


Making Health Equity Planning Work: A Relational Approach in Richmond, California

Journal of Planning Education and Research
2015, Vol. 35(3) 265–281
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DOI: 10.1177/0739456X15580023
jpe.sagepub.com


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Abstract

In this article, we ask how city planners can reorient urban governance to focus on health equity? We explore health equity planning in the City of Richmond, California, where planners are leading an integrated strategy to promote equity by addressing structural racism and many place-based “toxic stressors.” We explore the evolution of Richmond’s health equity planning from integrating health into a general plan, to neighborhood-based interventions, violence reduction programs, and drafting a Health in All Policies (HiAP) equity-focused strategy and ordinance. We suggest that making health equity planning work demands an explicitly relational approach to urban governance.

Keywords

ethics, public health, public administration

Introduction: Cities and Health Inequities

In the book *Making Equity Planning Work*, Norman Krumholz and John Forester ask, “what would happen if a group of professional planners working for the city [of Cleveland] devoted themselves to serving the needs of the poor” (1990, xv). In this article, we ask a similar question, namely, how can local government planners work collaboratively with others and reorient a city to focus on *health* equity? Health equity, as defined by the U.S. Government’s *Healthy People 2020* report, entails focused efforts to address avoidable social inequalities by equalizing the conditions for health for all groups, especially for those who have experienced socioeconomic disadvantage or historical injustices. Health inequities are increasing in cities and neighborhoods around the world and present one of the greatest equity challenges for urban planners today.

Where you live and how that place is governed can determine when and if you get sick, receive medical treatment, and die prematurely (Galea and Vlahov 2005). City living can be beneficial for human health, since urban areas generally offer greater economic and educational opportunities, medical services, political and gender rights, affordable housing, and cultural, political, and religious expression (Dye 2008). This holds true in both rich and poor cities of the global North and South. Yet, not everyone in cities can take advantage of these socially produced resources, and the poor and socially marginalized often experience health inequities,

or differences in access to health-promoting resources that are unnecessary, avoidable, and unfair (Braveman and Gruskin 2003). The World Health Organization (WHO) and UN-Habitat stated in their 2010 report *Hidden Cities: Unmasking and Overcoming Health Inequities in Urban Settings* as follows:

Health inequities are the result of the circumstances in which people grow, live, work and age, and the health systems they can access, which in turn are shaped by broader political, social and economic forces. They are not distributed randomly, but rather show a consistent pattern across the population, often by socioeconomic status or geographical location. No city—large or small, rich or poor, east or west, north or south—has been shown to be immune to the problem of health inequity. (WHO and UN-Habitat 2010)

One example of the persistence of health inequities is in the San Francisco Bay Area (the geographic focus of this

Initial submission, January 2014; revised submissions, September and December 2014; final acceptance, December 2014

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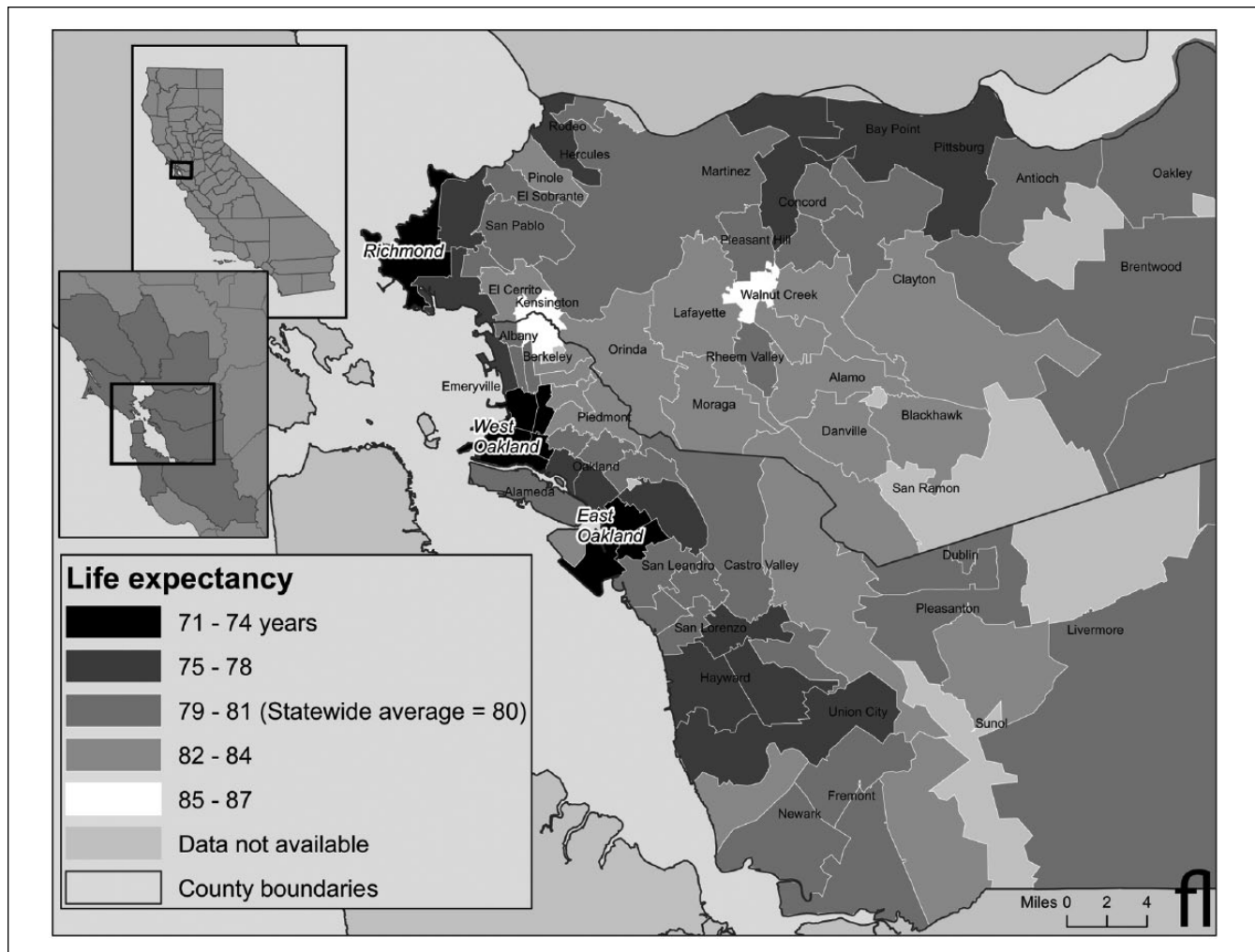


Figure 1. Life expectancy at birth, Alameda and Contra Costa counties, California.

Source: Data from M. Beyers, J. Brown, S. Cho, A. Desautels, K. Gaska, K. Horsley, et al., *Life and Death from Unnatural Causes: Health and Social Inequality in Alameda County* (Oakland, CA: Alameda County Public Health Department, August 2008), <http://www.acphd.org/media/53628/unnatcs2008.pdf>.

article), where an African American child born in West Oakland will die, on average, fifteen years earlier than a white child living just a few miles away in the Oakland Hills (Beyers et al. 2008) (Figure 1). In the Bay Area, life expectancy for everyone increased between 1960 and 2006, yet the difference in life expectancy between whites and African Americans has persisted and is increasing (Figure 2). This is what public health researchers call a health inequity; an avoidable difference that is unfair and unjust.

What explains these disturbing and persistent patterns of death and disease? The WHO, among others, has pointed to the social determinants of health, or more directly that social injustice is killing people on a grand scale (WHO 2008). Similarly, the New York City Department of Health and Mental Hygiene noted a decade ago that the concentration of health disparities in poor, predominantly African American and Latino neighborhoods are not likely due to disparities in access to health care, risky individual lifestyles, or genetic differences, but that

they are due primarily to differences in the social, economic, and physical conditions in which people live and the health behavior patterns that arise in these settings. "Health disparities" are more than "health-care disparities" . . . one lesson from the health data is that disparities exist for almost every condition. This observation suggests that, regardless of the specific issue, poor health shares common root causes. It is important to remember, then, that strategies aimed at particular issues need to be complemented by attention to those root causes of poor health: poverty, discrimination, poor housing, and other social inequities. Fundamentally, eliminating health disparities is about social justice, which is the underlying philosophy of public health. (Karpati 2004)

Yet neither the WHO nor most public health departments have offered city planners guidance for how to address the multiple drivers of health inequities and promote greater health equity. Health equity in this context is not equality (sameness) for all, but rather implies societal efforts to ensure that historically marginalized groups have enhanced

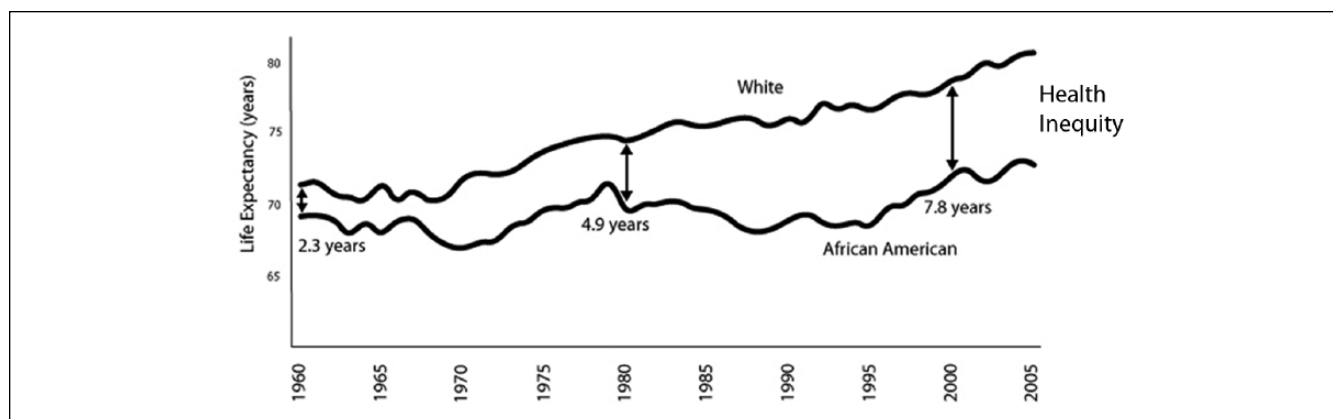


Figure 2. Life expectancy at birth for whites and African Americans, Alameda County, California, 1980–2006.

Source: Data from M. Beyers, J. Brown, S. Cho, A. Desautels, K. Gaska, K. Horsley, et al., *Life and Death from Unnatural Causes: Health and Social Inequality in Alameda County* (Oakland, CA: Alameda County Public Health Department, August 2008), <http://www.acphd.org/media/53628/unnatcs2008.pdf>.

opportunities to access health-promoting resources and that existing access barriers are removed (Braveman and Gruskin 2003; WHO 2008). In short, health equity means addressing distributive and procedural justice, or who gets what and how much, and ensuring openness and fairness in the political processes that make these decisions (Braveman 2014).

We reflect on our own health equity work over the past six or more years in Richmond, California. We utilize more than twenty-five interviews with leaders from local government agencies and community-based organizations that participated in the multiple processes described here. We asked each interviewee to describe their role in the different planning processes, their organization's approach to health equity, and in what ways the processes influenced activities of their group. We also used participant observation from more than fifty public meetings discussing health equity and policy making in Richmond. We recorded events, actions, and coalitions that aimed to promote greater health equity. Our case also reconstructs events using minutes of these public meetings, internal staff e-mails, confidential project grant reports, and publically available documents (such as meeting reports and presentations found at Richmondhealth.org). Using these data, we reveal the conceptual frames, practical strategies, and evaluation evidence that contribute to making health equity planning work.

The article proceeds as follows. First, we offer our health equity framework that includes concepts and an explicit approach for how public decision makers and activists can organize processes and interventions to address chronic, place-based health inequities. We highlight that our framework builds off of other equity-oriented planning and policy-making approaches but differs by combining a relational sociology with insights from epidemiology, medicine, and the biologic sciences that are often ignored in healthy "built environment" research and planning. Next, we discuss the emergence of health equity planning in Richmond, California, and early processes that integrated the social determinants of

health into the city's General Plan. Third, the article discusses pilot implementation projects, including place-based built environment interventions, indicator drafting, and city policy making, that all emerged from the healthy general plan process. Next, the article highlights the Richmond Health Equity Partnership (RHEP), a coalition that emerged as a result of group learning around what did and did not work during the pilot implementation phase. The RHEP expanded the participants and scope of health equity planning in Richmond, including a focus on the development of the first municipal Health in All Policies (HiAP) ordinance. We conclude with a discussion of some impacts and challenges of health equity planning encountered in Richmond and offer some general lessons for making health equity planning work in other cities.

Relational Characteristics of Health Equity Planning

We suggest a relational, health equity-oriented approach to planning that borrows from a range of social justice frameworks (Healey 2007; Fraser 2009; D. Mitchell 2003; Sandercock and Lyssiotis 2003). By relational, we borrow from Healey (2007, 14), who suggests that a relational approach emphasizes the interactions between problem framing, place-based practices, and the substance of policies coproduced by different governance actors and institutions.¹ Our framework includes at least the following four guiding principles:

1. *Antireductionist*: practice avoids a focus on single behaviors, diseases, or risk factors, and reifying some social groups or neighborhoods as if they were homogenous.
2. *Antideterminist*: rejecting the idea that only genetics, behaviors, or physical living conditions influence human health and embracing relational notions of place and "pathogenic exposures."

3. *Antipositivist*: continually questioning the neutral, disembodied, and placelessness of health science by including contextually specific epistemologies.
4. *Antielitism*: acknowledging that urban expertise is always coproduced by “experts” with a diversity of life experiences and focuses explicitly on reversing privileges obtained through social structural inequalities according to wealth, ethnicity, gender, immigration status, sexual orientation, and other forms of privilege (Corburn 2013, 7).

Antireductionist

Health equity planning suggests that the quality of solutions to urban health challenges depends in large part on the way they are framed (Schön and Rein 1994). If a problem is framed too narrowly, too broadly, or wrongly, the solution will suffer from the same defects. For instance, an urban air pollution control strategy focused on a single pollutant cannot produce adequate knowledge about the environmental health consequences of exposure to multiple pollutants—the reality in many communities. The framing of the regulatory issue is more restrictive than the actual distribution of chemical-induced risks, and hence is incapable of delivering optimal management strategies. For health equity planning, two central framing questions must be “what explains the distribution of disease and well-being across populations” and “what drives current and changing patterns of inequalities in well-being across population groups” (Krieger 2011). By emphasizing distribution as distinct from causation, this health equity principle can encourage planners to explore how social, political, and economic forces, from structural racism, to macro-economic policies, to neighborhood environments, together shape which groups get sick, die earlier, and suffer unnecessarily (Braveman, Egerter, and Williams 2011; Corburn 2009). We understand this orientation to include an action-focus on the neighborhood scale while also mobilizing municipal pressure to influence state and federal policies that shape municipal resources and opportunities. In other words, we embrace the idea of “targeted universalism,” or that actions must pay particular attention to the situation of marginalized groups and places in order to improve the health of everyone (Skocpol 1991).

Antideterministic

A complex mixture of urban place characteristics, such as affordable housing, access to healthy food, employment opportunities, safety, quality education, public transportation, opportunities for social connections, and political and cultural expression, are suspected as being important for shaping human health (Vlahov et al. 2007). We suggest that an important aspect of antideterminism is recognizing that the qualities in places relate to one another in complex, often mutually constitutive ways to constrain or promote opportunities to be

healthy (Cummins et al. 2007). Further, the relational view emphasizes that politics and culture—namely public policies and institutions—contribute to a “sense of place” by enabling or stymieing processes that assign place-based characteristics meaning (Gieryn 2000; Healey 1999). In the relational view of health equity, planners must grapple with the double construction of how place might influence health; first through material and physical building (the buildings, streets, parks, etc. of the “built environment”) and through the shaping of social process that assign meanings, interpretations, narratives, perceptions, feelings, and imaginations within places. Importantly, these meanings are contingent and contested, constantly being constructed and reconstructed as, for instance, when new population groups and cultures move into a place. Differences in social processes, such as power, inequality, and collective action, are often revealed through the construction and reconstruction of the material forms and social meanings of places, and a nuanced understanding of these processes is required for health equity planning (Emirbayer 1997; Escobar 2001). The contingent and contested characteristics of place-meanings suggests an antiesentialist view of places, or the notion that there is no one single set of place characteristics, meanings, or relationships that will make all cities and neighborhoods healthy, and an understanding of the history of places and biographies of people living there is necessary for health equity planning.

Antipositivist

Some built environment and health work tends to conflate neighborhood characteristics (often defined as static variables) with place (Ellaway et al. 2013; Kimbro and Denney 2013; Papas et al. 2009; White et al. 2011). These studies aim to explore for significant “neighborhood effects” on well-being using a subset of quantitative variables, and when little or no statistical influence is found, they often conclude that individual biology, behaviors, or genes must be responsible for health status, not “neighborhood characteristics.” Our antipositivist approach explores an alternative to this work, namely, that there are mutually reinforcing relationships between places and people and the position of places relative to each other, and that the place-effects on health ought to be understood as a result of endogenous and exogenous processes operating at a variety of spatial scales, not just the neighborhood scale (Corburn 2013). Building on our relational perspective, we aim to bring the social back into health science policy making and as such question the realist ideology that persistently separates the domains of nature, facts, objectivity, and reason from those of culture, values, subjectivity, and emotion in policy and politics more generally (Jasanoff 2007).

Antielitism

The antielitism principle suggests that expert analytic frameworks often create high entry barriers for alternative ideas, and

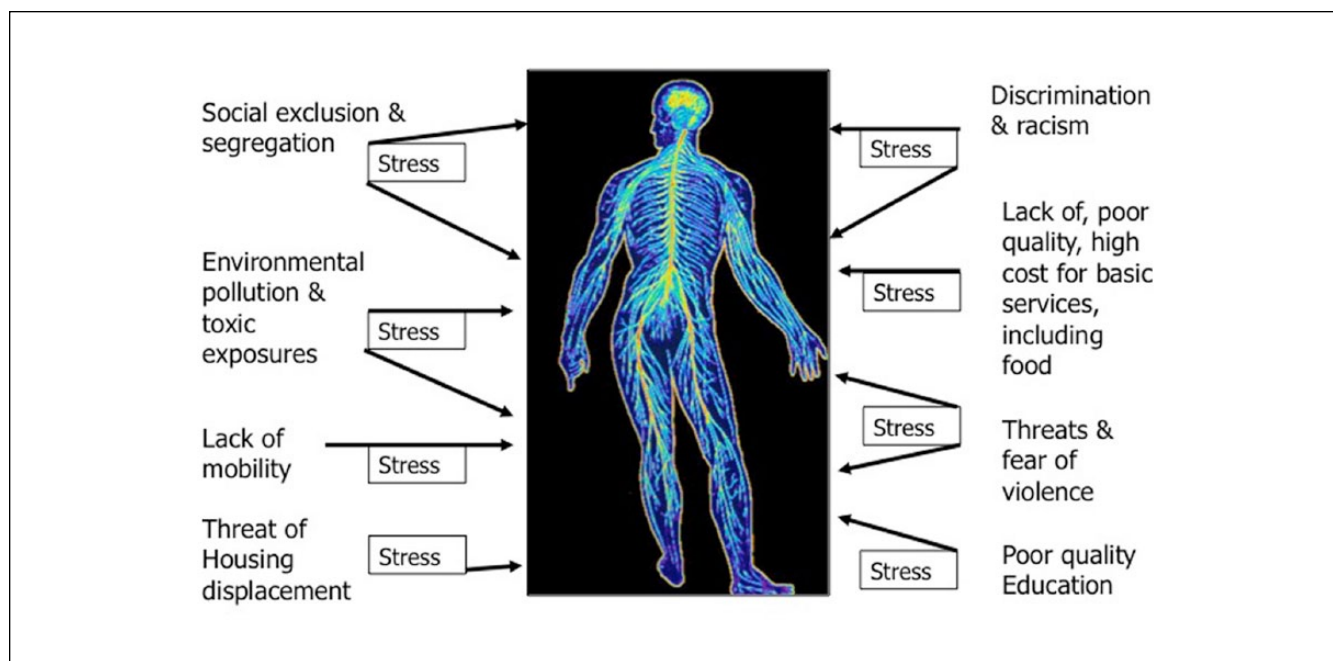


Figure 3. Cumulative stressors that adversely impact human health.
Source: Corburn, 2013, p. 17.

expert claims of objectivity tend to hide the exercise of power so that normative presuppositions are not subjected to general debate (Winner 1986). Health equity planning must make explicit the normative that lurks within the technical and to acknowledge from the start the need for plural viewpoints and collective learning. It asks planners to reveal how expertise can write itself into power and how disciplinary formations of the professions can limit practices of criticism (T. Mitchell 2002).

Embodiment and Toxic Stress: A Framework for Health Equity Planning

Taken together, our four principles encourage planners concerned with health equity to focus on embodiment, or how multiple inequities interact and accumulate over time, with place acting as the linchpin holding these arrangements together. As Krieger (2005, 353) notes,

Embodiment reminds us that a person is not one day African American, another day born low birth weight, another day raised in a home bearing remnants of lead paint, another day subjected to racial discrimination at work (and in a job that does not provide health insurance), and still another day living in a racially segregated neighborhood without a supermarket but with many fast food restaurants. The body does not neatly partition these experiences—all of which may serve to increase risk of uncontrolled hypertension, and some of which may likewise lead to comorbidity, for example, diabetes, thereby further worsening health status.

Embodiment research suggests that our bodies do not partition experiences with inequality and these experiences act

cumulatively as stressors on the immune and neurologic systems that lead to a range of diseases and premature death (Figure 3) (Adler and Stewart 2010; Geronimus and Thompson 2004; McEwen and Gianaros 2010; NSC 2009; Shonkoff et al. 2012). While stress can be life saving for most—think of the fight-or-flight mechanism—constant adversity is toxic, meaning that the prolonged activation of the stress response systems can disrupt the development of the brain architecture and other biologic systems (Sawyer et al. 2012).

As we show in Figure 4, under “normal” stressful situations, the human body has a range of physical and chemical responses, but primarily epinephrine (adrenaline) and cortisol are released to bring the endocrine and immune systems back to homeostasis (Figure 4, solid line). The body’s ability to maintain stability under stress has been called allostasis (McEwen 2007). In toxic stress situations, stressors are constant and the “allostatic load” continues to increase and the chemical release of “fight or flight” hormones does not properly regulate or shut-off (Figure 4, dashed line). Increased allostatic load wears away at the immune system as it overworks to manage the hormonal releases and attempts to return to homeostasis. Under toxic stress circumstances, the oversecretion of cortisol and adrenaline trigger other biologic responses such as poor glucose regulation and constant feelings of hunger that can contribute to chronic diseases such as overweight and obesity, diabetes, hypertension, cardiovascular disease, stroke, asthma, and other immune-related illnesses (Shonkoff et al. 2012). Some known toxic stressors include chronic poverty; racial, gender, and other forms of discrimination and marginalization; physical or emotional abuse; exposure to

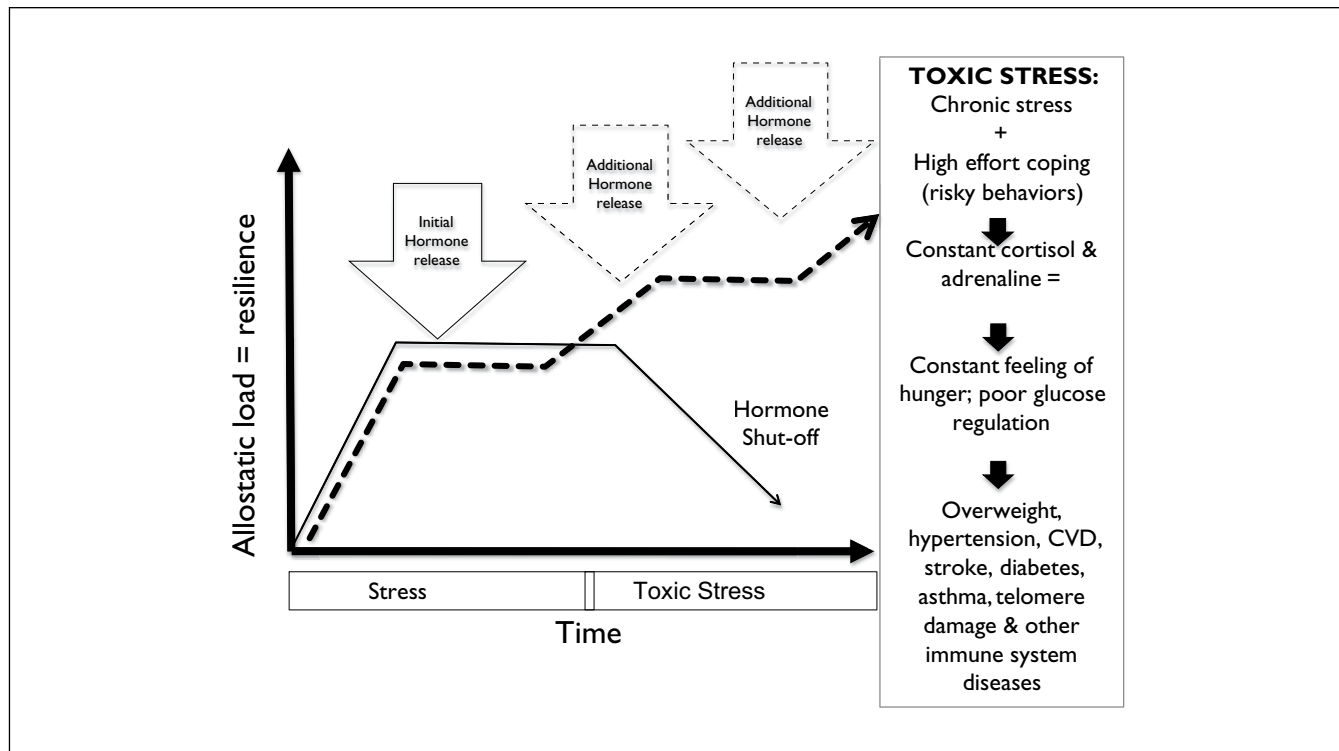


Figure 4. Chronic stress and its biologic impacts.

Source: Corburn, 2013, p. 19.

violence; and housing instability—and these stressors start influencing health in utero and have cumulative impacts over a lifetime (Velasquez-Manoff 2012). For example, reports of discrimination by African Americans and Asian Americans have been linked with visceral fat accumulation, which increases the risk of metabolic syndrome (and thus the risk of heart disease and diabetes) (Gee, Walsemann, and Brondolo 2012; Smedley 2012).² Toxic stress, particularly from discrimination, can contribute to high-effort coping behaviors in an attempt to overcome marginalization, which in turn can limit individual and collective efficacy and lead to heart disease and stroke. The adverse health impacts of high-effort coping behaviour related to toxic stress is what Sherman James (1994) has termed *John Henryism*. Toxic social stressors over one's life course are also suspected in influencing epigenetic processes that regulate whether genes are expressed or suppressed. Allostatic load has been linked with changes in the length of telomeres, which are DNA-protein complexes capping the ends of chromosomes that protect them against damage. Telomere shortening is considered a marker of cellular aging (Price et al. 2013). The toxic stress framework and four relational principles act as the guiding approach to our health equity planning in Richmond.

Health Inequities in Richmond, California

Located in California's San Francisco Bay Area, Richmond is the largest city located in western Contra Costa County

with a population of more than 103,000 residents (U.S. Census Bureau 2010). Richmond is also one of the most ethnically diverse cities in the San Francisco Bay Area, with more than 26 percent African American, 40 percent Latino, 21 percent white, and 13 percent Asian-Pacific Islanders. Richmond's history helps understand its diversity. The Santa Fe railroad had its terminus in Richmond, and many African American porters made Richmond their home. During World War II, more than sixty thousand workers—many African Americans from the American Southeast—came to work in the city's Kaiser Shipyards as part of the war effort. At the end of the War era, the shipyards closed and by 1950, more than 40 percent of Richmond's population was unemployed (Moore 2000, 97). In the 1970s and 1980s, Laotian refugees settled in Richmond and later a wave of Latino immigrants. Richmond is also home to one of the west coast's largest ports and the largest oil refinery west of the Mississippi River operated by Chevron Corporation, which dominates the city's industrial landscape and is the region's largest source of air pollution.

In 2010, nearly 20 percent of Richmond residents were unemployed, 38 percent of children were living in poverty (compared to 15 percent in Contra Costa County and 24.3 percent in all of California), and 57 percent of households paid more than 30 percent of their income for housing (U.S. Census Bureau 2010). In 2010, nearly half of homes in a single Richmond zip code were in foreclosure or at risk for foreclosure, and the city was ranked among the most violent American cities. Health outcomes in Richmond reflect these

social inequalities. According to the Contra Costa County Health Service agency in 2010, 22 percent of African American children were hospitalized for asthma compared with less than 9 percent of white children; 32 percent of adults aged 20–44 were obese, compared with 21 percent of similar Californians; and more than 28 percent of residents report their health as fair or poor, compared with only 16 percent of similar Californians (CCHS 2010). The *Contra Costa Times* reported in 2010 that the ZIP code in central Richmond (94603) had a life expectancy of 71.2 years (the California state average is 78.4 years), while a few miles away in another ZIP code over the Richmond Hills, life expectancy was more than 87 years (Bohan and Kleffman 2010).

Launching Health Equity Planning in Richmond

As one response to persistent health inequities, Richmond residents organized for environmental and social justice. Since the 1980s, African American residents organized into groups such as West County Toxics Coalition, Communities for a Better Environment, and Asian-Pacific Environmental Network, to reduce pollution from the Chevron refinery and hold the company accountable for its contribution to adverse health impacts (N. Malloy, pers. comm.). In 2006, the city launched a planning process to update its General Plan, and community groups formed a coalition to influence the process called the Richmond Equitable Development Initiative (REDI). REDI included environmental justice groups and organizations working to promote affordable housing, employment opportunities, improved access to health services, and violence reduction.³ According to former Executive Director of Urban Habitat, Juliet Ellis (pers. comm.), REDI used research, policy advocacy and organizing strategies to ensure that growth and development decisions in Richmond benefited the city's low-income communities and people of color. During some of the first public meetings about the General Plan Update, REDI members demanded that the plan include environmental justice and health issues. A consulting planning firm, Moore, Iacofano, and Goltsman (MIG), was contracted by the City of Richmond to organize the planning process. One senior MIG planner, Vikrant Sood, reflected on the early community meetings, noting,

The key issues for community residents were jobs, environment and health. Yet, we didn't have any specific plan for reversing pollution, a strategy for getting residents back to work or how land use planning could address public health. Community pressure and critique of our approach forced us to reach out to others in the region that had expertise in these areas. Specifically for health, we engaged with the San Francisco Department of Public Health, and their Environmental Health Director Dr. Rajiv Bhatia, to learn about how to integrate public health into our land use

planning. That is essentially how the idea of a specific Health Element emerged. (V. Sood, pers. comm.)

A partnership among MIG, the City of Richmond, and Dr. Bhatia was established and together they approached the California Endowment (TCE), a statewide health foundation, about supporting an innovation that had never been attempted in the State of California before, namely, drafting a Health Element as part of the General Plan Update. TCE was already funding many of the community-based organizations in Richmond, including REDI, and some similar land-use and health work using Health Impact Assessment in San Francisco. TCE provided financial support and contracted with PolicyLink, a national nonprofit, to organize a Technical Advisory Group (TAG) to advise the health element research and drafting process.⁴ The REDI coalition was also funded by TCE to participate in the Health Element process and to organize Richmond residents to engage in and shape the content of the plan.

The first tasks of the TAG were to describe the connections among land-use planning, city management, and health disparities in Richmond; generate a set of goals for the Health Element; and describe these in a baseline conditions report. This integrated approach reflected our four principles of health equity planning by including a range of data types, from quantitative health outcome information to resident narratives, explored multiple pathways between community risks and health, and included the expertise of residents and professionals in an open, participatory process. One of the initial TAG reports for the Health Element defined the planning process (City of Richmond 2007, 5):

The Health Element will address health disparities and promote healthy living, and use the General Plan as a vehicle for promoting sound public health and land use policy. The Element will outline a framework and methodology for evaluating and understanding existing community health and wellness conditions, develop goals, policies and implementing actions to address key community issues and opportunities, and create a tool for tracking progress over time. The Element will involve key stakeholders and the Richmond community in the process, and focus on key community needs and opportunities.

Recognizing and addressing health disparities was the first goal of the Element and, according to Sheryl Lane of Urban Habitat and a leader of REDI, this was an important orientation of the work and one that differentiated it from other health and “built environment” efforts (Lane, pers. comm.). Other explicit goals for the Health Element were to draft implementing policies, not just land-use or urban designs, to address community health and to develop a tracking and monitoring strategy.

From Planning Drafts to Pilot Implementation

By 2008, the first draft of a Community Health and Wellness Element (HWE) was publically released and articulated

eleven aspects of healthy planning raised by community members and researched by the TAG: (1) improved access to parks, recreation and open space; (2) expanded access to healthy food and nutrition choices; (3) improved access to medical services; (4) safe and convenient public transit and active circulation options; (5) a range of quality and affordable housing; (6) expanded economic opportunity; (7) complete neighborhoods; (8) improved safety in neighborhoods and public spaces; (9) improved environmental quality; (10) green and sustainable development practices; and (11) leadership in building healthy communities. Each priority area included specific policies and actions intended to make the goal a reality (City of Richmond 2012b).

At the same time the draft HWE was being reviewed, community groups mobilized to define indicators of equity in Richmond. Two nonprofit organizations, the Pacific Institute and West County Toxics Coalition, launched a year-long effort to define what they thought were the indicators of a healthy and just Richmond. They gathered oral histories along with publically available data into a report titled *Measuring What Matters: Neighborhood Research for Economic and Environmental Health and Justice* (Pacific Institute 2009). The report reflected a broad set of community assets and challenges, from lead paint in homes and freight transportation pollution to liquor stores and rehabilitating former prisoners returning to the community. A new regional health equity coalition, the West County Indicators Project, was created to track progress on the group's indicators and advocate for implementation of the HWE.

The community indicators work helped inspire a second phase for the Health and Wellness Element focused on developing pilot interventions that could help prepare planners for ongoing healthy planning practice. In 2009, the Richmond City Planning Department took the lead on what was called the pilot implementation phase (since the General Plan itself had not been formally adopted), or Phase II of the Community Health and Wellness Element (City of Richmond 2012a). The work plan of Phase II established a Neighborhood Strategies Work Group (NSWG) that selected two areas in Richmond with the poorest health, social, and economic conditions, called the Iron Triangle and Belding Woods, for focused interventions. Two primary schools in each neighborhood acted as the sites where residents came together to create action plans.

Learning by Doing: Place-Based Health Equity Interventions

The NSWG began in each site by organizing residents to conduct walk-audits of their neighborhoods and using these participatory map-making exercises to launch discussions about how to address local physical, social, and economic stressors. The maps created by residents, such as parents from the participating schools, were combined with available land use and health data from the City and County. The aim

was to prioritize short-term interventions that could build trust and working partnerships between local government and residents in neighborhoods that rarely saw institutions responsive to their needs (G. Arredondo, pers. comm. Velasquez 2012). According to City Manager Bill Lindsay, the community planning process helped a "light bulb" go off for him that every city department and decision was partially responsible for health and equity. According to Lindsay (pers. comm., 2011):

After a few years of this work, it finally just clicked for me listening to residents and staff strategize about projects we could do and how it would really improve their lives and reduce stress. Everything we [City] did, or didn't do, could have an influence on health for our neighborhoods and populations. Of course, there were other things we couldn't control, but it became clear that if we aligned and leveraged all that we did do in local government towards health, we could make a significant difference in people's lives. That was a defining "Ah ha" moment for me that we were in the "business of health."

Tangible place-based projects began during this phase so residents could see immediate results in their neighborhoods from the planning efforts. For example, street and sidewalk paving was improved, tennis courts at two local parks were converted into futsal (soccer) courts, and the city upgraded all streetlights to LED technology.

In the Iron Triangle area, residents and youth worked to redefine "places" that were viewed by outsiders as unhealthy. For example, an abandoned former rail corridor frequented by drug dealers was "taken back" by residents and youth and planned as a greenway, and an underutilized, unsafe playground was reclaimed, redesigned, and rebuilt into what is now Pogo Park and Elm Play Lot. In these processes, residents and city staff leveraged the evidence and partnerships developed through the health element planning process to secure a \$5-million Proposition 84 Statewide Park Program grant to develop new public spaces, such as Unity Park along the Richmond Greenway. According to Toody Maher, Director of the Pogo Park and Greenway projects, these public spaces began to change residents' perceptions of their place and their own health, since residents now had a safe place to play and meet their neighbors, reducing fear and stress and increasing social connections. The parks also offered local youth jobs, a place where food was grown and sold and that was a safe space for cultural expression. The pilot projects also revealed the importance for but challenge of engaging city departments and community-based organizations that did not necessarily view their mission as addressing health, such as those working on job training, education, and violence reduction, in promoting health equity (T. Maher, pers. comm.). The *New York Times* reported that Richmond was "leading the Bay Area into the future of urban planning" by "adopting a new vision for itself that makes the health of its residents a top priority" (Weintraub 2010).

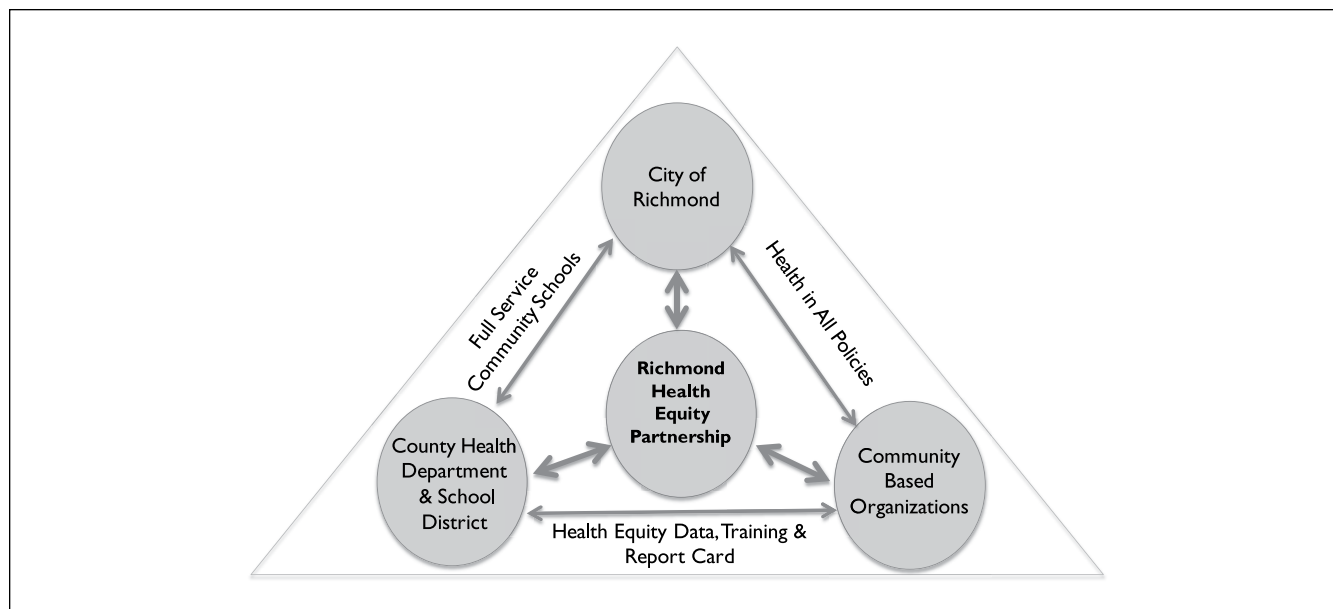


Figure 5. Richmond Health Equity Partnership, model of change.
Source: Corburn, 2013, p. 153.

Reducing Community Violence

Throughout the drafting and pilot implementation phase of the HWE, violence reduction was regularly the top priority for residents. Pressured by local activists and learning from national experiments in violence reduction, Richmond decided that continuing to criminalize poverty and incarcerating young men of color was not a solution (D. Boggan, pers. comm.). To address some of the causes of community violence and to promote safety, the City of Richmond created an Office of Neighborhood Safety (ONS) in 2007. The idea behind the ONS is to leverage city, county, and regional resources, in a way that nonprofits cannot, to enhance services for the City's most disconnected and vulnerable youth and young adults with the aim of reducing violence (ONS 2012). To achieve this goal, ONS worked to coordinate inter-departmental and cross-jurisdictional activities, built new partnerships with nonprofit service providers, and recruited Neighborhood Change Agents (NCAs) to conduct street-level outreach to at-risk individuals and enroll young people in their Peacemaker Fellowship program. The ONS also coordinated the Richmond Community Wellness Collaborative, which brings together street- and school-based outreach and case management, including the Contra Costa County Reentry Network, all of which facilitate life-supporting opportunities for young people and their families. Preliminary outcomes demonstrate the success of the ONS program: of the forty-three original Fellows, forty-one are alive, thirty-four have no new gun charges, and thirty-three have no gun violence-related arrests since becoming a Fellow, while twelve Fellows have obtained jobs and several Fellows have obtained their GED or high school diplomas

(ONS 2012). In 2009, the City had forty-two homicides, but by 2013 there were only twelve, the lowest number since 1980. According to DeVone Boggan, Director of ONS, the program has facilitated personal transformations, and he credits the Fellows in helping to transform community "norms" of violence.

Institutionalization: The Richmond Healthy Equity Partnership

As the pilot implementation phase of the HWE was concluding in late 2010, the California Endowment was launching a new, place-based initiative focused on fourteen communities in California called Building Healthy Communities (BHC), and Richmond was selected as one of the sites. The BHC initiative presented an opportunity for the City of Richmond to coordinate a range of disparate neighborhood-based equity efforts and further integrate equity into the everyday practices of city government (Lindsay, pers. comm.). The Richmond Health Equity Partnership (RHEP) was created in the city manager's office, not the planning department, and aimed to coordinate all city agencies, the county, school district, and community groups to draft a Health in All Policies Strategy and Ordinance for the city, develop a Full Service Community Schools strategy for Richmond schools, and draft an annual health equity report card by the local health department (Figure 5).⁵ The HiAP strategy and ordinance was seen by the city manager as a way to institutionalize and further the implementation of the Health Element of the general plan across all functions of the city.

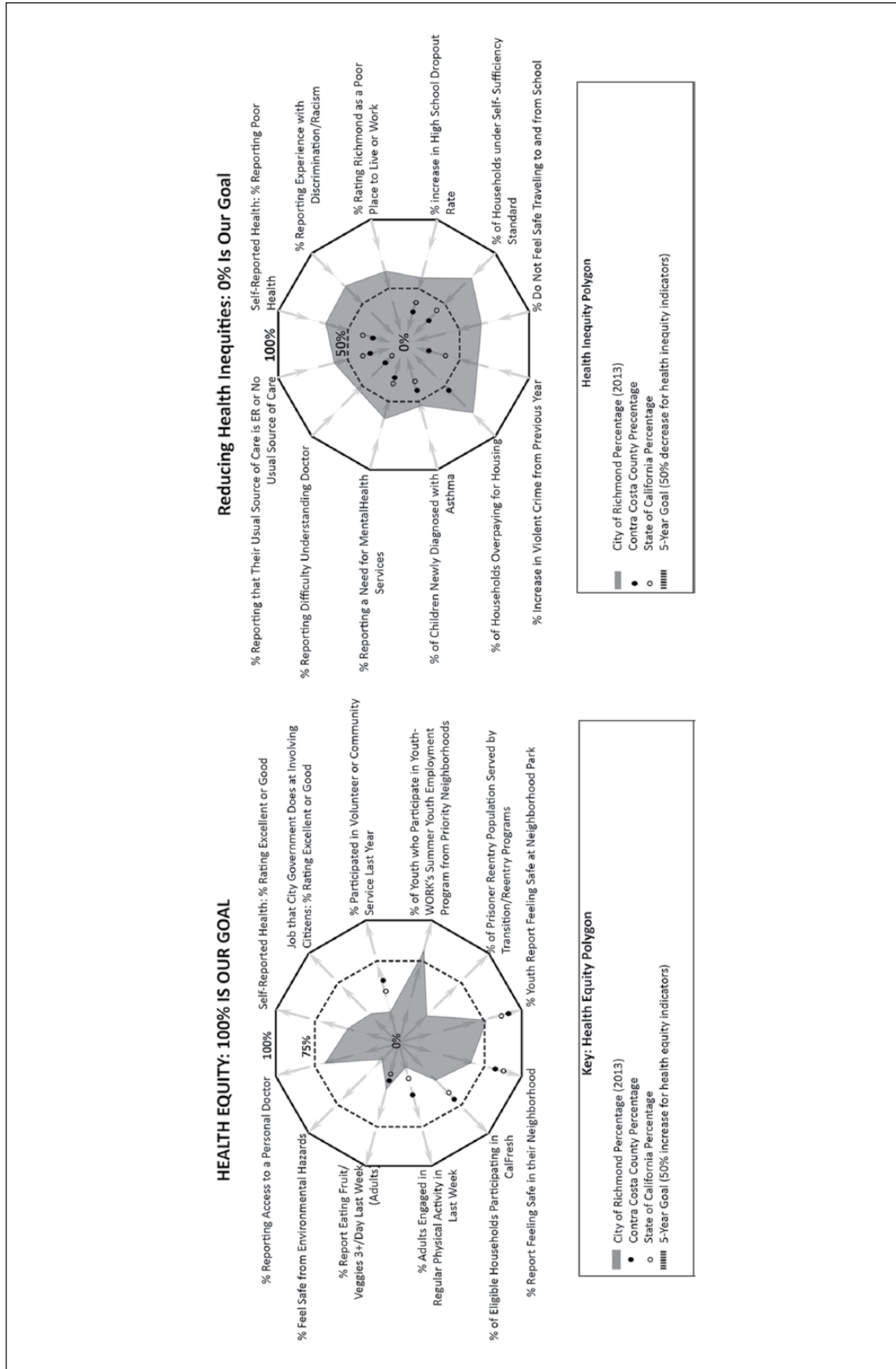


Figure 6. Relational equity measures for Richmond's Health in All Policies strategy.
 Source: City of Richmond, "Health in All Policies Strategy Document," 2014, <http://www.ci.richmond.ca.us/DocumentCenter/View/28771> (accessed April 19, 2014).

HiAP: City Services through the Prism of Health

HiAP is an approach to decision making that recognizes that most public policies have the potential to influence health and health equity, either positively or negatively, but that policy makers outside of the health sector may not be routinely considering the health consequences of their choices and thereby missing opportunities to advance health and prevention (ASTHO 2013). HiAP dates to the WHO's Declaration of Alma-Ata in 1978 and was endorsed as a strategy by the European Union in 2006 and the 2011 U.S. National Prevention Strategy. The State of California adopted a HiAP strategy as part of its Strategic Growth Council⁶ in May 2012 (California Health in All Policies Task Force 2012) and legislated HiAP as the core strategy for a new Office of Health Equity through a revision to the California Health and Safety Code (CA 2013). To our knowledge, no city had developed their own HiAP strategy, and within the RHEP we set out to integrate health equity into the decisions of every city department and the five-year strategic business plan and budget of the City of Richmond.

In Richmond, we organized our HiAP strategy into training, collaborative strategy drafting and indicator development. We began by organizing trainings in health equity for all city staff, starting with senior managers of every city department, from the police chief to the director of housing. The idea was to begin to integrate a health equity approach for all city departments from the highest levels of leadership. In January 2013, the Mayor and Richmond City Council were unanimous in directing city staff to draft the HiAP ordinance and accompanying implementation and monitoring strategy.

Structural Racism and Toxic Place-Based Stressors

The health equity trainings were organized using a structural racism framework. By structural racism, we meant that seemingly neutral policies and practices can function in racist ways by disempowering communities of color and perpetuating unequal historic conditions. Powell notes that a structural racism lens helps us analyze

how housing, education, employment, transportation, health care, and other systems interact to produce racialized outcomes. Such a model allows us to move beyond a narrow merit-based, individualized understanding of society to show how all groups are interconnected and how structures shape life chances. At the level of cultural understanding, the structural model shows how the structures we create, inhabit, and maintain in turn recreate us by shaping identity and imparting social meaning. Chief among the processes in a structural model that connect institutions to identity formation is the relationship between racial identity and geography . . . the racialization of space. (Powell 2007, 793)⁷

We introduced staff to these ideas and the public health evidence behind the cumulative exposures and toxic stress

models (see Figures 3 and 4), emphasizing that in Richmond no neighborhood or population group experienced only one “toxic” stressor. We used maps and environmental health evidence and asked city leaders to share their experiences working with the Richmond community. In this way, we emphasized that every city department could and should have a role in eliminating or reducing the multiple exposures in Richmond. According to one city leader, the structural racism and cumulative exposure approach was not only novel but spoke to their experience as a lifelong Richmond resident, noting,

The idea that health was not just something you get at your doctor's office was new for us and that housing, finance, engineering and other departments were also “health departments” was also new. We valued that institutionalized racism wasn't swept under the rug and the connections made clear about how even when individuals might not be racist, institutions and decisions—whether from legacies or being inattentive to racial impacts—have not really changed. This was important for moving the conversation from race and health to hidden discriminatory outcomes from city policies and practices.

Accompanying the trainings with city staff was a drafting committee that researched HiAP and health equity models around the world and began drafting a strategy document and ordinance.

Staff from the city manager's office and other departments brought early outlines of the HiAP strategy to community meetings, introduced the cumulative stressors framework and had participants reflect on different stressors regularly experienced in their neighborhoods and/or lives. All working drafts and meeting materials were shared on the city's website (www.richmondhealth.org). Residents and members of community-based organizations participated in additional public meetings to help set health equity priorities, review proposed actions, and suggest measures or indicators to track progress. An original set of twelve HiAP intervention categories was narrowed to six, and workshops with community-based organizations and city staff continued monthly for one year.

The narrowing of intervention areas was done primarily to ensure the HiAP was consistent with the categories and policy areas in the City's General Plan and Budget, thus ensuring consistency across related documents and enhancing the possibility of using similar performance measures. The final HiAP Intervention Areas focused on how city policy, management, and service decisions could begin to reduce the multiple toxic stressors in Richmond, and included (1) Governance and Leadership, (2) Economic Development and Education, (3) Full Service and Safe Communities, (4) Neighborhood Built Environments, (5) Environmental Health and Justice, and (6) Quality and Accessible Health Homes and Social Services (City of Richmond 2014). Each intervention area included three to six short-term (one to two years) and medium-term (five-year) policy and programmatic strategies targeting one or more “toxic stressor” in Richmond.

The *Governance and Leadership* Intervention Area focused on institutionalizing health equity awareness and practices within all functions of city management, including the city's budget and committing to transparent HiAP review processes, training, data sharing, and annual reporting. The *Economic Development and Education* section targeted city investment in existing workforce development initiatives; traditionally underrepresented, people of color and women owned local businesses; neighborhood-based child care; new health service job training programs; and a partnership with the school district to implement a full-service community schools program. The *Full Service and Safe Communities* intervention area focused on neighborhood-scale programmatic interventions that are known to reduce "toxic stressors" and support healthy choices, including promoting healthy food store development through land use zoning and enhancing the city's financial investments in and commitment to restorative justice, community-based violence reduction, and prisoner reentry programs. The *Residential and Built Environment* intervention area focused on directing city resources toward revitalizing foreclosed and substandard housing, expanding lead paint abatement, improving street lighting, developing a homelessness prevention and emergency shelter program, and engineering "road diets" that make streets safer by narrowing vehicle lanes and widening pedestrian and bicycle zones. The *Environmental Health and Justice* section included investing in climate change adaptation in vulnerable neighborhoods, a comprehensive asthma reduction program, community-based air monitoring around the Chevron oil refinery, rerouting truck routes away from residential areas and hazardous waste and brownfield site remediation. The *Quality and Accessible Health Homes and Social Services* intervention area emphasized how the city could increase access to health care due to opportunities available with implementation of the Affordable Care Act and enrollment in other safety net programs, such as CalFresh, Head Start, Medicaid/Medicare, the Children's Health Insurance Program and expand a place-based community health workers program that offered both employment opportunities and health promotion services to low-income residents and people of color.

Tracking Progress: Locally Accountable Health Equity Indicators

Indicators were reviewed to document inequities, health equity, and monitor the impacts of HiAP actions on people of color in Richmond's neighborhoods. A biannual citizen survey in Richmond was reviewed, and when participants noticed that the survey did not include explicit questions about health or experiences with discrimination, recommendations were made to the city and the survey was changed to include questions about "self-rated health" and experiences with discrimination. The HiAP subcommittee also reviewed available data and possible indicators from the California Health Interview Survey, the largest population

health sample collected annually in the state, to inform their indicator selection. Ultimately, the subgroup agreed on a set of health equity indicators that could track the drivers of inequities and the community's definition of health equity.

Twelve measures of equity using existing publically available data were selected to capture resident's priorities and give the HiAP a clear set of measurable indicators for moving toward greater health equity (Figure 6, left side), and a similar set of indicators were selected as inequities that the group wanted to reduce or avoid (Figure 6, right side). In Figure 6, the two polygons represent our relational approach to measurement: each axis indicates the existing conditions in Richmond (shaded gray area) in comparison to the county and state; the dashed line reflects a two-year goal for gauging progress. Within each of the six action categories in the HiAP strategy, one or more of the equity measures were analyzed by race and ethnicity in Richmond. The HiAP strategy was accompanied by a City Ordinance that was adopted by the City Council in April 2014 and gave legal authority behind the integrated strategies needed to achieve its goals.

Impacts of Health Equity Planning in Richmond

While it is conceptually and analytically difficult to identify and measure impacts of our integrated and relational health equity planning approach in Richmond, we offer examples below of transformative events and practices that our work has influenced through active city-community partnerships, an explicit commitment to dismantling racism and privilege, working to change the narrative and perception of Richmond, and committing to democratic data gathering and analyses. We intentionally differentiate impacts from outcomes, with the former referring to effects that often transcend a specific focus while the latter is a result or change that can be directly attributed to an activity or intervention (Rossi, Lipsey, and Freeman 2004). We suggest that the ongoing health equity planning work in Richmond is at least partially responsible for a value and political shift within Richmond's approach to city governance that now prioritizes health equity and the needs of the poor and people of color in Richmond more generally. This shift is reflected in practice and recent decisions. For example, the City Manager's office now takes a relational approach to its work, and structural racism and addressing toxic stressors are foundational concepts used to organize the work of most city staff. The Mayor and City Council has proposed using the power of eminent domain to support families under threat of losing their homes to foreclosure and to redevelop abandoned neighborhoods (Said 2013). The Richmond Greenway and Pogo Park projects have stimulated new development in the Iron Triangle neighborhood, such as the construction of a new high school and affordable senior housing adjacent to the newly constructed green spaces. Local business owners have partnered with the city's Richmond Build Academy, a training program for construction and renewable energy jobs, and dozens of formerly unemployed young people (95 percent of

which are people of color) are now getting paid to help rebuild their community using the Health Element and HiAP as a guide (City of Richmond 2013).

In September 2012, the Richmond Police Chief challenged the County Sheriff's proposal for expanding the West County Detention Facility in Richmond. The Chief argued that the \$19 million should be used instead for improved community services and supporting parolees. According to Adam Kruggel, executive director of Contra Costa Interfaith Supporting Community Organization, a group organizing for violence reduction and city programs to support people not prisons, the decision by the City of Richmond was "a great example of elected officials really, truly listening to the voice of the community and responding" (Brown 2012). In 2014, Richmond and Contra Costa County received a Federal Department of Justice grant to expand the city's Family Justice Center that provides a one-stop location for support and services to victims of domestic violence, sexual assault, and human trafficking (wccfjc.org/in-the-news/).

Also in 2013, the Lawrence Berkeley National Lab and the University of California, Berkeley, selected Richmond over twenty other possible locations for its second campus, emphasizing that Richmond was a city on the rise and that these institutions wanted to be a part of this renaissance (Jones 2013). The Richmond Bay Campus project will likely be the largest development project in the San Francisco Bay area and is projected to add at least ten thousand new jobs and a host of other amenities. A recent San Francisco Bay Area newspaper described the changes in Richmond as a "renaissance" (Geluardi 2011):

A new spirit in city government has helped transform industry, the quality of life in the city, and Richmond's grim reputation. The city has undergone a facelift, citizens are attending community meetings and events in unprecedented numbers, and new businesses—many of them green—are bringing economic opportunities back to town. While other cities are desperately contending with debilitating budget deficits and struggling to maintain public safety and other basic services, Richmond has produced balanced budgets and enjoys a full complement of police officers. The combined efforts of city departments and community members have resulted in meaningful reductions in violent crime. And the city has completed numerous civic and neighborhood revitalization projects that have given Richmond a new air of vitality and community health.

By 2014, the city was recognized globally for combatting environmental racism (Okwu and Motlagh 2014) and a community-based fence-line monitoring system had been installed to allow residents, environmental groups, and the city to gather independent air quality data and hold the Chevron refinery accountable for their emissions (www.fenceline.org/richmond/). Elections in 2014 resulted in a progressive mayor and council that supported and were involved in the health equity work (Ostrander 2014).

What Contributes to Making Health Equity Planning Work?

As we have tried to outline here, health equity planning is not about addressing one unhealthy behavior, improving health care access, or altering one aspect of the built environment. Rather, health equity planning requires having an explicit vision of the multiple drivers of health inequities in a specific place, and taking a relational approach to analysis and practice. Richmond planners encountered numerous challenges, many that are not unique to their city, and how they addressed the challenges can offer more general insights for making health equity planning work in cities everywhere.

A first challenge was that the early health and equity planning agenda was not defined by local government but rather by organized residents, as community organizations demanded environmental justice, equitable development, and violence reduction. Early in the planning process, the city partnered with community-based organizations and invited them to co-lead drafting processes for the HWE. Yet, these same CBOs also continued to apply pressure on city government to strengthen its internal equity agenda. Thus, health equity planning emerged from an inside/outside policy advocacy strategy (Rusk 2001).

Second, the HWE and the General Plan took a number of years to finalize and went through a series of hearings and revisions, as might be expected for a major planning document. However, the city did not wait for its formal adoption to commit to action. A pilot implementation program was agreed to by the city, county and CBOs and this action phase allowed all parties to learn together about how to implement health equity strategies in neighborhoods. This action-phase helped expand the number and type of city agencies that participated in health equity planning and moved health equity action outside the planning department and into the Office of the City Manager. This was important because the city manager directs all city agencies and has a direct connection to the Mayor and city council. This raised the profile of the work beyond just plan-making to action and spurred the HiAP strategy and ordinance.

Third, the "learning by doing" approach mentioned above built new partnerships that allowed each governmental body to continue to justify the work internally and to the public while also fostering coalitions that applied for and secured financial resources in the form of grants to continue the work. The county, city, and school district secured a major grant from the California Endowment for the RHEP, and each agency was able to apply for grants from the State to finance built environment projects. Under tight fiscal constraints, early health equity planning was partially justified and avoided some political opposition by securing financing external to the city's budget.

A fourth challenge was building an evidence base to support the work, particularly when data about health and place are not easily available at the neighborhood scale. The health

equity planners developed ongoing processes to identify both quantitative indicators and resident narratives to measure progress toward greater equity. The HiAP strategy did reach consensus on a set of health inequity and equity measures, but this was viewed as a “living document” subject to change as new information emerged and needed to include place-specific information, not just epidemiologist-defined health equity indicators. Importantly, this “adaptive urban management” approach revealed to all involved that multiple kinds of data and expertise were necessary for ongoing health equity data collection and monitoring (Lee 1999).

Much like findings from Krumholz and Forester’s *Making Equity Planning Work* (1990), city-level leadership was a key driver of success. Over the course of six short years, a municipal bureaucracy slowly transformed from one that reacted to crises to one aiming to proactively promote health and wellness, with an explicit eye toward equity. This institutional change was aided by such practical strategies as the establishment of an HiAP interdepartmental task force by the city manager and support for city departments to participate in community planning efforts. City leaders received training and support from faculty and graduate students at UC Berkeley, and an ongoing partnership between the City and the University helped support and staff equity work in times of fiscal cutbacks and staff layoffs.

Conclusions

Making health equity planning work in Richmond is an ongoing process that will require continued institutional attention, public engagement, and accountability. While it is too early to measure population health outcomes, an institutional shift has occurred as the city is integrating health equity into all its day-to-day decisions through the HiAP strategy, including its five-year strategic business plan and budget. Regular meetings of the RHEP have helped change how each city department prioritizes its work and now includes measures of health equity. Leadership from the city manager, senior staff, and community-based organizations are contributing to measurable improvements in the community—from renewed attention to the role of schools as sites for community health promotion, to parks and streetscapes, to social and economic programs, to significant reductions in violence. Importantly, the culture of planning and city management has shifted to make health equity and undoing structural racism a central and explicit component of the municipality’s work. We hope the experimentation, learning by doing, and explicit focus on equity in Richmond can inspire others that health equity planning can and must work.

Declaration of Conflicting Interests

The author(s) declared no potential conflicts of interest with respect to the research, authorship, and/or publication of this article.

Funding

The author(s) disclosed receipt of the following financial support for the research, authorship, and/or publication of this article: All authors benefited from a grant to the City of Richmond by the non-profit foundation, The California Endowment, which supported the Richmond Health Equity Partnership.

Notes

1. Healey (2007, 3–4) also describes the relational approach as emphasizing “the dynamic diversity of the complex colocation of multiple webs of relations that transect and intersect across an urban area, each with their own driving dynamics, history, and geography, and each with highly diverse concerns about, and attachments to, the places and connectivities of an urban area. This involves moving beyond an analysis of the spatial patterns of activities as organised in two-dimensional space, the space of a traditional map. Instead, it demands attention to the interplay of economic, sociocultural, environmental, and political/administrative dynamics as these evolve across and within an urban area. Within the sphere of governance activity, this means that planners from the “planning” tradition, with its focus on place qualities, have to encounter analysts and policy makers concerned with policy fields organized around other foci of attention, such as the competitiveness of the firm, or the economy as a whole, the health of individuals, or the operation of schools and systems of schools.
2. While race is an unscientific, societally constructed taxonomy that is based on an ideology that views some human population groups as inherently superior to others on the basis of external physical characteristics or geographic origin, the concept of race is still socially meaningful. A preponderance of research suggests that racial and ethnic variations in health status result primarily from variations among races in exposure or vulnerability to behavioral, psychosocial material, and environmental risk factors and resources. Racism encompasses prejudice, negative attitudes and beliefs about other groups, and discrimination, which is the differential treatment of people based on their race or ethnicity. The toxic stress concept suggests that racism, not race, affects health status by, among other hazards, diminishing social status, increasing exposure to risk factors and resources, and directly affecting health through increasing stress and the biologic response.
3. The members of REDI include Alliance of Californians for Community Empowerment; Contra Costa Faith Works; Contra Costa Interfaith Supporting Community Organization; East Bay Alliance for a Sustainable Economy; Greater Richmond Interfaith Program; Urban Habitat; Asian-Pacific Environmental Network; Laotian Organizing Project; Communities for a Better Environment. See <http://urbanhabitat.org/richmond>
4. The Technical Advisory Group (TAG) also included representatives from the Contra Costa Health Services Department (CCHS); the Environmental Health Investigation Branch of the California Department of Health Services; and the Department of Public Health, City and County of San Francisco. Members included Richard Jackson MD, MPH, Adjunct Professor, School of Public Health, University of California, Berkeley; Richard Kreutzer MD, Branch Chief, Environmental Health Investigations Branch, California Department of Health Services; Wendel Brunner, MD, Public Health Director, Contra

- Costa Public Health; Poki Stewart Namkung, MD, MPH, Public Health Officer, Santa Cruz County Health Services Agency and President of the National Association of County and City Health Officials; Dennis M. Barry, Director, Contra Costa County Community Development; Richard Mitchell, Planning Director, City of Richmond; Victor Rubin, PolicyLink; Sharon Fuller, Ma'at Academy; Sheryl Lane, Urban Habitat; Barbara Becnel, North Richmond Neighborhood House; Delphine Smith, Communities for a Better Environment.
5. We focus our comments here on the Health in All Policies (HiAP) strategy, since the other two initiatives were still in development at the time of this writing. The HiAP Ordinance was adopted by the Richmond City Council in April 2014. However, the West Contra Costa Unified School District did endorse the development of a Full Service Community Schools approach in its 2013 Strategic Plan and CCHS had drafted a list of potential health equity indicators. Full information on the status of the RHEP initiatives can be found at www.richmondhealth.org.
 6. The CA Strategic Growth Council HiAP strategy (California Health in All Policies Task Force 2012) directs all state agencies to
 - identify opportunities to incorporate a health and health equity perspective into guidance, surveys, and technical assistance documents issued by state agencies; and
 - support interested departments to incorporate a health and health equity perspective into appropriate guidance, surveys, and technical assistance documents, as opportunities arise.
 7. Taylor and Cole (2001) define structural racism as a distributive system that determines the possibilities and constraints within which people of color are forced to act. The system involves the operation of racialized structural relationships that produce the unequal distribution of material resources, such as jobs, income, housing, neighborhood conditions, and access to opportunities . . . such as education and training.
- ## References
- N. E. Adler and J. Stewart, eds. 2010. *The Biology of Disadvantage: Socioeconomic Status and Health*. New York: John Wiley.
- ASTHO (Association of State and Territorial Health Officials). 2013. "Health in All Policies: Strategies to Promote Innovative Leadership." <http://www.astho.org/Programs/Prevention/Implementing-the-National-Prevention-Strategy/HiAP-Toolkit/> (accessed September 3, 2013).
- Beyers, M., J. Brown, S. Cho, A. Desautels, K. Gaska, K. Horsley, T. Iton, T. Lee, L. maker, J. Martin, N. Murgai, K. Schaff, S. Witt, and S. M. Anderson. 2008. *Life and Death from Unnatural Causes: Health and Social Inequality in Alameda County*. Oakland, CA: Alameda County Public Health Department. <http://www.acphd.org/media/53628/unnatcs2008.pdf> (accessed December 12, 2012).
- Bohan, S., and S. Kleffman. 2010. "Shortened Lives: Where You Live Matters." *Contra Costa Times*. <http://www.contracostatimes.com/life-expectancy> (accessed November 12, 2012).
- Braveman, P. 2014. "What Are Health Disparities and Health Equity? We Need to Be Clear." *Public Health Reports* 129 (Suppl 2): 5–8.
- Braveman, P., S. Egerter, and D. R. Williams. 2011. "The Social Determinants of Health: Coming of Age." *Annual Review of Public Health* 32:381–98.
- Braveman, P., and S. Gruskin. 2003. "Defining Equity in Health." *Journal of Epidemiology and Community Health* 57 (4): 254–58.
- Brown, J. 2012. "Contra Costa Tables Controversial Jail Expansion." *Richmond Confidential*. <http://richmondconfidential.org/2012/09/07/contra-costa-tables-controversial-jail-expansion/> (accessed October 21, 2012).
- CA (California). 2013. "Health and Safety Code Section 131000-131020." <http://www.leginfo.ca.gov/cgi-bin/displaycode?section=hsc&group=130001-131000&file=131000-131020> (accessed January 27, 2014).
- California Health in All Policies Task Force. 2012. "Health in All Policies Task Force Implementation Plan: Health and Health Equity in State Guidance." http://sgc.ca.gov/hiap/docs/publications/Endorsed_-_HiAP_Implementation_plan_Health_and_Health_Equity_in_State_Guidance.pdf (accessed January 12, 2013).
- City of Richmond. 2007. "Richmond General Plan Update: Issues & Opportunities Paper #8: Community Health and Wellness." Richmond, CA: City of Richmond Planning Department.
- City of Richmond. 2012a. "Pilot Health and Wellness Implementation Policy Tools." <http://www.ci.richmond.ca.us/index.aspx?NID=2429> (accessed August 2, 2012).
- City of Richmond. 2012b. "Community Health and Wellness Element: City of Richmond General Plan Element 11." <http://www.ci.richmond.ca.us/DocumentCenter/Home/View/8579> (accessed November 12, 2012).
- City of Richmond. 2013. "RichmondBUILD Academy." <http://www.ci.richmond.ca.us/index.aspx?nid=1243> (accessed November 11, 2013).
- City of Richmond. 2014. "Health in All Policies Strategy Document." <http://www.ci.richmond.ca.us/DocumentCenter/View/28771> (accessed April 19, 2014).
- CCHS (Contra Costa Health Services). 2010. "Community Health Indicators for Contra Costa County." http://cchealth.org/health-data/hospital-council/2010/pdf/2010_community_health_indicators_report_complete.pdf (accessed June 11, 2012).
- Corburn, J. 2009. *Toward the Healthy City: People, Places and the Politics of Urban Planning*. Cambridge: MIT Press.
- Corburn, J. 2013. *Healthy City Planning: From Neighbourhood to National Health Equity*. London: Routledge.
- Cummins, S., S. Curtis, A. V. Diez-Roux, and S. Macintyre. 2007. "Understanding and Representing 'Place' in Health Research: A Relational Approach." *Social Science & Medicine* 65 (9): 1825–38.
- Dye, C. 2008. "Health and Urban Living." *Science* 319 (5864): 766–69.
- Ellaway, A., M. Benzeval, M. Green, A. Leyland, and S. Macintyre. 2012. "'Getting Sicker Quicker': Does Living in a More Deprived Neighbourhood Mean Your Health Deteriorates Faster?" *Health & Place* 8 (2): 132–37.
- Emirbayer, M. 1997. "Manifesto for a Relational Sociology." *American Journal of Sociology* 103 (2): 281–317.
- Escobar, A. 2001. "Culture Sits in Places: Reflections on Globalism and Subaltern Strategies of Localization." *Political Geography* 20 (2): 139–74.

- Fraser, N. 2009. *Scales of Justice: Reimagining Political Space in a Globalizing World*. New York: Columbia University Press.
- Galea, S., and D. Vlahov. 2005. "Urban Health: Evidence, Challenges, and Directions." *Annual Review of Public Health* 26 (1): 341–65.
- Gee, G., K. Walsemann, and E. Brondolo. 2012. "A Life Course Perspective on How Racism May Be Related to Health Inequities." *American Journal of Public Health* 102 (5): 967–74.
- Geluardi, J. 2011. "The Man behind Richmond's Renaissance." *East Bay Express*. <http://www.eastbayexpress.com/oakland/the-man-behind-richmonds-renaissance/Content?oid=2647128> (accessed August 1, 2013).
- Geronimus, A. T., and J. Thompson. 2004. "To Denigrate, Ignore, or Disrupt: Racial Inequality in Health and the Impact of a Policy-Induced Breakdown of African American Communities." *Du Bois Review* 1 (2): 247–79.
- Gieryn, T. 2000. "A Space for Place in Sociology." *Annual Review of Sociology* 26: 463–96.
- Healey, P. 1999. "Institutionalist Analysis, Communicative Planning, and Shaping Places." *Journal of Planning Education and Research* 19:111–21.
- Healey, P. 2007. *Urban Complexity and Spatial Strategies: Towards a Relational Planning for Our Times*. London: Routledge.
- James, S. A. 1994. "John Henryism and the health of African Americans." *Culture, Medicine, and Psychiatry* 18:163–82.
- Jasanoff, S. 2007. *Designs on Nature: Science and Democracy in Europe and the United States*. Princeton, NJ: Princeton University Press.
- Jones, C. 2013. "UC Picks Richmond for Lawrence Berkeley Lab Campus." *San Francisco Chronicle*. <http://www.sfgate.com/education/article/UC-picks-Richmond-for-Lawrence-Berkeley-lab-campus-2675669.php> (accessed October 15, 2013).
- Karpati, A. 2004. "Testimony before New York State Assembly Committee on Health and the Black, Puerto Rican and Hispanic Legislative Caucus, April 22." <http://www.nyc.gov/html/doh/html/public/testi/testi20040422.html> (accessed September 20, 2005).
- Kimbro, R. T., and J. T. Denney. 2013. "Neighborhood Context and Racial/Ethnic Differences in Young Children's Obesity: Structural Barriers to Interventions." *Social Science & Medicine* 95:97–105.
- Krieger, N. 2005. "Embodiment: A Conceptual Glossary for Epidemiology." *Journal of Epidemiology and Community Health* 59 (5): 350–55.
- Krieger, N. 2011. *Epidemiology and the People's Health: Theory and Context*. New York: Oxford University Press.
- Krumholz, N., and J. Forester. 1990. *Making Equity Planning Work: Leadership in the Public Sector*. Philadelphia, PA: Temple University Press.
- LaneLee, K. N. 1999. "Appraising Adaptive Management." *Conservation Ecology* 3 (2): 3.
- McEwen, B. 2007. "Physiology and Neurobiology of Stress and Adaptation: Central Role of the Brain." *Physiological Review* 87 (3): 873–904.
- McEwen, B. S., and P. J. Gianaros. 2010. "Central Role of the Brain in Stress and Adaptation: Links to Socioeconomic Status, Health, and Disease." *Annals of the New York Academy of Sciences* 1186:190–222.
- Mitchell, D. 2003. *The Right to the City: Social Justice and the Fight for Public Space*. New York: Guilford.
- Mitchell, T. 2002. *Rule of Experts: Egypt, Techno-Politics, Modernity*. Berkeley: University of California Press.
- Moore, S. 2000. *To Place Our Deeds: The African American Community in Richmond, CA 1910–1963*. Berkeley: University of California Press.
- NSC (National Scientific Council) on the Developing Child. 2009. "The Developing Child, Excessive Stress Disrupts the Architecture of the Developing Brain." Working paper no. 3. http://developingchild.harvard.edu/resources/reports_and_working_papers/working_papers/wp3/ (accessed December 3, 2013).
- Okwu, M., and J. Motlagh. 2014. "California City Wages War against Environmental Racism." *Al Jazeera*, February 17. <http://america.aljazeera.com/watch/shows/america-tonight/america-tonight-blog/2014/2/17/calif-city-leaderslockhorn-swithoilgiantoverhealthworries.html> (accessed February 20, 2014).
- ONS (Office of Neighborhood Safety). 2012. "2012 Annual Report: Changing the Odds." <http://www.ci.richmond.ca.us/DocumentCenter/View/26434> (accessed December 11, 2013).
- Ostrander, M. 2014. "Richmond: The Little Town That Beat Big Oil." *Al Jazeera America*, November 7. <http://america.aljazeera.com/blogs/scrutineer/2014/11/7/richmond-chevrolelectionmoney.html> (accessed November 7, 2014).
- Pacific Institute. 2009. "Measuring What Matters: Neighborhood Research for Economic and Environmental Health and Justice in Richmond, North Richmond, and San Pablo." <http://www.pacinst.org/wp-content/uploads/2013/02/final7.pdf> (accessed June 10, 2011).
- Papas, M. A., A. J. Alberg, R. Ewing, K. J. Helzlouer, T. L. Gary, and A. C. Klassen. 2007. "The Built Environment and Obesity." *Epidemiologic Reviews* 29 (1): 129–43.
- Powell, J. 2007. "Structural Racism: Building upon the Insights of John Calmore." *North Carolina Law Review* 86:791–816.
- Price, L. H., H. T. Kao, D. E. Burgers, L. L. Carpenter, and A. R. Tyrka. 2013. Telomeres and early-life stress: an overview. *Biologic Psychiatry* 73 (1):15–23
- Rossi, P. H., M. W. Lipsey, and H. E. Freeman. 2004. *Evaluation: A Systemic Approach*. 7th Edition. New York: Sage Publishers.
- Rusk, D. 2001. *Inside Game/Outside Game: Winning Strategies for Saving Urban America*. Washington, DC: Brookings Institution.
- Said, C. 2013. "Richmond Pushes Forward with Eminent Domain Plan." *San Francisco Chronicle*. <http://www.sfgate.com/realestate/article/Richmond-pushes-forward-with-eminent-domain-plan-5073950.php> (accessed December 19, 2013).
- Sandercock, L., and P. Lyssiotis. 2003. *Cosmopolis II: Mongrel Cities in the 21st Century*. London: Continuum.
- Sawyer, P., B. Major, B. J. Casad, S. S. Townsend, and W. B. Mendes. 2012. "Discrimination and the Stress Response: Psychological and Physiological Consequences of Anticipating Prejudice in Interethnic Interactions." *American Journal of Public Health* 102 (5): 1020–26.
- Schön, D., and M. Rein. 1995. *Frame Reflection: Toward the Resolution of Intractable Policy Controversies*. New York: Basic Books.
- Shonkoff, J. P., and A. S. Garner, and Committee on Psychosocial Aspects of Child and Family Health, Committee on Early Childhood, Adoption, and Dependent Care. 2012. "The

- Lifelong Effects of Early Childhood Adversity and Toxic Stress." *Pediatrics* 129 (1): e232–38.
- Skocpol, T. 1991. "Targeting within Universalism: Politically Viable Policies to Combat Poverty in the United States." In *The Urban Underclass*, edited by C. Jencks and P. Peterson, 437–59. Washington, DC: Brookings Institution.
- Smedley, B. 2012. "The Lived Experience of Race and Its Health Consequences." *American Journal of Public Health* 102 (5): 933–35.
- Taylor, H. L. Jr., and S. Cole. 2001. "Structural Racism and Efforts to Radically Reconstruct the Inner-City Built Environment." Paper presented at the 43rd Annual Conference, Associate of Collegiate Schools of Planning, Cleveland Ohio, November 8–11. <http://www.thecyberhood.net/documents/papers/taylor01.pdf> (accessed August 1, 2014).
- U.S. Census Bureau. 2010. "American Community Survey." http://www.census.gov/acs/www/data_documentation/summary_file/ (accessed November 10, 2013).
- Velasquez-Manoff, M. 2012. *An Epidemic of Absence: A New Way of Understanding Allergies and Autoimmune Diseases*. New York: Scribner.
- Vlahov, D., Nicholas Freudenberg, Fernando Proietti, Danielle Ompad, Andrew Quinn, Vijay Nandi, and Sandro Galea. 2007. "Urban as a Determinant of Health." *Journal of Urban Health* 84 (1): 16–26.
- Weintraub, D. 2010. "Richmond's New Priority: Taking Health Seriously," *New York Times*, April 2.
- White, H. L., F. I. Matheson, R. Moineddin, J. R. Dunn, and R. H. Glazier. 2011. "Neighbourhood Deprivation and Regional Inequalities in Self-Reported Health among Canadians: Are We Equally at Risk?" *Health & Place* 17 (1): 361–69.
- WHO (World Health Organization). 2008. *Closing the Gap in a Generation: Health Equity through Action on the Social Determinants of Health: Commission on Social Determinants of Health Final Report*. Geneva, Switzerland: World Health Organization, Commission on Social Determinants of Health.
- WHO and UN-Habitat. 2010. *Hidden Cities: Unmasking and Overcoming Health Inequities in Urban Settings*. Kobe: World Health Organization, The WHO Centre for Health Development, Kobe, and United Nations Human Settlements Programme.
- Winner, L. 1986. *The Whale and the Reactor: A Search for Limits in an Age of High Technology*. Chicago: University of Chicago Press.

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