I warmly welcome this comprehensive guide to the many diseases, conditions, methods, approaches, and areas of controversy and consensus that make up the challenging yet fascinating field of public health. As reflected by the vast scope of this encyclopedia, public health has multiple dimensions over a broad range of areas, and relies on contributions from an increasingly broad range of disciplines.

The impact of public health is historically greatest following the introduction of population-wide preventive strategies that do not require behavioral change. The fortification of salt with iodine is one classic example. Childhood immunization is another. Yet many fundamental determinants of health, such as adequate nutrition, sanitation, safe water, and safe living and working environments, reside in sectors beyond the direct control of public health. Moreover, in our closely interdependent and interconnected societies, the interests of public health are increasingly pitted against those of powerful industries, with powerful marketing strategies.

International trade agreements influence the availability and prices of commodities, including food and pharmaceutical products, often with little regard for the impact on health. At the same time, phenomenal increases in international air travel, with airlines now carrying more than 2 billion passengers each year, have made emerging and epidemic-prone diseases a much larger menace.

More and more, public health has strong political dimensions at the international level. More and more, public health needs evidence, also from economic studies, to increase its bargaining and persuasive power.

This encyclopedia is issued at a time of unprecedented interest and investment in health. In particular, the Millennium Declaration and its goals recognize the central place of health on the development agenda, and acknowledge the contribution of health to poverty reduction. Health has also gained status as a fruitful – and friendly – arena for foreign policy. Health is a foundation of prosperity and contributes to stability, and these are assets in any region, for any state.

While most welcome, this elevated status of public health is also a challenge. More attention means closer scrutiny, and resources come with an expectation of results. Advances in medical and scientific research continue to introduce new technologies, new generations of drugs, and vaccines for new diseases, and these innovations are nearly always more expensive. Public health is left to grapple with the obvious question: who pays, and how? The World Health Organization (WHO) estimates that, each year, out-of-pocket health expenses cause 150 million people to suffer financial catastrophe and push 100 million people below the poverty line. As this is a time when health is regarded as a poverty-reduction strategy, ways must be found to ensure that the costs of health care are not themselves a driver of poverty.

Everywhere, health is being shaped by the same powerful forces. Urbanization and demographic aging are global trends. The epidemiological transition has been joined by nutritional and behavioral transitions. Chronic diseases, long considered the companions of affluent societies, now impose their greatest burden on low- and middle-income countries. In developing countries, health systems still struggling to manage infectious diseases must now also cope with the demands of long-term care for a growing number of patients with heart disease, cancer, diabetes, asthma, and other chronic conditions. While prevention is by far the better approach, the lifestyle-related factors that increase the risk for these diseases lie beyond the direct control of public health.

Everywhere, the costs of health care are increasing. The expectations of consumers are rising. And gaps in health outcomes are growing wider, both between and within countries. The law of inverse care holds true: the availability of good medical care tends to vary inversely with the need for it in the population served.

The world has never before possessed such a powerful arsenal of technologies for curing diseases and prolonging lives. Yet each year, more than 10 million young children and pregnant women have their lives cut short, largely due to preventable causes. Fairness in access to the benefits of medical progress and equity in access to essential care remain fundamental concerns for public health. Questions about equitable, predictable, and sustainable access to care become
especially critical for a disease like HIV/AIDS, where therapy with antiretroviral drugs is lifelong and an interruption in the supply of medicines is, quite literally, a death sentence.

In public health today, the weakness of health systems is arguably the greatest impediment to achievement of the health-related Millennium Development Goals. Commitment, cash, and commodities cannot boost adequate progress in the absence of delivery systems capable of reaching those in greatest need, on an adequate scale, in time.

For a variety of reasons, governments and the donor community have historically lacked incentives to make long-term investments in health systems. Nor will health systems automatically gravitate toward greater fairness in the distribution of health benefits or equity in access to essential care. Doing so arises from deliberate political decisions. Without such decisions, steady advances in medicine and science will continue to benefit the privileged few, the poor will continue to be excluded from basic essential care, and the current great imbalance in health outcomes will grow more acute.

Thirty years ago, in 1978, the Declaration of Alma-Ata articulated primary health care as a set of guiding values for health development, a set of principles for the organization of health services, and a range of approaches for addressing both priority health needs and the fundamental determinants of health. Primary health care sought efficient population-wide solutions aimed at reducing gaps in health outcomes, with prevention on a par with cure, and resources invested rationally in the different levels of care. Fairness and equity were its guiding values – values now revitalized by the Millennium Declaration and its goals.

Users of this encyclopedia will have a chance to explore these and a multitude of other issues that make work in public health so complex and challenging, and yet ultimately so rewarding. I challenge you to consider these issues in the context of the overarching need for fair and equitable access to quality health care, always giving priority to unmet needs, and always seeking ways to maximize the efficient use of resources. Apart from strong humanitarian and ethical imperatives, doing so serves the self-interest of all nations. A world that is greatly out of balance in matters of health is neither stable nor secure.

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