# Joan Shorenstein Center on the Press, Politics and Public Policy

Discussion Paper Series

## Journalism and Global Health

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**#D-48**

* I am indebted to the researchers from the Kennedy School who worked hard and effectively on this project. Key research for this paper, as well as the creation of spreadsheets and the execution of online story counts, was carried out by Huisin Teo, a graduate student at the Kennedy School of Government. Interviews with reporters and editors were conducted by Bina Venkataraman, also a graduate student at the Kennedy School during the spring of 2008.

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**1. A small star rises, as the sky is falling**

AIDS, a new infectious disease recognized first in the summer of 1981, was thought to be a unique event, an historical throwback to plagues of earlier centuries. But as researchers began to compare notes and think about the modern condition of the planet, with its high population, high mobility, and opening reservoirs of unheard-of organisms, they began to realize that HIV was not a singular occurrence.

It was in fact part of an emerging pattern that the world now faces: new diseases have now begun to appear at a rate far higher than any time in history. The rate now appears closer to one a year rather than what seems to be the historical rate of one or two per century. Researchers have now counted more than 40 new diseases that threaten humans, are new to science, and which have appeared in less than 30 years---Legionnaire's, Toxic Shock, HIV, Lyme, West Nile, Mad Cow, E. Coli, SARS, and Avian Flu among the best known.

Global health issues extend beyond the appearance of new diseases, however. They extend from the safety of imported foods, to national security, to the effort to use health aid to combat poverty. (See "Some issues bundled under the term 'global health,'" p. 36.)

The realization of the new situation in world health came almost simultaneously in the 1990s in different fields, and groups from the United Nations to the CIA and from the Bill and Melinda Gates Foundation to the Bush Administration have said these issues are now vital to track and will be still more important as globalization rolls on. They represent both an opportunity—to stop spreading epidemics and to build development and stability in poor countries—as well as the threat of suffering and social disruption if we fail to keep up.

In everyday discussion, if the hotness of a subject can be measured by the number of times the phrase appears when it is searched on Google, "global health" has arrived as an issue. On a recent day, the phrase appeared 156 million times. For comparison, "global trade" appeared 127 million times, "global business" appeared 277 million times. At the same time, "President Bush" appeared 116 million times, and Britney Spears appeared 94 million times.

And of course, it arrived as a continuing story in journalism.

Looking to see how much coverage global health issues have received across American newspapers, we carried out a survey of news coverage in eight newspapers published over the past several decades. We also conducted two dozen interviews with the

reporters and editors at those papers and elsewhere in journalism. The survey counted 1,200 data points, each one representing one year's coverage of a single topic in one newspaper. We checked every story to be sure it was relevant—that it was substantially about the global health issue being reviewed, or contained a substantial discussion of that issue. All other stories, such as those that just mentioned a topic in passing (such as "diseases like avian flu") were excluded from the counts. (See methods in Appendix 2.)

We found that, even as American journalism has begun to suffer an historic decline, a new topic has made its way into routine coverage. The issues of global health now receive four times as much coverage as they did 10 years ago, and eight times as much as 20 years ago. These stories remain a small percentage of all the news, but they have become a small and steady part of routine coverage. A century ago, and even fifty years ago, there were few stories on the topic. Since the 1990s, the number of stories has increased to the point that the topic is recognized widely and even mid-sized American newspapers carry dozens of stories per year on global health issues.

The surveys and interviews led us to four general conclusions:

I Global health issues were covered fairly routinely not only by the major papers in America, as expected, but also by many of the mid-sized regional papers. The number of stories has risen substantially over the past 20 years.

II. The stories got into the papers not as a result of planning, or being part of the regular agenda reviewed at each day's news meeting, but rather they were event- and reporter-driven. It rose, not because editors laid out plans to increase coverage, but as reporters found stories and brought them to editors—essentially one story at a time.

III. Staff and budget cuts occurred at all eight newspapers in the survey, and that has held down coverage of global issues to some extent, and would probably continue to hinder this coverage. But reporters and editors remain actively interested in the subjects, believe their readers are interested as well, and deserve to see continued coverage on these topics.

IV. With profit-making newspapers suffering, several non-profit organizations have begun to support global health reporting by paying for reporting trips in hopes of keeping the topic before the public. It appears that non-profit work to cover global health will be increase, as several major organizations have plans for future work. They are planning to build international staffs of experienced reporters who will cover global issues and offer the coverage for free to established outlets.

**2. Linked Histories—Emerging Diseases to Emerging Foundations**

Confidence engendered by a century of progress in medicine, and particularly the rise of antibiotics and vaccines, led health officials in the 1970s to declare that the war on infectious disease over, and humans had won. In 1967, Surgeon General William Stewart said we were able to "close the book on infectious disease." And even in 1983, Harrison's Principles of Internal Medicine, a leading medical text of the era, said "Infectious diseases are more easily cured than any other major group of disorders…" At the time, infectious diseases had been declining steadily for many decades; now they have returned with a vengeance, and deaths due to infectious diseases rising in America.[1]

AIDS, an infectious disease recognized first in the summer of 1980, was thought to be a unique event, an historical throwback to previous world plagues of earlier centuries. But as researchers began to compare notes and think about the modern condition of the planet, with its high population, high mobility, and opening reservoirs of unheard-of organisms, they began to realize that HIV was not a singular occurrence, but was in fact part of an emerging pattern. New diseases have now begun to appear at a rate far higher than at any time in history—closer to one a year rather than one every few centuries. The first report that reviewed this new change was published by the Institute of Medicine at the U.S. National Academy of Sciences in 1992. It listed scores of new organisms recorded by science, and 39 new diseases to infect humans that had appeared only in the 25 years or so before the report was written. (See "Disease outbreak dates," p. 34)[2]

The report warned that, while science had the knowledge to keep up with diseases through research and the creation of new medicines, society had let support for public health collapse. The creation of new antibiotics and vaccines had come nearly to a halt, and funding for research and surveillance had dropped by historic amounts. (The below graph depicts the collapse of federal support for public health.)

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[1] Centers for Disease Control and Prevention, National Center for Injury Control and Prevention, Ten Leading Causes of Death, United States, 1981-1998, all races, both sexes. http://webapp.cdc.gov/cgi-din/broker.exe

[2] National Academy of Sciences, Institute of Medicine. *Emerging Infections: Microbial Threats to Health in the United States*. Washington, D.C.: National Academies Press, 1992.

Federal Public Health Funding as a Percentage of Adjusted Total Public Health Spending (Federal Plus State/Local), 1960-2000. (In Frist, Bill, "Public Health and National Security: The Critical Role of Increased Federal Support," *Health Affairs*, Vol 21, Issue 6, 117-130

The paper described the new state of the world that gave rise to the high rate of disease production: a very large human population, most of which lives in poverty and hazardous environments; extreme mobility, as a billion people a year (as of 2005) travel country to country, and a million people a week travel from high-disease countries to low-disease countries; forests and wilderness being opened for the first time, spilling out organisms that had never before mixed with humans or domestic animals; and the increasing failure of antibiotics as microbes become immune to their effects. Add to those a changing climate that is extending the range of diseases and such vectors as mosquitoes, creating an ideal environment to mix and create new diseases.

Genetic research has shown that microbes have the ability to trade genes. So it is that E. coli, a harmless inhabitant of the human gut, when, during outbreaks in Central America in the 1970s, it was mixed with the organism that causes Shigellosis and became a lethal agent: E. coli 0157:H7. The E. coli borrowed the gene that makes Shigella toxin (a poison produced by the Shigella bacteria, which causes disease by attacking the intestines, sometimes causing severe diarrhea and bleeding), and the new E coli has caused dozens of outbreaks in the United States and killed hundreds.

Another tale of globalization: the Asian tiger mosquito had been absent from the western hemisphere for a century, but a few years ago, a shipment of used tires from Asia landed in an American port. Inside the tires were breeding tiger mosquitoes. From that time,

it took less than 10 years for the mosquito to spread up and down South and Central America. With it came Dengue Fever. But this new version of Dengue was not the mild fever and malaise seen before—it was instead able to produce hemolytic uremic syndrome, or rapid bleed-out and death. The cases of hemorrhagic Dengue have been increasing, and in the spring of 2008, the worst epidemic in years hit Brazil; by March, 120,570 with 128 confirmed deaths.[3]

Each new disease, and each old disease that is emerging in a more fierce form, has such a story. This is an unavoidable side effect of globalization.

While such work was being done in emerging diseases, groundbreaking research was also being done in the economics of health. Beginning with the Nobel-prize-winning work of Robert Fogel, economists showed that the traditional picture of progress and economic growth as starting with wealth and investment in physical capital (for example transport and technology) was incomplete. In reviewing all of the wealth created in England between 1790 and 1980, Fogel demonstrated that those things were less than half the motive force in producing the wealth. The single largest factor was actually human capital—the public's health.[4]

For thousands of human generations, from before the pyramids to the Victorian era, life expectancy for humans had been unchanged—-about 25 to 30 years. Then, in a relatively few decades, humans doubled their life spans, and increased in physical mass by 50 percent. Workers were able to work more days and more hours per day, for more years—producing a huge productivity dividend. The new health also made investments in education and training more productive.

This new picture of the creation of wealth suggested that the economic picture of development should be reconsidered. Economists looking at the effects of increased health on societies found that in each of the recent Asian development success stories (South Korea, Malaysia, Singapore, etc.), investments in health came first and produced a "demographic dividend" (a generation of healthy children) which was then used to produce economic growth. It had been thought that increasing wealth led to better health; it was now

[3] World Health Organization. "Dengue/Dengue Hemorrhagic Fever in Brazil." *Disease Outbreak News*, April 10, 2008. http://www.who.int/csr/don/2008_04_10/en/index.html
[4] Fogel, Robert William. *The Third World*. Cambridge, UK: Cambridge University Press, 2004

shown that the equation could go both ways, and an infusion of health could trigger increasing wealth.[5]

Economists, including David Bloom, David Canning and Dean Jamison, pointed out that using increased health to drive development could be a revolutionary idea, and a potent tool if used well. Beginning in 1993, the World Bank for the first time put health projects at the center of development thinking in the landmark report *Investing in Health.*[6] Soon after, the World Health Organization brought more than 250 economists, scientists and policy-makers together (led by Jeffrey Sachs) in the Commission on Macroeconomics and Health in 2000.[7] The commission held a long series of meetings and studies that laid the way for a detailed plan for progress—called the Millennium Development Goals—which have health projects as their centerpiece. The 191 member nations adopted the strategy in 2000 and the specific goals in 2005.

Just at this time, the young billionaire Bill Gates was considering how to disperse the massive personal fortune he had created as leader of Microsoft. After active study of the question, he dropped his original thought that investing in a variety of different causes would make a good philanthropic portfolio. Instead he decided that one kind of investment had far better leverage than the others—investing in human capital, with most of his investment aimed at bringing basic health to developing countries. Warren Buffett followed his lead, and thus was created history's largest philanthropy. The Bill and Melinda Gates Foundation has about $40 billion in the bank now, and the figure will increase with pledged donations in the years to come. It now dispenses more than $2 billion a year in grants.

Simultaneously, the importance of health to the security of societies began to be realized in other areas of academic and government life.

The State Failure Task Force (now called the Political Instability Task Force) was formed in 1994 at the request of senior U.S. government officials. It is a continuing panel of university scholars who study political instability and state failure—coups, revolutions, regime changes, genocides, etc. One result of the panel's work was the compilation of a list of all state failures around the world between 1955 and 2006. Then followed a series of

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[5] Bloom, David E., David Canning and Dean T. Jamison, *Health, Wealth and Welfare*, in Finance and Development, March 2004, p10-15

[6] Jamison, Dean, et al., eds. *Investing in Health: the World Development Report, 1993.* Oxford: Oxford University Press, 1993.

[7] Commission on Macroeconomics and Health. *Macroeconomics and Health: Investing in Health for Economic Development.* Final report of the Commission, 2001.

reports using the historical data to determine the most important factors leading up to state failure.[8]

The task force reviewed some 1,300 variables and found, not surprisingly, that the single most important factor in state failure was the type of regime running a country. The single most vulnerable type of regime is "partial democracy," such as countries which have declared themselves democracies and held elections, but did not have the all-important parliamentary and judicial systems in place.

After the most obvious risk factor of an unstable regime, the study concluded that the next greatest risk factor was "quality of life." The group tried measuring this in a number of ways, including the common GDP per capita, along with combinations of that and other health-and-wealth factors. Those figures were surprisingly unsatisfactory. What the group found, instead, was that the best overall measure was a nation's infant mortality rate.

Infant mortality is linked to so many basic societal and human needs: nutrition, availability of health services, access to clean water and sewage disposal, education—all directly affecting the survival of children and the sense of a family's well-being. Children are the most vulnerable members of society and thus their progress is the most sensitive measure of basic success. At the same time, the reason GDP per capita fails as a measure is because it doesn't reflect widespread inequality; a few extremely wealthy people can hide many who live in extreme poverty.

Another step in moving health forward on the national agenda came in January, 2000. National Intelligence Estimates are reports written on special topics periodically by American intelligence agencies working through the National Intelligence Council. In 2000, for the first time, a national intelligence estimate report said that American policy should take into account global health issues as a high priority: "New and emerging infectious diseases will pose a rising global health threat, and will complicate U.S. and global security over the next 20 years. These diseases will endanger U.S. citizens at home and abroad… and exacerbate social and political instability in key countries and regions." [9]Jennifer Brower and Peter Chalk of the Rand Corporation summarized the new view in their book, *The Glob al Threat of New and Emerging Diseases: Reconciling U.S. National Security and Public Health Policy* in

[8] Political Instability Task Force of George Mason University School of Public Policy. Internal Wars and Failures of Governance, 1955-2006. http://globalpolicy.gmu.edu/pitf/pitfdata.htm
[9] National Intelligence Council. *The Global Infectious Disease Threat and Its Implications for the United States.* January, 2000. http://www.dni.gov/nic/special_globalinfectious.html

2003.[10] They noted that while many had expected a calmer, more stable world after the collapse of the Soviet Union, instead something else intervened: "turmoil and chaos are increasingly emanating from undefined sources," or as national security wonks call them "non-traditional threats." What defines the new threats is their global character, their ability to reach across borders—disease, terror, and environmental degradation. Military action has become increasingly ineffective and beside the point.

The role of health is positive, in that infusions of health can trigger development, but it is also negative. Poor health and suffering create instability, as the Failed States study showed. Those drawn to violence depend on the widespread sense of injustice and suffering. It is this sense that drives terrorist recruitment and, more important, that encourages many in society to turn a blind eye to the tactics terrorists use. The medium is poverty and injustice; what grows therein is anger and sometimes action.

Most journalists covering global health issues are not aware of the full breadth and background of the subject as described here, but quite a few are covering the day-to-day events in this rolling story.

**3. Anyone Interested?**

Are readers interested in global health stories? Readers' interests are not fixed and work done by the Pew Research Center over the past two decades shows that expectations about readership are often wrong.

The Pew center has tracked audience interest by asking readers and viewers about specific stories as they appeared in the news, asking whether they were following the stories "very closely," "fairly closely," "not too closely," and "not at all closely." Over 20 years, Pew did 165 such separate surveys, and interviewed about 200,000 Americans in the process.

The surveys found that what news organizations cover and what audiences want to follow are often different. Readers' true interests often do not coincide with the amount of coverage a story gets.

For example, it is said that some of the news that is most popular is news about celebrities. Michael J. Robinson reported in *Two Decades of American News Preferences,* that news

[10] Brower, Jennifer, and Peter Chalk. *The Global Threat of New and Re-emerging Infectious Diseases: Reconciling US National Security and Public Health Policy.* Santa Monica: Rand Corporation, 2003.

about "personalities" and "celebrity scandal" is at the bottom of all categories of interest—out of 19 news categories, they are ranked 18th and 19th.[11]

As a category of news "personalities and entertainment" is followed very closely by only 17 percent of the national audience," Robinson writes. "In fact, were it not for two extraordinary stories—the violent deaths of Princess Diana (1997) and John F. Kennedy Jr. (1999)—the average would be merely 13 percent."

That is compared to some high-draw news such as bad weather (40 percent followed closely in 2000 to 2006), health and safety (29 percent), and elections (24 percent).

Sport is also assumed to be a big draw; it isn't. On average, 19 percent of news audiences pay close attention.

There is sometimes a split between the audience and the coverage. Robinson reports that global warming fell near the bottom of stories covered in the Pew data, but nevertheless garnered strong interest from 26 percent of readers.

Overall, according to Robinson's study, news about health ranked seventh most closely watched among the 19 news categories followed over the past 20 years, and ranked sixth between 2000 and 2006.

Similarly, in a study by the Kaiser Family Foundation and the Harvard School of Public Health between 1996 and 2002, researchers found that about 42 percent of the news audience follows health news closely. The researchers report that—contrary to the mythology in newsrooms that people follow disease-related stories rather than general public health stories—general public health stories led over disease stories by 47 percent to 38 percent.

Of the stories that might be counted as global health issues, news stories got widely different responses. For example, stories about mad cow disease in Europe in 2001 were closely watched by 18 percent of the American audience. But the 1997 recall of E. coli-contaminated hamburger drew strong attention from 40 percent of the national audience, and SARS in 2003 drew 39 percent. Judging by the number of stories they wrote on the topics in our counts, journalists were also very interested; the highest number of stories in the past decade were on SARS, West Nile virus, E. coli and mad cow disease.

[11] Robinson, Michael J. Two Decades of American News Preferences, Pew Research Center, August 22, 2007. http://pewresearch.org/pub/574/two-decades-of-american-news-preferences

In our counts, different stories showed different patterns of coverage. The new diseases produced a large number of stories, but the coverage was concentrated within months of each disease outbreak. On the other hand, stories about health aid to other nations have received a smaller but steadier and slightly increasing number of stories since 2000. Malaria and tuberculosis are diseases affecting other nations rather than the U.S., but nevertheless, in American papers, a small steady number of stories are written about developments in these diseases.

Among the more interesting findings is whether the Millennium Development Goals are covered. We found that some newspapers gave almost no recognition to this program even though it is a major initiative of the United Nations, and has been agreed to, in principle at least, in American policy. But others covered the topic fairly often, and British and Canadian newspapers covered the progress of the program extensively. (See "Newspapers in the study," Appendix 3, p. 31)

This suggests that coverage of the goals may be a mark of the relative seriousness of the global news coverage in these outlets.

In the end, the data from reader surveys and from interviews with editors suggests that reporters and editors are best served by following the news, story to story, rather than covering or not covering stories because of the category they are assigned to. Reporters and editors in our survey say the best choice is to cover what's fascinating or important in itself, rather than by guessing what may interest readers.

**4. The coverage of global health**

There are several newspapers whose archives reach back into the 19th century, so it is possible using the internet to review the entire history of coverage. Using the *New York Times* as a guide, it is clear that before 1900, there were essentially no global health stories. Stories of health and disease were for the most part accounts of disease outbreak in or near the home town of the newspaper (e.g., an early polio story in the *Times* was "Puzzling child disease: epidemic of infantile paralysis baffles physicians of Poughkeepsie—believed to be contagious," on August 4, 1899).

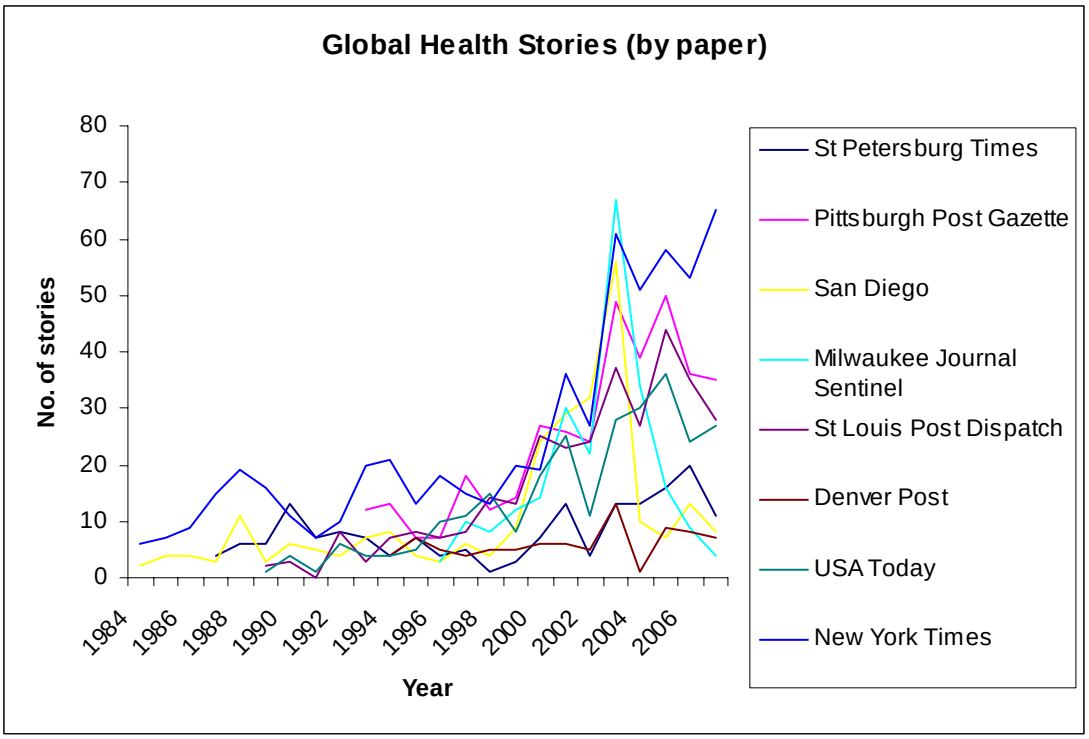
The first small burst of global health coverage came between 1911 and 1931, with the creation and well-covered action of the International Health Division of the Rockefeller Foundation. Like the sudden shock of recognition and activity that has accompanied the

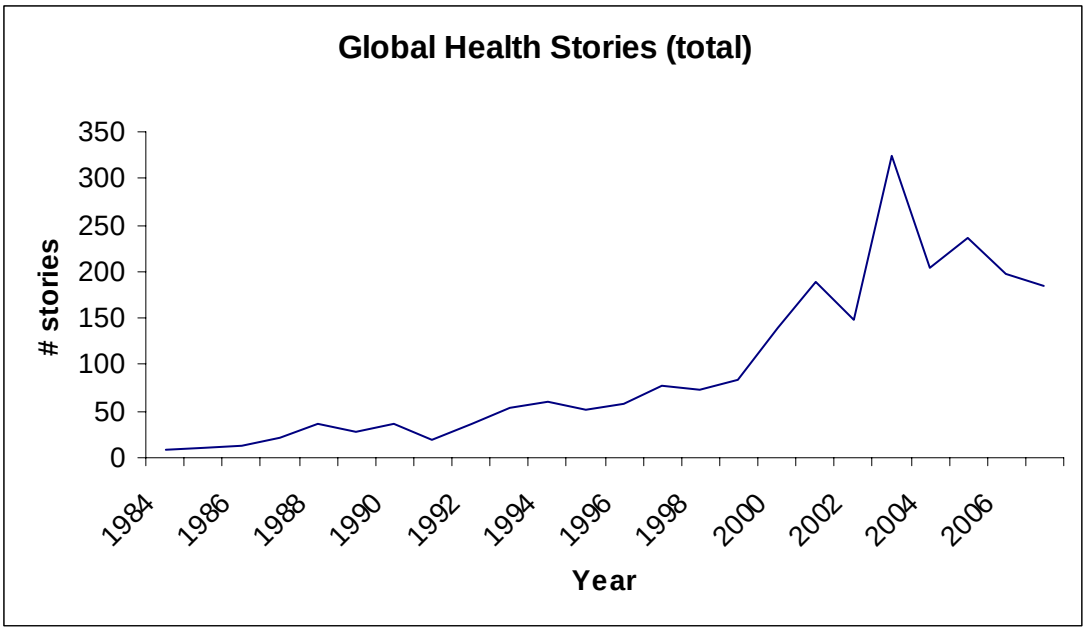
creation of the Bill and Melinda Gates Foundation, the teams of Rockefeller doctors and scientists sent abroad fired the imaginations of reporters. The Foundation spent $40 million between 1911 and 1931, an amount that, when adjusted to current dollars, is similar in scale to the billions that Gates has put in play.

But still, only a small handful of stories appeared in the *New York Times* each year until about 2000, when the advances in different fields came together. Since that year, the *Times* has averaged 46 stories per year by our general "global health stories" count. The other papers in our survey had somewhat lower averages: the *Pittsburgh Post-Gazette* 36, the *St. Louis Post Dispatch* 31, the *San Diego Union Tribune* 27, the *Milwaukee Journal Sentinel* 25, *USA Today* (a paper with a smaller news space) 25, the *St. Petersburg Times* 12, and the *Denver Post* 7.

Global health stories increased substantially year by year since the 1990s in all of the papers except the *Denver Post*, where coverage was minimal and steady.

Comparatively, American newspapers remain more inward-looking than their English-speaking counterparts. The Associated Press and the leading Canadian and British newspapers cover the subjects more, with up to twice as many stories as the *New York Times*. The news organization with the greatest coverage of the topic, by several fold, is the BBC.






It is often assumed that news coverage is planned by editors, who assign reporters to different beats—carving up the world into categories, and enabling the papers to keep track of events in many different areas of life. But for a number of subjects, including most specialties, coverage is neither assigned nor even organized. It is simply the drive and curiosity of reporters that finds and tracks stories. It is the reporters who spend their days talking to people to discover new and important developments in the various precincts of the world. Even within assigned beats, it is that openness to the new that is how journalists reflect the shape of the world as it changes.

"This is so much driven by reporters. It is not editor-driven," said Ashley Dunn, science editor at the *Los Angeles Times*, "Reporters who like these stories, and care about them, do them." At the *Washington Post*, science editor Nils Bruzelius makes it even more specific: "David Brown does most of our coverage of these issues; he has a profound interest in these issues…I'm not sure what would happen if he were not here."

Thus coverage of global health issues has happened story-by-story. At the *New York Times*, for example, the main reporter who covers global health issues is Don McNeil. McNeil was for years a foreign correspondent in places like Eastern Europe and Southern Africa before returning to the paper's home office in New York. He had developed an absorbing interest in health stories on the ground in other countries. His assignment when he got back was to the Science desk, under then-science-editor Corey Dean.

He told Ms. Dean that he would love to cover health issues, but not those in the U.S., which he felt were less interesting and also covered already. He wanted to cover health stories *outside the U.S.* "We don't have a beat like that," Ms. Dean said. But McNeil insisted, and after some back-and-forth, it was finally agreed, in traditional newspaper fashion, that McNeil could go find stories, and if they were good stories, the editor would put them in the paper: essentially one-by-one. But of course there were plenty of good stories, and so a new non-beat was created at the *Times*: global health news.

At the *Washington Post*, it is reporter David Brown who has led coverage. With the staff shrinking dramatically—three buyouts in five years, including the loss of health and science reporters—science editor Nils Bruzelius says that if it were not for Brown, his knowledge and interest, it's unclear how much the *Post* would be able to cover global health issues.

Individuals matter—the reporters out working, hand-to-hand, to find out what's happening in the world. But there is a push-back, especially in recent years, as owners, worried about finances and "what readers want," attempt to shape the paper to those concerns.

Editors and reporters describe their coverage as an effort to find out what's new, interesting and important day-to-day, and over time they hope to reflect something of the world as it is. Many newspaper editors, having in past years had more resources and leeway, are now trying to get more comfortable with the other approach, which might be called directed coverage. It is based notionally on what readers want, and the idea that doing more stories in "popular" categories is essential in order to produce more revenue.

But reader and audience surveys can't actually find out what readers want. Audience research, especially in broadcasting, is designed to set prices for advertising, not to understand human cognition and motivation. Because of this, editors and reporters worry that the emphasis on the commercial will flatten out coverage, producing news that doesn't following happenings in the world so much as it looks for some categories of events and disproportionately covers those. (As one observer suggested, audience tracking is akin to the query of a flight attendant going down the aisle asking "chicken or fish?" of passengers, then claiming the answers represent what people like to eat.)

The current pressure is to think locally and commercially, editors said. Because they want to continue to run a wide scope of news stories, they say that they look for ways to cast global health stories in local terms.

Jill Daly, science and health editor at the *Pittsburgh Post Gazette,* says that the staff in her section frequently discusses way to approach these topics, but "there's a split between what we'd like to be doing and what we have the resources for."

When the staff was larger, within the last 10 years, the paper had reporters travel to do stories abroad on aid issues, malaria and other diseases. Now, they focus more on connections in Pittsburgh. They also rely more on wire coverage. For this, they have space set aside in the international/national section specifically for health stories, so that they can always get some of these stories into the paper.

The staff actively looks for story ideas from health researchers at local organizations who travel to Africa and other places for global health work, particularly to the graduate school of public health at the University of Pittsburgh. In difficult times, editors can sometimes get lucky. The *Post Gazette* for a time had a reporter who used his vacation time and own money to travel to Africa and Asia to cover global health stories. But now he's gone.

The newspaper's perspective, Ms. Daly said, is that many in their community want to know about global health issues—especially given the international population in Pittsburgh "concerned about disease in their homelands." For example, they found a story about children raising money to send to an eye hospital in India, and were able to write about blindness in India. "International news coming over the wires sometimes prompts us to find someone locally working on the issue."

She says that with cuts in the industry affecting their paper, global health does get covered less. "I hope we can at least maintain our global perspective, but I'm afraid newspapers aren't going to be able to expand their coverage of global health issues unless there's a connection to local issues." In particular, she'd like to be able to cover preventable illnesses and health issues that come from damage to shared resources like air pollution and water pollution. "We don't do as good a job as we would in an ideal world, but we do as good a job as we can."

**STILL INTERESTED, BUT FINANCES MAY LIMIT COVERAGE**

"You know, people read health stories," said Ashley Dunn, *Los Angeles Times* science editor, "Certainly heart disease and other stories that impact them directly, but also on infectious diseases there is still a pretty strong interest. Our coverage, as we are working through the obstacles, is okay. Not great. We could do more."

Nils Bruzelius, science editor at the *Washington Post*, said, **"**We are far from abandoning it, but there are obstacles to traveling places now….These stories are happening. We're interested. But it's tough. We do want to have a global perspective and believe in the principle that journalism reflects going on in a smaller and smaller world. We need to know about these things."

Laura Chang, science editor, the *New York Times*. "We do feel a responsibility to cover global health issues. They are important and probably will be even more important."

Becky Lang, health science and environment editor *Milwaukee Journal Sentinel*: "Absolutely, we should be covering these issues more. They can only affect people more and more. Sometimes, when newspapers are in trouble, they focus on what's on their doorstep. But something like this has potential to affect everyone in the community. I feel we should devote more resources to global health."

Glenn O'Neal, assignment editor, *USA Today*: "All major papers will be forced to do more in the future; globalization is here to stay."

Mark Jaffe medical and science editor at the *Denver Post*, said, "There is no imperative to have health issues covered. There is heightened pressure to address readers' concerns, and readers here do not worry much about acute health problems in Africa…some issues, like malaria, tend to lose out given the pressure to make papers more reader-friendly." When it comes to nationally-important stories like the Bill and Melinda Gates Foundation, or SARS the paper will use wire stories, but likely pass on disease abroad. Coverage of the President's initiative on AIDS and other diseases in Africa is counted as political coverage, not global health coverage.

Cheryl Clarke, health reporter**,** *San Diego Union Tribune*. "To cover a global health issue today with staff [rather than wires] we'd have to find a way to link it to San Diego County."

**5. Non-profits to the rescue?**

John Daniszewski, managing editor for international news at the Associated Press said that AP is alert to global health issues, and in fact has increased its ability to cover them. AP has two new health and science specialists, based in London and Hanoi. And this year, Margie Mason is at the Nieman Foundation getting extra work in international health reporting as a Global Health Fellow. "We don't do enough of this coverage; we probably should do more, Daniszewski said. "We have a responsibility to do it, to give a good picture

of the world. And as our area of coverage increases [a majority of readers of AP are now outside the U.S.] there is a lot of potential, a real market for health and science news."

Associated Press is not a standard for-profit organization, but is a collective serving its member newspaper, broadcast and internet clients. The wire service has increased the number of stringers and "helpers" abroad, and begun to elevate local reporters in other countries, who Daniszewski said are now more highly skilled in English. The bureau size in Beijing has doubled. The AP now has a total of about 240 bureaus. One hundred two of them are outside the U.S., with a staff of about 600 print reporters, stringers and editors. In addition, the broadcast and photo staff brings the international staff to more than 1000.

Other leaders in journalism suggest that while AP can take up some of the slack by offering relatively inexpensive global coverage to papers that can no longer do much of their own, but that won't be enough.

John Schidlovsky, director of the International Reporting Project at Johns Hopkins University, says that other organizations are now starting to add international reporting power to papers across America.

The International Reporting Project sends reporters and editors abroad to find and to write stories for American papers. "We started this 10 years ago because of the reduction in mainstream media coverage of foreign stories… I don't think people are losing interest, they have fewer resources. It's a constant challenge. What we are doing is taking trained, talented people and sending them out to cover stories for their papers—free."

The group has sent 148 reporters and editors abroad, and the stories that have resulted have all been placed in American outlets [print, audio and video]. About 20 percent are health or science related stories, Schidlovsky says.

Several other organizations have been doing similar work, essentially supplying non-profit support for international health reporting. The Kaiser Family Foundation has supported both training and reporting projects for some years, and is now considering building a large wire service dedicated to covering health around the world. The Pew Charitable Trusts is considering a similar venture.

The Nieman Foundation at Harvard University is in its third year of putting three journalists per year through Nieman fellowships, and sending them abroad for four months to do reporting, mostly from developing countries.

The International Center for Journalists has begun a program to send journalists and their families abroad for longer—up to a year—to do reporting for media in the countries they visit. The program plans to increase to five journalists per year going abroad. Recently, the Association of Health Care Journalists discovered that local foundations are trying to support coverage: in Florida, Kansas and California, health foundations are funding or are planning to fund news services to write about health policy.

There are also a number of non-profits that have long supported journalists' reporting projects, including health reporting, such as the Alicia Patterson Foundation. Newer to the effort are the Center for Public Integrity Fund and the Pulitzer Center on Crisis Reporting.

Geneva Overholser, a professor of journalism at the University of Southern California, wrote a report on the future of journalism for the Annenberg Foundation in 2006 that advocated a strong role for non-profits in journalism of the future. She asks, "Who will keep journalism alive? Who will pay for this unique and expensive commodity—original reporting—that is so essential to self-governance and democracy?" She suggested the answer comes in a comment by Charles Lewis of the Center for Public Integrity. He said what was needed was a huge rescue effort, a Marshall Plan for journalism, funded by non-profit foundations.

**6. Conclusion**

Editors and reporters at most of the papers in our study said it seems clear that the less information about the world they can offer, the less able they will be to follow upcoming issues. For example, without a sense of how likely it is that new diseases will continue to arrive from abroad, the less likely it is that a state or city will know how many public health officers or what kind of equipment and surveillance practices will be needed. In the United States, public health is largely a state and city responsibility, so local coverage can matter.

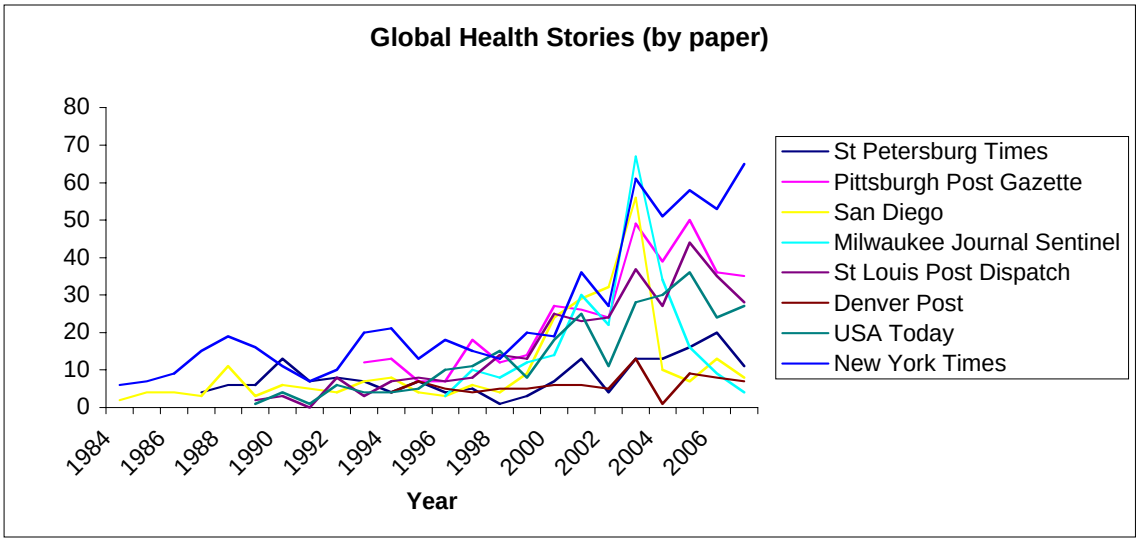
Similarly, if news of the conditions in other countries are not reported, it will be difficult to realize just what enterprises and what research should be promoted in the United States.

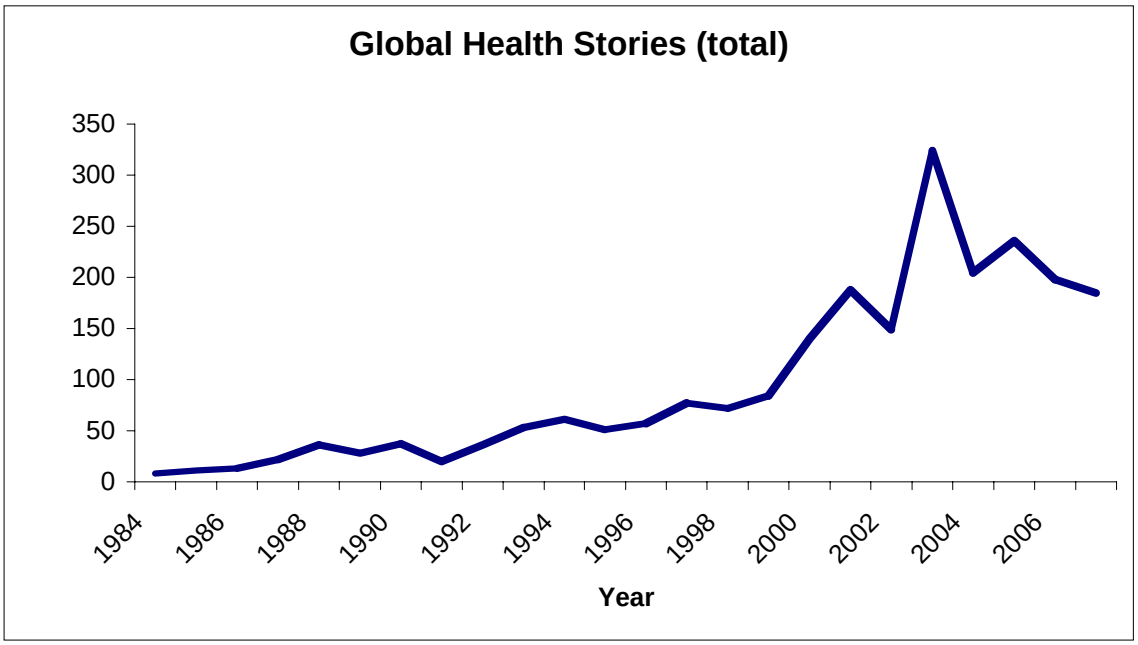
For example, several of the editors suggested that the United States currently has a good lead in technology and knowledge on such topics as energy conservation, solar power, pollution abatement, and the ability to regulate food and product safety. In the coming years,

China will need to buy the know-how and products in these areas. But if the U.S. does not recognize these as major markets of opportunity, its advantage will be lost. If American leadership is weak— in local areas readers don't hear about these possibilities—how will they know to take a chance and, for example, get trained in solar technology after they've been laid off from their manufacturing job? Reporters and editors suggest journalism can play a role.

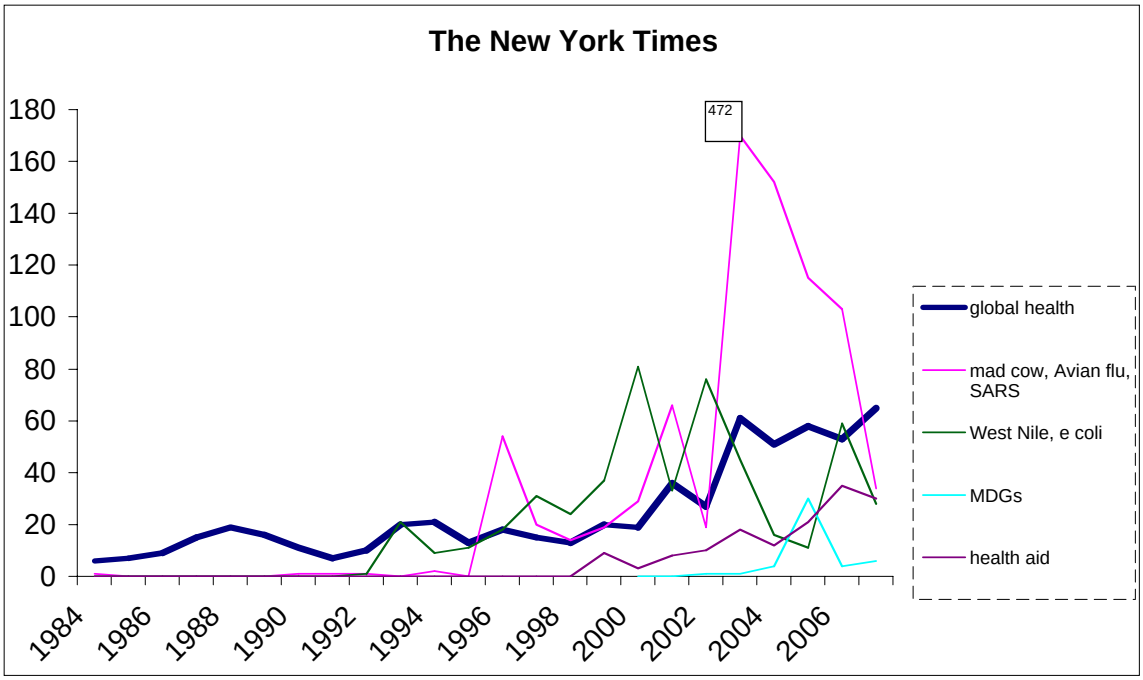
**Appendix One: The data charted.**

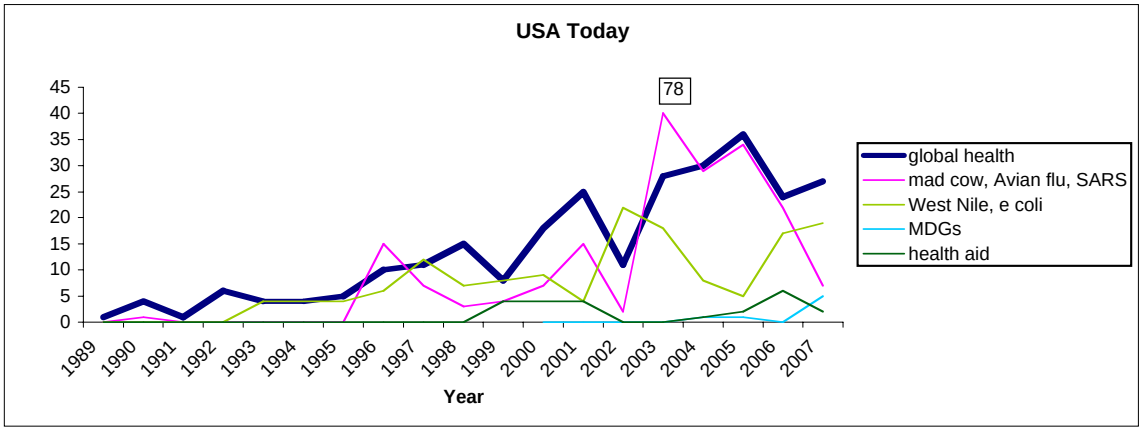
Graphs of counts on "global health" stories in eight newspapers.

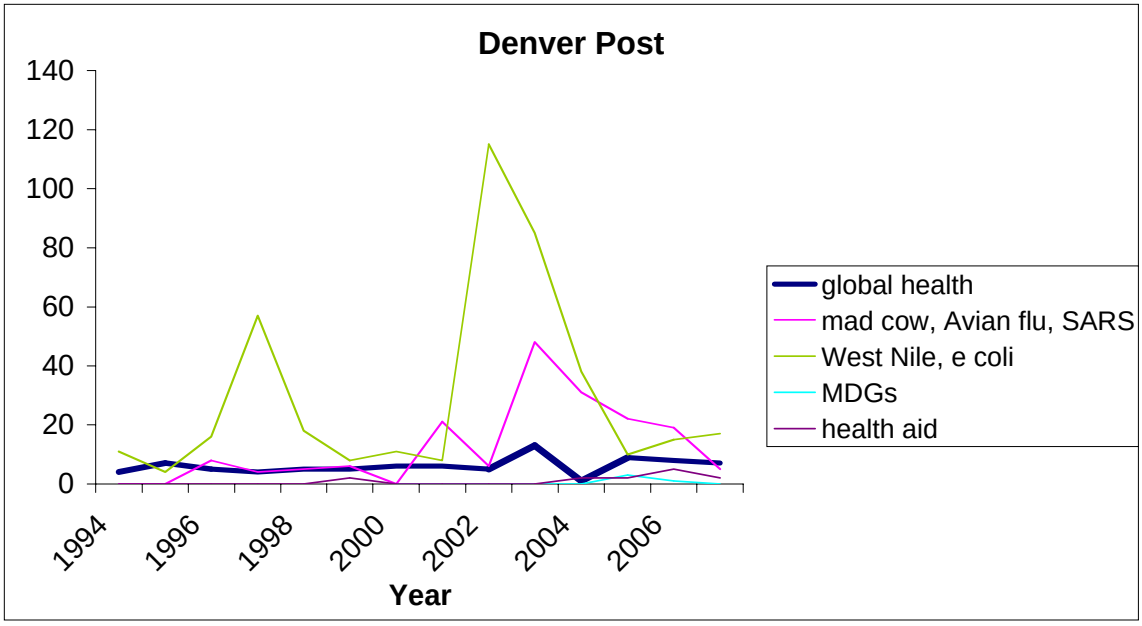


Graphs of five topics in each of eight newspapers.




Denver Post
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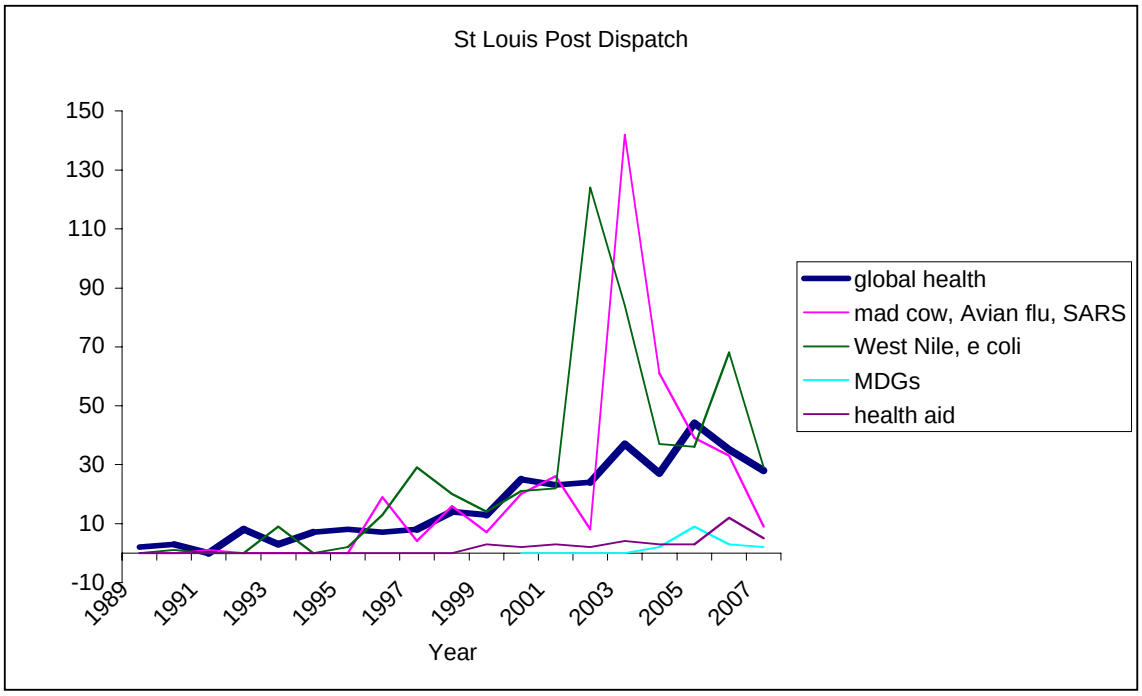
mad cow, Avian flu, SARS
West Nile, e coli
MDGs
health aid


St Louis Post Dispatch
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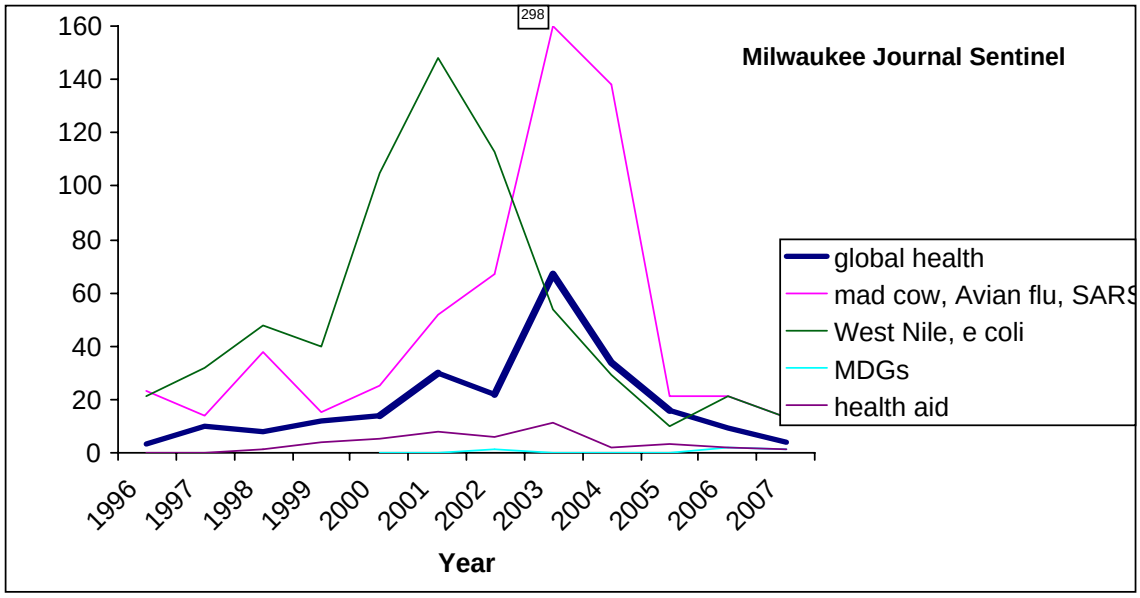
mad cow, Avian flu, SARS
West Nile, e coli
MDGs
health aid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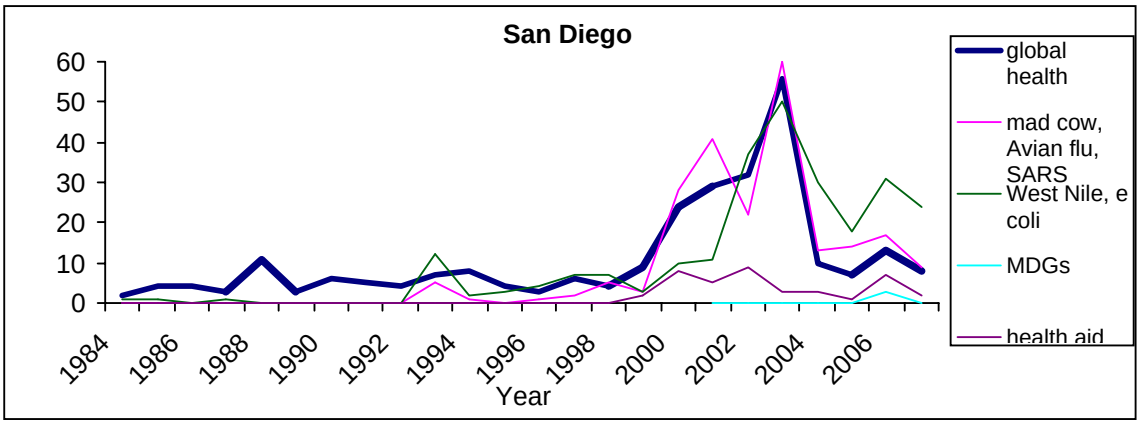
West Nile, e coli
MDGs
health aid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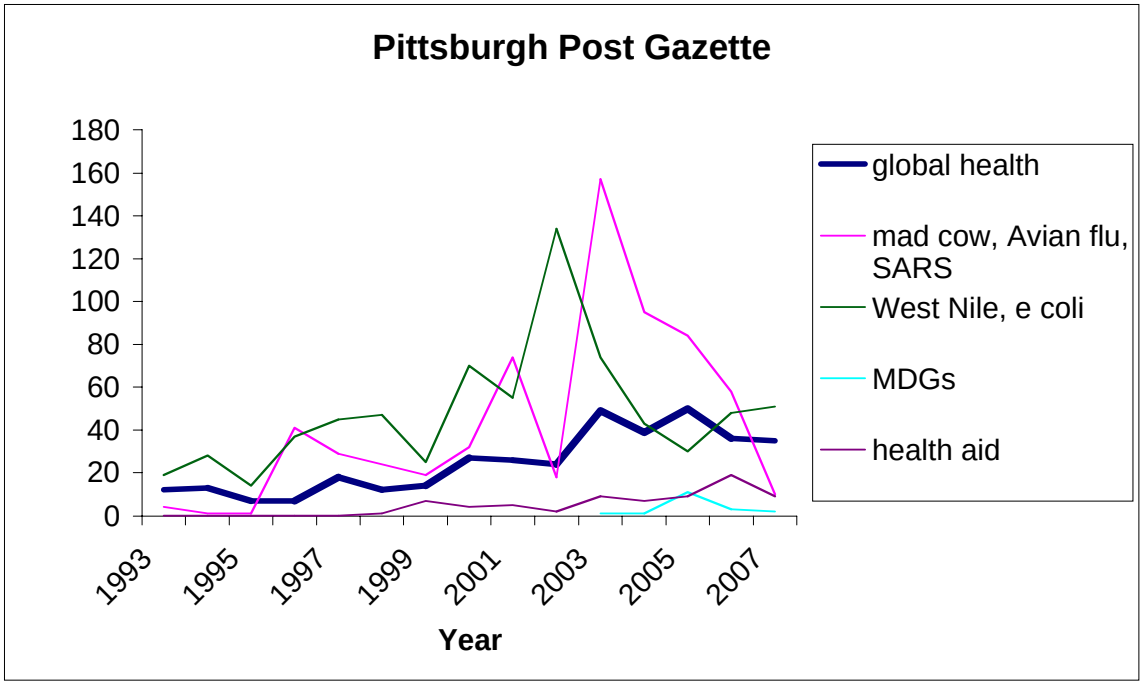
mad cow, Avian flu, SARS
West Nile, e coli
MDGs
health aid


Pittsburgh Post Gazette
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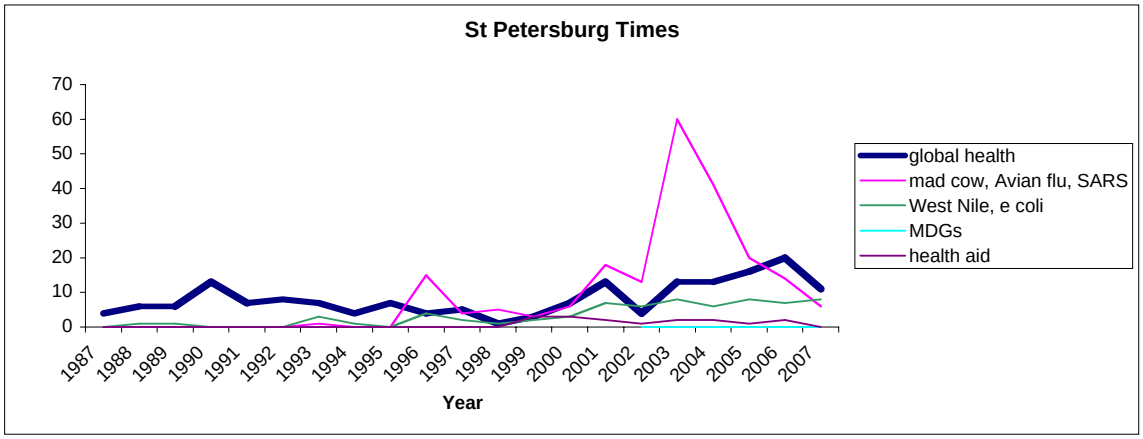
global health
mad cow, Avian flu, SARS
West Nile, e coli
MDGs
health aid


St Petersburg Times
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2007
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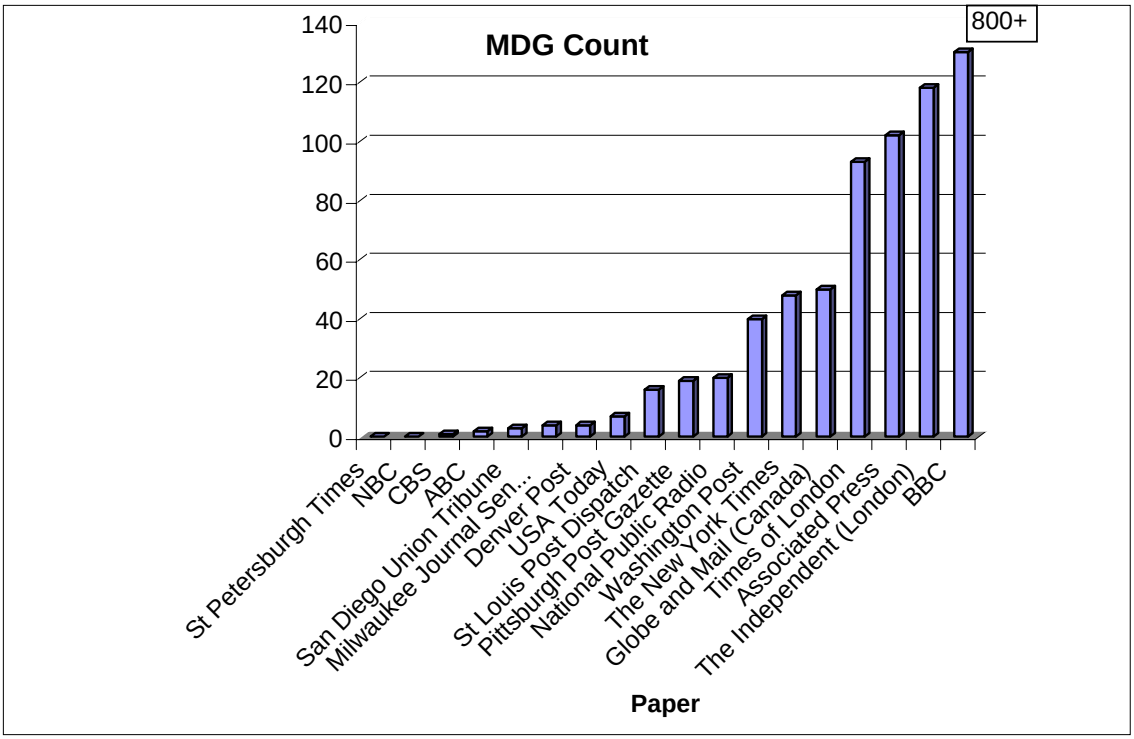
global health
mad cow, Avian flu, SARS
West Nile, e coli
MDGs
health aid

Stories mentioning the Millennium Development Goals of the United Nations at any array of different news outlets.



**Appendix Two: Methods**

In order to get a sense of the extend to which American newspapers are coving the bundle of issues referred to as "global health," we undertook extensive searches of the number of stories on the topic in 10 newspapers, as well as some less-extensive checks in broadcast outlets and wire services.

The current state of archiving of news allows considerably more data collection than in past years. After checking different sources, we chose to work on Lexis/Nexis Academic for most searches. Newspapers in the main search now have material from at least the past 14 years, and a majority back 20 years or more. Several outlets have archives that go back through every year since the 19th century.

We began by selecting a bundle of terms to search in each paper's coverage. A number of diseases were chosen because they are thought of as essentially the center of "global health" coverage. Searches were first done for HIV/AIDS, avian flu, SARS, E. coli (0157), mad cow disease, west Nile virus, polio, malaria, TB, and Ebola.

Each search was done separately by disease in each news source, year-by-year. We tested the practicality of doing such a broad array of searches by looking at each story brought up in the preliminary searches to determine whether it contained substantial discussion of the disease. We excluded stories that had passing mention of the disease (such as, "diseases like malaria" without other discussion of the disease). From the preliminary work, we determined that it would be possible during the five-month research project to do searches checking every story for relevance if we limited the number of newspapers to 10 and the number of searches to a handful of specific diseases and other telling topics.

For diseases, we selected different categories:

1. SARS, avian flu and Mad Cow disease. These are all diseases which have not yet arrived in the U.S. for the most part, and so are still "foreign," but they count as emerging threats.

2. E. coli and West Nile virus. These are new diseases that have recently arrived in the U.S. and have now caused many local outbreaks and hundreds of deaths. This category is essentially global diseases turned into local health stories.

3. Health Aid. The amount of aid delivered to developing countries on health projects is rising—it has more than doubled since 2001. This includes increases from the

federal government in several programs (Pepfar, Millennium Challenge grants, support for the Global Fund to Fight AIDS Malaria and TB), and several billion dollars annually from the Bill and Melinda Gates Foundation and others. There have also been a number of well-publicized efforts that have given global health issues visibility if not cash in the range of billions. These include the Live 8 and other concerts by rock stars Bono and Bob Geldoff, along with a variety of other initiatives such as Product (Red).

4. International efforts by the United Nations and the more than 190 nations that have signed on to the Millennium Development Goals and the campaign to use health projects as a central method to build up development in poor nations. This is a particularly sensitive measure of the desire to cover global health issues, because it requires some effort of reporting just to know what the millennium development project is, much less to track its progress.

5. "Global health." We found after preliminary searches that it is possible to construct a search term that can serve as a general surrogate for global health issues in general, a term that will include a variety of topics and exclude irrelevant material, chiefly the discussion of domestic health care. As with the other key searches, once the terms were entered and the search made, each story that was a "hit" was checked individually for relevance and irrelevant or stories with passing mentions were excluded.

The resulting bundle of searches is intended to catch, not every story on global health issues, but a substantial number that should allow us to get an idea of how coverage has changed and what kinds of stories make up global health coverage in general. A number of patterns were both clear and consistent.

Here is a breakdown of the search terms in detail:

**1.** The **global health** search

- In Lexis-Nexis, go to the general section, pick power search, and then find the newspaper. Then, using "terms and conditions" search:
- **Global w/seg health or international w/seg health or world w/seg health and NOT "health care"**
- Then, in order by date, print the "extended list" of hits, and **review each story for relevance.** That is, we are looking for stories on global health issues, or containing some

discussion of global health issues. But we don't want ones on other topics such as health care or ones that just mention health and global within them.

**2.** The **emerging diseases** searches

Same procedure as above but two separate searches will be conducted. One for emerging--foreign and one for emerging-local. For emerging foreign, that is diseases which essentially have not arrived in the U.S., but appear threatening.

a. Emerging foreign: **avian flu or SARS or mad cow disease**
   Then print and **eliminate irrelevants.**

b. Emerging local: **E coli or West Nile virus**.
   Then, print and **eliminate irrelevants.**

**3.** The **health aid** search

- **Bill Gates w/3 foundation w/seg health or global fund to fight or Bono NOT w/2 pro**
- **Eliminate irrelevants.**

This search captures stories on the Gates foundation's global health efforts, the work of the Global Fund, and stories about Bono but excludes stories with the phrase "pro bono."

**4. Millennium Development** project search

- Search for **millennium development goals**,
- Then **eliminate irrelevants**.

**5. The malaria** search

- **Malaria**
- Then **eliminate irrelevants**.

**6. Tuberculosis** search

- **Tuberculosis**,
- Then **eliminate irrelevants**

**7. Other** searches

We conducted a variety of other searches, but sampling broadcast or newspapers outside the basic American newspaper sample. Some of the other terms used were Ebola, smallpox, polio, and significant names (Paul Farmer, Jeffrey Sachs, for example). Other searches investigated the questions of disease caused by the increase in food imports, and disease and injury caused by other imported toxic products, and searches using a variety of terms such as diarrheal disease, waterborne disease, emerging disease, neglected disease, etc.

Comparison searches were done on other topics, including global business (including foreign business, international business, etc., but excluding "international business machines"), and a separate search for global, international or world trade.

Further, for comparison, Google searches were done for a variety of terms, to get a sense of the proportions of the "conversation" about these topics online.

**Appendix three: The Newspapers in the study**

The newspapers chosen for the study were mostly mid-sized regional American papers, with two national but quite different, newspapers for comparison. The mid-sized papers are broadly distributed geographically.

The list here include the most recent circulation figures (2007 Editor and Publisher's International Yearbook), and the year that the papers' full online archives begin.

1. *Denver Post*. 490,471 Mon-Sat; 600,229, Sunday. Archived since 1994.

2. *Milwaukee Journal Sentinel*. 219,300 M-S, 390,840 Sun. Archived since 1995.

3. *New York Times*. 991,335 M-S; 1,500,394 Sun. Archived since 1851.

4. *Pittsburgh Post Gazette*. 192,068 M-S; 332,617 Sun. Archived since 1993.

5. *San Diego Union Tribune*. 328,988 M-S; 359,355 Sun. Archived since 1983

6. *St. Louis Post Dispatch*. 268,242 M-S; 420,222 Sun. Archived since 1989.

7. *St. Petersburg Times*. 342,050 M-S; 410,423 Sun. Archived since 1987

8. *USA Today*. 2,293,137 M-S. Archived since 1989.

**Appendix four: Partial List of Interviews for the Report**

To go along with the story counts, editors and reporters were interviewed from the newspapers as well as from a variety of other journalism and health organizations.

Robert Blendon, professor of health policy and analysis
**Harvard School of Public Health**

Philip Boffey, former science editor, and current editorial writer
***New York Times***

Walt Bogdanich, investigations editor
***New York Times***

Mollyann Brodie vice president for public opinion and media research
**Henry J. Kaiser Family Foundation**

Nils Bruzelius, science editor
***Washington Post***

Laura Chang, science editor
***New York Times***

Cheryl Clark, health reporter
***San Diego Union-Tribune***

Jill Daly, health and science editor
***Pittsburgh Post-Gazette***

John Daniszewski, managing editor, international news
**Associated Press**

Penny Duckham executive director, media fellowships and internships program
**Henry J. Kaiser Family Foundation**

Ashley Dunn, science editor
***Los Angeles Times***

Lisa Greene, medical reporter
***St. Petersburg Times***

Mark Jaffe, medical and science editor
***Denver Post***

Steven Komarow, assistant international editor
**Associated Press**

Nick Kristoff, columnist
***New York Times***

Becky Lang, health, science and environment editor
***Milwaukee Journal Sentinel***

Glenn O'Neal, national assignment editor
***USA Today***

Jennifer Orsi, health and science editor
***St. Petersburg Times***

Tom Rosenstiel, director
**Project for Excellence in Jour**nalism

John Schidlovsky, director
**International Reporting Project, Johns Hopkins University**

David Gaddis Smith, wire editor
***San Diego Union-Tribune***

Sandy Wood, science, health and other topics editor
**St Louis Post Dispatch**

**Disease outbreak dates**

**E. coli**
1981: First reported new deadly strain in White City, California, traced back to contaminated hamburgers at MacDonald's.
1993: Jack in the Box case in California: four children dead and 600 people injured.
1996 Odwalla Apple Juice found contaminated
2006 Taco Bell outbreak in the Northeast.

**SARS**
Nov 2002-July 2003
Peaks: March 23 to 30, 2003 April 20 to 27, 2003, and May 18 to June 1, 2003
Articles in three Canadian papers peak at 25 stories per day.
Total cases in outbreak 8,100, 774 deaths.

**Malaria**
Nets and drugs succeed in reducing disease in several African countries up to one third.
Stories in February 2008; U.S. eradication 1947-51.

**Smallpox**
1967 15 million cases are estimated around the world, with 2 million dead.
The disease is certified as eradicated from the human population in 1979.

**Mad Cow**, Creutzfeldt-Jakob.
1985. Deaths in cows reported in England
By 2003,180,000 animals have been reported ill
In 1996, the related human syndrome, Creutzfeldt-Jakob disease is reported as linked to mad cow disease.
2003 the first mad cow case reported in the US.

**Avian flu**
First human cases, China, 1996

**Polio**
Recent outbreak from Nigeria spread with migrant workers on ships to Yemen, by road to other African nations, and by air to Botswana.
Field trials of vaccine, 58, 59. pre-vaccine high: 58,000 cases in US in 1952. By 1964, only about a hundred reported.
1300 cases 2007 all but a handful in Nigeria and India

**TB**
1985-1992 a resurgence is reported in the US.
2008: Highest-ever reported number of multi-drug resistant TV around the world: 489,000 cases
2008 XDR (extensively drug resistant TB) reported in 45 countries; 49 cases in US reported between 1993-2006
Number of cases tripled in NY between 1980 and 1992.

**West Nile**
1999 came to North America; first reported in humans and horses.
1997-2001, US epidemic. Peak of cases at 149 between 1999-2001, with 18 deaths

**Some issues bundled under the term "global health":**

- **New and emerging infectious diseases** such as avian flu, mad cow disease, West Nile virus, hemorrhagic E coli outbreaks, HIV, and extensively drug resistant tuberculosis.
- **Safety of imported food**, drugs and other products.
- **The Framework Convention on Tobacco Control**, an international treaty on tobacco control negotiated by the World Health Organization and put in force in 2005. 154 nations have signed on so far.
- **Health effects of climate change**, including new ranges for infectious disease, and the mixing of species and genes caused by the degradation of the environment.
- **The economics of using health aid** funds to press development, especially in poor countries, and the growing philanthropic movement to assist in bringing medicine to poor nations. Health aid includes:
- **The Millennium Development Goals**, written by more than 250 scientists, economists and policy officials from around the world under the auspices of the United Nations. The world's nations adopted the plan in 2005. Its centerpiece are health plans to help drive development in poor countries.
- **Health underpinnings of national security.** The policy studies that describe how health status affects the stability of nations, and uses measures of health and well-being as important indicators in nations at risk.