

The *Community Guide's* Model for Linking the Social Environment to Health

Laurie M. Anderson, PhD, MPH, Susan C. Scrimshaw, PhD, Mindy T. Fullilove, MD, Jonathan E. Fielding, MD, MPH, MBA, and the Task Force on Community Preventive Services

Introduction

"Individuals and families are embedded within social, political, and economic systems that shape behaviors and constrain access to resources necessary to maintain health... Greater emphasis is needed on public health interventions that involve communities, with the goal of collectively identifying resources, needs and solutions..." Institute of Medicine, Health and Behavior 2001¹

In the mid-1990s, the independent national Task Force on Community Preventive Services (the Task Force) was created under the auspices of the Department of Health and Human Services to summarize what is known about the effectiveness of community-based interventions to improve population health outcomes.² The Task Force wanted to examine broad social determinants of health from an ecologic perspective—one that recognized the connection between health and sustainable human, cultural, economic, and social activities.³ Communities interact with resources in the social and physical environments over broad periods of time. Understanding patterns of health or disease requires a focus not only on personal behaviors and biologic traits but also on characteristics of the social and physical environments that shape human experience and offer or limit opportunities for health.

From the Division of Prevention Research and Analytic Methods, Epidemiology Program Office, Centers for Disease Control and Prevention (Anderson), Atlanta, Georgia; the Task Force on Community Preventive Services and University of Illinois, Chicago, School of Public Health (Scrimshaw), Chicago, Illinois; the Task Force on Community Preventive Services and Columbia University (Fullilove), New York, New York; and the Task Force on Community Preventive Services, Los Angeles Department of Health Services, and School of Public Health, University of California, Los Angeles (Fielding), Los Angeles, California

Address correspondence to: Laurie M. Anderson, PhD, MPH, Community Guide Branch, Centers for Disease Control and Prevention, 4770 Buford Highway, MS-K73, Atlanta GA 30341. E-mail: LAA1@cdc.gov.

The names and affiliation of the Task Force members are listed at the front of this supplement and at www.thecommunityguide.org.

Address reprint requests to: Community Guide Branch, Centers for Disease Control and Prevention, 4770 Buford Highway, MS K-73, Atlanta GA 30341. Website: communityguide@cdc.gov.

Social Determinants of Health

Social determinants of health are societal conditions that affect health and can potentially be altered by social and health policies and programs.⁴ Three broad categories of social determinants are *social institutions*—including cultural and religious institutions, economic systems, and political structures; *surroundings*—including neighborhoods, workplaces, towns, cities, and built environments; and *social relationships*—including position in social hierarchy, differential treatment of social groups, and social networks.

Despite the recognition that changes in social conditions can change patterns of health and illness,^{5–9} systematic integration of this information into models of public health is limited, as is systematic exploration of interventions that might improve social conditions and health. In developing its *Guide to Community Preventive Services* (the *Community Guide*), the Task Force developed a conceptual model (Figure 1) that links social environmental interventions to health outcomes. In this introduction, we describe the analytic thinking underlying this conceptual framework. In the accompanying article¹⁰ we illustrate use of this framework for selecting interventions to be evaluated in systematic reviews of the social environment and health for the *Community Guide*.

The *Community Guide's* Social Environment and Health Model

The model shown in Figure 1 was developed by the Task Force and a multidisciplinary team consisting of the authors and consultants. We identified aspects of the social environment known to influence health, designed models to capture these relationships, synthesized and revised our models, and reached consensus on the model shown in Figure 1.

The fundamental premise of the *Community Guide's* model is that *access to societal resources determines community health outcomes*.¹¹ Standard of living, culture and history, social institutions, built environments, political structures, economic systems, and technology are all societal resources that a population draws upon to sustain health. Patterns of exposure to risk vary among socioeconomic groups and are associated with a funda-

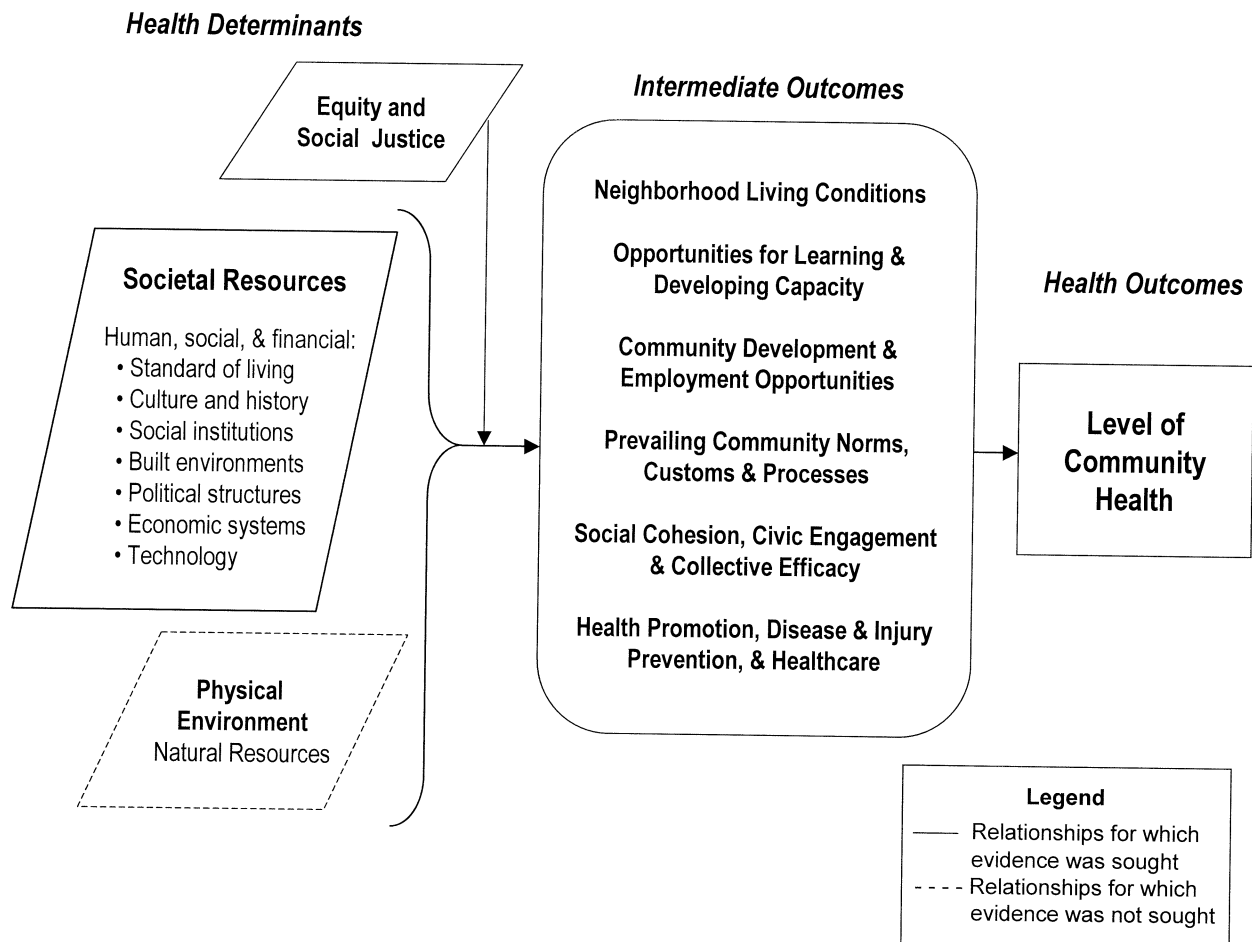


Figure 1. The *Community Guide's* social environment and health model.

mental access to resources.¹¹ Prosperity, whether at the community, family, or personal level, provides resources such as knowledge, money, power, and prestige, which can be used to avoid or buffer exposure to health risks. Poverty, however, with all of its attendant burdens, also powerfully influences health status. An impoverished social environment is a potential source of stressors (e.g., high-crime neighborhood or job scarcity) as well as resources (e.g., after-school programs or homeless shelters).^{12–14}

The degree to which equity and social justice exist in a society is reflected in the distribution of resources within the population.^{15–17} Macroeconomic research shows us that, in addition to economic prosperity, equality in the distribution of wealth is a characteristic of societies that improves average population health status and reduces health disparities.^{18,19}

As illustrated in our model, the following conditions in the social environment are associated with health outcomes:

- neighborhood living conditions^{20–24};
- opportunities for learning and developing capacity^{25–28};

- community development and employment opportunities^{29–33};
- prevailing community norms, customs, and processes^{34–37};
- social cohesion, civic engagement, and collective efficacy^{38–41}; and
- health promotion, disease and injury prevention, and healthcare opportunities.^{42–45}

These six observable conditions are intermediate indicators along a pathway from root determinants of health to community health outcomes. Using these community conditions as general categories for intervention, we identified approximately 200 community-based interventions to promote health-enhancing social environments (Table 1), from which the first three topics for systematic review were selected (this process is described in more detail elsewhere in this supplement¹⁰). Our first three systematic reviews of community interventions, presented in this supplement (early childhood development programs,⁴⁶ affordable and safe housing,⁴⁷ and access to culturally competent healthcare systems⁴⁸), are examples of using social resources to improve health.

Table 1. Community interventions to promote healthy social environments

Intermediate outcome	Intervention
Neighborhood living conditions	
Making housing affordable	<ul style="list-style-type: none"> • Legislative support for subsidized housing • Housing or shelters for homeless people • Increased single-room-occupancy units for low-income, single adults • Building codes requiring developers to apportion low-cost units in new developments • Mixed income housing developments • Low-cost housing protection in neighborhood revitalization projects • Habitat for Humanity
Increasing housing quality and safety	<ul style="list-style-type: none"> • Tenant organizations and support • Public programs to abate housing hazards (e.g., lead paint removal or rodent extermination) • Child-proof homes (e.g., safety locks, poison symbols, or scald-proof water controls) • Protection against extremes in climate • Removal of unsafe or abandoned buildings and debris in vacant lots • Fire safety protection • Neighborhood beautification (e.g., tree and garden planting or clean-up events)
Making neighborhoods safer	<ul style="list-style-type: none"> • Neighborhood Watch programs • Rapid access to emergency personnel (e.g., fire, police, and medical services) • Home security systems • Safe playgrounds • Animal control • Neighborhood policing by residents (e.g., Detroit's Halloween fire prevention) • Reduction of neighborhood gang activity • Reduction of drug trafficking and neighborhood "shooting galleries" • Increased sidewalks, exercise and recreation paths, and lighting • Reduction of liquor store density
Building, improving, and retaining neighborhood assets	<ul style="list-style-type: none"> • Public libraries, schools, fire departments, hospitals, and parks • Public information systems (e.g., local media or the Internet) • Neighborhood businesses and home-based enterprises • Cultural organizations and citizen associations • Religious organizations • Facilities for sports and other special interest clubs • Family resource centers • Supermarkets and produce grocers • Transportation systems (e.g., bus, rail, or car pools)
Enhancing neighborhood cohesion and social support systems	<ul style="list-style-type: none"> • Informal neighborhood social activities (e.g., sewing, book, or gardening clubs) • Mentoring programs (e.g., Big Brothers/Sisters or youth business) • Involvement in community organizations (e.g., Kiwanis or Scouts) • Senior centers • After-school programs • Accommodations for people with disabilities • Elder day care • Park recreation and exercise programs • Architecture designed to increase neighbors' interaction (e.g., decrease in gated communities and increase in sidewalks, front porches, and mixed income housing) • Neighborhood planning to increase public meeting spaces (e.g., plazas, parks, trails, local entertainment centers)

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Social Conditions as Risk and Protective Factors

The social conditions illustrated in the *Community Guide's* social environment and health model are quantifiable and offer a means, using epidemiologic methods, to

evaluate trends, correlate conditions with health outcomes, evaluate health and social programs, and inform policy decisions. High-risk or protective social conditions can be identified with available community-level data

Table 1. (continued)

Intermediate outcome	Intervention
Opportunities for learning and developing capacity	
Promoting early learning and child development opportunities	<ul style="list-style-type: none"> • Child development programs (e.g., Head Start or Healthy Start) • Parenting classes in schools, churches, or health agencies • Funding for expansion of community preschool programs • Training programs for providers of home-based childcare • Development of high-quality foster child care systems (e.g., training, adequate funding, and oversight) • Programs to support young mothers (e.g., school-based programs, home nursing visits, and educational programs and materials)
Improving the quality of educational systems	<ul style="list-style-type: none"> • Schools as sites for support programs (e.g., Washington Heights model after-school program, parenting programs, or community support programs) • Private corporation support for public education (e.g., company sponsorship and mentoring programs) • Senior citizens as models and mentors in schools • Adequate public investment in education • Competitive salaries for teachers • Programs to strengthen community-school relationships • Efforts to improve curricular standards • Efforts to improve teacher performance • Lower teacher-student ratios • Curriculum focus on social and health issues (e.g., personal skills, drug-free environments, or safe sex choices)
Enhancing job training programs	<ul style="list-style-type: none"> • Elementary and middle school exposure to entrepreneurial activities • Volunteer programs to mentor students in diverse occupations • Youth internships in local service agencies and businesses • Spotlight on public health careers at schools • Junior Achievement programs in schools • School-based student businesses for neighborhood services • Convenient junior colleges and community colleges with curricula that support adult technical and liberal education • Affordable technical schools • Technical school scholarships sponsored by regional businesses • Off-campus college programs at work sites and community sites to advance work opportunities • Retraining programs for displaced workers (e.g., factory closings or corporate downsizing) • Job Corps program • Mentoring programs to acquaint youth with professions and trades (e.g., summer internships)
Providing opportunities for recreation and leisure for all ages	<ul style="list-style-type: none"> • YMCA/YWCA programs • Campfire Girls/Boys, Boys Clubs, Girls Clubs, Scouting • Community sports for youth (e.g., basketball, baseball, soccer, gymnastics, and swimming) • Community arts programs through local parks and recreation agency • Local hobby clubs • Adult recreational sports and exercise programs
Promoting a life-long learning environment	<ul style="list-style-type: none"> • Community capacity development across generations (e.g., Louisville model) • Criminal justice system programs to reintegrate members of a community through job training programs • Continuing education programs for adults at local colleges

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(e.g., on education, housing, employment, and crime). For example, data on the number of young children within census tracts in conjunction with high proportions of female-headed households can

highlight which resources are most needed by the community (e.g., quality early childhood development centers, family health services, and after-school programs).

Table 1. *(continued)*

Intermediate outcome	Intervention
Community development and employment opportunities	
Enhancing community economic viability	<ul style="list-style-type: none"> • Enterprise zones • Small loans to support locally owned businesses • Recruitment and retention of neighborhood stores and services • Sustainable technologies • Job relocation to workers' neighborhoods • Contract with community-based businesses • Small-business assistance • Local business clubs as resource for business owners • University and community partnerships to advise local business owners and provide student apprenticeships • Policy and legislative safety nets during economic recessions
Providing job training opportunities	<ul style="list-style-type: none"> • Elementary and middle school exposure to entrepreneurial activities • Volunteer programs to mentor students in diverse occupations • Youth internships in local service agencies and businesses • Training of local residents for neighborhood intervention programs • Spotlight on public health careers at schools • Junior Achievement programs in schools • School-based student businesses for neighborhood services • Convenient junior colleges and community colleges • Affordable technical schools • Technical school scholarships sponsored by regional businesses
Developing employment opportunities	<ul style="list-style-type: none"> • Equal opportunity, nondiscrimination policies • Hiring of local personnel in neighborhood businesses • Placement of service companies and light industries in workers' neighborhoods • Community jobs for people who are mentally or physically impaired • Support of neighborhood cottage industry • Apprenticeship programs • Federal and state job programs (e.g., VISTA or Job Corps) • Roles for senior citizens in workplaces
Improving work conditions	<ul style="list-style-type: none"> • Minimum wages that permit working families to live above the poverty level • Flexible workplaces (e.g., shifts or telecommuting) that accommodate workers with child or elder care responsibilities • Safe and equitable working conditions for new immigrants • Safe work environments (e.g., federal occupational safety and health standards) • Quality, affordable child care for welfare-to-work participants and low-income working families • Jobs that provide personal growth and fulfillment opportunities • Adequate health benefits with employment • Financial safety in case of injury, illness, or job loss
Social cohesion, civic engagement, and collective efficacy	
Increasing civic engagement in communities	<ul style="list-style-type: none"> • Voter registration drives • Media spotlight on issues that need local input • Public health links with local faith communities • Civic clubs (e.g., Rotary, volunteer fire departments, or parent-teacher associations) • Enhanced sense of community around political jurisdictions (e.g., belonging to a particular neighborhood or township) • Noncategorized funding support for organizing community action groups

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Table 1. *(continued)*

Intermediate outcome	Intervention
Increasing social engagement in communities	<ul style="list-style-type: none">• Neighborhood social clubs (e.g., hobbies or sports)• Community centers or facilities for group meetings• Senior centers• Community day care programs (e.g., for preschool children or elderly or impaired people)• Promotion of public leisure activities (e.g., concerts or festivals) as alternatives to private leisure activities (e.g., television or video games)• Increased opportunities and facilities for community volunteers to share knowledge (e.g., about the arts, languages, or sports)• Centers for community entertainment and leisure activities (e.g., a theater–bookstore–coffee complex)• Attractive, safe neighborhood meeting spaces (e.g., parks, playgrounds, plazas, or ball fields)
Building community infrastructure to increase local decision making	<ul style="list-style-type: none">• Noncategorized funding support for community organizing• Community coalition building• Training in negotiation skills for community groups• Training programs for grassroots advocacy• Reinforcement of cultural heritage to build common interests (e.g., language courses or Saturday schools to teach ethnic group customs and art)
Prevailing community customs, norms, and processes	
Promoting social solidarity and understanding across diverse groups	<ul style="list-style-type: none">• Nondiscrimination policies• Affirmative action programs• Anti-stigma campaigns (e.g., for AIDS or mental illness)• Freedom schools (like those in the civil rights era)• Diversity training in workplaces
Providing a focal point for community growth and social support activities through religious institutions	<ul style="list-style-type: none">• Location for social support and leisure activities in addition to spiritual fulfilment• Location for multicultural social interaction• Source of aid for community members (e.g., food, clothing, or shelter)• Outlet for members to provide service to their communities• Outlet for socialization across generations• Center for all neighborhood types (i.e., urban, suburban, and rural)
Recognizing multicultural beliefs and customs	<ul style="list-style-type: none">• Neighborhood multicultural festivals• Cultural arts sponsorship (e.g., music, dance, and art)• Multicultural training for care providers• Increased multicultural sensitivity through professional associations (e.g., American Medical Association or American Nursing Association)• School-based programs that celebrate ethnic traditions• Recognition and reinforcement of cultural behaviors that are protective of health• Social and health services that are sensitive to cultural beliefs and customs
Supporting community centers for socialization	<ul style="list-style-type: none">• Community facilities for local group meetings• Public recreation facilities and programs for all ages• After-school programs• Support or interest groups• Youth programs that provide alternative to unsupervised leisure time (e.g., music, sports, or art programs)• Senior centers for socializing, education, and leisure activities

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Table 1. *(continued)*

Intermediate outcome	Intervention
Strengthening democratic norms for equal voice and influence for all community members	<ul style="list-style-type: none"> • Stimulation of community debates on issues of social equity (e.g., location of undesirable facilities, expenditures for schools, or placement of public libraries) • Attention to trends of increasing inequity in income and wealth and the consequences on health and social structure • Increased community voice in local government (e.g., voter registration drives or educational forums on ballot issues) • Encouragement of accountability of public agencies • Encouragement of accountability of private companies (e.g., unsafe products or employment practices)
Health promotion, disease and injury prevention, and healthcare opportunities	
Defining community goals	<ul style="list-style-type: none"> • Community participation in health decision making • Continuous access to health information for decision making • Research driven by community-identified health issues • Community as equal collaborator in research
Supporting safe and satisfying living conditions	<ul style="list-style-type: none"> • Collaboration between health services and broader social, economic, and political sectors for healthier environments • Social marketing to influence normative health patterns • Healthy choices in school, home, work, and community settings
Providing health education in communities	<ul style="list-style-type: none"> • Use of media for community health education • Use of media to raise awareness of public health issues
Promoting culturally appropriate health services	<ul style="list-style-type: none"> • Multicultural providers • Interpreter services • Health education materials in multiple languages • Multicultural participation in designing and evaluating health services
Making health care accessible	<ul style="list-style-type: none"> • Access to quality health care for all ages • Equitable coverage for mental health services • Coverage for preventive as well as curative care • Providers available in all communities
Promoting health and disease prevention through school settings	<ul style="list-style-type: none"> • Health-promotion curriculum (e.g., self-esteem or health choices) • Preventive care (e.g., hearing and vision screenings or therapy for speech or learning difficulties) • School completion and parenting skills programs for adolescent parents
Promoting health and disease prevention through the workplace	<ul style="list-style-type: none"> • Mental health promotion and care • Opportunities for exercise and healthy eating • Child care, child development centers • Opportunities to strengthen social networks • Opportunities for meaningful work experiences
Monitoring community health through sentinel health indicators	<ul style="list-style-type: none"> • Health indicators (e.g., preventable morbidity and mortality or health disparities) • Socioeconomic indicators (e.g., rates of employment, crime, or housing availability, or surveys of quality of community life)

Summary

In this supplement we review relationships between the social environment and health, explore methods for gauging communities' social resource needs, and propose health-promoting community interventions. Although some believe that studying the root determinants of health disparities in communities is futile because poverty and inequality are intractable, we present thinking that goes beyond this view. Internal and external resources are available to communities to improve health, and interven-

tions addressing environmental barriers to optimal health can improve health and quality of life.

Interventions that focus on social environments do not diminish the importance of programs that emphasize behavioral or lifestyle choices: instead, choice is better understood in light of the social circumstances in which it occurs. Environmental characteristics (e.g., detrimental social norms, lack of economic opportunity, unhealthy built environments) can marginalize individuals and neighborhoods. Solutions require

cross-institutional collaboration (e.g., education, labor, housing, public health, medicine) with communities to tailor relevant programs.^{1,28,44,49,50}

The social pathways that underlie population health phenomena vary across communities. The *Community Guide's* social environment and health framework and the systematic reviews are an effort to improve the coherence and comprehensibility of existing health and social science research. Understanding and using the framework can facilitate intelligent connections between health and social science research, which can be translated into public health policy and practice.

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