

February Urban Health Literature Review

- A. Urban health, general
- B. The inner-city
- C. The urban indoor and outdoor environment
- D. Global health, globalization and cities

Of general interest:

2003 Report on health in large U.S. cities at
<http://www.ci.chi.il.us/Health/Publications/2003BCHI.pdf>

2003 Report on migration and health at
<http://www.msoc-mrc.gla.ac.uk/Publications/pub/PDFs/Occasional-Papers/OP012.pdf>

Topic A. Urban health, general

1. Source: Am J Public Health. 2004 Jan;94(1):116-21.

Title: **Comparison of health status indicators in Chicago: are Black-White disparities worsening?**

Author: Margellos H, Silva A, Whitman S.

Institution: Sinai Urban Health Institute, Sinai Health System, Chicago, IL 60608-1797, USA. marhe@sinai.org

OBJECTIVES: This study examined Chicago residents' progress toward the Healthy People 2000 goal of reducing racial disparities in health and compared the results with a recent analysis of US data. METHODS: Non-Hispanic Black-to-non-Hispanic White rate ratios were computed for 14 health status indicators for 1990 and for 1998. RESULTS: Nationally and in Chicago, indicators for both Blacks and Whites improved between 1990 and 1998; however, Whites consistently fared better. Nationally, gaps narrowed on 10 indicators; for Chicago, they widened on 10 indicators. CONCLUSIONS: Nationally, there is apparent progress in reducing Black-White disparities; this is not true for Chicago. Whether failure to reduce racial disparities is unique to Chicago or is common to other urban centers remains an open question with important implications.

2. Source: Environment & Behavior , Vol 36(1), Jan 2004. pp. 41-69.

Title: **Neighborhood evaluation within a multiplace perspective on urban activity**

Author: Bonaiuto M, Bonnes M, Continisio M

Institution: U Rome La Sapienza, Italy

Abstract: Within place theory, the research investigated relationships between activities carried out in a place and evaluative aspects of the same place. In the study, 152 inhabitants, ages 18 to 55, all living in the same neighborhood of Rome (Italy) were sampled by sex. An individual questionnaire included three scales to measure frequency of activities (23 items for neighborhood, 32 items for city center, and 11 items for suburbs) and a 47-item scale to measure degree of satisfaction/dissatisfaction toward various aspects of neighborhood. Multivariate data analyses identified four groups of inhabitants (neighborhood confined, marginal escape users, multiplace hyperactive, and quality users), each characterized by a specific pattern of multiplace urban activity. Each group was characterized by sociodemographic and/or residential variables. Finally, each group was also characterized by a specific pattern of neighborhood evaluations, with respect to three main aspects (building/population density and uninhabitability, social-spatial insecurity, and functional inadequacy/unavailability).

3. Source: Health Serv Res. 2003 Dec: 38(6 Pt2): 1645-717

Title: **Measuring contextual characteristics for community health.**

Author: Hillemeier MM, Lynch J, Harper S, Casper M.

Institution: Department of Health Policy and Administration, The Pennsylvania State University, University Park

16802-6500, USA.

Abstract: **OBJECTIVE:** To conceptualize and measure community contextual influences on population health and health disparities. **DATA SOURCES:** We use traditional and nontraditional secondary sources of data comprising a comprehensive array of community characteristics. **STUDY DESIGN:** Using a consultative process, we identify 12 overarching dimensions of contextual characteristics that may affect community health, as well as specific subcomponents relating to each dimension. **DATA COLLECTION:** An extensive geocoded library of data indicators relating to each dimension and subcomponent for metropolitan areas in the United States is assembled. **PRINCIPAL FINDINGS:** We describe the development of community contextual health profiles, present the rationale supporting each of the profile dimensions, and provide examples of relevant data sources. **CONCLUSIONS:** Our conceptual framework for community contextual characteristics, including a specified set of dimensions and components, can provide practical ways to monitor health-related aspects of the economic, social, and physical environments in which people live. We suggest several guiding principles useful for understanding how aspects of contextual characteristics can affect health and health disparities.

B. The inner-city

4. Source: International Journal of Urban & Regional Research; Dec2003, Vol. 27 Issue 4, p912, 26p

Title: **Self-help in Housing and Chengzhongcun in China's Urbanization.**

Author Zhang L, Zhao SXB, Tian JP

Abstract: This article focuses on the housing issues of rural migrants arising from urbanization, with particular reference to chengzhongcun, a topic with considerable impact on policymaking. An attempt is made to understand the underlying rationale of self-help in housing and the important role of chengzhongcun in sheltering rural migrants in the context of China's rural-urban dichotomy. As demonstrated in this study, chengzhongcun accommodate, with little in the way of government resources and assistance, millions of rural migrants because of their social accessibility and affordability. While not denying their social problems, we argue that chengzhongcun in fact act as an innovative and positive agent to promote urbanization in present day China by housing massive numbers of rural migrants and assimilating them into cities. Current government policies towards chengzhongcun have generated a wide range of interest conflicts and confrontations. The consequences of such conflicts show that the government policies were problematic and unworkable, as they violated basic market principles as well as citizen rights. Policy strategy towards the redevelopment of chengzhongcun must acknowledge their credibility in the Chinese road to urbanization and requires more thoughtful and prudent consideration of migrants' demands for affordable housing.

5. Source: DS Patient Care STDS. 2003 Nov; 17(11):565-73.

Title: **Hospitalized HIV-infected patients in the HAART era: a view from the inner city.**

Author: Pulvirenti JJ, Glowacki R, Muppiddi U, Surapaneni N, Gail C, Kohl B, Jezisek T.

Institution: Division of Infectious Diseases, Cook County Hospital, Rush Medical College, Chicago, Illinois 60612, USA. Jpulvir@hektoen.org

Abstract: To evaluate hospitalizations of HIV-infected patients in the highly active antiretroviral therapy (HAART) era, we analyzed 2736 admissions of 1562 HIV-infected patients to Cook County Hospital from September 20, 1999 to July 10, 2002. Patients were predominantly African American (81%), male (72%), and active substance abusers (74%). Only 48% of patients with a prior HIV diagnosis were taking HAART and 37% of them had a viral load less than 1000 copies per milliliter. Patients on protease inhibitor (PI)-sparing regimens more frequently achieved a viral load less than 1000 copies per milliliter than those on a PI-containing regimens (41% vs. 34% $p = 0.036$). For patients with CD4 cell counts less than 200 cells per milliliter, those not taking HAART were more likely African American (83% vs. 76%, $p < 0.031$), homeless (13% vs. 5%, $p < 0.001$), active substance abusers (79% vs. 65%, $p < 0.001$), female (28% vs. 22%, $p = 0.001$), new to the hospital system (19% vs. 6%, $p < 0.001$), or not recently seen in the outpatient clinic (42% vs. 17%, $p < 0.001$). In our population, active substance abuse was prevalent and only a minority of patients was taking HAART. Women were receiving HAART less often,

independent of race and substance abuse. Aggressive programs are needed in high-risk populations to address substance abuse issues and to improve patient use of HAART.

6. Source: AIDS Patient Care STDS. 2003 Nov;17(11):575-80.

Title: **Attitudes toward HIV protease inhibitors and medication adherence in an inner city HIV population.**

Author: Demmer C.

Institution: Department of Health Services, Lehman College of the City University of New York, Bronx, New York 10468, USA.

Abstract: The objective of this pilot study was to examine attitudes toward protease inhibitors (PIs) among HIV-infected individuals and to assess the relationship between PI attitudes and adherence to PIs. Respondents were recruited from four AIDS service organizations in New York City; the total sample consisted of 97 HIV-infected individuals who were taking a PI. The sample consisted largely of African Americans and Latinos from inner city areas, and most had a low level of education. Adherence was suboptimal, with more than 50% of respondents failing to take their PI medications exactly as prescribed within the previous month. Individuals who had recently used illegal drugs within the past 6 months were more likely to be nonadherent to PIs. Those who were not adherent to PI medications reported greater concern about the side effects of PIs and were more likely to believe that it was acceptable to skip doses of PIs.

7. Source: Health Serv Res. 2003 Dec; 38 (6 Pt 2): 1735-59

Title: **The association between multiple domains of discrimination and self-assessed health: a multilevel analysis of Latinos and Blacks in four low-income New York City neighborhoods.**

Author: Stuber J, Galea S, Ahern J, Blaney S, Fuller C.

Institution: Division of Health and Science Policy, The New York Academy of Medicine, New York 10029-5283, USA.

Abstract: OBJECTIVE: This study examines the association between discrimination due to race and other attributes (e.g., sex, age) and self-assessed mental and physical health among Latinos and blacks. DATA SOURCE: Latino and black adult participants (n = 873) identified by random digit dialing were interviewed by telephone in four low-income neighborhoods in New York City: the South Bronx, East Harlem, Central Harlem, and Bedford-Stuyvesant. STUDY DESIGN: In this cross-sectional study, generalized estimating equations were used to fit multilevel multivariable models to test the association between discrimination and poor mental and physical health while controlling for socioeconomic status, access to health care, social support, smoking, and the racial and ethnic composition of each neighborhood. PRINCIPAL FINDINGS: Discrimination due to race and discrimination due to other attributes were associated with poor self-assessed mental but not physical health in separate multivariable models. Persons who experienced multiple domains of discrimination had a greater probability of reporting poor mental health than persons who experienced no discrimination. CONCLUSIONS: Discrimination due to race and other attributes was a significant correlate of mental health among Latinos and blacks independent of other accepted determinants of health.

8. Source: Clin Infect Dis. 2004 Feb 1;38(3):438-41. Epub 2004 Jan 13.

Title: **Syringe distribution to injection drug users for prevention of HIV infection: opinions and practices of health care providers in New York City.**

Author: Coffin PO, Fuller C, Blaney S, Vahnai L, Miller S, Vlahov D.

Institution: Center for Urban Epidemiologic Studies, New York Academy of Medicine, USA. pcoffin@nyam.org

The Expanded Syringe Access Demonstration Program (ESAP), which was intended to increase access to syringes for injection drug users (IDUs), went into effect in New York State on 1 January 2001. ESAP allowed prescription-authorized health care providers to register to distribute syringes without a prescription. In spring 2002, we conducted a random postal survey of 1100 providers in New York City to evaluate involvement in ESAP and willingness to furnish IDUs with syringes. Among 363 nurse practitioners, physicians, and physician assistants responding, 16.9% knew about ESAP, and 2.0% believed they were registered; 50.5% would consider distributing syringes to patients who were IDUs. Most of those unwilling to distribute syringes were concerned

about legal and moral issues. More respondents agreed that providers should prescribe syringes than distribute syringes (41.1% vs. 22.7%; $P < .0001$). These results suggest that many providers are willing to furnish IDUs with syringes but are unaware of the current law.

9. Source: *Psychiatric Rehabilitation Journal*; Winter2003, Vol. 26 Issue 3, p240, 9p

Title: **Representation of the governed: Leadership building for people with behavioral health disorders who are homeless or were formerly homeless.**

Author: Rowe M, Bebedict P, Falzer P

Abstract: Many organizations that provide services to individuals with behavioral health disorders are required to include people with psychiatric disabilities on their boards and action groups, yet this requirement rarely results in successful, ongoing representation. We report on a pilot project that trained people who were homeless and formerly homeless, most of whom were diagnosed with behavioral health disorders, for internships on boards and action groups that provide services to people who are homeless. We relate the project's goals to the theme of empowerment, present our findings, discuss key implementation issues, and offer recommendations for future program efforts and research

10. Source: *Am J Psychiatry*. 2003 Mar;160(3):477-82.

Title: **Do urbanicity and familial liability co-participate in causing psychosis?**

Comment in: [Am J Psychiatry. 2003 Mar;160\(3\):425-9.](#)

Author: van Os J, Hanssen M, Bak M, Bijl RV, Vollebergh W.

Institution: Department of Psychiatry and Neuropsychology, azM/Mondriaan/Riagg/RIBW/Vijverdal Academic Centre, EURON, Maastricht University, The Netherlands.

Abstract: OBJECTIVE: The urban environment and familial liability are risk factors for psychotic illness, but it is not known whether a biological synergism exists between these two proxy causes. METHOD: The amount of biological synergism between familial liability (defined as a family history of delusions and/or hallucinations necessitating psychiatric treatment) and a five-level rating of population density of place of residence was estimated from the additive statistical interaction in a general population risk set of 5,550 individuals. RESULTS: Both the level of urbanicity (adjusted summary odds ratio=1.57, 95% CI=1.30-1.89) and familial liability (adjusted odds ratio=4.59, 95% CI=2.41-8.74) increased the risk for psychotic disorder, independently of each other. However, the effect of urbanicity on the additive scale was much larger for individuals with evidence of familial liability (risk difference=2.58%) than in those without familial liability (risk difference=0.40%). An estimated 60%-70% of the individuals exposed to both urbanicity and familial liability had developed psychotic disorder because of the synergistic action of the two proxy causes. CONCLUSIONS: Given that familial clustering of psychosis is thought to reflect the effect of shared genes, the findings support a mechanism of gene-environment interaction in the causation of psychosis.

11. Source: *Urban Studies*; Jun2003, Vol. 40 Issue 7, p1183, 24p, 1 chart

Title: **(Re)Analyzing the sustainable city: nature, urbanization and the regulation of socio-environmental relations in the UK.**

Author: Whitehead M

Abstract: The sustainable city has now become a leading paradigm of urban development throughout the world. Although the practices, discourses and ideologies associated with the sustainable city have been widely disseminated, analyses of sustainable urban development remain surprisingly anodyne. Drawing upon the insights of regulation theory, this paper attempts to develop a critical engagement with the sustainable city as a space of socio-ecological regulation. Focusing upon two examples of sustainable urban development in practice—the first, the struggle over work-place environments in Stoke-on-Trent; and the second, the reinsertion of nature into the Black Country urban region—this paper explores the regulatory geography of the sustainable city and the environmental visions and practices with which it is associated.

C. The urban indoor and outdoor environment

12. Source: Ann Allergy Asthma Immunol. 2003 Dec;91(6):546-52.

Title: **Cockroach counts and house dust allergen concentrations after professional cockroach control and cleaning.**

Author: McConnell R, Jones C, Milam J, Gonzalez P, Berhane K, Clement L, Richardson J, Hanley-Lopez J, Kwong K, Maalouf N, Galvan J, Platts-Mills T.

Department of Preventive Medicine, Keck School of Medicine at the University of Southern California, Los Angeles, California 90033, USA. rmconne@usc.edu

Abstract: BACKGROUND: It is known that cockroach allergen exposure is both frequent in inner-city homes and associated with asthma severity in children living in those homes. However, there have been few studies of interventions to reduce exposures in this setting. OBJECTIVE: To evaluate the effect of short-term professional cockroach control and intensive cleaning on allergen concentrations. METHODS: Families of children from a school-based asthma treatment program who had skin test results positive to cockroach allergen were enrolled if the home had cockroaches. Forty-nine homes were randomly assigned to receive professional cleaning with bait traps containing insecticide, professional cleaning with bait traps without insecticide, or no cleaning or bait traps. In all homes, dust was collected repeatedly to evaluate cockroach allergen Bla g 2 in the kitchen and bedroom, and cockroaches were trapped and counted repeatedly for more than 11 weeks. RESULTS: Median cockroach counts were reduced in the homes treated with insecticide bait traps but not in other groups. There were significant reductions in allergen concentration in the kitchen in homes that received professional cleaning and had higher initial cockroach counts (54), regardless of whether bait traps had insecticide or not. CONCLUSIONS: We conclude that intensive cleaning can produce significant reductions in cockroach allergen in homes with heavy initial cockroach infestations.

13. Source: J Rural Health. 2004 Winter;20(1):7-16.

Title: **Rural-urban differences in the social climate surrounding environmental tobacco smoke: a report from the 2002 Social Climate Survey of Tobacco Control.**

Author: McMillen R, Breen J, Cosby AG.

Institution: Social Science Research Center, Mississippi State University, 103 Research Park, Starkville, MS 39759, USA. robert.mcmillen@ssrc.msstate.edu

Abstract: CONTEXT: Although previous research has found smoking rates to be higher among residents of rural areas, few studies have investigated rural-urban differences in exposure to environmental tobacco smoke (ETS). OBJECTIVE: This study contrasted the social climate surrounding ETS among Americans who resided in 5 levels of county urbanization. DESIGN: Data were collected via telephone interviews administered to a representative sample of 3,009 civilian, non-institutionalized adults over age 18 in the United States. Households were selected using random digit dialing procedures. FINDINGS: Compared to residents of urban counties, rural residents reported fewer restrictions on smoking in the presence of children and lower incidences of smoking bans in households, family automobiles, work areas, convenience stores, fast-food restaurants, and restaurants. Interestingly, when rural-urban variations in knowledge and attitudes about ETS were examined, the magnitude of rural-urban differences was smaller or nonexistent for these indicators. Moreover, logistic regression models indicated that none of these rural-urban differences in knowledge and attitudes persisted after statistically controlling for region, smoking status, gender, race, age, and education factors. This suggests that the observed rural-urban differences in ETS bans could not be explained adequately by rural-urban differences in knowledge and attitudes about the dangers of ETS. CONCLUSIONS: The policy implications of this research point to a greater need in rural America for programs focusing on the restriction and elimination of ETS. They also suggest that programs focusing only on influencing the levels of ETS knowledge and attitudes among the general population may not be adequate in producing the desired change

14. Source: Br Med Bull. 2003 Dec;68(1):209-225.

Title: **Indoor air pollution: a global health concern.**

Author: Zhang JJ, Smith KR.

Institution: Environmental and Occupational Health Sciences Institute & School of Public Health, University of

Medicine and Dentistry of New Jersey, NJ and Environmental Health Sciences, School of Public Health, University of California at Berkeley, Berkeley, CA, USA.

Abstract: Indoor air pollution is ubiquitous, and takes many forms, ranging from smoke emitted from solid fuel combustion, especially in households in developing countries, to complex mixtures of volatile and semi-volatile organic compounds present in modern buildings. This paper reviews sources of, and health risks associated with, various indoor chemical pollutants, from a historical and global perspective. Health effects are presented for individual compounds or pollutant mixtures based on real-world exposure situations. Health risks from indoor air pollution are likely to be greatest in cities in developing countries, especially where risks associated with solid fuel combustion coincide with risk associated with modern buildings. Everyday exposure to multiple chemicals, most of which are present indoors, may contribute to increasing prevalence of asthma, autism, childhood cancer, medically unexplained symptoms, and perhaps other illnesses. Given that tobacco consumption and synthetic chemical usage will not be declining at least in the near future, concerns about indoor air pollution may be expected to remain.

Topic D. Global health, globalization and cities

15. Source: Indian Pediatr. 2003 Dec;40(12):1145-61.

Title: Determinants of childhood mortality and morbidity in urban slums in India.

Author: Awasthi S, Agarwal S.

Institution: Department of Pediatrics and Institute of Clinical Epidemiology, King George's Medical University, Lucknow-UP, India. sawasthi@sancharnet.in

The large and continuous increase in India's urban population and the concomitant growth of the population residing in slums has resulted in overstraining of infrastructure and deterioration in public health. The link between urbanization, a degraded environment, inaccessibility to healthcare and a deteriorating quality of life is significant and particularly evident in the sharp inequities in IMR if one looks at urban specific studies. It is hence, germane to address the appalling inequalities in the distribution and access to basic amenities and health services with a focus on enhanced service coverage, improved sanitation and water supplies and mobilization of community action for effectively mitigating the childhood death and disease burden in urban slums.

16. Source: Int J Hyg Environ Health. 2003 Aug;206(4-5):269-78.

Title: Global urbanization and impact on health

Author: Moore M, Gould P, Keary

Institution: Office of Global Health Affairs, U.S. Department of Health and Human Services, Rockville, Maryland 20857, USA.

Abstract: Nearly half the world's population now lives in urban settlements. Cities offer the lure of better employment, education, health care, and culture; and they contribute disproportionately to national economies. However, rapid and often unplanned urban growth is often associated with poverty, environmental degradation and population demands that outstrip service capacity. These conditions place human health at risk. Reliable urban health statistics are largely unavailable throughout the world. Disaggregated intra-urban health data, i.e., for different areas within a city, are even more rare. Data that are available indicate a range of urban health hazards and associated health risks: substandard housing, crowding, air pollution, insufficient or contaminated drinking water, inadequate sanitation and solid waste disposal services, vector-borne diseases, industrial waste, increased motor vehicle traffic, stress associated with poverty and unemployment, among others. Local and national governments and multilateral organizations are all grappling with the challenges of urbanization. Urban health risks and concerns involve many different sectors, including health, environment, housing, energy, transportation, urban planning, and others. Two main policy implications are highlighted: the need for systematic and useful urban health statistics on a disaggregated, i.e., intra-urban, basis, and the need for more effective partnering across sectors. The humanitarian and economic imperative to create livable and sustainable cities must drive us to seek and successfully overcome challenges and capitalize on opportunities. Good urban planning and governance, exchange of best practice models and the determination and leadership of stakeholders across disciplines, sectors, communities and countries will be critical elements of success.

17. Source: Ann Ital Med Int, 2003 Apr-Jun; 18(2):64-72

Title: **Urban air pollution at the crossroads of the allergic pandemic.**

Author: Proietti L, Spicuzza L, Polosa R

Institution: Sezione di Medicina del Lavoro, Dipartimento di Medicina Interna e Patologie Sistemiche, Università degli Studi di Catania.

Abstract: In these past decades an important increase in the prevalence of allergic respiratory diseases has been documented in most countries of the world with large differences being reported within different areas, particularly in industrialized countries. Persistent environmental exposure to particulate air pollution from motor vehicles has been suggested to be an important factor contributing to the observed increased prevalence of allergic diseases. Data from various investigators in different parts of the world have shown an important association between environmental levels of motor vehicle exhaust emissions and increased symptoms of asthma and rhinitis. In addition, recent human and animal laboratory-based studies have shown that particulate toxic pollutants, and especially diesel exhaust particles, can enhance allergic inflammation and induce the development of allergic immune responses. This article reviews the current state of knowledge on the role of diesel exhaust particles in the susceptibility to allergy. It scrutinizes the epidemiological evidence that supports the causative link between particulate air pollution from motor vehicles and the increasing prevalence in allergic conditions and the immunologic mechanisms by which diesel exhaust particles enhance the susceptibility to allergy.

18. Source: International Journal of Urban & Regional Research; Dec2003, Vol. 27 Issue 4, p952, 4p

Title: **An alternative urban world is possible: A declaration for urban research and action.**

Abstract: At its June 2002 meeting in Paris and Caen, France, the members of the International Network for Urban Research and Action (INURA) collectively agreed on a declaration to express the organization's urbanist agenda. This declaration operates on two levels: one makes five statements conceived in the tradition of earlier (for example situationist) manifestos; the other is a set of concise statements on the state of the globalization process in the era of globalization and neo-liberalism. Subsections of the declaration deal with an urban world, a global city, migrant cities, unsustainable urban-natural relations, neo-liberalization, attacks on democracy, community vulnerability, the rise of racism, and some thoughts on possible alternatives. The strategic purpose of this declaration was to be an intervention at meetings of the international urban community, for example for the World Social Forum in Porto Alegre in January 2003 and similar regional and local events. The declaration is published here in order to invite debate among other scholars and activists on the issues raised in its theses and statements.