

Impromptu remarks in appreciation of receiving the Science Award 2000  
Annapolis Center Dinner  
Washington, D.C.  
23 May 2000

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I am profoundly grateful to the Board and Officers of the Annapolis Center for the recognition represented by this award. It is, indeed, an added honor to share the occasion this evening with Senator Thompson whose achievements and stature in the Senate are so widely recognized and appreciated.

It is now 23 years since the last naturally occurring case of smallpox was detected and the needed measures taken to prevent it from spreading further. Just over 10 years had elapsed since the global attack on the disease had begun, in 1967. Before eradication could be certified, in 1980, teams actively searched all countries; a large reward was posted for anyone discovering a case; and countless rumors were meticulously investigated. None proved to be smallpox and no cases have been found since. Countries throughout the world celebrated this victory. Vaccination could be stopped everywhere; no longer would anyone need to carry the little yellow booklets that attested to the fact that one had been successfully vaccinated within the preceding three years; smallpox hospitals could be converted to other uses.

More important was the fact that the most feared of all pestilential diseases had been conquered. Few today can fully appreciate what this disease has meant to mankind. We estimate the during the 20<sup>th</sup> century alone, more than 300 million persons died of smallpox. For perspective as to the meaning of this number, the New York Times estimated recently that during the 20<sup>th</sup> century, some 100 million persons died either directly or indirectly as a result of armed conflict. Smallpox alone killed at least three times that number. In south Asia, it was the leading cause of blindness.

The campaign was coordinated and directed by the World Health Organization. It cost, all in, just under \$100 million in international assistance. The annual savings as a result of vaccination being stopped and hospitals being able to be converted to other uses is estimated to be in excess of \$2,000 million each year. Notably, the campaign continued actively throughout some of the darkest days of the Cold War but with full participation and cooperation by the USSR and the USA. The burden of the program

was widely shared with the developing countries themselves bearing two-thirds of the total cost.

As the smallpox campaign progressed, I became aware of the fact that few of the developing countries were then providing vaccination against measles, polio, diphtheria, whooping cough or tetanus to their children. However, good vaccines were available for each of these diseases and were widely used throughout the industrialized world. Thus, we undertook to persuade the world community to expand the smallpox eradication effort to embrace these other vaccines as well and, in 1974, that decision was taken by the World Health Assembly. By 1990, 80% of children throughout the world were receiving these vaccines and a campaign to eradicate poliomyelitis had been launched. I should point out that the last case of polio in the Western Hemisphere occurred almost 10 years ago -- in Peru, in August 1991.

With new resources -- nearly one billion dollars now being made available by the Gates Foundation for vaccine research, development and application -- a new era looms for children and for adults alike in all parts of the world. It is an era in which increasing success in the prevention of disease can be anticipated.

But there is a dark cloud on the horizon. Within the past 5 years, the threat of bioterrorism has loomed ominously over us, with the smallpox virus being the most deadly threat of all the possible biological weapons. Through defectors, we have come to learn that the Soviet Union built an enormous network of laboratories for the development and production of biological weapons -- including a factory for smallpox virus itself, capable of producing as much as 100 tons per year. Rogue states have sought to develop their own capacities for bioterrorism and such as the Japanese religious sect, the Aum Shinrikyo, and the Osama bin Laden organization have become deeply involved in terrorist activities.

In 1995, the USA launched initiatives to deal with this threat. The primary response strategy relied upon training and equipping special teams of so-called "first responders" in 120 major cities. The first responders were identified as law enforcement officers, fire fighters and emergency rescue personnel. While such teams would be needed and appropriate were explosives or chemicals to be used, the requirements for dealing with bioterrorism were not appreciated. The point was missed that the silent release of a cloud of viruses or bacteria would not become apparent until days to weeks later and then, only as an epidemic began to develop. In an epidemic, the detection, diagnosis and treatment of the cases as well as needed efforts to trace the source and

to distribute drugs and vaccines would fall almost entirely to health care staff and public health officials. The role of police, fire and emergency rescue personnel, as in most epidemic circumstances, would be peripheral at best.

For the past two years, I have been working overtime to educate the Congress and the Executive Branch of the nature of this threat and what must be done to counter it. Finally, but less than a year ago, efforts were begun to mobilize the needed health care and public health resources so as to be prepared should a bioterrorist weapon be released. As yet, the resources made available are grossly inadequate and the effort is only beginning to define its direction but a start has been made and you will be hearing much more about this in the weeks and months ahead.

However, it is my fervent hope that we never again will experience smallpox -- but we are now much less certain of this as an outcome. America and the world have a critical task ahead if we are to effectively defuse this looming threat and avert the potential catastrophe of a world pandemic.

Thank you again for the honor of this award.

Subj: RE: Annual Dinner, May 23  
Date: 5/31/2000 3:03:20 PM Eastern Daylight Time  
From: RSeibert@AnnCtr.org (Richard Seibert)  
To: Dahzero@aol.com ('Dahzero@aol.com')

It was a pleasure to meet you and your wife at our annual dinner. I hope that you found the night enjoyable. I know that we did.

I have had several requests for a copy of summary of your remarks. Unfortunately, we did not tape your comments (on the list for next year) and I was wondering if you would mind sending me a summary of them. I would appreciate it very much.

Dick Seibert

----- Headers -----

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