

The Daily Briefing - Sept. 12th, 2007

New Century, New Challenges, New Dilemmas: The Global Nexus of Animal and Public Health

Breaking down health disparities: Social inequalities impact many

The average life expectancy of a black American is nearly seven years less than their white compatriots. The causes of this difference and other glaring differences in the imbalance in health status between races in the United States and internationally also include disparities in socio-economic status, discrimination and specific social environments in which citizens live.

“One of the biggest remaining challenges in eliminating longstanding health disparities among all groups, especially those most vulnerable,” says Walter W.

• In the U.S.A. Communities of Color are disproportionately affected
Latinos. African America.
—Less longevity.



Williams of the Centers for Disease Control and Prevention.

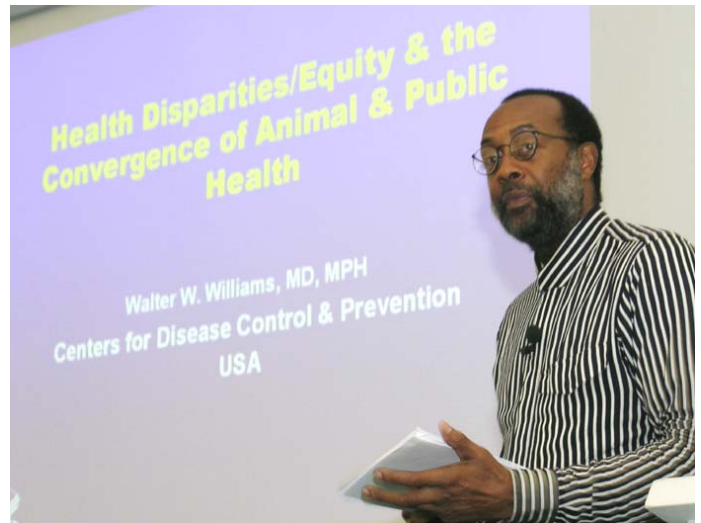
Health disparities by Williams' definition include differences in health status and health care and differences in the opportunities to achieve good health and longevity (see below “What is a Health Disparity”).

“The root causes of health disparities are risk predictors for occupational injury, illnesses and death, including that caused by exposure to animals and animal products,” says Williams.

While recognizing components of health disparities is significant to our understanding of how to evolve a one world, one health mission, a critical step is defining the term.

What is a health disparity?:

- **Inequality**
- **Difference in condition or rank**
- **Inequality: Lack of opportunity as in opportunity, treatment or status**
- **Inequity - Unfair and unjust - Unnecessary and unavoidable**



Williams

“Disparity is defined in most dictionaries as an inequality, a difference in rank or condition,” says Williams. “The key word here is inequality. Inequality is defined as a lack of equality as of opportunity.” Inequity, though, signifies an ethical, judgment, an instance of unfairness or unjustness. The definition, and the realization that disparities exist among sub-groups of the population, should also include acknowledgement of inequity.

“Inequity” evokes a conversation about justice or injustice, says Williams. “If one indicates that we are only talking about a difference and not injustice, then the decisions one may make regarding policies or resource allocation are very different.”

Some of the determinants of health disparities are changeable and some are unavoidable. Those beyond change, such as natural biological variations are beyond the control of agencies or organizations.

Elements that could be changed and minimize disparities include restrictive residential settings that prohibit healthy behaviors and determines the quality of education and employment opportunities.

Other examples include exposure to stressful living and working conditions, inadequate access to basic social and essential health services, and constraints on health-

“Why did (climate change and global warming) reach critical mass in recent years? Part is identifying people who are going to make convincing cases. Identifying leaders in America. Sometimes we need celebrities to convince more people to engage critical mass to affect changes.” - Philip Yam, Scientific American

related social mobility, such as the freedom to choose where one lives, goes to school, shops for healthy food, and works.

Segregation is an important consideration in charting a plan for change. "In many settings," says Williams, "the U.S. is still tremendously segregated."

He points to research that shows that eliminating segregation would erase black-white differences in employment rates and high school graduation rates, and decrease single motherhood rates between whites and blacks by as much as 66 percent.

Key conditions linked to segregation can constrain the practice of health behaviors and encourage unhealthy ones.

The agriculture, forestry and fishing industry employs 1.5 percent of Americans, yet it is dominated by Hispanic-origin workers. 84 percent of agriculture workers are Hispanic, with nearly 80 percent coming from Mexico. Most have low literacy levels and almost 80 percent have minimal English writing and reading abilities.

Low wages, on average family income less than \$15,000 per year, typify the industry particularly among meat and poultry workers. Making the situation worse and less desirable to those who have the freedom and opportunities to choose other career paths is the potential for injury and death.

The agriculture industry accounts for the highest mortality rate among industry sectors, outpacing mining and oil and gas excavation. In 2005, this number hit 32.5 for 100,000 workers.

Manual chopping away at meat carcasses with knives and cutting tools, exposure to chemicals and pathogens, and using potentially dangerous equipment account for some of the fatalities.

Health care tragedy playing out in India: Morphine unavailable to alleviate painless death

As was reported in the Tues., Sept. 11th edition of the International Herald Tribune, a health disparity is playing out on a daily basis for millions, suffering from cancer, tumors and other diseases. The disparity stems from a lack of morphine to provide those suffering pain from afflictions or those nearing death to experience relief.

As the article reports, only 0.4 percent have access to morphine. "Clinics dispensing morphine are so scarce that some patients live 800 kilometers, or 500 miles, from the nearest. Calcutta, a city of 14 million, has only one.

Mhoria Leng, a palliative care expert from Scotland is quoted in the article saying, "For a poor person here, that means just forget it. It goes from dire to dreadful."

The availability that safety nets can provide care once injury occurs also typify a disparity among low-wage U.S. workers. "Low wage workers in most industries in the U.S. are less likely to have employer-based health insurance," says Williams.

These workers often depend on "safety net" hospitals (primarily know for providing care for the poor and uninsured) for services. These hospitals are closing in many cities due to their decreasing ability to finance indigent and specialty care.

An additional issue is the strong association between linking poverty and living in close contact with animals. This proximity to animals greatly increases the risk for contracting many zoonoses. The impact is greatest among the 800 million food-insecure livestock keepers, consumer, traders and laborers worldwide.

"The impact of a zoonotic disease is worse in these communities than others as it takes the bread winner out of work, can take away their animals and source of income, and it is difficult to obtain health care for ill family members or veterinary service for ill livestock," Williams notes.

Eliminating the disparities that affect health demand advocacy. Sometimes this is in the face of resistance from organizations who benefit from conditions that give rise to or sustain disease. Groups urging better safety standards for automobiles, food production, and housing, as examples, brought about strong resistance from manufacturers, producers and landlords.

There are positive change efforts. Williams cites a CDC program, "Racial and Ethnic Approaches to Community Health," as an example that has created changed health outcomes in 34 communities. "We are seeing morbidity curves actually converge with health targets. Things are getting better in these communities. It's not yet a national program, but is working in these locations."

Elements of strategic issues for convergence

Social engagement:

Inclusion: Identify communities of people, including missing stakeholders, directly impacted by an issue, problem or policy & ensure that they can have a self-determined role in an authentic engagement process

Ensuring ownership rather than “buy-in” requires listening & engagement in the entire process

Culturally-determined: Engagement strategies must be culturally-determined

Increase awareness & sense of urgency through **communication** of all determinants of **one world, one health** (social, economic, political, systems)

Goal: Address strategies to key audiences so they hear, understand, incorporate, and act on issue

Collaboration & convergence means:

- Cultivate seeds
- Diffusion
- Find the willing
- Explore issues & opportunities
- Agree on scope, level & content
- Agree on benefits & measures of success

Effective leadership:

Goal: Creating the space for committed leadership

A one world ~ one health agenda



Use models, develop leaders, elicit contextual responses

Infrastructure & capacity

Open a convergence platform that utilizes:

- Technology - Incentives
- Flexibility - Sustainability

Diverse people, sousveillance & best practices

There is need for education & training on the convergence of animal, public and ecosystem health

Goal: To provide education & training on One Health to a broad base of stakeholders

- Base on relevancy
- Assess and measure success
- Base on regional morals & ethics
- Collaboration with awareness & communication experts

Seminar colleague on “One world - One health” mission via education

Themes emerging from “One world - One health include leadership, nurturing agriculture and protecting the environment. Colleague Jose Zaglul is living that mission.

The president of Earth University in Costa Rica, Zaglul empowers tomorrow’s leaders via a four-year, 210 credit curriculum. Unique to the program is that graduation is just the beginning. To earn a degree, students must develop a business plan that furthers agricultural production and environmental protection, among other themes. Graduates are given loans that they must eventually pay back through their business ventures. Examples have included eco-tourism and the growing of banana seedlings for export.

Also unique are the students themselves. Many are from impoverished conditions in Latin American, South America and Africa. Faculty members seek out students who might not achieve the SAT scores one would need for enrollment at a typical university, but who show positive attitudes, dedication and determination.

Zaglul remarks on one student from Peru. He was the first person in his city of 50,000 to attend college and now is a role model inspiring young people at home to study and prepare for advanced degrees.



SPORTS UPDATE

Sept. 11th - Tuesday's night contest at the Microbe Dome was a much closer contest, with the human race scoring three points before falling to the home-town Microbes, 150,000,000,000 (est.) to three. Strong performances by Ann Thrax, Sal Monella, and M.N. Gitis contributed to the victory. After the game, Microbes' manager Deino Coccus commented, "We were shocked that the humans could put up three points, but antivirals, vaccines and antimicrobials have given us trouble in the past." The series will continue over the better part of the next century and throughout the world, unless the humans can implement some powerful "one world - one health" strategies.

Are you ready?

As was mentioned yesterday, a resource for preparedness exists at www.RedefiningReadiness.net. The Website contains powerful community engagement practices to harness the knowledge and experiences of the broad range of people who need to be protected in emergencies. Offered is information to prepare communities for shelter-in-place emergencies and disease outbreaks.