I am honored to have the opportunity to address this conference. This is an extraordinary time of crisis in the world, a time of danger and opportunity and I think this conference is an extraordinary opportunity to make a difference.

This is ground zero for victims of intentional injury, regardless of nationality and location, regardless of the agent of disease:
- Thermo-nuclear explosion/radiation
- Chemical such as organophosphate
- Biological such as anthrax, or
- Kinetic energy from landmines, airplanes, or small arms.

On June 4, 1984, Dr. Howard Hiatt spoke to a gathering of the Fourth congress of the International Physicians for the Prevention of Nuclear war here in Helsinki and discussed the primary importance of Physicians in describing the scope and nature of the health impact of nuclear war. Dr. Hiatt stated that, though this was not all that Physicians must do, it would be critical beginning.

My task, in my brief time is to discuss the Physician’s role in preventing violent injury and our model linked information system for small arms, specifically firearms, in the United states.

I wish to explicitly employ the public health model of disease and to demonstrate its utility in offering a unifying approach to prevention.

The strength of IPPNW has been its focus – a focus on primary prevention, an inherently public health approach. Its focus historically has been on the agent of disease in nuclear war, in this case radiation/thermal release. By focusing on primary prevention and the agent, the goal is to prevent the release of the agent of disease. There is no rational plan available to work towards secondary prevention, managing casualties after the energy release. The conference in 1984 was effective because of this focus.

This current IPPNW conference is on small arms/firearms. The agent of disease in this case is kinetic energy which from the penetrating projectile and blast effect, results in the tearing, shredding, and compressing of vital organ tissue that result in exsanguination. Loss of vital functions, and death.
This particular “disease” has unique features. The projectiles, fired from the gun generally do not involve mass events, though we are keenly aware of the exception where dozens of people have died and been injured in one event whether initiated by an individual or a militia. It is also a uniquely challenging disease because small arms and especially firearms are a manufactured product, which moves within the stream of normal commerce just like airplanes and cars.

The challenges for public and private organizations and agencies in controlling access to these products are significant.

The first step in any public health problem is to describe its scope and nature. For most diseases – such as infectious diseases and cancer – this occurs with detailed information on the victims, their health histories, the morbidity and mortality toll, and detailed information about the agent & vehicle of the disease. We know a lot about malaria and HIV.

However, this is not the case with small arms and firearm related injuries and deaths. While we have some information on the victims, the information on the circumstances and the product associated with this disease most often rest with criminal justice agencies. Health providers and agencies may therefore know very little about the vehicle of this disease, the manufactured characteristics of small arms and light weapons, how such weapons are marketed, sold, distributed and used. The circumstances of firearm-related events are largely considered outside the perview of public health and medicine and are collected for solving crimes and not preventing injuries.

Current information on this disease in fragmented, incomplete, and collected in siloes of data sets by organizations and agencies dedicated to performing their tasks and not linked by a common prevention goal. Policy initiatives are subsequently based largely on incomplete information and cannot be monitored for their effect.

Our approach in the United states is similar to how many nations are addressing another product-related public health problem: car crashes.

Since 1975, all car crash deaths in the United States have been recorded in a linked data system that includes information on the victim/occupants, the highway/road where the crash occurred and detailed information on the car involved. Medical examiners and coroners and police reports are linked with detailed information on the cars and highway/roadways where the crash took place.

Injury prevention strategies can be rationally generated and evaluated with this comprehensive information.

was a “call” for such a system of linked information for firearm injuries. In 1999, an American Academy of Sciences, Institute of Medicine report again called for such a system to include all intentional injury deaths, regardless of the etiology of kinetic energy, whether by firearm or other means.

We have applied this model to all firearm deaths in Wisconsin. Currently 12 states/cities across the US are utilizing our model approach.

Since 1994, we have linked information from the medical examiner/coroner victim reports with the police agency describing the circumstances of the event and the firearm(s) involved in the case(s). We have linked two additional datasets that further describe the event. In the case of homicides, information on the victims and perpetrators criminal backgrounds is obtained. All firearms related with the event are traced to their fist history purchase, with information from the US Bureau of alcohol, Tobacco and Firearms.

Our goal is to have the most comprehensive, accurate information so that the first step in the public health process of addressing a disease is accomplished and that rational, thoughtful prevention strategies and policies can be generated, tested, and evaluated.

Our advisory Board includes representatives form organizations such as the National Rifle Association as well as traditional gun control and nonviolence advocates. Principles that govern our approach include:

- Linking information for injury control
- Advocating for better information, objectively analyzed, and not on behalf of specific policies

We are now able to fully describe the firearm related homicides, suicides, and unintended events in a defined population and begin to analyze these events that have been largely lumped together as large categories of events: homicides, and suicides. We can now inform programs that are attempting to decrease the incidence or are attempting to intervene with specific policies aimed at certain guns such as assault style firearms or targeted law enforcement initiatives designed for high-risk individuals.

As a result of this effort, we have gained significant knowledge about the firearms and manufacturers linked with these deaths. There are two areas of policy focusing upon small arms as a product that participants at this conference should consider pursuing:

1. Improve out knowledge of the guns and small arms associated with injury by standardizing and improving firearm marking such as with serial numbers that provide information on the firearm model and its design features and origin. We feel strongly that by marking firearms as well as other small arms with a standardized informative serial number, we gain greater transparency, accountability and understanding. We can
more effectively address illicit trade issues and develop appropriate policies for reducing both illicit trade and injury. Automobiles have a VIN # which has been designed to address car-theft issues but which is also useful to public health researchers. We propose a FIN # that can serve a similar purpose. Such a number can convey the following information, either directly or by reference to a manufacturer’s key:

- Make
- Model
- Type
- Caliber/gauge
- Barrel length
- Year of manufacture
- Place of manufacture
- Country through which the weapon has moved
- Specific features (including safety devices)
- Unique sequence number for specific tracing

While the UN Conference on the Illicit Trade in Small Arms and the Vienna Protocol contemplate an international system of marking that can provide the above information, the information may only be accessible to manufacturers and to law enforcement agencies within the country of manufacture. Such limits will deny us the tremendous utility of this information for preventing programming and policy.

2. Secondly, we urge policies promoting the collection of detailed information on the small arms and firearms associated with injury. This information is critical to provide new avenues for programs and policies that address weapon design to be less accessible to those who should not have these products and less available for misuse by those who are authorized to possess them.

In closing, I wish to quote Dr. Hiatt’s speech from 17 years ago here in Helsinki – which includes a quote form dr. Virchow, the German Pathologies. I find these words extremely relevant to this century as they were in the last two.

“In this period of limited dialogue and even more limited mutual understanding, by working together across national boundaries, physicians can add much to the development of a preventive strategy. In so doing they will be heeding the words of Rudolf Virchow, the great 19th century physician scientist: should medicine ever fulfill its great ends, it must enter into the larger political and social life of our time, it must indicate the barriers which obstruct the normal completion of the life cycle and remove them… Should this ever come to pass, medicine whatever it may then be, will become the common good of all.”