Good morning.

I want to leave some time for discussion so I'm going to dive right in. I have three main points to make today, which are all related.

First, we need a broader conceptual framework to understand risk management and risk assessment.

Second, we need to be conscious that the process of assessing safety is at least partly political.

Third, we need to recognize that overtly political agendas, especially on the risk management side, are often couched in terms of science and health to increase their cachet and legitimacy.

Although most of my examples will draw on IDRC's experience with research in the South, or developing world, I do think that these issues are also relevant to Canadian policymakers.

Let me turn to my first point: the need for a broader conceptual framework to understand risk management and risk assessment.

Before we can compare international approaches, we have to recognize that massive inequities exist between the majority of the world who live in the South, and the minority who live in the North. These inequities shape all aspects of health risk assessment and management.

There are inequities in health status. People in developing countries have drastically lower life expectancy and shoulder a greater portion of global disease burden.

There are inequities in health risks. According to the WHO, malnutrition was the leading cause of disease in 2000. Unsafe sex was the next highest risk, followed by unsafe water, sanitation or hygiene; high blood pressure; tobacco use; alcohol consumption; high cholesterol; and indoor air pollution. We've known about these risks for many years. More than sophisticated new technologies, they need monitoring and action-oriented contextual analysis.

There are inequities in health systems, which are drastically underfunded. Health systems in the South are further eroded by a variety of other factors such as structural adjustment policies, which tend to undermine public services; the migration of health professionals; and high drug
costs. Few reliable population databases exist. This makes it difficult to monitor progress on health risks or to detect new ones.

There are inequities in health research. I've called this presentation "A View from the 10/90 Gap" because less than 10 percent of global health research spending addresses the problems faced by 90 percent of the global population.

All this to say, the context for health risk management is different in developing countries. They have a different set of health risks and a health care system in crisis or not functioning at all. The impact on people is devastating and life-threatening — the magnitude of these risks is unimaginable to most of us in the North, even after September 11. We need to understand these inequities, and how they play out, before we can talk about risk management and assessment in the South.

How would we go about broadening the framework for understanding risk assessment and management?

First, we need more collaboration between disciplines, in both research and politics.

The Sanitary and Phytosanitary (SPS) provisions of the WTO and the food safety rules of the Codex Alimentarius, for example, are currently the domain of trade negotiators and specialized regulatory agencies. Their scientists aren't usually involved in implementation or political issues. As a result, academic and regulatory discussions of risk and product safety are very remote from the survival struggles and everyday risk assessments of ordinary people, be they farmers or health workers or consumers. It's another gap we need to close.

Second, in developing countries, we need a multi-pronged approach to make risk assessment and risk management fruitful.

Currently, there's an emphasis on biotechnology and the need to develop expert panels and regulatory bodies in the South. I agree.

But expert panels alone aren't going to make a difference to the poor majorities of the South. Scientists must link these highly technical approaches to the progressive development of population databases, surveillance systems and routine monitoring, as well as social and epidemiological analysis.

And scientists must integrate this approach with the development and implementation of policy that addresses the major risks to health in the South, especially poverty, as well as the local and global structures that maintain poverty.

This is not an original notion: the 1997 report of the Risk Commission in the United States found that chemical-by-chemical quantitative risk assessment is inadequate. They urged that strategies include genuine multi-stakeholder collaboration and social, political, cultural, public health and ecological analysis.
This won't happen until we recognize that existing "technical" risk management strategies are not value-neutral; rather, they embody value choices that have been made tacitly rather than explicitly.

This brings me to the second major point I want to make today: we need to be aware that the process of assessing safety is at least partly political.

Conventionally, risk assessment has been seen as a combination of biology (mostly toxicology) and statistics. Risk management, on the other hand, has been seen as a much more political process. In practice, both involve politics and both are amenable to rigorous and systematic analysis, which is the hallmark of science.

Consider the controversies over risk assessment in areas such as biotechnology. Or the widespread perception that trade interests routinely trump health and environmental concerns. These point to the need for a more sophisticated analysis.

Specifically, in addition to evaluating product safety, the assessment process should include analysis of the environmental and socio-political context of production and — are you ready — the power relations playing out in the regulatory process itself.

Ultimately, we need specialist knowledge of health, socio-political processes, regulation, and so forth. But we also need a multiplicity of spaces and mechanisms for informed, transparent, and vigorous public debate.

Experts need to recognize they have a responsibility to provide clear, trustworthy and useful information. When experts dismiss public concerns as "irrational," "emotional," or "political," they are, in fact, giving themselves a failing grade in communication. They are also failing to understand how different domains such as health, economic insecurity, and perceived political powerlessness are intertwined in real life.

To sum up, then, this broader framework would encompass more cross fertilization between disciplines; a multi-pronged approach; the acknowledgment that risk assessment is political; and finally, the importance of understanding power relations.

At this point, I would like to say a few words about IDRC's work, and our approach. We certainly don't claim to have all the answers, but we are trying to put many of these ideas into practice.

For the past 30 years, we've supported research and research capacity building in developing countries. We favour multi-disciplinary, participatory research that brings together researchers from different disciplines — an economist, a medical anthropologist, and an environmental engineer, for example. Moreover, we stress the need to work with local people to devise solutions to local problems.
I'll mention a few IDRC programs that point to the usefulness of an expanded conceptual framework:

• We've helped develop a demographic surveillance system and user-friendly tools to regularly record and analyze the causes of death in Tanzania. This has enabled district health teams and the national government to allocate scarce resources more effectively and equitably, and to modify national treatment guidelines for malaria.

• We've been building capacity among policy makers, health researchers, communities and the agricultural and natural resource management sectors in Africa and Latin America. The goal is to ensure that ecosystem management and human health are recognized to be intimately connected. I might add that when our partners in the South heard about the Walkerton tragedy, they thought it was just "common sense" to deal with both water quality testing and watershed management. (They were also astounded at the public outrage and resources that can be mobilized by 7 preventable deaths, but that is another story. Or is it, really?)

• We're supporting health systems, community groups and decision makers in Africa, Latin America, and India to develop effective strategies for informed and pro-active civic engagement in important public health debates

• We've been working with policy makers and researchers in the South to strengthen their analytic and bargaining capacity in trade negotiations, including finding more effective ways to participate in the setting and implementation of product safety standards.

• Finally, I'll mention what we call the Crucible project. This brought together stakeholders ranging from industry to aboriginal NGOs to debate intellectual property issues related to seeds and biodiversity. The discussion was respectful, but it did not try to seek consensus. Rather than looking for the lowest common denominator, the Crucible processes allowed each "side" to present and argue its best case.

I would like to turn now to my final point: the need to recognize that overtly political agendas, especially on the risk management side, are often couched in terms of science and health to increase their cachet and legitimacy. This occurs both among the more and the less powerful. But I am particularly interested in how "science" and "health" are used to maintain inequalities.

Sometimes a medical label is the only socially legitimate way to protest against powerlessness: people get sick and get a doctor's certificate instead of fighting the system.

Sometimes the agendas are more straightforward: there are significant economic stakes. This at least is the "civil society" perception of why commercial interests often oppose using the precautionary principle to assess the risks of biotechnology, for instance. Or why the "harmonization" of pharmaceutical safety standards tends to harmonize down across countries, instead of up.

Usually, there are multiple layers to a story. This is what happened in the debate over whether Zambia should accept genetically modified maize to fight off starvation.
When the issue first came to light, the rationale for Zambia's refusing the grain focused on health and environmental concerns. In the North, policy makers focused on the fact that it was "irrational" to worry about long-term health effects when, in the short-term, people were starving. The United States insisted that Americans had been eating genetically modified corn for years without any problems.

The North essentially framed the debate in terms of health risks from individual consumption. This sat well with the dominant approaches to food safety risk assessment and risk management. And it put out of bounds any debates about agricultural "dumping" or subsidies.

In Zambia, however, it wasn't viewed the same way. The government was concerned about the potentially devastating impact of losing access to European markets if Zambian livestock exports weren't certified as "GMO free." The media and civil society groups were also worried about unknown long-term environmental risks from farmers planting GM seed of a staple crop that was originally intended for immediate consumption.

Appropriate risk management requires highly specialized, technical agencies and procedures. But it also needs a thorough understanding of what is really at stake, and for whom.

I'd like to wrap up with some thoughts on the challenges for risk management in developing countries:

• research is essential at every level: from routine monitoring and surveillance to toxicology to socio-political, economic and ecosystemic analysis, to understanding what works and what does not work, and why. Building and sustaining capacity for this robust applied research is a major ongoing challenge. It will not be met through one-off efforts, be they large or small.

• risk assessment and the resulting management strategies have to examine global and local population-level risks such as poverty, climate change and poor sanitation, as well as the direct individual exposures and behaviours more often addressed under medical model approaches to risk. This is particularly important among poor populations which have very little control over their physical, social, or economic environments.

• risk assessment and management related to new technologies or to specific diseases or conditions must be integrated with strengthening health systems and with building capacity and an evidence base for pro-poor, multi-sectoral policies for health.

• there is inadequate support to address the few risk factors that are associated with most of the global burden of disease (malnutrition, unsafe sex, inadequate water and sanitation, indoor smoke and, of course, poverty). This gap exists in policy, in practice, and in research. It reflects the tacit value choices that continue to be made both in the North and among those with resources in the South.

• countries of both North and South need informed, constructive, but not necessarily consensus-based dialogue among groups pursuing economic, health, environmental and human
development or social justice agendas. In the South, it is particularly important to articulate each of these agendas clearly, so that an appropriate balance can be built.

That concludes my presentation. To sum up my three main points again:

One, we need a broader conceptual framework to understand risk management and risk assessment.

Two, we need to be conscious that the process of assessing safety is at least partly political.

And three, we need to recognize that overtly political agendas, especially on the risk management side, are often couched in terms of science and health to increase their cachet and legitimacy.

Thank you very much. I would be happy to answer any questions.