The harm and good done by cities

Cities are sources of creativity and technology, and they are the driving force of economic growth. However, cities also continue to be sources of poverty, inequality and environmental health hazards. For developing countries, the problems of urban environmental health are considerable. On pages 1117–1126, McMichael discusses the issues for low-income countries and argues that long-term solutions require radical social and technological changes. Populations in the cities of developing countries typically experience the “double environmental health jeopardy” of traditional risks from infectious diseases along with the physical hazards that accompany poorly regulated industrialization, substandard housing, traffic dangers, and the noncommunicable adult diseases that accompany the urban lifestyle. Ecologically sustainable cities, based on low-impact technologies, social enlightenment and equity, are an essential part of transitions to global sustainability.

Poisoned wells in Bangladesh

The contamination of drinking-water with arsenic in Bangladesh has been described as the largest poisoning of a population in history. Today, between 35 million and 77 million people are estimated to be at risk of drinking arsenic-contaminated water. Those affected, if exposure persists, may develop skin lesions, serious neurological effects, various forms of cancer and other adverse health effects. It is estimated by some that at least 100,000 cases of debilitating skin lesions have occurred. In this issue of the Bulletin, Smith et al. (1093–1103) describe the history of the problem in Bangladesh and discuss intervention strategies. The authors argue that the declaration of a public health emergency at an earlier point in time would have expedited the response to the problem. Each day of continued exposure to arsenic in drinking-water increases the risk of morbidity and death. Although different intervention strategies are available, the essential component of any emergency action plan is simple — provide clean drinking-water. This may be achieved at relatively low cost and should not wait for the results of surveys designed to assess the full extent of the problem.

Understanding El Niño

Kovats (pp. 1127–1135) explains how El Niño is directly linked to weather changes all over the world, which in turn cause floods, drought, famine, forest fires and epidemics of vector-borne and hygiene-related diseases. El Niño, “the (Christ) child”, started as an informal name for the occasional long warm periods occurring around the Equator in the Pacific, around Christmas time. It has become a technical term and the phenomenon it refers to are the object of intense scientific scrutiny. International action related to it includes the setting up of a United Nations Interagency El Niño Task Force. The deaths caused by El Niño are not easily counted because of the combination of factors involved, but they are estimated in thousands, and the disaster-related damage in billions of dollars. El Niño and the atmospheric Southern Oscillation to which it is linked are examples of the variability of climate that has always existed. As such they are distinguished from climate change, which refers to the incremental long-term change in the climate of a given location. Long-term climate change caused by human activities will be superimposed on the natural variations, altering their frequency and intensity, with profound but so far largely unknowable results. However, the simultaneous availability of data from monitoring stations around the globe, together with the computing power to simulate global climate, makes seasonal forecasting possible. Early warning systems for disasters and epidemics are gradually taking shape.

Indoor air pollution kills

Indoor air pollution may well account for nearly 2 million deaths a year in developing countries and some 4% of the global burden of diseases. Bruce et al. review evidence for the association between this common environmental defect and bad health (p. 1078–1092). About half the world’s population and up to 90% of rural households still rely on unprocessed biomass fuels for cooking, warmth and light. These fuels consist of wood, dung and crop residues and are burnt in open fires or poorly functioning stoves with very incomplete combustion. They expose inhabitants, especially women and children, to high levels of indoor air pollution. The most important cause of death in children under five years old is acute respiratory infections, and numerous studies associate these with indoor air pollution. In adults, chronic pulmonary diseases are also associated with exposure to biomass smoke. Though tobacco smoke is the most important cause of lung cancer, studies also show high incidences of this disease among non-smoking women exposed to coal smoke at home. Low birth weight and cataract are also associated with high levels of air pollution in the home.

Burning questions

An environmental health movement is gathering strength in industrialized countries. Opinions differ as to whether it is overriding the needs of developing countries or helping to meet them. Some of the issues are discussed in the Round Table (pp. 1156–1157). They include caring for future generations at the expense of those in urgent need today; neoliberalism versus global responsibility; stimulating economic development while promoting sustainability; and the absence of mechanisms for fair and effective global decision-making. As the debate continues, the need for wise and far-reaching decisions becomes more pressing.

Fresh Perspectives

The Bulletin welcomes for its Perspectives section views, hypotheses, points for discussion, or commentaries on issues of public health interest. Contributions should be a maximum of 850 words and should not contain reference lists; they will be edited and may be shortened. Please submit texts electronically if possible, by email (bulletin@who.int) or through our web site (www.who.int/bulletin).