

## Keynote

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I am delighted to be with you as a part of this very important conference. I am sorry I am not going to be able to spend more time with you, because I think it is going to be an exciting and precedent-setting meeting.

I don't know whether it is better to speak early in the morning or late at night. I guess I had one of my worst experiences at an evening speaking engagement. I spoke once after dinner where they had had a cocktail hour before dinner. When I got up to speak, I said, "I have only about 10 minutes here and I just don't know where to start. A guy in the back of the room said, "Well, why don't you start at the ninth minute?' So, I'm not going to ask you where I should start. I am delighted to be here and I appreciate your accommodating my crazy schedule.

On behalf of the Centers for Disease Control, I am very pleased to welcome you to this very important conference----especially our international guests. I think it makes a very important point that we are here together to collaborate on the issue of health statistics. Collaboration has solved many of the world's greatest health problems.

CDC, throughout its history, has recognized health as a global issue and has stayed focused on the vision of Healthy People in a Healthy World. Nowhere has that been illustrated better, I think, than in the area of infectious diseases and our global efforts in immunization. The eradication of smallpox in 1977 was a historic international milestone. In fact, today we are very close, working with our partners throughout the world, to eradicating polio. So, the time is right for us to come together internationally to look at the issue and the value of injury statistics.

I want to thank Manning Feinlieb and the members of the National Center for Health Statistics for organizing this ICE. One of the responsibilities of NCHS through the Office of International Statistics, is promoting international collaboration in the field of health statistics.

This international collaborative effort is one of several ways that NCHS accomplishes its important tasks. These efforts are designed to bring together researchers from several countries and the United States to study common problems and to arrive at results that will be mutually beneficial.

"The goal of the ICE on injury statistics is to improve the quality, the reliability and the comparability of international statistics on injury. The ICE recognizes the need for worldwide collaborative approaches and the reliance upon data to direct prevention efforts.

Let me tell you what I think this meeting can accomplish. Many agencies and programs represented here today are critical to our success. This symposium represents the need for cooperation and collaboration within, as well as among, countries.

The U.S. federal agencies with key roles in the collection, analysis, and dissemination of injury data, are joined by state and local governments, as well as representatives from many of the primary research centers across the nations, such as the directors of injury prevention research centers.

This is a tremendous opportunity, bringing together a wealth of expertise. "The organizers of this symposium have taken on a very important task, and I commend them.

By focusing on what has proven to be successful, here in this country and in other countries, and equally important, by avoiding those things that have not proven to be worthwhile, our efforts can be combined, our knowledge compounded, and our success rates maximized.

"This symposium is only the first step in this ICE. During this meeting, we will develop our plan for future research and action. We will widely circulate the proceedings of this symposium, which will illuminate the problems and limitations, as well as a successful and innovative approach to provide the needed statistics for injury prevention.

You were all invited to be here because of your contributions and your expertise and your devout interest in the broad arena of injury prevention and injury statistics. We are here to share our collective knowledge so that we can achieve the ultimate goal of reducing the toll that injuries take throughout the world.

I want to relate what you are doing here to the priorities which we have been establishing at CDC. We call our priorities evolving priorities, because we recognize the rapidity of change taking place, not only in our country, but throughout the world. Because of this rapid change, CDC must remain vigilant in monitoring changes, challenges and opportunities.

As I mentioned before, our vision is that of Healthy People in a Healthy World through Prevention. It is clear to me that, in order for us to achieve this goal, we must have priorities that are relevant and evolving. As the world evolves, so should our priorities.

I know that the areas that we have identified as priorities match many of the public health and prevention priorities identified by other nations. We have grouped our priorities into four major categories which I will discuss, with particular emphasis on injury prevention and the important role of data in each of these priorities areas.

The first priority area for CDC in 1994 is to strengthen the essential public health services--we call these the core public health functions. These are especially important during this era of health care reform discussion in our country, as we try to fix the health care delivery system that we all agree is in such great need of fixing.

Clearly, this is a starting point--to look at the core functions of public health. We must articulate a vision of public health that is broad and comprehensive. That vision must be clear enough for us to speak not only to local and state health departments, and to our colleagues internationally, but to communities at every level. For us to really carry out these essential services of public health in the 1990's, we need the cooperation of people in communities everywhere, at every level.

From this vision, core public health functions are defined. In addition to the traditional areas of public health, such as infectious diseases, we have added lifestyles and environmental influences. They affect the quality of life in ways unimaginable until just a few years ago.

Violence, for example, is now a major public health issue, amenable to the research and intervention that public health disciplines can provide. That is true, not only in this country, but in other countries as well. In December, I had an opportunity to visit an injury control program that our field epidemiology training program has established in Cairo, Egypt. I saw the impact that that program is having on injury prevention in Egypt.

A year ago, in May, I attended my first World Health Assembly as a U.S. delegate. I remember some of our colleagues from sub-Saharan Africa pointing out how the glamorization of violence on TV and in the movies in the United States is having an extremely negative impact on our teenagers. The global aspect of this issue is very clear.

The next thing we have to do is to develop a social marketing strategy. We must frequently relearn the lesson that an ounce of prevention is worth a pound of cure. We must constantly communicate that message in a way that is appropriate, meaningful, and effective to the various audiences that we reach--from the public, to the policy makers, to the health providers. We are especially encountering that lesson in some of our programs today.

Our biggest task is to develop strategies to turn knowledge into behavioral change. There have been many successes in the arena of injury prevention. We know some of those successes, especially in motor vehicle accidents. From 1968 to 1991, motor vehicle deaths decreased by 21 percent in this country, while deaths from violence increased by over 60 percent. We have also had success in the use of bicycle helmets, which are 85 percent effective, and have made a measurable difference, not only in terms of injuries, but also in terms of cost savings.

Within this priority of strengthening the core functions of public health is the development of a nationwide health information and surveillance system. That system must be capable of producing information wherever and when it is needed. Information that is standardized is especially important in injury prevention.

We can also strengthen our national systems through international collaboration and exchange. Two weeks ago, the National Center for Infectious Diseases issued a report--which I hope you have seen--on emerging infections. The first recommendation in that report was to develop strong surveillance systems throughout the world to really get a handle on infectious diseases, particularly the new and emerging infectious diseases. So, utilizing surveillance systems is no longer critical just nationally, but internationally, as well.

Our second priority at CDC is to develop, maintain, and enrich our capacity to respond to urgent threats to health. What are some of these urgent threats to health that we are concerned about? This priority includes such urgent threats as the new and emerging infections which I have mentioned, environmental toxins, where we are heavily involved, work place hazards, and injuries.

We can use statistics from the United States to illustrate some of our concerns. While specific problems vary from country to country, and we each have different priorities, injury is an urgent threat in every country. For example, in this country, we have 150,000 deaths per year from injuries, nearly 3 million hospitalizations, 31.5 million visits to the emergency room, which means more than one third of visits to the emergency room in this country are due to injuries. These injuries are both intentional and unintentional.

We are having a real problem with our young people--teenagers--in terms of violence. Since 1985, deaths from violence among teenagers in this country have increased by 77 percent.

Injuries are a leading cause of death in this country, for the population from ages one through 44. When it comes to the cause of potential years of life lost in this country, no cause of death even comes close. Injuries are way out front.

At least 10 million people suffer traumatic injuries on their jobs each year in this country. During the last decade, over 60,000 Americans died from workplace injuries. And the cost of injuries is escalating. The impact of injuries on health care services and the ability to provide care costs our economy more than \$83 billion a year.

Now, we must develop the capacity to respond to these urgent threats. When it comes to infectious diseases, obviously we must have the capacity to immunize.

We also must have laboratories and qualified facilities and personnel. In order to respond to the injury problems, we must also be able to monitor. We must have domestic and international emergency response teams. We must have global networks for disease detection, and violence and injury prevention programs globally.

CDC's National Center for Injury Prevention and Control, was created just two years ago, to emphasize the importance of injury prevention, along with CDC's long standing programs in the prevention and control of infectious and chronic diseases. Worldwide, CDC has collaborated with four other nations, to prevent and control injury and disease, by the establishment of our field epidemiologist training program. CDC is committed to training those of you who are visiting, especially, to know that. We are committed on an international basis.

Certainly, the most effective program in CDC's history has been the epidemiology intelligence service. We have trained more than 2,000 people who are leaders in epidemiology and prevention throughout the world. And we are committed to working with other countries to develop epidemiology and training programs, along with the 12 that you already have participated in. We look forward to working with some of you in this arena.

CDC's National Institute for Occupational Safety and Health (NIOSH) is an important partner in injury prevention in the workplace. NIOSH has developed a surveillance system for collecting information on fatal workplace injury in every state across the nation. The Institute has just released a document analyzing the data from 1980, which provides the most comprehensive statistics to date on the magnitude and nature of the problem, the potential risk factors, and the industries and occupations in this country at greatest risk. The data provide the foundation for the next decade of research and prevention efforts, aimed at reducing fatal injuries to workers in this country.

So you can see that our second priority in responding to urgent health threats is a very important one, as you can see, and I think quite relevant to the work we are going to be discussing in terms of injury statistics at this conference.

The third priority at CDC is to develop a nationwide prevention network and program. First, we must determine the opportunities for prevention. Data on injuries are helping to formulate those prevention messages, as well as to implement our prevention strategy. We have 25 programs now in 19 states, dealing with injury prevention. But we must develop local, state, national, and international partnerships, if we are to be successful in our injury prevention programs.

We must ensure work force diversity to be responsible to the diverse needs of this nation, but also of the world. We are, by definition, a diverse group at this ICE symposium. And from that diversity comes an enormous opportunity to learn and advance.

We must implement prevention strategies in many areas, such as AIDS, where we have a major strategy now in this country called the Prevention Marketing Initiative, which is having a significant impact.

Statistics are helping to develop, implement, and evaluate prevention strategies. So, as we implement prevention strategies throughout the country, we must have the monitoring systems and we must have the data bases, to assess what works and what does not work.

It is not enough to develop good programs. We have spent billions of dollars on programs in this country, often without really knowing whether the money was well spent, and sometimes finding out 10, 20 years later, that they were not effective. We have done that in clinical medicine. We can't afford to do that in the future, and we certainly can't afford to do that in our arena.

As I said earlier, a recent report from NCHS shows that deaths from firearms may soon exceed deaths from motor vehicle crashes as the leading cause of injury mortality in the country, because of what has happened over the last 10 to 15 years. Already, in seven states in this country, deaths from firearm injury equal or exceed deaths from motor vehicle crashes. This fact reflects two changes. For the past two decades, motor vehicle mortality has been declining, while violent deaths have been rising.

Public health, law enforcement, citizens groups, educators, individuals, have united to bring about the decline in motor vehicle crashes. And there is a lot we can learn from that success.

How did it happen? How have we been so successful in terms of motor vehicle accidents? We have designed safer cars in this country. We have built better highways. We have had fewer alcohol-related deaths, although we still have too many. And we have promoted seat belt use. All have contributed to this reduction.

We are now bringing in a similar coalition of concerned officials and citizens, to address gun-related violence. We need to know where to intervene. "The CDC funded work led by Art Kellerman, who is here with you, and his colleagues, published in the New England Journal of Medicine last year, shows what happens when a family purchases a gun and brings it into the home. In part the study showed that rather than confer protection, guns kept in the home are associated with an increase in the risk of homicide by a family member or intimate acquaintance. "This is a good example of the kinds of information we need documented scientifically in order to get a handle on this problem.

I spoke on this problem the other day at the National Press Club after Senator Bradley had recently said that ultimately the violence problem is not going to be solved just in Washington, but in our communities and in our homes. And believe me, we have a long way to go in our homes, where children still have access to firearms, and often find them when parents and grandparents are away.

Our fourth CDC priority is women's health. I can tell you that the issue of women's health as a priority, is not just a CDC priority, but a top priority throughout the Department of Health and Human Services. First of all, this priority acknowledges years of neglect in this area, and that neglect also applies in the area of prevention as evidenced by the fact that AIDS is spreading fastest among women in this country.

I attended the Eighth International Conference on AIDS in Morocco, on the African continent in December. It was a little frustrating, because there is so much bad news, as you know. On the plane back, I was reading a UNICEF assessment of AIDS in Africa. The report said that perhaps the single most important factor that could curtail the spread of AIDS in Africa would be the empowerment of women there, especially in the areas of sexual relationships and family relationships.

To a lesser extent, I believe, the same issue relates to health in this country, where women play such an important role in the health of the family, and yet often are not empowered to make a difference in their own health status, let alone their family's.

AIDS and other STDs such as chlamydia still account for about 150,000 cases of infertility in women each year. CDC has demonstrated the ability to significantly impact the problem, using a model in four states in the country, which we now hope to take to the rest of the country.

Domestic and workplace violence are also problems that pose serious threats to the health of women. Homicide is the leading cause of death for women in the workplace in this country. Domestic violence often leads women to the emergency room and, according to our data, during these visits to ER's, domestic violence often is not even diagnosed or reported.

We have established these four priorities, and we have identified cross-cutting issues that relate to all of these priorities. In order to accomplish our goals, we are adopting some new approaches.

I want to reemphasize the importance of new partnerships, if we are going to be successful. When I say new partnerships in this country, of course, we recognize that our relationships with local and state health departments, schools of public health, and preventive medicine programs remain critical.

We have also recognized that, if we are going to be successful in our prevention of AIDS and violence, we must develop some new partnerships. So, we are looking at community groups---our school systems, for example, offer an excellent opportunity to deal positively with teenagers and children at every level.

We have demonstrated the cost effectiveness of school-based education, and yet, there is too little of it taking place in this country. The school system is a very important ally. Churches and business communities are also very important. For example, The Rotary Clubs of this country have contributed almost \$250 million to our polio eradication program. They have also been very active in our AIDS prevention program. More than ever before, new partnerships are going to be critical for the future.

Community involvement must include the local, state and national community, but also the world community, in order for us to solve these problems.

For many of the world's health crises, such as AIDS, knowledge and information can be a most important injury prevention tool. We will test and duplicate what works best. We have a lot of knowledge about what works and will have a great impact, such as immunization and bicycle helmets in terms of injuries--we know how effective they have been. The effectiveness of seat belts is probably the best example.

We must continue to evaluate what works. Good data are critical. I want to emphasize the importance of data. The publication *Injury in America* highlights the role of data in injury research. A prerequisite for the scientific study of injury is the acquisition of data, on which we base priorities and research. Despite the obvious importance of injury as a public health problem, information to permit the study of the epidemiology of most injuries is still not available. We still don't have the information base.

No data is available on time, place and persons for some injuries and deaths, and even basic information is often lacking, such as the numbers and characteristics of people injured in nonfatal incidents. We must improve our databases.

Data are needed for planning, research, prevention, intervention, evaluation, setting priorities and measuring progress. Data help us to identify causes, risk factors, and groups at greater risk. Data are also used to develop consensus, to motivate citizens, to empower communities, and to provide policy. Data are a powerful force.

In the United States, statistics documenting the epidemics of firearm violence are an example of how data have been used to inform the debate. If you have been reading our papers this week--USA TODAY, NEW YORK TIMES--you have seen these articles on violence, substantiated by current scientific data.

Statistics showing that firearms are the second leading cause of death to Americans from the age of 15 to 34 have quantified a problem that people experience personally in their neighborhoods or in nearby communities. Data are what give meaning to these experiences. "These numbers have moved people and policy makers to an array of decisions, from limiting access to weapons--the numbers helped pass the Brady bill and the bill against assault weapons. Numbers helped to prove the point in developing programs for conflict resolution among teenagers.

Many of you from other parts of the world are faced with a different set of challenges, but we share mutual need for data to help us understand the magnitude of the problem, to assess risk factors, and to guide us in developing strategies to lessen the burden of injury.

We must improve injury statistics. For example, in the United States, there are very sophisticated and highly technological processes for coding cause of death from a death certificate. Yet, more specific information about circumstances leading up to the fatality is needed to ultimately prevent the deaths. That is what we don't have.

In terms of morbidity, our national knowledge level is even more basic. We know how many people are hospitalized as a result of fractures, but, from the records, we can't tell what caused those fractures--whether it was a fall, or a motor vehicle crash.

We need community level data, as well as national data. Injury statistics need to be complete, comparable, timely, and appropriate for analysis and interpretation. We must be able to link data from various systems, in order to expand the knowledge and the analytical capacity of the data.

We have a lot of data systems at CDC. You wouldn't believe how many we have! The problem is that the systems don't communicate with each other very well. So, the real challenge we face today is figuring out a way to link and integrate these data systems, as we move ahead. It is going to be critical for our health care and public health reform.

We must be able to improve the ability of data systems to relate and communicate with each other, not just at CDC. For example, The Substance Abuse and Mental Health Services Administration (SAMHSA) is the agency that deals with drug abuse in this country. Just think about the relationship of drug abuse and injury, and how important it is to be able to link data from SAMHSA and other programs to CDC data bases. Improvements are being made, however. Hospitals are being encouraged to use the I2 codes in the International Classification of Diseases, to capture information about the cause of injuries. And so, it is beginning.

Just two months ago, NCHS published the first national estimates of the causes of injury based on a national sample of emergency department visits.

To improve data on non-fatal workplace injury, NIOSH is now using the Consumer Products Safety Commission's electronic surveillance system to monitor occupational injuries among young and mature workers.

NIOSH would like to expand this system to track workplace injuries treated in emergency rooms, among workers of all ages.

One of my favorite stories concerns an experience I had in Morocco. Teenagers from throughout Africa were invited to attend the Eighth International Symposium. This was the first time they had been invited, and they were there because of the obvious role that teenagers play in the spread of this epidemic. The teenagers discovered that the new director of CDC was there, so they asked if I would participate in a roundtable discussion. I did and it was an interesting experience. They asked me about CDC, its history and its commitment to solving the AIDS problem. They asked me a lot of questions. As I sat there with these teenagers from throughout Africa, I realized they reminded me very much of teenagers in this country.

So, I decided to ask them a question. I said, "I am curious. Why is it that teenagers today have a couple at home, too, by the way--why is it that teenagers today engage in so many high risk behaviors? I mean, if it is not violence or drug abuse, it's early school drop-out or tobacco use. Teenagers today seem to be attracted to high risk behaviors, at least from an adult's point of view." One young man from Southern Africa responded, "Dr. Satcher, are you familiar with the expression that in Africa it takes a whole village to raise a child? I responded that I had heard that before. He said, "Then, I'd like to ask you another question--Where is our village? Where is our community? Where are people who care about children; not just their own children but all children? Where are people who care about the environment?" I thought about that a lot. So, I say to you today that teenagers in this country are probably asking the same question--Where is their community when they need it?

We need a world community involved in solving these problems. And in order to achieve that, we have to begin with conferences like this, where we look to the future and say, "How are we going to cooperate and collaborate in solving some serious world problems?"

"Thank you for your attention.