

City of Berkeley

Health Status

SUMMARY

Report 2013



ACKNOWLEDGEMENTS

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This summary and the final report are available for printing at:

http://www.ci.berkeley.ca.us/Health_Human_Services/Public_Health/Public_Health_Reports.aspx

SPECIAL THANKS

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PUBLIC HEALTH VISION AND MISSION

Vision: Healthy people in healthy communities.

Mission: To achieve and maintain optimal health and well-being for all people in Berkeley. We do this by working in partnership with our diverse communities to: promote healthy behaviors and environments, prevent illness and injury, protect against disease and other emerging health threats, eliminate health inequities, and advocate for social and environmental justice.

DEPARTMENT OF HEALTH, HOUSING, & COMMUNITY SERVICES VISION AND MISSION

Vision: A vibrant and healthy Berkeley for all

Mission: The Department of Health, Housing, & Community Services' mission is to enhance community life and support health and wellness for all. We are committed to social and environmental justice and to promoting equity in health, housing, and economic opportunity. We collaborate with community partners to build a vibrant and healthy Berkeley.

INTRODUCTION

Berkeley is one of three California cities with its own Public Health division.* This report fulfills one of the essential functions of public health: monitoring the health of the community. It includes information about successes, on-going efforts, and future directions of Public Health work in Berkeley. The report begins with a description of Berkeley’s demographics, and follows the health of the community throughout the life course from pregnancy and birth through childhood, adolescence, adulthood, and death.

Berkeley is considered a healthy community overall: residents generally live long and live well; they eat well, exercise regularly, are well educated, and enjoy a high standard of living. A closer look at our community, however, reveals significant health inequities: differences in health that are predictable by race/ethnicity and by factors such as income, housing, and education. The presence of marked and persistent health inequities in Berkeley means that our community as a whole is not as healthy as it should be.

Health Inequities are defined as “differences in health which are not only unnecessary and avoidable but, in addition, are unfair and unjust.”¹ Health inequities in Berkeley occur in consistent patterns by geography, race/ethnicity, and income and education. For example, African American residents in South

and West Berkeley have higher rates of adverse pregnancy outcomes, childhood asthma hospitalizations, heart disease, high blood pressure, stroke, and diabetes.

These health inequities affect our entire community. Poor health diminishes the quality and the quantity of life for an individual, and it robs our community of years of full participation, enrichment, and contribution. Berkeley’s health inequities are neither new nor unique to Berkeley—nevertheless, they are unacceptable. Berkeley has made significant progress in improving many measures of health, including decreasing the magnitude of some health inequities—and much work remains to be done.

The Public Health Division and the Health, Housing and Community Services Department recognize health inequities as a priority. Public Health defines health broadly, to include personal and community well-being. Health through this lens is influenced by much more than health care. While the full breadth and depth of the underlying social determinants of health are beyond the control of any single program or agency, the City is committed to addressing and eliminating health inequities. This can only be accomplished with the concerted attention and partnership of the community as a whole.

HEALTH INEQUITIES IN BERKELEY

Compared to a White resident, an African American living in Berkeley is:

| Demographics | Pregnancy & Birth | Child & Adolescent Health | Adult Health | Mortality |
|--|--|--|---|---|
| 3 times less likely to have a college degree | 20 times more likely to be a teen parent | 7 times more likely to live in poverty | 4 times more likely to have been diagnosed with diabetes and 14 times more likely to be hospitalized for diabetes | 2 times more likely to die in a given year from any condition |
| 2 times more likely to live in poverty | 2.5 times more likely to be born too small | 9 times more likely to be hospitalized for asthma (<5 years old) | 12 times more likely to be hospitalized due to hypertensive heart disease | 2.5 times more likely to die of cardiovascular disease |

* The other two city health Jurisdictions are Long Beach and Pasadena



Berkeley Unified School District



Robin Kempster



Robin Kempster

10 ESSENTIAL SERVICES OF PUBLIC HEALTH

In 1994 a national body of public health leaders developed the 10 Essential Services of Public Health as a framework for delineating the breadth and scope of Public Health responsibilities.² This report is a major component of Essential Service #1. At the end of this report, a chart provides examples of how Berkeley's Public Health division meets these service obligations. The essential services are:

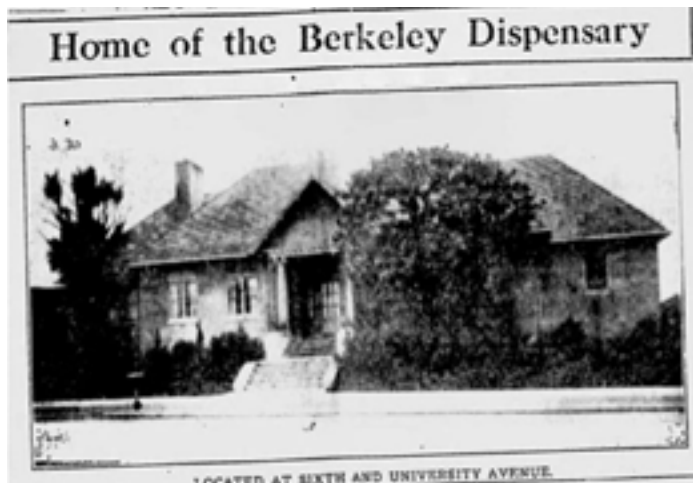
1. **MONITOR** health status to identify and solve community health problems.
2. **DIAGNOSE** and **INVESTIGATE** health problems and health hazards in the community.
3. **INFORM, EDUCATE,** and **EMPOWER** people about health issues.
4. **MOBILIZE** community partnerships and action to identify and solve health problems.
5. **DEVELOP** policies and plans that support individual and community health efforts.
6. **ENFORCE** laws and regulations that protect health and ensure safety.
7. **LINK** people to needed personal health services and assure the provision of health care when otherwise unavailable.
8. **ASSURE** competent public and personal health care workforce.
9. **EVALUATE** effectiveness, accessibility, and quality of personal and population-based health services.
10. **RESEARCH** for new insights and innovative solutions to health problems.

HISTORY OF PUBLIC HEALTH IN BERKELEY

The area now known as the City of Berkeley was once part of the territory of the Chochenyo/Huchiun group of the Ohlone Native American tribe. The first non-Native settlers arrived with the Spanish sponsored De Anza Expedition in 1776. What is now Alameda County was created in 1853 and by 1878 the people of “Oakland Township” incorporated themselves as the “Town of Berkeley.”

Berkeley has made public health a priority since its earliest days.

- 1880: The Public Health Department was established for the purpose of controlling diseases such as smallpox, cholera and yellow fever. Dr. Frank Payne (pictured) was the City’s first chief Health Officer.
- 1882: The first Board of Health was appointed. The responsibilities and authority of the Health Officer and of the newly established Board of Health included the control of communicable diseases and “sanitary nuisances.”
- 1895: Berkeley adopted a new charter giving the Board of Trustees the official power to establish a Board of Health to prescribe rules and regulations to promote the public’s health and comfort and to track births and deaths. Newly adopted health ordinances spanned the spectrum of public health: from the incineration within 24 hours after death of any person with diphtheria, scarlet fever, or smallpox, to the prohibition of expectoration on the floors of public buildings. Duties of the Health Officer included monitoring the town’s milk supply, ensuring that sewer drainage would always be under water, monitoring cases of tuberculosis, and registering and maintaining vital records.



- 1906: Berkeley’s population skyrocketed as a result of the earthquake and fires that devastated San Francisco. The large number of refugees from across the Bay, combined with the lack of community medical or nursing services, prompted the Town to establish the Berkeley Health Center.
- 1915: The clinic moved to a newly built location where it remains today, at University Avenue and Sixth Street.
- 1918: The world-wide influenza (flu) epidemic brought new responsibilities to the Public Health Department. The City Health Department and the Visiting Nurse Association (VNA, est. 1908) collaborated to open a temporary emergency hospital at Edison Jr. High School formerly located on Russell Street. The flu hospital was largely staffed by volunteers and demonstrated that the City of Berkeley was prepared to handle a large scale communicable disease outbreak. This was the dawn of public health emergency preparedness in Berkeley.
- 1923: City health department services and Berkeley school district health services collaborated to appoint six school nurses. This marked the beginning of an on-going coordination between the school district and City public health.
- 1957: The Short-Doyle Act provided financial assistance for community mental health programs. As a result, the City developed an expanded Mental Health program, which continues as the current Mental Health Division.
- 1960s: Berkeley Public Health initiated a host of innovations: the establishment of a family planning clinic; health education activities for immunizations; activities to support maternal and infant care; an intensive tuberculosis control program; and “Operation Head Start”—the planning for health services out of neighborhood centers developed in target areas.



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Berkeley’s Public Health Department was established in 1880.

In 1915, the clinic moved to a newly built location where it remains today, at University Avenue and Sixth Street.

History of Public Health in Berkeley continued

- 1970s and 1980s: The Berkeley Public Health Department engaged in a wide array of community services. Community health workers did outreach at the Welfare Department. Mini health screenings were done at senior centers and senior housing developments. One public health nurse (PHN) was assigned to each public school and one PHN was responsible for private schools. The venereal disease clinic saw close to 190 clients per week. Teams of public health nurses managed a multitude of child and adult health issues. They worked with families who were being evicted, engaged in tuberculosis treatment follow up, and assisted with child abuse and neglect cases.

The foundation for today's Public Health Division had been fully laid: a clinic offering direct services to address community needs; a well-established history of TB and communicable disease control; outreach workers and PHNs engaged with families, individuals, and partners in the City; partnerships with educational organizations; environmental and mental health services; and the ability to adapt to changing community needs and resources. Public Health was already working broadly in the community to address the social *determinants of health* and to eliminate *health inequities* in Berkeley—well before these terms were coined.

The current Public Health Division acknowledges the exceptional work done by those who preceded us. We are both proud and humble to be the current carriers of the mantle of protecting and promoting the health of Berkeley.



Berkeley Unified School District



Robin Kempster



COMPARISONS IN THIS REPORT: **HEALTHY PEOPLE 2020 AND BEYOND**

One way to evaluate the health of our City is to compare ourselves to others. Whenever Berkeley data address one of the Healthy People 2020 (HP2020)³ goals, that goal is reported, so we can see how Berkeley is doing relative to national health goals. We also compare Berkeley with Alameda County and with the State, and we report how different groups of Berkeley residents compare with each other: by age, gender, income, race/ethnicity, education, and place of residence. Finally, we show how health indicators in Berkeley have changed over time. Such comparisons allow us to assess how Berkeley is faring relative to national goals, our neighbors, and our past.

LEARNING MORE

The full 2013 Health Status Report contains:

- Detailed information on all topics in this summary. For ease of reference, original figure and map numbers from the full report are retained here;
- Data sources for all information presented;
- Definitions of key terms.
- The full report is available for viewing or printing at:
http://www.ci.berkeley.ca.us/Health_Human_Services/Public_Health/Public_Health_Reports.aspx



Annie Burke



1

CHAPTER 1: THE BERKELEY COMMUNITY: NEIGHBORS AND NEIGHBORHOODS

What is this?

This chapter describes Berkeley's demographics: information about the population. It tells us about Berkeley's people—who we are, how and where we live, work, and learn, and some of the challenges we face.

Why is this important?

Knowledge of a population's size, characteristics, and changes in fertility, mortality and migration are essential to meeting the health and healthcare needs of a community.⁴ When we know who lives in Berkeley, where they live, and the health and environmental challenges they face, we can target resources more effectively.

What is Berkeley's status?

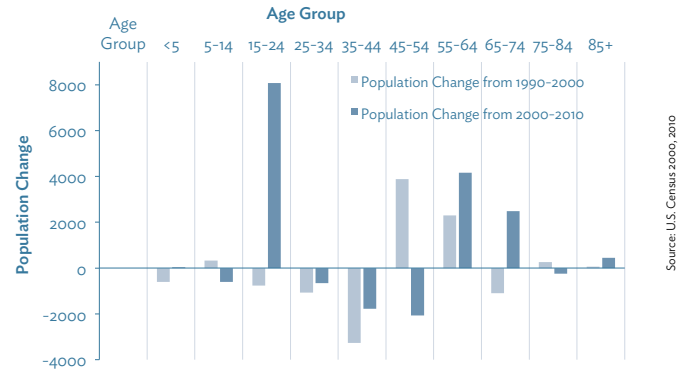
Berkeley is a diverse city of 112,000 people. The 2010 census showed some significant changes in the population. The City's demographics are influenced by the large university student population. In general, residents of Berkeley enjoy high levels of health, education, employment, and income. Berkeley has, however, substantial racial/ethnic disparities in all of these areas. Those affected by these disparities reside disproportionately in South and West Berkeley neighborhoods.

Key Findings

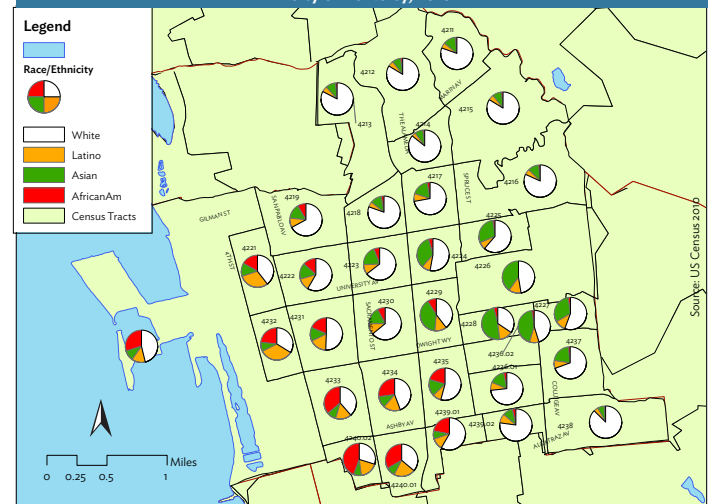
• Population

- Berkeley's population increased by 10% in the last decade.
- African Americans were the only racial/ethnic group to experience a population decrease during this time: a decrease of nearly 3,000 people.
- The biggest increases were in youth 15-24 years of age, and in those over 55.
- Berkeley's racial/ethnic composition varies geographically.

Figure 1.4 POPULATION GAINS/LOSSES IN 1990-2000 AND 2000-2010, BASELINE BY AGE Berkeley, 2010



Map 3 POPULATION BY RACE/ETHNICITY AND CENSUS TRACT City of Berkeley, 2010



Public Health Emergency Preparedness

The Public Health Emergency Preparedness (PHEP) Program develops plans and practices for large public health emergencies such as bioterrorism or pandemic influenza, as well as for the public health aspects of natural disasters such as an earthquake, fire, or flood.

Measure GG funding is being used to develop and implement a Public Health Preparedness program dedicated specifically to disaster preparedness in vulnerable and underserved populations of the City in South and West Berkeley. This program will focus on youth development and leadership initiatives to improve community capacity to respond in an emergency.

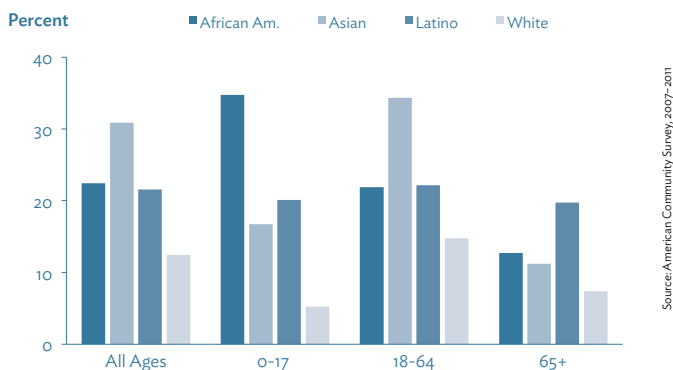
• Language

- o In more than one-quarter of Berkeley households, English is not the primary language spoken.

• Income and Wealth

- o One of every 3 African American children in Berkeley lives in poverty.
- o One of every 5 Latino children in Berkeley lives in poverty.
- o For every dollar earned by White residents, African Americans and Latinos earn 40¢.
- o White's make up 55% of Berkeley residents and account for 75% of the homeowners.

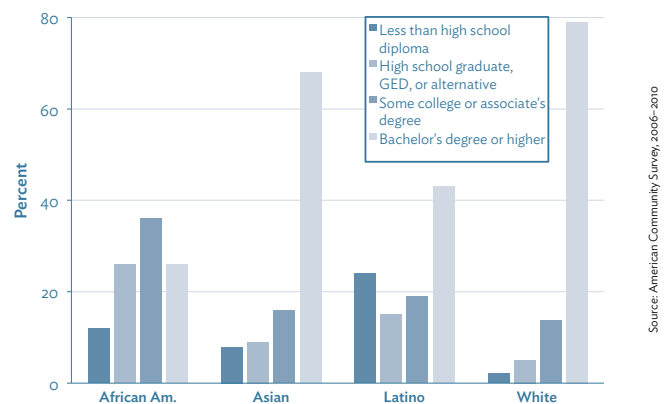
Figure 1.15 PERCENT OF POPULATION BELOW THE POVERTY LEVEL IN 2011 BY AGE AND RACE/ETHNICITY Berkeley, 2007–2011



• Education

- o 85% of adult Berkeley residents have attended at least some college.
- o African Americans are the least likely to have a bachelor's degree or higher.
- o Latinos are the least likely to have graduated from high school.

Figure 1.23 EDUCATIONAL ATTAINMENT OF POPULATION AGED 25 YEARS AND OLDER BY RACE/ETHNICITY Berkeley, 2006–2010



Career Development Opportunities

The Department of Health, Housing & Community Services (HHCS) offers extensive intern and volunteer opportunities. Students from BUSD schools, Berkeley City College, UC Berkeley, and health professions schools join the department to assist in projects, program evaluation, service provision, and community-based work. The YouthWorks program provides paid summer and year-round youth employment experience.

“Housing policy is health policy. Educational policy is health policy. Antiviolence policy is health policy. Neighborhood improvement policies are health policies. Everything that we can do to improve the quality of life of individuals in our society has an impact on their health and is a health policy.”

— Dr. David Williams, Harvard School of Public Health

- **Access to Health Care**

- o Nine percent of Berkeley residents lack health insurance.
- o African Americans have the highest rates of being uninsured: 18%.

Access to Health Care

As Health Care Reform rolls out in 2014, linking residents to eligibility assessment, enrollment, and retention is key to ensuring that Berkeley residents take full advantage of the opportunities presented by Health Care Reform. Public Health Nurses (PHNs) link residents to health care services via telephone assistance and home visiting case management services. El Centro Community Health Workers provide free information and assistance with Medi-Cal and Healthy Families applications.

- **Transportation**

- o Forty percent of Berkeley residents use active transportation methods to get to work.

Active Transportation

Active transportation means getting around by walking, biking, or taking public transit. Using active transportation benefits the individual's health, and is a primary strategy for reducing greenhouse gases and improving local air quality. Physical activity reduces the risk of heart disease, overweight and obesity, and high blood pressure, and improves mental health. Improved air quality lessens rates of diseases such as asthma and heart attacks. These health "co-benefits" make active transportation a win/win approach to community health.⁵



Amie Burke



Berkeley Unified School District



2 CHAPTER 2: PREGNANCY AND BIRTH

What is this?

Pregnancy and childbirth mark the beginning of a new individual's journey along the life course. In this chapter we report on maternal and infant health related to pregnancy and childbirth.

Why is this important?

The conditions of pregnancy, birth, and early infancy have a profound impact on health and well-being throughout life. Public Health focuses attention on this critical life stage when assessing the health of the community.

What is Berkeley's status?

Berkeley has excellent overall health indicators related to pregnancy, birth, and breast-feeding and meets most HP2020 goals in these areas. Inequities in birth weight and prematurity persist among African American mothers and infants, despite significant improvements over the last decade. The teen birth rate among African American young women is many times the rate among other racial/ethnic groups.

Key Findings

• Healthy People 2020

- Berkeley overall *meets* HP2020 goals for:
 - Prenatal care
 - Low Birth Weight
 - Prematurity
 - Breastfeeding from birth to 6 months of age
- Berkeley *does not meet* HP2020 goals for:
 - Prenatal care and birth weight among teen mothers
 - Prematurity among African American infants
 - Breastfeeding among African American infants at 3 and 6 months of age

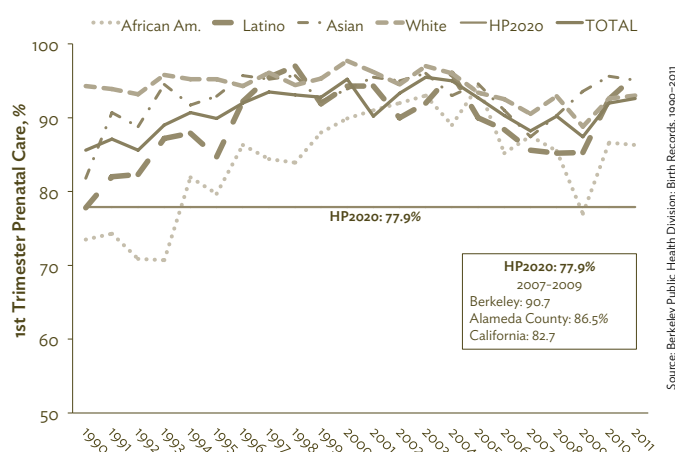
City of Berkeley Vital Statistics Office

The City's Vital Statistics unit registers every infant born in Berkeley, and receives information about infants born to Berkeley residents outside of the City. The Vital Records Office maintains documentation of Berkeley births and deaths going back to 1895, and plays an important role in the analysis of birth and death records. The California State Office of Vital Records has acknowledged the excellence of Berkeley's Vital Statistics performance with annual awards since 2005.

• Mothers

- 90% of Berkeley pregnant women receive prenatal care in the first trimester.

Figure 2.1 PERCENT OF PREGNANT MOTHERS RECEIVING PRENATAL CARE IN 1ST TRIMESTER Berkeley, 1990-2011



Women, Infants and Children (WIC) Program

WIC is a federally-funded health and nutrition program for low income women, infants, and children. WIC provides families with nutrition education, help finding healthcare and other services, and checks for buying healthy foods from WIC-authorized vendors—including fruits and vegetables from Berkeley farmers' markets.

• Teens

- o Berkeley has the lowest overall teen birth rate of California health jurisdictions.
- o African Americans teens have a birth rate 20 times higher than that of White teens and 5 times that of Latina teens. The birth rate in this population is higher than in Alameda County as a whole.

Vera Casey Collaborative for Pregnant and Parenting Teens

This partnership with the YMCA Early Childhood Services Head Start program and BUSD provides support and resources to help pregnant and parenting teens stay in school and graduate. The program includes a full-service child care center and child development services; weekly parenting class and social support groups for teen moms and dads; vital linkages to physical, mental, and educational health services; and public health nursing case management referrals.



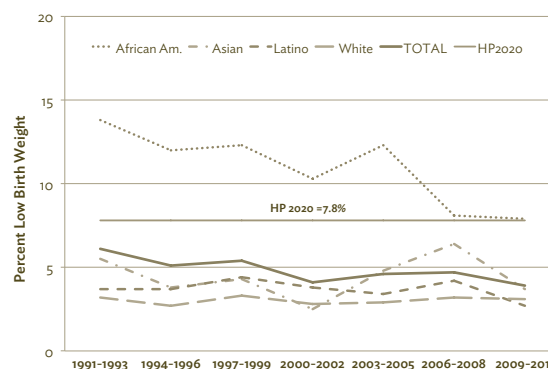
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• Infants

- o In 1991, an African American woman in Berkeley was 4 times as likely as a White woman to have a low birth weight (LBW) infant. In 2011, the risk of an African American mother having a LBW baby has fallen to 2.5 times higher than that of her White counterpart.
- o All racial/ethnic groups in Berkeley meet the HP2020 goal for LBW.
- o African American babies are twice as likely to be born prematurely as White, Latino, or Asian babies.

Figure 2.8 LOW BIRTH WEIGHT (EXCLUDING MULTIPLE BIRTHS) BY RACE/ETHNICITY Berkeley, 1991–2011 (3-year intervals) People 2020 (HP2020) Goal



Source: Berkeley Public Health Division, Vital Statistics, Birth Records

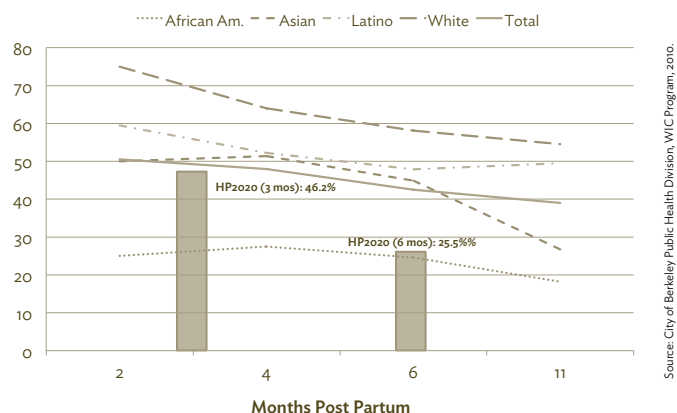
Black Infant Health (BIH) Program

BIH provides a welcoming environment for African American mothers and their babies, with the goal of improving maternal health and birth outcomes. BIH clients participate in prenatal and post-partum groups designed to support a healthy pregnancy and women's health, build parenting and life skills, increase social support, and provide education about health issues. Case management and resource linkages ensure that clients are connected with community and social services to meet their needs.

• Breastfeeding

- o Breastfeeding rates for Berkeley's newborns meet Healthy People 2020 goals in the immediate newborn period for all racial ethnic groups, and at 3 and 6 months for all groups except African Americans.
- o Berkeley does not have a certified Baby-Friendly hospital.

Figure 2.11 EXCLUSIVELY BREASTFED INFANTS IN WIC BY RACE/ETHNICITY AND MONTHS POST PARTUM, Berkeley, 2010



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Breast-feeding Support in Berkeley

WIC encourages breast-feeding among its clients, and WIC staff receives specialized training in this area. A PHN certified lactation consultant provides services to WIC and case management clients. PHNs work with health care providers to encourage breast-feeding. Mothers participating in the Vera Casey or BIH programs receive support for breast-feeding their infants.

"You literally saved my baby's life."

*— Pregnant Hypertension Clinic patient
with dangerously high blood pressure*

3

CHAPTER 3: CHILD AND ADOLESCENT HEALTH

What is this?

This chapter follows Berkeley residents on the life course, and describes the health of Berkeley's children and youth from infancy through age 18.

Why is this important?

Childhood and adolescence are formative times in the life course. Educational foundations are established during this time, setting the course for lifetime learning and employment opportunities. Personal habits of activity, diet, and social connections take form. This is a period of great opportunity and of experimentation.

What is Berkeley's status?

Berkeley's population has a smaller proportion of children than does Alameda County or the State (12% vs. 24%). This chapter contains some sobering information about Berkeley's children and youth: there are significant rates of child poverty; school-aged children are not as fit as we might expect; alcohol and marijuana use are common; and asthma causes hospitalization at high rates. Children and youth experience health inequities in asthma, fitness, poverty, and educational attainment. These inequities follow similar racial/ethnic and geographic patterns as inequities across the life course.

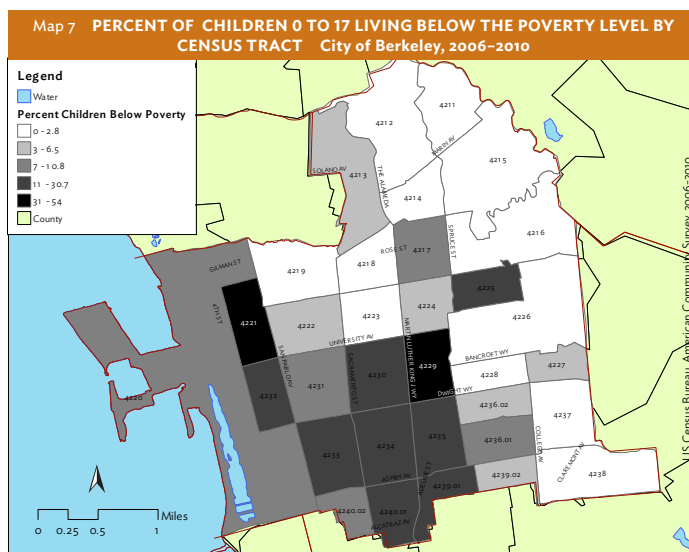
Key Findings

- **Healthy People 2020**

- o Berkeley overall *meets* HP2020 goals for:
 - Youth suicide attempts
- o Berkeley overall *does not meet* HP2020 goals for:
 - High School graduation
 - Asthma hospitalizations for children under 5

- **Poverty**

- o Over one third of Berkeley's African American children live in poverty.
- o Children living in poverty are concentrated in South and West Berkeley.
- o Poverty among African American youth is more than double the rate among all Berkeley youth and nearly 7 times the rate among White children.
- o Twenty percent of Berkeley Latino children live in poverty. This is 4 times the rate among white children.



• Education

- o African American, Latino, and low-income children in Berkeley do less well in BUSD schools than White, Asian, and higher income students. This educational achievement gap parallels the pattern of health inequities in Berkeley.
- o By 11th grade only 45% of BUSD students read proficiently.
- o Approximately 1 in 5 Latino and African American students do not graduate from high school. The BUSD high school drop-out rate does not meet HP2020 goals for any of its racial/ethnic groups.
- o The achievement gap between African American and White BUSD students is greater than that gap in Alameda County or the State.

• Physical Activity and Obesity

- o In 2011, only 20% of Berkeley 9th graders passed national aerobic fitness testing. BUSD students lag significantly behind students in Alameda County and California in aerobic fitness.
- o Twenty-nine percent of BUSD students are overweight or obese. This percentage is higher in African American and Latino children than in other racial/ethnic groups. Among BUSD 9th graders, over 40% are overweight.

Figure 3.5 PERCENT PROFICIENT OR ABOVE IN ENGLISH LANGUAGE ARTS BY RACE/ETHNICITY Berkeley Unified School District, Alameda County, and California, 2009–11

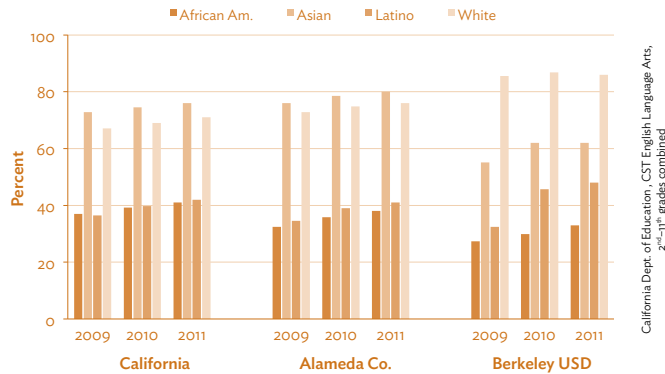
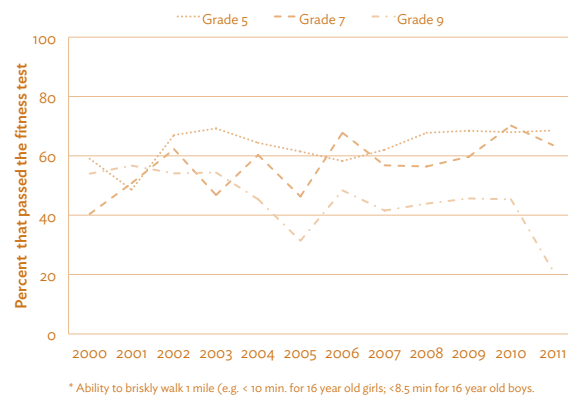


Figure 3.10 AEROBIC FITNESS 5TH, 7TH, AND 9TH GRADERS Berkeley Unified School District, 2000–2011



* Ability to briskly walk 1 mile (e.g. < 10 min. for 16 year old girls; < 8.5 min for 16 year old boys).

Source: California Dept. of Education

School-Linked Health Services (SLHS)

SLHS supports the health and educational success of BUSD students through collaboration between Public Health and the school district. This includes: reducing barriers to learning; optimizing health as a path to educational equity; meeting student health and safety needs; parent education and engagement; health consultations and referrals; policy recommendations; and coordination of Public Health programs working in schools.

“I was stressing, so I started going there, talking to counselors like every day and then, it just got better for me, like things looked more brighter.”

— Berkeley High School Health Center visitor

Breathmobile

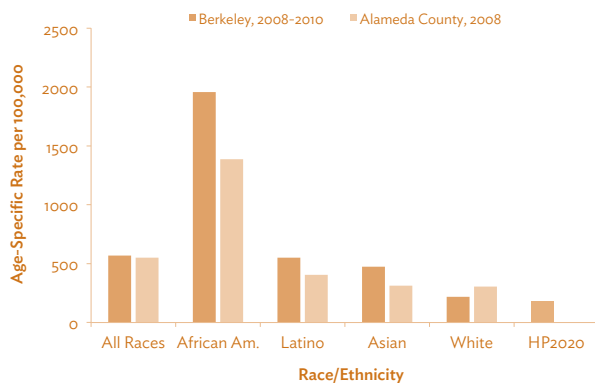
The Breathmobile, a project of the Prescott-Joseph Center for Community Excellence (PJCCE), is partnering with BUSD and Public Health to bring asthma care to BUSD students. This free mobile asthma clinic provides diagnosis, education, and treatment for children with asthma. Schools were selected for participation based on asthma prevalence among their students. The partnership is an example of community agencies working together to address health inequities and the achievement gap.



• Asthma

- o African American children under 5 years of age are hospitalized for asthma at rates that far exceed any other group.
- o Asthma hospitalization rates for African American and Latino children through age 15 are higher than for other groups, putting them at increased risk for school absenteeism and poor school performance.

Figure 3.15 ASTHMA HOSPITALIZATION RATE OF CHILDREN < 5 YEARS OF AGE BY RACE/ETHNICITY Alameda County (2008) and Berkeley (2008–2010)

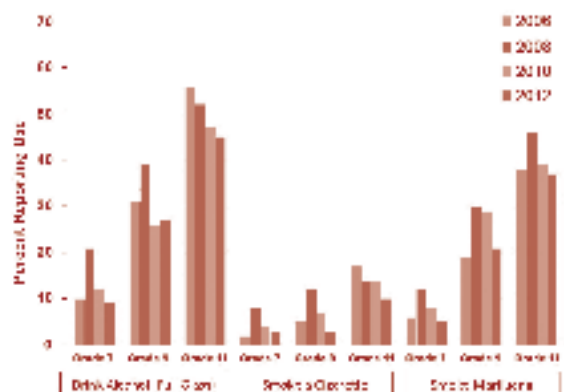


Source: City of Berkeley Public Health Division, Office of Statewide Health Planning and Development, 2008–2010

• Alcohol, Tobacco, and Marijuana Use

- o Approximately 45% of 11th graders report alcohol use in the last 30 days.
- o Approximately 35% of 11th graders report marijuana use in the last 30 days.
- o The percentage of students reporting that they use alcohol, cigarettes, and marijuana decreased at all grade levels in 2012 compared to 2008.
- o Marijuana use far exceeds cigarette smoking at all grade levels. Compared with their peers in the state, BUSD students are less likely to smoke cigarettes and more likely to smoke marijuana.
- o Alcohol is the mostly commonly used substance among BUSD students, followed by marijuana. Among B-Tech students, marijuana use exceeds alcohol use.

Figure 3.18 ALCOHOL, CIGARETTE, AND MARIJUANA USE IN PAST 30 DAYS IN 7TH, 9TH, AND 11TH GRADERS Berkeley Unified School District, 2006–2012



Source: California Healthy Kids Survey, 2012

“Nothing can faze these people. If you told them something so ridiculous and you’re so messed up they’re like, ‘Oh, I’m sorry sweetie. Okay, this is what we can do about it.’”

— Berkeley High School Health Center visitor

Berkeley High School & Berkeley Technology Academy Health Centers

The Berkeley High School Health Center and B-Tech Health Center provide free, safe, and convenient places for students to receive services. Medical Services include first aid; vision/hearing screening; Child Health and Disability Prevention (CHDP) exams; immunizations; and sexual health services. Health Education Services include individual counseling for the prevention of pregnancy, STIs, and HIV; campus-wide outreach and education; and a peer education program. Mental Health Services include individual short-term counseling, crisis intervention and support groups. All services include referral to community resources for students whose needs cannot be met onsite. Every effort is made to include parents in optimizing student well-being.

- **Mental Health, Violence, and Bullying**

- o Mental Health services are available to Berkeley youth through school- and community-based services.
- o Harassment related to race/ethnicity, including bullying and cyber-bullying, affects youth in Berkeley's middle and high schools, with 20% or more reporting being subject to harassment on these grounds.
- o Physical fighting decreases from 7th through 11th grades.

- **Injuries**

- o There were 24 assault-related hospitalizations of Berkeley youth in the most recent 3-year period for which we have data. Half of these involved firearms, and the vast majority were of African American youth.

- **Communicable Diseases: Sexually Transmitted Infections**

- o Chlamydia infections peak at ages 15-19 and are highest among African American young women.

“Because there are race issues everywhere you go, and like in the Health Center, that’s like the only place so far that doesn’t have the race issue and I like that.”

— Berkeley High School Health Center visitor

Tobacco Prevention Program — Youth and Policy

The tobacco program focuses on youth. The Program worked with youth to conduct survey research that led to local policy change. In 1996-2002 surveys found that 36-38% of Berkeley tobacco merchants sold tobacco to minors. Following passage of the Berkeley Tobacco Retail Licensure Law, the rate fell to 14% in 2004 and 5.6% in 2006. In 2012 for the first time no merchants were found selling tobacco to minors.

This is an excellent outcome from a program that involves Berkeley youth, Berkeley Police Department, Public Health staff, and Berkeley merchants.

- **Immunizations**

- o Berkeley's kindergarteners are less fully immunized (78%) than their counterparts in Alameda County and the state (90%).
- o BUSD students have higher rates of “personal belief exemptions” than students in Alameda County and the State. This increases the likelihood of vaccine-preventable disease outbreaks.

- **Lead Poisoning**

- o Cases of lead poisoning are rare in Berkeley, although residents are at risk for lead exposure due to Berkeley's large number of pre-1978 houses.

4

CHAPTER 4: ADULT HEALTH

What is this?

This chapter examines the health status of Berkeley's adults, from early adulthood through old age. This is the stage of life when chronic diseases, including cancer, are most likely to develop and take their toll on well-being. Communicable diseases, mental health issues, injuries and accidents continue to have major roles as well.

Why is this important?

This is the period of life in which one is most likely to work, to accumulate wealth, to have partners and responsibilities for other family members. Health is essential to the quality of adult life—not only for the individual, but for those around him or her. Ill health interferes with the productivity of this stage of life.

What is Berkeley's status?

Berkeley adults, on average, enjoy excellent health. They are physically active, have healthy behaviors, and low rates of chronic disease and illnesses of all sorts. However, not everyone in Berkeley shares equally in these advantages. There are marked inequities by race/ethnicity and income. African Americans living in Berkeley's South and West neighborhoods have high rates of chronic diseases and risk factors for chronic disease: often many times higher than other racial/ethnic groups. This is a major manifestation of health inequities in Berkeley.



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Key Findings

- **Healthy People 2020**

- o Berkeley as a whole *meets* HP2020 goals for:
 - Healthy weight
 - Physical Activity
 - Tobacco smoking
 - Hypertension
 - Asthma hospitalizations
 - New cases of syphilis in women
 - New cases of AIDS
- o Berkeley as a whole *does not meet* HP2020 goals for:
 - Screening mammograms
 - New cases of tuberculosis
 - New cases of syphilis in men
- o Note that even when the population as a whole meets a HP2020 goal, some Berkeley sub-populations by age, race/ethnicity, income, etc. may fail to meet the goal.

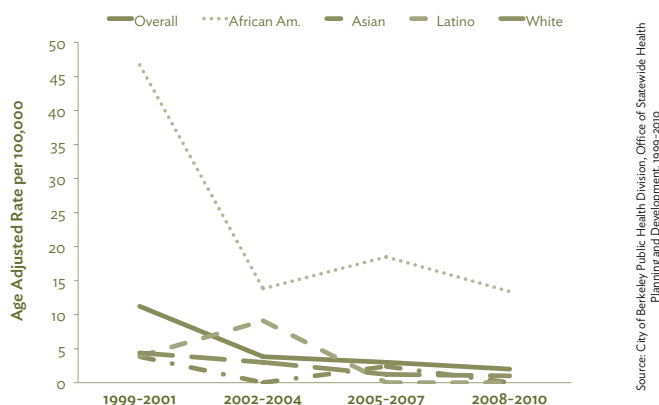
Highlight: Heart 2 Heart (H2H)

H2H uses a community-based approach to addressing health inequities in Berkeley. The program focuses on preventing high blood pressure and heart disease in South Berkeley. In partnership with LifeLong Medical Care and other community organizations, H2H engages community members in accessing resources, assets, and information to promote healthier living in selected South Berkeley neighborhoods.

• Chronic Diseases

- o African Americans and those with less than a high school education are most likely to be overweight or obese.
- o Men, African Americans, individuals with less than a high school education, and those 25-44 years of age have the highest rates of cigarette smoking.
- o Chronic disease rates have been decreasing in all racial/ethnic groups. The disparities between African American and other groups have narrowed for some conditions, but remain striking across the population.
- o Berkeley's African American population experiences inequitably high rates of all major chronic diseases: diabetes and its complications; hypertension (high blood pressure); heart disease; stroke; and asthma.

Figure 4.6 HOSPITALIZATION RATES DUE TO UNCONTROLLED DIABETES BY RACE/ETHNICITY AND YEAR OF HOSPITALIZATION Berkeley, 1999-2010



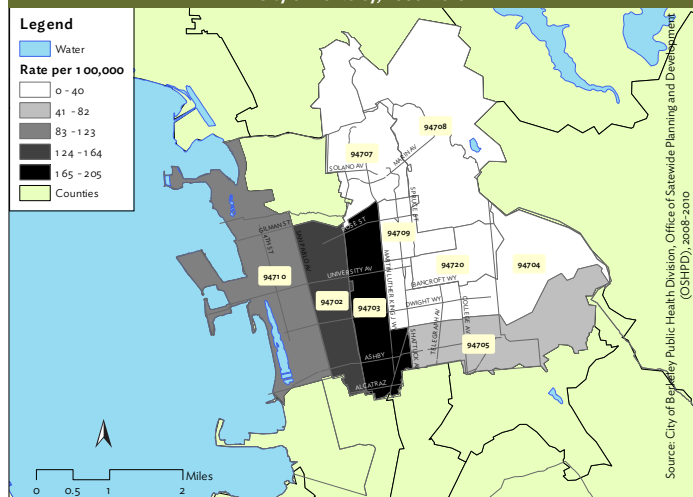
Berkeley Hypertension Program

In partnership with Lifelong Medical Center, this program focuses on community-based health promotion and environmental changes to encourage healthy eating and physical activity; increase access to hypertension screening and treatment; improve care for hypertension patients; and train Community Health Workers on outreach, education, and intensive counseling and support. A highlight of the program is the weekly drop-in Hypertension Clinic providing free blood pressure screenings and education, and treatment for uninsured residents with hypertension. Residents who attend the clinic experience lowering of their blood pressure.

Ambulatory Care Sensitive Conditions (ACSCs)

Preventable complications of illness are called "Ambulatory Care Sensitive Conditions." Improved access to effective primary and preventive care reduces hospitalization rates due to ACSCs.⁶ Uncontrolled diabetes and diabetes complications, hypertension, congestive heart failure, asthma and pneumonia are all considered ACSCs. Ready access to comprehensive, affordable, culturally and linguistically competent health care services can prevent these conditions from progressing to hospitalization. Public Health programs linking residents to health care services help prevent hospitalizations for ACSCs, and improve overall health and well-being of the community.

Map 11 AGE ADJUSTED DIABETES HOSPITALIZATION RATES BY ZIPCODE City of Berkeley, 2008-2010



Tobacco Prevention, Cessation, and Policy

The Tobacco Prevention program offers free smoking cessation classes and individual assistance. Program staff responds to complaints about smoking on sidewalks in commercial districts and in multi-unit housing. An ordinance prohibiting smoking in all multi-unit housing has been presented to City Council. The proposed ordinance would limit non-consensual exposure to secondhand smoke in the home, and thus decrease the adverse health impacts of second-hand smoke exposure.

• **Chronic Diseases**, *continued*

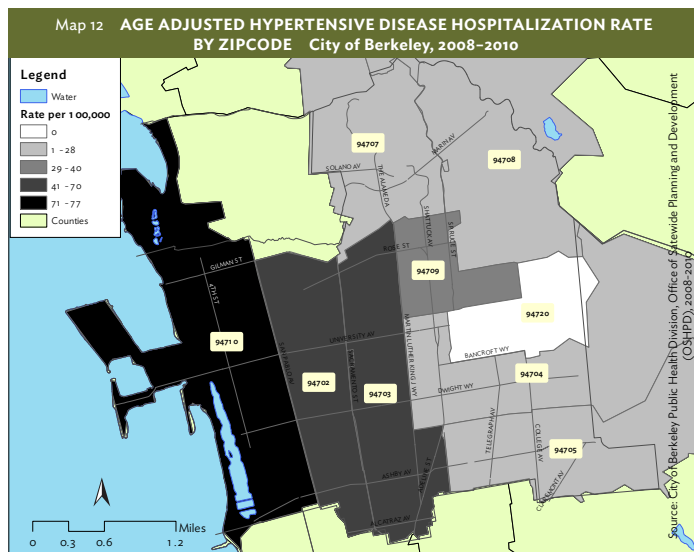
- Asians have the second highest rate of diabetes among Berkeley's racial/ethnic groups, but have very low rates of diabetes-related hospitalizations.
- Latinos have the lowest rate of hypertension-related hospitalizations of all racial/ethnic groups.
- Asthma rates are highest among African American and White Berkeley residents, and among those with higher levels of education. Asthma hospitalization rates, however, are disproportionately high among African Americans.
- White women have higher rates of breast cancer than do other racial/ethnic groups.
- Asian and Latina women meet the HP2020 goal for screening mammograms; other racial/ethnic groups do not.
- Prostate and lung cancer rates are highest among African Americans.

• **Mental Health**

- Hospitalization rates for mental health disorders are much higher among African Americans than other racial/ethnic groups.
- Mental Health hospitalization rates have been stable in Berkeley over the past decade.
- Asians and Latinos have the lowest rates of mental health hospitalizations in Berkeley.

Berkeley Mental Health

Berkeley's Mental Health Division provides community-based mental health services to Berkeley and Albany residents. Through its two clinical programs, Family, Youth, and Children's Services (FYC) and Adult Services Program, City mental health workers in multidisciplinary teams assist people in clinics, at schools, in their homes, on the street or in shelters, and in a variety of other community settings.



Public Health Clinic and Cancer

Berkeley's Public Health Clinic offers services to prevent and screen for some types of cancer. HPV (Human Papilloma Virus) vaccine prevents HPV infection. HPV infection is a known cause of cervical cancer in women and penile cancer in men. Hepatitis B vaccine prevents Hepatitis B infection. Chronic Hepatitis B infection is a leading cause of liver cancer. These immunizations are among the most effective tools available for decreasing cancer morbidity and mortality. Women are offered PAP smears for screening and early detection of cervical cancer. They also receive screening breast exams and referrals for mammography for early detection of breast cancer.

Evidence suggests that more equitable social policies, secure living-wage jobs, affordable housing, racial justice, good schools, community empowerment, and family supports are health issues just as critical as diet, tobacco use, and exercise. As a society, we have a choice: invest in the conditions for health now, or pay to repair our bodies later"

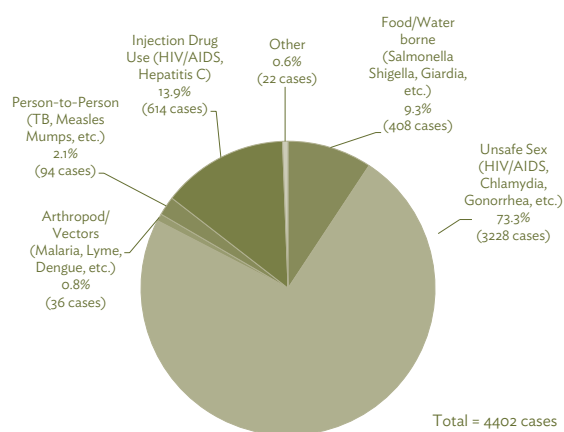
— www.unnaturalcauses.org

- **Disability** from physical, emotional, or mental conditions affects 26% of Berkeley residents. This rate is the same as that reported for the State. Women, the elderly, African American and Latino residents are more likely to experience disability.

Senior Injury Prevention Program

This program helps older adults maintain independence and quality of life. In-home assessments include a review of risks in the home, referrals to agencies that can install needed home improvement devices, and follow-up with family members, medical providers, Adult Protective Services or other social service programs to ensure the senior receives ongoing support if needed. Aging Services partners with the City Manager's office when seniors have property issues that cause safety hazards. Senior Centers provide periodic fall prevention and exercise classes.

Figure 4-49 CASES OF COMMUNICABLE DISEASE BY PROBABLE MODE OF TRANSMISSION Berkeley, 2006-2010



Source: Berkeley Public Health Division

Communicable Diseases

- o Public Health receives nearly 900 communicable disease reports annually.
- o Tuberculosis control involves extensive contact investigations, sometimes involving 100's of individuals.

Injuries

- o Hospitalization rates for injuries have risen steadily in the last decade among all groups except Latinos, for whom the rate has steadily fallen. The rate for African Americans is double that for Whites, and the gap is widening.
- o Accidental falls in adults over age 65 are a significant cause of hospitalization across all racial/ethnic groups. They are most common in North Berkeley.
- o The number of motor vehicle injuries has dropped by more than 50% in the past decade. Traffic injuries are most common among those 15-24 years of age. Bicycle injuries have increased.
- o On average, Berkeley police receive 140 domestic violence calls annually.

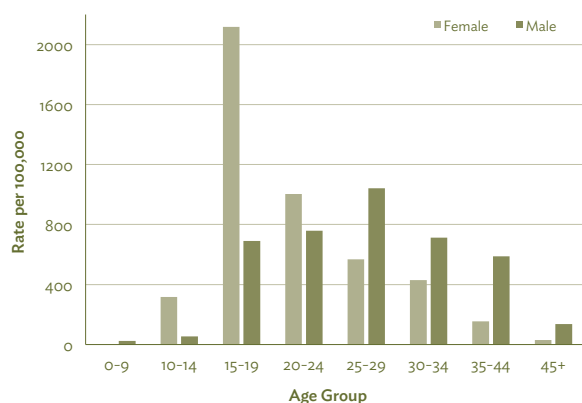
Communicable Disease Control Program

This program prevents the spread of diseases through surveillance and outbreak control. Staff and the Health Officer work with community partners and health care providers as well as with the State Department of Public Health and neighboring public health jurisdictions. Events in recent years have included measles, mumps, tuberculosis, pertussis (whooping cough), chicken pox, campylobacter, salmonella, and Norovirus. Settings for these investigations include preschools, schools, college/university campuses, businesses, restaurants, health care facilities, recreational facilities, and skilled nursing facilities. The number of individuals contacted in each investigation frequently exceeds 100, and preventive immunizations administered to control an outbreak can be in the thousands. This program is integral to public health's preparedness to respond to emerging infections such as H1N1.

- **Communicable Diseases, *continued***

- o Vaccine-preventable diseases such as pertussis (whooping cough) remain an important cause of illness in Berkeley.
- o Chlamydia and Gonorrhea rates are much higher among African American women and men than among other racial/ethnic groups of either sex.
- o Syphilis rates are highest among African American men.
- o New HIV infections occur at disproportionately high rates among Latinos and African Americans.

Figure 4.54 **CHLAMYDIA, GONORRHEA, AND PRIMARY AND SECONDARY SYPHILIS INFECTIONS BY AGE AND SEX** Berkeley, 2009-2011



Source: Berkeley Public Health Division

Response to Pertussis (whooping cough) Epidemic

In response to California's 2010 pertussis epidemic, public health took new measures to increase Tdap (pertussis) vaccination of adolescents and adults. Public Health worked with BUSD to notify parents and providers of the new California Tdap requirement for middle and high school students. Because of the special vulnerability of infants, Public Health efforts also targeted new parents and grandparents for Tdap vaccination.

Response to Foodborne Illness

Public and Environmental Health respond to reports of foodborne illness associated with restaurants or commercial kitchens. This involves on-site inspections, environmental or food sampling, and interviews with staff and patrons.⁷ Ill food handlers are restricted from work until they are medically cleared. Specific foods or food preparation techniques may be prohibited. In some cases, a facility may be closed until the situation is under control and remedial actions have been taken. Keeping Berkeley's food safe for diners is a high priority of the Department.

Public Health Clinic's Reproductive and Sexual Health Services

Berkeley's Public Health Clinic offers confidential testing, diagnosis, treatment, and prevention education for sexually transmitted infections, including HIV. The program also provides free condoms and lubricants. Reproductive and sexual health services for men and women are offered with a sliding fee scale based on income. No one is turned away because of inability to pay. In 2012 over 2,300 individuals were seen at the clinic.

5 CHAPTER 5: MORTALITY

What is this?

This chapter presents information about the end of life: the ages at which people die, the immediate and underlying causes of death, and the demographic patterns of death in the City. It contains information about Berkeley trends in deaths, life expectancy, leading causes of death, and years of potential life lost.

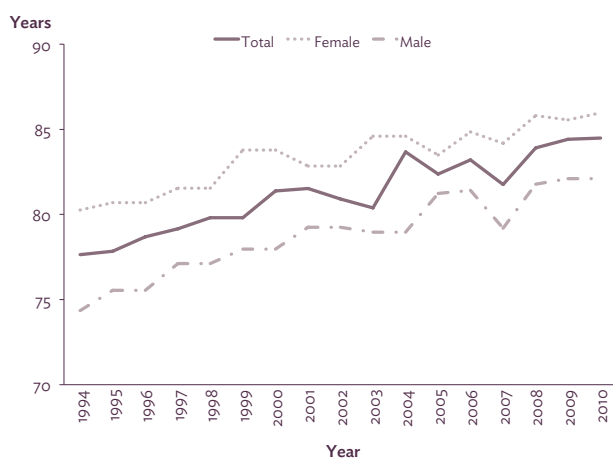
Why is it important?

Patterns of death help us understand health status and health inequities in Berkeley. Changes in these patterns can inform us about the City's progress in reducing unnecessary deaths, whether by preventing disease and promoting healthy environments and behaviors or by identifying and treating diseases early in their course.

What is Berkeley's status?

Berkeley residents in general enjoy long lives, and life expectancy has increased steadily over the last several decades. The leading causes of death in Berkeley are similar to those in Alameda County and the state as a whole. Health inequities by race/ethnicity exist for all causes of death, death rates, and years of potential life lost. Shortened lives and premature mortality are the cumulative result of health inequities that span the life course from conception to old age.

Figure 5.1 LIFE EXPECTANCY BY GENDER Berkeley, 1994–2010



Source: Berkeley Public Health Division Death Certificates, US Census

Key Findings

• Healthy People 2020 Goals

- o Berkeley as a whole *meets* HP2020 goals for:
 - Coronary heart disease death rate
 - Cancer death rate
 - Lung cancer death rate
 - And very nearly meets the goal for stroke death rate
- o African Americans in Berkeley *do not meet* HP2020 goals for:
 - Coronary heart disease death rate
 - Cancer death rate
 - Stroke death rate
- o Berkeley as a whole *does not meet* HP 2020 goals for:
 - Breast cancer death rate
 - Prostate cancer death rate

• Life Expectancy

- o Life expectancy for Berkeley women is 86 years and for men is 82 years.
- o Death rates in Berkeley are lower than those of surrounding Alameda County and California—reflecting the City's long life expectancy.
- o The death rate for African Americans in Berkeley is twice the death rate of Whites, and the gap appears to be widening.
- o Latinos have the lowest death rate of Berkeley's racial/ethnic groups.

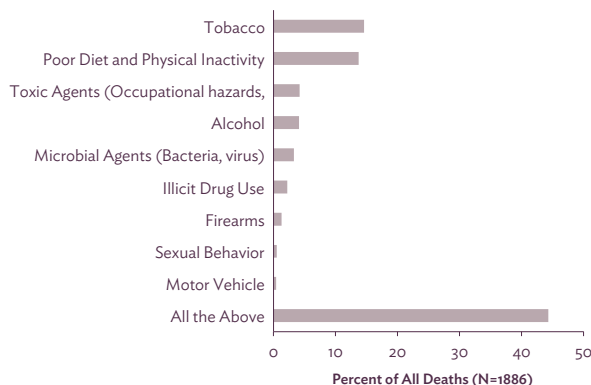


Annie Burke

• Causes of Death

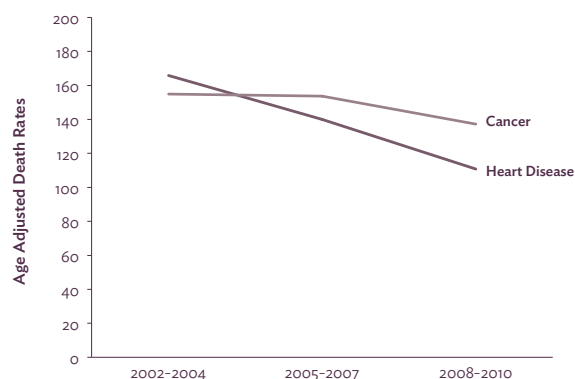
- o “Actual” causes of death are risk factors such as tobacco use, physical inactivity, poor diet, and alcohol and drug use. One third of Berkeley deaths are attributable to these risk factors.
- o Cancer and heart disease are the leading “underlying” causes of death (as recorded on death certificates) in Berkeley. They account for half of all deaths.
- o Cancer is the leading cause of death for all racial/ethnic groups except African Americans. Among African Americans, heart disease is the leading cause of death.
- o Cardiovascular disease death rates are twice as high among African Americans as among the population as a whole. Cardiovascular disease deaths have decreased over the last decade, but the gap between death rates of African American and other groups has remained constant.
- o The death rate from cardiovascular disease among Latinos is half that of the population as a whole, and the lowest of any group.
- o The stroke death rate among African Americans is more than double that of any other group.
- o Latina women have the lowest death rates from breast cancer in Berkeley, and are the only group to meet the HP2020 goal for breast cancer deaths.

Figure 5.8 LEADING ACTUAL CAUSES OF DEATH (BEHAVIORAL RISK FACTOR)
Berkeley, 2007–2009



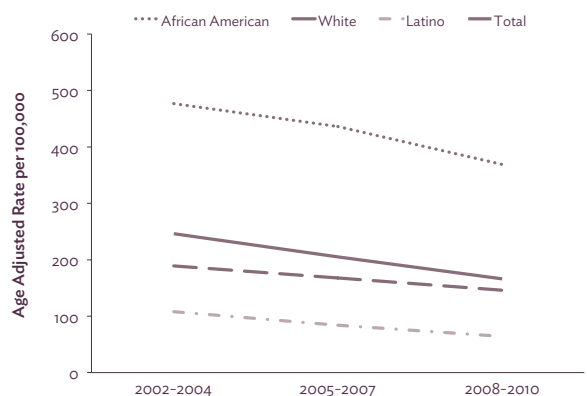
Source: Berkeley Public Health Division Death Certificates, McGinnis JM, Forge WH. Actual causes of death in the United States. JAMA 1993;270:2207–2212.

Figure 5.6 HEART DISEASE AND CANCER AGE ADJUSTED DEATH RATES
City of Berkeley, 2002–2010



Source: Berkeley Public Health Division Death Certificates, US Census

Figure 5.18 ALL CARDIOVASCULAR DISEASE DEATH RATES BY
RACE/ETHNICITY City of Berkeley, 2002–2010



Source: Berkeley Public Health Division Death Certificates, 2002–2010

Breast Cancer Area of Concern

Berkeley is located in the North San Francisco Bay “Area of Concern”, recently identified as one of four regions in the state with elevated rates of invasive breast cancer.⁸ The reasons for these elevated rates remain to be determined, and are the subject of investigation and research.

Figure 5.30 YEARS OF POTENTIAL LIFE LOST (YPLL) BY RACE/ETHNICITY
Berkeley, 2008-2010



Source: Berkeley Public Health Division Death Certificates

Years of Potential Life Lost (YPLL)

YPLL is a measure of premature death.⁹ Death rates and leading causes of death emphasize causes of death among older people. YPLL gives more weight to deaths among younger people. Thus, YPLL helps quantify the social and economic losses due to premature illness and death. Cancer is the leading cause of YPLL in Berkeley. African Americans account for a disproportionately large share of the YPLL in Berkeley. This means that potential contributions of African Americans in the Berkeley community are disproportionately reduced by premature deaths.

• Years of Potential Life Lost (YPLL)

- o African Americans account for a disproportionate number of YPLL in Berkeley. Although comprising less than 10% of Berkeley's population, they account for more than a third of YPLL. African Americans in Berkeley die younger than other racial/ethnic groups.
- o Cancer accounts for the most YPLL in Berkeley as a whole.

References

1. M. Whitehead, "The Concepts and Principles of Equity and Health," WHO, EURO Report, 1991.
2. CDC, "The Public Health System and the 10 Essential Public Health Services," 2013. [Online]. Available: <http://www.cdc.gov/nphpsp/essentialservices.html>. [Accessed 2013].
3. US Dept. of Health and Human Services, "Healthy People 2020," 2012. [Online]. Available: <http://www.healthypeople.gov/2020/about/default.aspx>. [Accessed 2013].
4. P. Braveman, "The Social Determinants of Health: Coming of Age," Annual Review of Public Health, vol. 32, pp. 381-398, 2011.
5. California Department of Public Health, "Climate Action for Health: Integrating Public Health into Climate Action Planning," 2012. [Online]. Available: http://www.cdph.ca.gov/programs/CCDHP/ Documents/CAPS_and_Health_Published3-22-12.pdf. [Accessed 2013].
6. Agency for Healthcare Research and Quality (AHRQ), "AHRQ Quality Indicators—Guide to Prevention Quality Indicators: Hospital Admission for Ambulatory Care Sensitive Conditions. Revision 4. AHRQ Pub. No. 02-R0203," Rockville, 2004.
7. CDC, "CDC Estimates of Foodborne Illness in the United States: Attribution of Foodborne Illness," 2013. [Online]. Available: <http://www.cdc.gov/foodborneburden/attribution.html>. [Accessed 2013].
8. Public Health Institute; California Breast Cancer Research Program, "California Breast Cancer Mapping Project: Identifying Areas of Concern in California," 2012. [Online]. Available: www.californiabreastcancermapping.org. [Accessed 2013].
9. US Department of Health and Human Services, "HealthyPeople.gov: General Health Status," 2011. [Online]. Available: <http://www.healthypeople.gov/2020/about/genhealthabout.aspx#years>. [Accessed 2013].

CONCLUSION

This report presents a current snapshot of the health of the Berkeley Community. It describes how the health of our community compares to previous reports, how we compare to our County, the State, and national Healthy People 2020 goals, and how groups within Berkeley compare with each other. Berkeley's community health is characterized by overall excellent health status and by striking health inequities.

These patterns of health inequities are neither new nor unique to Berkeley. The underlying causes and their

solutions lie in the environments and neighborhoods in which people live, work, learn and raise their families. Public Health's charge is to create the conditions in which everyone has access to the conditions which support a full and healthy life. Truly addressing the root causes of health inequities requires focused, consistent, comprehensive, and sustained effort on many fronts. Partnerships with community organizations, other City departments and divisions, and varied funding sources are key to effective public health interventions.



Berkeley Unified School District



Annie Burke/www.goingoutsideto.com

HOW BERKELEY PROVIDES THE 10 ESSENTIAL SERVICES OF PUBLIC HEALTH

Berkeley's Public Health Division is responsible for fulfilling the 10 Essential Services of Public Health. The examples below demonstrate how Berkeley's public health activities address these essential services, the outcomes these programs achieve, and how they are funded. These are examples only, not a comprehensive account of Public Health activities.

| Essential Service | Berkeley Examples | Berkeley Outcomes | Funding Sources |
|---|---|--|--|
| 1. Monitor health status to identify and solve community health problems | <ul style="list-style-type: none"> Communicable Disease surveillance (including TB, STIs, HIV/AIDS) Registration of births and deaths (Vital Statistics) | <ul style="list-style-type: none"> Understanding of disease patterns and risk groups, by gender, age, race/ethnicity, education, geography and income Identification and response to emerging trends in births, deaths, and causes of death | <ul style="list-style-type: none"> State funds for HIV surveillance and TB control Vital Statistics (fees for birth and death certificates) City General Funds State Public Health Realignment funds |
| 2. Diagnose and investigate health problems and health hazards in the community | <ul style="list-style-type: none"> Communicable disease outbreaks Health inequities in cardiovascular disease, low birth weight, diabetes, and asthma | <ul style="list-style-type: none"> Identification and control of outbreaks such as mumps and norovirus Low birth weight disparity has decreased from 4-fold to 2.5-fold Increased community awareness and treatment of high blood pressure | <ul style="list-style-type: none"> State and Federal funds; (Nutrition; Tobacco Prevention) Berkeley City General Fund (including Health Disparities) |
| 3. Inform, educate and empower people about health issues | <ul style="list-style-type: none"> Berkeley High School Health Center and Berkeley Technology Academy Clinic School Linked Health Services | <ul style="list-style-type: none"> Youth and their families have access to health information and services in the context of their education, recognizing the critical links between education and health | <ul style="list-style-type: none"> Family PACT City General Fund CFHC/Title X CHDP Alameda County Measure A BUSD |
| 4. Mobilize community partnerships and action to identify and solve health problems | <ul style="list-style-type: none"> Health-care institutions: LifeLong Medical Care, Alta Bates Hospital, Berkeley Free Clinic Community Service providers: Head Start, NEED, Childcare providers, faith-based organizations | <ul style="list-style-type: none"> Free Drop-in Hypertension Clinic, monthly neighborhood health van and barbershop blood pressure screenings with LifeLong Medical Care Early developmental screening and referral for infants and toddlers in community settings Safe needle exchange available locally | <ul style="list-style-type: none"> City general fund (including Health Disparities) State Public Health Realignment Mental Health Services Act Prevention/Early Intervention (MHSA/PEI) |
| 5. Develop policies and plans that support individual and community health efforts | <ul style="list-style-type: none"> Tobacco ordinances Heart 2 Heart mini-grant program for community members and groups | <ul style="list-style-type: none"> Smoke-free Multi-Unit Housing Ordinance under development Limit involuntary exposure to second-hand smoke in the home and associated health effects including asthma exacerbation Enhanced neighborhood leadership in creating healthy environments | <ul style="list-style-type: none"> State Tobacco Prevention Program City General Fund State Public Health Realignment Alameda County Measure A |
| 6. Enforce laws and regulations that protect health and ensure safety | <ul style="list-style-type: none"> Immunization requirements for school entry Public Health Emergency Preparedness program | <ul style="list-style-type: none"> Enhance compliance with immunization requirements in preschools and schools, including middle school Tdap requirement Develop and exercise coordinated emergency responses in the community and with partner agencies | <ul style="list-style-type: none"> State Immunization Program City general fund State Public Health Realignment State and Federal PH Emergency Preparedness funding City Measure GG funding |

continues next page

HOW BERKELEY PROVIDES THE 10 ESSENTIAL SERVICES OF PUBLIC HEALTH *continued*

| Essential Service | Berkeley Examples | Berkeley Outcomes | Funding Sources |
|---|---|---|---|
| 7. Link people to needed personal health services and assure the provision of health care when otherwise unavailable | <ul style="list-style-type: none"> Nursing Targeted Case Management (TCM) Partnerships with LifeLong Medical Care and Alameda County Public Health | <ul style="list-style-type: none"> Comprehensive nursing needs assessment of families receiving case management services, with linkage to Medi-Cal providers and to other health and social services Linkage to full-scope eligibility and enrollment assistance, including transitions related to Health Care Reform | <ul style="list-style-type: none"> City General fund State Public Health Realignment |
| 8. Assure a competent public and personal health care workforce | <ul style="list-style-type: none"> Youthworks and AmeriCorps opportunities Training site for health professional students of all types and levels (high school, community college, undergraduates, graduate students, and clinical internships) | <ul style="list-style-type: none"> Strengthening of the pipeline for a well-trained, diverse, local workforce committed to serving the Berkeley community | <ul style="list-style-type: none"> Program funds (e.g. Tobacco Prevention and PH Preparedness) City General Fund State Public Health Realignment |
| 9. Evaluate effectiveness, accessibility, and quality of personal and population-based health services | <ul style="list-style-type: none"> Member of the local Fetal and Infant Mortality Review Board Participation in Alta Bates Hospital's Infection Control Committee | <ul style="list-style-type: none"> High quality community-based perinatal services Monitoring and minimizing hospital-based infections | <ul style="list-style-type: none"> State CHDP/Perinatal Services Coordinator City General fund State Public Health Realignment |
| 10. Research for new insights and innovative solutions to health problems | <ul style="list-style-type: none"> Contribute our experience to the scientific literature and to professional and academic venues Pilot-test site for BARHII's health equity self-assessment tool | <ul style="list-style-type: none"> Mumps outbreak experience published in CDC's MMWR, including national policy recommendations BARHII self-assessment health equity tool is now part of NACCHO's national Health Equity toolkit | <ul style="list-style-type: none"> City General funds (Health Disparities) State Public Health Realignment |

NEXT STEPS

Despite the on-going efforts of public health in Berkeley, and despite many successes, health inequities which have been present for decades persist. The City is at a critical juncture. The City has a choice between continuing the current mix of public health programs and optimizing their impact within their categorical constraints—or making a series of difficult and strategic decisions: to focus limited public health resources on those health issues, populations, and interventions that will have the biggest impact on health inequities and thus on the health of the community as a whole.

The choice cannot be made by public health alone, and the work cannot be done by public health alone. Input from the community as a whole, and partnerships among community members and organizations, are key to addressing the root causes of health inequities with a focused, consistent, comprehensive, and sustained effort.

As a City public health jurisdiction whose community includes a school of Public Health, a non-profit hospital, a

robust Community Health Center network, a strong business community, a rich array of community partners, and an engaged population, Berkeley is a strong candidate for developing and piloting innovative approaches to health equity.

This Report is a starting point from which Public Health, HHCS, and the City can develop priorities and strategic interventions to improve community health. We look forward to discussing this report with Berkeley residents and community partners to shape our work going forward. You may contact us at publichealth@cityofberkeley.info.

Information about community meetings, City Council meetings and reports, and Community Health Commission meetings is available at <http://www.ci.berkeley.ca.us>.

You are an essential part of ensuring a vibrant and healthy Berkeley for all.

Thank you.