

Creating Healthier Cities

Where Do We Go from Here?

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A Framework for Urban Health

In this book and in other recent publications¹⁻³ we have proposed an ecological approach to urban health that suggests that the urban environment influences health and behavior at multiple levels. The focus of this approach is on “urban living conditions,” which are viewed as the day-to-day life circumstances of city dwellers that can either promote or damage health. This approach views health in cities as a function of individual factors influenced by local social (e.g., networks) and physical (e.g., built) environments, including health and social services, which in turn are influenced by municipal factors, including local government, civil society, and market forces, national policies, and global trends, such as immigration, the changing role of government, and economic globalization. This approach further considers the connections between cities and their surrounding areas. This formulation seeks to guide the urban health researcher or practitioner to an improved understanding of the determinants of health of urban populations.

Alternative Perspectives in Urban Health

In the past few years, public health researchers have considered the urban environment in its totality, and several frameworks have been proposed that describe how features of urban living may affect population health. While some of these frameworks are tightly focused on a single dimension, such as how features of the built physical environment may affect population health,⁴⁻⁶ our framework considers urban health in the larger context.¹ We suggest that the framework we present in Chapter 1, which has guided this volume, illustrates the benefits as well as the limitations of such conceptual approaches. One limitation of our model, however,

is that it does not fully consider the range of perspectives or “lenses” that can be used to examine how urban living influences patterns of health and disease. Here we describe a few approaches that warrant further development: demographic, developmental, psychological, cultural, ethnic and racial, gender, and political.

Demographic Approach

Demographic shifts will change the composition of urban communities in the United States in the coming decades, with important implications for health. Declining fertility and high housing costs for young families have already left some cities with relatively few children. In contrast, as the “baby boomers” get older, age distribution in the U.S. population is shifting upward. Cities, where a disproportionate number of the elderly live, will play an increasingly important role in shaping the health of an aging population. Unless health systems plan for this growing population, however, their special needs may not be met. Immigration, expected to increase in many cities in the coming decades, constitutes another demographic shift that will affect the urban social environment, the health and social service delivery systems, and housing and job markets. Key questions for urban health researchers and practitioners planning for these changes include, How do these shifts affect urbanization and urban development? What will urban populations look like in the future? and, What are the implications for the health of the nation?

Developmental Approach

The cumulative influence of city living over a lifetime merits more attention. Although cities provide a unique, culturally diverse, and enriching environment for children, for example, urban air pollution and higher concentrations of environmental contaminants challenge their health. In less wealthy nations, the deleterious effects of overcrowding and environmental pollution are exacerbated by undernutrition and greater risk of transmission of infection, particularly respiratory and diarrheal diseases that contribute to childhood mortality. In large urban settings, children are constantly exposed to varying amounts of assorted toxic chemicals inside and outside the home. Many of these contaminants are suspected to be associated with developmental alterations.⁷ Exposures in infancy can have long-term risks.⁸ In adolescence, urban environments may contribute to injuries, violence, drug abuse, and the spread of sexually transmissible diseases, as well as obesity, cardiovascular disease risk, and other health problems related to life-style.⁹ Cities can also provide greater educational opportunities, higher levels of social support, and perhaps more tolerance for alternative life-styles, offering urban adolescents some developmental advantages as well as disadvantages.

The risks and benefits of urban environments change in adulthood and in old age. As cities concentrate older people, “naturally occurring retirement communities” emerge, offering unique benefits and opportunities for targeted gerontological services.¹⁰ Urban health researchers who use a developmental perspective recognize that the relationship between urban living and health is different at dif-

ferent stages in a person's life and in different historical periods. Developing comprehensive frameworks for understanding how city living affects populations at different life stages in different eras can provide valuable insights into urban planning, health services, and health policy.¹¹

Psychological Approach

Researchers who use the psychological approach examine how city living influences cognition, emotions, and behavior and how cognition, emotions, and behavior in turn influence health. An examination of how the physical and social environments can influence risk perceptions, attitudes, intentions, and individual behavior change should look beyond the relation between characteristics of the urban environment and mental disorder, discussed in Chapter 13, and consider the extent to which the size, density, diversity, and complexity of cities can stimulate alertness, information processing, and creativity and generate sensory overload, inhibiting attention to the environment. An extensive body of scholarship has examined the role of stress and health.^{12–15} The physiological studies of stress show how mental perceptions can become embodied through hormonal and immunological routes that can then affect health.^{13–15} Several researchers have hypothesized that higher levels of stress in urban areas account in part for the urban health penalty, suggesting that psychological theories will need to inform both individual and community-level approaches to reducing stress or improving coping ability.^{16–18} Creating urban environments that support mental health challenges urban planners, public and mental health professionals, educators and elected officials.¹⁸

Cultural, Ethnic, and Racial Approaches

Another approach considers urban health through the lenses of culture, ethnicity, and race and racism. There is ample evidence that persons of different cultures, ethnicities, and races interact differently with their environments in ways that may affect health. Recent studies have shown that being foreign-born is associated with a lower likelihood of receiving preventive and treatment services in United States.^{19–21} This lower access to services, however, does not always translate to worse health. There is an evolving literature on the “healthy immigrant effect,” noting that for at least some immigrants, health is better than for long-term residents.²² There is also a literature on the impact of acculturation, wherein the culture and habits of the country of origin are shifted to the country where immigration occurred. For Hispanics, the literature is mixed; in certain areas—substance abuse, dietary practices, and birth outcomes—there is evidence that acculturation has a negative effect and that it is associated with worse health outcomes, behaviors, and perceptions. In other areas, for example, health care use and self-perceptions of health, the effect is mostly positive.²³

Culture has a profound effect on health, influencing diet, sexual behavior, drug and alcohol use, health care utilization, strategies for coping with stress, and social cohesion.²⁴ Some dimensions of the influence of culture on health have been explored. These include wariness of the health care system and government,²⁵ par-

allel paths to preventive practices and alternatives to care among those of different cultures,^{26, 27} the perception of discrimination,²⁸ and unintentional health provider practices that discourage appropriate care.^{29–32} But few health researchers have attempted to define the unique elements of urban culture and examine their impact on health, to document cultural changes that result from new patterns of interactions within cities and examine their associations with health, or to assess the health consequences of cultural conflict within diverse, densely populated cities. These challenges define the scope of a cultural approach to urban health.

In the United States, race has taken on a unique historical meaning and questions of race have dominated the history of public health since the days of slavery.³³ Substantial bodies of literature documenting disparities in health and health care between whites and African Americans.^{30, 34} In addition, researchers have documented the multifaceted impact of racism on the health of African Americans.^{35–39} To a great extent, racial disparities in health play out in cities, in part because African Americans are concentrated in cities, and so too are inequalities in income. A key challenge is to move beyond describing ethnic, cultural, and racial differences and disparities to reducing them.

Gender Approach

A gender approach to urban health examines the different impact of cities on the health of men and women. The experience of city living by gender is understudied.⁴⁰ Gender is one of the most powerful influences on health, and men and women experience urban living in different ways. For example, men and women experience distinct patterns of violence and crime in cities.^{41, 42} In many urban communities, young women are more likely to stay at home, care for other family members, and experience depression and social isolation.⁴⁰ Low-income young men in cities are more likely to work in the informal and illegal economies, significantly increasing their exposure to unsafe working conditions and violence.⁴³ In some immigrant urban communities, women experience their new situation as providing additional educational, employment, and social opportunities, while men may seek to hold onto the traditional roles and respect they may have experienced in their country of origin.⁴⁴ These different experiences of urban living may well influence physical and mental health. Gender also profoundly shapes HIV risk, and some have argued that changing gender roles and expectations is a necessary condition for HIV prevention.⁴⁵ Gendered analyses of city living can examine each dimension of social influences—global forces, markets, government, civil society—for their impact on health and inform the development of interventions and policies that promote gender equity and reduce gender disparities in health.

Political Approach

Politics shapes the health of urban populations by influencing who receives what share of a city's resources, as well as who gets to participate and who is excluded from making decisions about the future. Earlier chapters of this volume describe how the movement of the middle class to suburbs reduced the political influences of cities and contributed to reductions in the post New Deal social programs that

have benefited urban areas through the 1960s. Politics influences who moves in and out of cities, and how local and national resources are allocated between cities and other areas and between health and other purposes.⁴⁶ Politics shapes the ability of public health officials to achieve their objectives and can strengthen or weaken the social movements that fight for improved working conditions.^{47, 48} Despite its importance to health, with a few notable exceptions,^{49, 50} health researchers have rarely studied urban politics systematically and urban political scientists have only occasionally studied health. Creating a body of knowledge and a research agenda that examines the influence of politics on the health of cities could make an important contribution.

Studies based on these approaches can contribute unique insights into how city living affects health, and these insights can be used to design interventions to improve the health of urban populations. We hope that our summary will lead to critical examination of the value and limitations of different approaches and contribute to an integration of these approaches that will inform new conceptual models.

Tensions in Urban Health

The chapters in the book identify recurrent tensions that inform the consideration of the lenses as introduced here, suggest directions for future research, and illustrate the complexity of developing a science and practice of urban health. These include tensions between fundamental causes and proximate causes, between categorical interventions and comprehensive interventions, between behavioral and medical interventions and social, economic, or political interventions, between developing a universal model applicable to all urban situations and developing a model that emphasizes the uniqueness of each city, between urban health advantage and urban health penalty, between inner city and sprawl, and between determinants of urban health that are inside cities and those that are outside.

Fundamental Causes versus Proximate Causes

Our model for urban health considers the conditions of urban living that are affected by municipal, national, and global trends as proximate causes of individual and community health. The social structures that distribute power, money, and prestige, as Link and colleagues^{51, 52} have noted, represent the fundamental causes that underlie the proximate causes. We label these fundamental causes “enduring structures.” In general, social theorists have called attention to fundamental causes, while public health practitioners have taken a more pragmatic, although possibly less effective, approach in attempting to modify the most identifiable proximate cause, for example, individual behavior. While we do acknowledge the importance of fundamental causes in our conceptual framework, future urban health research will need to better integrate investigations of fundamental and proximate causes. By viewing each as discrete concept, we preclude understanding of the pathways and mechanisms by which the fundamental and proximate causes influence each other.

Categorical versus Comprehensive Interventions

Categorical interventions are defined here as discrete activities that are usually focused on a specific disease outcome. In contrast, comprehensive interventions are a combination of activities that seek changes across the levels of influence suggested by the conceptual framework and often seek to affect multiple outcomes. Since categorical interventions more easily fit the current scientific paradigm for generating inferences on effectiveness, they are often easier to evaluate because there is a discrete activity (e.g., a smoking-cessation program) with a specific outcome (rates of smoking, number of cigarettes smoked). As noted in Chapter 14, urban health researchers have developed methods to perform these types of evaluations. In contrast, comprehensive interventions that simultaneously include different levels of activity (behavioral and medical as well as social, economic, and political) and multiple outcomes are more difficult to assess for causal inferences. A key factor for generating inferences in the current scientific paradigm is the ability to isolate replicable components that produce or predict outcomes. Within comprehensive interventions, these components cannot be disentangled easily, and the effects they produce may vary across settings and contexts. Furthermore, it may not be the components themselves but rather the combination that is relevant to producing the desired outcomes. While methods for evaluation and frameworks for generating inferences are evolving for multilevel interventions, basic paradigm differences for what constitutes inference remain.

Many public health practitioners and researchers continue to choose categorical interventions not because they will be more effective but because they are easier to launch and evaluate. Many comprehensive interventions lack supporting evaluation studies not because they are ineffective but because they have not been studied. Resolving these problems through the development of new methods and more appropriate standards for determining effectiveness of different types of interventions will help to advance the practice of urban health.

Behavioral and Medical Interventions versus Social, Economic, and Political Interventions

Another debate among urban health interventionists centers on the relative value and importance of behavioral and medical interventions and social, economic, and political ones. Both approaches, however, are necessary and constitute an important part of the public health armamentarium. The debate centers on the relative importance of each within a portfolio of different interventions.

Campaigns for smoking cessation have used both approaches, emphasizing, on one hand, nicotine-replacement therapy, cognitive behavioral interventions, counseling, and use of antidepressants, and, on the other hand, changing norms with the help of community-wide campaigns, taxation of tobacco products, or new laws to restrict smoking in public places. Clearly, with this combined approach, the proportion of the population who smoke has declined. However, the debate about what constitutes the ideal mix of such approaches, and decisions about which approach to favor are influenced by organizational, political, and financial,

factors. To date, few researchers have proposed systematic approaches to resolving such questions.

To build on a second example, we can consider the epidemic of multidrug-resistant tuberculosis, which was described in previous chapters. The problem was widely attributed to infrastructure issues, where there had been reductions in funding for hiring, retaining, and training staff for tuberculosis clinics, resources for housing the homeless, and care offered in other crowded clinics and jails.⁵³ Categorical interventions included directly observed therapy for tuberculosis and the enactment of public health code that enabled the detention of nonadherent infected individuals until the infection had been treated. This example shows that medical and political actions (i.e., a multi-level intervention) were implemented, but only enough to contain the immediate problem; this limited approach could prevent the resurgence of tuberculosis in the future. A more comprehensive approach would include additional municipal and national funding for infrastructure, training, and outreach on tuberculosis, extension of resources and health care for the homeless, better housing for the poor, additional services within correctional facilities, and efforts to link continuity of care from corrections to the community. In this case, however, the immediate outbreak of multidrug-resistant tuberculosis was handled with a more categorical approach. Sustained efforts to maintain control of tuberculosis require a more comprehensive approach.

More recently, public health officials have devoted attention to the rising epidemic of obesity in the United States. Obesity is a risk factor for multiple diseases (e.g., diabetes, hypertension), and its impact has been projected to be so serious as to lead to a reduction in life expectancy in the United States.⁵⁴ While numerous approaches have been developed for individuals, including diet programs⁵⁵ and even surgery,⁵⁶ attention to community-level intervention is being recognized with an emphasis on multi-level approaches.^{57, 58} More “upstream” thinking has progressed to considering policy changes, such as urban redesign, taxes on junk food, or more health-conscious institutional food programs to promote healthier eating and more physical activity.⁵⁹ In contrast to the interventions that were implemented to control tuberculosis, a wider array of sustained efforts will be needed to achieve control of the obesity epidemic.

These three examples illustrate the factors that influence the selection of interventions to achieve the appropriate balance between behavioral and medical interventions and social, economic, and political ones. More systematic attention to a process for making such decisions can help urban health officials to develop an appropriate mix of intervention approaches.

Universal versus Context-Specific Models for Urban Health Interventions

Another tension forces urban health researchers to choose between universal models applicable to all or many urban situations and those that emphasize the uniqueness of a city, community or population. On one hand, a single simple model that can guide interventions to manage or avert crises across cities has a strong appeal. On the other hand, because every city has unique characteristics, any uni-

versal formulation can be either too simplistic or too complex. Thus, developing a systematic process for choosing the right place on the continuum of options that separates these polarities can facilitate the development of more effective but also more economical interventions to improve urban health. The discussion in Chapter 10 of water and sanitation issues in developing world cities illustrates such an approach.

Urban Health Penalty versus Urban Health Advantage

Our more recent work⁶⁰ has focused on considering the salutary effects of urban living or the “urban health advantage,” a view that has not been the focus of research on health in cities. The more historic and commonly held view is that cities are harmful if not toxic environments for health. The term *urban health penalty* posits that cities concentrate poor people and expose residents to unhealthy environments leading to a disproportionate burden of poor health. Another term that has been used to characterize this approach is *inner city health*.^{61–63} The departure of the middle class and jobs to the surrounding suburbs in the past several decades within the United States as well as many other Western countries has led to concentrated urban poverty, increased racial segregation, and diminished capacity among cities to meet the needs of increasingly impoverished populations.⁶⁴ By the late 20th century, U.S. and some European cities had higher rates than their respective nonurban areas of HIV infection, substance abuse, mental illness, infant mortality, asthma, and other conditions.⁶⁵

Considering issues related to urban health within an urban health penalty rubric draws specific attention to the poor health conditions that persist in many inner cities.^{46, 65} However, this approach tends to equate “urbaness” with issues of disadvantage, and urban health becomes synonymous with conditions among the minority poor of the inner cities. In addition, this approach does not lead us to consider the specific characteristics of cities that may be associated with poor health, nor does it acknowledge that a multitude of factors (including, but not limited to poverty) accounts for urban population health.

Thus, emphasizing only the urban health penalty does not consider emerging evidence that living in cities might also confer an advantage by exposing residents to a salutagenic urban environment.⁶⁰ An urban health advantage perspective emphasizes the health benefits of city living. In fact, it may not be useful to think of the urban penalty and the urban advantage approaches as mutually exclusive. All cities have characteristics that both promote and harm health. The health status of a given urban population can be viewed as the sum of the urban advantages minus the sum of the penalties. Research, interventions, and policies that maximize advantages while minimizing penalties can contribute to the goal of healthier cities for all.

Inner City and Sprawl

More recently, health researchers have shifted their focus from the health consequences of inner cities to the health consequences of “urban sprawl,” the diffusion

of urban populations outside central cities.⁶⁶ Motivated by the rapid suburbanization of U.S. and European cities in the past decades, this approach highlights the adverse health effects of urban growth into outlying areas. These include increasing automobile pollution and accidents, sedentary life-styles that contribute to the rise in obesity and diabetes, increased social isolation, and the breakdown of social capital.^{66, 67}

Although the distinction between cities and suburbs is relevant for considering the impact of different environments, this distinction draws attention away from the relationship and interconnectedness of city and suburbs. For example, many suburbanites commute to the city for work, recreation, and cultural activities, and specialized health care. Conversely, urban health problems such as HIV, substance use, and violence commute to the suburbs, where public officials may initially lack capacity to address these issues. These interconnections between populations and problems suggest that a systems approach applied to metropolitan areas may yield more useful insights. In addition, some observers question whether urban sprawl is a new phenomenon and whether its adverse health consequences outweigh its health benefits.⁶⁸

In sum, these tensions permeate much of the literature on urban health. In our view, defining appropriate syntheses of these dilemmas and developing systematic approaches to resolving such conflicts in particular contexts will help to advance the field of urban health.

Next Steps: Toward a Science and Practice of Urban Health

In the past decade, urban health has received renewed attention as an area for research and intervention. In this volume, we summarize some of this work, especially as it applies to the United States. We believe there is a compelling case for developing a distinct science and practice of urban health. Several trends—the growing urbanization of the world's population, the dominance of urban forms in both developed and developing nations, and the unique impact of the urban environment on health and disease—create a new urgency for better understanding and more effective efforts to improve the health of people in cities. The history of the past two centuries shows that changes in urban living conditions can lead to rapid and significant changes in health, additional support for our thesis that health interventions to modify living conditions promise improvements in global health.

In our view, urban health does not necessarily require the creation of a new discipline. Instead, a transdisciplinary approach,^{69, 70} in which researchers combine the methods and disciplinary perspectives of many fields to develop theories, concepts, and methods uniquely situated to the subject of study, in this case the health of urban populations, may be appropriate. As several authors in this volume suggest, among the recent fields of inquiry that can contribute to the science and practice of urban health are studies on the social determinants of health, on the impact of the built environment on human health, on the causes and remedies for

disparities in health, on the ecological causes and consequences of changes in living conditions, and on methods of community-based participatory research.

In closing, we recommend several actions for readers who support the development of a systematic science and practice of urban health. Such an agenda can help to develop priorities for research and intervention and to coordinate the efforts of the researchers, educators, practitioners, public health officials, advocates, and others working to improve the health of urban populations.

Create Interdisciplinary Training and Research Centers in Urban Health

The complexity of the urban environment and the multiple determinants of urban health problems ensure that no discipline has a monopoly on research and intervention. To build an interdisciplinary science of urban health will require creating institutions that foster such efforts. To date, such centers have emerged in universities, health departments and other research institutions. Recent reviews or case histories have described these experiences.⁷¹⁻⁷³ More systematic study of the lessons from these units will help to improve their contributions.

In addition, in recent years, scholars from a variety of disciplines have begun to make the process of inter- or transdisciplinary research a field of investigation.^{70, 74-76} Some have applied transdisciplinary approaches to issues closely related to urban health, such as urban planning, active living, or tobacco control.^{69, 77, 78} Urban health researchers should join this dialogue and seek to develop research processes that support integrating findings, methods, theories, and concepts from different disciplines into a unique body of knowledge that can inform the study of city living and health.

Redesign Training Programs for Urban Health Researchers and Practitioners

Improving the health of urban populations requires a work force of practitioners, managers, researchers, and policy makers with the requisite knowledge and skills. Current professional training programs focus more on disease outcomes, populations, and techniques than on the characteristics of the urban environment that contribute to health and disease. To prepare future urban health professionals and researchers, academic programs will need to reexamine admissions policies, curriculum, field placements, faculty promotion and tenure procedures, and affiliations with local health departments, community organizations, and policy makers.^{72, 79} Creating networks of urban health professional educators from around the world will help to facilitate this process and ensure that emerging units will learn from each others' experience.

Integrate New Arenas of Scholarships into the Study of Urban Health

To develop a comprehensive science of urban health, researchers will need to become familiar with a wide variety of scholarship that can inform the multilevel

investigations that are needed. The principle contributions to the study of urban health have come from epidemiology, environmental health sciences, health services research, and other public health disciplines, as well as from sociology, psychology, anthropology, and urban planning. Many other disciplines and fields of study offer the promise of new insights into cities and health: neuroscience and immunology can help to understand how urban environments affect human biology;^{80, 81} women's and gender studies can contribute new understanding of how cities differentially affect males and females;^{41, 82} cultural studies can inform research on the impact of dominant urban ideologies and discourses on health norms and behavior;⁸³ and transportation sciences can guide investigations of the health impact of various transportation systems, a key issue for both developed and developing world cities.⁸⁴ Developing systematic strategies for the integration of relevant bodies of knowledge for urban health is an important priority.

Focus Research on Interventions and Policies That Promote the Health of Urban Populations

For too long, urban health researchers have simply described the health of various urban populations or compared urban and nonurban or intra-urban differences. In our view, the priority for future research should be on analytic studies that identify particular characteristics of the urban environment that contribute to health or disease and on the evaluation of interventions to modify these factors. By encouraging students and colleagues to tackle these more difficult questions, by advocating for funding streams that support this kind of research, and by educating policy makers on the potential of good research to inform policy and practice, urban health researchers can help to shift research resources to more productive activities.

Use Urban Health to Build New Research and Practice Links Between Clinical, Health Services, and Public Health Research

In the past, clinical, health services, epidemiological, and intervention research studies have often proceeded on separate tracks, with little communication among the various strands, an approach that has limited progress. Yet the evidence presented in previous chapters shows that prior health conditions, current living circumstances, and access to services all affect health outcomes of urban populations. The complexity of the urban environment as well as the density of urban researchers may make cities a suitable setting for reweaving these threads into a single research strand, since each gives necessary but not sufficient insights into population health.

Link Urban Health Research with Rural and Suburban Health Research

In the past few years, rural health has attracted new attention in the United States, and as more people move into increasingly diverse suburban areas,⁸⁵ others have

focused on the health risks and benefits of suburban life.⁸⁶ In our view, these developments should be seen as advancing the study of urban health, rather than competing with it, since all three highlight the role of place in health. Moreover, in an increasingly globalized world, many health problems move back and forth across urban, suburban, and rural lines.⁸⁷ Future research should focus on this migration of diseases and develop effective methods for reducing such transmission and minimizing its impact.

Build New Partnerships with Urban Communities

Urban communities have a key role to play in urban health research and intervention. Community-based participatory research offers principles and methods that can guide partnerships between researchers, community organizations, and community residents.^{88,89} A recent review of the experiences of the Urban Research Centers funded by the Centers for Disease Control and Prevention illustrates the accomplishments and barriers that such partnerships face.⁷¹ By engaging a variety of community stakeholders in all aspects of planning research, framing questions, collecting data, interpreting findings and disseminating results, researchers increase the likelihood of more fully understanding a phenomenon of interest. They also give communities greater ownership of the research process and outcomes and build potential support for translating findings into practice or policy.

Build Links with Constituencies That Can Help to Move Research Findings into Practice

More broadly speaking, improving the health of urban populations will require creating alliances with a wide sector of constituencies including policy makers, service providers, nonprofit and advocacy organizations, social movements, and citizens. Such alliances will be needed to win funding for research, achieve policy changes to improve urban health, and implement and sustain interventions at the neighborhood, community, municipal, regional, national, and global levels.

Conclusion

In this volume, we argue that urban living conditions—the daily life experiences of people living in cities—are the primary proximate and most remediable determinant of health and disease. These daily life experiences result from individuals interacting within unique physical and social environments with a specific constellation of health and social services. Improving these urban living conditions is the most promising primary target for public health intervention. Thus, training programs must prepare health professionals to take on this task, by emphasizing the *content* of urban health as exposure to a particular environment and the *processes* for intervention. Disciplines that could benefit from such an approach include not only medicine, nursing, law, and urban planning but also academic fields such as anthropology, economics, sociology, and political science.

Public health practitioners need to ask how we go from where we are to where

we want to be to improve the health of cities. To do this will require working effectively at both the scientific and political levels. While public health as a discipline has long acknowledged the importance of both politics and science, most researchers, practitioners, and policy makers spend their working lives in one domain or the other. To promote the health of cities in the 21st century, we will need to develop a practice and an agenda that are equally grounded in science and politics.

Cities are more than a daunting list of problems that sum to a portrait of inevitable decay. Urban areas are a collection of diverse, vibrant, and interacting social environments. This volume provides a framework that can guide the development of a comprehensive agenda for urban health research and intervention. We hope that readers will debate the framework, rearrange its components, remedy its limitations, and integrate new perspectives. Most of all, we hope we have provided some starting points for advancing a vision of the interdisciplinary development of a science and practice that can improve the health of urban populations.

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