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ROUNDTABLE ON URBANISM AND HEALTHY LIVING **(Background paper for the debate)**

Urbanism: A Challenge for Public Health

1. The megatrend toward the integration and demographic growth of cities partly reflects the cultural, economic, and political dynamic of these spaces. The result of this trend is that, since 1975, the population in megacities (cities of over 10 million inhabitants) has tripled; in general, this has also occurred in cities of over 1 million inhabitants (1). The world is becoming urbanized at an unprecedented rate: in 1900 13% of the world's population (220 million people) resided in cities; in 1950, the urban population represented 29.1% (732 million); while in 2005, 49% of the population lived in urban areas, that is, 3,171 million people (2). This trend is very marked in the Americas, the region with the highest degree of urbanization and whose cities are the most crowded in the world. This translates into growth in the number of small, medium, and large cities, and their burgeoning into metropolitan areas and megalopolises. Latin America and the Caribbean (LAC) have undergone an early and rapid transition in comparison with other, similarly developed regions, with the urban population growing from 42% of the total in 1959 to 77% in 2005 (1).

2. The proportion of cities with over 20,000 inhabitants is higher in Latin America than in Europe. In 2010, 79.4% of the population of the Region of the Americas is living in urban areas, and most of the future population growth is expected to take place in cities (2). In the Region of the Americas, six of the largest urban areas are megacities, with two in Brazil (São Paulo and Rio de Janeiro), two in the United States (New York and Los Angeles), one in Argentina (Buenos Aires) and one in Mexico (Mexico City). Other major cities are Bogotá (Colombia) and Lima (Peru), each of which has over 8 million inhabitants, followed by Santiago (Chile) and Belo Horizonte (Brazil), with 6 million each (2). Although these large cities continue to grow, medium-sized cities in the Region

(generally with populations ranging from 2 to 5 million) are currently exhibiting the greatest population growth rates.

3. The socioeconomic and political development of medium-sized cities in the Region is lower than that of large metropolitan centers. A study on poverty and precarious living conditions in the cities of the Region by the Economic Commission for Latin America and the Caribbean (ECLAC) shows that, since 1995, the highest proportion of poor families has been found in medium-sized cities (3). In 2001, 127 million people, representing 33% of the Region's population, lived in poor neighborhoods; that is, 35% of the population of South America and 24% of the population of Central America and the Caribbean (4).

4. Cities attract people because of their potential opportunities to improve people's quality of life and well-being (2). Cities create economies of scale, resulting in the availability of educational services, knowledge, medical care, and food. Moreover, industrial growth offers opportunities for paid employment. The concentration of technology and supplies, as well as professionals, for the delivery of medical services in the Region is very unequal between urban and rural environments. For example, there are 8 to 10 times more physicians in cities than in rural areas (5): in Argentina, the ratio is 10:1; in Paraguay, 16:1; in Nicaragua, 27:1, in Peru, 5.3:1, and Colombia 2.4:1 (6). In Canada, in 2004, only 9.4% of physicians worked in rural areas, where 21.1% of the population resides. In 2005, a Health Department study showed a concentration equivalent to 80% of all physicians and 87% of specialists in cities, where only 59% of the population resides. (7) Overall, in the United States of America, the urban-rural ratio for primary care physicians in 2005 was 1.5:1, while that of specialists was 2.4:1 (8). In Mexico a 2005 study showed that in the state of Chiapas, where 54% of the population is rural, there were 0.79 physicians per 1,000 population, while in Mexico City, where 99.5% of the population is urban, the figure was 3.03—that is, a ratio of 3.8:1 (9). A 2002 report published in Uruguay complements the picture (10). Brazil has 6 physicians per 10,000 population in the North region, 8 per 10,000 in the Northeast, and 21 per 10,000 in the Southeast. In Guatemala, the rural-urban ratio is 4:1. In Argentina, the ratio between the city of Buenos Aires and Tierra del Fuego is 10.13:1. Thus, city populations have higher income levels; in 2007, poverty among the rural population in Latin America was 53% higher than among the urban population (2). The majority of people in large cities have access to basic services; people live longer, with average life expectancy now at 75 years. The majority have enough income to purchase durable goods such as televisions and audio equipment, and cities have increasingly built parks and other recreational facilities (2).

5. In LAC, the rapid and unexpected growth process is exceeding the capacity to provide these services, while in the cities the complexity and turbulence of an

interdependent and unequal world are becoming exacerbated. Although more services are available in the cities, there is also greater labor market flexibility and lack of job security. In cities, inequalities in access to infrastructure services (2), housing, and the economy are intensified. Unexpectedly high urbanization is a serious concern for certain vulnerable populations and is rapidly creating a humanitarian crisis. Thus, this year, 30.8% of the inhabitants of urban areas in Latin America and the Caribbean live in poor neighborhoods lacking basic public services (2). In these neighborhoods, there are no water and sanitation, waste disposal, transportation, energy, health care, or education services, nor is there protection against poverty, violence, injury, or high morbidity and mortality.

6. The “urban” context, which poses so many challenges, also reflects the permeability of societies and the complexity of political agendas, as well as the proliferation of networks and coalitions that have power and influence (11). Urbanization not only differentiates populations in terms of the traditional rural-urban dichotomy, but also intensifies heterogeneity in the conditions that determine the health status of urban residents, in terms of both their distribution and the dynamics of inequity. These differences are not always seen in the data compiled and used by the ministries of health (12), as they treat the entire population as a homogeneous unit. Where information does not reflect the differences in the population, the response of the health system is not sufficiently adapted to the urban condition and its social gradients, nor is it possible to find appropriate language for interaction with direct stakeholders.

7. Buildings, transportation, energy supply, industry, the demand for food transport, and waste management in cities have a profound impact on the climate. (13). Similarly, the cities of the Americas are exposed to the health implications of factors related to climate, such as hurricanes, disease-transmitting vectors, extreme temperatures, and more. It is calculated that natural disasters related to climate change cost the affected countries around 0.6% of their GDP (14). In some countries, such as Brazil, it has been documented that health facilities consume around 10% of the total of the energy produced in the country (15). As a result, the PAHO White Paper *Protecting Health from the Effects of Climate Change in the Region of the Americas* (15) includes elements of a regional plan, in which the specified actions represent a framework for national plans (16); they include specific recommendations for actions designed to protect urban health. Tackling the complex current and future challenges that urban contexts pose for human and environmental health demands a change in our way of thinking and acting with respect to society’s role in urban settings and also a greater understanding of the forces and relations that will shape cities in the long term.

The Burden of Urbanism on Health

8. In cities, population is not distributed uniformly, particularly in the Latin American context (2). There are visible differences between residential zones for rich and poor, with well-constructed houses and makeshift dwellings, many of the latter built by the residents themselves. The poor have different levels access to urban services in terms of their affordability and accessibility; potable water is still scarce in three out of four homes in some Latin American countries, and sewage disposal is lacking in 50% of homes (2). Due to the growing number of irregular settlements in the Region, almost 50% of the population of the Region now lives in such settlements (18). The structure and the size of this type of settlement negatively impacts social, family, community, and gender relations; moreover, their tendency to attract migrants has significantly undermined the social support available.

9. The distribution of the immediate health determinants varies considerably among urban populations. These determinants include access to health services and affordable nutritious food; the availability space for physical activity (20); alcohol, tobacco, and illegal drug use; and exposure to toxic chemicals (19). Urban transportation and production conditions lead to changes in air, water, and soil quality (19). Although disaggregated information for the Region is unavailable, roads are clearly less safe in the cities and even worse in smaller towns.

10. Thus, urbanism creates a specific burden for health care services, since they must ensure equity when dealing with chronic noncommunicable diseases, such as cancer, diabetes, respiratory disorders, cardiovascular disease, and mental illness and with diseases resulting from environments conducive to communicable diseases, such as sexually transmitted diseases, HIV/AIDS, dengue, yellow fever, and tuberculosis. Obesity in LAC is greater in urban areas and areas with higher poverty (21). Urbanism is also a determinant of injuries from traffic accidents, which cause no less than 3.2% of DALYs (disability-adjusted life years) in the Region, and violence. The homicide rate in the Region, 27.5 per 100,000 population, is the highest in the world (12). Its social determinants have been studied, and mortality has been documented at 23 to 62 per 100,000 population in locations marked by medium and high levels of poverty and high population density; this figure is much higher than that of locations with low levels of poverty and high levels of urbanization, with rates from 3.0 to 7.7 per 100,000 population (22). Injuries and violence contribute to the perception of insecurity, which has an impact on mental disorders (anxiety and depression) in individuals and families living in poor urban neighborhoods (11).

The Cost of Urbanism for Health

11. Urban living conditions entail social, financial, and political costs for health systems and families. To address these conditions of urban life, it must be understood that this is a large-scale problem due to the number of people affected and the vulnerability of cities. For example, the impact of air pollution each year costs São Paulo some 28,212 years of healthy life (23); the concentration of people in Mexico City accelerated contagion and the spread of influenza A (H1N1), costing the country almost 0.5% of its GDP (24); floods such as the one in New Orleans, in the United States, and earthquakes, such as those in Port-au-Prince, Haiti, and Chile. The main social and political responsibility to act to protect the population in critical conditions like these rests with the authorities and the health services, which should be at the forefront of every pertinent social and intersectoral response.

The Importance of Influencing the Future of Cities from the Health Sector

12. The environment constructed by human beings defines the health situation. In LAC there is a mix of cities, some very well-established and others where the regularization of irregular settlements is under way; this process implies policy decisions about the construction of new dwellings, basic sanitation, the design of transportation alternatives, energy, waste management, and industrialization. Once infrastructure has been constructed, it is very costly to modify; to a great extent, infrastructure defines the nature and culture of a society, its relations, and its impact on environmental quality and the population's health outcomes.

13. Given the current phase of development in the cities of the Region, there is a great opportunity to develop a design more favorable to population health. Therefore, acting now to help define the future of the city is an investment that will yield results in the short and medium term and can influence the level of well-being, quality of life, functional capacity, and health of the population. Urban planning capacity remains limited throughout the Region. There are only 27 universities with urban planning programs in all of Latin America, compared with 88 in the United States alone. Ministries of health should play a key role in urban planning activities (20), linking them with public health criteria beyond the traditional geographical distribution of health care services; this link should be structured from its legal foundations up through the implementation stage. Within this context, consideration should be given to the recent guides issued by WHO (25), which include training schemes, financial incentives, regulatory mechanisms, and other nonfinancial mechanisms to encourage rural practice, as well as models to functionally link rural areas with urban medical services, as is being attempted with the medical services themselves under the direct leadership of the ministries of health, linking specialized services virtually or through medium- and

long-term planning methods with the purpose of bringing services closer to the people (27).

The Response within the Health Sector Itself

14. Within the health sector as such, it is necessary to have adequate models for health care services that reflect the resources and challenges posed by urban complexity. Services must be closer to the population, as well as timely, and should be capable of going where the people are, especially when it comes to primary care; staff should be trained to work in urban environments, using appropriate technologies to help reduce inequalities. This is particularly important in the case of poverty mitigation programs (28), health programs for industry, and school and university health services. The models should address issues of social and institutional capacity as well as the health needs of the urban population. Activities for health promotion and the regulation of environmental determinants must also be responsive to urban conditions, as well as to their own environmental impact.

Response of other sectors with respect to health

15. Ministries of health must use their resources to affect health determinants that are driven by other sectors and reduce the greatest burden of disease at its origins. To this end, they exercise their steering role, which includes (29) generating information and performing urban health surveillance, developing socioeconomic indicators that reveal differences within cities and with the rest of the nation; producing health guidelines and standards for use in urban planning and development; and incorporating health impact analysis methodologies into the design of urban development policies, programs, and projects. Ministries of health should take advantage of the context of city administrations, which bring multiple sectors together under a mayor or governor, to incorporate needed health perspectives (30).

Next Steps

16. In the roundtable discussion, the ministers of health will have to analyze the opportunity that cities offer for improving the health of the large populations they contain: the benefit can be substantial. This means discussing the elements needed to define urban health policy that can be used to integrate public health criteria into urban planning. Within this steering action the following should be considered: health surveillance systems that differentiate the social status of populations and their degree of urbanization; and innovative health service design and operation, with different models for people and families living in the urban context. For the ministries to exercise their steering role, they will have to consider analyzing the impact of the activities of other

sectors on health, and from there undertake integrated action to promote a better quality of life for urban populations. It falls to the Ministry of Health to serve as the catalyst for this multisectoral work, with technical support and relevant standards and guidelines. We hope that the ministers of health will stipulate the need for a regional strategy or plan, to be implemented by the Bureau, that can serve as the framework for future processes and better guide its work.

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