

## Closing Remarks

C.J. Romer, M.D.

Let me first express the deep interest and great pleasure I had to participate in the debate which took place this week, and not only share ideas but also concerns with those present.

I wish on behalf of WHO to thank and congratulate the organizers, and particularly, the CDC National Center on Health Statistics, not only for the quality of the organization of this meeting, but also to have taken the initiative to set this International Collaborative effort on injury statistics.

We also deeply appreciate that this International Collaborative Effort was closely associated with the work of the WHO working group on injury surveillance, chaired by Dr Wim Rogmans, Director of the Dutch Consumer Safety Institute, which is also a WHO Collaborating Centre. Indeed, the WHO interest has also been demonstrated to some extent by the fact that 5 WHO Collaborating Centers were participating in addition to Dr L'Hours and myself, from WHO/HQ and Mrs Y. Holder from the CAREC Office.

There has been a wealth of expertise produced during these days. The level of the debate has been very high. We have witnessed enthusiasm, but have also heard a certain dose of skepticism and frustration.

As far as I am concerned, I only wish to stress a few points which "may likely" underline future development of data systems, yet without entering into technical details which have been largely covered.

Health intelligence is the central nervous system of public health. Success achieved for infectious diseases is the best demonstration, particularly when referring to smallpox eradication, yesterday; onchocerciasis, today; poliomyelitis tomorrow, and other diseases the day after tomorrow. In 1993, 143 countries were polio free.

Health intelligence is likely to be even more critical in the future because of the speed of changes societies in the world are facing today. Epidemiological and demographic transition, urbanization, but also rapid democratization processes are causing and reflect a time of changes, which will call for new needs, new information systems management to meeting these needs.

At the same time, new challenges surface because traditional ways of thinking are threatened. Among those is the fact that we, health people and professional have the strong tendency, anchored and rooted in our intellectual mind to think and act very often according to the traditional vertical disease oriented approach. What happens is that each verticality creates its own data system, multiplies them, but usually none of them communicate with the other.

But today, what is at stake is of a totally different nature.

Environmental threats to health, life styles, population issues, social issues and their impact on health call for aggregated, integrated action, in other words for linkages and mechanisms for consolidated decision making. Safety promotion and injury control are certainly today a challenge to health people and others calling for such scientific decision-making and community partnership, with all the consequences it entails on the type of data systems needed.

There is a last point I wish to raise.

We, health professionals, have also thought for a long time that we were the depository of knowledge in health, and consequently, were the only ones to know what to do for the health of people. We have therefore created data systems in isolation of the community which we were supposed to serve, and to a great extent, we have ignored to incorporate in these data systems the indigenous expertise of the community and the potential of the community to be an active partner in the promotion of its own health.

New partnerships have to be created in health to meet new health challenges, violence is a good example, and data systems have also to take this into account.

WHO is going to give stronger attention to data systems development aiming at better serving community needs in the frame of its SAFECOM project coordinated by the Department of Social Medicine of the Karolinska Institute in Stockholm in its capacity of Collaborating Centre on Safety Promotion.

With regard to partnerships, I wish to stress the following. In the area which is of concern today, data generation is one thing, but setting mechanisms so that these data can be used efficiently is another thing. Partnerships with the community including NGOs is a prerequisite and can be an asset not only for collecting data reflecting the situation and needs of the community, but more to ensure these data will be used for action when the community has been convinced it will be for its own benefit.

#### Concluding Remarks

I am sure we share a common concern, if not frustration, when we consider the weight of injury on the public or the public health agenda when it comes to prioritization of health issues. In general, injury programs are grossly, if not indecently, under-funded in most countries.

To improve the score we must strive to better lighten the burden of injury on health, particularly with regard to the medical, social or individual psychological disablement it entails, burden on the individual's health but also on the family, community and society as a whole. We must do for injury what has been done for more traditional diseases when assessing their impact on society's quality of life. Injury surveillance and data systems are the "big bang" for this chemistry to be initiated.

The global burden of diseases report produced last year by The World Bank, using the DALY index and weighting injury at about 12 percent of the total burden of disease worldwide is an interesting first move in this direction.

Setting objectives and targets and committing ourselves to meet the above needs might be a fundamental step for technical cooperation particularly through this International Collaborative Effort in partnership with NCHS and WHO.

Two other possible grounds for cooperation based on discussions of the ICE group would be:

- To prepare a glossary of terms used in the injury field. There is still some inconsistency and misunderstanding among safety or injury researchers and practitioners in the use of some terms and concepts. First and not the least, use and translation in non-English languages of the term injury versus the term accident.
- To establish an international clearing house in the injury field with access to basic information concerning on-going programs and their evaluation, type of institutions and expertise available, etc. This could well be a ground for cooperation between NCHS and the WHO WG on injury surveillance.

Finally, I do think the time is now ripe and needs sufficiently and evidently felt and expressed to consider the possibility of preparing a specific classification on injury as an "epigone" to the ICD. Consultations will be initiated in WHO and ICE and the WHO Working Group on Injury Surveillance should be the key partners in this endeavor.

I now wish to congratulate Lois A. Fingerhut and Bob Hartford the co-chairpersons for the success of the meeting and use this opportunity to call for strengthened cooperation between NCHS and WIIO to give as soon as possible, practical application to the recommendations formulated by this group.

Joseph L. Annest, Ph.D.

I appreciate the opportunity to speak on behalf of Dr. Mark Rosenberg, Director, National Center for Injury Prevention and Control (NCIPC) concerning international activities that will stem from this very important ICE conference. NCIPC is committed to working with the National Center for Health Statistics and WHO, and all of you, to accomplish the goal of improved injury data systems and injury statistics throughout the world.

As I reflect on the last couple of days, I see that there is a lot of work to be done, and I think that a lot of you agree.

I recall what Dr. Satcher said to us at the beginning of the conference about the power of high quality data and its influence on decisions regarding public health policy in the area of injury prevention. Most certainly, this potential alone should be the force driving each of us to reconfirm our commitment to the field of injury control and to determine our roles, as individuals, in improving international statistics on injury. Although resources are limited and our schedules are busy, fruitful international collaboration will be necessary to make this effort a success.

As we conduct research to address and overcome problems in injury prevention and surveillance in our own countries, we need to share what we learn with the rest of the international community. Along this line, I would like to briefly describe three injury surveillance projects of international interest that are being conducted by NCIPC. All three of these projects aim to improve data on injury morbidity.

First, we are developing and testing national guidelines for the uniform collection, analysis, and reporting of traumatic brain and spinal cord injuries. In 1992, a draft working group of the Secretary's National Advisory Committee on Injury Prevention and Control assisted CDC in developing guidelines for traumatic and spinal cord injury surveillance. These guidelines were pilot tested at three sites by two state health departments—New York and Rhode Island—and one local health department—Maricopa County, Arizona. The results of these pilot studies have been summarized and used to revise the guidelines, which will soon be reviewed for approval by the National Advisory Committee for Injury Prevention and Control. The final guidelines are expected to be disseminated later this year and will be made available to federal, state, and local officials and health departments in this country, as well as internationally. Also, recently, the Traumatic Brain Injury Act of 1990 passed the U.S. Senate and is now pending in the U.S. House of Representatives. We hope this will provide additional resources to develop a uniform national reporting system to determine the incidence, severity, and magnitude of traumatic brain injury in the United States.

Second, NCIPC is working toward establishing a uniform data set for emergency department surveillance. This effort is a public/private partnership, coordinated by Dr. Dan Pollock, Acute Care Team Leader of our Division of Acute Care, Rehabilitation Research, and Disability Prevention, who has been participating in this symposium. Currently, we are exploring groups that can serve as planners and cosponsors for this activity. We will conduct a conference patterned after the 1988 consensus conference that led to the development of uniform case criteria and standardized data elements for trauma registries. These trauma registry guidelines have been disseminated around the world. In addition to data standards, the upcoming ED surveillance conference will address important issues concerning linkage of data systems for pre-hospital, hospital, and rehabilitation services. Linking these data systems to provide information on the circumstances, risk factors and behaviors, treatment, and health outcomes related to injury is essential to assessing quality of care issues and to carrying out injury surveillance, research and prevention activities.

Third, NCIPC is addressing the growing epidemic of firearm-related injury in the United States. This epidemic needs close attention and scrutiny. What we are learning about monitoring and preventing firearm-related injuries may have important international implications if, at some point, the epidemic spreads to other countries.

In the United States, firearms are the weapons used in approximately 68 percent of homicides and 60 percent of suicides. In 1991, firearm-related injuries accounted for over 38,000 deaths in the United States. As Lois Fingerhut mentioned in her talk, if trends continue as they have in the past 15 years or so, firearm-related injuries will soon surpass motor-vehicle-related injuries as the leading cause of death from injury in our country.

We know remarkably little about the patterns and causes of nonfatal firearm-related injury. NCIPC has been involved in several projects that will help us to understand better the magnitude and impact of firearm-related injuries and to evaluate the effectiveness of prevention programs that address firearm-related injuries as a major cause of morbidity, disability, and death in the United States.

Currently, through an interagency agreement with the U.S. Consumer Product Safety Commission, we are collecting data through the National Electronic Injury Surveillance System for use in computing national estimate of nonfatal firearm injuries. Preliminary estimates indicate that there are about 2.5 times as many nonfatal gunshot wounds as there are firearm-related deaths in the United States. My colleagues and I are currently preparing manuscripts to summarize our findings, based on the first full year of data collection—June 1, 1992 through May 31, 1993.

We also have two cooperative agreements, one with the Massachusetts Department of Public Health, working on a statewide injury emergency-department-based surveillance system for weapon-related injury, and the other with the New York City Department of Health, establishing an emergency-department-based surveillance system for weapon-related injury in Harlem, New York.

We are exploring mechanisms for establishing a national information database on fatal and nonfatal firearm-related injuries, that will enable us to monitor trends, examine risk factors, and evaluate interventions. Also, state-based behavioral risk factor survey systems are currently being used to assess risk behaviors for firearm-related injuries. Our intent is to share with all of you our experience in developing and improving surveillance systems useful for designing, monitoring, and evaluating prevention programs aimed at reducing firearm-related injuries in the United States.

In closing, I would like to thank Lois Fingerhut, Bob Hartford, and other NCHS staff for hosting an outstanding ICE symposium. It has been very informative and insightful. It has been a real privilege to attend this symposium and brainstorm about how to improve injury data systems and injury statistics with some of the most talented health professionals in the world. My hope is for success, and I look forward to future collaborations with all of you.

Robert Israel

You have all been participating here for a little over 2½ days now, and I am sure that you have been stimulated and found the proceedings of relevance and interest. But I am also sure that you are tired and would like to get up and stretch and go on about your business and, for many of you, to go home. Some of you have been away from home for a long time. So, I promise that I will not spend too much time in making just a few concluding remarks.

Let me start out by saying that one of the primary themes of the International Collaborative Effort on Injury Statistics should be described by paraphrasing the well known admonition by Socrates, "know thyself" . . . "know thy data."

And in that spirit, the objectives of this collaboration include learning more about national injury data through comparisons, through improvement of comparability and of data quality, and strengthening international systems for data collection and analysis, through in-depth understanding of a selected set of national practices for defining and

measuring injury morbidity and mortality, leading to a better understanding of the causes of injury and the means of effective prevention.

A sub-objective of these activities is to develop, on the basis of our mutual experiences, input into the various coding systems, including the new ICD-10, future revisions of ICD, the development of new systems, the modification of other existing systems, and especially, as I have heard from several speakers today, the development and enhancement of potential members of the ICD family of classifications to focus on the more specific and detailed needs in the injury data area.

Now, the content and accomplishments at this symposium can be described as having covered a broad range of issues, including recommendations described in the workshop reports. That leaves us with a large number of problems and issues, as well as recommendations. At the same time we have, through this symposium, I think, strengthened the networking on a personal basis, on an institutional basis, and on national and international levels as well, which should lead to better collaboration within and among nations, including the strengthening of multinational efforts with the leadership of such organizations as the injury surveillance working group, and directly with WHO and its collaborating centers, and the Pan American Health Organization in this region of the world.

In that connection, I say, Dr. Romer, we accept your invitation with great pleasure, to work together, because none of us singly or individually, regardless of the size of our agency, can tackle all of the many facets of the problems of injury prevention and control.

While this particular collaborative effort is, by design, focused mainly on certain aspects of the overall problem, we feel that the pooling together of talents and interests can significantly overcome some of the stated and unstated resource concerns that we all share.

There are some next steps that we hope will flow from this symposium. I can't elaborate on them in great detail because we are going to have to sit down quietly and think about all of the exciting things that have come out in these last 2½ days, but we certainly will try to capture the momentum that has developed here by establishing an international Collaborative Effort Working Group. We will set it up and we will convene a somewhat smaller group later this year. We hope this smaller group can take all of the inputs and ideas from this meeting and integrate the data needs of injury prevention programs with the congressionally mandated responsibility for the National Center for Health Statistics to be the nation's health statistics focal point.

We will try to work with all of our colleagues to define an ongoing activity that will be do-able—what that turns out to be remains to be seen. But certainly, on the basis of our experience with international collaborative efforts of this type, we feel quite confident that if each participating organization and country puts a bit of effort into the overall activity, we will reach a critical mass that will have an impact on the improvement of injury data, which then hopefully will also result in stronger and more effective injury prevention programs.

So, let me thank you. You, the participants, are the leaders on my list to be thanked, because without your hard work these few days, and all of the preparatory work leading up to these few days, we would not have had a successful and useful symposium.

Secondly, I would like to thank our cosponsors, the National Institute for Child Health and Human Development, in helping us to bring this symposium about.

And next, I would like to specifically thank our CDC colleagues. The National Center for Health Statistics is one of a number of components of the Centers for Disease Control and Prevention, particularly working on this activity with our colleagues in the National Center for Injury Prevention and Control, the National Center for Environmental Health, and the National Institute of Occupational Safety and Health.

And I certainly would be remiss in not thanking the ICE Steering Committee, which has put many hours into the planning of this symposium.

I also would like to thank the support staff from the National Center for Health Statistics, especially Ms. Linda McCleary and Ms. Ginger Richards who did a lot of the staffing of the front desk and photocopying for you and made numerous telephone calls and ticket reconfirmations on your behalf. They are probably not here now, but I will extend our thanks to them later.

Finally, I want to give my own personal, deep appreciation of the co-chairs of this whole effort—Bob Hartford, who is my deputy and so I can attest to how many hours he put in on this—and to Lois Fingerhut, who is special Assistant for Injury Epidemiology in the Division of Analysis at the National Center for Health Statistics. Lois and Bob, you have done a very fine job, if I must say so myself. I appreciate it. I think all of the participants appreciate it and I just know that you will feel that all of the hard work that you have done leading to this point is but a prelude to more hard work.

So, in closing, let me remind you that you are about to embark upon a hazardous portion of your day, so let me wish you all a very, very safe journey back home, wherever that may be, and we look forward to seeing you all again another day. Thank you very much.