



Figure 2: Optimal Centralization of Public Good Provision

opinion regarding the preferred nature of the public good; and (3) problems of adverse selection. Public goods that entail relatively high fixed costs and have widespread benefits, such as maintaining peace and security through law enforcement and the military, or maintaining clean air and water and a stable climate through environmental protection, should optimally be provided at a centralized level (Figure 2). Where preferences over the size, quality, or nature of the public good vary widely, however, more decentralized provision may be preferable. This is particularly true for goods that have more limited geographic benefits, and thus a higher degree of rivalry, such as public education and community social activities. Wallace Oates (1972) argues further that policies designed to achieve distributional equity goals are also best provided at a federal level to avoid the adverse budgetary effects that might arise with poorer families selecting to live in, and richer families selecting to live outside of, those state and local jurisdictions with more progressive policies.

It is worth noting that not all publicly provided goods are pure public goods by the conventional definition employed in this entry. Information, for instance, is non-rival in consumption but certainly potentially excludable. Legal rights and the rule of law are potentially excludable as well, as history has demonstrated to many disenfranchised communities. Common property resources like fish, on the other hand, are nonexcludable, but their consumption is rival. In each case government regulation of the provision process—whether through patent law, civil rights legislation, or fishery management—can in principle be desirable. In weak and failed states, however, regulation of resources may generate incentives for corruption, as officials “sell” licenses and grant access for personal profit. In other cases, governments have opted to provide private goods, such as education, health care, or postal services, all of which are both rival and excludable, in

order to capitalize on fixed costs, achieve beneficial externalities, or to adopt certain standards (the benefits of which are both nonrival and nonexcludable).

**SEE ALSO** *Collective Action; Institutionalism*

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## PUBLIC HEALTH

Public health is a branch of the social and health sciences, as well as a field of social and health endeavor, that aims at collective action for the prevention of disease and the promotion of health. The U.S. Institute of Medicine offers this definition: “public health is what we, as a society, do collectively to assure the conditions in which people can be healthy” (K. Gebbie, L. Rosenstock, and L. M. Hernandez 2003). Depending on the political philosophy of governance and the role of the state, this aim and its operational applications have taken different shapes in different contexts. In some contexts, “public health” refers to public-sector health; in other contexts, the term refers to the public’s health.

Public health is as old as history itself. Most holy texts (including the Bible, Torah, and Qur’an) contain instructions regulating sanitary behavior. Other belief systems, such as the Indian Ayurveda (from the Sanskrit *ayu*—life and *veda*—knowledge of), have formulated prescriptions for leading healthy lives. The Hippocratic writings have been highly influential in Western conceptualizations of health and illness. Although the ancient Greek physician Hippocrates (c. 460–377 BCE) and his school are found to be the fathers (and mothers) of modern medicine, their instructions for healthy housing are the direct forebears of current perspectives on environmental health.

The rise of modern public health occurred in the mid-nineteenth century. With the advance of statistics and empirically-based science, health advocates (later known as the *hygienists*) in France, Germany, England, and the United States endeavored to link disease patterns to environmental conditions. These hygienists had roots

in engineering, law, and charity, and to a lesser extent in emerging scientific—allopathic—medicine. British royal anesthesiologist John Snow (1813–1858) made a breakthrough in 1854. Using an ancestor of what is known as a geographic information system, Snow was able to attribute cholera outbreaks in Victorian London to the quality of water coming from the city's Broad Street pump.

Although public health *science* had certainly made its mark with the work of early epidemiologists, public health *action* was relatively slow to follow, mostly because the proposed interventions met with considerable political resistance. The idea that large infrastructural works (sewage systems, garbage collection, piped water) had to be put in place for the public good was persistently countered with arguments that the delivery of appropriate individual health care services, and emphasis on the responsibilities of individuals for their lifestyles, would yield better results. Ultimately, though, the political argument that the workforce was withering as a result of lack of public action won over the critics.

Formal public health training in this tradition started at the Massachusetts Institute of Technology in 1889 and at the London School of Hygiene and Tropical Medicine in 1899. A pressing debate emerged in the United States around the question of whether public health was a branch of medicine and should thus be taught in medical schools. The Flexner Report (1910), sponsored by the Carnegie Foundation, found that schools of public health should be separate entities. In Europe, however, there was a commonly shared belief that public health was an integral part of the medical realm. Outside the United States, the Rockefeller Foundation eventually sponsored schools of public health that were closely allied with medicine (in Zagreb, Beijing, and London). Public health in Europe became known as *social medicine* or (in the United Kingdom) as *public health medicine*.

The breakthrough stature that the field had acquired in the second half of the nineteenth century withered, regrettably, as a consequence of advances in vaccine development and immunology. The dominant idea became that most, if not all, disease could be treated or prevented through immunological interventions. Public health could contribute to this notion by developing population-based vaccination campaigns. The social and political aspects of public health science and action lost prominence, even in those realms where the political dimensions of health issues were blatantly obvious. Governments had been engaging, since a failed first meeting in Paris in 1851, in a series of “sanitary conferences” aimed at regulating the transmission of disease between nation-states through measures such as quarantine. Such efforts would clearly have had an impact on trade, which was why most of these conferences had limited success.

In the era of globalization, little has changed in the public health landscape. Trade and mobility are profound drivers of the potentially rapid spread of infectious diseases such as avian influenza or SARS (severe acute respiratory syndrome)—the 2003 SARS outbreak in China led to a World Health Organization (WHO) travel warning for Toronto—and tensions between individual foci on the promotion of health and community-based orientations have not been resolved.

One would, for instance, expect that modern public health knowledge and practices would have been able to prevent the Black Death (or “pestilence”) that ravaged Europe in the mid-fourteenth century. At the time, witchcraft, ethnicity (arguments reminiscent of those voiced in the twentieth century on the HIV/AIDS epidemic by some religious groups), and seasonal bad airs were blamed for the pandemic. Current scientific knowledge of the disease pathogen and its vectors would, supposedly, account for more effective interventions, reducing overall mortality. This supposition is only partly true. Bubonic plague is still endemic in many nations. Similarly, the global community has not been able to fully contain or control contemporary cholera pandemics, nor will it be able to fully prevent annual influenza outbreaks, including those caused by particularly virulent pathogens such as the H1N5 avian influenza virus. It must be recognized that pathogens are an inseparable element of the global ecosystem, and global public health surveillance and control systems—partly due to political indolence, sometimes referred to as a “betrayal of trust”—have only a limited capacity to proactively engage in their complete prevention.

Many international organizations include health in their considerations: for example, the International Labor Organization (ILO) deals with workplace health, UNICEF with maternal and child health, the UN-Habitat with urban health, and UNESCO with education for health in schools. The United Nations technical agency responsible for health matters since its inception in 1948 (its establishment urged by Brazil and China at the UN founding conference in San Francisco in 1945) is the WHO.

The WHO is the only UN technical agency that, apart from a global headquarters and national liaison offices, has six Regional Offices (in Europe, the eastern Mediterranean, Africa, Southeast Asia, the Western Pacific, and the Americas). These offices formulate “regional” policies following directions from the global World Health Assembly. The programs of the WHO in its first decades focused on infectious disease. The greatest accomplishment of this era is the first and only eradication of a major human disease, smallpox (1967–1977). This accomplishment also signaled, however, the end of the infectious disease paradigm. From the launch of the

“primary health care” approach following an international meeting in Alma Ata (Almaty), Kazakhstan, in 1978, the community and social aspects of health promotion and the management and delivery of care became more important than biomedical intervention considerations. In this shift, the WHO has experienced great successes and failures. Under the visionary leadership of Halfdan Mahler (1973–1988), the WHO positioned itself as a powerful broker for health between professionals, governments, and communities. The WHO’s next director-general, Hiroshi Nakajima (1988–1998), was accused of letting the organization fall victim to corruption, a pawn of (pharmaceutical) industries, with an ineffective bureaucracy not responsive to such global threats as HIV/AIDS nor the call for evidence-based medicine and public health. His successor, Gro Harlem Brundtland (1998–2003), was elected to take charge and reposition the organization. One of her most visible accomplishments was the commissioning of a series of studies into macroeconomics and health chaired by the American economist Jeffrey Sachs. Lee Jong-Wook (1945–2006), who became WHO director-general in 2003, further advanced the social science angle of the organization by appointing in 2005 a prestigious Commission on Social Determinants of Health. This commission is to report on early child development, health systems, employment, globalization, urban settings, and gender in public health, among other issues. This range of topics again emphasizes the intrinsically political nature of public health.

In the 1990s, the WHO established a list of essential functions to which public health agencies should strive to conform:

- Prevention, surveillance, and control of communicable and noncommunicable diseases
- Monitoring of health situations
- Health promotion
- Occupational health
- Protection of the environment
- Public health legislation and regulations
- Public health management
- Specific public health services
- Personal health care for vulnerable and high-risk populations

The list reflects the ideal that public health must embrace insights from the social and natural sciences. These would range, for instance, from molecular medicine to empowerment and community development, toxicology, and political science. Some disciplines, such as epidemiology and health services research, are uniquely aligned to the public health realm. Others have specialized

branches related to public health, notably biostatistics, health economics, sociology, anthropology, psychology, and environmental health. In many universities, schools of public health provide a critical link between faculties. However, the domain is also rich in contention, particularly where the survival or growth of “established” disciplines is concerned. A pivotal review by the U.S. Institute of Medicine, for instance, demonstrated the enormous untapped potential for insights from the social and behavioral sciences in the promotion of health. These insights, for reasons linked to “disciplinary exclusiveness,” have not yet pervaded “traditional” public health research and teaching.

Another level of rivalry has developed around the application of public health expertise. On a scale, two extremes are found. One, predominantly carried by laboratory-based public health sciences, poses that clinical expertise determines courses of action. This would, for instance, relate to the legitimacy to implement population-wide vaccination or risk-behavior-change campaigns (top-down). Others, notably the radical social sciences, start from the position that health is an inherently social condition and that community-driven action is most appropriate (bottom-up). Agreement is difficult to reach, and a “mixed-scanning” approach is often advocated by the WHO and many local public health agencies.

An organization strongly committed to the bottom-up approach is the global People’s Health Assembly (PHA), an alliance of academics, communities, and non-governmental organizations. The PHA endeavors to balance the expert-driven globalized stance with a community-based local (“glocal”) approach. A major imbalance with which both the PHA and the WHO struggle is the “ninety/ten divide”: 90 percent of the global public health research effort is spent on only 10 percent of the global health burden. Important players in this arena, apart from the WHO, are private sector entities. These include pharmaceutical industries and charitable organizations such as the Bill and Melinda Gates Foundation (the largest single donor to public health efforts—over \$5 billion—in 2005).

The nexus between globalization and health is an important research challenge. Like the unresolved ninety/ten divide, most public health research resources are devoted to issues in industrialized nations. These include such matters as access to and the efficiency of health services—for example, medical technology assessment and health services financing schemes (often mirroring, again, the difference between public sector or the public’s health). A critical issue in these analyses is the inequitable distribution of access, as well as disease burden, within and not between nations. Research into equity and inequalities in health top many European

agendas; in other countries, such terms have been deemed politically taboo, which has not prevented research into areas that are alternatively labeled with less value-laden terms, such as *social exclusion* or *diversity and health*. Ethnicity, socioeconomic status, heredity, and gender issues thus remain at the core of many public health controversies.

SEE ALSO *Disease; Health Economics; National Health Insurance; World Health Organization*

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## PUBLIC INTELLECTUALS

SEE *Intellectuals, Public*.

## PUBLIC INTEREST

While there is no one public interest, most political philosophers credit some notion of collective welfare. Examples include French philosopher Jean-Jacques Rousseau's "general will," U.S. president James Madison's "collective good," or English philosopher Jeremy Bentham's "greatest good for the greatest number." In debate, public interest is often invoked when a faction's influence harms the larger group. As James Madison defined it in Federalist Paper number 10, the tenth Federalist Paper in a series of published articles arguing for the ratification of the U.S. Constitution:

By a faction, I understand a number of citizens, whether amounting to a majority or a minority...united and actuated by some common impulse of passion, or of interest, adverse to the rights of other citizens, or to the permanent and aggregate interests of the community.

There are two core conceptions of the public interest, *organic/republican* and *utilitarian/liberal*. In Western philosophy, "republican" societies regard the state or society as a collective entity, possessing virtues and commanding citizen obligations that dominate individual or self-interested objectives. "Liberal" conceptions of public interest focus on individual welfare or value, and invoke some assumption justifying interpersonal comparisons of value or satisfaction.

Political theorists couple normative conceptions of public interest with claims about institutional design. One extreme is the Rousseau-Marx approach (named after Rousseau and German political philosopher Karl Marx), which suggests an objective underlying definition of the good or virtuous society. According to this approach, any action or policy that violates this objective "public interest" is a mistake, or even a crime against citizens.

Near the other extreme are conceptions of the public interest that credit consensus, appealing not to objective values but to deliberation. In varying degrees this view is embodied in the writings of John Rawls, Jürgen Habermas, and James Fishkin. This approach claims that reasonable people can achieve consensus (or near consensus) on public policy problems through deliberation.

But some would go further. "Agonistic pluralists," such as Chantal Mouffe, require only that citizens disagree peacefully. Policy debates, in this view, are value-laden and emotional, so requiring consensus causes violence. The democratic process is the alternative to violence, an arena in which fundamental differences can be aired and discussed, preventing difference from hardening into enmity and violence. In this regard, it is participation and democratic engagement, *in and of itself*; that is the public interest.

#### RATIONAL CHOICE THEORY

Another approach, rational choice theory, is consequentialist and utilitarian. The public interest can only be defined, in this tradition, in terms of the Pareto criterion. The Pareto principle is essentially unanimity: Given a status quo policy A, new policy B serves the public interest if, but only if, all members of the society prefer B to A. A weaker comparison would allow that many citizens are indifferent between A and B, but at least one prefers B to A, and none prefer A to B.

Other proponents might extend valid public interest arguments to include the work of welfare economists John Hicks and Nicholas Kaldor. Their "compensation," or "potential Pareto" principle, defines the public interest in terms of monetized gains and losses. If some citizens prefer new policy B to status quo A, but others prefer A to B, then the Pareto criterion does not apply. But the policy authority can still discover the public interest, adding up