The Crucible of Public Health Practice: Major Trends Shaping the Design of the Management Academy for Public Health

James H. Johnson, Jr, Barbara J. Sabol, and Edward L. Baker, Jr

Public health leaders and managers need new leadership and management skills as well as greater entrepreneurial acumen to respond effectively to broad demographic, socioeconomic, and political trends reshaping public health. This article asserts that the need for such training and skills was the impetus for the conceptualization, design, and launch of the Management Academy for Public Health—an innovative executive education program jointly offered by the schools of business and public health at the University of North Carolina at Chapel Hill.

KEY WORDS: **demographic trends, management development, population health, public health, training**

The practice of public health is ever-changing with an expanding range of challenges and opportunities.[1] Public health leaders must master not only technical challenges related to disease prevention and health promotion but also the techniques needed to face adaptive challenges as they lead organizations engaged in the enterprise of public health. To cope with the complex array of external and internal challenges, public health leaders will have to radically restructure and re-engineer the way public health is managed, practiced, and financed in the United States.

In this article, we review the broad trends reshaping public health. To respond effectively to the dynamic forces driving these trends, we assert that public health leaders and managers need new leadership and management skills as well as greater entrepreneurial acumen—a demonstrated willingness to take risk and the agility, resiliency, tenacity, and decisiveness to respond to unanticipated crises and opportunities. We conclude by arguing that the need for such training and skills was the impetus for the conceptualization, design, and launch of the Management Academy of Public Health.

Major Trends Affecting Public Health Management and Practice

The challenges that public health organizations face are embedded in a broader set of demographic, economic, geopolitical, and sociocultural trends that are dramatically transforming American society. Here we focus on five of those trends.

Shifts in sociodemographic composition of the US population

Our nation is in the midst of an unprecedented demographic transformation. Two "colorful" processes are altering the size, composition, and geographical distribution of the US population. The first is the "browning" of America and the second is the "graying" of America.

The "browning" of America refers to the increasing role that non-White ethnic minority groups are playing and will continue to play in the years ahead in the growth of the US population.[2] It is driven in large

Corresponding author: James H. Johnson, Jr, PhD, Urban Investments Strategy Center, Kenan-Flagler Business School, Frank Hawkins Kenan Institute of Private Enterprise, Campus Box 3440, Chapel Hill, NC 27599 (e-mail: jim_johnson@unc.edu).

James H. Johnson, Jr, PhD, is Director, Urban Investment Strategies Center, Frank Hawkins Kenan Institute of Private Enterprise and William R. Kenan Jr Distinguished Professor of Entrepreneurship at the Kenan-Flagler Business School at the University of North Carolina at Chapel Hill.

Barbara J. Sabol, MA, RN, is Program Director, the W.K. Kellogg Foundation, Battle Creek, Michigan.

Edward L. Baker, Jr, MD, MPH, is Director, North Carolina Institute for Public Health; Professor, Departments of Epidemiology and Health Policy and Administration, University of North Carolina at Chapel Hill, School of Public Health.

J Public Health Management Practice, 2006, 12(5), 419–425
© 2006 Lippincott Williams & Wilkins, Inc.

TABLE 1 ● Net population change attributable to non-White population growth, 1990–2000 and 2000–2003*

Region	2000 Population	Net change 1990–2000	% Net change due to non-White population growth	2003 Population	Net change 2000–2003	% Net change due to non-White population growth
United States	281,421,906	32,712,033	65	290,809,777	9,387,871	70.5
Northeast	53,594,378	2,785,149	100	54,399,446	805,068	92.9
Midwest	64,392,776	4,724,144	62	65,406,134	1,013,358	64.6
South	100,236,820	14,790,890	52	104,539,290	4,302,470	67.4
West	63,197,932	10,411,850	69	66,465,849	3,267,917	70.0

*From US Census Bureau, Population Division, Population Estimates.[4]

part by both legal and illegal immigration to the United States from Mexico, other parts of Latin America, and Asia. Large-scale immigration to the United States from these areas began after 1965, when US immigration law was amended to eliminate discriminatory provisions barring entry from certain countries, and continues to the present.[3] The effects of this more liberal immigration policy, which, in essence, allowed more people of color to immigrate to the United States, are evident in the most recent census data.

Census 2000 revealed that the US population grew by 32.7 million, or about 13 percent, during the 1990s. Nationally, non-White ethnic groups, many of whom arrived from abroad, accounted for 65 percent of the net growth. Regionally, non-Whites accounted for all of the net population growth in the northeast,* 62 percent of the net population growth in the midwest, 52 percent of the net growth in the south, and 69 percent of the net growth in the west during the 1990s. This trend has continued since 2000 (Table 1).

Because the non-White population is much younger and has a higher fertility rate than the White population, most population projections forecast that non-White population growth will continue to outpace White population growth at least until the year 2050, when the US population is projected to reach about 420 million. Between now and mid century, the White population is projected to grow by only 29 percent, while the Black, Native American, Hispanic, and Asian/Pacific Islander populations are projected to increase by 94 percent, 109 percent, 238 percent, and 412 percent, respectively (Figure 1).

This growth will result in a major color adjustment in America's population. The White share of the total population is projected to decrease from its 1995 level of almost 75 percent to about 50 percent in 2050. Blacks, Hispanics, Asians, and Native Americans together will account for 49 percent of all Americans in 2050, up from just over 26 percent in 1995. The largest growth will be among Hispanics, who are projected to account for almost 25 percent of the population in 2050 (Figure 1).

Undergirding this increasing diversity is a massive geographical redistribution of the US population, which is driven in large measure by immigrants and Hispanics.[6] The majority of the foreign born are still concentrated in the major immigrant gateways—California, Florida, Texas, New York, and New Jersey.[7] But these two groups are beginning to settle in states that heretofore were not magnets for immigrant, and especially Hispanic, population growth.[8–10] Southern states like North Carolina, Georgia, Tennessee, and Arkansas; midwestern states like Iowa, Minnesota, Nebraska, and Kansas; and Mountain states like Nevada, Utah, and Colorado all experienced rapid foreign-born population growth during the 1990s (Figure 2).

The second "colorful" demographic process is what many call the "graying" of America, or the aging of the US population, that is, the growing share of the population that is 65 or older. Within the next 6 years, the 76 million Americans born between 1946 and 1964, the post-WWII baby-boom generation, will begin aging out of the labor market. (Add to this US immigrants born between those years and the number swells to 84 million.) This exodus will be important because the post-WWII baby boom was followed by a baby bust. That is, the native-born population, especially native-born Whites, stopped having children in sufficient numbers to replace itself.

Reflecting this shift in reproductive behavior, the 18- to 34-age cohort of Americans was substantially smaller (67 million) than the baby-boom cohort (82 million) in 2000. And while the baby-boom cohort grew rapidly during the 1990s (31.9%), the 18- to 34-age cohort actually declined by 4.1 percent during this period.

Given these demographic dynamics, one study forecasts a US labor shortage of 10.6 million by 2010. This impending labor shortage holds enormous implications for the human resource needs of public and private sector organizations, including the US public health system.[11,12]

---

*This was the case because the northeast was a net exporter of Whites (ie, the number of Whites moving out of the region exceeded the number moving in) between 1990 and 2000.

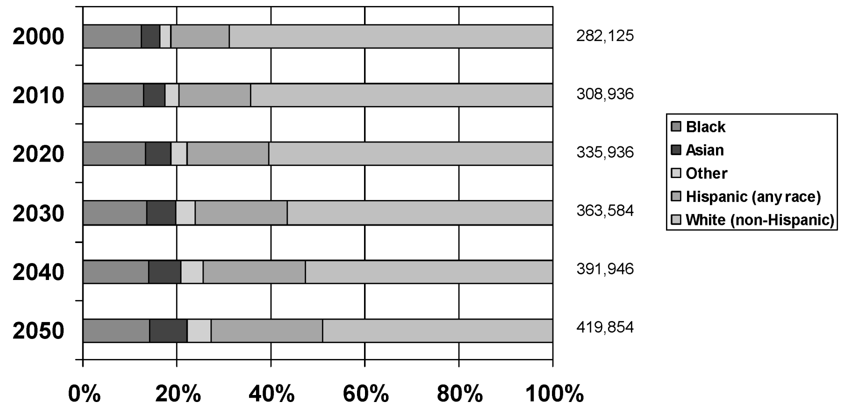

FIGURE 1. Population projections by race, 2000–2050.[5]

In light of these changes, state and local public health department officials must develop the requisite skills that will enable them to (1) anticipate and monitor these and other important sociodemographic shifts in their services areas and (2) re-engineer their infrastructure, workforces, and operations to respond effectively to the linguistic, cultural, and economic challenges and barriers that newcomers to the United States face in their efforts to access needed healthcare resources.[13–15]

Public health officials will also need to develop or devise innovative strategies for dealing with the persistent problem of health disparities among immigrant and ethnic minority groups—in addition to the large Black-White differences in health status. Many of the recent improvements in population health status—such as reductions in infant mortality, sudden infant death syndrome, cancer incidence and mortality, homicide, and AIDS mortality—are not being fully realized among African Americans and other minority groups.[16] Similarly, immigrant and minority populations remain substantially more likely to face barriers in accessing healthcare due to financial, geographic, cultural, and insurance-related constraints.[1]

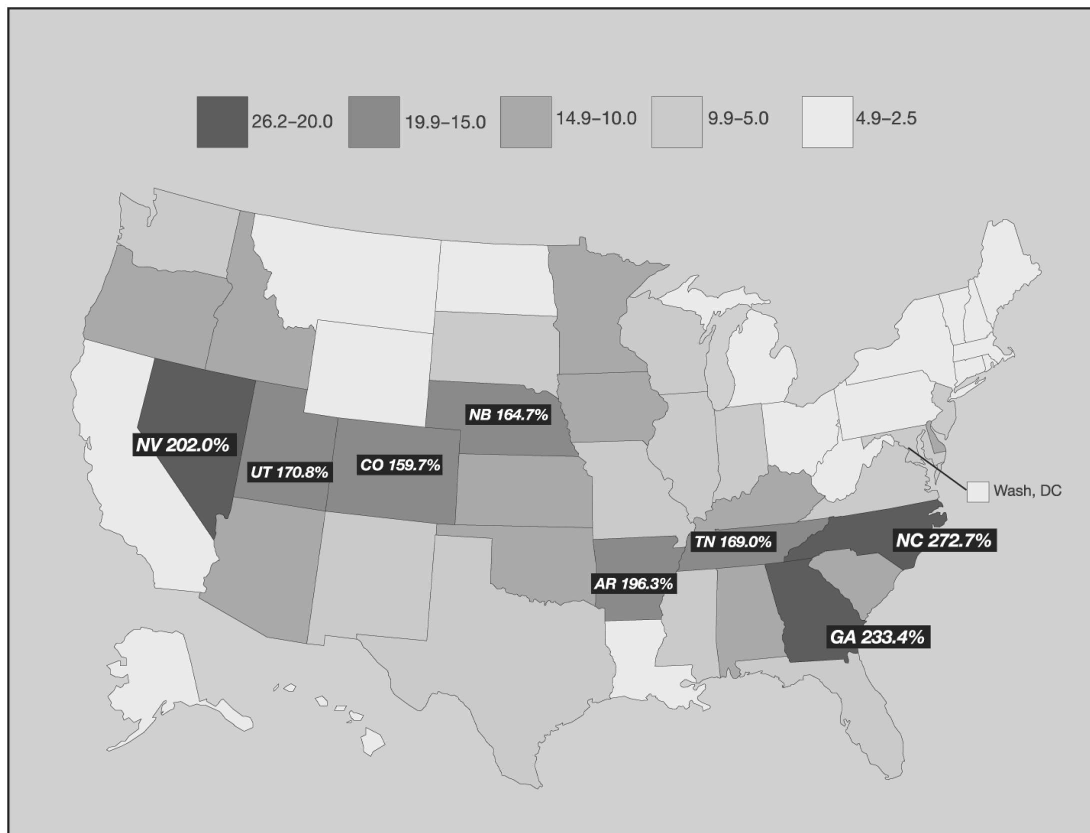

FIGURE 2. Percentage change in foreign-born population by state, 1990–2000. From US Census 2000.

A complex array of economic and sociocultural factors, including the vestiges of racial bias and discrimination, are likely to contribute to these disparities in healthcare access and outcomes. In the face of the daunting and persistent problems, public health managers require creative strategies and innovative methods for monitoring, assessing, and addressing health disparities that go beyond the traditional domains of public health practice. Given the financial constraints under which most public health departments operate, these strategies will have to be decidedly entrepreneurial in orientation.

The "graying" or aging of the American population gives rise to new imperatives for the prevention, diagnosis, and treatment of chronic disease in adult populations. These imperatives are particularly acute in the southeast, which has been experiencing rapid growth in its elderly population through the in-migration of retirees from other regions of the country for nearly three decades. In the face of this demographic shift, which is likely to continue well into the 21st century, public health agencies must devise innovative strategies to enhance their capabilities in areas such as targeted health promotion and disease prevention interventions, age-appropriate screening and diagnostic services, and transportation and health information services.[17] Public health agencies face special challenges in addressing the health needs of aging rural populations—who often face serious problems in access to healthcare.[18]

At the same time they are developing programs and services to address health-related problems associated with the aging of the US population, public health leaders will have to develop comprehensive succession plans for the upcoming surge in retirements within their departments.[13] These plans should include, among others, a strategy for retaining high-potential young talent—especially persons of color—from within the existing ranks and an aggressive worldwide search for diverse talent.

Changes in health services delivery and financing

Medical practice and public health in the United States remained functionally separate during most of the 20th century despite many similarities in mission and method.[19] In the 1990s, the rapid growth in managed healthcare enrollment—among both privately insured individuals and beneficiaries of public programs—created concern about how these changes are affecting the distinctions and the interactions between these two fields of practice. Some policy analysts and health plan executives argue that because managed care plans assume clinical and financial responsibility for the health of defined populations, these plans have both opportunities and incentives for integrating aspects of medical care and public health practice.[20–24]

Collaborative relationships between managed care plans and public health agencies emerge as a mechanism for sharing the human, financial, and intellectual resources required to implement public health activities.[25] Other observers warn that managed care plans may weaken the public health infrastructure, in part by siphoning off patients and Medicaid revenues that traditionally have supported public health agencies and related safety-net providers.[26,27]

Some public health agencies have responded to the growth of managed care among Medicaid beneficiaries by reducing their involvement in direct provision of personal health services, by transferring responsibility for certain public health services to other organizations,[28] and by reorienting public health organizations toward population-based public health services.[29] Other agencies have responded by contracting with plans to provide clinical services to their enrollees, or by forming their own managed care plans to compete in the Medicaid Managed Care market.[30–32]

In the wake of rapid managed care growth, public health managers require the necessary information resources and analytical, decision-making, and negotiation skills to develop effective relationships with managed care plans and other public and private health organizations. Once established, these relationships require public health managers to engage in new and diverse activities, such as managing resources and services under capitated payment arrangements, marketing programs and services to potential enrollees, coordinating service provision across a continuum of care, and evaluating quality of care.

Uninsured and underinsured populations

Growing numbers of individuals are unable to obtain needed healthcare from mainstream medical care providers because they lack adequate health insurance coverage.[1] Consequently, the organizations that traditionally provide uncompensated care to these populations have experienced sharp increases in the demand for their services.[33] This demand growth is occurring at a time when many safety-net providers—including public health departments, community health centers, and community hospitals—are experiencing difficulties in covering the costs of uncompensated care while also remaining responsive to market demands for efficiency and cost containment under managed care. Public health organizations and other safety-net providers face urgent imperatives to find new ways of managing costs and delivering uncompensated care in this new environment.

State and local public health managers must identify optimal ways in which to apply the limited additional resources that are becoming available through federal and state programs, such as the Children's Health Insurance Program for low-income, uninsured children, and the various state insurance pools. A growing number of organizations are using collaborative, interorganizational approaches to address uncompensated care issues—which allow organizations to pool their resources and expertise, share costs, and realize efficiencies of scale and scope through joint service provision activities. These approaches require special skills in areas such as alliance development, financial management, marketing and public relations, and entrepreneurial grants management and fundraising—skills that most public health leaders and managers do not possess.

Emerging and resurgent health risks

Public health agencies also confront the challenges imposed by an array of new and resurgent health risks in many communities.[1] These risks include the threat of influenza pandemic and the emergence of new and drug-resistant strains of infectious diseases—many spawned by the inappropriate application of drug therapies. These threats are compounded by the growing geographic mobility of the population, both domestically and internationally, which limits the effectiveness of traditional disease surveillance and control systems.

Many communities are facing new environmental threats created by technological innovations in industry, scientific advances in agriculture, and economic globalization.[34] Finally, mounting concerns about the potential effects of biological terrorism pose new challenges for public health agencies in securing the capacity to respond to this emerging threat.

Public health managers face daunting challenges in adapting their operations to address these new and resurgent public health problems while also maintaining core public health functions. To cope with resurgent threats and unanticipated public health crises, state and local health managers will need additional training in such areas as strategic planning and crisis management.

Accountability and public responsiveness

Public health organizations also face mounting pressure to demonstrate accountability and responsiveness to their primary stakeholders, including policy makers, clients, and the public at large. Health policies at federal, state, and local levels reflect a renewed commitment to improving the effectiveness and efficiency of government services and to demonstrating the value of these services to their constituencies. At the federal level, this commitment was reflected in the provisions of the Government Performance Results Act of 1993.[35] This commitment is also reflected in recent state and federal efforts to develop public health performance standards and accreditation systems for public health organizations.[36]

Public health organizations are also responding to the need for greater accountability by exploring new approaches for public dissemination of community health information and new structures for ensuring public participation in health planning and priority setting. Community health report card systems and community health improvement programs are two types of strategies being adopted by public health organizations for these purposes.[14]

To ensure greater accountability and responsiveness to their multiple constituencies, state and local public health managers will need fundamental training that will enable them to evaluate the local applicability of these strategies.

Helping Health Managers Meet the Challenges

In view of these major trends shaping the practice of public health, the founders of the Management Academy for Public Health concluded that a targeted learning experience was needed to enhance the entrepreneurial skills of current public health professionals. In view of the "browning" and "graying" of America, the Academy curriculum needed to focus on issues of cultural competency and re-engineering of organizational infrastructure, workforce development systems, and operations to improve capacity to serve an increasingly diverse population. Furthermore, in order to address the major issues related to health disparities, innovative strategies will be needed; the Academy's founders envisioned a curriculum specifically focused on the process of program innovation.

The founders saw becoming more "business like" as key to effective partnering with the healthcare industry. Therefore, skills development in the basic business practices related to managing people, managing money, and managing information would need to be incorporated into the Academy experience. Such skills were anticipated to be beneficial in addressing the needs of the growing uninsured and underinsured population, and the range of emerging health risks faced by communities.

Finally, enhanced accountability pressures, particularly in state and local government, dictated skills improvement not only in basic management skills but also in entrepreneurial efforts to develop innovative approaches to monitoring performance, such

as the National Public Health Performance Standards Program.[36*] The Academy experience was envisioned to provide basic skills development in the use of existing accountability tools, as well as providing an impetus for developing new, innovative approaches.

As the founders of the Management Academy for Public Health contemplated the public health landscape in the late 1990s, these five major trends shaping public health emerged as driving forces for the creation of the Academy. Upon these conceptual foundations, the Management Academy for Public Health was developed.

*As of November 2005, 18 states have such efforts under way, including North Carolina. Robert Wood Johnson Foundation, Multi-State Learning Collaborative Meeting, November 17, 2005.

REFERENCES

1. Institute of Medicine. *The Future of the Public's Health in the 21st Century.* Washington, DC: National Academies Press; 2003.
2. Johnson JH, Farrell WC, Guinn C. Immigration reform and the browning of America: tensions, conflicts and community instability. *Int Migration Rev.* 1997;31:1029–1069.
3. Hirschman C, Kasnitz P, DeWind J, eds. *The Handbook of International Migration*. New York: Russell Sage; 1999.
4. US Census Bureau, Population Division, Population Estimates. *Vintage 2003: State by Age, Sex, Race, and Hispanic Origin*. Available at: http://www.census.gov/popest/topics/methodology/2004_st_char_meth.html. Accessed April 28, 2006.
5. Bureau of the Census. *Population Projections of the United States by Age, Sex, Race, and Hispanic Origin: 1995–2050*. Current Population Reports—P22-41130. Washington, DC: US Dept of Commerce; February 1996.
6. Johnson JH, Farrell WC, Johnson-Webb KD. Newly emerging Hispanic communities in the United States: a spatial analysis of in migration fields, settlement patterns, and social receptivity. In: Bean F, Bell-Rose S, eds. *Immigration and Opportunity*. New York: Russell Sage; 2000:263–310.
7. Frey W. Where immigrants matter most: assessing new migration dynamics in America. In: *The Book of the States: 2004*. Lexington, Ky: Council of State Governments; 2004:380–388.
8. Johnson JH, Johnson-Webb KD, Farrell WC. A profile of Hispanic newcomers to North Carolina. *Popular Gov*. 1999;65:2–12.
9. Peterson D. The changing face of Minnesota. *Star Tribune*, September 30, 2004.
10. Wadhwani A. Hispanics outnumber Blacks in 24 counties. *The Tennessean*, September 30, 2004.
11. Gunderson S. Life-long education. Congressional Testimony, Senate Committee on Health, Education, Labor, and Pensions, April 14, 2005. Available at: www.highbeam.com/library/doc3.asp?ctrlInfo±Round91%3APro%3ADOC%3APri. Accessed March 30, 2006.
12. Gunderson S, Jones R, Scanland K. *The Jobs Revolution: Changing How America Works.* Chicago: Copywriters Inc; 2004.
13. Institute of Medicine. *Who Will Keep the Public Healthy?: Educating Public Health Professionals for the 21st Century*. Washington, DC: National Academies Press; 2003.
14. Baker EL Jr, Potter MA, Jones DL, et al. The public health infrastructure and our nation's health. *Annu Rev Public Health.* 2005;26:303–318.
15. Lichveld MY, Cioffi JP, Baker EL Jr, et al. Partnership for frontline success: a call for a national action agenda on workforce development. *J. Public Health Manag Pract.* 2001;7(4):1–7.
16. US Department of Health and Human Services. *Healthy People 2010*. 2nd ed. McLean, Va: International Medical Publishing Inc; 2002.
17. National Center for Health Statistics. *Health, United States, 1999. Health and Aging Chartbook*. Hyattsville, Md: US Department of Health and Human Services; 1999.
18. Loue S, Quill BE, eds. *Handbook of Rural Health*. New York: Kluwer/Plenum; 2001.
19. Lasker RD, and the Committee on Medicine and Public Health. *Medicine and Public Health: The Power of Collaboration*. New York: New York Academy of Medicine; 1997.
20. Roper WL, Koplan JP, Stinnet AA. Public health in the new American health system. *Front Health Serv Manag*. 1994;10(4):32–36.
21. Smith M. Prevention in managed care: joining forces for value and quality. *Am J Prev Med.* 1998;14(3 suppl):4–6.
22. Showstack J, Lurie N, Leatherman S, Fisher E, Inui T. Health of the public: the private-sector challenge. *JAMA*. 1996;276(13):1071–1074.
23. Baker EL, Melton RJ, Stange PV, et al. Health reform and the health of the public. Forging community health partnerships. *JAMA.* 1994;272(16):1276–1282.
24. Centers for Disease Control and Prevention. Prevention and managed care: opportunities for managed care organizations, purchasers of health care, and public health agencies. *MMWR Morb Mortal Wkly Rep.* 1995;44(RR-14):1–12.
25. Goldberg BW. Managed care and public health departments: who is responsible for the health of the population? *Annu Rev Public Health.* 1998;19:527–537.
26. Rosenbaum S. A look inside Medicaid Managed Care. *Health Aff (Millwood).* 1997;16:266–271.
27. Citrin T. Topics for our times: public health—community or commodity? Reflections on healthy communities. *Am J Public Health*. 1998;88(3):351–352.
28. Halverson PK, Kaluzny AD, Mays GP, Richards TB. Privatizing health services: alternative models and emerging issues for public health and quality management. *Qual Manag Health Care*. 1998.
29. Wall S. Transformations in public health systems. *Health Aff (Millwood)*. 1998;17(3):64–80.
30. Roper WL, Mays GP. 1998. The changing managed care—public health interface. *JAMA.* 1998;280(20):1739–1740.
31. Halverson PK, Mays GP, Kaluzny AD, Richards TB. Not-so-strange bedfellows: models of interaction between managed care plans and public health agencies. *Milbank Q.* 1997;75(1):113–138.
32. Halverson PK, Kaluzny AD, McLaughlin CP. *Managed Care and Public Health*. Gaithersburg, Md: Aspen; 1998.

33. Cunningham PJ, Tu HT. A changing picture of uncompensated care. *Health Aff (Millwood).* 1997;16(4):167–175.
34. Zeigler DJ, Brunn SD, Johnson JH. *Technological Hazards*. Washington, DC: Association of American Geographers; 1983.
35. Office of Management and Budget. Government Performance Results Act (1993). Available at: http://www.whitehouse.gov/omb/mgmt-gpra/gplaw2m.html. Accessed April 28, 2006.
36. Robert Wood Johnson Foundation. Multi-State Learning Collaborative Meeting; November 17, 2005; Chapel Hill, NC. Available at: http://www.cdc.gov/od/ocphp/nphpsp. Accessed July 7, 2006.