Thank you very much, and good afternoon ladies and gentlemen. I’m very happy to be here with you.

I’m going to talk about data collection, and in particular I’d like to focus on what I see as the potential for data from the field. I think it’s useful first of all to make a distinction between collecting data in what I would call “organized” settings and the other type of setting that I’m much more familiar with which can only be described as a “disorganized” setting. I’m hoping that the other two speakers will have the opportunity to speak about data collection efforts in countries that are more resourced, but as many of you will know, the International Committee of the Red Cross has a mandate to work in conflict areas and provide humanitarian assistance, and so the data that I am privileged to work with typically comes from settings where we are essentially substituting for the…

I’ll thank Wendy having gone through the work to provide the background data upon which I could make this graph. Now in any context, but certainly in under-resourced environments, I think it’s important to recognize that data collection is an exercise that requires a substantial investment of infrastructural and human personnel resources. There is a requirement I believe incumbent upon people who take the effort to enlist others to collect data that they provide back to those individuals who are collecting and furnishing data competent analyses of the data that’s been provided with appropriate follow-up in terms of programs or interventions, and above all there has to be all along the chain of data collection, data analysis, and interpretation, there has to be an over-arching emphasis placed on ensuring that the validity of the information that’s being entered into the system is – I won’t say beyond reproach because I don’t believe that that’s ever the case, but – as valid and as credible as one could have it. And I would urge all of us here who are interested in working in this field, especially if we are coming from a medical background, to draw on the enormous reserves of credibility that are afforded socially to the medical profession and encourage all of you to do your utmost to ensure that claims are not inflated, that data is presented fairly and accurately, and that we are I think by that way presenting a case which will in the long run become one which will shape policies.

Within the International Committee of the Red Cross in our surgical hospitals this is a typical entry card that we provide to all patients coming in. And it’s a relatively simple mechanism but we also computerize a lot of the key parts of information from each
patient who we admit for a weapon injury into one of our hospitals. And this allows us the ability to then go back to our database which is a unique database in the world, the largest of its kind, and look at an array of different things. But this I want to emphasize again, takes a lot of time, it takes a lot of effort, and it takes a certain amount of resources to actually field and operate in the hospitals where we work.

I think if you consider the great potential, I mean I’m a great believer in the potential for data from under-resourced contexts to actually make a change, and I would argue that one of the most important things that it can do is that credible data collected appropriately and analyzed appropriately can go a great distance towards sensitizing different types of publics. A good example of this probably is one in recent memory will be the Campaign that evolved to have landmines banned. And here I think it’s important to reflect on the fact that there was well before the campaign proper and images like this and advocacy materials that could be prepared like this there was as solid amount of background work that was done in providing basic descriptive epidemiological information coming from conflict areas that basically said “hey look, there are a lot of things about landmines that make them a very special type of weapon. There’s a lot of things that we as doctors find quite abhorrent in having to treat somebody who had no party to a conflict but was indiscriminately wounded by a weapon technology which will now provide that person with a permanent life-long disability.” So there was a lot of background medical work done in a way that I would argue was uncontestable – very credibly based, not exaggerated, and simply putting up an argument which ultimately put the burden of proof on militaries to document why this particular type of weapon was militarily necessary.

I think another where data from the field can provide a service is it can actually lead to legitimate questions being posed to political entities about the wisdom of foreign policies, and one example I’d like to draw on here is some work by Richard Garfield who wrote during the ‘80s on the Reagan Administration’s policy of supporting the Contras in Nicaragua. One of the things he did in a descriptive epidemiological paper was to simply compare and contrast vaccination coverages between two communities which were affected or not affected by conflict during the insurgency and the counter-insurgency movements in Nicaragua. And as you can see here there are very marked differences in vaccination coverage between war and non-war communities. And if you want we even have the parameter estimates that one would require to run out estimates of lives lost or deaths that would result from these differences in vaccination coverage in these two communities. What was interesting for me in the paper, because there was much more that was presented, there was the fact that Contras were actually specifically targeting health personnel and health facilities, they could credibly make the argument that the foreign policy decision of the Reagan Administration was flawed in the sense that its ostensible beneficiaries in Nicaragua were probably not benefiting at all and indeed were suffering. And they could do so with evidence like this. So I think this is a good example of medical data, if you will, from the field providing a realistic means upon which the wisdom of foreign policy judgements can be questioned.
This is a complicated graph and I’ll apologize for it but what it shows is the number of patients admitted to a hospital of the ICRC in northwestern Cambodia from 1991 to 1995. I did a study in the latter period on the right that I won’t really talk about right now, but I think it’s interesting to put that particular study in its historical perspective and look backwards in time. You’ll see that in the middle there’s a section marked off by the acronym UNTAC which many of you may know stands for the UN Transitional Authority in Cambodia. Well, UNTAC only had two mandates. The first was to disarm and demobilize 70% of the Cambodian fighting factions, and the second was to provide free and fair democratic elections. Well, shortly after arriving in Cambodia, UNTAC abandoned its disarmament mandate, and focused instead on the provision of free and fair democratic elections. Now, I think one of the interesting things for me about this particular graph is it shows that during the period of UNTAC the rate of weapon injuries was dramatically diminished, but it then rose after the departure of UNTAC to levels which in fact were somewhat in excess of what they were during the combat period prior to the arrival of UNTAC. And those numbers that I have there on the graph are the seasonally adjusted mean annual incidence of weapon injury in Cambodia during that time. I think what that sort of evidence can do is provide a further bullet in the armament if you will to argue that frequently the international political community is more ready to abandon disarmament efforts in post-conflict settings than it should be, and that there is not as much perseverance on the behalf of the international community in these matters. And I think that’s something that is recognized by policy makers within the international community themselves. But this sort of evidence certainly helps to highlight it.

The final thing I won’t talk about too much here is this is data from a study I did in Afghanistan in the Kandahar region, simply showing that after the takeover of the Taliban and the passage of this region, the Kandahar region, into a time period where it was now no longer militarily contested by different factions, the overall rate of weapon injuries did decline, but it certainly didn’t decline dramatically. We observed about a 30% decline at our facility providing surgical care to virtually all war-wounded or weapon-injured I should say in that region. And I think what that highlights is the fact that there is clearly a lot of use of weapons that goes on that doesn’t have anything to do with combat proper.

Another potential use of data from the field is that one can actually use this information to evaluate different types of interventions. This is data from a study in Cambodia where I’ll just draw your attention to the two histograms on the right marked “civilians.” This data comes from approximately 900 people who we admitted for weapon injuries over the course of one year. And we can divide these individuals into individuals who were either civilians or combatants, and we can also ascertain whether the injury was inflicted in a combat-related incident or not. Well, many of us have often heard what I can only characterize as an exaggerated claim given that conferences like this usually where somebody stands up and says “90% of victims today are civilians,” or “90% of casualties
in modern day conflict are civilians,” and I’ve even heard people carry on from that and say that the majority of them are women and children. Well, in fact there’s certainly no evidence that I can find within my own institution’s experience to support that. This particular study which is the only one I know of where we prospectively ascertained combatant status as part of the study, shows that we had about 50% of individuals injured over the course of a year who were civilians. It is not the fact that 50% is a more accurate reflection of the true number that is important to me. What is important to me is that if you look at those two different bars, the combat related injuries that civilians endured were virtually entirely related to inappropriate use of stand-off artillery and mortar fire being directed at inhabited areas. The mechanism of injury for virtually all of the civilian injuries that occurred in non-combat contexts were the use of firearms in the resolution of interpersonal disputes. Now that sort of insight into the mechanism of injury for different types of incidents is important for preventive interventions because there is a completely different prevention message for those who would wish to do something to protect civilian populations in wartime from being injured during combat between factions then there is for those who would like to do something to protect civilian populations from the use of military specification weaponry in the resolution of interpersonal disputes. They are very, very different prevention messages.

I think it’s good to talk a little bit about limitations of data as well, and I think really these are divided into limitations on the actual data itself, how good you can get it. I think increasingly I’m feeling the need for qualitative data collection and data analysis, which is something that I think has to date at least been underutilized. There is another layer of problem, though, and that is in the overall readiness of the political community or largely political community to accept input from the public health system. And that’s not a new problem, I mean historically, public health people have had a struggle with moving evidence-based decision making through a network into policy creation.

I want to close with a few comments on the scope of data collection. I think that we do have to think quite broadly about this problem. This might seem irrelevant that I put up a slide that plots death from tuberculosis in the United Kingdom but I think what’s interesting about this is this is historical data from a medical historian named Thomas McKowan. The first medication that we actually had to treat somebody with tuberculosis was streptomycin. And essentially it came on the market at around 1945. What’s interesting about this graph is you have to ask yourself the question “well what was happening prior to 1945?” And what was happening was a tremendous range of improvements in poverty alleviation, better housing, literacy efforts, birth-spacing for families, the industrial revolution providing greater means of prosperity for families. All of these things played a much more determinitive role in reducing death and morbidity from tuberculosis than did the beginning of formal medical treatment. Now why I think that’s important is because we have already seen the face of small arms light weapon injuries related with widespread availability of weapons. It involves an array of other factors that include many factors that push demand for weaponry, that push social
readiness for individuals to use weapons in the course of interpersonal disputes, and I’m rather pessimistic that approaches that focus solely on supply-side solutions or reducing availability of weaponry in a given instance will be very fruitful unless we’re looking at a lot of these other issues as well.

Now, I’m going to end my remarks there in an effort to keep us all on time. But thank you for your attention.