Burden, Alameda County, 2000



Notes: This map shows some high concentrations of renting households under severe burden in otherwise high-income neighborhoods such as the Berkeley hills and Castro Valley. In addition to the fact that there are relatively very few renter (vs. owner) households in these areas, one possible explanation for these anomalies is that people are paying a premium to rent in these neighborhoods. Source: Census 2000.

distribution of service users differs from the general Alameda County population. African Americans constitute the majority of service users, followed by

Figure 33: Homeless Service Users by Race/Ethnicity, Alameda County, 2003



Source: Speiglman R, and Norris JC, 2004.

Whites and Latinos. Compared to the county population, service users are half as likely to be White, 3.6 times as likely to be African American, 7.7 times as likely to be American Indian or Alaska Native, and less likely to be Asian, Latino, or of another race/ethnic group (data not shown).³⁴

To avoid displacement or homelessness, many low-income families double up, resulting in overcrowded conditions that are a detriment to health. According to the 2003 California Health Interview Survey, 1 in 4 Alameda County households is crowded.^a Twenty-eight percent (28%) of households that are crowded are poor compared to 8% of those that are not crowded. Twenty-six percent (26%) of adults in crowded households report poor or fair health status, compared to 15% of those in households that are not crowded.³⁵

a. In CHIS data, a crowded household is one in which there are more persons than rooms.

Homeownership and Discrimination in Lending in Low-Income Communities of Color

Rising housing costs combined with stagnating wages have contributed to diminishing opportunities for homeownership among Alameda County residents. The housing opportunity index measures the percentage of homes sold that are affordable to people earning the median income and above (by definition, half of county households earn above the median income and half below). Figure 34 shows that the percentage of homes affordable to median income residents dropped from 50% in 1996 to less than 10% in 2006. As of the fourth quarter of 2006, only 1 in 10 homes sold was affordable to those earning at least the median income, which was \$83,800 for a family of 4. With falling home prices in 2007, the opportunity index trended upward, reaching 17.4% in the fourth quarter of 2007.

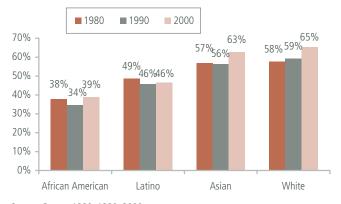
Figure 34: Housing Opportunity Index, Alameda County



Note: There were no data for the 1st through 3rd quarters of 2002 and 2003, so the data for the 4th quarter was used for the entire year. Source: National Association of Homebuilders 2008.

Given that Alameda County's residents of color are more likely than White residents to have incomes below the county's median, the diminishing opportunity for homeownership particularly affects low-income communities of color. As seen in Figure 35, home ownership rates among African American and Latino households have been much lower than for Asians and Whites. Moreover, between 1980 and 2000, homeown-

Figure 35: Homeownership Rates by Race/Ethnicity, Alameda County



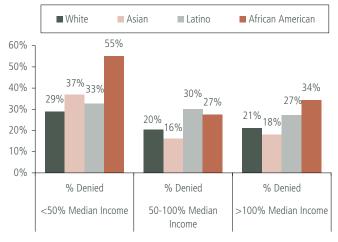
Source: Census 1980, 1990, 2000.

ership substantially increased overall for Asians and Whites, but not for African Americans and Latinos.

Differences in homeownership rates by race are not sufficiently explained by income inequality between races. For instance, Alameda County's White residents, regardless of income, have higher rates of homeownership than African American and Latino residents across all incomes.³⁶ One explanation is discrimination in home mortgage lending. In 2006, 34% of African American loan applicants in the highest income category were denied, while only 29% of White applicants in the lowest income category were denied. Latinos were also much more likely than Whites or Asians to be denied home purchase loans, regardless of income (Figure 36 on page 73). Home purchase loan applications from low-income (less than 50% of the median income) Asians are also more likely to be denied than those from Whites and Latinos in the same income group.

Finally, despite the legal end to the discriminatory practices of redlining and racial steering, homeownership opportunities for people of color, especially for those with low incomes, are often in segregated, distressed communities that lack access to many health protective goods and services (see Segregation section).

Figure 36: Home Purchase Loans Denied by Race/Ethnicity, Alameda and Contra Costa Counties, 2006



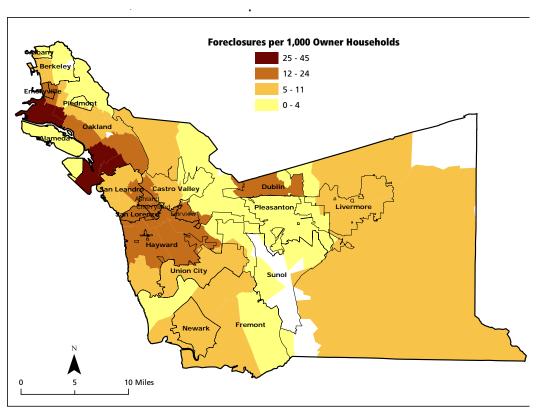
Source: Home Mortgage Disclosure Act, 2006.

Searching for Stability: Foreclosure in Communities of Color

Although African Americans and Latinos had high denial rates for home purchase loans, they were targeted to receive sub-prime loans for home purchase, as well

as for home improvement and home refinancing. 20,21,36 Since sub-prime loans are more likely than prime loans to end in foreclosure, the current foreclosure crisis is particularly affecting these communities. As demonstrated in Map 6, the areas of Alameda County with the highest concentrations of African Americans and Latinos are the areas experiencing the highest rates of foreclosure. Nationally, foreclosures due to sub-prime loans are expected to result in a loss of wealth for people of color amounting to between \$164 billion and \$213 billion. This is considered the greatest loss of wealth to communities of color in modern U.S. history. 19 While a similar analysis for communities throughout Alameda County does not exist, one study expects that the high-cost loans made in 2006 will cost Oakland almost \$875 million.20

Map 6: Foreclosure Rate, Alameda County, 2007



Sources: Census 2000; DataQuick 2007.

Data to Action: Policy Implications

There is ample evidence documenting the links between housing problems and poor health outcomes. Evidence also clearly shows that Alameda County's low-income households of color are experiencing high rates of housing problems, such as severe cost burden, overcrowding, homelessness, foreclosure and displacement. Homeownership rates for Latino and African American households have stagnated, while Asian and White homeownership rates have increased overall between 1980 and 2000. As a result, some households are denied the health benefits associated with homeownership. This situation is traced to the legacy of segregation and the result of continued discrimination in the housing market and employment sectors, as well as of predatory lending.

Increased federal funding is essential to alleviate the affordable housing crisis by creating more affordable rental housing, and enforceable federal policies are necessary to eliminate discriminatory lending. Local level strategies are also important, however. Those policy goals and strategies that would contribute to a more stable, healthy housing environment include:

Increase housing affordability and stability

- At a minimum, meet ABAG requirements for the development of affordable units for very low-, low- and moderate income people. Doing so will require jurisdictions to be creative in their efforts to generate more revenue for affordable housing production. Strategies include increasing the redevelopment tax increment set-aside for affordable housing to at least 35%, if not higher, adjusting zoning laws and increasing density, introducing affordable housing bond measures, establishing a Community Land Trust, and working closely with affordable housing developers.
- Implement and fully fund the EveryOne Home Plan, which is Alameda County's visionary plan

for ending homelessness. This includes funding supportive housing operations and services using strategies such as transitioning funds from emergency shelter services to permanent affordable housing. For more information, see http://www.everyonehome.org/.

- Protect the existing affordable housing stock and prevent displacement by just rent control laws and condominium conversion policies, implementing Just Cause Ordinances, and preserving single resident occupancy (SRO) hotels for the lowest income people.
- Promote mixed-income development using policies such as inclusionary zoning, and offer incentives for construction of on-site affordable units.

Support housing policies that build wealth

• Increase funds for and utilization of first-time home buyer programs.

Decrease foreclosure

- Increase funding for emergency housing assistance to prevent foreclosure and displacement and encourage lending institutions to stabilize households at risk of foreclosure.
- Partner with community organizations to identify households at risk of foreclosure or displacement and perform targeted outreach and prevention services.

Implement policies that prevent predatory lending

- Create and implement jurisdiction-wide post-foreclosure policies to get foreclosed properties back on the market in a timely manner.
- Create and implement policies guiding trustee
 (e.g. banks, management companies, etc.) responsibilities when taking over a foreclosed property.

LIFE AND DEATH FROM UNNATURAL CAUSES

Housing

References

- 1. Fullilove MT. Root Shock: How Tearing Up City Neighborhoods Hurts America and What We Can Do About It. New York, NY: A One World/Ballantine Book. 2004.
- 2. Jackson K. Crabgrass Frontier: The Suburbanization of the United States. Oxford, UK: Oxford University Press. 1985.
- 3. Housing and Urban Development. *Affordable Housing*. Available at: http://170.97.67.13/offices/cpd/affordablehousing. Accessed April 15, 2008.
- 4. Matthews KA, Kiefe CI, Lewis CE, Liu K, Sidney S, and Yunis C. Socioeconomic Trajectories and Incident Hypertension in a Biracial Cohort of Young Adults. *Hypertension*. 2002;39:772-776.
- 5. Nettleton S, and Burrows R. Mortgage Debt, Insecure Home Ownership and Health: An Exploratory Analysis. *Sociology of Health and Illness*. 1998;20(5): 731-753.
- 6. Lipman BJ. Something's Gotta Give: Working Families and the Cost of Housing. Washington, DC: Center for Housing Policy. 2005.
- 7. Krieger J, and Higgins D. Housing and Health: Time Again for Public Health Action. *Public Health Matters*. 2002;92(5): 758-768.
- 8. Bartlett S. The Significance of Relocation for Chronically Poor Families in the USA. *Environment and Urbanization*. 1997;9(1): 121-132.
- 9. Dong M. Childhood Residential Mobility and Multiple Health Risks During Adolescence and Adulthood. *Archives of Pediatrics and Adolescent Medicine*. 2005;159:1104-1110.
- 10. Canadian Population Health Initiative. *Housing and Population Health: The State of Current Research Knowledge.* June 2004. Available at: http://secure.cihi.ca/cihiweb/dispPage.jsp?cw_page=download_form_e&cw_sku=HPH04PDF&cw_ctt=1&cw_dform=N. Accessed March 2007.
- 11. Fassinger P, and Adams GR. *A Place To Call Home: Housing in the San Francisco Bay Area* (ABAG Catalog Number: P06001PLN). Oakland, CA: Association of Bay Area Governments. 2006.
- 12. Wang L, Beecroft E, Khadduri J, and Patterson R. *Impacts of Welfare Reform on Recipients of Housing Assistance: evidence from Indiana and Delaware.* Prepared for U.S. Department of Housing and Urban Development by Abt Associates. Bethesda: MD. 2003. Available at: http://www.huduser.org/publications/commdevl/welfare_reform.html. Accessed February 2008.
- 13. Meyers A, Rubin D, Napoleone M, and Nichols K. Public Housing Subsidies May Improve Poor Children's Nutrition. *American Journal of Public Health.* 1993;83(1): 115-119.
- 14. Meyers A, Cutts D, et al. Subsidized Housing and Children's Nutritional Status: Data from a Multisite Surveillance Study. *Archives of Pediatrics and Adolescent Medicine*. 2005;159:551-556.
- 15. Buchanan D, Doblin B, Sai T, and Garcia P. The Effects of Respite Care for Homeless Patients: A Cohort Study. *American Journal of Public Health*. 2006;4(19): 19-26.
- 16. Martinez T, and Burt M. Impact of Permanent Supportive Housing on the Use of Acute Health Services by Homeless Adults. *Psychiatric Services*. 2006;57(7): 992-999.
- 17. Leventhat T, and Brooks-Gunn J. Moving to Opportunity: an Experimental Study of Neighborhood Effects on Mental Health. *American Journal of Public Health*. 2003;93(9): 1576-1582.
- 18. Leigh W, and Huff D. *African Americans and Homeownership: Separate and Unequal, 1940-2006.* Joint Center for Political and Economic Studies. Brief #1. November 2007.
- 19. Rivera A, Cotto-Escalera B, Desai A, Huezo J, and Muhammad D. *State of the Dream: Foreclosed.* Boston, MA: United for a Fair Economy. Available at: http://www.faireconomy.org/issues/racial_wealth_divide/foreclosed_state_of_the_dream_2008_0. Accessed March 10, 2008.
- 20. Association of Community Organizations for Reform Now (ACORN). *Foreclosure Exposure: A Study of Racial and Income Disparities in Home Mortgage Lending in 172 American Cities*. 2007. Available at: http://www.acorn.org/fileadmin/HMDA/2007/HMDAreport2007.pdf. Accessed January 25, 2008.
- 21. U.S. Housing Scholars and Research and Advocacy Organizations. *Residential Segregation and Housing Discriminiation in the United States: Violations of the International Convention on the Elimination of All Forms of Racial Discrimination.* 2007.

Available at: http://www.nationalfairhousing.org/resources/newsArchive/resource_08305276931793260067.pdf. Accessed February 10, 2008.

- 22. Leigh W, and Huff D. *African Americans and Homeownership: The Subprime Lending Exerience*, 1995-2007. Brief #2. Joint Center for Political and Economic Studies. November 2007.
- 23. Sundquist J, and Johansson SE. Indicators of Socioeconomic Position and Their Relation to Mortality in Sweden. *Social Science and Medicine*. 1997;45(12), 1757-1766.
- 24. Macintyre S, Ellaway A, Der G, Ford G, and Hunt K. Do Housing Tenure and Car Access Predict Health Because They are Simply Makers of Income of Self-Esteem? A Scottish Study. *Journal of Epidemiological Community Health*. 1998;52(1): 657-664.
- 25. Shenassa E, Stubbendick A, and Brown, MJ. Social Disparities in Housing and Related Pediatric Injury: A Multilevel Study. *American Journal of Public Health*. 2004;94(4): 633-639.
- 26. Cairney J, and Boyle MH. Home Ownership, Mortgages and Psychological Distress. Housing Studies. 2004;19:2, 161-174.
- 27. Rossi P, and Weber E. The Social Benefits of Homeownership: Empirical Evidence from National Surveys. *Housing Policy Debate*. 1996;7(1): 1-35.
- 28. Herbert C, and Belsky E. *The Homeownership Experience of Low-Income and Minority Families: A Review and Synthesis of the Literature*. Washington, DC: U.S. Department of Housing and Urban Development, Office of Policy Development and Research. 2006. Available at: http://www.huduser.org/Publications/PDF/hisp_homeown9.pdf. Accessed November 20, 2007.
- 29. National Low Income Housing Coalition. *Out of Reach*. 2006. Available at: http://www.nlihc.org/oor/oor2006/data.cfm?getstate=on&getcounty=on&county=185&state=CA. Accessed February 2008.
- 30. City of Oakland Community and Economic Development Agency. *Citywide Rental Survey*. July 2004. Available at: http://www.oaklandnet.com/government/hcd/policy/docs/rent_survey04.pdf. Accessed November 12, 2006.
- 31. U.S. Census Bureau. American Community Survey. Table C25074. 2006. Available at: http://www.factfinder.census.gov/.
- 32. Benedict A, Dawkins C, Haas P, Makarewicz C, and Sanchez T. *Housing & Transportation Cost Trade-offs and Burdens of Working households in 28 Metro Areas.* Center for Neighborhood Technology and Virginia Tech University. 2006. Available at: http://www.cnt.org/repository/H-T-Tradeoffs-for-Working-Families-n-28-Metros-FULL.pdf. Accessed January 30, 2008.
- 33. City of Oakland Community and Economic Development Agency, Housing and Community Development Division. *Fair Housing Analysis of Impediments*. 2005. Available at: http://www.oaklandnet.com/government/hcd/policy/docs/AI_2005.pdf. Accessed December 2006.
- 34. Speiglman R, and Norris J. *Alameda Countywide Shelter and Services Survey—County Report.* Oakland, CA: Public Health Institute. 2004. Available at: http://www.oaklandnet.com/government/hcd/policy/docs/ACSSS_CW.pdf. Accessed December 1, 2006.
- 35. California Health Interview Survey. *CHIS 2003 Adult Special Use File, Release 1.* Computer File. Los Angeles, CA: UCLA Health Policy Research. February 2005.
- 36. Census 2000. *Public-Use Microsamples 2000*. Computer Files. Available at: http://sodapop.pop.psu.edu/data-collections/pums/pums/2000. Accessed February 2008.

Data Sources

- 1. U.S. Census Bureau. Census 1990, 2000. Available at: http://www.factfinder.census.gov/.
- 2. U.S. Census Bureau. 1980 Census of Population, Characteristics of the Population. San Francisco-Oakland SMSA.
- 3. California Employment Development Department, *Labor Market Information System (LMIS)*. Available at: http://www.labormarketinfo.edd.ca.gov/.
- 4. U.S. Department of Housing and Urban Development. *State of Cities Data System*. Computer File. Available at: http://www.huduser.org/datasets/fmr/fmrs/index.asp.
- 5. U.S. Census Bureau. American Community Survey. 1999-2006. Available at: http://www.factfinder.census.gov/.
- 6. DataQuick. Foreclosures by Zip Code. Computer File. http://www.dataquick.com/.

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- 7. ABAG. A Place to Call Home: Housing in the San Francisco Bay Area (updated August 2007). http://www.abag.ca.gov/ planning/housingneeds/aplace.html.
- 8. Speiglman R, and Norris JC. Alameda Countywide Shelter and Services Survey—County Report. Oakland: Public Health Institute. May 2004. Available at: http://www.acgov.org/cda/ACSSScountywide.pdf.
- 9. National Association of Homebuilders. NAHB/Wells Fargo Housing Opportunity Index. 2008. Computer File. Available at: http://www.nahb.org/page.aspx/category/sectionID=135.
- 10. Federal Financial Institutions Examination Council. Home Mortgage Disclosure Act. 2006. Computer File. Available at: http://www.ffiec.gov/hmda/.

Transportation

"My feet is weary, but my soul is rested."
—Mother Pollard, Montgomery Bus Boycott Participant

Historical Overview

Transportation is the circulatory system of our communities. It allows us to access our schools, jobs, and goods and services like grocery stores and childcare centers, while providing us opportunities to connect with our friends, family, and communities. Access to this most basic service, however, has not and is not available to all. A review of some U.S. history explains why there is unequal access. In 1896, through Plessy v. Ferguson, a case regarding the legality of separate railway cars for African Americans and Whites, the U.S. Supreme Court ruled in favor of the "separate but equal" doctrine. Transportation issues were integral to the start of the Civil Rights Movement, as demonstrated with the Montgomery Bus Boycott and Freedom Rides. White Brown v. Board of Education began the demise of the "separate but equal" doctrine, new transportation policies were being created that devastated low-income communities and communities of color. During the 1950s and 1960s the Federal Highway Administration funded highway projects that were often routed through urban communities of color, leading to displacement, contributing to increased segregation, and exposing remaining residents to harmful air pollutants. Finally, during the same time period, federal funding that favored highways over public transit facilitated the movement of jobs from central cities to outer suburbs and left whole communities without access to affordable transportation by which to get to those jobs—a situation that exploded in civil unrest in Los Angeles in 1965.

These transportation policies as well as others have limited the life chances and harmed the health of communities of color and low-income populations across the nation and in Alameda County. They have restricted access to important societal resources and disrupted communities. In spite of some affirmative steps on the part of the federal, state, and local governments, as well as transportation agencies themselves, inequitable transportation policies persist.

What Research Tells Us

Transportation Access and Affordability: Low-Income Households Face Trade-offs

In communities that rely on public transportation, known as transit-dependant communities, affordable and accessible transportation is vital for accessing employment, goods and services, and medical care. Low-income parents identify transportation difficulties, such as high costs and inaccessibility, as a significant barrier to obtaining routine medical care for themselves and their children.3 Transportation is also a significant barrier to reaching food and retail options for the transit dependent. Residents in lowincome communities are less likely to own a car and 3 times less likely to have a grocery store within their neighborhood.4 Therefore these residents rely more heavily on mass transit to complete their shopping. If mass transit is unreliable or otherwise inaccessible, residents are forced to shop within their neighborhoods. For low-income neighborhoods, this generally means shopping at smaller stores with substantially less healthy food at higher prices (see Food Access and Liquor Stores section).5 This can lead to food insufficiency and insecurity—the lack of access to enough food to fully meet basic needs at all times—in vulnerable populations, while contributing to the risk of overweight and obesity.

Unavailable or unreliable transportation is a factor in people's ability to take and keep a job, making access to transportation a determinant of employment opportunities. In Atlanta, Portland,⁶ and Los Angeles,⁷ researchers found significant employment effects from increased bus access and improved accessibility to employment hubs. Studies have also shown that single women receiving public assistance without access to a personal automobile experience employment benefits from increased transit access.⁸ Employment in turn, is associated with better mental and physical health in

employees and their families (see Income and Employment section).

Focus on Automobiles: Air Pollution, Climate Change and Communities of Color

Federal transportation policies promoting the widespread use of the automobile have particularly affected the health of low-income communities and communities of color through multiple and converging pathways. Federal transportation investments in highways, which consistently dwarfed those in public transit,1 promoted post-World War II suburban development. Development of outlying areas combined with discriminatory housing policies led to reinforced segregation and the associated negative community conditions and health consequences (see Segregation section).1 Furthermore, many highway projects in the 1950s and 1960s were constructed through low-income communities and communities of color without involving members of these communities in the planning processes.1 Households were displaced, communities became isolated, protective social bonds were broken and remaining residents were exposed to air pollution from cars and other motorized sources.

Low-income people and people of color continue to be more likely than affluent people and White people to live near freeway interchanges.9-11 As a result, pollution is often heavier in these communities, as are the ill-health effects¹² (see Air Quality section). The impact of the widespread use of cars extends beyond air quality issues, however. Given that motorized vehicles are the largest source of air pollution in the United States,¹³ cars are contributing to climate change. Climate change may increase rates of health problems affected by extreme weather events and greenhouse gas emissions, as well as facilitate the growth of water-, food-, vector-, and rodent-borne disease.¹⁴ Generally, everyone is threatened by climate change, but the most seriously affected people will certainly be the poor. In the U.S., low-income people and people of color are at

particular risk in part because their health is already disproportionately compromised, they are more likely to be socially isolated (see Social Relations and Community Capacity section), and they command fewer resources to prepare for and respond to disasters such as extreme weather events. This was seen in the aftermath of Hurricane Katrina and Rita, as well as in the week-long Chicago heat wave of 1995, 15 both of which are examples of extreme weather events that are expected to increase with climate change.

I Can't Hear Myself Think: Noise Pollution and Low-Income People's Health

Noise pollution, much of which comes from transportation sources, ¹⁶ is more prevalent in low-income communities. As far back as the 1970s, the U.S. Environmental Protection Agency was warning of negative correlations between household income and neighborhood noise levels. ¹⁷ More recently, researchers have found that the situation is no better now than it was thirty years ago—low-income communities continue to be more vulnerable to the health effects of noise pollution such as hearing loss, hypertension, heart conditions and mental stress. ¹⁸

Active Transportation: The Benefits and Risks of Biking and Walking

The positive health impacts of walking and biking to complete daily activities—known as active transport—are indisputable. Recent studies reveal that increasing and improving pedestrian and bicycle facilities, including sidewalks, bike lanes, lighting, traffic calming devices, and more, reduce driving and promote physical activity. Promoting physical activity can improve health outcomes especially in low-income communities of color who tend to have fewer opportunities to exercise and eat healthy food in their neighborhoods (see Physical Activity and Food Access and Liquor Stores sections).

Despite the health benefits, in many U.S. cities walking and bicycling are not only inconvenient, but also unsafe. Pedestrians and cyclists are several times more likely to be killed in a motor vehicle crash than car occupants. Rates of injuries to pedestrians and bicyclists are even higher in poor neighborhoods, as they often lack the structural factors, such as sidewalks and bike lanes, that make biking and walking safe, as well as carry high traffic volume and high speeds. 20-22 For these communities, the positive health impacts of active transportation could be outweighed by the serious threat of injury. Given that driving rates (as measured by vehicle miles traveled) are highly correlated with pedestrian and bicyclist safety, strategies that discourage driving in favor of bicycling and walking will help improve overall safety. This is especially important in low-income communities where active transportation tends to be low.

A Look at Alameda County

Transportation Costs and Transit Dependency

In Alameda County, low-income households dedicate a larger share of their income to transportation costs than those with higher incomes (Figure 37). For instance, the average household earning less than

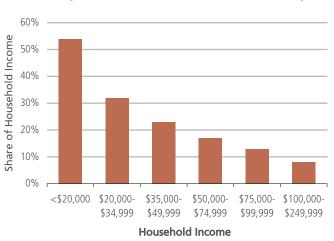


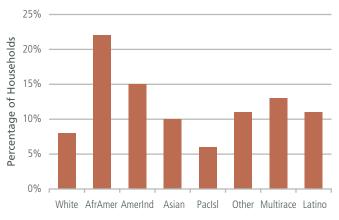
Figure 37: Income Dedicated to Transportation Costs by Household Income, Alameda County

Source: Benedict A, Dawkins C, Haas P, Makarewicz C, and Sanchez T, 2006.

\$20,000 per year spends over half its income on transportation compared to 7% of income among the average household earning \$100,000 per year.²³ Moreover, there is national evidence indicating that transportation costs are increasing at a faster rate for low-income households than for higher income households.¹

Alameda County has the second highest rate of zerovehicle households in the Bay Area; over 1 in 10 Alameda County households did not own a car in 2000.²⁴ These households are considered transit dependent. As demonstrated in Figure 38, nearly a quarter of all African American households in Alameda County do not own a vehicle—a much higher proportion than all other racial/ethnic groups.

Figure 38: Transit-Dependent Households by Race/Ethnicity, Alameda County, 2000



Source: Census 2000.

Low-income households are more likely than high-income households to be transit dependent. One in 4 low-income households in Alameda County did not own a car in 2000. The proportion of transit-dependent households decreases with higher income.

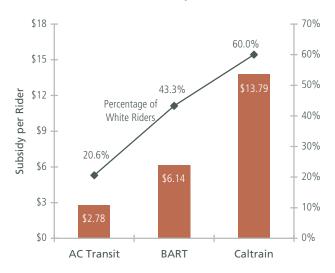
Unequal Transit Funding, Service Cuts and Reliability

The transit-dependent are more likely to be served by low-subsidized, unreliable transportation. Of the two major public transit providers serving Alameda County—AC Transit and Bay Area Rapid Transit (BART)—AC Transit serves more transit-dependent people than BART. Studies of ridership show that 61%²⁵ of AC Transit riders are transit dependent, whereas only 16%26 of BART riders are transit dependent. AC Transit also serves the largest proportion of riders who use public transportation on a daily basis. Ridership studies have also found that 38% of AC Transit riders have household incomes of \$25,000 or below, while only 13% of BART riders have incomes at this low level. The racial composition of riders is also different: the typical AC Transit rider is most likely to be African American, while the typical BART rider is most likely to be White. Of all the transit operators in the Bay Area, AC Transit has the highest percentage of minority riders.26

The amount one pays to ride public transit does not cover the cost of the trip. Therefore, transit providers utilize funding from Metropolitan Transportation Commission (MTC), as well as other sources, to make up the difference. Despite its comparatively high percentage of transit-dependent riders and lowincome riders, AC Transit receives a smaller subsidy per passenger than BART. According to a class action lawsuit, Darrensburg v. MTC, the subsidy amount per passenger for 3 Bay Area public transit providers—AC Transit, BART, and Caltrain—increases as the percentage of White riders increases. (Figure 39 on page 83). (Although Caltrain does not serve Alameda County, it is included for comparison.) The MTC subsidy was \$2.78 per AC Transit rider, 20.6% of whom are White, and \$6.14 per BART rider, 43.3% of whom are White.²⁷ On May 23, 2006, the Alameda County Board of Supervisors passed a resolution urging MTC to increase the allocation of public funds in an effort to approach parity in subsidy levels.²⁸

Not only is there a disparity in subsidies, there is also a disparity in service level. Between 1986 and 2004, AC Transit has cut its overall level of service while BART has increased its level of service, even though all East

Figure 39: Public Subsidies and Race/Ethnicity of Riders



Source: Data from the National Transit Database, 1989-2003, as reported in Communities for a Better Environment, Urban Habitat, and Public Advocates, Inc., 2006.

Bay transit providers experienced similar declines in ridership over the same years (Figure 40).^{27,29,30}

Several factors may influence cuts to level of service, but government subsidies do a have direct correlation to level of service available. Regardless of the underlying causes, what is certain is that cuts to service have significant consequences for Alameda County's transit-dependent people. For example, according to a 2002 study, only 28% of the residents in our county's disadvantaged neighborhoods had transit access to a hospital and less than half of the same residents had access to a supermarket within a half-mile walk of their homes.³¹

A study of AC Transit service cuts between December 1995 and June 1996 found that the service cuts cost transit riders \$30.7 million in annual transit expense increases (between the time of the cuts and the time the study was completed in 1997). The study attributed the increase in travel expenses for riders to the need to close transit gaps left by the reduction in service with taxis and other, more expensive, forms of transportation.³² The study found other indirect costs due to service cuts, such as income losses and added travel time

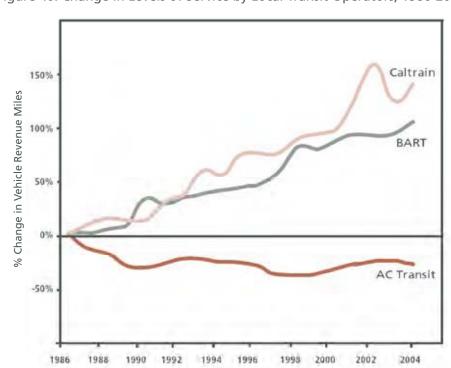


Figure 40: Change in Levels of Service by Local Transit Operators, 1986-2004

Source: Data from the National Transit Database, as included in Darensburg et al. v. Metropolitan Transportation Commission, 2008. Note: Level of service is based on *vehicle revenue miles*, which are total miles traveled by transit vehicles while carrying fare-paying customers. (with riders' time calculated at \$5 per hour) brought the total costs of service cuts to AC transit riders to \$48.1 million.³²

Furthermore, cuts to service can decrease the reliability of transit. According to MTC, AC Transit, while serving the largest proportion of minority, low-income and transit-dependent riders, is the least reliable large transit operator in the Bay Area.²⁹ A third of all AC Transit buses are either early or more than 5 minutes late.

The Air Out There: Freeways and Communities of Color

Despite the need for improved public transit, federal policies historically have favored highways. In Alameda County, significantly more African Americans and Latinos live within 500 feet of freeways compared to other race and ethnic groups, disproportionately exposing them to harmful chemicals and placing them at risk of negative health outcomes (see Air Quality section).

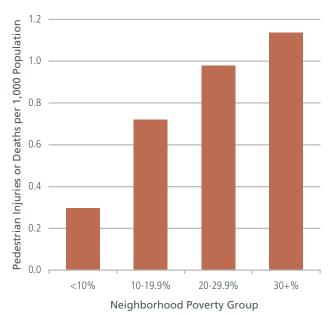
According to a case study by the Federal Highway Administration, when the Cypress Freeway was built in the 1950s it cut through the predominately African American community of West Oakland, dividing the community in half, displacing 600 families, and uprooting dozens of businesses.³³ The freeway became a physical barrier between one four-square-mile area in the western-most part of West Oakland and the more affluent, eastern sections of West Oakland and downtown. Residents, already living in the shadow of railway yards and the Port of Oakland, were then exposed to the air and noise pollution emitted from the heavy traffic overhead. In addition, residents attributed a large part of the economic decline in the community during the 1960s to the divisive impact of the Cypress Freeway.33

Residents were not given an opportunity to participate in the planning and design process when the freeway was originally constructed. However, when it collapsed in the Loma Prieta Earthquake, highly organized community members worked with transportation planners and officials in a planning process for rebuilding. Creating opportunities for meaningful community participation led to a more favorable, though not perfect, new location for the freeway. Unfortunately, most communities will never have a similar opportunity to move the freeways that affect their health.

Traffic-Related Injury and Death in Low-Income and Minority Communities

Low-income communities and communities of color bear the burden of higher rates of transportation-related injury. County-level data show that rates of pedestrian injury are higher in neighborhoods with higher poverty. The pedestrian injury and death rate increases 6 times from around 2 cases per 1,000 persons in the lowest poverty group to over 12 cases in the highest poverty group (Figure 41). In Oakland, the majority of cycling/motorized vehicle collision victims are African American,³⁴ and African American and Latino pedestrians are also at the greatest risk of pedestrian injury

Figure 41: Annual Motor Vehicle-Related Pedestrian Injuries or Deaths per Year by Neighborhood Poverty Group, Alameda County



from collision with a vehicle.³⁵ Such unsafe conditions can discourage physical activity, leading to adverse health outcomes (see Physical Activity and Neighborhood Conditions section).

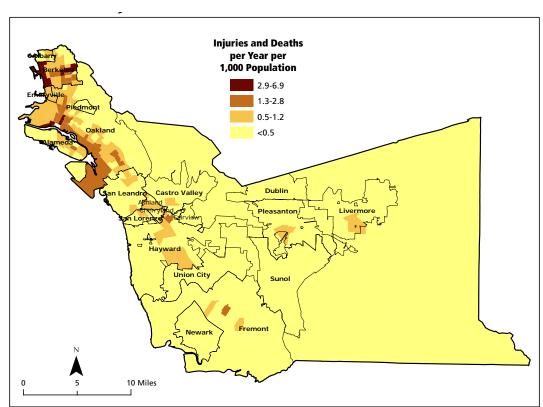
A map of the rate of pedestrian injury and death rates further demonstrates that this negative health outcome is concentrated in communities that are burdened by many of the other inequities examined in this report such as poverty, crime, pollution, illness, and premature mortality (Map 7).

Data to Action: Policy Implications

A lameda County's low-income communities and residents of color are the most likely to rely on public transportation. Those who are dependent on transportation are more likely to depend on AC Transit, the provider with the lowest reliability, lowest levels

of public funding, and decreasing level of service. The communities are also over-burdened by the direct health effects of transportation, namely, transportation-related injury and air pollution. These conditions stem from policy decisions and can be addressed by a commitment to achieving transportation equity. Closing the gap in federal funding for highways vs. public transit, specifically for operating costs, is essential for achieving transportation equity. Local strategies to increase transportation equity include the following.

• Increase affordability: Decrease transportation costs for low-income families. MTC has identified equity as one of the three goals of its Regional Transportation Plan for 2035. According to the plan, equity will be measured by decreasing housing and transportation costs for low-income households by 10%. MTC should consider utilizing policies and programs, such as subsidized transit passes for low-income families. In doing so, MTC would effectively contribute to raising



Map 7: Annual Motor Vehicle-Related Pedestrian Injuries or Deaths, Alameda County

Source: SWITRS, January 1996 to March 2007.

- incomes in communities that most need the boost. In addition, local jurisdictions should explore options such as ballot measures to offer free bus passes for all students 17 years of age and under.
- Improve accessibility and reliability: Expand bus service in the areas with the most need using strategies such as fully funding the community-based transportation plans, especially the corresponding transit gaps, for the communities of concern identified by MTC.
- Support public transit subsidy equity: Support the
 Alameda County Board of Supervisors' resolution
 that encourages equitable distribution of public
 transit funds. One suggestion for equalization is
 for MTC to study the potential for creatively swapping capital funds for operating funds, thereby increasing the amount of money potentially available
 to AC Transit's operation-heavy service.
- Decrease driving: Implement policies that promote the use of public transportation. Transit oriented development that locates housing, including affordable housing, and essential goods and services in close proximity to each other and to public transit hubs, increases transit options for residents. This type of development is proven to increase use of public transit and decrease vehicle use per capita. Utilize road pricing strategies that reduce driving and increase funds for public transit, such as high-occupancy toll lane systems and congestion pricing in urban areas. Since such policies are potentially regressive in nature, it is imperative to implement them in a way that ensures low-income households are not disproportionately burdened.
- Increase and improve pedestrian and cycling access:
 Increase access to safe walking and biking through the creation of regional, county, and city pedestrian and bicycle strategic plans. Funding for these plans should be prioritized for high-poverty areas experiencing a disproportionate burden of injury.

LIFE AND DEATH FROM UNNATURAL CAUSES

Transportation

References

- 1. Sanchez T, Stolz R, and Ma J. *Moving to Equity: Addressing Inequitable Effects of Transportation Policies on Minorities.* A Joint Report of the University of California Los Angeles Civil Rights Project and the Center for Community Change. 2003. Available at: http://www.civilrightsproject.ucla.edu/research/transportation/trans_paper03.php. Accessed February 2008.
- 2. National Advisory Commission on Civil Disorders. *Report of the National Advisory Commission on Civil Disorders*. 1968. Washington, DC: GAO.
- 3. Flores G, Abreu M, Olivar MA, and Kastner B. Access Barriers to Health Care for Latino Children. *Archives of Pediatrics Adolescent Medicine*. 1998;152(11): 1119-1125.
- 4. Morland K, Wing S, Diez Roux A, and Poole C. Access to Healthy Foods Limited in Poor Neighborhoods. *American Journal of Preventive Health*. 2002;22(1):23-29.
- 5. Vallianatos M, Shaffer A, and Gottlieb R. *Transportation and Food: The Importance of Access.* Center for Food and Justice, Urban and Environmental Policy Institute. October 2002. Available at: http://departments.oxy.edu/uepi/cfj/publications/transportation_and_food.pdf. Accessed March 2008.
- 6. Sanchez T. The Connection between Public Transit and Employment: the Cases of Portland and Atlanta. *Journal of the American Planning Association*. 1999;65:284-296.
- 7. Kawabata M. Job Accessibility by Travel Mode in U.S. Metropolitan Areas. *Papers and Proceedings of the Geographic Information Systems Association*. 2002;11:115-120.
- 8. Ong P, and Houston D. Transit, Employment, and Women on Welfare. Urban Geography. 2002;23:344-364.
- 9. Pastor M, Sadd J, and Morello-Frosch R. *Still Toxic After All These Years: Air Quality and Environmental Justice in the San Francisco Bay Area.* Center for Justice, Tolerance and Community, University of California, Santa Cruz. February 2007.
- 10. Ash M, and Fetter TR. Who Lives on the Wrong Side of the Environmental Tracks? Evidence From the EPA's Risk-Screening Environmental Indicators Model. *Social Science Quarterly.* 2004;85(2): 441-462.
- 11. Morello-Frosch R, Pastor M, and Sadd J. Environmental Justice and Southern California's 'Riskscape': the Distribution of Air Toxics Exposures and Health Risks Among Diverse Communities. *Urban Affairs Review.* 2001;36(4): 551-578.
- 12. Brooks N, and Sethi R. The Distribution of Pollution: Community Characteristics and Exposure to Air Toxics. *Journal of Environmental Economics and Management*. 1997;32(2): 233-250.
- 13. Surface Transportation Policy Project. *Alliance for a New Charter.* Available at: http://www.transact.org. Accessed February 2008.
- 14. U.S. Environmental Protection Agency. *Climate Change and Public Health*. United States Office of Policy, Environmental Protection Planning and Evaluation Agency (2171) EPA 236-F-97-005. October 1997.
- 15. Klinenberg E. Heat Wave: A Social Autopsy of Disaster in Chicago. Chicago: University of Chicago. 2002.
- 16. Fleming G, et al. *Transportation Related Noise in the United States*. National Academy of Sciences Transportation Research Board Committee on Transportation-Related Noise and Vibration. Available at: http://www.trb.org/publications/millennium/00134.pdf. Accessed March 2008.
- 17. U.S. Environmental Protection Agency. The Urban Noise Survey. EPA 550/9-77-100. 1977.
- 18. Stansfeld SA. Noise Pollution: Non-Auditory Effects on Health. British Medical Bulletin. 2003;68: 243-257.
- 19. Pucher J, and Dijkstra L. Promoting Safe Walking and Cycling to Improve Public Health: Lessons From The Netherlands and Germany. *American Journal of Public Health*. 2003;93(9): 1509-1516.
- 20. Braddock M, Lapidus G, Gregorio D, Kapp M, and Banco L. Population, Income, and Ecological Correlates of Child Pedestrian Injury. *Pediatrics*. 1991;88(6): 1242-1247.
- 21. Mueller B, Rivara F, Shyh-Mine L, and Weiss N. Environmental Factors and the Risk for Childhood Pedestrian-Motor Vehicle Collision Occurrence. *American Journal of Epidemiology.* 1990;132(3): 550-560.
- 22. Puranik S. Profile of Pediatric Bicycle Injuries. Southern Medical Journal. 1998;91(11): 1033.
- 23. Benedict A, Dawkins C, Haas P, Makarewicz C, and Sanchez T. *Housing & Transportation Cost Trade-Offs and Burdens of Working Households in 28 Metro Areas.* Center for Neighborhood Technology and Virginia Tech University. 2006. Available at: http://www.cnt.org/repository/H-T-Tradeoffs-for-Working-Families-n-28-Metros-FULL.pdf. Accessed January 30, 2008.
- 24. Metropolitan Transportation Commission. Vehicle Ownership Forecasts for the San Francisco Bay Area 1990-2030,

- Based on ABAG Projections 2000 & Projections 2005: Data Summary. Prepared by the Planning Section of the Metropolitan Transportation Commission. November 2005. Available at: http://www.mtc.ca.gov/maps_and_data/datamart/forecast/Vehicle_Ownership_Forecasts_Report_Nov2005.pdf. Accessed February 2008.
- 25. Blash L, Nakagawa M, and Rogers J. 2002 On-Board Passenger Survey: System-Wide Results. Prepared for Alameda Contra Costa Transit District by the Public Research Institute. September 2003. Available at: http://www2.actransit.org/pdf/planning_focus_182.pdf. Accessed October 2006.
- 26. Metropolitan Transportation Commission. *Transit Passenger Demographic Survey*. Presentation. Prepared by Goodbe Research. 2007. Available at: http://apps.mtc.ca.gov/meeting_packet_documents/agenda_878/5_MTC Demographics_Survey_Presentation.pdf. Accessed March 2008.
- 27. Communities for a Better Environment, Urban Habitat, & Public Advocates, Inc. *MTC*, *Where Are Our Buses?*: *Challenging the Bay Area's Separate and Unequal Transit System*. December 20, 2006. Available at: http://urbanhabitat.org/files/MTC-Where%20Are%20Our%20Buses12.20.pdf. Accessed February 2007.
- 28. Carson K. Alameda County Urges MTC to Halt Funding Bias Against East Bay Bus Riders: Similar Positions Taken by the Oakland, Berkeley, and Richmond City Councils. May 23, 2006. Available at: http://www.acgov.org/board/district5/articles/busriders.pdf. Accessed May 2008.
- 29. Metropolitan Transportation Commission and Caltrans District 4. *Bay Area Transportation: State of the System Report 2006*. 2006. Available at: http://www.mtc.ca.gov/library/state_of_the_system/2006/State_of_the_System-06.pdf. Accessed February 2008.
- 30. Exhibit E to Exhibit 1 to Declaration of Thomas A. Rubin In Support of Plaintiff's Motion for Summary Adjudication, Filed April 1, 2008. p3-4. *Darensburg et al. v. Metropolitan Transportation Commission*. Case No. C-05-1597-EDL.
- 31. Hobson J, and Quiroz-Martinez J. *Roadblocks to Health: Transportation Barriers to Healthy Communities.* Transportation and Land Use Coalition. 2002. Available at: http://www.transcoalition.org/reports.html#justice. Accessed October 2007.
- 32. Orain & Associates, and Byrd R. *Using Public Transportation to Reduce the Economic, Social and Human Costs of Personal Immobility.* Prepared for Transit Cooperative Research Program, Transportation Research Board and National Research Council. December 1998. Available at: http://books.nap.edu/openbook.php?record_id=9438&page=R1. Accessed April 2008.
- 33. U.S. Department of Transportation. *Cypress Freeway Replacement Project: California Department of Transportation*. Prepared for the U.S. Department of Transportation, the Federal Highway Administration, and the Federal Transit Administration. n.d. Available at: http://www.fhwa.dot.gov/environment/ejustice/case/case5.htm. Accessed March 2008.
- 34. City of Oakland. 2007 Oakland Bicycle Master Plan. Available at: http://www.oaklandpw.com/AssetFactory.aspx?did=2886. Accessed February 2008.
- 35. City of Oakland. *Oakland Pedestrian Master Plan*. Available at: http://www.oaklandnet.com/government/Pedestrian/PedMasterPlan.pdf. Accessed February 2008.
- 36. Metropolitan Transportation Commission. *Travel Forecasts for the San Francisco Bay Area 2009 Regional Transportation plan Vision 2035 Analysis: Data Summary.* Prepared by the Planning Section of the Metropolitan Transportation Commission. November 2007. Available at: http://www.mtc.ca.gov/planning/2035_plan/tech_data_summary_report.pdf. Accessed March 2008.

Data Sources

- 1. Benedict A, Dawkins C, Haas P, Makarewicz C, and Sanchez T. *Housing & Transportation Cost Trade-Offs and Burdens of Working Households in 28 Metro Areas*. Center for Neighborhood Technology and Virginia Tech University. 2006. Available at: http://www.cnt.org/repository/H-T-Tradeoffs-for-Working-Families-n-28-Metros-FULL.pdf.
- 2. Communities for a Better Environment, Urban Habitat, & Public Advocates, Inc. *MTC*, *Where Are Our Buses?: Challenging the Bay Area's Separate and Unequal Transit System*. December 20, 2006. Available at: http://urbanhabitat.org/files/MTC-Whe re%20Are%20Our%20Buses12.20.pdf.
- 3. National Transit Database, as included in Exhibit E to Exhibit 1 to Declaration of Thomas A. Rubin In Support of Plaintiff's Motion for Summary Adjudication, Filed April 1, 2008. p3-4. Darensburg et al. v. Metropolitan Transportation Commission, Case No. C-05-1597-EDL.
- 4. California Highway Patrol. *Statewide Integrated Traffic Records System (SWITRS)*. Computer File. Reference http://www.chp.ca.gov/switrs/.
- 5. U.S. Census Bureau. Census 2000. Available at: http://www.factfinder.census.gov/.

Air Quality

Historical Overview

Too often hazardous waste facilities, sanitary landfills, refineries, and other polluting industries have been sited in poor communities and communities of color, creating distasteful, noxious, and unhealthy living conditions. Furthermore, governmental response to these injustices has been slow and incomplete. The Environmental Justice (EJ) movement grew in response to these discriminatory practices. Drawing on the Civil Rights movement and the legal foundation of Civil Rights Act of 1964, environmental justice advocates brought public attention to the common practice of intentionally placing environmental toxins in the proximity of African American communities. The EJ movement picked up momentum in the 1980s, after court cases charging racial discrimination in the siting of toxic waste facilities and the subsequent publication of an important federal study, *Siting of Hazardous Waste Landfills and Their Correlation with Racial and Economic Status of Surrounding Communities*. 1,2

The National Environmental Policy Act (NEPA) of 1969 set a standard of safe, healthful environments for all Americans and instituted the requirement of environmental impact assessments on federal government projects. The EJ movement helped to force recognition that these impact assessments were not adequately considering impacts to communities of color. In 1994 Executive Order 12898, *Federal Actions to Address Environmental Justice in Minority Populations and Low-Income Populations* was issued. This order focused attention back on the intent of NEPA and called for improved assessment of exposure, risk, and impacts on the poor and people of color, in addition to addressing mitigation and involving communities in the process. Congress, however, subsequently failed to pass the Environmental Justice Act, blunting the impact of these policies. Litigation in the area has not been successfully pursued. As a result, environmental justice advocates must continue to fight to ensure polluters are not disproportionately concentrated in communities of color and to ensure environmental standards are enforced.³⁻⁵

What Research Tells Us

The San Francisco Bay Area is a major metropolitan area with a large volume of traffic, commerce, and industry. As a result, all Bay Area residents are exposed to levels of air pollution that are above state air quality standards for both ozone and diesel particles. However, some Bay Area residents are exposed to much higher levels of air pollution than others by virtue of where they live and go to school. And while technological advances and regulatory processes have led to decreased vehicle and industrial emissions in the last three decades, these improvements have been offset by huge increases in the number of vehicles on the road, the number of miles traveled, and the volume of goods being transported.

Yesterday's Zoning, Today's Toxic Neighborhoods

A growing body of research provides strong evidence that poor people and people of color are much more likely than Whites and those with higher incomes, to live in close proximity to areas with high levels of air pollution, such as freeway interchanges, ports, railways, and industrial toxic release sites. 7,10-12 It is no accident that vulnerable populations (children, elderly, poor, non-White) live in areas with the worst air quality. Those who can least afford to be sick and have the least access to health care and other social commodities have often been excluded from the land use planning process and decisions that shape the environment in which they live. Historically, zoning ordinances effectively maximized property values of the wealthy while simultaneously relegating low income and people of color to areas zoned for industrial use.13 While many historical land use decisions cannot be undone, planners, policy makers, and public health officials have a duty, not only to protect residents in polluted areas from excess exposures and health risks, but to engage community residents in the mitigation process wherein community development, regulatory, and other decisions are made.

Dirty Air from Transport, Industry and Our Everyday Lives

Air pollution, or outdoor toxic air contaminants, comes from three main sources: 1) mobile sources such as cars, trucks, trains, and ships; 2) stationary sources, such as factories and power plants; and 3) area sources, such as fireplaces, lawn mowers, and dry cleaners. Diesel exhaust is an extremely harmful component of air pollution, especially the smaller particles 2.5 microns or less in size. Diesel particles contain toxic and carcinogenic compounds, including benzene, arsenic, and formaldehyde. These compounds can go deep into the lungs and directly into the blood stream. Additional toxic air contaminants are present in other motor vehicle exhaust and industrial emissions, including nitrogen oxides, sulfur dioxide, ozone, lead, acrolein, and dioxin. 14-16

Children and Workers Pay the Highest Health Price

Long-term exposure to air pollution leads to higher rates of illness and premature death. 16-19 Truckers and heavy equipment operators who work around diesel exhaust are at increased risk of lung cancer.²⁰ Shorter term exposures can make allergies, asthma, and chronic bronchitis worse.²¹ Air pollution also can affect fetal development, decrease lung function, and increase susceptibility to respiratory infection.²¹⁻²³ Many air pollutants have recently been found to be harmful to more vulnerable groups, including children, the elderly, and asthmatics, at levels that were previously thought to be safe.21 In fact, exposure to air pollution may actually affect the long-term development of young children's respiratory, nervous, endocrine, and immune systems.²³ Children, especially, may be more vulnerable to air pollutants because they breathe more rapidly than adults, they tend to breathe through their mouths, their immune systems are not fully developed, and they spend more time outdoors.²¹

LIFE AND DEATH FROM UNNATURAL CAUSES

Air Quality

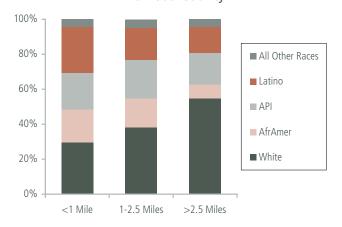
A Look at Alameda County

Air Pollution from Industrial Sources

In this section, characteristics of Alameda County residents living in close proximity to industrial toxic release sites are examined in relation to the population living at greater distances from those sites. This approach was used in an earlier study of the Greater Bay Area and the findings are consistent with that study. They show that poor people and people of color are exposed to higher concentrations of industrial air pollutants in Alameda County than are wealthy people and White people, in part because they live in closer proximity to stationary sources of industrial pollution.

Figure 42 shows that non-White residents are more likely to live near a polluting facility than White residents. The percentage of non-White residents, particularly African Americans and Latinos, is greatest within 1 mile of a toxic release facility and grows smaller at greater distances. The percent non-White decreases from 71% within 1 mile of a toxic facility to 62% within a 1 to 2.5 mile radius, and to 45% at a distance of more than 2.5 miles.

Figure 42: Population Racial/Ethnic Composition by Proximity to Toxic Air Release Facilities,
Alameda County



Sources: TRI 2005; Census 2000.

Similarly, Table 7 shows that the percentage of the population living in poverty is highest within 1 mile of toxic release sites (13.4%) and lowest at 2.5 miles

(7.4%). The differences are even more pronounced for children under 5 years of age: 15.8% of those living near a toxic facility live in poverty compared to 6% of those living 2.5 or more miles away. Per capita annual income decreases with proximity to a facility, while the percentage of recent immigrants and foreign born increases. In addition, home ownership is lowest, 52.7%, nearer the sites.

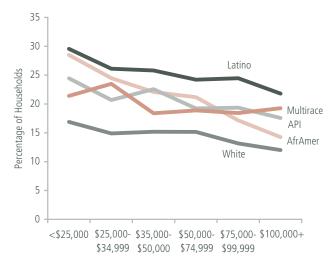
Table 7: Proximity to Toxic Air Release Facilities by Demographic Characteristics, Alameda County

	TRI Proximity			
	<1 mile	1-2.5 miles	>2.5 miles	
% Below poverty	13.4	12.2	7.4	
% Children <5 below poverty	15.8	14.4	6.0	
Per capita annual income	\$21,343	\$24,835	\$33,512	
% Homeowners	52.7	50.3	63.7	
% Recent immigrants (>1980)	24.9	21.2	15.3	
% Foreign-born	32.5	28.0	22.2	

Note: Census 2000 block group data used for analysis. Sources: TRI 2005; Census 2000.

Figure 43 demonstrates that racial/ethnic disparities persist even when income level is taken into account. The percentage of each race/income group living within a mile of a toxic air release facility declines with increasing income. Most notably, the percentage of ev-

Figure 43: Households Living Within 1 Mile of Toxic Air Release Facilities by Race/Ethnicity and Income, Alameda County



Sources: TRI 2005; Census 2000.

ery non-White group living within a mile of a facility is higher than Whites at every income level.

Air Pollution from Roadways

In Alameda County the proportion of African Americans and Latinos living within 500 feet of freeways is higher than in areas beyond 500 feet of freeways (41% versus 33%).

Higher levels of toxic air contaminants have been documented around schools near and downwind of busy roadways, and children attending these schools are more likely than other children to have asthma symptoms.8 Legislation passed in 2003 prohibits new schools from being situated within 500 feet of a highvolume roadway (≥100,000 vehicles per day).²⁴ While there are no private schools situated so close, there are 10 public schools, K-12, that lie within 500 feet of a high-volume freeway (Table 8). These 10 schools, serving over 5,400 children, most of them in elementary school, could not be built in their present locations today due to unacceptably high levels of air pollution. Seven of the 10 schools are in the Oakland Unified School District, and 1 each is in Fremont, Hayward, and San Leandro Unified School Districts.

Table 8: Public Schools by Proximity to Freeways and Free or Reduced Price Meal Program Status,
Alameda County

	Not Within	Within 500 Ft Med	Within 500 Ft High	
% Students FRPMP	500 Ft	Volume	Volume	Total
Not high poverty (<60%)	206	24	3	233
High poverty (>=60%)	106	23	7	136
Total schools	312	47	10	369
% Schools high poverty	34.0	48.9	70.0	36.9

Notes: Proximity to freeways: 1) not within 500 feet of medium- or high-volume freeway, 2) within 500 feet of medium-volume freeway (25,000 to 100,000 vehicles per day), and 3) within 500 feet of a high-volume freeway (>=100,000 vehicles per day).

Source: California Deptartment of Education 2006-2007.

In addition to the 10 schools located within 500 feet of a high-volume freeway, there are 47 schools in the

county within 500 feet of a medium-volume freeway (25,000 to 100,000 vehicles per day). Fortunately, the majority of public schools, 312 out of a total of 369 (85%), do not lie within 500 feet of either medium- or high-volume freeways.

Using the percentage of students on Free or Reduced Price Meal Programs as a proxy measure of poverty, schools were classified as high poverty if 60% or more students were enrolled in the program in the 2006-2007 school year. Table 8 shows that high-poverty schools are more likely than other schools to lie in close proximity to freeways. Just over one-third (34.0%) of schools not near medium- or high-volume freeways are high-poverty schools, compared to almost half (48.9%) of schools near medium-volume freeways and 70% of schools near high-volume freeways.

These data suggest that over 35,000 children in Alameda County are exposed to medium to high levels of traffic pollution every school day. Many of these children, especially in the high-poverty schools, carry an additional burden of being economically disadvantaged; many of them are English learners and many do not achieve proficiency in language arts. This inequitable pattern has been observed statewide as well. ¹² In order to protect the health of these children, ongoing monitoring of potentially harmful exposures and their health consequences is critical to informing future policies aimed at achieving environmental and health equity.

Air Quality in West Oakland

West Oakland residents breathe air with 3 times more diesel particles in it than the Bay Area in general.²⁵ Air pollution exposure of this magnitude translates to a 2.5 greater lifetime risk of cancer compared to that in the Bay Area. Most of this excess risk (71%) is due to diesel trucks transporting goods on freeways around the area as well as into and out of the Port of Oakland and the Union Pacific Rail Yard. Other environmental justice researchers have estimated the excess exposure to diesel particles in West Oakland to be even greater,

5-fold indoors to 9-fold outdoors.^{26,27} The problem goes beyond West Oakland. Alameda County census tracts with major freeway interchanges, truck traffic, and industry (e.g., San Leandro and Castro Valley) have a substantially higher risk of cancer and respiratory disease when compared to the nine-county Greater Bay Area.⁷

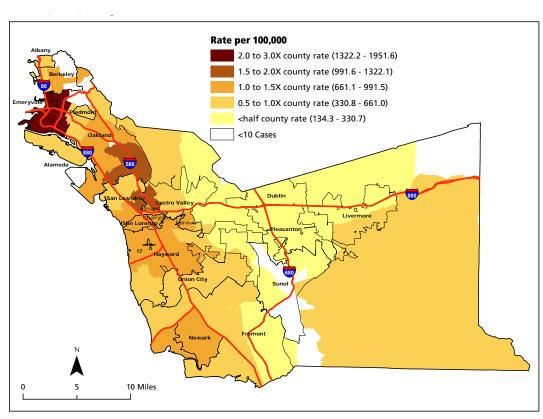
Health Impact of Air Pollution: Childhood Asthma

Asthma is generally a manageable chronic condition. Asthma attacks can be triggered by respiratory infections and allergens, including dust, mold, and air pollution.

The rate of emergency department (ED) visits for asthma countywide among school-age children (5-17 years of age) is 661.1 per 100,000. As Map 8 shows, this rate

increases by two- to three-fold in West Oakland, North Oakland, and Emeryville (range: 1,332.5 to 1951.6 per 100,000). These areas have large African American populations and many low-income residents living in the midst of major sources of air pollution and bearing a disproportionate burden of illness. Rates exceeding the county rate by 50% or more are found along the I-80, I-880 and I-580 corridors in Berkeley, Hayward, San Leandro, San Lorenzo, Castro Valley, and Newark.

African American children in Alameda County are disproportionately affected by asthma, with a rate of ED visits that is 1,675.5 per 100,000, 2.5 times higher than the overall county rate of 661.1 per 100,000 children (Figure 44 on page 94). The African American rate was fully 12 times the Asian/Pacific Islander rate, and about 4 times the Latino and White rates. Similar patterns have been observed statewide, where the rate of ED visits and hospitalizations among African



Map 8: Emergency Department Visits for Asthma, Children 5-17 Years, Alameda County

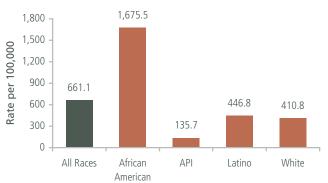
Notes: Data on ED visits reflect only those that were treated and released. ED patients admitted to the hospital are reflected only in the hospitalization data.

Source: CA OSPHD 2005-2006.

Air Quality

Americans of all ages is 3 times higher than the White rate, suggesting that this is not a localized phenomenon. This dramatic health inequity may be explained in large part by the fact that higher proportions of African Americans live in the poorest, most polluted areas and often lack access to quality housing, health care and other material resources necessary to manage asthma as a chronic condition.

Figure 44: Asthma Emergency Department Visit Rates, Ages 5-17 Years, by Race/Ethnicity, Alameda County



Source: OSHPD 2005-2006.

Data to Action: Policy Implications

s the evidence suggests, major inequities exist in Alameda County in the geographic distribution of air pollution and the populations exposed. Economically disadvantaged people, many of whom are people of color, are more likely than wealthy people or White people to live close to busy freeways, ports, and commercial sources of pollution, and their kids are likely to attend schools in more polluted areas as well. In addition, children who live in highly polluted areas experience rates of emergency department visits for asthma 2 to 3 times the rest of the county. It is imperative that government agencies work with business and residential communities to protect residents from exposure to air pollution. Following are some policy goals and recommendations that would address the inequitable distribution of toxic air contaminants and the populations exposed to them.

- Reduce exposure to diesel particulates by eliminating diesel trucks in residential neighborhoods and enforcing the no-idling law near schools.
- Require the use of clean technology in new ships and trucks and reduce emissions in existing fleets by building and leveraging funding sources to ease the transition to clean technologies.
- Ensure successful implementation of state and federal emissions reductions regulations through enforcement and cooperative work agreements across sectors.
- Identify additional means by which port, rail, and other agencies can reduce diesel and other air emissions as quickly and early as possible.
- Study trucking and shipping operations to understand their impact on low-income and vulnerable populations.
- Expand monitoring of air toxins from auto, diesel, and industrial sources to include more locations, i.e., low-income communities and schools close to freeways and ports.
- Conduct health surveys in schools located within 500 feet of major roadways to determine if prevalence of asthma and bronchitis is in excess of that observed in schools without major roadway exposures.
- Make resources available to upgrade heating and ventilation systems in schools, prioritizing those closest to freeways.
- Incorporate public health input in local land use planning and development decisions and weigh air pollution impacts.
- Engage communities in decision-making through meaningful public participation in land use planning and pollution mitigation decisions.

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References

- 1. Bullard R. *Environmental Justice in the 21st Century*. Available at: http://www.ejrc.cau.edu/ejinthe21century.htm. Accessed April 25, 2008.
- 2. U.S. General Accounting Office. Siting of Hazardous Waste Landfills and Their Correlation with Racial and Economic Status of Surrounding Communities. Washington, DC: Government Printing Office. Available at: http://archive.gao.gov/d48t13/121648.pdf. Accessed April 25, 2008.
- 3. Executive Order (12898). Federal Actions to Address Environmental Justice in Minority Populations and Low-Income Populations. 1994. Available at: http://www.ejnet.org/ej/execorder.html. Accessed March 2008.
- 4. Pollution Issues. *Environmental Justice*. Available at: http://www.pollutionissues.com/Ec-Fi/Environmental-Justice.html Accessed April 22, 2008.
- 5. EnviroJustice. *Environmental Justice Timeline*. Available at: http://www.envirojustice.org/aboutus/ejtimeline.html. Accessed March 2008.
- 6. Bay Area Air Quality Management District. *Air Quality and Blueprint Planning*. Presentation. http://www.calregions.org/regcivic/bln/20061129/20061130-hiken.ppt. Accessed April 8, 2008.
- 7. Pastor M, Sadd J, and Morello-Frosch R. *Still Toxic After All These Years: Air Quality and Environmental Justice in the San Francisco Bay Area*. Center for Justice, Tolerance and Community, University of California, Santa Cruz, February 2007.
- 8. Kim JJ, Smorodinsky S, Lipsett M, Singer BC, Hodgson AT, and Ostro B. Traffic-Related Air Pollution near Busy Roads: The East Bay Children's Respiratory Health Study. *American Journal of Respiratory and Critical Care Medicine*. 2004; 70:520-526
- 9. Frumkin H, Frank L, and Jackson R. *Urban Sprawl and Public Health: Designing, Planning, and Building for Healthy Communities.* Washington DC: Island Press. 2004.
- 10. Ash M, and Fetter TR. Who Lives on the Wrong Side of the Environmental Tracks? Evidence From the EPA's Risk-Screening Environmental Indicators Model. *Social Science Quarterly.* 2004;85(2):441-462.
- 11. Morello-Frosch R, Pastor M, and Sadd J. Environmental Justice and Southern California's 'Riskscape': the Distribution of Air Toxics Exposures and Health Risks Among Diverse Communities. *Urban Affairs Review.* 2001;36(4):551-578.
- 12. Green RS, Smorodinsky S, Kim JJ, McLaughlin R, and Ostro B. Proximity of California Public Schools to Busy Roads. *Environmental Health Perspectives*. 2004. 112(1):61-66.
- 13. Maantay J. Zoning, Equity, and Public Health. In: Hofrichter, R. ed. *Health and Social Justice: Politics, Ideology, and Inequity in the Distribution of Disease.* San Francisco, CA: Josey-Bass. 2003:228-250.
- 14. California Environmental Protection Agency. *List of Identified Toxic Air Contaminants*. Available at: http://www.arb.ca.gov/toxics/id/taclist.htm. Accessed March 17, 2008.
- 15. U.S. Environmental Protection Agency. *Particulate Matter: Health and Environment*. Available at: http://www.epa.gov/air/particlepollution/health.html. Accessed February 19, 2008.
- 16. California Environmental Protection Agency, Office of Environmental Health Hazard Assessment and American Lung Association of California. *Health Effects of Diesel Exhaust*. Fact Sheet. Available at: http://www.oehha.org/public_info/facts/dieselfacts.html. Accessed February 2008.
- 17. Künzli N, Jerrett M, et al. Ambient Air Pollution and Atherosclerosis in Los Angeles. *Environmental Health Perspectives*. 2005;113(2):201-206.
- 18. Jerret M, Burnett RT, et al. Spatial Analysis of Air Pollution and Mortality in Los Angeles. *Epidemiology*. 2005;116(6):727-736.
- 19. Kinney L. The Pulmonary Effects of Ozone and Particulate Air Pollution. *Seminars in Respiratory and Critical Care Medicine*. 2004;20(6):601-607.
- 20. Bailey D, Goldman Z, Minjares M. *Driving on Fumes: Truck Drivers Face Elevated Health Risks from Diesel Pollution.* NRDC Issue Paper. New York, NY: NRDC. December 2007.
- 21. California EPA, Office of Environmental Health Hazard Assessment and American Lung Association of California. *Air Pollution and Children's Health*. Fact Sheet. Available at: http://www.oehha.org/public_info/facts/pdf/kidsair4-02.pdf.

Accessed Feb 2008.

- 22. Vedal S, Petkau J, White R, and Blair J. Acute Effects of Ambient Inhalable Particles in Asthmatic and Nonasthmatic Children. *American Journal of Respiratory and Critical Care Medicine*. 1998;157:1034-1043.
- 23. Gauderman WJ, Avol E, Gilliland F, et al. The Effect of Air Pollutionon Lung Development from 10 to 18 Years of Age. *New England Journal of Medicine*. 2004;351(11):1057-1067. With correction from New England Journal of Medicine. 2005;1276-a.
- 24. Senate Bill No. 352, Escutia. School Sites: Sources of Pollution. Chapter 668. October 2003.
- 25. Air Resources Board, California Environmental Protection Agency. *Diesel Particulate Matter Health Risk Assessment for the West Oakland Community: Preliminary Summary of Results (Draft)*. March 19, 2008. Available at: http://www.arb.ca.gov/ch/communities/ra/westoakland/documents/draftsummary031908.pdf. Accessed March 19, 2008.
- 26. Pacific Institute. Clearing the Air: Reducing Diesel Pollution in West Oakland. Oakland: Pacific Institute. 2003.
- 27. Wu, DP. West Oakland Diesel Emissions Inventory and Air Quality Monitoring Study. Oakland: Pacific Institute. 2003.
- 28. California Department of Health Services, Environmental Health Investigations Branch. *The Burden of Asthma in California: A Surveillance Report.* June 2007.

Data Sources

- 1. U.S. Census Bureau. Census 2000. Summary File 1. Available at: http://www.factfinder.census.gov.
- 2. U.S. Environmental Protection Agency. *Toxic Release Inventory (TRI)*. 2005. Available at: http://www.epa.gov/enviro/html/tris/tris_query.html.
- 3. California Department of Education. DataQuest. 2007-2008. Available at: http://data1.cde.ca.gov/dataquest/.
- 4. California Office of Statewide Health Planning and Development. Emergency Department Data Files. 2005-2006.

LIFE AND DEATH FROM UNNATURAL CAUSES

Air Quality

Food Access Liquor Stores

Historical Overview

Discriminatory public and private policies have deprived people of color from access to health-enabling goods and services. A lack of healthy food outlets and overabundance of liquor stores are part of the legacy left behind by several decades of systematic disinvestment in low-income neighborhoods of color. Beginning in the 1930s, redlining practices of federal housing and lending institutions marked certain neighborhoods as "undesirable" places for residential and commercial investment.^{1,2} Urban neighborhood decline escalated in the face of post World War II urban renewal and suburbanization. To make way for federal highway construction and city-initiated development projects to "renew" blighted areas, properties and businesses were seized by eminent domain, large parts of neighborhoods were bulldozed, and many residents and businesses were uprooted.³ The population in urban centers declined and became increasingly segregated as middleclass (generally White) families migrated out of cities to settle in the suburbs. 1,4 Supermarkets were among the businesses that were pushed out of or left inner cities in the 1960s and 1970s—taking with them jobs, tax revenues, and healthy food offerings. 1,2,4 Many small independent groceries and corner stores were forced to close down. To stay viable, remaining stores have had to charge higher prices or focus on higher-margin sales of processed foods and beverages, along with alcohol and cigarettes.^{2,4} In some cities, opposition has arisen to corner stores that have become de facto liquor stores.^{1,2} Liquor stores in low-income communities of color have long been a source of tension and outrage, as manifested in the urban riots of the 1960s and Los Angeles riots in 1992—as they have tended to be associated with alcohol-related problems and crime rather than healthful goods and economic opportunities.

Passed in 1977 to require equal access to credit in all communities, the Community Reinvestment Act has opened up opportunities for new investment and retail activity in low-income neighborhoods of color.^{1,4} In 2000, the New Markets Tax Credit program was enacted to help stimulate private sector investment in low-income communities. In addition, community development corporations have emerged in urban centers nationwide that can advance economic and neighborhood revitalization (including supermarket development).^{2,4} However, significant challenges in accessing capital and barriers to healthful retail development persist.

Food Access and Liquor Stores

LIFE AND DEATH FROM UNNATURAL CAUSES

What Research Tells Us

Food Deserts: Lack of Healthful Foods in Low-Income Neighborhoods

Food "deserts", or places with little to no access to healthy food choices, are often found in low-income urban neighborhoods. 4.6 In addition to the historical forces described above, supermarkets are less likely to be located in low-income areas for several reasons: spending power of residents in these areas is perceived to be low; actual or perceived rates of crime are higher so insurance, security, and other operating costs are elevated; land parcels of appropriate lot size are limited and costs of acquiring and redeveloping urban sites are high; and access to financing for businesses in these areas remains difficult.4

Access to healthful foods within low-income neighborhoods is further complicated by lack of money and transportation to get to the nearest full-service grocery store—where fresh produce, meat, and dairy products are more readily available. 4,6 A recent study in three California counties (Alameda, Contra Costa, and Santa Clara) found that only 52% of people in low-income areas live within a half mile of a supermarket.⁷ Reliance upon public transit can mean fewer trips to the grocery store or only being able to purchase small quantities of groceries. 1,7 Residents in these areas are frequently relegated to shopping at neighborhood corner stores, which typically sell non-perishable or poor-quality foods at higher than average prices.^{1,4,8} While supermarkets and fresh produce vendors are lacking in these neighborhoods, there is an overabundance of unhealthful food outlets, including fast food restaurants.4,9

Poverty often results in food insecurity (which can take the form of skipped meals, limited portions, or poor-quality foods) and increases vulnerability to both hunger and obesity. ^{1,10} The budget constraints faced by low-income households can lead to malnutrition and hunger. ¹⁰ At the same time, many of those experienc-

ing food insecurity find themselves at increased risk of obesity, especially given their local food environment. A recent study in California concluded that the higher the ratio of fast food restaurants and convenience stores to grocery stores and fresh produce vendors in communities, the higher the prevalence of obesity and diabetes.¹¹ In places where healthful foods are scarce and expensive, low-income households are "forced to buy cheaper, higher-calorie foods in order to make their food budgets last."10 In addition, opportunities for physical activity tend to be more limited in low-income, high-crime neighborhoods (see Physical Activity and Neighborhood Conditions section). Greater consumption of high-calorie foods and reduced levels of physical activity have led to an intensifying obesity epidemic nationwide, but especially in low-income communities of color. 11-13 Health risks associated with obesity include increased risk of coronary heart disease, stroke, cancer, and diabetes—all chronic diseases and leading causes of death that disproportionately affect African Americans. 11,13,14

Current analysis and planning around food access in low-income communities have mostly focused on single factors (e.g., number of grocery stores, distance from the nearest full-service grocery store). In order to plan appropriate strategies, however, food access must be looked at in relation to a broader set of factors, including: viable transportation options and distance; affordability of food choices; proximity to unhealthful food sources; neighborhood safety; consumer preferences (such as store appearance, food selection, and availability of ethnic-specific foods); store hours of operation; and cultural and language competence of store owners and workers.¹

Liquor Stores: An Unhealthful Oversaturation in Low-income Neighborhoods

The very corner stores that lack healthy foods often have an abundant supply of alcohol and cigarettes, as these are products that bring in higher profit margins.^{2,4} These stores add to the higher density of liquor outlets found in low-income communities of color, which has implications for the physical availability of alcohol as well as health and quality of life in these neighborhoods.^{15,16,17} For African American and Latino males, potential health consequences are serious since they are at higher risk for alcohol-related diseases.^{18,19} In addition, liquor stores in these neighborhoods typically sell alcohol chilled and in larger containers, "ready for immediate consumption on a street corner, in a nearby park, or in a motor vehicle—drinking patterns more likely to result in excessive drinking, public drunkenness, automobile crashes, and physical violence."^{17,20}



Social and physical conditions in these neighborhoods also suffer. Liquor stores become places "where social control is weaker and social interactions that lead to crime are more likely." These stores often act as magnets for illegal activity and gathering places for loiterers, drug dealers, and prostitutes. As the number of alcohol outlets increases, so do levels of crime and violence. A high density of liquor stores contributes to urban blight and sense of neighborhood disorder, engendering feelings of personal powerlessness and psychological distress. They can also pro-

mote perceived lack of safety and limited walkability in the community. Moreover, the over-concentration of liquor stores in these already marginalized neighborhoods "may reproduce inequality by marking them as 'the ghetto'," which leads to further stigmatization and disinvestment.²⁷

A Look at Alameda County

Limited Access to Healthful Food in Many Neighborhoods

Large stores are more likely to offer a broad range of healthful food options than smaller stores. A full-service grocery store with produce department and butcher counter is typically 10,000 to 20,000 square feet. There are many more small stores (less than 3,000 square feet) in Oakland and Alameda County than large stores (greater than 10,000 square feet). This is especially true of Oakland, where only 5.3% of stores are large compared to 11.0% in the rest of the county. To expand access to healthful foods, more small stores will need to be encouraged and supported in carrying fresh produce and other nutritional foods or larger supermarkets and grocery stores will need to be attracted and developed in Oakland.

Map 9 on page 100 shows the concentration of unhealthful food outlets, including fast food restaurants and convenience stores, by neighborhood (census tract). Neighborhoods that are darkly colored have a higher density of fast food restaurants and convenience stores. Although there is not a clear spatial, racial/ethnic, or poverty correlation in these data, it can be seen that there are many areas in Alameda County with a high density of unhealthful food outlets.^a A recent study in California determined that there are over four times the number of fast food restaurants and convenience stores compared to grocery stores and produce vendors in Alameda County.¹¹ Decreasing

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a. There are some limitations to this analysis. This is based on business directory information based on NAICS codes, which may classify outlets incorrectly—those listed as convenience may, in fact, be small grocery stores or vice versa.

Outlets per 1,000 Residents

3.5 - 8.7

1.5 - 3.4

0.6 - 1.4

0.0 - 0.5

Oakland

Oa

Map 9: Fast Food and Convenience Store Density, Alameda County

Source: California Center for Public Health Advocacy, with data from ESRI/InfoUSA 2005.

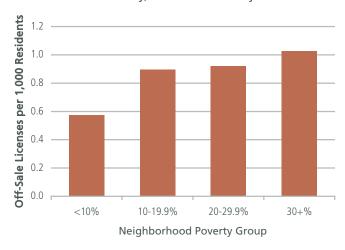
the number of unhealthful food outlets and increasing access to healthful food vendors is critical to improve local food environments that are putting residents and certain neighborhoods at increased risk of obesity and diabetes.¹¹

More Off-Sale Liquor Outlets in Higher Poverty Areas

Besides an overabundance of unhealthful food outlets and too few grocery stores, certain neighborhoods in Alameda County also suffer from a high concentration of liquor stores. Map 10 on page 101 shows the density per 1,000 residents of off-sale liquor licenses (liquor stores and other retail outlets that sell liquor for consumption off the premises). The distribution of these licenses is highly correlated with neighborhood poverty levels—the number of liquor stores nearly doubles from 0.57 per 1,000 persons in the lowest poverty areas to 1.03 in the highest poverty areas (Figure 45).

Higher liquor store density is associated with increased rates of violence. Figure 46 on page 101 shows that the rate of Part 1 and Part 2 crimes (which include most property and violent crimes) increases as liquor store density increases. The more liquor stores per 1,000 people, the more Part 1 and 2 crimes. While many other factors influence crime rates, like economic and

Figure 45: Liquor Store Density by Neighborhood Poverty, Alameda County



Sources: California Department of Alcohol Beverage Control. 2007, Census 2000.

Licenses per 1,000 Residents

>3.00

2.01 - 3.00

1.01 - 2.00

0.06 - 1.00

0.00 - 0.05

San Leandre Castro Valley

Pleasanton

Pleasanton

Pleasanton

Newark

Fremont

Newark

Fremont

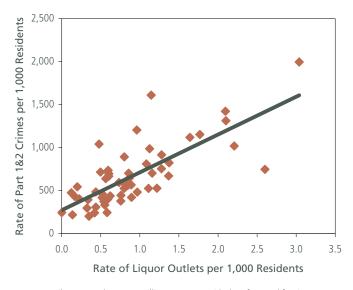
Map 10: Density of Off-Sale Liquor Licenses, Alameda County

Source: California Department of Alcohol Beverage Control, 2007.

social conditions in neighborhoods, this high correlation (0.96) suggests that the concentration of liquor

stores is an aspect of the physical environment that significantly contributes to crime.²⁸

Figure 46: Rates of Liquor Outlets Compared to Rates of Part 1 & 2 Crimes by Police Beat, Oakland



Sources: Spiker S, Sorrelgreen E, Williams J, 2007, with data from California Department of Alcohol Beverage Control. 2007 and Oakland Measure Y data 2007.

Data to Action: Policy Implications

In Alameda County, there are many neighborhoods with a high density of unhealthful food outlets. Low-income urban neighborhoods especially suffer from limited availability and affordability of healthful foods. Meanwhile in many of these same neighborhoods, the physical availability of alcohol is high and quality of life is undermined by an over-saturation of liquor stores. To improve these unequal and health-negating neighborhood conditions, the following policy goals and strategies are suggested.

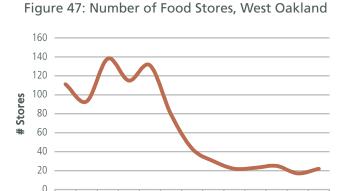
Food Access

• Limit the number and density of fast food restaurants:¹¹ Use zoning and land use regulations to

A Look at the Food and Liquor Store Environment in West Oakland

West Oakland is an example of a low-income urban community with far better access to alcohol and unhealthful foods than fresh produce and other healthful options. There is no large grocery store (>10,000 square feet) in West Oakland, since the last remaining one closed its doors in 2007. The West Oakland community was once served by numerous small independent grocers, but urban renewal projects (including the Cypress Freeway and BART construction) in the 1950s and 1960s displaced many of these food

stores (Figure 47).²⁹ Since then, the community has struggled with high levels of food insecurity, which is exacerbated by enduring conditions of poverty. According to Census 2000 data, 61% of West Oakland households earned an income of less than \$30,000 in 1999. The number and ratio of food stores to persons living in West Oakland has drastically declined over time. There were nearly 140 stores or 2.0 per 1,000 residents in 1950, but only 23 food stores or 0.9 per 1,000 residents in 2000.²⁹



Source: Fuller A, 2006.

Census 2000 data indicate that more than 35% of

households in West Oakland do not have a car, compared to 11% of households in the overall county. This implies that over one-third of residents primarily rely on walking and public transportation. To access a full-service grocery store using public transportation, residents may spend up to two hours of travel since there are no direct transit routes to the stores nearest to West Oakland. Given these transportation barriers, residents often rely upon neighborhood markets as a primary source of food.

Mandela Marketplace collected data from 22 retail stores that sell food or liquor in the 12 highest-poverty West Oakland census tracts. Findings were that 100% sold unhealthful snack foods; 96% sold alcoholic beverages; and 80% sold some type of fruit or vegetable. The quality of the produce in these stores was generally poor, and fresh food items were not well marketed or maintained. In order to purchase fresh foods at a discount rate, store owners often purchased more than they could sell within the shelf life of the produce. Produce tended to be sold even if it had sat out too long, had not been stored properly, or was deteriorating. In addition, store owners frequently had to raise fresh food prices to minimize their dollar loss.

limit the number of fast food restaurants, especially in low-income neighborhoods and around schools that currently suffer from a high density of these outlets. Local planning and zoning efforts should take into account the health consequences of building new fast food restaurants in communities that are already overburdened with unhealthful food outlets.

Increase healthful food availability in neighborhood stores and other outlets: 1,11 1) Provide financial incentives (in the form of grants, loans, and tax benefits) and other support (including facade improvement, equipment purchase, training and technical assistance) to enable existing stores to provide healthful foods at affordable prices; 2) Use general plans and zoning regulations to prioritize the development of alternative sources of fresh

- produce such as farmers' markets, community gardens, and community- and school-based produce stands; 3) Work with community groups and residents to support them in efforts to increase healthful food availability.
- Retain and attract supermarkets and full-service grocery stores:1,11 1) Use economic development and redevelopment incentives (such as grants, loans, tax credits, land assembly and eminent domain) to encourage new stores to locate in lowincome neighborhoods as well as improve existing stores; 2) Identify potential locations for full-service grocery retail in general plans and zoning regulations and prioritize that use in those locations; 3) Support community groups and coalitions in advocacy efforts to attract and retain full-service grocery stores (preferably locally owned) in underserved neighborhoods; 4) Provide demographic and other local economic data to shift business sector perceptions about local demand for healthful food retailers (i.e., local purchasing power)

Liquor Stores

- Establish and enforce regulations to restrict the number of liquor stores: 1) Ensure that California's Department of Alcoholic Beverage Control limits the number of off-sale liquor stores that are authorized to operate in census tracts which already have an over-concentration of off-sale premises. State legislation should mandate use of public health criteria in the ABC licensing process; 2) Ensure that the Oakland Planning Commission and other city planning commissions deny business license applications in areas that are already over-concentrated with off-sale premises.
- Enforce regulations to limit nuisance activity
 around liquor stores: Enforce the 1996 law that
 Oakland passed to hold liquor stores responsible
 for high levels of nuisance activities such as litter, prostitution, and drug dealing in and around
 stores, with the option of revoking their operat-

- ing permit if proof of serious nuisance issues is obtained and violations persist.
- Increase local control over problem liquor stores:
 Establish a framework under which local governments can act to mitigate negative impacts on a community's health and welfare that result from an over-concentration of liquor stores, such as allowing the creation of alcohol impact zones where liquor store operations can be more tightly restricted.
- Stop alcohol advertising that targets low-income communities of color: Restrict alcohol advertisements on storefronts and around schools and playgrounds.
- Assist with conversion of liquor stores to other retail that meets community needs. Provide redevelopment dollars, credit for repair and loans, and business plan development.

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References

- 1. Bolen E, and Hecht K. *Neighborhood Groceries: New Access to Healthy Food in Low-income Communities.* 2003. Available at: http://www.cfpa.net/Grocery.PDF. Accessed March 20, 2008.
- 2. PolicyLink. *Healthy Food Retailing: Roots of the Access Gap.* Available at: http://www.policylink.org/EDTK/HealthyFoodRetailing/Why.html#7. Accessed April 25, 2008.
- 3. Cox W. *The Role of Urban Planning in the Decline of American Central Cities*. Available at: http://www.demographia.com/db-xplannerscities.pdf. Accessed April 20, 2008.
- 4. Feldstein L, Jacobus R, and Laurison H. *Economic Development and Redevelopment: A Toolkit on Land Use and Health.* 2006. Available at: http://www.healthyplanning.org/ecdev_toolkit/EcDevToolkit.pdf. Accessed May 20, 2008.
- 5. Hutchinson E. *Liquor Store Attacks Go Deeper than Booze*. 2005. Available at: http://news.newamericamedia.org/news/view_article.html?article_id= b4e9325402f2cb20b16c3b6e6e49b95f. Accessed May 1, 2006.
- 6. Wrigley N. Food Deserts in British Cities: Policy Context and Research Priorities. Urban Studies. 2002;39(11): 2029-2040.
- 7. Hobson J, and Quiroz-Martinez J. *Roadblocks to Health: Transportation Barriers to Health Communities.* 2002. Available at: http://www.transcoalition.org/reports.html. Accessed May 2, 2006.
- 8. Troutt D. *The Thin Red Line: How the Poor Still Pay More.* San Francisco, CA: West Coast Regional Office, Consumer's Union. 1993.
- 9. Block J, Scribner R, and DeSalvo K. Fast Food, Race/Ethnicity, and Income: A Geographic Analysis. *American Journal of Preventive Medicine*. 2004;27(3): 211-217.
- 10. Food Research and Action Center. *Hunger and Obesity? Making the Connections*. Available at: http://www.frac.org/pdf/Paradox.pdf. Accessed April 15, 2006.
- 11. Babey S, Diamant A, et al. *Designed for Disease: The Link Between Local Food Environments and Obesity and Diabetes*. California Center for Public Health Advocacy, PolicyLink, and the UCLA Center for Health Policy Research. 2008. Available at: http://www.publichealthadvocacy.org/designedfordisease.html. Accessed May 6, 2008.
- 12. Centers for Disease Control and Prevention, National Center for Health Statistics. *Prevalence of Overweight and Obesity Among Adults: United States*, 2003-2004. 2007. Available at: http://www.cdc.gov/nchs/products/pubs/pubd/hestats/overweight/overwght_adult_03.htm. Accessed April 15, 2008.
- 13. Grantmakers in Health. Weighing in on Obesity: America's Growing Health Epidemic. Washington, DC: 2002. Available at: http://www.gih.org/usr_doc/Obesity.pdf. Accessed May 1, 2006.
- 14. Centers for Disease Control and Prevention, Office of Minority Health & Health Disparities. *Health Disparities Affecting Minorities: African Americans*. 2000. Available at: http://www.cdc.gov/omhd/Brochures/PDFs/1PBAA.pdf. Accessed April 17, 2008.
- 15. Gorman D, and Speer P. The Concentration of Liquor Outlets in an Economically Disadvantaged City in the Northeastern United States. *Substance Use and Misuse*. 1997;32: 2033-2046.
- 16. Stewart K. *How Alcohol Outlets Affects Neighborhood Violence*. Pacific Institute for Research and Evaluation. Available at: resources.prev.org/documents/AlcoholViolenceGruenewald.pdf. Accessed April 15, 2008.
- 17. LaVeist T, and Wallace J. Health Risk and Inequitable Distribution of Liquor Stores in African American Neighborhoods. *Social Science and Medicine*. 2000;51(4): 613-617.
- 18. Jones-Webb R. Drinking Patterns and Problems among African Americans: Recent Findings. *Alcohol Health and Research World.* 1998;22(4): 260-264.
- 19. Caetano R. Alcohol-Related Health Disparities and Treatment-Related Epidemiological Findings Among Whites, Blacks, and Hispanics in the United States. *Alcoholism: Clinical and Experimental Research.* 2003;27(8): 1337-1339.
- 20. Johns Hopkins Bloomberg School of Public Health. *Off-Premises Liquor Stores Targeted to Poor Urban Blacks*. Press Release. 2000. Available at: http://www.jhsph.edu/publichealthnews/press_releases/PR_2000/alcohol_off_premises.html. Accessed April 15, 2008.
- 21. Gruenewald P, and Remer L. Changes in Outlet Densities Affect Violence Rates. *Alcoholism: Clinical and Experimental Research.* 2006;30(7): 1184-1193.

- 22. Lipton R, and Gruenewald P. The Spatial Dynamics of Violence and Alcohol Outlets. *Journal of Studies on Alcohol.* 2002;63: 187-195.
- 23. DeFao J. Crackdown Targets 3 Problem Liquor Stores: Fearful Neighbors Cautiously Await Results of City's Action. San Francisco Chronicle. February 26, 2006.
- 24. Graham K. Isn't it Time We Found Out More about What the Heck Happens around American Liquor Stores? *Addiction*. 2006;101(5): 619-620.
- 25. Downey L, and Van Willigen M. Environmental Stressors: The Mental Health Impacts of Living near Industrial Activity. *Journal of Health and Social Behavior*. 2005;46(3): 289-305.
- 26. Geis K, and Ross C. A New Look at Urban Alienation: The Effect of Neighborhood Disorder on Perceived Powerlessness. *Social Psychology Quarterly.* 1998;61(3): 232-246.
- 27. Kwate N, and Lee T. Ghettoizing Outdoor Advertising: Disadvantage and Ad Panel Density in Black Neighborhoods. *Journal of Urban Health.* 2007;84(1): 21-31.
- 28. Spiker S, Sorrelgreen E, and Williams J. 2007 Liquor Outlet Report: A Preliminary Analysis of the Relationship Between Off-Sale Liquor Outlets and Crime in Oakland for 2007. Oakland: Urban Strategies Council. 2007. Available at: http://www.urbanstrategies.org/programs/csj/documents/Liquor_Outlets_v_Crime_in_Oakland_10-25-2007.pdf. Accessed April 20, 2008.
- 29. Fuller A. A History of Food Insecurity in West Oakland, CA: Supermarket Location. 2006. Available at: http://www.peoplesgrocery.org. Accessed April 25, 2008.
- 30. ??California Adolescent Nutrition and Fitness Program and the California Pan Ethnic Health Network. Communities of Color Issue Briefing Paper: Addressing the Obesity Epidemic—Public Policies for Healthy Eating and Physical Activity Environments. Berkeley/Oakland, California. August 2003.
- 31. Prevention Institute. Healthy Eating and Physical Activity: Addressing Inequities in Urban Environments. Oakland, CA. May 2007.

Data Sources

- 1. California Center for Public Health Advocacy. *Searching for Healthy Foods*. Computer File, with data from ESRI/InfoUSA 2005. Information available at: http://www.publichealthadvocacy.org/searchingforhealthyfood.html.
- 2. U.S. Census Bureau. Census 2000. Available at: http://www.factfinder.census.gov/.
- 3. California Department of Alcohol Beverage Control. *License Query System*. Available at: http://www.abc.ca.gov/datport/LOSMenu.html.
- 4. Spiker S, Sorrelgreen E, Williams J. 2007 Liquor Outlet Report: A Preliminary Analysis of the Relationship Between Off-Sale Liquor Outlets and Crime in Oakland for 2007. Oakland: Urban Strategies Council. 2007. Available at: http://www.urbanstrategies.org/programs/csj/documents/Liquor_Outlets_v_Crime_in_Oakland_10-25-2007.pdf. Accessed April 20, 2008.
- 5. Fuller A. A History of Food Insecurity in West Oakland, CA: Supermarket Location. 2006. Available at: http://www.peoplesgrocery.org. Accessed April 25, 2008.

Food Access and Liquor Stores

LIFE AND DEATH FROM UNNATURAL CAUSES

06 LIFE AND DEATH FROM UNNATURAL CAUSES Food Access and Liquor Stores

Physical Activity Neighborhood Conditions

"The automobile has given improved mobility primarily to the middle class, middle-aged. But these owner-drivers have not merely gained new mobility through the car; they have also rearranged the physical location patterns of society to suit their own private needs, and unwittingly in the process destroyed and severely limited the mobility and access of all others."

—K.H. Schaeffer and Elliott Sclar

Historical Overview

Major changes in lifestyle and in the built environment (the physical character of a place such as buildings, roads, malls or parks) have contributed to dramatic declines in physical activity levels of American adults over the last few decades. Historically, physical activity was woven into the fabric of life. Most jobs required physical exertion; a typical job today requires little physical exertion. Land use patterns associated with increased suburbanization and urban sprawl have changed the way we get around and how we live our lives. Transportation infrastructure has been built largely for automobiles rather than pedestrians. Consequently, travel by foot or bicycle has given way to driving. As a result, people have become much less physically active, and sedentary lifestyles have become a pressing public health problem.^{1,2}

What Research Tells Us

So Many Reasons to Exercise; Too Few of Us Do

re than half of U.S. adults are not physi- \mathbb{K} cally active on a regular basis. Just over 1 in 4 reports no leisure-time activity at all. The Centers for Disease Control and Prevention (CDC) recommends 30 minutes of moderate physical activity on at least 5 days of the week-referred to as regular leisure time activity—to maintain health and wellness.3 Physical activity can be recreational or utilitarian. Recreational activities are those done during a person's leisure time and could include jogging, hiking, weight lifting, etc. Utilitarian activities are those a person engages in for another purpose, e.g., active transport—walking or biking to get to work. Activities that have a lower exertion threshold, require less equipment, do not take much time from other activities, and have some practical purpose (e.g. active transport) can be adopted and adhered to more easily than other types.4

Physical activity has many health benefits. It promotes weight loss while preserving and increasing lean mass. It also maintains muscle strength, bone mass, proper joint function, and may foster and maintain mental health. People may have a more positive self evaluation of physical and mental health status if they are more active. The benefits of physical activity are greatest for the elderly because it delays onset of disability, chronic disease, functional limitations, and subsequent loss of independence.

Physical inactivity is linked with increased risk of coronary heart disease, colon cancer, and diabetes. Modest increases in physical activity levels are associated with substantial reduction in mortality from these conditions. Physical activity is protective against cognitive decline in the elderly, depression, osteoporosis, and a range of other common health conditions. Physical inactivity is a risk factor for being overweight, which puts people at greater risk for type 2 diabetes, stroke, and other chronic diseases.¹

Neighborhood Hurdles Sometimes Too High

Physical inactivity is higher among members of people of color, the poor, and women. 1,2,5 The poor face a more formidable combination of personal and environmental barriers to being physically active than people with higher incomes. They may face greater personal barriers because they have less leisure time available to them or have little by way of discretionary income that allows them to engage in some types of physical activity, e.g. exercising in a gym. They may also not have access to information about the amounts and type of physical activity necessary to maintain good health. 6

Studies have identified a variety of neighborhood conditions that make physical activity extremely difficult, especially for poor people. Consequently, there has been increasing emphasis on public health policies aimed at reducing barriers to physical activity in the built environment in order to enable, rather than simply motivate, change in individual behavior.² For example, poorer neighborhoods are likely to contain fewer amenities such as sports fields than affluent neighborhoods.⁶ Research has shown that limited access to parks, playgrounds, and lack of space to exercise—all of which limit people from being physically active—are often distinctive characteristics of low-income urban neighborhoods.^{2,7}

Perception of availability and access to places for physical activity in a neighborhood is an important predictor of physical activity level in communities. People are more likely to get out and be active in places that are attractive and aesthetically appealing or where others are doing the same.² These features are often lacking in poorer neighborhoods. Crime and fear of crime are a reality in many low-income communities. Crime erodes community trust and marginalizes residents. Fear of crime is likely to keep people indoors, particularly the old and the young, and discourage physical activity.⁸ Environments perceived as low in crime promote physical activity. People are most comfortable being physically active when they can do so in places

they perceive to be safe. Physical inactivity increases with decreasing neighborhood safety.²

The characteristics of the built environment that contribute to sedentary lifestyles are low density, low land-use mix, low connectivity and dependence on automobiles. Neighborhoods with accessible nearby places and less sprawling quality are places where people are more active.²

Neighborhoods designed with stores, theaters, and other destinations within walking distance of home and work have the potential to promote physical activity. Neighborhoods that have facilities for active recreation such as nearby parks, multiuse trails, and appealing sidewalks or public spaces for walks may also promote recreational activity.² Physical environments designed to facilitate commuting by foot, bicycle, or public transit help promote physical activity by incorporating walking or biking into people's daily routine.^{1,2}

Figure 48: Physically Inactive Adults by Income, Alameda County



Source: California Health Interview Survey 2003.

dents. In Alameda County, adults from low-income households are less likely to have a place to walk or exercise near their home than those from high-income households. Availability of a space^b for physical activity in the neighborhood increases with higher income (Figure 49).

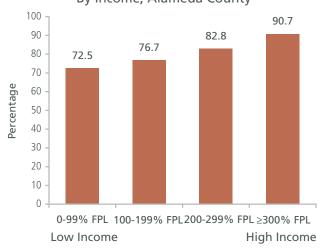
A Look at Alameda County

In Alameda County, income is associated with physical activity level (Figure 48). One-third of adults from low-income^a households are physically inactive (33.5%)—about 3 times the percentage of high-income households (11.3%).

Whites have the lowest rate of physical inactivity of all racial/ethnic groups. Adults with less than a high school education were much more likely to be physically inactive than those at higher education levels (data not shown).

Neighborhood conditions also strongly influence opportunities for physical activity among county resi-

Figure 49: Place Near Home to Walk/Exercise By Income, Alameda County



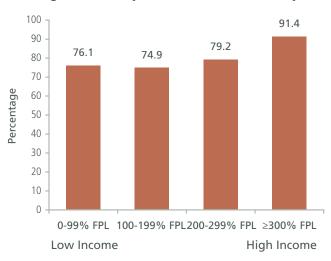
Source: California Health Interview Survey 2003.

a. The federal poverty threshold is used to define income groups in terms of poverty level, a measure of material deprivation. A household between 0 and 99% of the federal poverty level is considered low-income; households at or above 300% of the federal poverty level are considered high-income.

b. Availability of space was measured by adult respondents' reports of perceived availability of space to walk or exercise, and not actual location of space near the respondent's address.

In the county, adults from high-income households are more likely to describe their neighborhood as being safe to walk or exercise^c outdoors than those from low-income households (Figure 50).

Figure 50: Safe to Exercise Outdoors in Neighborhood By Income, Alameda County



Source: California Health Interview Survey 2003.

Availability of space to walk or exercise in the neighborhood and safety are strongly associated with physical activity level among adults in the county. Adults with no access to a place near home to walk or exercise are over twice as likely to be physically inactive than those with access to a space for physical activity (data not shown). Adults who perceive their neighborhood as unsafe to walk or exercise are 60% more likely to be physically inactive than those who feel their neighborhood is safe for physical activity.

Data to Action: Policy Implications

In Alameda County, adults from low-income households are less physically active compared to adults from high-income households. The poor have fewer opportunities for physical activity. Residents in lowincome households are much less likely to have a place to walk or exercise near their home, or to feel that their neighborhood is safe for outdoor physical activity than those from high-income households. Poorer availability of space and lack of neighborhood safety strongly contribute to lower physical activity levels in low-income communities. The following policy goals and policies are suggested to address this situation.

- Develop and promote local strategies to increase availability of venues for active recreation, i.e., parks, playgrounds and school facilities, especially in low-income communities.
- Establish joint-use agreements between schools and communities, especially in low-income neighborhoods, to allow off-hour use of school courts, fields and playgrounds.
- Improve safety of parks and other recreational facilities in high crime and low-income communities by engaging policy makers, law enforcement agencies, residents, and community organizations in the development and implementation of zoning laws and general plans.
- Promote walking and biking to work, entertainment, shops, and schools, through specific proposals for city general plans, zoning requirements, use of redevelopment funds to increase land use mix in urban and suburban areas,
- Assist in the development of local planning policies that increase public transport access and improve walking and biking routes to schools, e.g. locating schools in town centers.
- Support planning and urban design strategies for streets and sidewalks that are safer for walking and biking.
- Support state legislation and local policies to promote regular physical activity in schools such as physical education programs, e.g. increase funding

c. Perceived safety was measured by adult respondents' reports of whether it was safe to exercise outdoors in their neighborhood.

for teachers and equipment especially in low-income communities.

References

- 1. Frank LD, Engelke PO, and Schmid TL. Physical Activity and Public Health. In *Health and Community Design: Impact of the Built Environment on Physical Activity.* Washington, DC: Island Press. 2003.
- 2. Frumkin H, Frank L, and Jackson R. *Urban Sprawl and Public Health. Designing, Planning, and Building for Healthy Communities.* Washington, DC: Island Press. 2004.
- 3. U.S. Department of Health and Human Services, Centers for Disease Control and Prevention, National Center for Chronic Disease Prevention and Health Promotion. *Physical Activity and Health: A Report of the Surgeon General.* 1996.
- 4. Frank LD, Engelke PO, and Schmid TL. Physical Activity: Types and Patterns. In *Health and Community Design: Impact of the Built Environment on Physical Activity.* Washington, DC: Island Press. 2003.
- 5. Institute of Medicine. Health and Behavior: The Interplay of Biological, Behavioral, and Societal Influences. Behavioral Risk Factors. Washington, DC: National Academy Press. 2001.
- 6. Frank LD, Engelke PO, and Schmid TL. Physical Activity. Children, the Elderly, and the Poor. In *Health and Community Design: Impact of the Built Environment on Physical Activity.* Washington, DC: Island Press. 2003.
- 7. Babey SH, Brown ER, and Hastert TA. *Access to Safe Parks Helps Increase Physical Activity Among Teenagers*. Policy Brief. Los Angeles. UCLA Center for Health Policy Research. 2005.
- 8. Lopez RP, and Hynes H. Obesity, Physical Activity, and the Urban Environment: *Public Health Research Needs*. *Environmental Health: A Global Access Science Source*. 2006, 5:25. Also available at: http://www.ehjournal.net/content/5/1/25.

Data Sources

1. California Health Interview Survey. *CHIS 2003 Adult Special Use File*, *Release 1*. Computer File. Los Angeles, CA: UCLA Health Policy Research. February 2005.

Criminal Justice

Historical Overview

The Supreme Court's famous Dred Scott ruling in 1857, stating that African Americans "had no rights which the white man was bound to respect," demonstrates the inherently racist nature of the early American criminal justice system. We have yet to fully address the legacy of inequity that occurs throughout the criminal justice system—from arrest, to prosecution, to sentencing, and beyond.

In modern times, the two sets of policies that have served to increase inequity as well as create an overall surge in criminal justice involvement are the "war on drugs" and "tough on crime" approaches. First promoted by Richard Nixon in 1972 and strengthened in the 1980s, the war on drugs was intended to discourage the production, distribution, and consumption of targeted substances and to increase funding for enforcement. Implementation of the laws, however, resulted in a marked shift of focus; rather than targeting major traffickers, as advocates for harsher drug policies had argued, most persons incarcerated for drug offenses have been users, low-level dealers, couriers, and assistants.¹ Drug offenders in prisons and jails have increased 1,100% since 1980. Although these policies are generally race-neutral in language, their implementation demonstrates a bias toward targeting African Americans. Relative to other racial groups, African Americans have seen a much higher increase in prison admissions for drug offenses since the 1980s, even with roughly the same levels of drug use as Whites.

Increasingly punitive sentencing laws, such as California's three-strikes law, have also had a racially inequitable effect. The three-strikes law prescribes that a person who has a prior violent or serious offense and who commits a new felony can receive twice the normal prison sentence for the "second strike." A person who has committed 2 prior violent or serious offences and then commits a new felony will automatically receive 25 years to life in prison. Analyses of the effects of California's three-strikes law find that 1) there has been an overwhelming impact on African Americans and Latinos; 2) nearly two-thirds of people imprisoned were sentenced for nonviolent offenses; and 3) the counties that used three strikes most frequently have shown no greater declines in crime than those that used the law more sparingly. Collectively, these policies have served to worsen the criminal justice crisis that we face today.

Criminal Justice LIFE AND DEATH FROM UNNATURAL CAUSES

What Research Tells Us

Crime and Fear of Crime Not the Whole Picture

oth crime and the criminal justice system affect health. Actual crime can directly affect health through physical bodily harm, economic hardship and emotional trauma. Fear of crime can indirectly affect health by increasing stress, promoting social isolation, preventing health-promoting behaviors such as walking for exercise, and preventing access to services for fear of moving about freely in the community. While violence and crime are health hazards, especially in poorer communities, the institutions and practices established to prevent and respond to crime play a crucial role in perpetuating unequal patterns of crime across neighborhoods. The discussion that follows focuses primarily on the ways that our criminal justice systems are exacerbating and deepening the social and economic disparities that led to acts of crime in the first place.

The prison, jail, probation, and parole populations have grown remarkably over the past 3 decades. The United States has the largest incarcerated population in the world, with over 2.3 million people in jails or prisons as of 2008.3 That is a rate of 750 per 100,000 people, or over 1% of the adult population. According to the Bureau of Justice Statistics, if recent incarceration rates continue, an estimated 1 out of every 15 persons will serve time in a prison during his or her lifetime.4 The consequences of this rapid growth are born more heavily by urban communities, especially low-income neighborhoods and communities of color. This criminal justice phenomenon has direct and indirect health impacts on individuals, families, communities, and the society as a whole. Incarceration correlates with health directly through higher incidence and prevalence of disease among the incarcerated and previously incarcerated. It also affects health indirectly through stigmatization, unemployment, strained social networks, neighborhood conditions, and its effects

on economic opportunity in specific populations and communities.

The Disproportionate Burden of Incarceration—To What End?

Although incarceration rates are high in the general population, different segments of our society bear a disproportionate burden of incarceration. Males and African Americans are more likely to be incarcerated than other groups. While 1 in 106 adult White males is currently incarcerated, 1 in 15 adult African American males is incarcerated. Based on current rates, an estimated 32% of African American males will enter state or federal prison during their lifetime, compared to 17% of Latino males and 5.9% of White males. Finally, criminal justice involvement is more common in urban areas, as compared to suburban and rural areas.



This inequity is not merely a consequence of individual behavior. Complex social factors are involved, including institutional racism, a legacy of segregation and discrimination, inequitable education systems, limited economic opportunity, and cycles of poverty. An illustratation of this point is that Whites and African Americans use and sell drugs at similar rates, however the arrest and incarceration of African Americans for drug offenses happens at significantly higher rates. African Americans comprise 14% of regular drug users, but are 37% of those arrested for drug offenses and

56% of persons in state prison for drug offenses.¹ This inequity also extends to sentencing; African Americans serve almost as much time in federal prison for a drug offense (58.7 months) as Whites serve for a violent offense (61.7 months).¹ In an analysis of parolees to Alameda County, drug offenses were the leading reason for incarceration.⁶

While the United States saw decreases in crime in the 1990s, rising incarceration rates have not been found to be a deterrent of crime and thus a contributing factor in this decline. Research concluded that the decline in crime rates was due to a variety of social factors, including economic prosperity and the decline of the crack cocaine epidemic.^{7,8} There is also little evidence to suggest that high rates of incarceration significantly affect drug use rates or deter drug users, but rather money invested in treatment has been shown to have a greater effect on drug use and recidivism than relying solely on incarceration. Incarcerating individuals to address social ills such as substance use and violence has proven ineffective. High recidivism rates also suggest that our current approach to criminal justice does little to deter crime or address the underlying causes of crime.

The rising costs of the current tough-on-crime approach are reaching alarming levels. In California, the Department of Corrections and Rehabilitation operates on a budget of approximately \$9.7 billion annually. Local and state governments are feeling the financial burden of incarcerating so many individuals in addition to the rising enforcement and judicial costs of the current approach. States and localities that are finding themselves economically strained have been forced to rethink their approach to crime and punishment.

The Common Roots of Poor Health and Involvement in Crime

The relationship between involvement in the criminal justice system and health outcomes is complex. Patterns of health inequity and criminal justice involve-

ment may be mutually reinforcing. Some of the root causes of health inequities are the same factors that influence disproportionate crime and incarceration rates—poverty, income inequality, low levels of completed education, limited job prospects, and marginal housing.11 The population involved in the criminal justice system, which disproportionately includes lower income people and African Americans and Latinos, has a higher incidence of substance abuse and communicable disease, a higher likelihood of suicide and history of mental illness.1 This population that experiences poorer health to begin with is concentrated in prisons—places where previously existing conditions are exacerbated through further exposure to health risks and traumatic events. In addition, the incarcerated often receive inadequate health care. 12 Eventually, prisoners are likely to return to communities that are burdened with poverty and lacking the social supports they need.

The health and social consequences of incarceration are numerous. Rates of HIV, Hepatitis C, and tuberculosis are significantly higher among the incarcerated than in the general population. For those returning to the community, there are indirect impacts on health due to loss of social support, strained relationships, loss of health insurance, and lack of self-sufficiency. The formerly incarcerated face both formal and informal further punishment in the community as a result of their involvement in the criminal justice system. These may include losing the right to vote, restrictions on employment, exclusion from public housing, and limited financial support including lifetime bans on food stamps, TANF, and federal student loan programs for certain drug convictions.

These negative consequences extend to families of the incarcerated especially when they lose economic support. Incarceration can lead to an increase in single-parent households, which comes with its own set of stressors. Children of the incarcerated are at increased risk of entry into foster care and they have a 5-fold increase in chances of going to prison in their lifetime.¹

Criminal Justice LIFE AND DEATH FROM UNNATURAL CAUSES 11

A history of incarceration may also precipitate homelessness.

Vicious Cycles of Concentrated Crime Punish Whole Communities

Areas of high arrest, crime, and probationer and parolee residence are distributed unevenly and tend to be concentrated in particular neighborhoods. These neighborhoods face the multiple burdens of high rates of communicable disease, mental health concerns, substance abuse, stigma as a result of crime and arrest patterns, loss of wage earners, and the possible spread of gang activity. 11,14,15 The prospect of new crimes committed by returning prisoners can elevate fear of victimization among residents and perceptions that the neighborhood is unsafe. Many disenfranchised individuals concentrated in one area can decrease that community's political influence and ability to advocate for change through government channels.11 Concentrated populations of formerly incarcerated persons may decrease levels of trust and social cohesion and increase social isolation1 (see Social Relations and Community Capacity section).

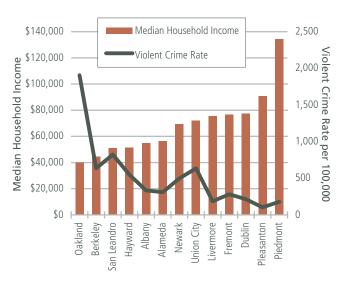
Cycles of community chaos and criminal activity, increased police activity, police misconduct, and community distrust of the police keep many communities stuck in a state of turmoil and instability. 15 Increases in spending for the corrections system are seen as diverting resources from crucial social needs such as education and health. In addition, incarceration rates can skew the data that influence the distribution of needed social services. For example, most correctional facilities are located in rural and suburban areas, while most individuals housed in correctional facilities come from urban communities. Census data—used to allocate funding—count incarcerated individuals as part of the communities in which the correctional facility is located, not the jurisdictions where they are from and to which they will most likely return.

A Look at Alameda County

Crime and Income

Neighborhoods with higher income have lower violent crime rates, while areas with lower income show elevated violent crime rates. While these inequities are substantial at the neighborhood level, we have complete data only for cities (Figure 51). In Alameda County, violent crime is highly associated with median household income at the city level (correlation is 0.6). Oakland has the highest violent crime rate (1,905 crimes per 100,000 population) and the lowest median household income (just over \$40,000), while Piedmont and Pleasanton have the highest incomes and lowest violent crime rates.

Figure 51: Median Household Income and Violent Crime Rate, Cities in Alameda County



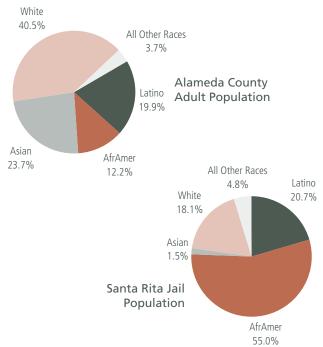
Note: Violent crime here includes forcible rape, homicide, assault, and robbery. Sources: Census 2000; FBI UCR 2006.

Racial/Ethnic Patterns of Incarceration

In Alameda County, the rapid growth in the criminal justice system and the racial/ethnic patterns of inequity follow the national trend. Alameda County had 4,546 persons in state prisons as of December 2006, and 3,783 people in the county jail at Santa Rita as of March 2008. In Santa Rita Jail, 55.0% of the inmates

were African American, while only 18.1% were White (Figure 52). In the county, 12.2% of adult residents are African American and 40.5% are White.

Figure 52: Alameda County and Santa Rita Jail Racial/Ethnic Breakdown. 2008



Sources: Alameda County Sherrifs Office 2008, DOF 2008.

As noted previously, Whites and African Americans use and sell drugs at similar rates; however, the arrest and incarceration of African Americans for drug offenses happen at rates that are dramatically higher.⁵ Of the 198 largest counties in the United States, Alameda County has the 10th highest rate of admission to state prison for drug offenses and the 18th highest ratio of African American to White drug admission rates.⁵ African Americans are admitted to state prisons for

Table 9: State Prison Drug Offense Admission Rate

	Admission Rate per 100,000			Ratio of African	
	County		African	American	
	Overall	White	American	to White	
Alameda	154.9	23.1	797.5	34.5	
Contra Costa	49.7	25.9	218.8	8.5	
San Francisco	123.4	35.8	1,013.9	28.3	

Source: Beatty P, Petteruti A, and Ziedenberg J, The Vortex, 2007.

drug offenses at a rate of 797.5 per 100,000 people, while Whites in the county have a rate of 23.1 drug admissions per 100,000 people (Table 9). Thus, African Americans are about 34.5 times more likely than Whites to be imprisoned for drug offenses.

California's three-strikes law has substantially contributed to an increase in the state's prison population, and nearly two-thirds of second or third strikers have been incarcerated for nonviolent crimes. Statewide, African Americans and Latinos have been imprisoned under three strikes at much higher rates than Whites. In Alameda County, the African American incarceration rate under three strikes has been 19 times higher than the White rate (Table 10). For Latinos, the incarceration rate has been nearly twice that of Whites.

Concentrations of Probationers and **Parolees**

There were over 11,000 persons on county probation in Alameda County at mid-year 2007. Areas of high arrest, crime, and probationer and parolee location are not equally distributed around the county and tend to

Table 10: Incarceration Rates Under Three-Strikes Law

		Incarceration Rate per 100,000			Black-to-	Latino-to-	
		Total	White	Latino	Black	White Ratio	White Ratio
California	All-strikers	21.9	11.8	17.2	150.0	12.7	1.5
	Third-strikers	126.1	69.4	126.2	721.3	10.4	1.8
Alameda County	All-strikers	42.2	11.6	19.3	220.2	19.0	1.7
	Third-strikers	7.5	1.8	2.5	42.0	22.7	1.4

Sources: Ehlers S, Schiraldi V, and Lotke E. Racial Divide: An Examination of the Impact of California's Three Strikes Law on African-Americans and Latinos. 2004.

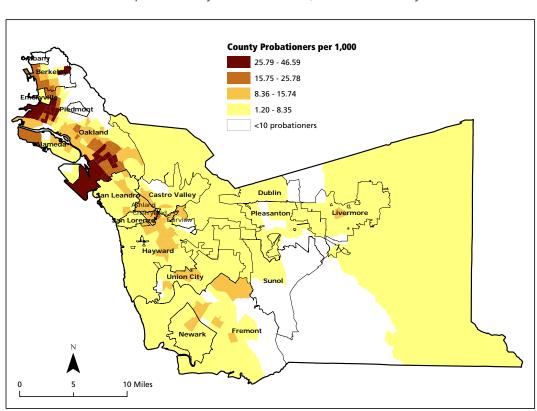
be concentrated in a small number of neighborhoods. Map 11 illustrates probationer location rates in Alameda County by census tract. Areas with the highest concentration of individuals on probation are clustered in parts of Berkeley, East Oakland, West Oakland, and some of the unincorporated areas. This concentration of persons on probation is highly correlated with neighborhood poverty rates in these neighborhoods.

In addition to those on probation, 6,270 people from state prisons were paroled to Alameda County in 2006. A recent study conducted by the Urban Institute suggests that "returning prisoners are increasingly concentrated in communities that are often crime-ridden and lacking in services and support systems." As explained earlier, this clustering of individuals who are still involved in the criminal justice system substantially affects their families and communities.

Data to Action: Policy Implications

In order to address inequities that the criminal justice system perpetuates, we must look at the causes of disproportionate criminal justice involvement for low-income persons and communities of color. Also, we must acknowledge that relying on punitive measures alone does little to reduce rates of crime, substance abuse and sales, or violence in our communities. Instead, we can look to alternatives to incarceration where plausible and minimize unnecessarily punitive measures that expand the already huge population behind bars. Some policy goals and strategies include the following.

 Decriminalize substance addictions and, in lieu of relying solely on incarceration, use evidence-based models to address drug use and abuse that have been shown to reduce recidivism. For example, en-



Map 11: County Probation Rate, Alameda County

Source: Alameda County Probation Department, FY2005-2006.

- sure adequate funding for Prop 36, which diverts drug offenders from prison.
- Revisit and revoke laws that are unnecessarily punitive and contribute to the rapid growth of the incarcerated population. Revoke California's threestrikes law and review new legislation that increases punishments for certain types of gang activity.
- Review corrections and criminal justice system policies that disproportionately punish people of color, from the point of police contact through to incarceration.
- Review and revoke policies that punish individuals upon return to the community and inhibit their ability to reintegrate into society. For example, remove from application forms questions that ask if the individual is a felon, repeal the federal ban on student loans to the formerly incarcerated with drug convictions, and allow non-violent drug offenders the opportunity to expunge their records.
- Support programs that promote the successful re-entry of individuals back into their communities, such as the federal re-entry bill, the Second Chance Act.
- Integrate services to individuals on probation in order to provide access to needed support such as social, health, education, housing, and vocational services.
- Address revocation of parole for technical violations and re-institute halfway back programs for substance abuse lapses.

References

- 1. Mauer M, and King RS. A 25-Year Quagmire: The War on Drugs and Its Impact on American Society. The Sentencing Project. 2007.
- 2. Ehlers S, Schiraldi V, and Lotke E. *Racial Divide: An Examination of the Impact of California's Three Strikes Law on African-Americans and Latinos*. Justice Policy Institute. 2004. Available at: http://www.justicepolicy.org. Accessed March 2008.
- 3. Pew Center on the States. One in 100: Behind Bars in America 2008. 2008.
- 4. Bureau of Justice Statistics. *Criminal Offenders Statistics*. Available at: http://www.ojp.usdoj.gov/bjs/crimoff.htm. Accessed April 2008.
- 5. Beatty P, Petteruti A, and Ziedenberg J. *The Vortex: The Concentrated Racial Impact of Drug Imprisonment and the Characteristics of Punitive Counties.* Washington, DC: Justice Policy Institute. 2007.
- 6. McKinney T, and Williams J. A Report on People Under Criminal Justice Supervision in Alameda County. Oakland, CA: Urban Strategies Council. January 2006. Available at: http://www.urbanstrategies.org/programs/csj/documents/ReportonPeopleunderCJSupervision_FINAL_020306.pdf. Accessed May 2008.
- 7. Stemen D. Reconsidering Incarceration: New Directions for Reducing Crime. Federal Sentencing Reporter. 2007;19(4): 221-233.
- 8. Spelman W. The Limited Importance of Prison Expansion. In: Blumstein A, and Wallman J, eds. *The Crime Drop in America*. Cambridge: Cambridge University Press; 2000.
- 9. Aos S, Miller M, and Drake E. *Evidenced-Based Adult Corrections Programs: What Works and What Does Not.* Olympia: Washington State Institute for Public Policy. 2006.
- 10. California Department of Corrections and Rehabilitation. *State Budget Highlights 2007-2008*. Available at: http://www.dof.ca.gov/budget/historical/2007-08. Accessed April 2008.
- 11. Freudenberg N. Jails, Prisons, and the Health of Urban Populations: A Review of the Impact of the Correctional System on Community Health. *Journal of Urban Health*. 2001;78(2): 214-235.
- 12. Alameda County Reentry Health Task Force. *Basic Information about the Receiver.* Available at: http://www.urbanstrategies.org/documents/Informationaboutthereceiver_07.06.07_bh.doc. Accessed May 2008.
- 13. Williams NH. Prison Health and the Health of the Public: Ties That Bind. *Journal of Correctional Health Care*. 2007;13(2):80-92.
- 14. Golembeski C, and Fullilove R. Criminal (In)Justice in the City and Its Associated Health Consequences. *American Journal of Public Health*. 2005;95(10): 1701-1706.
- 15. Taxman F, Byrne J, and Pattavina A. Racial Disparity and the Legitimacy of the Criminal Justice System: Exploring Consequences for Deterrence. *Journal of Health Care for the Poor and Underserved*. 2005;16: 57-77.
- 16. California Department of Corrections and Rehabilitation. *California Prisoners and Parolees Annual Report*. Available at: http://www.cdcr.ca.gov/Reports_Research/Offender_Information_Services_Branch/Annual/CalPrisArchive.html. Accessed December 2007.
- 17. Lynch JP, and Sabol WJ. *Prisoner Reentry in Perspective*. Crime Policy Report Vol.3. Washington DC: The Urban Institute. 2001. Available at: http://www.urban.org/projects/reentry-portfolio/publications.cfm. Accessed April 2008.

Data Sources

- 1. Federal Bureau of Investigation. *Uniform Crime Reports (UCR)*. Available at: http://bjsdata.ojp.usdoj.gov/dataonline/, http://ag.ca.gov/cjsc/statisticsdatatabs/CrimeCity.htm, and http://www.fbi.gov/ucr/ucr.htm.
- 2. Alameda County Sherrif's Office. Jail Population Profile. March 28, 2008.
- 3. California Department of Finance. *Race/Ethnic Population with Age and Sex Detail*, 2000-2050. 2007. Available at: http://www.dof.ca.gov/Research/Research.php.
- 4. Beatty P, Petteruti A, and Ziedenberg J. *The Vortex: The Concentrated Racial Impact of Drug Imprisonment and the Characteristics of Punitive Counties.* Washington, DC: Justice Policy Institute. 2007.
- 5. Alameda County Probation Department. Probationers. FY2005-2006. Computer File.
- 6. Ehlers S, Schiraldi V, and Lotke E. *Racial Divide: An Examination of the Impact of California's Three Strikes Law on African-Americans and Latinos*. Justice Policy Institute. 2004. Available at: http://www.justicepolicy.org.

Access to Health Care

"Of all the forms of inequity, injustice in health care is the most striking and inhumane."

—Martin Luther King, Jr.

Historical Overview

Modern health insurance in the United States dates back to 1929 when it was linked to employment and employers assumed the administrative tasks of enrolling employees and collecting premiums. Health insurance spread during World War II after employers were permitted to increase their provision of health insurance and to consider those premium payments as legitimate costs of doing business. Rather than being guided by consistent policies aimed at equitable access to health care for all, the growth of an employer health insurance system was not conceived or driven as intentional government policy. The expanding private market private for health insurance over the years opened the door to for-profit insurers who were able to compete by offering narrower and customized benefit packages at lower premium costs. The entry of the for-profit sector shifted the system from the traditional "community-rated" models to "experience-rated" premiums (meaning that the healthier or younger the employees, the lower the premium) and provided an incentive to "disengage" from those who were higher risk (among whom were the sick and the aged). These features continue to characterize many private health insurance plans offering coverage or employer health benefit management services today. In 1965, the federal government enacted legislation for programs to cover most individuals 65 years and older (Medicare) and some discrete categories of the poor (Medicaid)—the major sources of public health insurance today. The expanding power of medicine to help the sick and the spread of private and public health insurance in the twentieth century resulted in a great increase in medical care utilization and investment in the expansion of for-profit hospitals, long-term care institutions, and Health Maintenance Organizations (HMOs). Moving into the 21st century, as health care costs skyrocketed and rates of the uninsured rose drastically; several efforts to reform the broken system have been attempted by both national and state legislators. Changes have been piecemeal and profound inequities in access to needed care persist.¹

Access to Health Care LIFE AND DEATH FROM UNNATURAL CAUSES

What Research Tells Us

Health Insurance: Not Universal, Not Affordable

Insurance coverage is a major determinant of access ▲ to health care services in the United States. The majority of Americans have private health insurance through their own, a spouse's, or a parent's employment. A small percentage has coverage through directly purchased private insurance. Government provided health coverage—an important source of insurance—includes Medicaid (for low-income children and adults), the State Children Health Insurance Program (SCHIP) for low-income children, Medicare (for adults 65 years and older), and military veteran's coverage.² Medi-Cal—California's Medicaid program—has broader income eligibility criteria than the federal criteria.³ The Healthy Families Program—California's version of SCHIP—provides low-cost health, dental, and vision coverage to children in families with income up to 250% of the federal poverty level.^{4,a}

Various factors including changes in the overall economy and the impacts on employment and family incomes, the rapid growth in health care costs and insurance premiums, and the inability of Medicaid and other public programs to cover more of the uninsured largely explain the decrease in insurance coverage over the past decade. Significant shortfalls and barriers in the current health care system contribute to inequities in health insurance coverage. The voluntary nature of employment-based coverage, the movement of employers away from "defined benefits" to "defined contribution", higher premiums, higher out-of-pocket costs for employees, and lower take-up rates are among the reasons for declining employment-based insurance rates in recent years. Complex procedures for enrollment in public programs, lack of understand-

ing or knowledge of eligibility criteria, and stigma are some of the reasons that a significant proportion of adults and children who are eligible are not currently enrolled or do not maintain enrollment in public programs.⁵⁻⁷ With few exceptions, growth in health insurance premiums has been outpacing overall inflation and increases in workers' earnings since the late 1980s. The most current national data show that Americans who get health insurance for their families through their jobs have seen their premiums increase 10 times faster than their income in recent years.8 In California, not being able to afford health insurance was the most common reason for not having coverage in 2005—accounting for 43% of the uninsured.⁵ Employment-related factors (changing employers or losing a job) was the second most common reason (15% of the uninsured). Other barriers such as immigration status, exclusion from health plans due to health conditions, and administrative delays were the reason 16% of the uninsured did not have coverage.

A Profile of the Uninsured

In the United States, uninsured rates are on the rise. 9,10 In 2006, the gaps in private and public health insurance left 46.5 million, or 18% of non-elderly, Americans without coverage. b,c The overwhelming majority of the uninsured were those from working families or those with low incomes who fell through the cracks of the health care system. Over 8 in 10 of the uninsured are from families with at least one full-time worker (70%), or at least one part-time worker (11%). Although Medicaid covers 40% of the poor, its eligibility criteria leave 37% of those below poverty level uninsured. Two-thirds of the poor or near-poord (67%) are uninsured. The uninsured rate among the non-elderly poor is twice as high as the national average (37% vs. 18%); the near-poor also run a high risk of being unin-

a. Only citizens and documented immigrant children below 5 years are eligible. Undocumented children, and recent immigrants children below five years are not eligible.

b. The elderly (age 65 and older) uninsured are not included because they have universal coverage by Medicare.

c. Based on the Census Bureau's Current Population Survey.

d. "Poor" is defined as those with incomes below the federal poverty level. "Near-poor" is defined as those with incomes 100-199% of the federal poverty level.

sured (30%) because their incomes are higher than the Medicaid cut-off point but too low to purchase private insurance.¹⁰

People of color are much less likely to be offered health insurance through their jobs, be eligible for health benefits, or be able to afford their share of the cost of health premiums. One-third of Latinos are uninsured compared to 13% of Whites. Non-citizens have high uninsured rates compared to citizens (47% vs. 15%) due to their employment in low-wage jobs that are less likely to offer health coverage and restrictions on their eligibility for public coverage. Undocumented immigrants make up a small share of the uninsured population. The great majority (about 4 in 5) of the uninsured in the United States and California are citizens and documented non-citizens. Undocumented immi-



grants are more vulnerable than citizens to factors that lead to uninsurance, e.g., low wages or being ineligible for public programs.¹¹

The uninsured are more likely than the insured to be young (21% are below 18 and 63% are below 34 years of age). In addition, childless adults are less likely to be eligible for public coverage programs and are more likely to be uninsured than adults with children. Education also influences the chances of being uninsured—those who did not attend college are less likely than those with higher education to be insured. Type

of employment (part- or full-time) and occupation determine health insurance coverage. The gap in coverage between blue- and white-collar workers in different industries is two-fold. Over 80% of the uninsured are in blue-collar jobs.^{2,10}

In 2005, 6.5 million non-elderly Californians (20% of the state's population) were uninsured all or part of the year. The proportion of children and adults who were uninsured part of the year remained unchanged between 2001 and 2005. Even with the strong economic recovery, employment-based coverage of the non-elderly population declined during this period. Lack of insurance coverage was a persistent problem for at least three-fourths of the uninsured—not a short-term problem related to brief gaps in employment-based insurance. One in 4 Californians never had health insurance coverage.

The Consequences of Uninsurance

Being uninsured even for a short period of time results in decreased access to care and can have serious health consequences.² The uninsured are more likely than the insured to report problems getting needed medical care. They are much more likely to have an unmet need for medical care or a prescription drug.² Having health insurance facilitates access to a usual source of care—a regular place to go to for medical advice. Those who have a usual source of care are more likely to receive preventive care, to have access to and utilize medical care, not delay seeking care, receive continuous care, and have lower rates of hospitalization and lower health care costs.^{12,13}

They are more likely than the insured to be hospitalized for avoidable health problems and to experience declines in overall health. In the United States the annual excess deaths due to lack of health insurance are estimated to be as high as 21%. Uninsured adults living with chronic diseases are less likely than the in-

e. Based on the California Health Interview Survey, which is not directly comparable to the Census Bureau's Current Population Survey.

sured to receive appropriate care to help manage their health conditions. They have worse outcomes than the insured for diabetes, cardiovascular disease, end-stage renal disease, HIV infection, and mental illness.15 The uninsured who are hospitalized for a range of conditions receive fewer needed services, worse quality care, and have a greater risk of repeat hospitalizations or dying shortly after discharge.^{2,10} Uninsured persons suffering from trauma and cardiovascular disease, in particular, are less likely to receive the same quantity and quality of hospital services and are more likely to die from their conditions than the insured. 15 Health insurance coverage is associated with better access to prevention services and better quality care. Uninsured adults are less likely than insured adults to receive preventive and screening services such as mammograms, Pap tests, colorectal screenings, and prostate-specific antigen (PSA) test and to receive them on a timely basis. Uninsured cancer patients generally are in poorer health and are more likely to die prematurely than the insured, primarily due to delayed diagnosis. Furthermore, even after cancer is diagnosed, there are treatment disparities based on insurance coverage.^{2,15}

Uninsured women and children receive fewer prenatal and perinatal services than the insured. Uninsured newborns are more likely to have low birth weight and to die than insured newborns. Uninsured women are more likely to have poor outcomes during pregnancy and delivery than are women with insurance. Uninsured children have worse health care access and utilization than insured children.¹⁶

Lack of health insurance coverage also has multiple economic consequences for individuals, employers, taxpayers, and the health care system. The costs of medical care for uninsured individuals are weighed against other essential needs such as housing, transportation, and food; treating catastrophic illness can result in serious financial consequences. Employers bear the economic burden of the uninsured in terms of reduced productivity and absenteeism for health

reasons. Taxpayers also pay some of the hidden costs associated with the uninsured by shouldering the cost of financing public programs. Finally, the health care system may bear some of the avoidable costs of treating the uninsured, e.g. costly emergency room care for health conditions that can be managed in a low-cost primary care setting.¹⁷

Beyond Insurance: Unequal Access and Unequal Treatment

As described earlier, having health insurance facilitates access to prevention services such as cancer screening.



However, cultural and linguistic barriers also have a significant impact on participation in, and utilization of, cancer screening—regardless of insurance status. White women are much more likely than all other racial/ethnic groups to be screened for breast cancer and be diagnosed early. Low-income women are less likely to receive mammography screening than high-income women. White and African American men are more likely than Latino or Asian men to be screened for prostate cancer. Men from low-income households have significantly lower screening rates than those from high-income households. Asian and Latina women are at greater risk for cervical cancer, but are much less likely to be screened than White or African

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American women. ^{18,19} This body of evidence suggests the need for culturally appropriate strategies to narrow the gaps in access to potentially life-saving prevention services such as cancer screening.

There is also compelling evidence of significant disparities in the quality of health care for different race/ethnic groups. An extensive Institute of Medicine (IOM) review found that people of color were less likely than Whites to receive needed services and that these disparities existed for a number of health conditions, including cancer, cardiovascular disease, HIV/AIDS, diabetes, and mental illness, and are found across a range of procedures, including routine treatments for common health problems. The sources of such unequal treatment at the health care service-level were also examined. The IOM review concluded that bias, stereotyping, prejudice, and uncertainty on the part of health care providers may contribute to racial and ethnic disparities in health care.²⁰

Working Toward Health Care Reform

Access to a high quality system of affordable health care is an important human right and a necessary strategy for improving health and quality of life and reducing health disparities. However, health care alone is not sufficient to "produce" health in populations.²¹

Most people who live long and healthy lives in United States do so without much assistance from the health care system. In fact, a reasonable goal of most Americans is to avoid hospitalization, emergency room visits, and even our physician's office, except for routine clinical preventive services. The best strategy for doing this is to avoid acquiring a chronic disease. Prevalence of chronic disease in a community is a primary driver of the demand for health care services. The medical care costs of people with chronic diseases account for more than 75% of the nation's \$2 trillion medical care costs. Chronic diseases, (primarily heart disease, stroke, cancer, and diabetes), are the cause of 7 of every 10 Americans deaths. Chronic disabling condi-

tions cause major limitations in activity for more than 10% of Americans, or 25 million people. Relatively modest shifts in the overall chronic disease burden in a community can have dramatic effects on health care costs and utilization. In general, the current reactive health care system is primarily designed to mitigate the adverse consequences of, rather than prevent the occurrence of, chronic disease. Thus expansion of access to routine preventive services especially for chronic disease, should be a major strategy in future health care reform.²¹

The IOM Committee on the Consequences of Uninsurance suggests five principles for reforming the U.S. health care system. It proposes that health care coverage should be 1) universal; 2) continuous; 3) affordable to individuals and families; 4) affordable and sustainable for society; and 5) enhancing to health and well-being.²² In recent years a number of legislative strategies addressing some or all of these IOM principles of health care reform have been proposed at the state and national levels.

Some of the recent California proposals to assure affordable coverage for those with low and moderate income that have been considered are 1) mandate that would require that employers offer and help pay for health benefits or pay into a public purchasing pool; 2) individual mandate that requires all individuals to buy health insurance; 3) single-payer program similar to Medicare for the entire population that would replace private health insurance. All of these options attempt to assure affordable, continuous care for children and adults. While there is considerable public interest and support from constituencies such as the medical community for these health care reform strategies in California, none has been successful in the legislative process due to the lack of political support or budgetary challenges.5 The future of health care reform at both state and national levels remains uncertain in the current economic climate.

Access to Health Care LIFE AND DEATH FROM UNNATURAL CAUSES

The Safety Net: Critical to Ensuring Access to Health Care

While health insurance coverage cannot guarantee good health, it is clearly key to access and utilization of health care. However, insurance coverage alone is not sufficient to ensure access to necessary services, especially in light of recent market trends toward highdeductible health plans, reductions in benefits and greater patient cost-sharing. Many insured individuals may face diminished access to health care because they are essentially underinsured. Furthermore, not having a usual source of health care, also known as a "medical home" may result in reduced access and utilization of health care and worse health outcomes independent of insurance status. California's system of safety net providers—which includes community health centers, public hospitals and clinics—can play a critical role in improving access to health care for the uninsured and underserved.²³ This system of safety net providers was the source of regular care for almost a quarter of California's non-elderly population in 2005. Four in 10 safety net users were covered all year by employment-based insurance, but they reported using these community health centers, public hospitals and clinics as their main source of care. Nearly 3 in 10 safety net users were covered by Medi-Cal or Healthy Families and reported their main source of care as the safety net. The safety net also served nearly 3 in 10 of those who lacked coverage part or all of the year.24

California depends heavily on federally supported health centers and other non-federally funded community clinics to provide primary care to the uninsured and underserved. These primary care clinics, regardless of their funding source, are not traditional private medical practices. They provide comprehensive primary and preventive care, and assist patients in

accessing care through enabling services such as case management, child care and health education. Providers who work in community-based primary care clinics and health centers are often better able to meet the complex needs of low-income populations and people of color that they typically serve. Their focus on culturally competent, high quality care includes support services such as transportation, child care, interpreters, etc. These types of services, designed to enable and improve access to care for vulnerable populations, have been shown to reduce health care disparities and result in better health outcomes (e.g. birth weight) than lowincome populations who do not receive care at health centers. Health policy experts in California have proposed that in addition to expansion of insurance coverage, enhancing the health care safety net through the expansion of primary care and provision of a potential medical home, is an important strategy for improving access to the medical care system and health outcomes among the uninsured and underinsured.²³

Alameda County is distinct from many California counties in that there is a strong safety net comprised of a network of established health care providers that serve low-income persons regardless of their insurance coverage status. These providers currently serve a substantial proportion of the uninsured, who are largely low-income and people of color. Supporting this safety net provider network is a significant percentage of the county health budget.g Though these funds are not enough to purchase full health coverage, they do ensure that the lowest-income (below 200% of the federal poverty level) Alameda County residents have access to a broad range of health care services. Currently, these providers are working together to coordinate services for the uninsured, and to increase the number of uninsured who have a usual source of care through a "medical home."25

f. Alameda County's safety net includes: the Alameda County Medical Center (public hospital system), Children's Hospital-Oakland, federally-qualified community health centers, the Alameda County Public Health Department, the Berkeley City Health Department, and many private hospitals, physician practices, and smaller clinic programs.

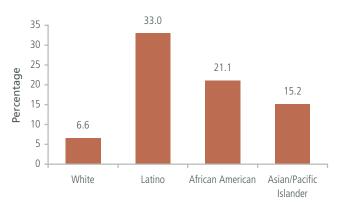
g. County budget sources for services for the uninsured include: disproportionate share hospital (DSH) funds, county indigent health care funds, e.g. County Medical Services Program (CMSP), Medi-Cal waiver funds, e.g., Alameda County Excellence (ACE) program, and a special county sales tax (Measure A).

A Look at Alameda County

Groups Affected by Lack of Access to Health Care

In Alameda County, as in the United States, profound inequities in health insurance coverage by racial/ethnic group exist today (Figure 53). Among non-elderly adults 18-64 years old, Latinos are 5 times as likely as Whites to be uninsured (33.0% vs. 6.6%). African Americans and Asian/Pacific Islanders are also more likely than Whites to be uninsured (21.1% and 15.2% respectively).

Figure 53: Uninsured Non-Elderly Adults by Race/Ethnicity, Alameda County

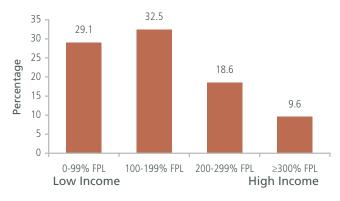


Source: California Health Interview Survey 2005.

There are also substantial inequities in health insurance coverage by income among non-elderly adults—the poor are disproportionately burdened by lack of health insurance (Figure 54). Six in 10 adults from low- or moderate-income households have no health insurance.^h

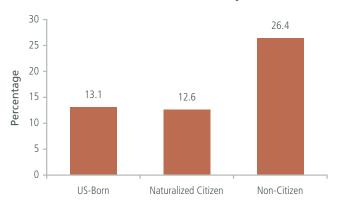
Immigration status is a major determinant of health insurance coverage (Figure 55). Recent immigrants who are not U.S. citizens are twice as likely to be uninsured than are U.S.-born persons. An additional 1 in 8 immigrants who are naturalized U.S. citizens is uninsured.

Figure 54: Uninsured Non-Elderly Adults by Income, Alameda County



Source: California Health Interview Survey 2005.

Figure 55: Uninsured Persons by Immigration Status, Alameda County



Source: California Health Interview Survey 2005.

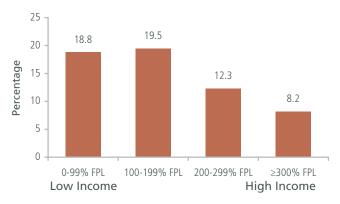
Another important determinant of access to health care—having a usual source of care—is influenced by income (Figure 56 on page 128). Adults from low- and moderate-income households are over twice as likely to lack a usual source of care as adults from high-income households (18.8% and 19.5% vs. 8.2%).

Some Consequences of Inadequate Access to Health Care

Health insurance is a key to access to the health care system and to better health. In Alameda County, not having health insurance coverage is associated with poorer self-reported health. The uninsured are twice

h. The federal poverty threshold is used to define income groups in terms of poverty level, a measure of material deprivation. A household between 0 and 99% of the federal poverty level is considered low-income; 100% to 199% of the federal poverty level is considered moderate income; households at or above 300% of the federal poverty level are considered high-income.

Figure 56: Persons Lacking a Usual Source of Care by Income, Alameda County



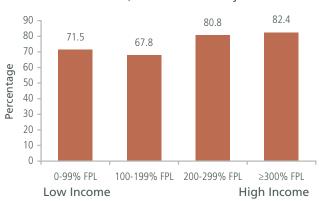
Source: California Health Interview Survey 2003.

as likely as the insured to report being in poor or fair health. The uninsured experience barriers to health care; they are twice as likely as the insured to not have a place to go to when they need medical care or advice and much more likely than the insured to encounter problems getting necessary health care or delay getting needed medical care (data not shown).

Lack of health insurance also limits access to and use of critical prevention services. Significant inequities in access to prevention services by income, education, or race/ethnicity are evident from the differences in access to screening for breast, prostate, and cervical cancer among residents of Alameda County.

Women from lower income households are less likely to be screened for breast cancer than those from higher income households (Figure 57). Breast cancer

Figure 57: Breast Cancer Screening by Income, Alameda County

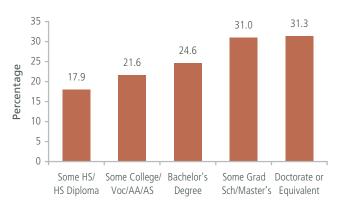


Source: California Health Interview Survey 2003.

screening rates are also determined by insurance status—a much higher proportion of women with health insurance report being screened for breast cancer than those lacking insurance (80.2% vs. 64.5%) (data not shown).

In the county, higher education is associated with higher rates of PSA screening for prostate cancer; the percentage of men screened increases with higher education level from 17.9% to 31.3%. Insured men are much more likely to have been screened for prostate cancer than the uninsured (Figure 58).

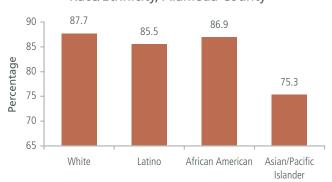
Figure 58: Prostate Cancer Screening by Education Level, Alameda County



Source: California Health Interview Survey 2003.

In Alameda County, Asian/Pacific Islander women (75.3%) are significantly less likely to be screened for cervical cancer than White (87.7%), African American (86.9%), and Latino women (85.5%) (Figure 59).

Figure 59: Cervical Cancer Screening by Race/Ethnicity, Alameda County



Source: California Health Interview Survey 2003.

Women with health insurance are much more likely to be screened for cervical cancer than those lacking health insurance (84.9% vs. 75.3%) (data not shown).

Data to Action: Policy Implications

Access to a high quality system of affordable health care is an important human right and necessary for improving health and reducing health disparities. The clear inequities in access to health insurance and health care in Alameda County are profound and unjust. The poor, Latinos, and recent immigrants in the county are disproportionately burdened by lack of health insurance and have inadequate access to health care. Those who lack health insurance also experience significant barriers to health care. Additionally, there are inequities in access to and utilization of critical prevention services such as cancer screening by race/ethnicity and socioeconomic status. There is also notably less utilization of breast cancer screening by decreasing income, and significantly lower rates of prostate cancer screening by education. Asian women are substantially less likely to participate in cervical cancer screening than women of all other racial/ethnic groups. Being uninsured also contributes to the significant gaps in cancer screening. An important strategy in reducing health inequities in Alameda County is to increase the availability and utilization of prevention services in the health care system. The following policy goals and strategies are recommended to improve health care access.

- Support federal and state proposals aimed at continuous and universal access to affordable health care for all.
- Support local efforts to strengthen the health care safety net and increase the number of uninsured and underinsured who have a usual source of care through a "medical home."

- In partnership with clinics, hospitals, policy-makers, employers, and elected officials, develop and advocate for policies that improve access to basic health care for the uninsured and underinsured. Support affordable health care options (private or employer based) for these groups. For example, young single adults (ages 18-24) and adults (particularly males) who are unemployed and most likely to be uninsured or underinsured.
- Support strategies to streamline public health insurance enrollment, e.g. enhanced application assistance and system navigation with attention to language and cultural competencies to assist consumers in better understanding and utilizing appropriate health services.
- Propose and support legislation to increase Medi-Cal provider rates to improve affordability of services in the health care safety net that many poorer residents depend on.
- Support State funding of undocumented health care to ensure the provision of preventive health and health care services to undocumented individuals to protect their health, the health of the public at large, and to prevent more costly health care costs.
- Support State statutes to maintain continuity of health coverage during budget gaps to ensure consistent support, especially to seniors and persons with disabilities who are dependent on health and social services.
- Support legislation to improve affordability of critical prevention services such as childhood immunizations, e.g., by eliminating deductibles.
- Promote culturally appropriate cancer screening programs for specific populations, e.g., Asian women for cervical cancer through partnerships with multicultural health care organizations.
- Support the implementation of targeted breast and prostate cancer screening programs among lowincome and lower literacy groups in the county.

 Support private and public efforts to develop comprehensive chronic disease management programs for diseases such as diabetes, asthma, and high blood pressure, particularly those that employ peer-based and peer-led culturally relevant interventions.

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References

- 1. Richmond J, and Fein R. *The Health Care Mess: How We Got Into It and What It Will Take to Get Out.* Cambridge, MA: Harvard University Press. 2005: 235-237.
- 2. Department of Health and Human Services, Office of the Assistant Secretary for Planning and Evaluation. *Overview of the Uninsured in the United States: An Analysis of the 2005 Current Population Survey.* Issue Brief. September 2005.
- 3. California Department of Health Care Services. Medi-Cal. Available at: http://www.medi-cal.ca.gov/programs.asp
- 4. California Department of Health Care Services. *Healthy Families*. Available at: http://www.healthyfamilies.ca.gov/hfhome.asp
- 5. Brown ER, Laverreda SA, Ponce N, Yoon J, Cummings J, and Rice T. *The State of Health Insurance in California. Findings From the 2005 California Health Interview Survey.* UCLA Center for Health Policy Research. July 2007.
- 6. Brown ER, Ponce N, and Laverreda SA. *Job-Based Insurance Declines for Moderate- and Low-Income Workers*. Health Policy Research Brief. UCLA Center for Health Policy Research. July 2007.
- 7. Laverreda SA, Brown ER, Yoon J, and Glen S. *More than Half of California's Uninsured Children Eligible for Public Programs But Not Enrolled.* Health Policy Fact Sheet. UCLA Center for Health Policy Research. October 2006.
- 8. Robert Wood Johnson Foundation. *Squeezed: How Costs for Insuring Families are Outpacing Income*. Available at: http://www.rwjf.org. Accessed May 21, 2008.
- 9. Kaiser Commission on Key Facts. Medicaid and the Uninsured. Kaiser Family Foundation. March 2008.
- 10. Kaiser Family Foundation. *The Uninsured: A Primer. Key Facts About Americans Without Health Insurance*. October 2007.
- 11. Brown ER, Pourat N, and Wallace S. *Undocumented Residents Make Up a Small Share of California's Uninsured Population*. Health Policy Fact Sheet. UCLA Center for Health Policy Research. March 2007.
- 12. Fryer GE, Dovey SM, and Green LA. *The Importance of Having a Usual Source of Health Care*. American Family Physician. 2000;62: 477. Available at: http://mchb.hrsa.gov/whusa_05/pages/0501usc.htm. Accessed March 2008.
- 13. Pancholi M. *Reasons for Lacking a Usual Source of Care: 2001*. Statistical Brief #32. Rockville, MD: Agency for Healthcare Research and Quality. Available at: http://www.meps.ahrq.gov/mepsweb/data_files/publications/st32/stat32.pdf. Accessed March 2008.
- 14. The Urban Institute. *Uninsured and Dying Because of It: Updating the Institute of Medicine Analysis on the Impact of Uninsurance on Mortality.* January 2008.
- 15. Institute of Medicine. Care Without Coverage: Too Little Too Late. Washington, DC. National Academy Press. 2002.
- 16. National Academy of Sciences Committee on the Consequences of Uninsurance. *Health Insurance Is a Family Matter*. Washington DC: National Academies Press, 2002.
- 17. Davis. K. *The Costs and Consequences of Being Uninsured*. Medical Care Research and Review 60 (2): 89S-99S (Supplement to June 2003).
- 18. Chen JY, Diamant A, Pourat N, Kagawa-Singer M. Racial/Ethnic Disparities in the Use of Preventive Services Among the Elderly. *Preventive Medicine*. December 2005:2(5): 355-395.
- 19. American Cancer Society. Cancer Facts & Figures 2007. Atlanta, GA: American Cancer Society; 2007.
- 20. Institute of Medicine. *Unequal Treatment: What Healthcare Providers Need to Know About Racial and Ethnic Disparities in Healthcare*. Washington DC: National Academies Press, 2003. Available at: http://www.nap.edu/. Accessed May 1, 2008.
- 21. Iton, Tony. Testimony Before the Subcommittee on Health of the House Committee on Ways and Means. June 10, 2008.
- 22. Institute of Medicine Committee on the Consequences of Uninsurance. *Insuring America's Health: Principles and Recommendations*. Washington DC: National Academies Press, 2004
- 23. Roby DH, Kominski GF, and Cameron ME. *Improving Access Through Health Insurance Coverage and Safety Net Expansion: A Review of Literature.* Health Policy Research Brief. UCLA Center for Health Policy Research. August 2007.
- 24. Gatchell M, Laverreda SA, and Ponce N. 7.6 Million Californians Rely on the Safety Net of Health Care Providers for Regular Care. Health Policy Fact Sheet. UCLA Center for Health Policy Research. September 2007.

25. Penserga L. Alameda County Access to Care Collaborative. *Strategies to Improve Access to Care Among Vulnerable Populations through Alameda County's Safety Net*. Personal Communication. July 2008.

Data Sources

- 1. California Health Interview Survey. CHIS 2003 Adult Special Use File, Release 1. Computer File. Los Angeles, CA: UCLA Health Policy Research. February 2005.
- 2. California Health Interview Survey. CHIS 2005 Adult Public Use File. Computer File. Los Angeles, CA: UCLA Health Policy Research. February 2007.

LIFE AND DEATH FROM UNNATURAL CAUSES

Access to Health Care

Social Relationships Community Capacity

"On an individual level, successful communities nurture the kind of human connections that tie neighbor to neighbor, parents to children, and youth to adults. Abundant stores of social capital create networks that informally help get things done, be it a neighbor who provides day care for working mothers or the adults on the block who act as role models and mentors for kids. On a deeper level, it is these kinds of strong ties and relationships that form the foundation of collaborative action for positive change."

—Potapchuk W, Crocker JR, and Jarle P¹

Overview of Social Inequities

Tracing the social inequities documented in preceding sections, a troublesome picture of injustice emerges. Low-income communities and communities of color have been marginalized, deprived of equal access to resources and opportunities, and excluded from meaningful participation in policy decisions that have affected their health and life chances. A review of the evidence helps to illustrate the multiple social inequities and thus extreme disadvantage they face.

- Opportunities to earn a *living wage and accumulate monetary assets* are not equal and not available for many. The gap between the rich and poor is widening, with extreme concentrations of wealth.
- Opportunities to receive *high-quality education* are not equal and not available for many.
- Opportunities to live in *housing that is affordable and safe* are not equal and not available for many.

- Access to *affordable and reliable transportation* to reach work, school, retail stores, and services is not equal and not accessible to many.
- Opportunities to live in neighborhoods *free of air pollution and toxic contaminants* are not equal and not available for many.
- Access to *fresh healthful food* within a reasonable distance from home and exposure to *unhealthful liquor* and food outlets are not equal.
- Access to neighborhood environments that are conducive to *physical activity* is not equal and not available for many.
- Access to *unbiased criminal justice systems* and to *safe neighborhoods* is not equal and not available for many.
- Access to quality affordable health care is not equal and not accessible to many.

Each of these social inequities plays a role in shaping and sustaining the unequal distribution of disease and death, both nationally and locally. The links to health outcomes are explained and documented in previous sections. As public health leader, Reed Tuckson, points out, "Health is the place where all the social forces converge," and for that reason, "the fight against disparities in health is also one against the absence of hope for a meaningful future."

It is not surprising that marginalized individuals and groups tend to be more socially isolated, live in conditions of higher stress and less social support, and lack bridging relationships that link them to mainstream resources and services. When people must move frequently to find less costly housing, work long hours and cannot take time off from work, or do not know whom to contact for help or where to voice their concerns, they are left feeling excluded and powerless. Moreover, decades and generations of social disadvantage and income inequity have affected the social environment in the low-income neighborhoods where these people often live. The Enduring conditions of poverty, unemployment, segregation, displacement, and disinvestment have eroded social networks, disrupted community ties, and reduced levels of trust and civic participation. To reverse these trends, leverage and build community assets, and promote equity in economic, social, physical and service environments, residents need to be engaged and empowered to use their collective voice.

What Research Tells Us

Good social relations and strong support networks improve health. Substantial evidence supports the relationship between supportive social ties and better physical and mental health and conversely, the association between social isolation and higher rates of disease and death. Social relationships can provide emotional benefits for people, resulting in lower stress and improved health outcomes. Through relationships, people can also gain access to resources and political

power, allowing them to improve their own life conditions and create healthier communities.

Social Support Buffers the Effects of Negative Environments

Social support is often thought of in two ways: 1) the amount of support (size of people's social networks and frequency of their social contacts); and 2) the quality of relationships, which can yield emotional support (such as listening, giving feedback) or practical assistance (such as help around the house or rides

to medical appointments). Experiencing interpersonal communication and mutual obligation makes people feel cared for, esteemed and valued, and has a powerful protective effect on personal health and well-being.⁹

Research shows that social support affects health through multiple pathways. It can directly protect against health conditions, like depression, pregnancy complications, and disability from chronic diseases.¹⁰ Social support can also affect health behaviors, such as dietary choices, physical activity and smoking. Through social relationships, people share health information, increasing the likelihood that healthful norms of behavior are adopted. Experiencing social support may increase a person's perception of control over the environment and sense of self-worth, which can improve mental well-being.11 Lack of social support can influence risk of and recovery from illness. An interesting example of this effect is a study linking diversity of social ties to susceptibility to the common cold virus. Results showed that those with more social ties were less likely to get the cold. Even if they did develop the cold, it was shorter in duration and had milder symptoms. This finding held after controlling for virus type, age, sex, season, body mass index, education, and race.12

Social support also buffers an individual from acute and chronic stress, thus moderating its potentially harmful impact on health.¹¹ This is particularly important in low-income areas, which are often characterized by multiple stress-causing hazards, including: crowded and run-down housing, fewer services, limited access to transportation, more exposure to conflict, poorly funded schools and other factors. One study of urban isolation found that mortality at the time of the 1995 heat wave in Chicago was linked to differences in individual social relationships and supportive institutions in an impoverished neighborhood. The elderly residents living alone who had a helpful neighbor, friend, relative, or service provider to visit and help them cope with the heat were less likely to die from the high temperatures than other elders

who were almost always isolated from social contact and support.¹³ Additional research shows that being socially isolated is associated with increased rates of premature death and poorer chances of survival after cancer and heart attack.

Social Capital in Communities

The concept of "social capital" provides a broader framework for understanding the ways in which social relationships affect not just individual, but also community health. Social capital is defined as "characteristics of communities stemming from the structure of social relationships that facilitate the achievement of individuals' shared goals." This includes the quality of social networks as well as what emerges from these networks—such as shared norms, mutual trust and cooperation. A complete expression of the concept is: "social capital factors include trust and cohesion; willingness to take action for the community's benefit; community engagement, such as through voting or volunteering; [and] behavior norms." ¹⁴

Research shows that such community characteristics shape health behaviors and outcomes. For example, adults living in neighborhoods where people report greater trust and shared values walk more for leisure than those in neighborhoods with little trust.¹⁵ Research also has linked measures of trust and willingness to intervene to stop negative behavior ("collective efficacy") to rates of violent crime in communities. In one study of Chicago neighborhoods, a combined measure of trust and willingness to intervene was found to be the largest predictor of violent crime rates.¹⁶ Other studies have linked the belief that "most people can be trusted" to self-rated health¹⁹ and mortality.¹⁸

An important property of social capital is that it is a public good. 19 Its benefits are often shared broadly within a particular community. This means that a socially isolated individual can benefit from living in a neighborhood rich in social capital. For example, an elderly widow living alone could benefit from being in

a community where her neighbors frequently interact and help each other out. Conversely, in a community where social capital has been depleted, even the most fortunate residents can suffer from poor linkages to important mainstream resources and opportunities.

Beyond Social Capital to Empowerment and Community Capacity Building

To improve community health, we must strengthen bonds within communities and help build bridges to external organizations and institutions with power and resources. Moreover, we will need to engage and mobilize communities so they can advocate for change in their economic, physical, social, and service environments. Empowerment and community capacity-building are vital for changing the structural factors that perpetuate negative community conditions. ²⁰⁻²⁵

According to Wallerstein, empowerment is "social action that promotes participation of people, organizations and communities toward the goals of increased individual and community control, political efficacy, improved quality of life and social justice." In empowerment models, the processes of creating a healthier community are as important as the outcomes. Empowerment can create health through multiple pathways—individual psychology, social relationships, organizational growth and community change. 27

Community capacity-building (CCB) involves viewing communities and residents as potential resources for change, rather than as passive recipients of services. As defined by the Colorado Trust, community capacity is "the set of assets or strengths that residents individually and collectively bring to the cause of

improving local quality of life." Examples of developments in this CCB approach are seen in the Healthy Cities/Healthy Communities network, the growth of a national grass-roots environmental justice movement, community partnerships to fight the spread of HIV/AIDS, and the growing momentum behind community-based participatory research (CBPR) approach to studying and addressing health and social problems. A local example of community capacity-building in two low-income, high-crime Oakland neighborhoods is described at the end of this section.

A Look at Alameda County

Social Support

Aults from low-income households have lower levels of social support available to them than those from high-income households (Figure 60 on page 137). a,b Lack of social support among low-income residents can limit their access to information and resources in the community. Lower levels of emotional and practical support can limit their ability to cope with adverse neighborhood conditions and have negative health consequences.

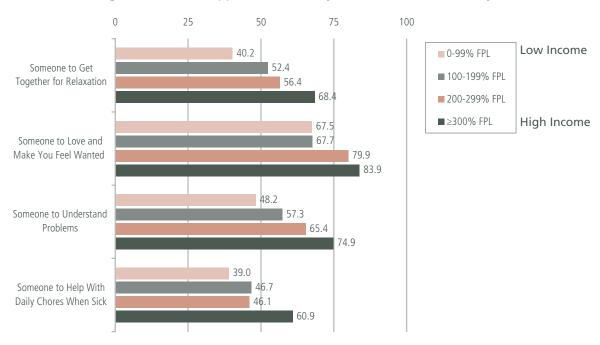
Social Cohesion

The cohesiveness in a neighborhood—trust, shared values, getting along, helping each other—contributes to neighborhood social capital. The level of social cohesion experienced by neighborhood residents is influenced greatly by their income (Figure 61 on page 137). Adults from low-income households describe their neighborhoods as less cohesive than adults from

a. The federal poverty threshold is used to define income groups in terms of poverty level, a measure of material deprivation. A household between 0 and 99% of the federal poverty level is considered low-income; households at or above 300% of the federal poverty level are considered high-income.

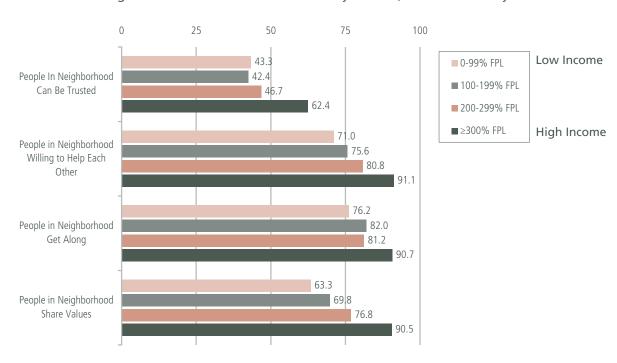
b. These findings are based on measures of social support from the 2003 California Health Interview Survey. Respondents were asked how often they had someone available to get together for relaxation, to love and make them feel wanted, to understand their problems, or to help with daily chores.

Figure 60: Social Support Measures by Income, Alameda County



Source: California Health Interview Survey 2003.

Figure 61: Social Cohesion Measures by Income, Alameda County



Source: California Health Interview Survey 2003.

high-income households. Those from low-income households are least likely of all income groups to report that people in their neighborhood can be trusted, are willing to help each other, get along, and share common values—attributes of the social environment that are protective against crime, unhealthy behaviors, and adverse health outcomes.

Lower cohesion among residents of low-income households can limit their capacity to collectively participate in advocating for resources for their community. Lower social cohesion can also have an adverse effect on health-related behavior and health outcomes in these communities.

Data to Action: Policy Implications

Low-income people experience lower levels of social support and are more likely to live in communities that are less cohesive. These social conditions have negative consequences on health-related behavior and health. Nevertheless, there is great capacity for mobilization, civic engagement, leadership, capacity-building, and exercise of political power. Many of these communities have valuable and important assets that can support positive change. Recommended strategies to empower residents and improve social conditions in Alameda County neighborhoods are described below.

- Strengthen and expand place-based community capacity building (CCB) efforts in low-income and underserved communities in order to empower residents to address the underlying social determinants of health. An example of this approach is the City-County Neighborhood Initiative described on pages 139 and 140.
- Develop neighborhood-level strategies in affected communities to address concerns identified by

- residents to reduce unfavorable neighborhood and social conditions, increase protective and resiliency factors, and improve health outcomes.
- Implement strategies to build social capital in vulnerable communities by empowering residents to take action in partnership with city/county governments and community-based organizations to improve their neighborhood conditions.
- Provide greater opportunities for community
 participation in local planning and policy decision-making around social determinants of health
 in their communities—including income/employment, education, housing, transportation, air quality, food access and liquor stores, physical activity,
 criminal justice, and health care access.

c. These findings are based on measures of social cohesion in the 2003 California Health Interview Survey. Respondents were asked about whether people in their neighborhood could be trusted, are willing to help each other, get along, and share common values.

City-County Neighborhood Initiative (CCNI) in Oakland

A local example of how the Alameda County Public Health Department (ACPHD) is helping to build community capacity and empower Oakland residents is described below.

Founded in 2004, the CCNI is a partnership between the ACPHD, City of Oakland, the Oakland Unified School District (OUSD), community-based organizations and neighborhood resident groups. The CCNI partners with neighborhood residents to increase their capacity to identify and address high rates of violence and other health inequities. The CCNI approach builds upon existing neighborhood assets. City and County staff work closely with residents to increase their leadership skills, and to build their social, political and economic power. Residents can leverage this power to create healthier neighborhoods.

CCNI efforts are concentrated in 2 pilot neighborhoods, Sobrante Park in East Oakland and the Hoover Historic District in West Oakland. These are both low-income and high-crime neighborhoods with large youth populations. Community efforts in both neighborhoods began with door-to-door baseline surveys in 2004, completed by more than 200 residents in each neighborhood and by 100 youth ages 12-17 in Sobrante Park. Through surveys and community forums, residents identified the following action priorities:

Sobrante Park

- Improve Tyrone Carney Park and surrounding streetscape.
- Reduce drug dealing and violence.
- Create more positive activities for youth activities.
- Prepare the neighborhood for disasters.

Hoover Historic District

- Renovate Durant Park.
- Reduce blight.
- Create a continuum of improved and connected youth services and employment.

The CCNI uses the following strategies to build community capacity and meet residents' action priorities:

Developing local leaders

CCNI staff have an ongoing commitment to train and mentor residents. In Sobrante Park, more than 100 residents have completed a 16-hour leadership series. Topics included: root causes of health inequities; undoing racism, and community organizing. In West Oakland, 37 residents were trained in civic engagement, local government and using the media to create policy change. The CCNI plans to expand leadership training to more residents and cover additional topics.

Establishing Resident Action Councils (RAC)

Resident Action Councils are the primary vehicle through which community activities are organized in each neighborhood. At monthly RAC meetings, residents discuss community issues, gain access to resource people from the City and County, receive training on various topics, and plan community-wide meetings and celebrations.

Supporting community initiatives through mini-grants

The CCNI Mini-Grant Program recruits and trains residents to serve on grant-making committees. In turn, these committees solicit applications from fellow residents for seed money (\$350-\$1,500) to fund community improvement projects. Recent mini-grant cycles have focused on healthful eating, physical activity, and youth development.

Promoting positive youth development

CCNI has developed several programs to promote positive development and leadership skills in youth ages 12-24. The Oakland Youth Movement (OYM) engages local youth in action research to identify neighborhood priorities and mobilize their peers to create change. It's on Y.O.U. (Youth with One Understanding) organizes neighborhood-wide youth events to promote healthy eating, physical activity and violence prevention. In West Oakland, CCNI staff work with partners to provide one-on-one outreach to help youth find jobs and the youth group HYPE (Healing Youth with Positive Energy) has been formed.

Rebuilding the community social fabric through time banks

The CCNI is working with a local church and the Resident Action Council s (RAC) to create the Sobrante Park Time Bank (SPTB), which brings residents together to help each other by exchanging favors and services. In 2007, the SPTB grew to nearly 200 English and Spanish-speaking members, who have exchanged more than 1000 hours. For example, residents recently earned time-dollars by helping to plan and staff an all-day community health fair and celebration.

Promoting healthy lifestyles

Through CCNI, health department staff work with residents to organize health fairs, immunization clinics, nutrition counseling, asthma and diabetes support, and other services. CCNI helps to provide linkages to much-needed information and services.

References

- 1. Potapchuk W, Crocker JP, and Jarle P. Exploring the Elements of Civic Capital. National Civic Review. 1999;88(3): 175.
- 2. Tuckson R. *Call to Action: Eliminating Racial and Ethnic Disparities in Health.* U.S. Department of Health and Human Services. Washington DC: U. S. Department of Health and Human Services and Grantmakers in Health. 1998: 10.
- 3. Kawachi I, Kennedy P, and Wilkinson R. *Income Inequality and Health: The Society and Population Health Reader.* New York: The New Press. 1999.
- 4. Keating D, and Hertzman C. *Developmental Health and the Wealth of Nations: Social, Biological, and Educational Dynamics.* New York: The Guilford Press. 1999.
- 5. Brooks-Gunn J, Duncan GJ, and Aber JL. *Neighborhood Poverty: Context and Consequences for Children*. New York: Russell Sage Foundation. 1997.
- 6. Seeman TE, and Syme SL. Social Networks and Coronary Artery Disease: A Comparison of the Structure and Function of Social Relations as Predictors of Disease. *Psychosomatic Medicine*. 1987;49: 341-354.
- 7. Uchino BN, Cacioppo JT, and Kiecolt-Glaser JK. The Relationship between Social Support and Physiological Processes: A Review with Emphasis on Underlying Mechanisms and Implications for Health. *Psychological Bulletin*. 1996;119: 488-531.
- 8. Glasgow RE, Strycker LA, Toobert DJ, et al. A Social-Ecologic Approach To Assessing Support for Disease Self-Management: The Chronic Illness Resources Survey. *Journal of Behavioral Medicine*. 2000;23: 559-583.
- 9. Turner RJ, and Marino F. Social Support and Social Structure: A Descriptive Epidemiology. *Journal of Health and Social Behavior*. 1994;35:193-212.
- 10. Wilkinson R, and Marmot M. The Solid Facts: Social Determinants of Health. WHO. 2003.
- 11. Stansfield, SA. Social Support and Social Cohesion. In: Marmot M, and Wilkinson RG, eds. *Social Determinants of Health*. Oxford University Press. 1999.
- 12. Cohen S, Doyle WJ, Skoner KP, Rabin BS, and Gwaltney JM. Social Ties and Susceptibility to the Common Cold. *JAMA*. 1997;277(24): 1940-1944.
- 13. Klinenberg, E. Dying Alone: The Social Production of Urban Islolation. Ethnography. 2001;2(4): 501-531.
- 14. Cohen CJ. Social Capital, Intervening Institutions, and Political Power. In: Saegert S, Thompson JP, and Warren MR, eds. *Social Capital and Poor Communities*. New York, NY, Russell Sage Foundation. 2001.
- 15. Brown ER, Babey SH, Hastert TA, and Diamant AL. *Half of California Adults Walk Less Than One Hour Each Week*. UCLA Center for Health Policy. Research Health Policy Research Brief. December 2005.
- 16. Sampson RJ, Raudenbush SW, and Earls F. Neighborhoods and Violent Crime: A Multilevel Study of Collective Efficacy. *Science*. 1997;277: 918-924.
- 17. Kawachi I, Kennedy BP, and Glass R. Social Capital and Self-Rated Health: A Contextual Analysis. *American Journal of Public Health*. 1999;89: 1187-1193.
- 18. Kawachi I, Kennedy BP, and Wilkinson RG. Crime: Social Disorganization and Relative Deprivation. *Social Science and Medicine*. 1999;48: 719-731.
- 19. Kawachi I, Kennedy BP, Lochner K, and Prothrow-Stith D. Social Capital, Income Inequality and Mortality In: Kawachi I, Kennedy P, and Wilkinson R, eds. *Income Inequality and Health: The Society and Population Health Reader.* New York: The New Press. 1999: 222-235.
- 20. Hawe P, Noort M, King L, Lloyd B, and Jordens C. Multiplying Health Gains: The Critical Role of Capacity-Building in Health Promotion. *Health Policy*. 1997;39: 29-42.
- 21. Minkler M. Community Organizing among the Elderly Poor in the United States: A Case Study. *International Journal of Health Services*, 1992;22: 303-316.
- 22. Scultz AJ, Israel BA, Becker AB, and Hollis RM. It's a 24-Hour Thing...A Living-For-Each-Other Concept": Identity, Networks, and Community in an Urban Village Health Worker Project. *Health Education and Behavior.* 1007;24: 465-480.
- 23. Mondros JB, and Wilson SM. Organizing for Power and Empowerment. New York: Columbia University Press. 1994.
- 24. Hawe P. Making Sense of Context-Level Influences on Health. Health Education Research. 1998;13(4): i-iv.

- 25. Serrano-Garcia I. The Ethics of the Powerful and the Power of Ethics. *American Journal of Community Psychology.* 1994;22: 1-20.
- 26. Wallerstein N. Powerlessness, Empowerment and Health: Implications for Health Promotion Programs. *American Journal of Health Promotion*. 1992;6: 197-205.
- 27. Minkler M, ed. *Community Organizing and Community Building for Health*. New Brunswick: Rutgers University Press; 1997.
- 28. The Colorado Trust. *Promoting Health by Building Community Capacity: Evidence and Implications for Grantmakers*. Available at: http://www.coloradotrust.org/repository/publications/pdfs/ComCapEvid.pdf. Accessed May 14, 2008.

Data Sources

1. California Health Interview Survey. CHIS 2003 Adult Special Use File, Release 1. Computer File. Los Angeles, CA: UCLA Health Policy Research. February 2005.

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