MCDOUGALL

The State of National Governance Relative to the New International Health Regulations

Ottawa, September 20-21, 2006
IDRC Boardroom/Nayudamma Lounge, 14th Floor, 250 Albert St., Ottawa

Legend:

RS = Dr. Ron St. John	KW = Dr. Kumanan Wilson	DF = Dr. David Fidler
BP = Dr. Bruce Plotkin	SL = Dr. Stefano Lazzari	AM = Dr. Anthony Marfin
RH = Rebecca Hathaway	EL = Dr. Expedito Luna	AMc = Dr. Allison McGeer
HJ = Dr. Howard Njoo	JS = Dr. Jeffrey Scott	JG = Dr. Jian Guo
JZ = Dr. Jianzhong Zhang	SV = Dr. Stephane Veyrat	HL = Dr. Harvey Lazar
VP = Val Percival	BT = Dr. Barbara von Tigerstrom	CH = Cath Halbert
YF – Yuri Fedorov	SK = Dr. Sampath K Krishnan	SP = Unidentified Speaker

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Morning, September 20, 2006

SETTING THE STAGE

Chair: Dr. Ron St. John

I am the Director-General for the Centre for Emergency Preparedness and Response at the Public Health Agency of Canada. It's a privilege and a pleasure to welcome you here, first to Canada and second to the International Development Research Centre... Council, sorry, and to this meeting.

I'd like to first of all introduce our Deputy Chief Public Health Officer of Canada, Dr. Bob Clarke, who will say a few words as well.

Dr. Bob Clarke

Thanks, Ron.

Again I'd like to just welcome you all here on behalf of the Canadian government and also the Public Health Agency of Canada, IDRC and all those who helped prepare for this meeting. This is a very important meeting for us, and I think just from the interest that has been generated in this meeting. The International Health Regulations are certainly something that we need to learn more about, and the issues around governance and application of these International Health Regulations will be a very interesting discussion.

So I really welcome you here and look forward to hearing the proceedings of this meeting. Thank-you.

Dr. Ron St. John

Thank-you. Dr. Lazar?

Dr. Harvey Lazar

I'm Harvey Lazar. I'm not on the agenda, but I'd just like to tell you in 15 seconds that the boardroom you're in is the boardroom of the International Development Research Centre, which is an NGO, a Canadian NGO with sponsorship from the Canadian government which works at arm's length, and it's one of the... The pictures you see on the walls around you are former members of the board of IDRC and I would just say, in Canada we think it's one of the

most effective NGO's around the world, and I just thought you might want to know where you are. If there's anyone from IDRC who would like to add a word about just the nature of what you do...? No? Okay, so thank-you for that.

Dr. Kumanan Wilson

I thought we'd begin with just a round of introductions. My name's Kumanan Wilson. I again would like to thank everybody for participating in this event.

I'm a physician at the Toronto General Hospital, I'm with the University of Toronto and Queen's University, and I'll be making a few more comments later about how we hope this workshop unfolds.

Dr. David Fidler

I'm David Fidler. I'm a Professor of Law at Indiana University School of Law in Bloomington, Indiana.

Dr. Jeffrey Scott

I'm Jeff Scott, I'm Chief Medical Officer of Health, Province of Nova Scotia, in Canada.

[Several speakers inaudible]

Dr. Jianzhong Zhang

I'm Zhang Jianzong from the National Institute of Communicable Disease Control and Prevention, China's CDC.

Dr. Sampath K. Krishnan

I'm Dr. Sampath Krishnan, I'm the Coordinator of Communicable Diseases Surveillance at the country office of the WHO in India.

[Several speakers inaudible]

Mr. André Basse

Je suis André Basse. Je suis diplomate de formation et j'ai négocié donc le Règlement sanitaire international pour le compte du Sénégal et pour le compte du Groupe africain. Merci.

[inaudible]

Dr. Expedito Luna

I'm Expedito Luna, I come from the Ministry of Health of Brazil, where I'm the Director of Communicable Disease Surveillance and Control.

Dr. Anthony A. Marfin

Hi, I'm Anthony Marfin, and I'm the Deputy Director of the Division of Global Migration and Quarantine at the United States Centers for Disease Control and Prevention, and I'm here representing the Department of Health and Human Services.

[inaudible]

Mr. Bruce Plotkin

Good morning. Very glad to be here. My name is Bruce Plotkin. I am the legal expert on the International Health Regulations implementation team, so I work at WHO together with the rest of the team that is implementing the IHR.

[Two speakers inaudible]

Dr. Ron St. John

Thanks very much. I would ask please that you remember to use the microphone when you speak because we do have translation and we are trying to record the proceedings, so they'll miss it if we don't use the microphone, so I would appreciate it if you would just press the red button when you speak. Thank-you.

Dr. Kumanan Wilson

Once again I'd like to thank everybody on behalf of the conference organizers for making it to this workshop, and in particular I would like to thank those that have travelled long

distances to make it here. I know many of you were on flights most of the day yesterday, and I apologize for any inconvenience you may have experienced.

Up-front, is there any logistical issues or concerns? I think we can direct people to Christopher, myself or Patty and we'll try to help with any of those issues.

Most of you have received some of the information leading up to this workshop, and again the very broad objective is to understand the governance challenges to implementing the International Health Regulation, focusing specifically on how these governance challenges are unique to federal nations or non-federal nations that have decentralized systems of government.

And in essence there'll be two major points of emphasis during this workshop. One is I think obviously everybody here recognizes the importance of the IHR and the importance of the work a lot of people are doing around the table here, and the necessity to effectively implement the International Health Regulations. And then the International Health Regulations also offer several unique challenges, it's in many ways a revolutionary new approach to managing some of the problems in a globalized world, and because of its uniqueness countries with older systems of government – such as federal states and unitary states – may have difficulties in adapting to this new approach.

The overall goal is to hopefully have a relatively frank and open discussion on these governance challenges, but most importantly it'll be for each of us to learn from each other and learn from each other's experiences, and then from the synthesis of the information that comes out of this workshop we hope to provide some key messages and learning materials for others to benefit from as well.

The general approach is this will be a two-day workshop. We are fortunate to have nine country presentations – these will be approximately one hour each – and we'll also have two presentations representing more regional perspectives.

In general these presentations will be approximately 20 to 30 minutes – there's obviously flexibility depending on the amount of content – and then I think the most critical component will be a discussion where each of you will have an opportunity to ask questions – and very specific questions if you wish – about some of the challenges countries may be experiencing.

Just a point of clarification, people were invited here as experts in public health in the IHR from a specific country, not necessarily as representing that country. If they wish to state that they would be representing the position of their country they are free to do so, but otherwise

we will not take the comments as being representative of the country from which they came. Not an official statement.

Again, just another point of clarification. This again is not in a... the objective of this workshop will not be to identify past problems or any challenges people have had in the past – unless that's an essential part of the background – but primarily to look forward and again to describe strategies countries may be working on or beginning to examine to overcome the potential governance obstacles to implementing the International Health Regulations.

And finally – and we'll discuss it a bit more at the end of the workshop – we will be providing edited transcripts to all participants for their comments and feedback. From the information we obtain from this workshop we hope to develop a list of key messages and the suggested strategies to assist federal nations and decentralized states to assist them with some of the governance challenges that will be discussed, and then ideally we could develop learning materials to more concretely assist countries in the WHO in this very important process.

Perhaps we can take a few quick questions on any points here that were particularly unexpected or require clarification...? No? Okay, thank-you very much. I think we'll begin with our first presentation. Does anybody on the conference organizing committee want to make any comments? No?

Dr. Ron St. John

The first speaker I believe is Bruce. You're going to speak first, is that correct? Tony, I mean. Sorry, beg your pardon. Sorry, Bruce is WHO. No, I'm sorry, is David Fidler speaking now? Yes, you put me off-track, Kumanan.

Dr. Kumanan Wilson

I apologize.

Dr. Ron St. John

Sorry, I apologize. I got off-track. David, you're going to go first. Sorry about that. I got off-track.

Dr. David Fidler – Overview of the New IHR

Thank-you. Just let me first personally thank Kumanan, Chris, Harvey, and Ron for inviting me to participate in this event. It's those gentlemen that really had the vision, the perseverance and the patience to see this gathering come together, and I just wanted to thank them personally for including me in this. I'd also like to thank all of you for coming to be a part of this. I know many of you have busy and probably impossibly busy schedules but you found time to join us on this effort.

I say these thank-you's not just a matter of etiquette but I think that it also reflects well on all the time and effort that you and the organizers of this effort have put together, and it sort of underscores for me, I think, the two themes of what I want to talk about in my brief remarks this morning, and I promise I'm going to be brief.

I think this event and your participation in it highlights the importance of the new International Health Regulations in two contexts. First, I think us getting together to talk about this signals appreciation of the new International Health Regulations as a governance mechanism in global health, and second it also signals appreciation that this important innovation that the new IHR represents in terms of global health governance depends critically on its effective implementation in countries throughout the world, and I just want to briefly share some thoughts on the themes of innovation and implementation that I think are really at the heart of what we're going to be doing today and tomorrow.

Now, a major theme of the writing and the scholarship that I've done on the new International Health Regulations has attempted to convey both conceptually as well as practically how radically different the new International Health Regulations are from the approach that was taken in the past with the IHR and the predecessor international legal regimes that were established, and I call that older approach the classical regime.

My talk is billed as an overview of the new IHR but I just want to make sure that... you should rest assured I'm not going to go through all the different ways in which the new IHR differ from the old classical approach, which is actually a relief for me because most audiences I talk to about this have absolutely no idea about the details. I think this group actually understands the way in which it's different so I'm not going to go into those details.

But what I do want to talk about is to focus a little bit on these themes of innovation and implementation, because I think it's important. And as I started thinking about making remarks

to this group I began to sort of have flashbacks, memories of the years that I'd been working on the IHR, and I can still vividly recall some of my first forays into the world of international law and public health, which would be just about over ten years ago now. I naively assumed, as a rather ill-informed international lawyer on issues of public health, that people in both international and public health would know about the International Health Regulations and would also be interested in them. The most typical response I received to my early inquiries were either blank stares of total incomprehension – which is indicating that people I was talking to had absolutely no idea that the IHR existed – or laughter, which indicated that the people I was talking to thought that my interest in the International Health Regulations, or that the International Health Regulations themselves, were something of a joke.

It's very different today. Today I get inquiries from people about the new IHR. People are interested in how the new International Health Regulations relate to security objectives concerning biological weapons. They want to know about how the new International Health Regulations fit with the rules of international trade law that operate at the World Trade Organization. They want to know how the International Health Regulations contribute to the health-related millennium development goals that the United Nations has established. And they want to know how the new International Health Regulations incorporate human rights principles.

Now, often these questions – and others which I haven't mentioned – they come from people who are not experts in public health, they're not experts in international law, they come from people working on national security, development policy, the protection of human dignity, or issues related to the liberalization of international trade, and this indicates just an extent to which the new International Health Regulations has impacted across such a wide range of policy areas.

I've also been asked why has the UN Secretary-General stressed repeatedly the importance of the new International Health Regulations with respect to strategies that he and others are devising for reform of the entire United Nations. Why, I've also been asked, have high-level panels and experts linked the new International Health Regulations with developing new forms of governance, not only globally but also at the national level.

Now, the nature and frequency of these questions have of course been stimulated by the impact of events that have taken place in the world, particularly the outbreak of SARS, the

concerns that exist about bioterrorism, the issues related to avian influenza, and of course the fear about pandemic influenza.

Now, recognition of the importance of the governance innovation that the new International Health Regulations represents comes, I think, tempered with an appreciation of the seriousness of the challenges that the new International Health Regulations and I explain to people how radically different and historic the new International Health Regulations are as a matter of international law and international governance, people don't stare at me with blank faces and – at least not to my face, anyway – they're not laughing at what I'm saying. But what I do tend to get is the raising of the skeptical eyebrow when I describe how new and different this is. They understand conceptually what I'm talking about in terms of how innovative the new International Health Regulations are, but I think they're wondering about the implementation of this new innovation, and you sort of see them thinking, "If it sounds too good to be true, it probably is."

Now, international lawyers are accustomed, they're very used to this kind of skeptical reactions because we have to live with them all the time. States' international organizations in many different realms of international relations create new, innovative schemes, new treaties , all the time, and these often raise hopes that we're finally going to turn the corner. Of course often those hopes are never achieved because those innovations are never implemented to the point at which the promise becomes reality.

And we've actually seen this pattern in global health on a number of occasions. After all, once upon a time the classical regime in the old international health regulations were also considered innovative and progressive, and of course that image no longer exists because that image has been tarnished by the failure of states to implement the innovations effectively and to comply with those regimes.

So implementation is really what this meeting is all about. The scope and substance of the new International Health Regulations are innovative but they're also much, much more demanding of countries and of the World Health Organization than any previous incarnation of these set of rules. In addition, the harmonization of a global strategy – which is achieved at the level of the International Health Regulations – meets in this implementation phase the diversity of governmental systems and public health realities that exist around the world.

We are essentially facing today a challenge – and I'm going to paraphrase Edmund Burke, here – and that challenge is achieving a unity of purpose globally through the diversity of operations locally.

This is why I personally think that this meeting – as well as WHO's ongoing efforts on implementation – is so critical, and I do really look forward to hearing the views and the opinions of the people that are gathered around here today.

And I really can't think of any better way to close my brief remarks this morning than to yield the floor to our colleagues at the World Health Organization who I think shouldered successfully the need to achieve innovation in global health governance, but who also now have to face, shoulder to shoulder with the rest of us, the challenge of implementation, the challenge of turning that remarkable vision into a sustainable governance framework for the 21st century.

Thank-you.

Dr. Ron St. John

Thank-you very much, Dr. Fidler. We'll now turn the floor over to – in proper order, Stefano, you go first – Stefano Lazzari from the Lyon Office of WHO.

Dr. Stefano Lazzari – Current WHO Approaches to Implementation Activities

Yes, good morning everybody. We decided to switch presentations simply because mine will be a bit more informative in providing you with an update of where we are in terms of WHO activities towards the implementation of IHR, and Bruce will go there a bit more into the more key topics for discussion for this meeting which is the governance and the issue of federalism and how this can be addressed.

I have a short presentation. I'm going to try to keep it just to the main points, the main concept, and provide you really with some useful information on that.

Perhaps while the presentation is coming up let me just say that WHO is organizing itself in terms of IHR implementation re. IHR secretary to the group that followed discussion the text of the regulations is now being restructured under the leadership of Dr. Rodier that most of you know, and is organizing itself around a number of areas that I will illustrate you in implementation, recognizing that so many different partners and peoples and expertise is required.

This is very much construction and work in progress, and I'm just going to try to give you an update of where we are with some of these aspects.

Of course a major step in the implementation strategy has been the World Health Assembly resolution on early IHR implementation last May that sort of accelerated the whole process of implementation based on the agreement among WHO member states to apply the early implementation of some aspects of the IHR on a voluntary basis, and this very much in the context of pandemic influenza, so there are a number of elements that are under the IHR that now member states and state parties have committed to implement voluntary earlier on from this initial directional focal point to some of the specific work related to pandemic influenza. And I'll come back later to this, but definitely this resolution has sort of accelerated the whole process of implementation and put also some pressure on WHO and I think all member states to start to becoming more active in addressing the issue of implementation.

WHO is defining a WHO strategy as such – again, as I said under the leadership of Dr. Rodier – that is built around three different domains and seven specific areas of work. And this is all done building on existing, we're not really starting from scratch in IHR. (There is a whole?) background of work done first of all (by the various?) IHR implementation teams. Many of the background consultation and documents prepared will be also very useful during the whole implementation phase.

The whole structure of WHO alert and response operation is very much important in the context of the implementation strategy. Other ongoing efforts in terms of disease surveillance, of disease response and other WHO relevant control programs also come into the picture, and we have a number of regional strategies for surveillance and response that very much meet many of the elements and the requirements of IHR implementation. So there are a number of things already in place that we have to keep into consideration in developing the strategy.

The three areas, the three domains we find are the very management of the project as such and the way WHO organizes itself. The whole alert, preparedness and response operation side, and the national core capacity – what member states and countries with WHO support have to put in place – and we have identified these different seven areas. Going anti-clockwise you have the overall coordination of this IHR implementation project or effort; some specific IHR bodies and procedures that need to be put in place, the IHR focal points, the roster expert, the emergency committee, review committees and all that are these other requirements which are in

the IHR. Some IHR communication strategies are required, that is very much to build (that focus in?), interest and knowledge about International Health Regulations more broadly than what it is nowadays. In terms of national core capacity we have of course the country alert and response operations as well as the whole issue of points of entry and what needs to be built in terms of point of entry. And then for alert and response operation there's a number of elements already in place, the whole process of intelligent information collection, verification, assessment and response to global threat, as well as some work that is ongoing on specific threats, and of course pandemic influenza's the first one that come that comes into the picture but there are many others the WHO programs are already involved with.

So we feel that our efforts in IHR implementation will have to revolve around these seven areas, and specific strategies are being developed for each and every one of them.

I will use this framework just to update you on where we are, starting a bit with the project management side, the coordination, the bodies and procedures, and the communication side.

And coordination is going to be an issue here. IHR touches so many different domains and areas and expertise that many players have to be brought on board, they have to understand and they have to in a sense speak the same language and work together if we are to achieve the results. And this is a challenge in itself, I think – within the organization, but also globally – to achieve this coordination of many different players, institutions, agencies, both at international but also at regional level. And of course the issue of federal states it's part of this coordination challenge.

We have decided to build, in the WHO in Geneva, a WHO taskforce that will comprise many of the players within the organization has the tools to ensuring this coordination at least within the organization. And this taskforce is not found yet but it's going to be that people are going to be identified and put together within the next few weeks, so it's a process already in motion.

In terms of bodies and procedures the resolution of the Assembly has called for identification of national focal points, and of course this is the definition that we have in the text of the regulation. I would like to stress here that the regulations talk about a national centre, not an individual, whereas many state parties in fact have come back appointing an individual to that, and this is still an ongoing discussion that we have with each of the state parties.

This is the situation as of mid-September, 60 national focal points have been officially designated and WHO has been informed of their details and contact details, and you have also distribution by regions, which for some regions I must say it's still a bit disappointing, but we hope as we keep negotiating with them the procedure will accelerate.

If your country's not on the list, of course, the message is clear. [laughter]

The information on each national focal point is put in a database – and this an example database – with all the contact details and how they can be reached by e-mail, phone, fax, and every other means, and this database will be continuously updated as we get new nominations or as, perhaps, member states or state parties decide to change the definition of the focal point. So, 60 out of 192 member states still is a bit of a way to go.

Also, the roster of experts is being put together. These are experts in relevant fields of expertise that can be utilized in terms of a response to a public health emergency of international concern, and it's also the source of members for the emergency committee or review committees, and it's appointed by the DG. As of today 45 states have proposed experts for membership. And once again, if you haven't done it yet I think we would very much encourage your countries to come forward and propose experts because we want the roster to be of course as broad and as rich as it can possibly be. All this will go, again, into a public database, an IHR expert roster that is being put together.

On the alert response operations side, many of the elements in relation to the IHR are actually already in place in the overall ___ (and goals and actors?) but there's a couple of things that have been done. One is in trying to apply the concept of the IHR to the existing system, and you see here a bit of a summary of how an event will have to go a different... a series of steps during the notification and determination process starting from, of course, the detection by the disease surveillance system in the country, through the national IHR focal point that will have the responsibility to communicate with WHO contact points – usually at regional level but also in Geneva – and then it will go to the WHO director-general who actually has the responsibility to determine whether the event constitutes or not a public health emergency of international concern and recommend appropriate members, of course in consultation with state parties and with the advice if required, of the emergency committee.

So all these elements and the notification system is now being revised and discussed, and let's say in a sense re-adapted to the requirement of the IHR, and in particular we have identified

IHR counterpoints in every regional office which will have a dedicated phone number, a dedicated fax number and e-mail, and also will be provided where feasible with BlackBerries so they can be reached any time, and a roster of duty offices being organized so that the presence and the contents will be available 24 hours a day 7 days a week. And standard operating procedures are being developed for each region on how this whole system should work.

And some of the work will have to also filter down to our country offices that as well are going to have to organize themselves in terms of facilitating the contact between the national focal point and our IHR counterpoints. This is a work in progress and I think in a matter of a few weeks the system will be in place in every region.

Also in terms of specific threats the influenza pandemic taskforce has been put together. It functions similar to the emergency committee but it will basically end its functions when the emergency committee of the IHR will come into place ___ (to force of?) the IHR. The mandate is to provide technical advice to the DG on all issues related to pandemic and avian influenza, and there is a meeting of the influenza pandemic taskforce already planned for the end of September. It's the first organizational meeting to really see how, again, they can function in the interim and how then their functions can be transferred to the emergency committee.

I will then go into things that are more close to the work we're doing in Lyon, and that's the development of national core capacity. That, in some ways, is going to probably be one of the most challenging aspects of IHR implementation. We have organized in Lyon – and I think some of you might have attended or seen the results on international consultations specifically on the topic national capacities – with the objective no identify how to translate Annex 1 in the requirements of the IHR into operational guidance, and develop out of that strategies and mechanisms to develop this capacity within the time-frame of the IHR.

We focus there on three or four areas of functions: the early warning system; laboratory support; response capacities required at country level; and the whole issue of communication and coordination, always at the national level. The report is available, and out of that report now an advanced draft is being developed on what we interpret as national core capacity for IHR.

It is quite a difficult issue. Defining what we mean by core or minimum as opposed to a perfect system is quite challenging, and defining it in a sense that is universal and applicable to countries as different as maybe China and Tonga, or Burkina Faso and Belgium. It's really

challenging, and we're trying to address this is very many different ways. This work will have to be done, brought up to more global and international discussion.

Also an issue is at what level this capacity will actually be required, and the issue of federalism here is very important because of course some of these functions may be a central level but it could very well be delegated in some countries at the more peripheral level, requiring a whole different set of implementation.

A special point is also how can we then assess this core capacity within the time-frame required by the IHR – which is two years – and we're looking at what existing guidelines, tools, training materials, can actually be used or adapted to the IHR requirement. All of this will be part of a strategy as well of the definition of this core capacity.

I will touch very briefly on two concepts. One is how can we develop a system that is universal, and one idea is to have maybe IHR Level A, Level B, Level C, according to the status of development of the country, which is a possibility but it will make it difficult to define which countries go in A, B, C or D or so on. I prefer – and I put this together for you this morning so I apologize – a concept car. What does this mean? It means car some in all sorts of shapes and flavours all around the world and in history, right? And you have some examples here of very different cars. But if you look into it, in fact cars have some key components that exist everywhere. They have a steering wheel for the direction, they have an engine for propulsion, they have a fuel tank to get fuel to the engine, they have lights, they have wheels.

So when we talk about core function and core requirements, in a sense – and this is my view at least – we are trying to identify these elements, key elements that make up an IHR car. And then it will be up to the country, to the state party, depending on their resources and their willingness to invest to decide how complex, how elaborate, how performing they want the system to be, but in terms of IHR I think we need to make sure that these key elements that make the IHR car are all there. And the effort we're trying to do is to identify these key things that have to be there to make the IHR car come together.

In general terms we've talked about the capability of detecting an event coming from very many different sources, the capability to verify, assess and investigate and confirm an event with a major epidemiological but also laboratory support component required, the capability to respond in the most appropriate way at national level to this event, and the capability to communicate it properly, both to WHO on an international level but also nationally within the

country and particularly with the media and the general public because we know sometimes bad communication can cause more damage than the event itself.

We have tried to redevelop all this in the sense of IHR monitoring and evaluation system, trying to identify the key indicators that will tell us that the car is there, and we have divided these indicators in five broad areas. One is policy, planning and financing and it includes the existence of some legal framework; a national plan for responding to public health emergencies of international concern; a budget allocation for this; some on infrastructure and institutions; others on the availability of human resources and skills and knowledge required for IHR; the specific technical resources, and something on the IHR system and services, and the list of indicators is there. It's still on discussion but I just wanted to give you an idea of the direction we are taking. And it's important that we can come to a consensus on this because in a way it's the only way we can eventually say a country is complying with the requirement of the IHR or not, we have to be able to have some sort of a universal understanding of what we have to put in place.

A document with more details of this is on an advanced draft and I think will be going out for discussion soon, but I just wanted to give you basically (the concept?).

And finally another major challenge is points of entry. There's been a meeting held in Montréal – again around May, if I'm not mistaken – and various working groups have worked on standard operating procedures on the various aspects in terms of points of entry that will be required, and the expectation is that the work will advance on all the SOP's fairly rapidly. We might be able to produce some draft by the end of the year. The list of SOP's that have been identified is here and will go from inspection standard operating procedure to hospitals and clinics and transport and many different aspects, and I think the work is definitely going in this area.

And finally there are two guides which are planned for publication, one is on ship sanitation and the other one is on hygiene and sanitation in aviation, and both of them are due some time in 2007.

Okay, I'll stop here. Thank-you very much, and *merci beaucoup*. I hope it was informative even if quick, and of course I'm very much interested in the discussion and if some of these points might – or will – come up again during the rest of today. And thank-you very

much again to Ron and the organizers for giving me the opportunity to be here with you today. Thanks.

Dr. Ron St. John

Thanks very much, Stefano. Bruce? I think we'll hold questions and comments until Bruce makes his presentation.

Mr. Bruce Plotkin – A WHO Perspective on Legal Challenges and Frameworks

While that's coming up let me introduce myself again. I'm Bruce Plotkin, I'm the legal expert on the IHR implementation team, and I work with the technical personnel in Geneva. I can tell you from my own personal experience that there are enormous activities going on all the way across the organization as the programs that deal with specific diseases, the programs that deal with outbreak alert and response, and the programs that deal with almost any communicable and other disease problems are all working to revise their SOP's, to revise their procedures so that everybody is applying the same basic rules and so that everyone will be ready to go forward under the new IHR when the new IHR come into force.

This is a massive undertaking...

[Start of Side 2]

... At the headquarters the IHR are coming up already in a number of ways, not just in terms of preparation. As you can imagine, there are outbreaks of all kinds of diseases all over the world, and now when major outbreaks come up we are using them as sort of an opportunity to test the new International Health Regulations so that when there is an outbreak of polio, for example, questions are raised about how would this be handled under the IHR, how might it be handled differently, how would it be handled the same. These are all very important questions.

In this context, while there are a lot of important and serious outbreaks that happen, one thing that needs to be kept in mind is that the IHR public health emergencies of international concern, which is one of the aspects of the new IHR that everybody seems to focus on, are not likely to happen very often. Again, it is an aspect that that tends to get so much of the attention, but as a practical matter, true public health emergencies of international concern--with convening of the IHR Emergency Committee and formal declaration of a public health emergency of international concern--at least in terms of the immediate future it appears likely that there won't be a lot of them. We'll have to see what the future holds, but my current expectation is not that

you will having three or four public health emergencies of international concern a year, I expect it be a fairly rare phenomenon.

One area where the IHR are already affecting the global scenario is with regard to avian influenza. Stefano touched briefly on the resolution passed by the Health Assembly on early voluntary compliance with a number of the requirements in the International Health Regulations. And I can tell you that as events of various kinds having to do with influenza are arising around the world, they are being measured against the International Health Regulations even though they're not binding yet, in the context of the early compliance resolution. with regard to information or specimens or whatever having to do with influenza.

So on the one hand it's very easy to say this is happening in about eight or nine months from now, and it's not really happening now, but it's already coming forward, we can already see it in the way that we are looking at things, the way that we're analyzing things, and of course the way that Stefano's people out in Lyon are trying to prepare to fill all those requirements.

One of the things that's also important to keep in mind as we go forward is the incredibly tortuous, satisfying, frustrating negotiations that went on with the Intergovernmental Working Group for the revised IHR. You had vast numbers of people all trapped with each other in various kinds of rooms, forced to negotiate things that were often very complex and very difficult. This was done in face-to-face negotiations by the delegates from the member states. And one of the important things to remember about this is not only that it went on for a long time, that it was face to face, that these were hard decisions, that a lot of issues had to be compromised, was that this happened in the shadow of SARS. So it's not like this happened without any particular emergency or without any particular experience having happened. SARS happened in the middle of 2003, our negotiations didn't start until the end of 2004, and I can tell you that for countries that were involved in SARS and the experience of SARS – and countries that weren't – it was on everybody's mind. People were talking about the issues that had arisen and what should be in the new IHR to address those concerns, what should the IHR have in them because we've had this experience.

Very quickly – this is the legal portion of the show – the International Health Regulations, while on the one hand they are very new and really unprecedented in a lot of ways, in one way they're very old, and that is the International Health Regulations are an agreement between states. Under the WHO constitution for the international health regulations and certain

other regulations, once they're adopted by the Health Assembly – which happened in the middle of last year – once they were adopted by the Health Assembly all WHO member states are in, all WHO member states are automatically bound by them unless within a limited time period they affirmatively take a step either to make certain kinds of reservations or to reject the new regulations in their entirety.

So, for those of you who may not be watching your calendar every day, the deadline for rejection – or making a reservation, of course – is December 15th. I can tell you that we have received no official notifications of reservations by anybody. The only one that I'm aware of that's even been announced is one reservation by one country that was announced a while back and there has been no further official activity. But in any event, it is – as I indicated – an agreement among member states of WHO.

So what does this mean? I have other interesting bits to say but most of the presentation, for our purposes, as we look forward now, can be summed up right here. Because this is an agreement among WHO member states, no matter what subdivisions are involved, no matter how states may be aggregated for some purposes or divided up for other purposes, like other international agreements the overall rights and responsibilities that come with the IHR 2005 are the focus of states' parties. It is the states' parties that have these obligations, it is the states' parties that have these rights. And one of the obligations that states' parties have – and this is traditional under international law – is that the states' parties are the ones who decide how to implement their international legal obligations within their own political and legal context. And if you think about it, this is logical. I mean, it's a fundamental sovereignty issue. If you go and you try and tell a state, "Well, you have to do this, and you have to do it that way, you have to do it that way," these things are seen as being the fundamental prerogatives of the states themselves. And it also makes sense from a logical perspective because how a state will need to implement its obligations under the IHR is going to depend on a large number of what are going to be essentially unique characteristics. What is the state's legal system? They vary. How are the relevant obligations broken up horizontally among different ministries? How are the obligations broken up vertically among the different governmental units? How do they all relate to each other? Who is responsible for what? Who's responsible for the money, who's responsible for enforcement?

On the one hand you can speak of them generally in terms of listing all of these requirements. At the same time, how they appear in any particular country is going to be unique because it's going to depend on the history and the relations within the country.

That's the first key point to sort of keep in mind. The second one is obvious and rather self-evidence but I wanted to make it anyway, and that is broad participation by all states' parties is the key to benefits for all of us, and this is true whether you have an event which is happening in the capital, whether you have an event that is happening in the periphery of a country or anywhere in between, whether it's dealt with by a local or intermediate governmental unit or a national unit. The point is that what happens in that state is going to affect other states, and the other states... for the other states it's not going to make a big difference if the issue arose at one level or another level, it can still very much affect every other state. And when I say every other state, I mean all of us. And this is the key to this kind of agreement, this is an interdependent world, and because it's an interdependent world we need as many of us and as much of us in the picture for it to work. If you have a hole in the net the net doesn't work nearly as well for any of us.

Federalism. It's an interesting issue. It is, as some of the background materials make clear, it's not an unusual issue, it comes up all the time in agreements because there are agreements in all kinds of areas that require some sort of action or other activities on the part of units other than the federal government or the national government that's actually signing the treaty. This is part of the international legal process, the lawyers, the diplomats, they know all of this going in, and so the question then becomes how best to address these in order to achieve the objectives of the agreement.

I can also tell you from having been through the negotiations – and I know many of you were in the negotiations there too – that participation of multiple governmental levels and entities – whether they're ports, whether they're local health districts, as well as the heads of the ministries – the activities of all of these levels were self-evidence all the way through the negotiations. Everybody knew it, everybody knew that that was going to have to happen, because otherwise you couldn't put together a system that would make any difference in terms of combating these problems on a global level. These were discussed on a routine basis. You should have heard the negotiations about how detailed they were, and how intense various people were about the national capacity-building requirements, how should those be seen, how should the

requirements be seen for ports and airport area and issues like that. So all of this, the fact that all of these local areas would be involved, all these different governmental units would be involved, was very much a subject of awareness and discussion by the delegates as it went through the process. And again, feel free to go and talk to some of the people who were there and were involved in it, and some of them are in the room.

In addition – and I have a slide on this in just a couple of minutes – the delegates in the negotiations also reflected the fact that there might be a need for legal or legislative or regulatory revision of the legal systems among various countries and various places around the world. This is inevitable. Again the country saw this as this was being negotiated, saw that this was one of the things that was going to have to be dealt with, and there are provisions on it. I'll talk about them in a moment. The very first resolution that adopted the IHR addressed these and said, "This is coming, we need to..." Well, actually it's the Health Assembly – which means the member states – urged the other member states – which was the same group of them – to start thanking about this because this is part of the process.

The last bullet isn't actually on there, and that is the specific strategies. I think, because so many countries' situations are necessarily going to be unique in the specifics, I think it makes sense to discuss them most in terms of the specific countries, but in general terms you're talking about the same kinds of considerations in all of them. Prioritization: in the context of the country what are the legal arrangements or the changes or whatever that have to be made that go at the most important aspects of the IHR? What are the specific key points within that particular country, within those particular units? We can talk about more of that specifically.

Just a little bit more of the legal part. The IHR generally take a unitary approach to state party obligations. The vast majority of them are in state and in terms of states' parties. At the same time they do recognize that for some purposes you really do have to talk about some subnational unit, and there were a lot of discussions during the negotiations because you would talk about, "Well, the state party shall take the following measures at the port to kill the rats on ships," or things like this, and it would be obvious that it sounded funny to say that the state party would do it, so there was a lot of discussion about what term would you use. And so ultimately, after a lot of discussion, we wound up with "competent authority", and it was an accommodation of a number of concerns that were raised by a number of countries. That's the primary subnational unit that is discussed.

At the same time, of course, what the competent authority does, in whatever context, it is still the state party of course which is the party to the agreement which has the overall responsibilities and rights under the regulations.

There are surprisingly few points in the regulations that actually address legislative or legal or administrative revision. These are the two main ones. You may have seen this in the background materials. The first one is a part toward the very end of the regulations, tacked onto another article that deals mostly with other things, and it provides exactly as it says there. It was put there in recognition that countries will need to address some revisions – and it depends on the country – in their legal or legislative systems, and it provides for this mechanism right here.

I put the little note there that says "notes and questions", and the notes and questions really come down to this. First of all, if a country is going to invoke this provision the deadline is December 15th, just like it is for reservations. So, know that the deadline is out there. But the second one is this was a provision that was drafted very quickly at the end of the negotiations when a lot of things were being done at once, and frankly it's not entirely clear exactly what its effect may be. We can talk about this in more detail, it's just that this is the one provision that actually talks reasonably specifically about some of the issues that we're talking about here and I wanted to make sure that it was out there so you all know that it's there.

The other provision is the one on collaboration, which specifically contemplates that the States Parties would assist each other in this area.

The other items we can discuss as they come up in the course of our discussions, and – like Stefano – if you have questions we are here to provide information and to discuss what's happening at WHO and what we're doing to help support the States Parties in going forward with the Regulations.

Dr. Ron St. John

Thank-you very much, Bruce. We'll entertain some comments and questions for a few minutes from the floor, if people have comments or questions for our colleagues from WHO.

Questions and Answers

RS: Yes, France?

SV: Thank-you for those two presentations. My question is to Stefano Lazzari. Perhaps I can ask him in French? I don't know if people...

RS: I'm sorry, there are translation headphones here for those who would like them for French. Please, *un petit peu*.

SV: Technical pause.

SP: Bien sûr. Pas de problème. Je crois que nous sommes prêts.

SV: Thank-you. Ma question est la suivante, j'ai vu dans la présentation que l'OMS travaillait à identifier des contacts points régionaux et donc dans le Règlement sanitaire international on a vu que les contacts points n'étaient pas précisés s'ils devaient être régionaux ou au niveau du siège. Donc je voulais savoir s'il y avait eu depuis des évolutions et si on partait plutôt sur des points de contact de l'OMS qui seraient régionaux ou si on restait sur quelque chose de centraliser au niveau du siège. Et ma question est double à la fois pour le problème de la consultation (article 6) ou pour le problème de la notification (article 12). Donc est-ce qu'un utilisera les mêmes circuits pour les deux? Est-ce qu'on aura des contacts avec la région pour uniquement la consultation, une sorte de prénotification bilatérale et d'échange ou est-ce que, effectivement, les deux voies seront les mêmes ou distinctes? Voilà ma question.

SP: Oui, effectivement il y a eu une discussion sur à quel niveau le contact point devait être établi et comme c'est pas bien spécifié comme vous l'avez dit dans le texte de Règlement sanitaire international et je crois que la décision serait effectivement d'établir des points de contact au niveau régional. Et pour la raison justement de rapport avec le pays de suivi et de la façon que l'OMS est organisée. Ce qui n'empêche que le système va être mis en place d'une façon que le transfert d'une formation et la discussion avec les pays va être faite assez rapidement avec l'engagement du siège, mais le premier point de contact en principe ce sera pour la notification des événements potentiels au niveau régional. Et justement l'équipe à ____ on a travaillé de façon très étroite et continue avec les régions pour établir des mécanismes de système de communication et de système opératif pour s'assurer que ça puisse marcher d'une façon correcte. Mais oui, je crois que peut-être Bruce était aussi parti de la discussion qui a eu lieu d'ailleurs à Lyon après la conférence de mai et où effectivement on a estimé qu'au niveau régional c'est le bon niveau. Thank-you.

RS: Comments, questions? Additional...?

?: Une question. Quand vous parlez de points de contact régional, vous voulez dire dans le contexte global? Pas à l'intérieur du pays, mais régional au plan du monde c'est-à-dire les… Vous pouvez pas dire le niveau régional à l'intérieur du pays, mais vous voulez dire… le niveau régional à l'intérieur du pays, mais vous voulez dire… global?

SP: Non, non, non, non. Comme j'ai montré, l'événement potentiel va être détecté au niveau pays. Le focal point au niveau national, la responsabilité de notifier l'OMS et la notification sera à travers le point de contact régional, et à travers ce système ça va arriver à Genève et ça va activer le système de l'OMS. Voilà. Et l'OMS c'est un organisme régionalisé, comme vous le savez bien. C'est normal que ça suive la structure, si vous voulez, de l'organisation.

RS: The lady in the back from Foreign Affairs. Just a moment, Dr. Fedorov, you're next. The lady in the back? Would you please...?

KW: If you could just everybody state their name, just for the transcription process.

RS: Yeah, say your name.

VP: Hi, I'm Val Percival from Foreign Affairs, and this question may be self-evident to people who are more familiar with the IHR than I am, but I was wondering what... you talked about the obligations that the IHR put on state parties. What additional obligations does it put on the WHO and what does it mean in terms of the evolution of the WHO as we move forward?

BP:

RS: Thank-you, Bruce. In the interests of time I'm afraid we're going to have entertain one more comment, and Dr. Fedorov you were the next to ask. I'm sorry. Dr. Fedorov?

YF: I have a question to Dr. Lazzari. May I ask you, when you're coming back to the original focal points, when we discuss this matter, do you mean that the original offices of WHO will serve as regional focal points?

SL: They are contact points, they are not focal points.

YF: For organizations, I mean.

SL: What it means is that we're organizing contact points in each region who will be accessible by the national focal points at any time in order to notify potential...

YF: So you will not produce any other new structures or...? The original offer will serve.

SL: It will be within the regional office and it's going to be most likely the existing people involved in epidemic alert or response already.

YF: Thank-you. Yeah, that's clear.

SL: But they're going to organized themselves in order to be available and contactable 24 hours seven days a week.

YF: Thank-you.

RS: Thank-you. One more comment from Senegal. Please state your name.

AB: André Basse, *du Sénégal*. Je voudrais revenir à cette question de point de contact parce que je crois que c'est important, parce qu'il se situe donc dans ma compréhension, dans le cas de l'article 6 de Stefano Lazzari. Et le concept de l'article 6 c'est d'aller très vite dans la notification et à même d'aider les ____ qui sont prévus là-bas de 24 heures notamment. Est-ce qu'en introduisant la notion de points de contact au niveau régional c'est pas une lourdeur qu'on va ajouter au dispositif de notification, et d'autre part est-ce que le point de contact régional sera une option à côté de la possibilité qui sera offerte aux points focals nationaux de communiquer directement avec le siège, parce que le concept de l'article 6 c'est la consultation. En créant une étape intermédiaire entre le pays et l'OMS siège on peut aller lentement. Donc c'est pourquoi cette notion de point de contact régional cause problème par rapport au concept de l'article 6. Je vous remercie.

SL?: Merci pour la question. Effectivement je crois qu'on ne peut pas empêcher un national focal point ou un gouvernement de contacter directement le siège. Mais à ce moment-là ce qui se passe c'est que le point de contact du volet national sera immédiatement informé par le siège. Bon, aujourd'hui les systèmes de communication nous permettent de faire ça dans un temps très rapide. C'est pas vraiment un problème. Le problème c'est d'avoir des mécanismes de systèmes en place qui marchent et qui marchent bien; et à ce moment-là tout le monde va être mis au jour de la situation dans un délai minimal. Mais je ne crois pas qu'on peut effectivement empêcher un gouvernement au point focal de… par exemple s'ils n'arrivent pas à contacter au niveau régional tout de suite de contacter le siège. Je crois que c'est quelque chose qui restera possible. Et après ce sera le mécanisme différent qui entrera en place.

RS: Thank-you very much. I believe in the interests of time now we'll move into the next part of our agenda. Dr. Wilson will introduce the country presentations.

If I could add, to avoid confusion, some of you picked up the agenda outside. The agenda outside does not reflect a change – a last-minute change – we had to make. Dr. Howard Njoo, who was going to start off with the Canada presentation, was called to the Minister's office. We didn't feel we should say we're busy and so he is currently at the Minister's office and we've switched the Canada presentation to right after lunch today. Sorry for any confusion.

COUNTRY PRESENTATIONS

Chair: Dr. Kumanan Wilson

Thank-you. We're a little behind schedule but we're doing okay. The first country presentation will be from the United States, Dr. Marfin, and then there will be comments afterwards by Dr. Hathaway.

COUNTRY 1: USA

Dr. Anthony Marfin

First let me think the organizers at this meeting for inviting me. It's a real opportunity to see some people that I've worked with in the past already with regards to security and prosperity partnerships and to move into some of the new things that we're going to be involved in in the coming years.

Let me also say that my background is actually arbovirology, and I say that because everyone here seems to be very familiar with the International Health Regulations. My role here has only started perhaps six to eight months ago, so I will make the bet that I'm the most inexperienced person in the room on this. But I do listen well and I know that I will learn quite a bit.

I will tell you that this talk has been cleared with the United States Department of Health and Human Services. Despite that, I do bring a certain amount of bias. I am a former state health officer with the State of Oregon and a former county health officer with Santa Clara County in California, so I think sometimes that's going to show in some of my discussion.

As has already been talked about, we are here to describe the extent to which the United States has a system of governance that will enable effective implementation of the revised International Health Regulations, and so I'm going to address this over about the next 15 to

20 minutes. Although I will be speaking for about 15 to 20 minutes and show you about 15 slides, this is actually the very key slide. Many of you may already know that the United States, of course, has a deeply rich colonial background. Back in the mid-17th century we had influence from the French, the British and the Dutch in our north-east areas, influence from the British and the Spanish in the south-east, influence from the Spanish and later the Mexicans in the south-west, and then quite a bit of influence from the Russians, the Spanish and the British in the north-west. As a result we have a very, very rich and flavourful regional concept in the United States, and in many places it has continued on and we take a great deal of pride in our regionalization. And let me tell you not only with regard to the International Health Regulations but on almost everything that we do in public health this has a great influence on the way that the federal government and the state governments interact.

So, in terms of the background for our political structure the United States is a federal system of government, but let me emphasize the fact that it's a federation of states that have independent and sovereign governments of their own, that these states do retain powers that were not expressly given to us – to the federal government – in our U.S. Constitution over 200 years ago – with the subsequent amendments, of course – and that we are a full presidential system with a bicameral legislation of senators and congresspersons that represent their constituencies at the state and local level, and this gives a great deal of flavour to, again, any discussion around public health, or practically anything else in the United States.

But the basic questions are, "Well, who really does public health in the United States?" and I would contend that it is really a concurrent jurisdiction. The United States Constitution does describe a division of the jurisdiction. This is – in the third bullet, here – the 10th Amendment to our Constitution that states that the powers not delegated to the United States by the Constitution, nor prohibited by it to the states, are reserved to the states respectively or to the people.

Now, that's very confusing for me not being a lawyer, but what that means is public health was not expressly given to the United States in the Constitution, and as a result that power resides within the states.

Well, then, how does the federal government exert any power in public health? Because I'm going to describe that we have lots of roles, we do lots of things, and where we get into the business is really in the fact that we are able to regulate commerce with foreign nations and those

factors that are related to commerce. And we can also regulate commerce between the states in terms of interstate commerce.

And the way that this has been interpreted, the way that we would reach in, is that we feel that disease, the movement of disease, outbreaks, epidemics, all affect commerce, and we have used this in many situations to say that we do have a role here.

Continuing, then, who does public health? What I'm saying is that the responsibility for public health is shared, and most of the functions are decentralized as I will show you here in a table in just a bit. But within a state all aspects of surveillance, reporting and public health – including the laboratory – clearly belong to state and local health departments. In international settings, in inter-state settings, the jurisdiction belongs to the federal government. The federal public health entities do not have any direct authority over the state and local public health entities. Despite that we have an amazing record for cooperation.

These are our national core capacities, again talking about who is performing public health in the United States. As you can see – and we'll start with the right-hand column – this is the local health department, these are the counties and the parishes that... I think there's 3,118 counties or parishes in the United States, and they are responsible for all aspects. Ultimately, when somebody has a problem they're going to call a local county or parish health department. They're responsible or case detection, notification, collection of case data, analysis and interpretation of that data, the investigations, dissemination of any public health information ultimately comes down to the local level, and then response and intervention ultimately comes down to the local level as well.

The states actually have a very close relationship with the local health departments, and I think that that is one thing that is somewhat different than the relationship between the federal and the state public health departments, that you will see states and local health departments often blurring the hard edges between a county and between a state. And the states, in some states there are no county health departments, in some states the state is responsible for case detection and notification, but in all states you'll see that the state is frequently supporting the local health departments. States are frequently involved in the collection of case data, analysis, interpretation.

With regard to the investigation and confirmation of diagnoses, the states all maintain a cadre of epidemiologists that are working very, very closely, either with regions within their state – meaning groups of counties or parishes – or with individual counties and parishes.

With regard to the clinicians and the laboratory, in some states this would be done upon request, the county or a parish would request assistance with either clinical or laboratory assistance. In many states, the states do have some primary public health laboratory responsibilities, and then there are other functions that may be available upon request. States again are involved in the dissemination of public health information and are often partners with the counties in terms of the response and intervention.

The national level, this is where we sit in the ivory tower and are often able to pontificate about what is going on, but every once in a while – as you'll see here – we do roll up our sleeves, but it's usually upon the request of a state, and that is usually transmitted from a county to the state and then to the federal public health entities. And primarily we are talking about the U.S. Centers for Disease Control and Prevention when we talk about the federal public health entity.

But you will not see very many situations where the CDC – the U.S. CDC – is involved in case detection or notification and the collection of case data. We often will be involved in investigations with state and local health departments upon their request.

We're frequently involved in the analysis and interpretation of public health data because despite this division the cooperation that we have with state and local health departments has led to some incredibly rich databases that we are frequently using.

With regard to the investigation of cases and confirmation and diagnosis, although we do provide epidemiologists and laboratory support upon request from the states, primarily, this usually does not happen, and there's almost no situations in which our federal public health agency – the U.S. Centre for Disease Control and Prevention – actually provides clinical care or clinical... I won't say clinical consultation because we will frequently give consultation in terms of guidelines or guidance, but we very rarely would be involved in clinical care.

As many of your know when you peruse our Web site at the U.S. Centers for Disease Control, dissemination of information is one of our key functions, and it's becoming an increasingly important part of all of our functions.

With regards to the response and intervention, again this is primarily upon request from state health departments. There's very, very few situations – there's almost no situation – in

which the federal government, the United States Centers for Disease Control and Prevention, would intercede and put in an intervention unless it were at the request of a state health department. Now, sometimes that may come after many, many...

[Start of Side 3]

...spinach in E. coli 0157, we've had a bioterrorism attack with anthrax five years ago, we've had a large mumps outbreak, and it's a recurring problem with measles.

And so despite the fact... most of those, if I'm not mistaken, are not on our nine notifiable diseases, yet we've done a very good job in terms of supporting our states and getting the information out to others. Sometimes it's through CNN a little bit earlier than us, but our intent is there and it is always moving out, we are always moving that information out in general.

And so people say, "Well, how do you that? You don't have any jurisdiction over the states." The way that we work now is that we work through harmonization. We are working to establish consensus with professional groups of state and local public health officers. And what I have here in the fourth bullet is an example of the by-laws from our Council of State and Territorial Epidemiologists, and this is just an excerpt of it, but highlighted in yellow is a key phrase here. The CSTE, one of their main functions is to support the use of effective public health surveillance and good epidemiologic practice through training, capacity-development, and peer consultation. Peer consultation goes both ways. It moves up: they will consult with federal entities. They will go down: there's some incredibly talented public health people working in counties and parishes of the United States. The federal government will often consult others. When you look at our advisory groups it is very full of state and local public health officials.

But the key piece here is developing standards for practice. We'll often bring up a change, we will say, "This is the standard practice based on the following scientific reasons," and then we undergo a discussion. And this is a regular annual event, actually, in which new standards of practice, new ways of approaching certain diseases of public health importance in the United States are addressed.

And so again, I just want to emphasize that although we do not have direct power/jurisdiction over the state health departments, that for the past 40 years it's working through this harmonization by developing standards of practice that are similar that has really carried us through some tough times and some tough outbreaks.

So, getting to IHR negotiation and approval, carrying on from all that I've already said, I think you would have probably expected this slide, and that is that the U.S. government will implement the International Health Regulations in a manner that is consistent with our fundamental principles of federalism, that these International Health Regulations will be implemented by the federal government to the extent that their implementation comes under our jurisdiction. This is something that is going to... we discuss very often, but ultimately this is the bottom line. To the extent that the International Health Regulation obligations come under the jurisdiction of state and local governments we will bring these obligations with a favourable recommendation, we will help state and local health departments accept the new obligations under the IHR.

People may not know it but in each state a significant proportion of the public health budget is actually given to the states by the federal government, and that is pretty-much usually without strings attached, or not a whole lot of strings [laughter] but it is given there so they can minister as they see fit. These are ways that we will work with them, these are things, the financing of new ways accommodate the IHR obligations, or things that we will approach very favourably, and that we will work though consensus again, and assistance – both technical and financial assistance – with our states.

Actually, this is just restating all of that, and that is that we're going to work with our professional groups, the professional groups that represent state and local health officers and epidemiologists, to adopt the IHR 2005 requirements as a standard for public health in the United States, and that as necessary the federal government will provide financial and technical support to the states to adopt this new standard.

Because of the time and because we are getting a little behind I am going to skip over this slide. It is again just restating where authority sits, and the fact that the public health is performed by state and local health governments but that technical lab assistance does come from the federal government.

Communication is actually one of our biggest and most important pieces. It's also been one of our best technological advances over the last five years. CDC and the states have worked hard to put in place something called FEX. This is a rapid firewall protected site where privileged information can move between federal, state and local health officers. This is become an incredibly important tool for us. We get regular notifications on our BlackBerries, on our

cellphones, that we have to check in with out FEX mailbox. It's just been an incredibly valuable tool. Right now, during spinach and our discussions about 0157 and spinach, this thing is just constantly going, it's just constantly notifying people so there's constant updates. It's been, I think, one of the real steps forward that we've made in terms of the relationship between CDC and local health departments.

We still have health alert networks where we get out electronically or through fax information to state health officers. And now we have a third piece out there and we have just expanded the number of forward-deployed field stations that are maintained by the CDC. Up until two years ago there were only eight quarantine stations in the United States. We have now increased that to 18. By the end of the next fiscal year we will have increased that to 20. Each one of those quarantine stations has a jurisdiction, and each one of those quarantine stations can serve as a forward-deployed CDC resource for states that are within that jurisdiction. So we've done a lot in terms of communication, and these things are probably the most valuable things that we have done.

We will – the U.S. federal government – will express authority over the public health emergencies within specific settings – that should say "settings" not "jurisdictions" – and that is the settings where there's an international event or an interstate event. Otherwise the public health emergencies will be under the jurisdiction of state and local governments, and these settings are those interstate events that involve non-federal assets or non-federal resources. Why non-federal? The best example would be a nuclear problem, a nuclear event. Because the nuclear industry is under the regulation of the United States government that would rapidly become a federal event. That is something that cannot stay within the jurisdiction of a state or local health department.

Are there events that can say within a state and local health department? Yes, there are many. But is it likely? No. And that is because of the... again getting back to the harmonization and the cooperation and the voluntary nature of the systems that we have established.

With regards to public health emergencies in interstate settings the U.S. government is committed to take all appropriate measures to facilitate the implementation of IHR's at the local level.

What are the potential obstacles? They really come down to communication and collaboration, just like anything else. The states don't want a system where there's dual

reporting, they have to turn from one computer here and turn over to another computer here for dual reporting. We are working at that. There's a great deal of variation in the technological capacity between our states and counties. We have world leaders in terms of technologic capacity, and we have other states that – for either financial reasons or other resources – just simply do not, cannot come up to a given standard. So even within our country the variation creates new challenges for us. There's always a need for more rapid movement of information.

And actually I don't think that one of the obstacles is establishing our focal point, I think that is moving along rapidly. Yeah, we've identified the Office of the Secretary of HHS, and... well, it's done from that point but now how do we get information to that person? Well, we're working on that on a weekly basis.

How do we overcome these obstacles? I actually created one of CDC's few real-time ongoing surveillance networks, and that's ArboNet which has been used to monitor to West Nile Virus, and these are actually the principles that we use to standardize data collection based on scientific principles, to simplify data transfer that would move necessary data, not desirable data. You know, sitting in Fort Collins it's always desirable to know about the potassium in that person on the third day of illness, but is it really necessary? We always come back to that.

Web-based data systems: we're just starting this exploration where we have shared workspaces that are jointly accessible and maintained by all three levels of government. XML file transfer between data systems has been a godsend to us, dedicated communications systems, and then the protocols. It's one thing to establish something but we need protocols on how these things are done.

To overcome these obstacles we're going to require agreements on data sharing, we're going to require ongoing development and access to secured electronic communications systems.

So in summary – and this is my last slide – the obstacles to implementation remain a decentralized public health system that anything that is implemented has to be done in a manner that is consistent with our fundamental U.S. principles of federalism, and full implementation of the new IHR's will rely on cooperation from state and local health departments. The rapid communication is always an important point, and then of course the need for technical support of state and local health departments. And then I think the last question that was on that format was do you expect the need for any assistance with the implementation. I don't think we do, I think we've got it pretty-well covered.

So with that I'll turn it over to Becky and then questions.

Ms Rebecca Hathaway

Thank-you, and good morning. Thank-you, Dr. Marfin.

Let me be brief since I know we're running a little late this morning, but I want to echo Dr. Marfin's statement about the fact that we have a long history of working among our federal, state and local public health entities in the U.S., cooperatively and collaboratively if sometimes informally, to share information and to address any issues of public health emergencies.

I think for us we are very fortunate, and Dr. Marfin mentioned that the federal government has funded the states to really, in this case, support, develop and enhance some core public health functions that are necessary for implementation of the IHR, and they do include the improvement of epidemiology and surveillance systems, laboratory capacity, communication systems, and in this case I'm talking about some of the secure electronic communication systems that we now have in place which Dr. Marfin pointed out in some of his slides. We also talk about risk communication for all of our public so that we speak with one voice, and there is in addition funding for training so that we can assure an effective public health workforce – whether that is a local, state or federal workforce – to address any issues.

I think I would like to say as a representative of the states – all the individual states this morning – that we concur with Dr. Marfin that we should look at some of our current capacities and systems to identify standards of practice and leverage those systems and mechanisms that are currently in place to ensure efficient and effective use of our assets and resources to support implementation of the IHR.

And that's all I have this morning. Thank-you.

Dr. Kumanan Wilson

Thank-you very much. I think we have a fair bit of time now for some discussion. Any questions? Dr. Federov?

Questions and Answers

YF: I have a question for Anthony. You mentioned you have a quarantine station. What are their responsibilities, and where are they situated? At the cross points, frontier crossing points, or somewhere else?

AM: Yes. Well, there have been quarantine stations – federal quarantine stations – in the United States for probably about 120 years now. They were first established on the east coast, again in response to commerce primarily. The yellow fever and smallpox were problems and so there were quarantine stations primarily directed at maritime health that were established in the late 19th century.

Following World War II there were many changes. As increased aviation became an entity there were quarantine stations that were set up primarily at the international airports as well as the maritime. In the early 1960s there were, I think, roughly 80 quarantine stations in the United States. We probably had the third-biggest navy in North America – it was a very large, large operation – and they had been reduced in number after we won the war against infectious diseases in 1968 I think that was.

And then we started to expand them again. As I said, in 2004 there were eight, an they were at the places that you would have expected, the big ports of entry, and that would have been New York, Los Angeles, Chicago and Miami, those are really our biggest four ports. In addition there were quarantine stations in Seattle, Honolulu, San Francisco, Atlanta, and I think that's it.

And since that time we have put quarantine medical officers at all of the ports – that is a new thing – and we've increased the staff, and we've increased the stations. And now there are quarantine stations at, well, essentially our 18 biggest cities in the country, so we now have quarantine stations in Detroit, we have quarantine stations in Houston, in Dallas, Forth Worth. We have two quarantine stations that are primarily involved in border health issues, so we have one is San Diego and one in El Paso, and they're working along the land border. We have stations in Boston and in Dulles, and so we'll be adding others.

The function has changed somewhat. Our quarantine medical officers are not there to really look and wait for ill passengers to come through, they're intended to be there to be a CDC resource for disease control in the community, a regional resource, so that for instance if the State of New York had to rapidly communicate something where they wanted CDC assistance and they were not getting the response out of Atlanta directly they could go directly to the New York City quarantine station. We are a part of the CDC, we see ourselves as part of the CDC, and we see one of our main functions to

be communication with headquarters, but mostly we are there to put in place systems to identify ill passengers with diseases of public health significance, and that's really where we spent a lot of our time over the past year trying to define just what those are.

In that way we're very different than quarantine medical officers that sit in quarantine stations say in Germany or Japan where they may have a complete intensive care unit, they may have multiple surgical suites, they may have a nursing staff of 300. We do not have that. In fact... and this is actually directly relevant to the IHR because you say, "Well, where are your resources, then? How are you going to meet the need to intervene?" Again, we work with state and local health departments, and we have many, many fine intensive care units within miles of an airport, and we have agreements with them with regards to the transport and care of ill passengers with diseases of public health significance. We transport other people too, but we are working very, very closely with specific hospitals that are in the proximity of large maritime ports, large airports and large land border crossings to accommodate our nine quarantinable diseases.

This underscores our need to define a public health emergency a little more broadly than those nine diseases, and we are constantly pushing people to be thinking about other things other than those nine entities.

KW: I think Dr. St. John wanted to make a comment.

RS: Just to add a quick comment, Canada found itself in exactly the same position as the Unit.ted States because we had effectively disbanded our quarantine program over the years. Following SARS it was a government decision to rebuild, but to rebuild almost identically along the same lines that the United States has rebuilt is quarantine services, with almost the identical mission and the same objectives, so we have a very compatible system between Canada and the United States for quarantine. Thank-you.

KW: Next we have questions from first Dr. Lazar and then Dr. von Tigerstrom.

HL: Thanks for the presentation, Dr. Marfin. That was really excellent, so I thank you for that.

You emphasized, I think as forcefully as you could, the federal nature of the public health system in the United States, and if I understood you correctly the United States government – the federal government – accepts the IHR obligations insofar as U.S. government has authority and capacity, but for things where it doesn't it's recommending that the state and local authorities assume the responsibilities, but it's up to the state and

local authorities to do so of their own volition. You also then talk about the fact that the U.S. government transfers some money I think to state and local. Is it both state and local?

AM: Yes, there are several... we give money to almost all states with regards to STD, HIV, TB. There are several emerging infections, we do give a great deal of money to the states. But in addition there are some very large metropolitan areas that will give money directly to. New York City is an example of that, Los Angeles is an example of that, Chicago, Philadelphia is an example of that, so there's roughly about 62 entities that we give money to.

HL: I guess my question is, you made a comment about it was unconditional but then you said some of it is conditional, and then the two of you laughed, so my guess is that in that laugher there's a story. Could you elaborate a little bit on the extent of the conditionality or non-conditionality associated? I guess what I'm really ultimately driving at is if you had some state and local governments that were less enthusiastic than others in the implementation of the IHR, to what extend does U.S. government practice enable you to use conditional grants to move these folks along?

AM: I can give you an example of something that we did with regards to ArboNet, our arbovirus surveillance system, in that there were a significant proportion of surveillance and public health dollars given out through one of our cooperative agreement mechanisms, and it very specifically said that you will cooperate with ArboNet. That is about as direct as I have ever seen it written.

Now, we had a responsibility to make ArboNet an accessible system to them as well, and we worked very hard. Becky and I just actually just met today so I've not seen her at the West Nile meetings, but all our annual meetings we spend a full day talking with our partners, "How do we need to change this?" And so we went from a system that took probably about 20 minutes to enter every infected bird in the country to one that comes up with a location, a tag, a species, and that's it.

And so we have worked with them to modify that system, but ultimately – and this is where the laughter comes from – we said, "If you want these dollars you will partake in this system," and so we would do that.

Is there – and I guess this is a market-driven kind of thing – is there a set number of dollars where somebody would say, "We don't want to report to ArboNet. Keep your money." We have not run into that yet. [laughter] Public health dollars are tight in the United States right now, and in fact the federal government is probably... I'm going to let Becky get into trouble saying how big our proportion is.

HL: That was actually going to be my next question, what proportion of the public health dollars do come from Washington... or, Atlanta?

RH: I think it differs state by state. In some states almost 100% of local programmatic funding comes from federal dollars. And I will use an example of New York specifically, and I can speak to STD and TB because Dr. Marfin's already mentioned them, but in New York to run that program and to sustain it the state looks at federal dollars, which can be problematic at times if you're hoping that your state government will also support some of the activities for disease intervention and control.

In other states it's very different, so again that's our independence. I can say this about the dollars. The dollars are usually granted under what we call cooperative agreements, and there is usually a spirit of cooperation about how do we hold ourselves accountable and what is built into those systems so that we can say there are deliverables, there are outcomes that all of us are expected to achieve. And we do usually have to do some kind of reporting to show that we are progressing in a manner that will achieve an overall goal, both programmatically and we have to show that we were also fiscally responsible.

KW: I think next Dr. von Tigerstrom, then Dr. Krishnan.

BT: Hi. Dr. Marfin, you mentioned a couple of issues, first of all the variation in the definition of notifiable disease from state to state – which is also an issue here in Canada, I would imagine most federal states – and also the efforts at the federal level to start integrating this concept of public health emergency of international concern or potential public health emergency of international concern to your definition. And so I'm curious as to whether you can share any knowledge about efforts that are going on, especially dealing with harmonization between the states, specifically on that issue of the list of notifiable disease but also in terms of public health capacities as well, in terms of the legal framework, and also to the extent that that's happening whether it's incorporating

concepts from the IHR and speaking to core capacities and that concept of public health emergency.

AM: That is actually one of those questions where I am going to have to say this truly is a work in progress. We are now putting together our strategy – with state partners, by the way – to come up with the mechanism, the strategy, for incorporating this into the nature of reportable diseases – or notifiable diseases – for all states.

Some of the things that we talk about are introducing this concept of the public health emergency with potential international consequences is through Council of State and Territorial Epidemiologists, introducing it as a proposal that all states would accept and then integrate into their state public health department.

There would be a second piece to that where we would have very little control and that is then the states themselves would have to work with their counties or parishes to get that involved. In Oregon we had a county council of local health officers that got together and in a very analogous system would look at a proposal – something that was brought in my the State of Oregon – and then look for general discussion and acceptance, revision in all of these things, and then acceptance, and then... I mean, very similar to what we're doing here, because those counties are signatories or they're participants in that particular council, they would say, "Yes, this is now something that we will integrate into our county."

So it's a long process. One of the good points about it is that it is scientifically-based, for the most part, that we bring in scientifically-based case definitions, laboratory methods and those things, so it's very responsive to that. But it is a method that sometimes may take a year to several years to put in place, to craft that resolution at CSTE.

I'm not as familiar with ASTHOR, so if there are similar processes that go on there.

RH: There are similar processes, and currently the states that... this is kind of a little sidebar, and this is why we have to integrate what we're doing. Some states that share borders with Canada and Mexico have received funding for an early warning infectious disease surveillance project, and not only are we working with our sister states on the borders to work on some issues about what diseases do we all consider to be notifiable and

reportable and we will share... we're working through data sharing agreements, and that's a legal issue that I cannot address, but we're also working with the Canadian provinces and with Mexico now, so that we not only do this on a regional basis but we also do this with these two countries.

And when we look at certain notifiable conditions and what we all can agree to, we also within the state – and I will speak for New York but some other states do this too – we legislate which diseases and conditions will be reported from the local health entity – and some states have them, and Dr. Marfin mentioned that some states don't, the state is the local health entity(?) – but we legislate what will be reported to the state health department, and when it's reported, and how it's reported, and exactly what necessary information should be reported. And that does take time.

So there's two things going on between states and locals because New York State added 'flu as one of their reportable diseases and legislated that the local health departments will now report certain cases – I'm not going to go into too much detail about that – up to the state. And the states are working among one another, too, to talk about what can we all agree to share with data about notifiable diseases that may be a concern to all of us. There are no boundaries when it comes to land, air or sea borders because infectious diseases aren't noted for stopping there.

KW: Just a point of clarification. We were normally scheduled for a coffee break now but in the interests of time what I'm going to suggest is people can very quietly go in and out to get refreshments. I think I want to continue with this discussion and I don't want to interrupt it, so if that's okay with people there should be refreshment available and then we'll continue with questions.

Next is Dr. Krishnan.

SK: My question to Dr. Marfin is how much dependence are the states as far as on the federal laboratories are concerned?

AM: I think that that, too, is very similar to the rest of our operations. There are... matter of fact it may be even moreso just simply because of the nature of reagents. Here the U.S. Centers for Disease Control has a large infrastructure back in Atlanta where we have laboratorians that are not involved with a particular state, they're not involved with running a particular public health program, but they're researchers and they are doing one

thing and that is developing laboratory tests. This kind of goes back in the history of – as you can see, I'm a historian at heart – it kind of goes back to the history of CDC when there was the Bureau of Epidemiology and the Bureau of Labs, and then they kind of got merged together and forced to work together.

Those laboratorians, that's all they did, they just made tests, they made better tests, they made better reagents. Monoclonals came on the scene, all the tests had to be revised. Nucleic acid amplification comes on the scene, how are we going to implement those? And that's what those people do.

That is an expensive undertaking, and there are very, very few labs in the United States – on the state level – that would do that. One of them is Wadsworth in New York, that they will develop new tests for deployment across the United States. The other one is the California Public Health Laboratory in Richmond that will do the same thing, and so they're deployed... and Texas, to some extent, and Michigan. These are the ones where they may make some and deploy them very, very widely.

So ultimately new tests, most of them are coming out of the Centers for Disease Control, and then they're being shared. The reagents – new reagents – because they're limited, sometimes the distribution has to be limited, and that has been a problem in the past, it's been a problem with the pan 'flu reagents in terms of getting wide distribution.

But the financial underpinnings for those laboratories are also coming from the federal government. There are cooperative agreements with regards to the laboratory, and money is going, and it funds a lot of what they do at the state laboratories.

SK: Clarify a little. The states are dependent on the lab confirmation from the federal side, or are the states committed enough to do the lab confirmation at a state level?

AM: It depends on the states. There are many states that do not want to confirm, they will do all of the preliminary stuff, because the cost of confirming the one or two cases that may occur within their border over a ten-year time period, the machinery alone is just too expensive, so they'll very often be involved in the high-level screening tests and then move it to Atlanta very, very quickly for a confirmatory test.

Again, there are some laboratories where that is not necessary – California and New York being two of the best examples of that. We are involved in a certification program looking at laboratories and asking them, "Do you have the ability, do you have

the core capacity to be part of a laboratory response network?" and so there will be certain labs that will be identified as being capable of doing the final confirmatory test.

KW: I think Dr. Lazzari is next. If I could just ask a quick question before that. The wording you had up there on the issue of complying with the IHR as committed under the U.S. system of government, it seems familiar, it was taken from the announcement that there may be an intent to issue a reservation on this issue. I was wondering if you're aware if that intent to issue a narrowly tailored reservation around the federal issue is still being considered.

AM: I think that within HHS and Department of State that people continue to discuss how we can best accommodate the needs for the IHR's, to get state and local health departments to cooperate, as well as still to meet our needs around federalism, so the discussion is still ongoing and I can't comment on whether there's a formal one coming down.

KW: Dr. Lazzari?

SL: Yes. Dr. Marfin, thank-you very much for your presentation. I particularly appreciated the table on the core function at the different levels within the federal government, and I think it highlight very well a problem we're trying to deal with in looking how core capacity can be implemented, and that is that the way you illustrated it, in fact the functions within the IHR Annex 1 at central level, many of these functions actually within the U.S. system are not at central level – federal level – at all, they are at state and even county level. And this is not just because the capacities are there but because the mandate is there, right? At the federal level you don't really have the mandate by constitution to do that.

And this of course is a challenge if you try to look at it in terms of a universal sort of system applicable to all levels, but the IHR deals with public health emergencies of international concern, serious stuff, it's not really the routine work, so my question to you is in the case of a truly public health emergency of international concern, or even a public health emergency of national concern that covers many different states, potentially, and could quickly damage the health of many people, would that role change or could that role change? Could then the federal level take on more responsibility because of the nature of the danger – which is a specific of the IHR – or would still be some sort of upon-request sort of role? And really just trying to be practical and see us in a true

situation, because this is what really IHR is about, it's not the 99% of the routine work that might happen, epidemics or outbreaks in the country is the true event that has the potential for being a major public health problem at national or international level.

RS: I wonder, before you answer that question if I could ask my question, because you might answer them both at the same time because it's an overlapping question. At the time of Katrina, as seen from outside the United States, there appeared to be imperfections in the communication between local, state and federal level, not just related to public health but more broadly related to be dealing with that emergency. And this is just an impression I had. The impression I had is at the level of politics and society rather than at the legal level there was a sense that the federal government "should have done more faster". Now, how much of that was public health related and how much of that was related to other things? I don't know, but I guess what I wonder about is whether there's a sense at the level of the federal government that they should have had more legal powers than they did have to deal with that particular issue?

So I raise the question now because Dr. Lazzari asked his question and I think they're overlapping sorts of questions. I ask it because when I wondered about these questions in a Canadian context – and I think probably the Canadian story will be somewhat analogous to your story – I wondered if there was a true large public health emergency in Canada whether the Canadian public would tolerate the federal government saying, "We have limited authority to do with this. We need the request to come from the provinces before we can do whatever it is (we resolve?)." It's an overlapping question, that's why I wanted to do it.

AM: And a difficult question, by the way. [laughter] And it is going to require both of us to answer it.

The concept of federalism is not one that is restricted to public health or to the Department of Health and Human Services. Federalism goes across all of our departments and it goes into all of these things. So I think it is fair to say that the Department of Homeland Security – which was the primary driver with regards to Katrina – also operates in a system of federalism, and that requests would go up from a local or state to the U.S. government federal level for assistance.

I'm not going to comment on whether it moved through adequately or fast enough or things like that, but I can tell you that the Department of Homeland Security is a lot newer at communication problems than CDC and the state and local health departments are. We've been doing this for many, many years just because of the nature of notifiable diseases. And so we are coming from a spirit... we have that spirit of cooperation and communication that is a little more developed because of time, I think.

We are interdependent. One of the things that was on that table, we don't have people in every city in the United States, so we are dependent on people to work with us to let us know. They are dependent upon us for some financial obligations, for reagents, for laboratories, for the infrastructure about the communication, which is again a very expensive operation and so we maintain that for all of us. So it is because of mutual need that we keep each other in the loop.

With regard to public health emergencies where we would change that method of functioning, we've had some big ones... and I'm glad you expanded it to be of national consequence because then I could turn it to anthrax and speak to that because I was in New York City as a team leader, and everything there was a partner...

[Start of Side 4]

...we did not federalize the public health aspect of that. (Marcia Leighton?) and I argued every day about at least one thing, and that's just the way it was, and we discussed lots and lots of stuff, and so we never changed that. And that probably is one of the most important national events that we have had.

I think that in all situations we would prefer to keep the method or the form of communication our current methods, I think we would prefer to keep it like that. And at a time of stress, whether it's spinach yesterday or monkeypox or anthrax we have always maintained that we have yet to run up against that event where, from a public health point of view, that we would have changed that.

Now, I was not around at Three Mile Island. Could that have been one? I don't know. But it's within my knowledge, and within our recent exercises, I do not see one where we would change that system.

KW: Next Dr. Veyrat and then Mr. Basse.

SV: Thank-you. Can I ask you a question in French too?

J'ai en fait deux questions. La première c'est est-ce que j'ai bien compris que donc on serait sur autant de points focaux nationaux qu'il y a d'étoiles sur le drapeau américain? Donc c'est juste une confirmation. Ou est-ce qu'il va y avoir en plus… est-ce qu'il va y avoir en plus un super point focal donc qui serait au niveau du CDC ou du DHHS? Ça c'était la première question. La deuxième question c'est en termes d'action de santé publique qui est un des éléments et un des articles prévus dans le Règlement sanitaire international, prenons l'exemple d'une nécessité de mettre sous quarantaine soit des avions arrivants, soit des navires, parce qu'on a détecté effectivement un cas importé ou des choses comme ça. Est-ce que ça va être une compétence partagée entre la ville qui reçoit l'avion ou les avions en conséquence? Est-ce que dans un cas d'une alerte à transmission interhumaines on peut prendre l'exemple de la pandémie grippale avec un virus qui mute et qui est identifié comme recombinant? Est-ce qu'on va décider simultanément et à quel niveau donc la décision sera-t-elle prise? Est-ce que le CDC va donner ordre en quelque sorte aux différents États bien que souverains de mettre en place de dispositif de screening pour l'entrée comme pour les sorties et puis de *contact tracing*, de traçabilité des passagers? Ou est-ce que ça va être aussi la liberté encore de chaque état, chaque responsable de grandes villes ou de comtés de mettre en place son propre dispositif à son gré et à son rythme? Et enfin donc effectivement sur ces deux points là, si vous pouvez nous apporter les précisions.

AM: If I suggested that there were going to be 50 focal points that is not correct. There is going to be one national focal point for the United States, and that is in the Office of the Secretary of the Department of Health and Human Services – DHHS – and it will not be at CDC.

Our discussion with Mr. Plotkin was that even though we've designated that we have a lot of work to do to make that right, now, because up until just recently in terms of sending cables back and forth to Geneva and things like that it has been our division, the Division of Global Migration and Quarantine, or the director of CDC that's been responsible, so this is a major shift for us, and now we have to think of how we're going to be funnelling information in to them. But no, there are not going to be 50 focal points, there will be only one national focal point.

Your question regarding quarantine is an interesting one. And again, a historical piece, in fact the very first quarantine stations in the United States in the early 18th century, there were two, one was in New York City and one was in Philadelphia, and they were established by the municipality, they were not run by the states of New York or Pennsylvania respectively, they were not run by the federal government. The federal government did not really get into the business of quarantine until after the Civil War, the late 19th century, and then there were just a few overtures. It wasn't 'til we hit the 20th century that the federal government got into that.

Now we've gone completely the other way. There are no local quarantine stations, all quarantine stations in the United States are operated by federal partners. They're not known as the Federal Inspection Services, of which CDC is one of them. There are roughly 425 ports of entry into the United States – that includes our land borders, our maritime ports of entry and our airports that are receiving international flights – at every single one of those there will be a federal presence at the border. All of them have the ability to contact one of the 20 CDC quarantine stations if there is a question about public health or about quarantine, and so that is the way that we are supporting those individuals.

There may be some situations where we would ask a state or local health department to act on our behalf, for example one of the remote land border crossings of Montana where there is not... it would take us I don't know how many hours to fly there from Seattle, but in fact we would ask the state or local health department to actually visually inspect someone for that rash illness or that consideration of pan 'flu. And we have done that several times already within the past year, but it is again that spirit of cooperation.

With regards to the screening operations, at the larger ports of entry we do have CDC personnel that are capable of screening those folks. With regards to pan 'flu, we anticipate that there may be some situations... we can all envision a situation in which we put in place a very large screening program for one to three weeks, for example, and in that case we would keep that as a federal operation as well. And you may say, "Well, doesn't that violate the whole spirit of what you've been talking about?" Within a port of entry a person isn't in the United States until they cross a certain line, so when you get

off that airplane, before you walk through those white doors that say, "Now you're entering the United States," that is federal land, and the screeners, the public health authority on that piece of land is the United States government, federal people. With regards to health they're CDC, U.S. CDC, and the Public Health Service – which is closely entwined with the Department of Health and Human Services and CDC – has in place... we are now putting together plans to think about how they would augment the screening at these ports of entry.

Now, again, I want to emphasize that these are plans. Although we can envision scenarios where we would do this, that is not... I'm looking at Ron because I'm thinking about SBP issues as we move down the line here! These are not... you know, our line continues to be that these ports should be as open as possible, and we do not anticipate that large screening operations that interfere with commerce and movement are going to be a part of that, but we still had the plans in place that we would not call upon state and local resources at that time.

Now, we do ask... we are setting up situations where we would ask them to receive ill folks for quarantine or isolation, we rely heavily upon them for local laboratory support. When the federal government puts out an isolation or quarantine order U.S. Centers for Disease Control doesn't have any police to enforce that, so we are dependent upon state and local authorities to help us do that. We are in the midst of negotiating on almost a case by case basis with the cities and states that house these major ports of entry how we are going to accomplish that. In some states will have memoranda of agreement, in some states it will be a little less formal than that, but we are negotiating on an ongoing basis for them to operate on our behalf.

KW: Next is Mr. Basse.

AB: Merci beaucoup. Juste une question sur le fédéralisme. Nous savons que pendant les négociations donc des RSI les États-Unis avec d'autres pays certainement étaient très en pointe sur la question donc la clause fédérale. Comme l'a dit ce matin le représentant de l'OMS Bruce, cette question… cette clause n'a pas été retenue mais il y a quand même une option qui figure dans le texte du RSI c'est-à-dire l'article 593 donc qui offre l'option d'une déclaration qui pourrait être faite par les États qui le souhaitent ou déclarent au directeur général de l'OMS pour procéder à un certain nombre d'arrangements

administratifs. À partir de ce moment donc je crois que les États fédéraux concernés avaient deux options en termes de mise en oeuvre du RSI, la première option étant de le faire dans le cadre actuel de leurs arrangements administratifs c'est-à-dire donc en optant pour le status quo; la deuxième option étant n'est-ce pas de procéder à la révision de leurs arrangements administratifs auquel cas ils auraient besoin de faire une déclaration donc au directeur général de l'OMS. Est-ce que je peux déduire de votre présentation de ce matin et de vos différentes réponses aux questions que votre intention en tant que pays parti à RSI est de le mettre en oeuvre dans le cadre de vos arrangements actuels? Merci beaucoup.

AM: I think the most honest and direct way to answer that would be that at present we are using the established arrangements that we have. Those established arrangements have helped us in many, many situations, and again – whether it's anthrax or SARS or spinach – that has kept us in good stead. And it has been tested numerous times.

Will that stop us from seeking, in a cooperative nature, a different arrangement? I don't think it will. I think that we will try to define a different arrangement. That arrangement may be something as simple as defining for all states a public health emergency of international consequence, and putting in a case definition through our Council of State and Territorial Epidemiologists and putting that in place and saying, "Now every state has this, we all know what this is, and even though we have different notifiable diseases and everything, now we're going to define it in a slightly different way." And so will we pursue that? We're discussing that. So I think if we're using what we have, we are doing that now, we will continue to do that. Are we open to new ways of doing it in a way that does not violate the state sovereignty? We're open to that as well.

KW: One last question from Dr. McGeer.

AM: It's actually a two-part question. The first piece of it, what I think I heard about the influence of the federal government over what happens in public health is three-fold. The first is the ability to control funding, and at least from my perspective as a fortunate Canadian holder of cooperative agreement money when people aren't paying attention to international borders, that's a very substantial and highly organized amount of money that I think has a large influence on that. But there are also two other clear points of influence. The first is the technical expertise that resides in epidemiology and the

laboratory at the CDC that mean that if you... and I think a very well-developed support system that goes with it that leaves people in local and state health departments in the position of wanting to talk to the federal government when they have a problem. And the second is that there's a very clear system of federal employees embedded in state and local health departments whose – this is a bit of an overstatement – but whose primary allegiance, if you like, is to the United States and to the federal government and who must be a phenomenal source of information transfer that some of the rest of us don't have.

Can you talk a little bit about a) whether I've missed things about other ways that the federal government influences the rest of the world in public health, and b) what you think those relative weights are, how important they are, whether there are other things that might work?

AM: Although we've talked a lot about funding and financing, being an idealist at heart I'm going to say I don't think that's the biggest, most important driver for these things, I think it's your second one, and that is the technical advisors. We maintain a good group, a quality group, a group that is... you know, although sometimes we're ponderous we're usually right, and trying to move out in terms of some of these new tests and new case definitions that... you know, again, we are ponderous, but because we have that time to think about these things rather than running public health programs on a state and local level we're able to think about some of these different things, so we are sought out for our opinion by our state and local partners.

We are actually in a very interesting time right now because we have some state and local people who are incredible public health experts right now too. I don't know where they're finding the time to think about these things because they do have to run local programs and things like that, so we're also at a time where it's a two-way street. I think maybe in '46 when CDC established, in the early '50s, it might have been more of a one-way street, but now it's a two-way street and there's information moving back and forth.

The embedding, I would say that embedding – and Becky can correct me if she thinks it's different – although it is big a lot of it is... you know, most of the vast majority of these people are the people that are actually making the programs happen, the public

health advisors in STD's, TB, in immunization. We have hundreds of people that are working in the States. Surprisingly, these people often identify themselves as state people, and they very, very much identify themselves as working on behalf of the state. So I don't think – and this is opinion, now – I don't think that they are really on the watchout for CDC specifically, I think that they are usually looking for a nice balance. And the example I would use, of someone that I have worked with an awful lot lately, is Gil Chavez who's the state epidemiologist to California . He is in fact a CDC employee. But Gil really goes out of his way to give a very balanced and equitable image of working on behalf of the state, and if anything I think that he would err on the side of standing up for the states because he knows he has to overcome that other piece.

RH: I think also what we find is that laboratorians want to speak to other laboratorians, epidemiologists want to speak to other epidemiologists. What you will find between our federal level and our state level is, aside from who's embedded where in the states to carry out some programmatic functions is fairly often the feds capture somebody that used to work at a state level, or the states captured... you know, now have someone employed for them that used to work on a federal level. So, once those relationships are established, whether they're formal or whether they're standardized in some way, whether there's some standard operating procedures, they take place, and I think what you find for public health is people are more liable to pick up the phone ad say, "We've got to have emergency phone call for CSTE," for the state and territorial epidemiologists, "because this is what's going on," and we need as a group to decide how we're going to handle it, and we need... so I think that's what happens more often than not.

AM: And that would be a new mechanism, it's that movement back and forth, "I am no longer an employee of the State of Oregon, I'm CDC." When Dave Fleming went from Oregon to the federal government to be the Deputy Director of CDC he's no longer Oregon but he brings that perspective, and it's the perspective that is more important than anything else.

Accessibility is the other one that Becky was just mentioning there, and for the most part... it may have decreased over the past few years just because of the time demands, but our folks – relatively highly placed within our organization at CDC – are still very accessible to state epidemiologist or a program director, and that has been a

very valuable piece as well, they know that they're not going to get the run-around and that they're very often going to get an answer that they would like to have.

So I think those are two other pieces that go in there with the three that you identified.

KW: This is the last question, so Mr. Plotkin, and then we're actually – as you may know – one presentation behind, but we'll move to Dr. Luna's presentation to the first in the afternoon, but I'll describe the logistics after Mr. Plotkin's question.

BP:

AM: That is correct. And because they are coming into international ports of entry they are not technically in that state until they cross some point so they've gone from federal land to state land, and so within those jurisdictions we still retain very, very specific requirements for determining what documents, what vaccination. That goes through a series of rule changes, and in fact we are in a whole series of rule changes right now. Rule changes are not constitutional amendments, they're not laws that are passed by Congress, but it is our operational guide. These operational guides get changed very, very rarely simply because it's expensive to do and it has an incredible ripple effect. And we would approach many of these things through a rule change, and it would be a federal change. There are numerous opportunities for state and local health departments to comment on rule changes, there's numerous opportunities for the individual citizen in the United States or a corporation to comment on those, and so that would be the way that we would tweak that rule change to accommodate some of the needs that have been identified by the state local health departments, the professional boards, Council of State and Territorial Epidemiologists, the associations for state and territorial health officers, or the individual citizens and corporations.

BP: AM: Yes.

BP: AM: Yes, they are federal decisions. My hesitancy here is we've come into a new era in that there is more cooperation between the various departments of the United States. In some of these cases it's not just a Department of Health and Human Services decision but in fact homeland security, commerce, agriculture very much so that it is cooperation across multiple departments, but yes it would still remain federal.

BP:

AM: Outside of the situation where we're talking about border measures, outside of those situations where we're talking about federal reservations – meaning the land around our international ports of entry, or federal areas that are in states such as military bases or bureau of land management or things like that – I do not know of a specific mechanism or proposed mechanism where we would do that.

BP: .

AM: Where we would federalize. I think, yeah, independent of the cooperation of state and local health departments. We could, at a time come to an agreement that a federal resource would be mobilized and used within that investigation, and what comes to mind is the Department of Defence laboratories that we moved into New York City during anthrax to do testing for us. We had DoD personnel that were working with New York City's Department of Health laboratory, we had a laboratory that was moved out onto the street just in front of those laboratories, so we did move those federal resources but they were under guidance from – at least jointly – for somebody from CDC who was overseeing a lot of those DoD resources, and a person from the New York City Department of Health, so we did not federalize in that situation, no.

BP:

AM: I think that's true, yes.

BP:

KW: Thank-you very much. I think we're off to a good start. I think it's time for lunch. Lunch should be served at five after 12:00. There'll be a noon-time talk at 12:35, so if everybody could be back here at 12:35 you can bring your lunch and Dr. McGeer will give us some perspectives on SARS and avian 'flu, and then we'll begin after that with Dr. Luna in the afternoon.

LUNCHEON SPEAKER

Dr. Allison McGeer

Dr. Marfin was wrong. There is absolutely no doubt that I am the least knowledgeable person in the room about the IHR!

This of course is the other way of identifying an academic in medicine is that we are incapable of talking without having PowerPoint slides up at the same time, so you need to bear with me on that aspect.

Kumanan asked me if I would talk a little bit about the perspective from the ground outside of public health on issues surrounding the management of outbreaks with international consequences, and I'm expecting to have some experience in pan 'flu in the near future, but at the moment the sum total of my experience is SARS, so SARS is what you get to hear about, and if I'm too medical please just stop me.

The first thing that I need to say is that first of all it is wonderful to be here today and it's great to see the IHR moving forward, because for all the people who worked on the SARS outbreak – and I can only speak to the local people in Toronto, essentially, though I'm sure it's true of outbreaks elsewhere in the world – that to see people move as a consequence – or at least in part as a consequence of this outbreak – and to see the progress that we can make is really heartening, and for the families that lost multiple relatives during the outbreak I think it means that we actually are doing something to honour their memory. So, none of what we learned from SARS in Toronto would have been possible without the assistance of the patients and their families and a huge number of people from many sources who've worked on control of SARS in Toronto.

Here's the summary. It's, on the scale of things, a fairly small outbreak – although widespread – 26 countries, 8,000 cases, 774 deaths in about a two and a half month period. And this is the beginning of it. As everyone knows the initial discussion occurred in December of 2002 about a cluster of cases – a fairly small cluster of cases – that was eventually reported out as probably due to Influenza B that we know fairly little about, and then at the end of January as the SARS virus evolved a very large cluster of hospitalized cases in Guangzhou. The little purple line on the left side here is where exportation of disease – at last outside of China and Hong Kong – occurred, and you can see that that occurred by the end of the Guangzhou outbreak. By the time we were dealing with it elsewhere in the world a number of Chinese had about a month's experience with us and were substantially ahead of it, and it is one of the tragedies of the SARS outbreak that we weren't able to capitalize on that experience in the rest of the world.

Having said that – and I'll come back to this when I talk about reporting and limitations – if you had told anybody before the 15th of March of 2003 that what appeared to be a localized

hospital-based cluster in Guangzhou would be exported to 26 countries in four weeks, you would have been told to go away and work somewhere else. And I think the primary answer that we didn't hear about this was because nobody really believed that it was going to be exported. And looking at it retrospectively, none of us, I don't think, would have believed that it was going to be exported, and so I think it's very important to recognize, when we talk about recognizing events of international importance, that those events do not come with clear labels, and that the fact that we wish to discuss them and we wish to know about them means we need to have a very clear understanding about knowing about things that may not be international events but may become international events.

And the exportation to the rest of the world – this is not quite true for Hong Kong but it's very clearly true for the outbreaks outside of Hong Kong – were associated with a single event in a single hotel room in Hong Kong on the evening of February 21st. A physician from China stayed in the Metropark Hotel in Kowloon overnight. He was ill when he came. He stayed in Room 911 in the hotel overnight, and the little red room notices on this floor plan are the rooms of other hotel visitors or rooms in which people came who were infected as a consequence of his stay there. He was hospitalized on February 22nd in Hong Kong. At least anecdotally I'm told that he went into the hospital and said, "I have a highly infectious disease, you need to put me in isolation now." He subsequently died in the hospital in Hong Kong.

From that one night there was one infected traveller who travelled to Ireland and did not transmit disease, an American businessman who went to Vietnam and started the outbreak in Vietnam, three travellers from Singapore who took the outbreak back to Singapore, two travellers in the index case who furthered the spread of disease in Hong Kong, one infected traveller to the United States – we had originally called it two but I think it's fairly clear that the second case was in fact household transmission in the United States, although it's an interesting fact that we chose to call it a travel-related case for a long time after SARS – and two infected travellers who came back to Toronto, one who travelled to British Columbia and transmitted the disease to a single healthcare worker in Vancouver, and a second person who came back to Toronto.

Index case in the Toronto outbreak was a 78 year-old woman who came back to Toronto on February the 23rd, their last night in the hotel room. They'd actually gotten free coupons to stay in the hotel so it was a treat staying in the hotel, and it's a message about travelling and

staying in hotel rooms. She was not ill when she returned to Toronto, she became ill about tow days later with what we now of as the prodrome of SARS. She was given a diagnosis of a viral illness and died at home about eight days after her initial onset of symptoms. She was presumed to have died of a heart attack because she had some underlying heart disease and there wasn't another obvious cause of death, I think fairly typical for what you would expect to happen.

Before she died she transmitted the disease to her son who was her primary caregiver at home. He was admitted to hospital on March the 7th with what was presumed to be community-acquired pneumonia and developed progressive disease and died on the 13th of March. Between March 3rd and March 12th all of his household contacts developed illness. Obviously not clear whether it was his mother or himself who was the index, but his wife, his son, his brother and his father all developed symptoms of illness.

Now, remember when you're talking about SARS in retrospect that there's on average a five-day incubation period from exposure to the development of disease, there's on average a seven-day period from the time you develop disease until the time you are sick enough to need to be admitted to a hospital or see a physician, so that the total gap from illness onset to when we would recognize you as diseased in a setting where we're not actively screening people and looking for people is nearly two weeks. I would point out to you that the gap for influenza is actually very similar. The difference between SARS and influenza is that because you are not infectious with SARS until you are generally at least three or four days into illness, the gap between when you become infectious and when we know about you even when not expecting it is generally only three or four days. Influenza is of course completely different, you're infectious at the beginning of influenza, you present usually with a complication at day eight to ten of illness, and by the time we see you in the healthcare system with influenza we're already five generations in. And that of course is why pan 'flu and SARS are unrelated diseases from a public health perspective. They may look clinically the same but they bear no relation in terms of their management and control.

Shortly after that initial spread had the onset of illness that was outside of the household, initially to the daughter of the index case who had been in visiting her mother while ill, did not live in the same household, and then to the family physician of the family who saw a number of ill family members on March the 6th and became ill three days later. And on March 10th and

13th two patients who had been in the emergency department at the same time as the son on his admission on the 7th developed illness.

This is all, of course, completely under the radar. There was no notification of anything until – in Toronto – on March the 10th a public health notification about a potential H5N1 influenza came to people's attention and the family was considered for that. I truth, the history of travel in the family was not clear for a very long time, another message about the transmission of information. It's nice to say you transmit information but you have to have it to transmit it, and it was not easy to obtain information about the family, and it became progressively more difficult. On the 13th, when the ProMED message came out... another message about how we communicate effectively at a clinical level: the most reliable source of information that any of us have outside the public health system is ProMED and it's now become a critical function for transmitting information outside of public health.

And I think it's something we need to think about between public health and the rest of us in the world that simply having public health know about things is not adequate, and the communication to the healthcare system – as opposed to the communication to the public – is something that I think we need to think about in the process of asking how we make the notification of important events work rapidly and efficiently.

So here's the initial case family. By the time the ProMED alert came out and we became in Toronto of the cluster of illness in the family, all members of the family were symptomatic except the seven month-old grandchild who was infected but not symptomatic at the time, and two of them had died and it therefore became increasingly difficult to get any information about what had happened to them.

Now, we're still before the 12th of March when we knew what was happening. Between March 9th and 11th the family had a number of chest x-rays and investigation from their family physician's office and transmitted it to five staff at the hospital. Between March 11th and 14th one of the people – now we're starting to talk chains, okay? – second index case, the index case's son, the son of the index case comes to the emergency department, transmits it to another patient in the emergency department, that patient returns to the hospital with disease that is not recognized as SARS, and before we knew what was happening had in fact transmitted it to 36 hospital staff members, students, patients, and visitors at two hospitals because of an inter-hospital transfer that occurred because of his need for renal dialysis.

On March the 16th, now about 48 hours after the investigation had started and just as the patient was being called to notify him his exposure, the second patient who was infected in the emergency department on March the 7th came back into the hospital, and in the roughly hour and a half before he and his wife were recognized as ill and put into isolation there was transmission from the case to three of the emergency personnel who picked them up, four emergency department staff, and from the case's ill wife – who was merely a visitor – to about 22 people who had had the misfortune to pass through the emergency department while she was waiting for her husband to be registered and admitted.

So here's our status about 48 hours into the outbreak. Not all of these people were ill yet, but all of them had been exposed and their illness could not have been prevented.

By March the 16th, if you think about this has occurred in an urban centre, the jurisdictions involved now included four local public health units...

[Start of Side 5]

...where people lived, where people worked, where people went to the hospital – these were the people we knew about: there were in fact two other local public health units who were involved that we didn't know about yet – the province, the provincial public health laboratory – which in our area is a separate jurisdiction from the province's epidemiology unit – the national microbiology lab who was also processing specimens, and the federal government because we had March the 16th recognized two travel-related cases – potential cases – in addition to the index case, and because one of the infected family members had travelled to the United States on a business trip on the day she became ill. So with a new disease, in a very short time-frame, a hugely complex process for trying to manage what was already going to be a very difficult outbreak.

We then got about a week of relative peace because of the incubation period of SARS. There was a period of time when we'd had a relatively small number of people exposed and the gap between exposure on the 14th and 16th and recognition of disease took us about seven or eight days, so between the 15th and the 21st there were only three or four new cases and everybody kind of thought it was going to be okay, and people I think let down their guard a little bit and did not panic as extensively and effectively as we might have done, with the consequence that on March the 21st – on the afternoon of March the 21st – we became aware that seven members of staff that we had not recognized as exposed had a febrile illness at the

hospital, and we started a fan-out procedure whose goal was to contact every member of hospital staff to ask about illness.

About 18 hours later we had seen 35 healthcare workers in the emergency department, all of whom... it was actually not an experience I'd care to repeat but it was interesting. It was an opportunity to read a next textbook. They had the same disease, and it was not a disease I had ever seen before, but I could tell they all had it. Clinically, of the 35 people we saw there were 30 cases who we were sure had SARS and four people we were sure about, and one we thought didn't. The one we thought didn't have Influenza B. All of the other 34 were subsequently proven to have SARS.

And over the next two days the number of... there were household contact cases from those healthcare workers who presented. There were additional healthcare workers and contacts who presented, and consequently on the 25th of March we had run out of isolation beds to care for these patients in Toronto. We knew that there was going to be transmission in other hospitals, but we had no concept of... we knew that there were exposures that we didn't understand at the index hospital, that we had no idea what they were. We didn't know whether we were talking asymptomatic staff, we didn't know whether we were missing the diagnosis in patients, we didn't know whether the transmission was airborne, and we just... you know, it didn't necessarily make sense but all we knew was that something serious had gone wrong in that hospital that we were not in control of, and we also knew – because of our regionalized healthcare system – that we had to have had transferred enough patients and staff to other hospitals that other hospitals in the system were not safe, but we had no date to tell us which of those hospitals were not going to be safe.

Consequently there was a meeting that Ron St. John probably remembers very clearly on the afternoon of the 25th, as I understand, to discuss whether we were talking about a national emergency or provincial emergency and try to define responsibilities. I would put it to you that, in the wisdom of hindsight, this was way too late – but I think it's a predictable evolution and I'm not sure how much better we can do – and on the evening of March 21st a provincial emergency was declared and we closed the hospitals and we quarantined anybody who might have been exposed.

So here's the shape of the SARS outbreak in Toronto. This tall peak is the day that the emergency was declared, and it's important to recognize that this was the stage at which we

actually put into place measures to control transmission. The incubation period is ten days. Move out ten days and you get those cases that we could not have prevented based on those measures, and you can see that once you decided to take it far enough that SARS was actually a relatively easy disease to control. And retrospectively, of course, when you know what you're dealing with there isn't actually much challenge to controlling the transmission of SARS, it's not very difficult if you know what you're doing. It's knowing what you're doing that's hard.

Here's our sum total of cases, a total of 358 cases in Toronto, 44 patients who died, 23,000 patients quarantined, 316,000 calls to the hotline at Toronto Public Health, and an estimated $1.13 billion in economic losses.

As somebody who dealt with this issue in hospitals, I don't have a lot of apologies about the draconian measures that were taken to control transmission in hospitals – I still think that there wasn't a lot of choice about taking those- but I absolutely agree that the damage that was done to people other than the people who had SARS, and the damage that was done to people's health as a result of the economic loss, was almost certainly orders of magnitude greater than the illness associated with SARS. It's unrecognized but the economic losses to Toronto and the mortgages that went unpaid and the depression and suicide associated with those losses I think were probably more substantial than the illness we saw.

One cannot, of course, talk about what happened in Toronto without talking about the travel advisory, and what I want to point out to you is that the travel advisory in Toronto occurred here. It actually was declared the day after I decided that we might be okay. I was the last person in the group. By the time the travel advisory was declared in Toronto... we didn't know we had it under control in hospitals, and there was some discussion about the fact that this second wave in Toronto was entirely hospital-based, and it was a hospital catastrophe, but it was not a public health threat outside of the hospitals, and I was I think the last person to feel comfortable. I don't have any doubt that if people at the World Health Organization had had the data that we had on the ground in Toronto on April 23rd that the travel advisory would not have been issued, but we were completely unable to transmit that data to anybody who knew to make those decisions effectively.

I would point out to you that after the travel advisory was declared suddenly it became much easier to do so, which is a message about science and politics in the world, but I think we put... it is unforgivable, I think, that we put the World Health Organization in the position of

having to make critical decisions without being able to supply them with the information to make those decisions, and for us in Canada I think it's... I believe the word that David Naylor used in his commission report was "shameful". It is not something that countries in the developed world should be doing.

So a couple more minutes on my perspective on learnings of the story. I wanted to first provide you with two quotes from people other than me and David Naylor. This is from the Campbell Commission report. "Despite the eventual success in containing SARS so many things went wrong in the public health response it is difficult to know where to start." There is subsequently a list of 27 headings of areas for improvement and changes, and I take this meeting as the promise that we are moving in Canada, although we can talk about fast enough.

This second slide is a slide from one of the hospital epidemiologists who came to assist in the management of the second phase of the SARS outbreak in hospitals, and I gave it to you verbatim – I'm not awfully fond of looking at it myself – but I think the issues on the ground in Toronto were first of all that we did not have the local expertise in public health to manage this outbreak and we were willing to ask. There are, I think, two issues with our culture of public health that we need to think seriously about. The first is that all of us have limits when we need help, and when eventually we had three precautions transmission in our hospitals and were very worried about our healthcare workers, and the teaching hospitals in Toronto asked if the CDC would come, we were at a state in the outbreak where most people working on the outbreak had worked 31 days out of the last 31 with an average of four or five hours' sleep – this is not the way you should be functioning – and one of her other slides was to point out that nobody was capable of decision-making in hospitals adequately at that time.

When we asked for the CDC to come in – this another marker about asking, about the CDC's reputation and about meeting that reputation of being willing to help – the response at all levels of our public health system was that they didn't want to do it because it was an admission that we couldn't cope with it. I didn't have any trouble, at that time, with it being an admission that I couldn't cope with, and I think we all need to be able to recognize that some outbreaks need to be managed with every resource that can be applied.

The second level of culture within this setting is that we don't have a solid connection, particularly in larger centres, between clinicians on the ground and public health, and that needs to be... I'm not sure that even through the many layers of the public health system and federations

that we are free of problems, but it's very clear that there's a major gap between clinical sectors and public health, and if we expect to...the people who know something's wrong at the beginning of a public health emergency are the family physicians and nurses on the ground, and if we fail to engage them in this process ultimately then we will be slower and less effective in managing it.

We also have a culture within the public health system in Canada, I think – and you can shoot me for this later – in which we find ourselves bound by the regulations and policies and what we believe we can do. The response when we look at trying to do things tends not to be, "How do we do this? It needs to be done," but, "What are the limitations on what I can do?" and I think that's a function of, in part, a very layered system of responsibility for public health in which it is easy to lose sight of the ultimate goal, and I think that parcel of delivering on the International Health Regulation needs to take into account how we try to break that cycle and more effectively get people collaborating.

The last three slides, quickly, these are obvious statements. I have to say my initial reaction to the concept of international health regulation is that I think we have failed to demonstrate, repeatedly, that you can control human movement, that controlling human movement is an effective way of controlling disease. And I've been very appreciative of the World Health Organization move to support local control and to try to make sure that we are focused on pathogens as opposed to people. It seems to me the only way for long-term success, and so to the extent that this is about information and support for local control of things that are potential global problems, it's a good thing. To the extent that we think it's about being able to control human movement I think it will fail badly.

I think I've talked about many of these things, and you heard my question this morning. If you want people to report at any level to a level that is larger/higher-up/different, they need to understand what it is they have to report and they need to understand why – otherwise it won't happen – and it needs to be accompanied with sufficient incentives. Those incentives can just be feeling good and knowing that you're doing your job, but they have to be clear. The system we have currently for reporting, at most levels, are active disincentives: travel advisories at the most senior levels, demands for detailed information at lesser levels. I think we need to think very carefully through the federal systems about how to make it a positive thing to feed information up the chain as opposed to a negative thing.

And about the collaborative process, I think the CDC's success in their cooperative agreements has a lot to do with ongoing discussions about what data is collected and why it's collected so that people on the ground doing it see the need for it and are willing to do it.

And lastly – this is another obvious statement about the interaction between science and politics – we had a great deal of difficulty during the SARS outbreak being able to use scientific evidence effectively, being able to translate what people at the SARS Scientific Advisory Committee thought should happen to the political levels that were making decisions, and we failed very badly in accumulating the evidence about what was going on so as to make better decisions, and I would hope that in the translation of the notification and the policies for notification and management of new diseases that we're paying very careful attention to both of those issues.

Thank-you.

Questions and Answers

KW: Maybe we can take two quick questions. Does anybody have any questions? And if not I might ask one myself. The issue of travel advisories obviously has been a controversial one, and I think of the recent article just published in *PLoS Medicine* demonstrating perhaps the efficacy of travel advisories in delaying transmission and using the September 11th reduction in air travel and the delaying of the 'flu season. I don't know, given the controversies of the travel advisory in Toronto and its usefulness as an instrument, if you had any thoughts on that specific issue.

AMc: The problem with travel advisories is that they make a certain amount of sense some of the time. The difficulty, to my mind, is that they are a very blunt instrument, and it's not clear that the benefits are greater than the risks. I also... you know, the data about reducing air travel and the transmission of influenza is cool and interesting academic data, but I think any influenza expert and any public health person will tell you that the extent to which you have to reduce – for influenza specifically, than other things – the extent to which you have to reduce travel and the benefit you get from reducing travel in influenza is a) limited – we were talking about an extension of ten days, which gives you time to panic but it doesn't give you time to prepare – and b) that the second problem is that restriction of movement works if it's very extensive and if it occurs early enough.

You will notice in the data about pan 'flu that we were talking about restricting travel in September and October to create an eight-day delay in 'flu transmission in December and January. I can't imagine that when we get to Phase 5 in pan 'flu and we don't know that there's going to be a pandemic – we're going to be still uncertain – and the time at which, in my view, we're going to have to make the decision about stopping travel to reduce transmission is at that level, when we're uncertain. There's no way that we're going to make the decision to reduce travel enough to delay the onset.

And so I think because the impact of travel advisories are so great that they will almost be invariably initiated too late, and probably not broadly enough to be really effective. And I'm empathetic with the fact that they're such a draconian thing to do that people don't like doing them until they're really sure, but the price of waiting until you're really sure is that it's, I think, almost always going to be too late.

KW: I'd like to thank you on behalf of all of us, Dr. McGeer. I hope you never have to go through that experience again! [applause]

Afternoon, September 20, 2006

COUNTRY 3: CANADA

Dr. Ron St. John

I'd like to introduce Dr. Howard Njoo. Dr. Njoo is the Associate Director-General for the Centre for Emergency Preparedness and Response of the Public Health Agency. Dr. Njoo has quite a bit of experience with IHR – he was an active member of the Canadian negotiating team at the IHR sessions at WHO – and is going to give a Canadian perspective on the IHR.

Just also by way of introduction I was impressed so much with how what we have to say in Canada parallels and duplicates what Dr. Marfin had to say about the United States, so if you ask us the same questions about how things work in Canada we'll say same as U.S., same as U.S., same as U.S. So, without introduction, Howard, please go ahead.

Dr. Howard Njoo

I thank you very much, Ron. It's a pleasure for me to be here today to be able to give you, I guess, my own personal reflections and perspective on the IHR's. I apologize, though, for not being here this morning and missing the discussion because I'm sure that would have helped tweak what I want to say, so if I say anything which is out of context and so on I apologize in advance.

Basically, I guess, my personal reflections on the IHR's come from two points of view. First of all is that I do have experience in both clinical medicine and public health, and when I say "public health" at all three levels of government, so in a sense I've seen it from both sides of the fence in Canada, I've seen it from the local Toronto and Ontario perspective, and now with the feds I have obviously a different hat on, so I think that was quite useful for me in terms of formulating my perspective.

The second point is that, as Ron said, I was the federal technical lead on the Canadian delegation for the negotiations IHR, so having seen how things developed and unfolded in the actual negotiations in Geneva it was certainly an eye-opener for me, and I think I see many familiar faces who were with me in Geneva at 2:00, 3:00 in the morning when we're trying to hammer out a deal, and the challenges and how we overcame them, so it's good to see you all again and hopefully I think all of us are part of, now, a bigger picture and a bigger approach to try and implement them world-wide, so I think that that's very good.

In terms of the actual revision of the IHR's, my personal observation – I think it's echoed by many in the international community – is that it's an amazing success story for what I call the international public health community. If you look at, I guess, how thinks function in UN agencies – from what I've been told – to actually get the revisions of the IHR's done barely about two years after the SARS crisis occurred world-wide – and obviously in Canada – I think is almost unbelievable, so it just showed the level of commitment and work which was done by all countries involved, and in the public health community in particular, to actually get it to that point.

The other part also is that in terms of this specific workshop, I'll just mention just as an observation, is that the issue of the challenges for federal states did actually come up during the actual negotiations in Geneva, and I think it was one country in particular the U.S. had brought it up as a potential obstacle or challenge in terms of the federal government being in a sense

present at the negotiations and speaking on behalf of the U.S. but in essence not really having the authority or power to compel their states – which would have obviously a large responsibility for the implementation of the IHR's – comply. What was interesting is that, Canada included, and the many other federal states present at that time in terms of their consideration, for them at the end of the day it wasn't what they saw as an insurmountable issue or challenge, and there really was no support for any specific article in the IHR's making reference to federal states and possible challenges and so on in terms of implementation. So I just wanted to put that forward in terms of the fact that it was recognized at the actual negotiations, and most federal states saw it in a particular light.

Having said that, I just now want to, I guess, dive into a Canadian perspective, and basically what I think from Canada – or at least my own personal viewpoint – is that the IHR's an excellent tool, and certainly a framework which will allow us collectively in the public health community – and also in the medical community – to systematically examine our infrastructure and practices and subsequently enhance the areas in which we can improve. I think we would all acknowledge that we don't have any perfect system anywhere in the world and there's always room for improvement, and Canada's no exception.

One thing I will say – and I think this is also alludes to what Dr. McGeer said – is that Canada in many ways had a leading role in the development of the revision of the IHR's. With the Toronto experience we were certainly looked upon as leaders because of our lessons learned, and we still are looked upon as leaders in terms of the implementation based on what we went through in Toronto. It certainly brings back memories for me when Allison showed some of the presentation because I was also technically involved at a very practical level, both at the federal level but then – I'm not sure if you recall – when some members of the committee in Ontario actually came down ill they had to sort of co-opt people from throughout Canada, and especially those who had an Ontario license in the public health and medical system in Ontario to come down, and so I was actually part of that committee for a while, spent a few weeks in Toronto and then obviously came back to Ottawa. I have very fond memories of that time, by the way.

Anyway, in terms of my perspective as far as how the IHR's play in Canada, I think overall I would say that we have an excellent and history of collaboration between, I guess, federal and provincial and territorial levels in terms of how we work within the public health and medical communities. If something were to happen tomorrow, an emergency, regardless of what

legal frameworks or whatever we have in place, people would just want to get it done right and we would cooperate. Obviously things may not be smooth and there are always lessons learned, but by and large we have the history and history, so I think that's stood us in good stead even during the SARS crisis.

Many of the elements, I think, of the IHR regarding surveillance and notification and control measures and so on are actually essentially already in place in Canada. We could always do better, but we have established working relationships, certainly between the federal level and our counterparts in terms of public health in the provinces and territories, and that has been ongoing and continues to be very strong. We now have additional structures – which I'll speak to – such as the Pan-Canadian Public Health Network, but by and large it builds on what we already have.

Just another point – which I'm not sure if Allison may agree or disagree with me – is that even if you use the SARS example in terms of an actual practice it worked quite well in one respect. If you look at sort of this whole cycle of information, starting at the WHO level internationally, the WHO did report to us at the federal level that there were cases of atypical pneumonia happening in Hong Kong and so on and something to be on the alert for, especially if people were coming out of Hong Kong. Through our established networks we then communicated that message, that alert, that advisory, to our provincial counterparts. So I can't speak for the public health system within the provincial jurisdiction but certainly from the federal level it went down to the provincial level.

And my understanding – and I'm also a clinical physician – is that depending, obviously, on the various jurisdictions, I think then the local medical offices of health, through various mechanisms, I think made their health professionals aware of the situation, so it might have been a notice posted in the emergency room or doctors' offices. I'm not quite sure, I don't recall exactly if I got a notice in the mail, but certainly it was made clear to the clinical docs on the ground from the provincial public authority to be on the lookout for these types of situations. And lo and behold, barely a couple of days after this notice came out coming from WHO to federal level to province we actually got a call.

And interestingly, I actually got a personal phone call from the then chief medical officer of health at the time, Dr. Colin D'Cunha, that there were a couple of cases which met this criteria

in terms of atypical pneumonia having recently come back from Hong Kong in the Scarborough Hospital.

The rest is history, and obviously there are many things that we could collectively have done better, but in terms of that initial notification from sort of the local level to the federal level to then start managing the situation, that was there. So I think that's maybe a small success but at least was something that was there, and I think was something we can certainly build on.

As far as FPT collaboration, I think Dr. Jeff Scott will speak from the provincial perspective, but certainly I think that spirit has always been there, and even in terms of the negotiating team that went to Geneva from Canada we made sure that we had a provincial perspective, and Dr. Jeff Scott and also Dr. Joel Kitner from Manitoba were actually part of our delegation that went over to negotiate in Geneva, so to me it's another example of good FPT collaboration in Canada.

As far as the IHR implementation, I'm going to go through a template afterwards. I think in Canada the approach we're taking is that before we have process underway – and we're looking it from three aspects – first of all in typical Canadian fashion we're going to consult all our stakeholders and actually go through a very rigorous analysis of all the individual articles in the IHR's to actually see where they gaps are, which specific articles, who actually has jurisdiction over which specific items, and clarify that.

The second part, then, I think, would be that where there are existing practices but maybe something that's missing such as maybe actually formalization of, for example, an information-sharing agreement, we're going to actually look at mechanisms to address those. One of the key parts, as others have mentioned, is the actual notification protocol, and in Canada although we have a long-standing tradition of good notification communication channels from local to federal levels, it's actually never been formalized in law. So that's one of the things we're actually looking at to in a sense formalize what is already-existing practice.

And then finally, I think, which is obviously the biggest for us but also for any other state, I think, is to actually look at our gaps, our weaknesses, and certainly in Canada we're not alone. We're going to look at specific things such as how we use this new algorithm, because that certainly is a departure from the traditional practice of having a list of defined diseases. So, for something like the new virus x which may appear tomorrow, how do we actually work with

the provinces and territories to actually develop a consistent approach to actually determine what would constitute a public health emergency of international concern.

And then of course one thing that we've very cognizant about – and myself in particular, wearing my other hat as a clinician – is that we need to make that connection to the front-line folks which Dr. McGeer alluded to, the actual front-line health professionals who actually are really the first line of defence and the first people who would actually recognize something which may become a so-called PHEIC, if you use the acronym. So, in terms of tools for front-line physicians, nurses and so on, doctors' offices and hospitals, that's certainly something we're going to have to work forward in that regard.

But having said all that, I think overall – before I go to this template – I think we have been and continued to be viewed as a leader because of our experience, and I think sometimes there's always a silver lining in sort of the bad times we go through, and I think we're hopefully now on sort of the upward curve having lived through SARS.

And I don't think we have enough time but I certainly have my own viewpoints on travel advisories, and the one thing I will say is that yes, I don't think they work, and even if you have a very carefully-worded travel advisory that says, you know, "No essential travel to the City of Toronto," or whatever, be it warranted or not, what I saw at the federal level is that people just look at political boundaries and so they see all of Canada as tainted. You know, we have a large countries, it's a couple thousand kilometres from sea to sea, but for people in Europe and elsewhere as soon as you saw the word "Canada" they wouldn't be able to recognize that someone actually came from Vancouver or Halifax, a couple thousand kilometres from Toronto, and so there were sort of horror stories that I had to deal with in terms of Canadians being denied hotel accommodation in Paris, or being denied entry on a cruise ship in the Mediterranean and so on. So there is a lot of fall-out which we have to obviously expect, and of course there's the economic losses and so on which go without saying.

One thing I'm going to slip into – I know we're stuck for time – is I was given this template – which I'm not sure if the other speakers are following – in terms of consistency, in terms of how Canada – at least my opinion – how we shape up against the various questions put forward by the organizing committee. So, here goes. Pretty straightforward. If we look at the political structure in a public health governance, Canada is a federal state with a parliamentary confederation of provinces and territories. All clinical and public health activities are the

responsibility of the province, and that's something that's very well-recognized in Canada and a very strong responsibility of the provinces and territories, the only exception really being the *Quarantine Act* which the federal government is responsible for which in a sense gives us certain powers at our ports of entry in terms of the international boundary, border with the U.S. and other countries.

If you look at the major public health institutions, certainly where I work the federal focal point would be the Public Health Agency of Canada, and we have now created something called a Pan-Canadian Public Health Network, which we see as an integration mechanism between the federal level and the provinces and territories. I think it's a good mechanism, and it's certainly in the early phases of using it but I think so far it's proven to be quite useful in terms of having a good dialogue.

The provincial/territorial counterparts are obviously the ministries of health, and then as well as the local level, which my understanding in terms of a legal interpretation it really is part of the province, because municipalities in Canada – cities – are really by legislation a creation of the province, so that's just a minor technical point to note.

In terms of national core capacities, I don't think we're much different from other federal states, so I won't really comment on this. As you can see, if you look at it at a broad level, what is most important and has the most access obviously is the local level. You can see it in terms of actual detection and management and so on, so that's something all of us you collectively keep in mind, is that we need to support the local level and make sure that they're engaged and they're part of the solution implementation of the ideal IHR's in every federal state.

What are we doing in terms of negotiation approval? As I mentioned before we have a good tradition of information sharing but I think it's certainly been a wake-up call for Canada to actually try and formalize some of these things in legislation, so that's what we're actually doing. So that's all I'll say on that one.

Does the federal national government have the authority to mandate? No, but I think in terms of the spirit of how we've always worked within the public health community I don't see that personally as a major obstacle or challenge, it's something that we're just going to continue business as usual and make sure that we do the right thing collectively.

And in terms of mechanisms, like I say we're relying obviously on our long-standing good working relationships, but the one thing I'll put down here – and maybe other Canadians

will want to comment – is that the federal government as a mechanism could use its spending power in much the same way that the federal government has played on in terms of ensuring that there is in a sense a national sort of medicare system in terms of publicly-funded they've used their spending power in the past to have the individual provinces and territories have their publicly-funded healthcare systems more or less be compatible and have portability so that a Canadian citizen, if they are a resident of one province and then become ill in another province, would also have access to healthcare and so on. So, in much that same way I think the federal government could use – or at least it's one tool we could access – its spending power to assist the provinces and territories in some fashion in terms of surveillance systems and other aspects necessary for the IHR's.

Response to a public health emergency of international concern, I think all of us are aware or very keenly recognize that there are always local events first. As they say, it's something that happens to be handled at the local level, and because of our long-standing collaborative environment it's certainly something that I think we'll just continue in terms of making sure that all the stakeholders are engaged and involved in finding solutions to weaknesses.

The one thing where we do have the federal responsibility is from a WHO perspective. It has to be at the federal level, and the Public Health Agency of Canada has been identified as the national focal point, so we are that point of contact with the WHO in terms of notifying them and also having notification back of situations happening elsewhere in the world.

Here I think we're just saying the same thing again. We're obviously involved in various process underway working with our colleagues at the provincial/territorial levels, and at this point I don't think there's anything further I need to say, it's sort of the same things.

In terms of costs – this is always a sticky area when you talk about FPT relations in Canada – I think it's recognized that most jurisdictions would be responsible for their own costs. Of course there are certain areas in which there might be overlap, or an area for further discussion, but I think it's recognized that based on the responsibilities for the jurisdictions they would be responsible for, obviously, taking care of their own areas.

Finally, comparing strategies, my own personal viewpoint in terms of challenges in terms of communication/collaboration, no major challenges. I think the most important thing we need

is goodwill, which I think we have in Canada. It's obviously just working with the goodwill and moving forward.

Strategies: the Public Health Network is one mechanism. I don't think it's the only mechanism but it's certainly a key mechanism that we're currently using. And does it serve as a useful framework? Yes, I think the IHR's have been something that all of us in Canada can use to our mutual benefit to actually improve, enhance our public health, and obviously also our medical care system in Canada.

And it's all a matter of degree, because in Canada I think we wanted the perfect system, and where we're going to use the IHR's in one way. When I was at the negotiations in Geneva some countries, to me it was quite striking, they're so happy they can use the IHR's to go to their government and be able to advocate for a national microbiology laboratory – which they don't even have – to be able to make diagnoses for various diseases, so you can see how various countries need to use it for different purposes and obviously our level, in a sense, is quite different from some other countries.

Three governance challenges that I would put forward, I think – obviously I've had some discussion with some colleagues – surveillance capacity at all levels is certainly something we need to look at, and part and parcel of that is obviously a response part as well. Capacity at ports of entry, so this is a strictly federal responsibility in terms of the *Quarantine Act* and how we keep the diseases out if that's at all possible, or at least what we could do in terms of that aspect of disease control. And of course FPT cooperation/collaboration. You know, I'm sure there'll be little glitches that come up and we just need to be able to have the good spirit to keep moving on in that direction.

What expectations when you look at WHO donors and so on, obviously Canada – being one of the, I guess, richer countries – would really not have any expectations for that type of assistance.

And then finally in terms of technical assistance and so on, not important. In many ways I think it's quite gratifying to Canada that we've been called upon to participate and provide some technical expertise in different processes related to the IHR's.

Any human rights challenges? I don't think so in Canada at this point.

Governance obstacles? No.

And formally/informally linked with those of other countries...

[Start of Side 6]

...as far as implementation strategy, I think we've got natural linkages with lots of different groups, be it in the Commonwealth or others, but obviously I think the closest country we have linkages with are obviously our neighbours to the south, because we obviously have common issues and a common border as well.

So with that I'll end my presentation, and any questions...

Dr. Ron St. John

Thank-you, Howard. I'd ask the delegates please just hold their questions until we hear Dr. Jeff Scott who is the Chief Medical Officer for the Government of Nova Scotia, will also provide some comments from the provincial perspective.

Dr. Jeffrey Scott.

Thank-you very much. I've taken the liberty of putting a few slides together. I have some disagreements with the federal perspective but on the whole I think we are moving towards this.

I did have the opportunity to attend in a couple of the negotiation sessions, and that was really important because it really brought to me the link between activities at the international level and activities at the local level. This is my perspective as an Atlantic medical officer of health. And so just to give you a sense, I'm from Nova Scotia, which is one of the small provinces over here, and as you can see we're a coastal province. There's a few small provinces around us which means that we're faced with the situation of we're a port of entry, we have ____ airport, we have the sea routes, we've got the cruise ships. And we have the cruise ships that actually go back and forward between the four other Atlantic provinces, so we face challenges, and we've seen those challenges during exercises and when we actually have outbreaks of diseases on ships, which are very relevant, I think. So I'm trying to give a perspective from this point of view.

I thought I'd talk about what I see as some of the building blocks that are in place that will aid implementation, and then talk about some of what are the obstacles that we need to really deal with in order to make these work. First of all, as Dr. McGeer said, we've had experience in Canada with SARS, and even though in Nova Scotia we didn't have SARS we all had experience with it, and it really got attention, it got political attention, that's the bottom line.

And then we had the Naylor Report, the national report, which had really said, "Look, you need a robust public health system, you need to have good infrastructure, you've got to have well-trained individuals, you've got to deal with all aspects of public health, and that gives you the search capacity to deal with these major incidents. You've got to be able to do epidemiology, you've got to coordinate, you've got to communicate, and you've got to manage. And the Naylor Report has really been one of the blueprints that's been moving through the FPT system. FPT is the Federal/Provincial/Territorial system, FPT, because we think together federal/provincial/territorial system.

We've got a chief public health office now, and a public health agency, and we've got a centre for emergency preparedness and response. That's important. We didn't have a chief medical officer of health. The issue of what is the true, national independent leadership is critical. We've got that, that's very important. We have new quarantine legislation. That's moving through, the regulations are coming – and Howard and Ron can speak about that – but that's important. We had old legislation.

And we have this concept which is called the Public Health Network, and what happened was the federal/provincial/territorial ministers said we really want to start looking at how we coordinate our public health activities across the provinces and territories with the federal government.

Now, this might look like a very complex structure, but in fact it is an important structure. This replaces 76 committees that were place and were not really well coordinated. And really the intent, as you can see, there are various areas such as communicable disease control, emergency preparedness and response, public health laboratory process, surveillance and information. And I'll be also dealing with the other very important public health issues, but these are the ones that are focused on how we're going to deal with some of these IHR issues, how we're going to coordinate our activities.

And the important thing is that these go through a council who report ultimately to the Conference of Deputy Ministers. That means it's reporting to the deputy ministers of the provinces and territories and the federal government. And we really didn't have a very good mechanism for the coordination or actions going to that group, and that's important if you're going to get political decisions to make recommendations, decisions at the practical policy level to get recommendations to the ministers who cover the various jurisdictions. And there's a lot of

outcomes that are coming from this group, deliverables which are expectations of the deputy ministers which are going to the ministers of health for endorsement.

The other thing that was really important was that after the Naylor report there was funding that came from the federal government towards public health. There was $100,000 allocated in a trust fund to provinces and territories, and that was to be used in a way... it was to be used in fact to help with some of your ability for emergency preparedness, your public health laboratory functions. It was directed towards that. The problem was it was a trust fund, so basically a province and territory could do anything it liked with it. Now, provinces and territories have chosen to use that, but I can tell you it was a struggle at times to keep that money within the public health system. But that was a one-off grant to be used over three years. Basically it's the end of the time, and that's going to be an important issue.

There was money for health, fully(?) $100 million to help towards the development of a Canadian integrated public health surveillance system, and what that has meant is there's been a lot of work because the IT – the information technology specialists – were at one level, and the public health people were at another level. And we were in the stone age, quite frankly, and it varied across the country. We're now starting to talk, to work together. But this is moving, and it is important and it's going to take a while, but basically we need to have good, computerized data sets that work, that communicate.

We've had some issue, we've got some good flows like EPIX, we've got the CIOSC – the Canadian Integrated Outbreak Surveillance Centre – so people can transmit information about outbreaks from a local public health level, can go to a provincial level, and go across the country. So we're starting to use computer technology in a much better way, but we're still learning how to use this.

And there's been the development of several memorandums of understanding which are really practical and important, but we've got to operationalize them.

We had a food-borne illness outbreak protocol, because what we were finding is when you had an outbreak that crossed jurisdictions between different provinces, and where you had federal agencies such as the Canadian Food Inspection Agency, the issue is who's on first, who's going to coordinate, how do you deal with these multi-jurisdictional outbreaks.

We also now have a respiratory illness outbreak protocol, and that in fact is just being disseminated and has just literally gone out to the provinces and territories, and that clarifies in a

way the roles and responsibilities of the jurisdictions and how the federal agencies will engage in action when we have an outbreak that takes place that cross jurisdictions, and our role in that was to take that protocol and to really see how we can make it work and to apply it and to evaluate it and to use it.

The other thing that's really important and I've found in public health as time's passed, we're getting more and more involved with other things apart from human health, so the issue of avian influenza, we have to look at things such as a formal animal disease emergency support plan. So what do you do when you have an animal disease that could or could not have human health potential? The number of agencies that get involved at the federal level or the local level are increasing, and it's really critical that we have the ability to get 'round the table in order to say, "What do you do, how do you do it, and how do we work together before we're faced with a situation of dealing with a public health issue that requires that coordinated response?"

We have a memorandum of provision of mutual aid during a public health emergency about to be agreed to and signed off in fact by the deputy ministers and the ministers of health.

The other thing that's going to be important is that there's a process now to look at the federal/provincial/territorial roles and responsibilities during a pandemic. In a way, the intent of that, in fact – and the network is doing a piece of this – is to scope out all of these memoranda that we have and see, during a pandemic, how would we actually... what will we do, how would we really effectively operationalize this at that senior level. And there's been a lot of pressure from the provinces to get this done. And these are all benefits indeed to the bigger picture of the national health regulations.

And the other thing that's about to be signed off is a process for information sharing during a public health emergency. Now, this is not quite the latest road chart – the latest road chart was developed last week – but basically one of the issues is this concern about sharing information between jurisdictions. And in fact many of us have the legislation that would allow us to do it, and many of us believe that we should just do it anyway. But this is a process that is being put into place to allow us to basically advise the Chief Medical Officer of Health Canada to pull together the Council of Chief Medical Officers of Health to decide that we believe – and using the same decision tree that is used by the International Health Regulations – decide that we think there may be a public health risk that is of concern across Canada, and allow us basically to share whatever information is necessary in order that we can effectively control that risk.

So this process is just about to be signed off. Again what we have to do now is take this and make it work within our jurisdictions. And there's a longer process, as Howard said, to look at how can effectively in the long term share information respecting privacy/confidentiality information. These are all things that are important, that are building blocks that are not necessarily targeted to International Health regulations – our target is to make sure we can respond internally in Canada – but are useful to them.

The other thing are exercises, and in the Atlantic provinces we've gone through several exercises where usually there's a scenario of an infectious disease or a bioterrorist type threat: Atlantic Guard, Atlantic Shield, collaboration and coordination between jurisdictions – more than one province and the federal government – and we're planning avian influenza exercises and pandemic influenza exercises. These I believe are critical, because it's only when you actually stress that and take the scenarios and take the protocols and see that they actually work and then really find out where the grey areas are, because there are still grey areas and they keep coming up.

So I think they're obstacles, and I call them obstacles. Funding is critical. Naylor, in his recommendation, said really that the federal government should be providing $300 million a year which flows through to local public health units in order that they can continue to do programs, strengthen infrastructure, and that in turn will aid in the ability to deal with another SARS or something like that if it comes along.

And to date what has happened is we've not got consistency of approach, and that's why it really has to be at the political level to ensure that funding flows, and that funding is dedicated, and that there's a reporting mechanism back to say, "What have you effectively used that funding for?"

There's a lack of an awareness of the International Health Regulations at the local level, and what I mean by the local level is the regional medical officer of health, who's really important in the coordination at that level. And I talked to some of my colleagues and asked them what they know at it, and not many do. So we failed, I think, to communicate national health regulations and really what are the true perspectives and the true issues that relate to public health at the front line.

There is differing provincial legislation, and many jurisdictions have updated or are updating their public health acts. We have done that in Nova Scotia, and SARS allowed us to

actually get that through and allowed us to put in the possibility of declaring a public health emergency which may be necessary to operationalize any response.

There needs to be clarification of the role of the chief public health officer – that position is there but there needs to be legislation – and I really think that's very important, we need to have that national leadership role which will be critical.

There is the issue of multiple players, and as I say we're communicating I think well between our health partners at the federal/provincial/territorial level, but at the provincial level there's so many agencies to communicate and so many agencies at the federal level it is quite complicated.

There are what I call the grey border areas, and we've found during our exercises that when you have situations where you have a passenger arriving, clearing customs in one province and then moving between provinces, a cruise ship, then whose jurisdiction? And what we've done in Nova Scotia, in fact, we sat 'round the table and we sat down with some of our quarantine officers, the quarantine nurses, we've sat down with Workplace Health and Safety, we haven't had DND – the Department of National Defence – because they have a federal responsibility, we've had First Nations Inuit Health Branch because we have the responsibility there, we've had our provincial partners, and we've basically tried to say, "If this happens, what's your job?" And that's really important that we take these issues at the local level, so we've developed a draft what we think our jobs are and how we collaborate, but we have to verify that and make sure that works in advance.

Now, the other thing that's really important is changes. We have the changes in the deputy minister and the minister. We've just been asked to sign off in the provinces and territories, do we all agree to Canada endorsing the International Health Regulations. The good news is Nova Scotia signed – the two ministers signed – yesterday, but these were changes. These were new ministers and I had to do briefings of the ministers of something which they were not involved in. If this had happened a little bit earlier it would have been a lot easier because the other ministers lived through the SARS scenario. So there's a timeliness issue which I think is important, and I think we're moving in the right direction but we've got to accelerate that because there's only a window of opportunity before the next issue comes up.

So on the whole I think we can, but we still have these issues, and the key issue is to make sure we get the funding that's dedicated to help us enhance the public health system at the

local level, because unless we do that then you will have significant variation across the country, and the variation is that Canada will only be as strong as its weakest link.

That's it.

Dr. Ron St. John

Thank-you very much, Jeff. The floor is open for questions and/or comments.

Questions and Answers

CH?: I had a question for Howard. For Canada, Australia and the U.S. the key public health power is the powers under the *Quarantine Act* which serve for communicable disease – and I was going to ask you this morning as well – have you got any views on whether it's desirable or necessary for the federal government to get powers in relation to... I keep saying non-communicable disease but I don't mean that, I mean diseases that are not communicable, or health threats that are not communicable such as... I mean, it's hard to picture but deliberate international event or an accident or contamination event or something like that. Should the federal government have powers to act and make decisions in those cases?

HN: I'm sorry, I may not be getting your question. Are you talking about a health threat of any source that may cross international borders?

CH?: Well, a public health event of international concern that's not a communicable disease, so therefore you can't use your powers under the *Quarantine Act*, or the powers under the *Quarantine Act* are irrelevant in that situation.

HN: My own personal viewpoint is that yes, because as part of the discussion for the revision of the IHR's they made the explicit point that it would be expanded beyond infectious diseases, it really was a public health threat of any source and any type, which would also include chemical and radionuclear, and they also said irregardless of origin, which I think is a fuzzy way of saying either accidental or intentional. So, certainly for infectious diseases at the federal level we've got the *Quarantine Act* in terms of what we can do at our ports of entry, but within our jurisdiction if there was something to happen, an event, a terrorist event involving, I guess, let's say a radionuclear device or so, our perspective is that we always use an all-hazards approach. So we have a framework in Canada to deal

with those types of emergencies, we have our Department of Public Safety and Emergency Preparedness and so on, and the other departments play into that, and we come in from a public health point of view to cover off the public health and the healthcare-related aspects of that emergency.

So I don't think we're relying any specific piece of legislation like the *Quarantine Act* to deal with other types of threats, just recognizing that we have an approach to deal with all threats.

CH?: I suppose we have been considering in Australia whether or not we need a healthcare as well as the security-related powers for that sort of incident.

HN: There is an all-encompassing act, which it doesn't belong to us specifically but it belongs to another department, the Department of Public Safety, the *Emergencies Act*, and I think some of the legal folks here may want to delve into that, but that power is sort of a last-resort piece of legislation in which the federal government specifically could almost order anyone to do anything – if you want to put it in sort of familiar terms – to deal with a threat to the public, so that is one tool that is already available, but it's certainly something that we've been all told not to use, that there's so many other mechanisms and tools we could be using before that, but certainly that's something that is available as a last resort.

I'll leave it open to other colleagues to chip in.

RS: If I could just add a comment to that, if I understood your question, the London bombings – the unfortunate London bombings – were obviously no health threat to Canada, yet we had an intense interest in that event, certainly because our colleagues in London had a remarkable survival rate for people trapped in what's called an enclosed space explosive event, so we were very interested in the medical management of those unfortunate casualties. But we did not feel we needed to seek any authority, for example, to talk to our colleagues in the UK and to urge them to share their experiences with us, and we've had meetings and visits to talk about those kinds of events, although they posed no immediate public health threat to Canada.

CH?: Perhaps if I gave an example, which is a risky one, but there's certain events which will threaten trade, commerce, etc. At the moment it's quite a debate as to which powers and what authority you would act under to take actions that would interrupt trade and

commerce, etc. We all know that we have various powers, our external powers covers a lot of things. I suppose some of our _____ government colleagues have looked to health to provide very definitive advice that certain health actions need to be taken in certain circumstances. I understand from what you're saying that Canada has an all-encompassing power to take those decisions. I'm sure Australia could take those decisions under some power or other, but the question for us is whether it's desirable to have a public health power to take actions that would sort of override others. I don't think we've got close to the answer to that, because that's very complex and difficult, but we certainly have that power in relation to quarantine, in relation to communicable disease, and we don't really debate that.

RS: Yes, Dr. Lazar?

JS: Was there another question first?

RS: Was there another one I missed?

HL?: I had a series of questions, but just one remark on the last comment. I'm subject to correction, but it's not my understanding Canada has an overriding emergency power. The *Emergencies Act* in Canada, as I understand it, could only be implemented or invoked or promulgated – whatever the right word is – under certain conditions, and so if there's an outbreak of infectious disease in one province which is of concern to the federal government, it cannot... that in and of itself is not a sufficient trigger to enable the federal government to use all of its powers. Now, I'm subject to correction but I believe that's correct.

I had two questions for Dr. Njoo. The first one may be a little bit nasty, so forgive me. It's actually posed in a spirit of nastiness, so not only is it nasty but it's nasty in spirit, so I ask you in advance to... anyhow, you alluded on numerous occasions to the spirit of intergovernmental cooperation that apparently infuses your relationships to the different orders or levels of government. My understanding of the level of cooperation that went on during the SARS episode is that it fell short of that high level of cooperation that you alluded to, that there were in fact some real impediments. I mean, first of all you may think I'm wrong on that statement in which case you can just tell me I'm wrong, but if I'm not wrong then can you sort of help me understated what has happened since SARS that gives you this confidence? That's question number one.

Question number two, I think in dealing with the template... this is not a nasty question, the first one was. You can answer both of them nastily if you want, though, I mean I probably deserve it. On the question of funding I think you basically said that provinces will fund what they're responsible for funding, the feds will fund what they're responsible for funding, and there's no real issue of re-allocating the public funds associated with public health emergency. I think that's what you said. If that's the case – and I may have got you wrong – if that's the case let me encourage you and your colleagues to rethink that issue.

It seems to me that if you were in the planning stages and you were to get a serious outbreak in one of two provinces, and the federal government would take the view, "Well, there's an outbreak in Saskatchewan and Manitoba of whatever-it-is," healthcare is a responsibility of the Manitoba and Saskatchewan governments, the federal government already transferred some money under the Canada health transfer and some other intergovernmental transfers, but those transfers are really not intended to deal with an emergency situation. It seems to me that it would be unfortunate if it was only in the middle of an emergency where the physical limitations – and the financial limitations – of my two hypothetical provinces were being tested that you then got down to negotiating fiscal arrangements that were going to help those provinces cope with a truly horrific situation. That would be unfortunate.

I don't expect a definitive answer from you, obviously, on this point, but any comments you might be able to make on either of those two points I would welcome.

HN: Sure, I'll take the second one – I think it's the easier one – then I'll go with the first, which I also think is not that nasty. You could be nastier, I guess.

The second one I think in terms of – maybe I didn't present it well – is that certainly there are sort of the very clear jurisdictional responsibilities, federal, provincial and so on, but I think there's a lot of the areas in which obviously there's areas in which we could further collaborate, and I think one of the points I made was about the federal government using its spending power. Certainly in many areas we are looking at ways we could bolster provincial capacity in terms of an emergency. In others we're looking at mechanisms where we can facilitate cooperation not just between the federal government and a province but even between provinces as far as mutual assistance. We're looking at

things such as health emergency response teams, sort of a multi-jurisdiction which could be used in case of a true emergency. And so I think through a variety of mechanisms, both funding, maybe even things like what we're doing in other areas such as surveillance, giving tools, I think Dr. Jeff Scott alluded to some of the moneys were pouring into certain networks and so on, to me that's all part of how the federal government can be part of the solution.

So I think that's answering your second question, so the federal government only gets into a discussion on financial arrangements when there's a crisis. We're trying to do a lot of things up front collaboratively with the provinces and territories.

My personal perspective on the first one is that it's quite interesting, because I think based partly on my own personal experience and knowing the players in Ontario – because I was a medical officer of health with the City of Toronto before, I knew all the public health folks and so on – I think there were obviously issues, I think, within the Ontario public health system between the City of Toronto and the provincial level and so on.

Of course we can get into a big discussion in terms of healthcare and public health and so on. What I saw is something that's a very important lesson learned, is that there's now a recognition I think in Canada – and I think abroad as well – that there's a difference between what we consider sort of a single mandate or a very clear what I call simple emergency and something I might euphemistically call a complex emergency. So a simple emergency, in my view, looking at the public health sector would be something like a waterborne illness outbreak where it's pretty straightforward, there's a source and people are ill and the local public health authorities and physicians can deal with it, and there might be some spillover in terms of other consequences.

Where I think we recognize there's a broader issue is that if there is a certain type of emergency – and it doesn't necessarily have to be an infectious disease, it could be from other sources – but in this case it was SARS and now we're looking at pandemic, where it happened in SARS and we anticipate for pandemic it'll be complex because there won't just be the medical and public health aspects in terms of the virus and sick patients and treatment and research and vaccines and so on, but the other impacts in other society in terms of other sectors affected in terms of transportation, business continuity,

the impact on a country – the tourism and so on – and those were things which were unanticipated before SARS but came to the forefront as the SARS situation developed, and to me that's the biggest lesson learned.

And so there's nothing wrong in terms of the various sectors didn't know how to play with each other because they never had to do it before, but certainly something we're now recognizing as important to deal with up front. At the federal level – and I'm sure it's happened at our provincial level – we now have a framework in which there is a designated federal department that's the lead. In this case it's Public Safety, so they are sort of the hub of the wheel, and depending on the type of emergency if it's a straightforward one it might just be a single department dealing with it and it would just help coordinate in a very low-key fashion, but if something ever developed which would be recognized to be complex and involve multiple sectors and jurisdictions they would be the coordinating force.

Let's say for example in Toronto in SARS or a pandemic, the public health folks could deal with really the public health medical aspects and not be bombarded by all these other issues such as what happened during SARS such as airports and airport authorities and dealing with other sectors and the impacts on them, which I think overloaded and burdened the folks trying to then deal with actually dealing with patients and the virus and so on.

So that's sort of a long of way I saying that I think that's one thing we learned and hopefully we can deal with better in the future. I'm not sure if Ron or others have other comments...?

RS: Just a very brief comment, just to illustrate that we don't argue during crises. We manage the National Emergency Stockpile System in Canada. It's $300 million plus of emergency supplies located in nine strategic warehouses and 1300 other smaller deposits of supplies and materials. This is instantly available to all the provinces with one phone call, and the authority to deploy those resources does not require my approval, there is a director of the system that has the authority to deploy on one phone call from the province, and our standard is that those supplies will be available anywhere in the country within 24 hours of receipt of a request.

So I just use that as an example of many areas where when the crisis happens we don't argue a lot in Canada, we just do things.

HN: Just to finish your thought, you were referring to the Toronto situation. I don't want to attribute this to anyone, this is my own personal observation. During the SARS crisis, it became aware that it had expanded beyond a simple emergency, because at the beginning if it was strictly in medical public health it was Ontario's Chief Medical Officer of Health – Dr. Colin D'Cunha at the time – who was responsible, but as it spread it became essentially a true emergency in the general sense for the population of Ontario. That's when you had another I think commissioner – I'm not sure what the title was – Dr. Jim Young, Emergency Preparedness, also coming in to help manage that. And of course these were two, in a sense, two different areas of the Ontario system having to deal with it. And of course in terms of a first time it's always more complex and difficult to try and figure out who does what and who's responsible.

RS: Dr. Scott?

JS: Yeah, maybe I can comment on the funding. I think there are two challenges. It's good because what we have seen for the first time in preparation we've seen the federal government provide money for a national immunization strategy. I mean, money to prepare Public Health. We've seen them pay 60% of the cost of the antivirals for pandemic preparedness, but to get to that process it really had to be a consensus on the total amount and it was a mixture of political, public and professional organization advocacy to get there.

So I think you need to keep that going to get money flowing, but the other thing that you have to be very careful about is even if you get money the provinces within your own jurisdiction will sometimes say wait times or our hospital sector are more important, and so it's siphoned sideways. So you need to have the arrangements that provide the funding and the accountability that the funding is used for the purpose it was intended to be used for.

RS: One... two more questions or comments, then we'll have to move on.

AMc: I guess a federal... maybe a personal opinion on how we cope – and I think this is probably broader than just Canada – with what I think is the public expectation that in emergency setting that the feds are in charge, that the buck stops in terms of management

with the government of Canada, but in fact functionally that's not at all what happens, that the buck stops for public health, for most things – not, I understand at borders and other things – but the buck stops at the provinces, and I think the... my sense of the Canadian public is that that's not the way they see the world, and I don't think they'd be very happy if they knew that that was what the function was. How do we manage... is that a reasonable expectation? If it's not a reasonable expectation then how do we manage that process – we get people to understand that our functioning is okay – when I think the external review of our management of SARS – and yeah, I apply it as much to myself as... more to myself than anybody else – was very negative, and with justification?

RS: That's a similar question that I asked our U.S. colleagues this morning, which was in a sense [10 sec. blank] federal government that has to be there, not constitutionally, not legally, and maybe functionally it's impossible because you don't have the doctors and nurses, but the sense that they've got to be in charge because they're the big government. Same sort of question.

HN: It's interesting. I agree with Allison's comment that the buck stops, really, at the front line. And I'm not sure, maybe somewhere people have a different perception, but certainly the way we've worked – or I've perceived it – is that any emergency is always bottom-up, it's always a local event first and we always, at the federal level, prescribe to this principle of what we call YOYO 24. In English yo-yo is the little toy that you go up and down with, but YOYO can also stand an acronym for You're on Your Own for 24 Hours, so that's the way we've always worked, and it's always been sort of a going up the pyramid in the sense that it's not the feds in charge but the local folks have the responsibility, first responders. If it's a city it's fire and so on, paramedics, hospitals and so on. If they're overwhelmed by the event, be it... not a car crash because that's pretty constrained, but let's say an earthquake or something then it goes up to the provincial level to try and pull resources as appropriate to assist with the local event, and then at the final level if there is further assistance to support them it would be at the federal level where Ron talked about the nest, let's say emergency stockpile, but we never come at it that the feds are in charge, we're taking over, that certainly hasn't been my perspective and approach.

AMc: I don't think it's a "taking over" question, I think it's some level of responsibility and accountability, you know, it becomes a team. It's just that I think what Canadians expect is that the federal government carries the ultimate responsibility and the goal for the best we can do for all Canadians all the time. What I perceive is exactly as you've described, in general the can is actually carried at the local level where there's not a great deal of expertise sometimes, and that may not be a bad thing but I think if we expect that to continue then we need to work at the understanding that that's how the system... that's what the system actually is, and I'm not sure that Canadians will tolerate that system if they know it exists.

RS: Dr. Scott, 30 seconds, and then we'll go to Dr. Krishnan.

JS: I think on of the clear things there, the issue, it's the risk communication to the public. During SARS one of the problems we had was who issues an advisory for Canadians within Canada, and really it was very difficult, between the provinces and territories, to see who did it. To me that is a role of the chief public health officer, and that's a very strong role of the public face – not necessarily managing it, because I think it will be – but it's a public face coordinating and collaborating with the agency, because that should be seen as very important from the Canadian perspective.

RS: Thank-you. Dr. Krishnan, last comment please.

SK: I want to know what is the role of the political leadership and commitment during this type of episode, because in India for example when we had SARS we never had any cases except for two suspect cases. The health minister of the federal system calls all the health ministers of the states and we have an emergency type of a meeting and discuss the issues, and similarly at the administrative level we have the health secretaries who are the bureaucrats who the executive power is with them, they are also called to the centre and you have a meeting and it is discussed. Similarly, during the avian 'flu outbreak also the affected state health ministers are called and briefed about it, so how does it work in the Canada or U.S. system?

RS: Dr. Njoo, you're on the hotseat, here!

HN: Again, one of the many, many legacies or lessons from SARS was the need to have a coordinated communications and messaging – both political and technical – across the

country, so that the federal and the provincial territorial levels are not saying different things at different times to the population.

So there has been a lot of work on communications network, crisis communications network across the entire country, so that there is strong linkages not only across the federal government between departments but also with the provinces and territories. I trust, Dr. Scott, you would agree with that?

JS: Yeah. In the process, I think one of the key things, part of the roles and responsibilities during a pandemic was really try and articulate, as well, not just that but how you set the system in place, because when a pandemic comes you want to have a process that there's a national response, and how do you communicate that between the various policies and political levels? It's there but it needs to be put in place. That'll take place.

RS:

COUNTRY 2: BRAZIL

Dr. Expedito Luna

First of all I would like to thank the organizers for inviting Brazil to present our experience and to share the experiences of the countries, and also I would like to apologize in advance for my mistakes because I'm not a native English speaker so I'll probably make many mistakes in language.

As most countries represented here, Brazil is a very large country. Population estimates for 2006 is 186 million population. It's a federal state with 26 states and one federal district which is the national capital and in practice functions as the 27th state, and more than 5,500 municipalities.

As you can see in this map it shows the demographic distribution of the population of Brazil, and most of the population is located in the south-eastern coastal area and north-eastern coastal area, and there is a huge almost empty space in the northern region which is the Amazon forest. And these differences are not only geographical and also populational but also ethnical – being the southern population of Brazil mostly descended from European immigrants, the north-eastern population mostly descended from Africans, and the northern states mostly indigenous native South Americans – and also of income distributions with the most developed areas in the southern areas, and also the largest state of Brazil, which is the State of Sao Paolo – I'll point it –

the state with 43 million population is the largest and it's responsible for half of the economy of the country.

And so these differences are key to the processes of Brazil. On the one hand we have a very populous, very large state. On the other hand we have a state like that one, the northernmost state, with a population of 300,00 only, and half of the are or half of the surface, belonging to one of the indigenous groups, the Yanomami nation. These differences, they account for a lot of our difficulties in implementing not only the IHR but all healthcare and public health.

And another key thing to understand our process is to understand that we are in Latin America and with the strong authoritarian politics that go in the subcontinent, and in the 20th century Brazil has had two dictatorships, and the last one that ended only in 1985, and so it's only 21 years of democratic government, and so our institutions are in the building – it takes time to build democratic institutions – and so is our national health system. The constitution, the national constitution, the democratic constitution was established in 1988, and the new health system – which is designed to be a universal healthcare system – was begun its implementation in 1999. And it's a decentralized system involving the three levels of government, the federal, state and municipalities, and the municipalities are the ones responsible for delivering healthcare to the population.

The Ministry of Health coordinates the national health system and also funds it. Two-thirds of the funds of the national healthcare system come from the federal government. This money is routinely decentralized to the states and municipalities on the basis of the population and...

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...the degree of development and income, so that the northern, which are larger and less populated, they get more money per capita than the southern, which are richer and with a larger population.

And the public health surveillance system, it was established in 1975. Of course there were public health activities before that, but there was a major meningococcal disease outbreak in the '70s in Brazil, and it was a time of the military government. At first the government tried to hide, to say that nothing was happening, and then later on they came to accept and to publicly acknowledge there was an outbreak, a huge epidemic, and as a response to that they created the first national public health surveillance system in 1975. At that time it was mostly a federal

system with a small participation of the states. From 1999 on we began the decentralization of the national public health surveillance system.

This is the flow chart of the Ministry of Health, and I'll point out where we are located in one of the secretariats of the ministry which is the focal point for the International Health Regulations. Then here it's called the (Secretariat de Vigilance y Salud?), the Public Health Surveillance Secretariat, and it's one of the five secretariats of the ministry. The other ones are healthcare, human resources, of the democratic governance, and science, technology and strategic supplies.

And then within the secretariat we have three departments. This one is where I am, it's the Communicable Disease, then Health Situation and Analysis, and Non-Communicable Disease, the STD/AIDS Department, and also an environmental health – it doesn't have the status of a department – and we also have the four decentralized services. Two of them are public health laboratories, one located in the Amazon, which specializes in arboviral diseases, and the other one in Rio De Janeiro specializes in tuberculosis.

What's the mandate of the Ministry of Health in public health surveillance? Well, it sets the standards, case definitions, guidelines, and coordinates the public health surveillance and disease prevention and control programs, like STD/AIDS, tuberculosis, leprosy, malaria, dengue, viral hepatitis, and also the national immunization program and the national public health laboratories network.

We share the role of protection and response to national public health emergencies with states and municipalities, and also the Ministry of Health is responsible for centralized procurement of strategic supplies like drugs for special programs, like 'flu, HIV vaccines, insecticides and lab reagents, and also to deliver those goods to the states.

There's an annual planning of activities which is made jointly with the states and municipalities, and the ministry conducts the assessment of that planning. We set goals and we set targets to be achieved, and that's continuously monitored. And we have a specific budget for disease surveillance and control programs which in 2006 was equivalent to US$250 million, and we in the Public Health Surveillance Secretariat are the national coordinators of all that.

As in Canada, in the U.S., it's quite difficult to really separate precisely which are the roles of states, national and local. I put it in red the ones which are more likely to be developed at a national or state or local, and in green which is more from the other ones. See, most of the

capacities are shared amongst the three levels of government, being the detection mostly local and the dissemination of information of information mostly federal, mostly central.

Concerning the approval of IHR, our president, the president of the republic will submit the IHR for the National Congress approval. As we're going to have national elections in two weeks we understand that that will only happen after the elections.

In Brazil the national law is over any state or local laws and regulations, so once it's approved conflicting legislation of state and municipalities, they no longer are valid. And states and municipalities, they can add more things to the legislation but they cannot conflict with the federal. Amongst the key changes are the requirements of isolation, quarantine, social distancing, because these things have never been clearly regulated in our country.

And how is the negotiation process within the health system? There is a committee with eight representatives from each one of the levels, so the council of state health departments appoints eight people, the council of municipal health authorities appoints eight people, and this committee decides which things are going to be followed by the health system as a whole. They are particularly concerned in costs and more money, so things that do not imply new costs or new money they tend to approve without much discussion. [laughter] And besides financing the regular transfer of money, we may – we as the federal government – may decentralize more money for specific projects. I'll discuss that later on.

One other change to comply with the IHR is the revision of the public health surveillance system law of 1975, and then we hired one of the universities of our country, the Centre for Health Law at the Public Health School at the University of Sao Paulo which has prepared a draft for us – currently the second draft – and as we finish the discussion within the health sector that will include the state and municipalities. For now it's only within the Ministry of Health. After that process we'll present to the office of the president that will submit that to the National Congress.

And among the key changes is the establishing of the roles of the federal, state and municipal governments, because at that time – in 1975 – the municipal governments had no participation in surveillance and disease control, and also those things I've spoken already – isolation, quarantine, social distancing – their applicability, and also the definitions of public health emergencies of national concern, and penalties for not complying with that law which do

not exist presently – the present law does not define any penalty – so the ones who do not comply are not punished.

And we have already established, as a ministerial act, a list of immediate mandatory reporting diseases. What does that mean? That means the diseases which are of national concern. In the regulations concerning their detection, notification, verification, reporting and response, that was done in February. And also the establishment of the Strategic Information Centre for Public Health Surveillance.

And the next step was a funding mechanism to support the establishment of equivalent centres in the states and the capital cities' health secretariats.

Another initiative is the FETP training which was established in 2000 in cooperation with the CDC of the United States, and at the same time the short courses on outbreaks investigations for a large audience, and Internet-based epidemiology courses.

And there was a huge investment in public health laboratories network.

Here we have the disease list which is of national interest. Then we have... some of them are related to the bioterrorisms and do not happen, in Brazil have never happened. And some of the old IHR and some of the new, complying with the new IHR. Then botulism, anthrax, cholera, yellow fever, West Nile and so on.

And also unusual and unexpected events, which are the cases or deaths related to an unknown disease or modified pattern of a known disease.

And the ways how to notify, how to report those, which is a 0-800 – it's a toll-free telephone – and by e-mail, and also a search in the press and Internet.

And some of the diseases are here because of national policies, like measles. The transmission of measles has been interrupted in Brazil since 2000, and then we have the interest of keeping that achievement. And Chagas Disease, that as well their transmission was interrupted, the bacterial transmission was interrupted, and we now only have acute episodes, mostly related to food-borne Chagas Disease, something that was unknown before.

This is a data flow. It usually starts in the health units and ends up in our Ministry of Health, the Public Health Surveillance Secretariat.

And as the Annex 2 of the IHR we have set an algorithm for notification of diseases, so we're trying to follow that for every event to classify if it's of national interest and also if it

would be of international interest. That's our Strategic Information Centre, which is the 24-hour functioning for reporting of diseases.

And in the past six years the number of outbreaks that were investigated with the participation of people from the Ministry of Health, and that until 2005 there were 114 outbreaks in 83 municipalities, and it's things very diverse, food-borne diseases to yet-unknown problems.

As I told you there's been a huge investment in our national public health laboratories. These laboratories are mostly state public health laboratories and we are upgrading their biosafety capabilities, and then you'll see in a triangle 12 laboratories that received a biosafety laboratory, and the red spots are the border laboratories which were built in order to increase sensitivity and specificity of surveillance in all national borders. And these are also not linked directly to the federal level, we have financed them but they usually belong to the state health departments or to the municipal health departments.

These new regulations from March this year establishes the diseases and situations of national and international... mostly national but the ones that are national are submitted to the algorithm to see if they're international or not, of international concern.

The direct intervention of the federal government is to be decided according to the request of the state – of the state governments – insufficient capacity of state and local, or a risk of national spread, or if they are problems that occur simultaneously in two or more states.

The Public Health Surveillance Secretariat was formally designated as the focal point. I saw it was on the WHO slide this morning, and I'll ask the diplomats, the foreign relations what happened, because there was a presidential act nominating the secretariat, and I don't know, maybe the foreign ministry has not informed yet WHO.

Internally it was established a committee for the coordination of the IHR implementation in August, last month, and with also the participation of federal, state and municipal representatives. And this committee has the mandate to invite, to call other ministries if there are issues which relate to agriculture or trade and other areas.

How our system works, the states and municipalities they must formally adhere to the decentralized public health surveillance system, and once they do that they agree with the goals and the targets that are set up annually and they begin to receive the money. And if they fail to comply with the targets they may have restrictions in the money they keep on receiving. As I

said, it's around $350 million – it was in 2006 – and that corresponds to two-thirds of the total budget.

And also we sometimes finance direct investment for different programs besides of that regular money transfer, like the laboratories for building and remodelling, for equipment – new equipment – vehicles and so on.

The potential obstacles, one of them I've spoken already is the different capacity of state and municipal governments. Some of the state governments are very weak, they're small states and they have difficulty in performing routine activities of public health. The decentralized process sometimes may delay the decision-making process because we need to consult all different levels, and sometimes there are logistics difficulties. Brasilia is the capital of the country. It's located very centrally of the country. We are not more than two hours' flight from any of the states, but sometimes it's quite difficult to get to places. I remember last year there was a huge rotavirus epidemic in the Amazon region. It was about one year, and coincidentally with the worst drought ever in the Amazon Basin.

Some communities, there was one indigenous group of 900 people which asked for our help, and we sent the team to the state capital and the military provided us a helicopter for the team to get to that place, but there were so many fires in the forest that the helicopters could not fly and we took five days to get to their village. In the meantime, of the nine new-borns in that ethnic group eight had died. So, sometimes it's very difficult logistics to get to places.

And then we see that the 27 – the 26 states and the federal district – now take part of the public health of the system, and of the municipalities 93%. As you see, most of the municipalities are very small, are under 20,000 population, and that also means that their capacities are quite different or quite weak, and of the large cities of the 14 municipalities over 1 million, only one has not formally adhered to the national health system, because of local political struggles between the state and the municipality of the capital.

The Ministry of Health, concerning the public health surveillance and disease control activities, there is a mechanism of direct monitoring, of assessment if the states and municipalities are complying with the established targets, and that's made not only by looking at the data but also actively visiting the places, and then we have a target to meet of visits, and that's how we are performing. The numbers for 2006 are only until March, and then you know that January and February is the summer-time there and most things are on vacation and will not

work, so 2006 will probably change a lot. But mostly we've been able to comply or to be very close to our target of visiting and assessing the performance of most states, state capitals, cities with over 100,000 inhabitants. For the small areas, that process has not been for the smaller municipalities, this process has not been established.

The key obstacles, I think it's the differences and the inequities among states and municipalities, also the scope of the IHR with the need to involve other sectors of government like agriculture, like defence, this will pose an extra problem, and the problem of federalism, of the need to... the agreement of all levels.

Is there a problem with human rights issues? Yes, there is, because as a new democracy any restriction in human rights tends to be seen as undesirable, so the lawyers and the people in that area they tend to say no, even the ones who when we asked them to prepare the draft for the new law when we started talking about the new IHR isolation quarantine they said, "No, no, we don't want to do that." Then we discussed it and they were convinced that it was necessary.

I don't think in the IHR... I think it will be easy to be approved by our congress but the new law will not be so easy because it's more specific to our situation.

Well, concerning international cooperation, we're having very successful cooperation with our neighbours, and that reflected in our interventions during the whole process of discussion and approval of the IHR, so the Mercosur countries – Paraguay, Argentina, Uruguay, and more recently Venezuela – they had very active participation, with common positions, and since 2000 we meet regularly at least twice every semester. There is a specific committee for public health surveillance and control. So, we have advanced a lot information-sharing, harmonization of programs and protocols, and it has been a very positive experience for all the countries.

At the same time we feel the need of technical and scientific cooperation, especially in the assessment of core capacities. We need to define what's that and how is that going to be among the states and municipalities. Also in training and the process of implementation of the national public health laboratory. We do not have a national public health laboratory. Most laboratories are at the state levels and act as references for the national level, and we now feel the need to have a reference centre which works closely-coordinated with the epidemiologists. So, we have reserved money in our budget to build a national laboratory. Our target to the end of this year is to have the terms of reference published so that companies – engineering and architecture

companies – can come and participate in the bid to build the laboratory, and we intend that in 2007 will start the construction of the national laboratory in Brasilia.

We do not intend to issue any reservations. We understand the new International Health Regulations reinforces a current movement in the country to strengthen our public health surveillance system.

I think that's it, and we'll end with a view of Brasilia.

Questions and Answers

RS: Thank-you very much, Dr. Luna, and no need to apologize for English, it was well done.

EL: Thank-you.

RS: Comments and questions from the floor for Dr. Luna? Yes, Dr. Kumanan?

KW: Thank-you, that was a very helpful presentation. I'll just make sure I understand, it appears from what I've taken in from your presentation that the federal government's taking a fairly aggressive role on these issues. You mentioned the idea of having penalties and having conditional funding and auditing at the local and regional levels. And we've heard from the previous two presentations there's perhaps a reluctance to do such an aggressive approach because it may damage the necessary collaborative relationships that are important in combatting these types of problems. Has there been a lot of objection from the other levels of government about this type of an approach, and is there a perception that it may be damaging to these collaborative relationships?

EL: I think one thing is – it relates to what I've said – the authoritarian tradition of Latin America, and the two dictatorships that we've had were also movements of centralization, that they took away powers from the states, and within the democracy that shifted, and sometimes shifted too much. Like, the health system it's not even the state's, it's the local authority, which receives most of the money and is responsible for delivering care and also public health. And the new law, we are trying to establish punishments but we don't know if it's going to pass, and we don't know who is going to punish who! Maybe that will be shared, a shared responsibility. That's what we think, it's a shared responsibility.

And also, as I said, most of the money comes from the federal government, so there's a natural leverage for us to assess and to monitor what they are doing with the money.

But that has come out of common agreement. As I said, in the public health system there is the three-level committee and everything's decided, everything that especially involves money is decided jointly by the three levels. And sometimes they are interested that the others got punished, that they got less money, because more money will be available for the others.

And there are also very strong states, like the State of Sao Paolo, very strong, very powerful – including public health – that continuously challenges.

RS: Thank-you. Dr. Lazzari?

SL: *Obrigado*, Dr. Luna. Thank-you very much for your presentation, and I think it's also nice to see how Brazil is moving rapidly implementing the public health surveillance system.

I really have just a small question, more for clarification or more information. You talked a lot about the funding available for disease surveillance and control and how this is distributed with the states and the federal level. I was wondering if you also have provision of some emergency funding, funding that can be used in emergency situations, and if you have also stockpile capacity of equipment or material that can be used, and at what level would this funding or resources be kept and utilized? Is this something again that is transferred as a responsibility to the state level, or it remains at the federal level?

And a second question is on your disease reporting list, which very interesting as proposed. Would the reporting be based only on confirmed cases of the disease which are on the list, with a laboratory confirmation, or would they go also on suspected cases? And in cases it's suspected then how would the system go about the verification and confirmation?

EL: There's only one for confirmed cases, it's neonatal tetanus, because we are in the process of eliminating tetanus, so that's the only confirmed case part of the list – the others are suspect cases – and we expect that our network of laboratories functions and provides the confirmation of cases. Although it's difficult, when you see new sub-types of influenza it implies laboratory, but that's the same with the IHR.

SL: But if I may, this role of confirming the suspected cases is something that would go back to the state level, or would be done at local level?

EL: Yes, mostly at local level, and sometimes if you are in those northern-most Amazon states we take that responsibility, to take samples to a reference laboratory. We have a contract with an airliner that carries biological material all over the country when it's necessary.

And concerning the funding of emergency activities, yes, there is currently at the federal level funding for emergencies, which may be distributed to states and municipalities but it's managed centrally.

And supplies, we have a chain of warehouses from the federal level in Brazil – they're in Rio – and each state has its own warehouses. But for new things we are still debating, like the osoclamivir(?), it's still held by the federal government. We have not come to an agreement where it's supposed to be, and if all states need to have a supply or not. It's still being debated.

RS: Thank-you. Other questions or comments?

Okay, we do have provisions for a break. I think everybody could probably benefit from a stretch, so let's take a ten-minute break at this time. Thank-you.

[break]

RS: We'd like to invite our experts from China to please make their presentation at this time.

COUNTRY 4: CHINA

Drs. Jian Guo Li and Jianzhong Zhang

Thanks, Mr. Chairman.

Ladies and gentlemen, good afternoon. I really want to say sorry here because my English is very poor, so I can't make a good communication with each other. So sorry. Even though that, I still want to report my presentation in English. Let me try.

My topic is that perfecting the development of emergency response mechanism, improving health emergency response capacity, and implementing effectively International Health Regulations, 2004.

Part I:

As we know, the newly-revised International Health Regulations, 2004 is a milestone in preventing the spread of a disease on global scale and will come into effect in June, 2007. The implementation of IHR will play an important role in improving each country's core capacity of surveilling and the reporting to a public health emergency of international concern, and strengthening the relations between WHO and its member countries to jointly respond to possible international public health risks.

The Chinese government was actively involved in the revision of IHR. Furthermore, as the revised IHR came out, the Chinese government has made a lot of preparation for its implementation. In accordance with these regulations, WHA 59.2, the Chinese Ministry of Health has voluntarily commenced to observe the provisions related to the risks caused by avian influenza and the pandemic influenza. Today's conference is of great significance as it will provide opportunity for every country to share experiences in the preparation for the implementation of IHR.

Now I would like to introduce Chinese preparation for the implementation of IHR, the (four-step plan?). China's health undertaking has formed the layout, characterized by government leadership, coordination of sectors, and enrollment of the whole society. The Chinese government has attached great importance to the building of a public health system. It has set up institutions of disease control, health supervision, women and child healthcare, and specialized in disease prevention and treatment at a national, province, city and county levels, as well as a community health surveillance network.

A multi-sector cooperation mechanism, including sectors of health, planning, finance, foreign relations, border control, agriculture, transportation, education, tourism, etc., has been established and therefore a framework of health work involving the whole society was set up.

In terms of emergency response management, the Chinese government gradually develops a management system which is administrated by categories, graded responsibilities, combined ____, and the priority responsibility areas besides its building of the emergency response mechanism with unified command, sensitive response, smooth coordination and efficient operation.

Emergency response management institutions and (assistance teams?) are developing, and the layout of government leadership, coordination of sectors and involvement of the whole society have been formed.

Part II:

Public health emergency response system and the mechanism have been primarily set up which lay the foundation for the implementation of IHR.

1) Establishing the organization and the coordination mechanism for the implementation of IHR; to make full preparations for the implementation of IHR; a preparation and coordination leader team for the implementation of IHR was established by the Ministry of Health, Ministry of Foreign Affairs, state administration of quality(?) supervision, inspection and quarantine.

In order to present the response to public health emergencies effectively and in a timely manner, the Ministry of Health of China initiated and set up a public health emergency response coordination mechanism with 31 government departments. The mechanism has effectively strengthened the exchange of information and the joint action taken.

2) Maturing emergency response legislation and a plan to standardize emergency response by-laws and regulations: the constitution of the People's Republic of China stipulates that the state should develop health and medicine including modern medicine and the traditional Chinese medicine, encourage and support establishment of various medical facilities by ___ collective organizations, enterprises, public sector, as well as community organization. People-oriented health activities should be carried out to safeguard people's health. The Chinese government insists on responding to public health emergencies according to the laws and has perfected the laws, regulations and health emergency response plans of different kinds.

In 2003 China issued public health emergency response regulations through _____ public health emergency response mechanism. In 2004 the Chinese government revised the law of the People's Republic of China on the prevention and treatment of communicable disease. In 2005 a national plan for public emergency response in general was drawn up by the state council. The general plan defined the objective of the emergency response system which prioritizes classified management, graded responsibilities, combination of ____, and the management of responsibility areas in line with the three laws or regulations and based on assignment of the State Council, Ministry of Health of China, formulate national plan for public health emergency

response and a national plan for medical assistance and the response to public health emergencies which were promulgated by the General Office of the State Council.

Targeting prominent public health emergencies, Ministry of Health of China also worked out such plans as emergency response plan for highly pathogenic human avian influenza by Ministry of Health, response plan for nuclear accidents and radiation accidents by the Ministry of Health.

Local governments have drawn up a local health emergency response plan based on local realities, and a system of national plans for public health emergency response has been basically set up.

Currently China is working on state laws on public emergency response. As the frontier health and the quarantine law of the People's Republic of China, and in specific rules for enforcing issued in 1988, targeted only at the plague and the cholera, China is now revising the law to meet the requirements of implementing...

[Start of Side 8]

...enhancing core capacity to meet the requirements of IHR, in line with the provision in Annex 1 of IHR, and with the joint efforts of the Ministry of Health, state administration of quality supervision, inspection and quarantine, the core capacity-building of state surveillance and the public health emergency response has been included in public health emergency response system plan during eleven five-year periods which is still in the process of formulation.

Two other documents on the way, core capacity-building standards for health quarantine on borders and guidelines for the formulation of a national plan for public health emergency response in communities and to improve health emergency response on borders and crossroads.

Based on Annex 2 of IHR, regarding portable public health emergencies, China has begun to formulate regulations on evaluation and assessment to standards, domestic identification and international report.

The Ministry of Health of China has drawn up a plan for dissemination of information on public emergency and epidemic of communicable diseases required to report, which aim to inform the public of information on public health emergencies and epidemic of communicable diseases required to report, as well as the measures taken. This information will appear on a government Web site and government communiqués at the same time.

4) Identify national focal point, strengthening coordination: the Chinese government is making great efforts on work relative to national focal point for IHR and keeps improving the multi-sector and inter-regional communication and coordination system so as to effectively implement IHR by joint efforts.

5) Effectively carrying out prevention and controlling measures, respecting and protecting individual rights: IHR states that its implementation should fully respect individual dignity, human rights and basic freedom. The constitution of the People's Republic of China also stipulates that nationality should respect and protect human rights. Every citizen enjoys the right, entitled by the constitution and the laws, and they (must obey?) the obligations stipulated by the constitution and the laws too.

The Chinese government holds that measures taken by the government should accord with the possible characteristics, extent and the scale of the social risk of the emergencies. Alternative measures must protect citizens' rights to the maximum. Every citizen has the responsibility to participate in emergency response.

6) Strengthening the construction of the public health system to lay the foundation for implementation of IHR: the Chinese government pays much attention to the development of a public health system. In the last three years the government's expenditure in this regard amounted to RMB30 billion and over 5,000 construction programs have been started. All these efforts aim to strengthen the mechanism of disease control and prevention, medical assistance and treatment, health supervision, as well as construction of public health emergency reporting systems. All these measures have improved the capacity of responding to public health emergencies.

In January, 2004, China studied the information reporting and management system for public health emergencies in communicable diseases on the basis of individual case reports. Thirty-one provinces in China can directly report related information through the Internet. Currently the report rate among medical institutions above county level reaches 93%; township hospitals, 66%; and the CDCS at various levels, 100%.

The establishment of the vertical reporting system is useful to set up a mechanism of surveillance, evaluation, early warning and the response which has built a sound basis for the effective response to public health emergencies.

In addition, China has set a surveillance network on food pollutants and food-induced diseases which cover 16 provinces and 830 million people. Since 2004 China has renewed and constructed surveillance points at the national level for key 20 communicable diseases and the vector borne by origin. To date 762 surveillance points are in use, which has provided reliable information for the control of epidemics.

7) Investigating on potential risk and evaluation capacities to issue quick response: China will investigate on potential risks and make registry, develop and improve a database for potential risks so that basically information can be provided for the surveillance, early warning and handling of public health emergencies.

A survey on the emergency response resources should be conducted and a database of material reserved, as well as an evacuation plan must be initiated. A study on big resources demanded in times of public health emergency should be strengthened to meet the demand of emergency relief.

8) Strengthening the supporting system of science and technology to prevent and control in a scientific way: emergency response supporting systems should be strengthened.

An emergency response laboratory network made of laboratories of four levels – national, province, prefecture and the county levels – should be built up. Studies on key emergency response technologies should be strengthened, and the emergency response standardized system should be established. Evaluation on emergency response capacity and emergency relief performance should be perfected so that managing standards on quality control, training and evaluation of emergency works.

Surveillance on diseases of unknown causes and emerging infectious disease and the capacities of scientific research such as testing should be improved to respond to public health emergencies effectively.

9) Strengthening financial input on emergency response management: according to the national plan for public emergency response in general, and based on the principle of the division of executive and financial powers, financial departments at various levels (should build?) the expenses concerning public security, public emergency prevention and response, which must also be included in annual budgets.

10) Strengthening international exchange and cooperation: Resolution WHA 58.3 states that based on the related provisions in IHR member countries are encouraged to cooperate with

each other and with WHO to ensure the effective implementation of the provisions about prevention and control of public health emergencies such as human avian influenza. China has had extensive communication and cooperation with WHO and the countries related.

Part III – Weakness in Implementing IHR

1) __ of promotion among the public in health education is not enough. The public still lacks common sense about response to public emergencies, self-protection, awareness and ability to save themselves or others.

2) Emergency response capacity and infrastructure are relatively lagging behind. Emergency relief teams at the community level are poorly equipped, and the lack of flexibility and training, and their training cannot be conducted effectively and systematically.

3) Supporting systems for emergency testing techniques is not perfect. Testing laboratories of different kinds at various levels are poorly equipped, and rapid testing methods and capacity need improving.

Part IV – Suggestions:

1) IHR has made requirements for the capacities of national surveillance, emergency relieving action, and border control. WHO should strengthen guidance and support in each regard, especially support on meeting developing countries' needs on capacity-building and resources.

2) Strengthen technical assistance, guidance and training in terms of national capacity-building, such as prevention guidelines for systems surveillance, early warning, methods of evaluation, regular and emergency measures.

3) Strengthen exchanges of experience about preparation for the implementation of IHR among member countries, setting up frequent communication mechanisms in order to achieve information exchange, technical cooperation, resource sharing, prevention and the control to prevent outbreaks or threats of public health emergencies in a joint manner.

China will closely communicate and cooperate with WHO and its member countries to improve the capacity of implementing IHR and push forward its implementation.

Thanks for your attention. I would like to answer some questions. Maybe in Chinese!

Questions and Answers

RS: Thank-you very much. Excellent. An excellent presentation. May I open the floor for questions and comments? Go ahead, Dr. Lazarri. You have the floor.

SL: I agree with you. I'd like to thank our Chinese colleagues for their very interesting presentation.

At one point in the presentation your colleague made reference to national, provincial, prefecture and county levels, four different levels. I wonder if he could elaborate a little bit on the different roles in implementing the IHR for the national level, for the provincial level, for the prefecture level, and for the county level.

JL: [via translator] I would like to answer this question. This is a very interesting topic, and actually after the SARS crisis in 2003 all levels of the Chinese government – from the central government, provincial government, prefecture governments as well as county governments – all of them have put (special and enough?) attention to this emergency responding system.

First of all, I have to say that the Chinese government, we have a trend of improving gradually to the system management based on the law and regulations.

In 2003 the Chinese government has published of national regulations in response to the emergency disease responding regulation.

In 2005 we have implementing and improving that regulation, and we have globalized policy with regards to the emergency and infectious disease responding system.

After that each of the departments, on the direction of the State Council, each ministry and department individually they have respectively published a total of 105 individual regulations with each of the departments and ministries.

In terms of procedure for the legislature purpose, in the second half of 2006 the Chinese emergency infectious disease responding system law has been approved in the level of the State Council. This legislation proposition has already been tabled on the Chinese National Assembly.

This legislation proposition is already in the National Assembly of China, which (Pudong Fu?) analyzed in the different levels – on the provincial level and the counties, and the individual organizations – to have the feedback of this regulation and law.

I think, from my perspective, this proposition will be passed after three readings in the first half of next year. In that way, after the approval by the Assembly, this kind of emergency response for infectious disease system and public health system will be legalized in terms of legislature, in terms of the local by-law and so on.

So in terms of implementing of IHR, after this proposition has become the law, the four levels of the Chinese governments will act according to the law, they have more power.

Otherwise, remember in 2003, in the case of the SARS in 2003, some of the officials which showed incompetence in the response for this kind of emergency crisis has been ____ and punished. It's because of the law support.

With regards to the management of the system and the leadership management, there's kind of established(?) ___ in the China State Council a kind of specific agency which is named National Council's Emergency Responding Office. Particularly in some of the State Council's ministries, for example in the Ministry of Public Health in which I worked, there was establishment of the Office of Health Emergency and Responding Centre.

Even if in some of the ministries in which there is not this kind of specific office, however, we do have some people responsible for this purpose. In the May of this year – which is 2006 – there was a meeting held in Beijing with regard to the national management on the health emergency and response system. In that meeting something has already clarified.

So in each level of the government it must – this is kind of a compulsory requirement – in each of the levels of government, for example in province, prefecture and as well as the county levels, each of the governments must have a kind of office or the centre for this kind of public emergency and responding system.

So I'm personally very confident with the support of law and legislature with the improvement of the management system so the Chinese public health emergency responding would cause... will be improved and go forwards for the better, efficient way.

Of course we have to be facing kind of weakness, as I mentioned, because due to this emergency health centre and office has newly established we have tremendous problems and issues to be overcome.

Let me raise the example to further explain the situation currently. For example, in terms of the domain of the public health system, if something happened, even if in the rural level, so the report for this kind of event can go over the different levels and go reported directly to the central, because this kind of report will be carried out through our electronic reporting system.

In comparison with this we did have, previously, using this kind of electronic reporting system allowed us to jump over so many inconveniences in terms of administration or the bureaucracy. In that way, once the central government is aware of this event they will make the quick and direct intervention from the central government. If necessary the central government's central office will sent directly some experts – specific experts and officials – to go to the site inspection and visit and give the guidance and help and support right away at that place.

So, after evaluation made by the experts we should have kind of different levels evaluation reports. Currently we do have a four-level evaluation system. For the ordinary events we will let the county level's governments deal with it. Meanwhile, they will receive the support from the prefecture level governments, of course. If something relatively serious – more important, more serious – in that way we let the prefecture level to deal, with the support of the provincial government, where the major crisis will be dealt by the provincial level government with support of central government. In case of extremely serious crises, we do have the central government's direct intervention.

In that way, as we have not only a networked electronic reporting system, however we have kind of a grassroots level reporting, ordinary people reporting system. Also we have a supervision made by the mass media.

So, particularly which is more important than that, of the SARS crisis, each of the government officials have much more conscious intention toward this kind of public health crisis. So, by my personal perspective, the Chinese in the whole – all levels' government officials – particularly in regards to the response of the public health crisis, so the ability to deal with this kind of crisis and the people's consciousness has much more improved.

Of course we do not forget that we have the support international, for example WHO, and for the international societies as well.

Thank-you.

RS: Thank-you. Other questions? One more question. Dr. Luna, from Brazil?

EL: China is currently facing the H5N1 influenza virus in domestic birds and some human cases, and I wonder if you could exemplify how it really works, the surveillance chain really works, how the detection happens, who is responsible for detection, where are the laboratories? Because for every confirmed episode probably there are tens or more of suspect cases. And then in which level that decision is made, which is important, which is not important, which is strongly suspected, and who takes action, specifically in H5N1? Is it the provinces, is it the federal? And who notifies to WHO?

RS: Brief answer, please, so we can have France's presentation next. Thank-you.

JL: [via translator] Also I would like to answer this question. According to my memory, based on China's national statistics in terms of influenza H51, not including the case which happened in September, 1997 and beginning of 1998 in Hong Kong area, in mainland China totally so far now we have reported and confirmed a total of 21 cases.

Actually so far – as I mentioned – totally we have 21 cases, and only one case which happened in the end of year 2003 which has been detected and conformed by the scientific experts and recognized by the WHO, and other 20 cases have been reported and detected in our different levels of laboratories in the second half of last year.

Actually I would like to say that in terms of influenza transmitted to human beings, among those cases I know that for in terms of surveillance reporting and action taken, all those kind of responding measures belong to the Ministry of Public Health in the national level. So in terms of the human being transmitted by the avian influenza, particularly we detected and reported according to the standard made by the WHO, once recognized diagnosis and confirmed by both governments and WHO we have to report it confirmed. So, we have intentions in that to have shortened the time of detection and confirmation.

I'll give you an example. For example, in 2006 in the month of June we have reported one human being transmitted this kind of influenza. From the discovery and detecting to send the confirmed patient to the hospital for treatment until for the confirmation reporting at the national level for all this three matters were taken in the process, the whole process takes less than two days. Even if for the confirmation by the...

it takes us totally less than 50 hours. Once this suspicion happens we immediately report it to both the Hong Kong and Macau public health authorities, because it's close to the case discovery places. It was in June, 2006.

We have also discovered another patient in the Xinjiang Autonomous Region. Those kinds of patients have been diagnosed and detected by our SARS surveillance detecting system. For example, in the case in Xinjiang Province, once we got this patient which is suspicious we take from his respiratory system some sample and detected negative.

Based on the standard made by WHO we would like to think that we can give it up this kind of suspicious patients because it does not meet for the standard of suspicion made by the WHO. However, our system did not let him go. Instead, we made further detecting based on the sample taken from the patient and we just captured germs off the sample for three generations. Finally after three generations' detecting we make the confirmation, we can make the final diagnosis.

I would like here to take only one minute to explain a little bit for the situation made ____ in the Agricultural Ministry of China.

RS: If we could just make it very short, please.

JL: You know, in terms of surveillance for the poultry and birds, this kind of surveillance is made normally by the system of ____ in the Ministry of Agriculture. However, we do have, in terms of officials from public health ministries, we have very cooperation between the two ministries.

I'm sorry that I've taken long speaking.

RS: Thank-you very much. I think in the interests of time we're going to have to move on because we do have to vacate the room precisely at 5 o'clock, no exceptions. I do not wish to cut our colleague from France short but is it possible to make your presentation? Thank-you.

COUNTRY 5: FRANCE

Dr. Stéphane Veyrat

Thank-you to welcome a little country like France [laughter] because there is so big countries all around. I'll try to make my presentation as short as possible and perhaps we can have questions tomorrow if there is some. I'll present in French. I apologize for that.

[Start Side 9]

Donc la France est un pays de 60 millions d'habitants. Nous avons un ministère de la Santé et des solidarités et c'est au sein de ce ministère que je travaille au Département des situations d'urgence sanitaire. Donc on a des lois de décentralisation qui sont intervenues en 1983 en France et une autre loi aussi qui a conforté le rôle local des préfets qui est intervenue en 2004.

Donc on a un État qu'on peut qualifier de semi-centralisé à la différence des nombreux États fédéraux auxquels vous êtes habitués ici avec un président, un premier ministre et évidemment des ministres, un gouvernement et puis au sein de cet État nous avons sept zones de défense qui ont déjà une connotation très crise puisque c'est vraiment des compétences spécifiques autour d'un préfet de zone pour coordonner l'action quand il y a des problèmes d'ordre public. Vingt-deux régions en France, 95 départements sans compter les départements d'outremer et 36 000 communes donc beaucoup, beaucoup de petites communes aussi.

On a donc des préfets en région et dans les départements qui ont des pouvoirs importants. Ils détiennent des pouvoirs exécutifs de faire appliquer les lois votées au niveau national et pour cela ils s'appuient sur les services déconcentrés donc les services déconcentrés de chaque ministère, chaque ministère ayant des agents dans chaque département. On a également des maires qui ont un certain pouvoir, des pouvoirs notamment de police sanitaire et d'hygiène. Quand il y a des problèmes d'habitats insalubres, des problèmes d'insalubrité aussi parce qu'il y a une pollution de l'eau etc. C'est un pouvoir de police du maire. Et le préfet n'intervient que par subsidiarité c'est-à-dire quand le maire fait défaut et n'intervient pas.

L'ensemble des budgets de veille et de sécurité sanitaire depuis très peu, depuis une loi de 2004 est voté chaque année annuellement devant le Parlement ce qui nous donne d'ailleurs beaucoup de travail puisqu'on doit préparer une évaluation des actions et de comment on va consacrer et utiliser le budget voté. On a également une loi très, très importante mais on y reviendra tout à l'heure qui est la Loi de santé publique. La précédente loi était de 1901 donc ça

faisait plus de 100 ans et c'est une loi majeure pour nous puisque pour la première fois on a fixé plus d'une centaine d'objectifs de santé publique et on a confié des missions très claires à la fois à l'Institut de veille sanitaire qui au niveau national est chargé de collecter l'ensemble des données sanitaires et qui fixe des missions aussi aux régions pour organiser tout ce qui est la prévention, les politiques de santé publique et la veille et l'alerte.

Très, très rapidement et juste pour vous donner une idée on a cinq niveaux. Ici on parle du niveau du bas c'est le niveau local avec des émetteurs du signal sanitaire donc que ce soit des professionnels de santé qui travaillent dans les établissements de santé ou dans le monde libéral en ville, que ce soient les professionnels des maisons de retraite, d'établissements médicaux, sociaux, que ce soient les exploitants qui sont dans les réseaux d'eau potable pour l'approvisionnement d'eau potable des villes, les exploitations agricoles avec les élevages notamment, les usines et notamment on pense aux installations classées. On a eu un accident 2003 qui était... en 2001 pardon, qui était juste après les *Twin Towers*, beaucoup moins grand mais quand même important à notre niveau qui était un accident à Toulouse avec une explosion dans une usine chimique qui a fait beaucoup de victimes et qui a beaucoup traumatisé la classe politique française et par rapport justement à l'organisation des secours.

On a ici effectivement sur le terrain aussi des vétérinaires et beaucoup de vétérinaires ont des mandats sanitaires et donc peuvent faire des interventions et peuvent signaler aux directions dans les départements, les directions chargées justement du contrôle en santé animale. Quand on remonte d'un cran on arrive au niveau départemental et au niveau départemental on a également un niveau qui est centré sur les préfets. J'ai mis ici tout le niveau vertical en rouge puisque c'est la crise. Quand il y a la crise c'est les préfets donc préfets et ça remonte jusqu'au premier ministre en général par le biais du ministère de l'Intérieur qui prend la main sur tous nos problèmes.

Quand c'est des alertes les préfets savent gérer très bien au niveau local et on a ici l'ensemble des services déconcentrés. Il s'agit de l'équipement, qu'il s'agisse des transports, qu'il s'agisse de services vétérinaires, qu'il s'agisse de l'action sanitaire et sociale, des services déconcentrés du ministère de la Santé. Donc la DDASS ici, la Direction départementale des affaires sanitaires et sociales est une des structures. Et on a à côté de ça des services qui sont départementaux, le SAMU qui est le Service d'aide médicale urgente qui chez nous à la différence de, je pense au Canada, des États-Unis, le SAMU est médicalisé chez nous. Donc on a

un médecin à bord dans les camions. Et on a aussi des pompiers avec certains médecins mais pas toujours. On a la police et la gendarmerie ici et donc ces structures-là quand il y a une alerte particulière sur le territoire du département ils vont prévenir le préfet. Ils réfèrent au préfet dès que ça dépasse un petit peu quelque chose de basic.

Au niveau supérieur, le niveau régional et zonal, on a l'équivalent de ce qui existe au niveau déconcentré avec des fonctions supplémentaires d'expertise puisqu'on a des niveaux d'agrégation de signaux sanitaires qui peuvent remonter et ici là... ici c'est la cellule interrégionale d'épidémiologie qui est une des antennes on va dire de l'Institut de veille sanitaire qui est national. Et donc on 16 cellules interrégionales d'épidémiologie pour l'instant. On n'en a pas dans toutes les régions mais on en a 16 sur 22 régions. À côté de ça le CCLIN c'est les Centres de coordination pour la lutte contre les infections nosocomiales puisque comme partout dans le monde les infections nosocomiales c'est un vrai problème et probablement une des émergences qu'on aura... sur lesquelles le RSI devra intervenir. On en parlait tout à l'heure. On a effectivement des structures régionales d'appui à chaque fois qu'il y a des alertes dans les établissements.

Et puis au niveau national, ici on a un point focal national qui est positionné au ministère de la Santé et dans notre département. Et puis on a à côté de ce point focal national qui est juste là pour faire le lien finalement surtout ici vertical mais aussi ici horizontalement, on a également évidemment une très grande importance pour à la fois l'Institut de veille sanitaire qui va collecter les données analysées remontées du terrain et pouvoir détecter une alerte et puis les agences de sécurité sanitaire. Donc on voit qu'elles ont été créées par la Loi de 1998. C'était le premier étage de la fusée, la Loi de 2004 étant le deuxième étage, mais les agences de sécurité sanitaire ont été créées justement pour pouvoir à la fois garantir, améliorer la sécurité sanitaire. Ici l'AFSSA pour les produits de santé. L'AFSSA c'est les aliments. L'environnement et le travail c'est l'[AFSET] et on a une agence de biomédecine qui vient d'être constituée.

Donc à côté de ça vous voyez que dans cet organigramme sur la veille et le signalement on a effectivement l'Institut de veille sanitaire et on a l'administration de la santé. Il y a un partage des tâches qui est assez précis entre les missions de veille, de surveillance, d'expertise et d'alerte et les missions de l'administration qui sont d'élaborer les politiques de santé publique et les mesures de gestion, et l'administration de la santé avec à côté aussi l'administration de l'agriculture qui est chargée de la même chose mais pour son champ de compétence.

Donc le résumé des diapos précédentes se retrouve ici avec la même difficulté qu'on a déjà vue chez les collègues pour arriver à positionner les trois puisque effectivement des choses sont faites au niveau local. Ça dépend de quoi on parle. La détection des cas et la notification on la met au niveau local mais c'est évident que pour des phénomènes rares et des émergences on pourra avoir en fait une pertinence simplement et une détection qui ne pourra se faire qu'à un niveau régional de ____ ou à un niveau national puisque ça peut être réparti et pris individuellement au niveau local où un peut très bien ne pas avoir de détection particulière.

La collecte et l'uniformisation des données là aussi se fait dans les trois niveaux plus particulièrement aux régions nationales mais le niveau local aussi a son rôle à jouer. L'analyse et interprétation de la même façon. Les confirmations diagnostiques ben c'est plutôt du ressort du niveau local et donc on avait vu tout à l'heure les Directions départementales des affaires sanitaires et sociales, les Directions des affaires vétérinaires. Elles vont voir sur place quand il y a des épidémies et des *outbreaks*. Ensuite la diffusion de l'alerte elle est plutôt soit du niveau local, soit du niveau national, rarement du niveau régional mais on a vu quelques alertes coordonnées par un niveau régional. Et puis l'intervention elle est aussi soit du niveau national quand il s'agit de communications principalement et les niveaux locals quand il s'agit d'imposer des mesures de correction localement.

Alors si on passe à la négociation et à l'approbation du nouveau récit on a eu un récit qui a été adopté sans réserve par le gouvernement français. Le ministère des Affaires étrangères a transmis l'information à l'OMS. Il s'impose pour nous sans aucune... il n'a pas besoin que ça passe au Parlement. Il n'a pas besoin que ça soit voté. Il n'a pas besoin de choses comme ça puisqu'on a un décret en fait qui est seulement nécessaire à des décrets d'application, mais il est prévu que tous les accords internationaux conclus et dans lequel fait partie la France s'appliquent automatiquement puisqu'on a... la Constitution de 1958 le prévoit.

Par contre on a un certain nombre d'évolutions réglementaires juridiques et l'accompagnement à faire passer et c'est notamment le fait que dans les missions de mon département il n'est pas prévu qu'on soit un focal national donc il va falloir l'identifier. Il n'est pas prévu que la Direction générale de la santé puisse communiquer non plus sur des mesures par exemple du ressort du monde vétérinaire. Ça c'est une des questions aussi qui se posaient donc il faudra faire évoluer ces missions. De la même façon on a un certain nombre d'éléments dans le code de santé publique qu'il faut ajuster pour répondre à tout ce qui est USPPI (Public Health

and Emergency International Concern). Et puis on a un certain nombre de missions aussi, des DAS, donc dans les départements des cellules d'épidémiologie dans les régions à faire préciser puisqu'il y a des évolutions sur les contrôles et les missions dans les points d'entrée/points de sortie.

Enfin il y a une question mais qui dépasse encore et qu'on aimerait mieux voir traiter au niveau de l'OMS que ce soit région ou que ce soit Genève, c'est le problème des compagnies aériennes et les compagnies de transport, agences de voyages, tours opérators avec la grande question qui est « quelles sont leurs obligations en matière d'information et de traçabilité des voyageurs ». Alors à défaut s'il n'y avait pas de décision au niveau d'OMS, pas de possibilité de faire évoluer les choses avec des systèmes de réservation en ligne comme AMADEUS ou d'autres choses comme ça il faudra que nous on prenne des décisions et probablement une réglementation spécifique obligeant les tour opérators en France et les agences de voyages à signaler les choses.

Alors je ne vous apprends rien en vous disant qu'on s'est penché tout d'abord sur tout ce qui était contenu dans la décision de voter par l'assemblée l'OMS, par l'assemblée mondiale sur l'application anticipée de certaines mesures pour la mise en oeuvre du RSI dans le cadre de la prévention de la pandémie grippale et donc on avait identifié effectivement ces cinq points à la fois la mise en place de l'algorithme, annexe 2, à la fois le point focal national, la désignation – donc je vous dis qu'on vient de le désigner – le dispositif de surveillance et de notification bien on a déjà vu une partie et on pourra peut-être éventuellement développer si on en a le temps. Les mesures de santé publique pour les voyageurs on va y revenir. Elles posent un certain nombre de problèmes. J'ai évoqué le problème des agences de voyages, de la connaissance, de l'action des compagnies mais il y a d'autres sujets aussi. Et puis évidemment le problème des données personnelles et les transports des matériels biologiques.

Donc sur ces cinq actions on s'est penché et on a essayé d'évaluer ce qui était déjà fait, ce qui nous posait problème et là où on a laissé. Sur le système de surveillance la France est déjà relativement structurée en termes de réseaux de surveillance à la fois sur le volet santé animale. Je vous ai parlé des vétérinaires. Donc il y a les vétérinaires sur le terrain qui vont dans les fermes et il y a les vétérinaires qui travaillent dans les directions départementales dans chaque département, et puis il y a des vétérinaires au niveau national. Et puis la même chose au niveau santé humaine, on a des médecins généralistes donc qui sont libéraux ou pédiatres ou médecins

généralistes qui travaillent et qui participent à un réseau qu'on appelle un réseau de médecins sentinelles – donc il y a deux catégories – et ces médecins se sont engagés, enfin ce sont des médecins assez volontaires qui s'engagent à faire à la fois des prélèvements – ils peuvent faire des prélèvements à la recherche de virus de la grippe – et puis ils signalent, ils renseignent et ils remontent leurs informations de manière hebdomadaire au niveau national.

Il y a certains laboratoires aussi qui agissent de la même façon et qui remontent des souches pour caractérisation aux laboratoires nationaux de référence, et donc on a les laboratoires nationaux de référence qui suivent tout ça. Et puis en parallèle de ça on a un autre réseau que je n'ai pas mentionné ici qui est un réseau de veille entomologique. Vous savez que la France a été quand même très touchée par effectivement des alertes *vector-borne disease* avec notamment le *Chikungunya*, une épidémie de dengue qui a touché aussi les Antilles et la Guyane et *Chikungunya* à la Réunion et à la Mayotte. Donc on est très sensibilisé et on s'aperçoit qu'effectivement on a des nouveaux vecteurs en France qui apparaissent. On a notamment des familles d'[AIDS] qui semblent remonter d'Italie pour s'implanter dans le sud de la France. Donc cette surveillance mise en place aussi pour le West Nile virus puisque comme pour l'Amérique on a également du West Nile virus de temps en temps sur l'arc méditerranéen, sur les départements du bord de la Méditerranée. On a aussi une surveillance sur tous ces arbres de virus.

Sur la deuxième étape dont j'ai parlé tout alors c'est la Loi de la santé publique du 9 août 2004. On voit bien qu'on a un Institut de veille sanitaire qui doit monter en puissance mais comparé au CDC d'Atlanta l'Institut de veille sanitaire est encore très, très faible en termes d'effectifs. C'est tout petit mais c'est... la France est aussi plus petite que les États-Unis d'Amérique. Donc c'est une petite structure mais qui monte en puissance et qui doit pouvoir s'appuyer sur un réseau de correspondants qu'il soit au niveau local, au niveau régional, au niveau national avec des laboratoires et des partenaires. Donc tout phénomène menaçant en santé publique doit pouvoir en plus lui conférer... la loi lui confère une possibilité d'investigation, d'aller voir exactement ce qui se passe et de demander à des entreprises, à des structures, à des compagnies aériennes ou à d'autres compagnies des données mêmes nominatives quand il y a une menace pour la santé publique avec un phénomène émergent.

Pour nous on a un gros travail qui est de diffuser l'information aux autres ministères qui n'est pas encore fait aujourd'hui, diffuser l'information sur ce qui entraîne l'application de

l'annexe 1 et l'annexe 2 du règlement sanitaire international et ça c'est un gros travail à venir. Sur la détection, notification, vérification, déclaration je ne reviens pas. On a vu avec le tableau la présentation simplement deux accents et deux focus, l'un sur le fait que la France vous avez vu est un système avec plusieurs ministères donc on a un fonctionnement historiquement qui est un peu en tuyaux d'orgue vertical et la difficulté c'est que selon la nature du risque les compétences ne sont pas forcément à la santé.

C'est par exemple pour la radiologique et le nucléaire où on a une structure qui maintenant ne dépend plus directement de la santé même si on y est plus ou moins rattaché, mais qui gère tous les phénomènes d'alertes nucléaires, donc alertes météorologiques, accidents de radiothérapie importants mais aussi éventuellement problèmes de diffusion d'un nuage radioactif. Et donc tout le travail va être de remettre de l'horizontalité, de la transversalité dans des remontées qui se font plutôt verticalement jusqu'au premier ministre pour revenir ensuite vers nous éventuellement avec retard. Et puis pour rappeler qu'en France on a un État qui s'est présenté pendant longtemps comme un peu providence et garant de la sécurité, on a eu beaucoup d'implication d'hommes politiques, de ministres de la Santé sur des alertes. Le plus récent c'était 2003. Vous savez qu'on a eu une canicule et que notre ministre de la Santé de l'époque n'a pas résisté à la canicule non plus.

Donc on a cette obligation de détection des phénomènes, obligation d'alerte et puis obligation de gestion, et le problème ça va être justement de travailler sur qui valide finalement la communication à l'OMS quand on fait soit une consultation (article 6) soit une notification (article 12). Ça va être à quel niveau est-ce que cela va être arrêté. Est-ce que ça va dépendre du directeur général de la santé, mon supérieur direct, ou est-ce que ça va dépendre du ministre de la Santé ou est-ce que ça va remonter jusqu'au premier ministre avant de vous être retransmis? C'est une des questions qui est encore un peu ouverte à vrai dire. Et en plus de ça il va falloir qu'on ait la validation avant de communiquer des autres directeurs d'administration, agriculture ou fraude ou douanes ou que sais-je encore... même intérieur peut-être. Donc voilà, donc on a encore des sujets.

Ça je viens de vous le dire de toute façon. Un autre point peut-être important c'est de dire que la Direction générale de la santé donc ma structure à moi n'a pas d'armes directes, on va dire pour imposer les choses au niveau local. On n'a pas d'agents de police. On n'a pas de structure comme ça. On a bien des médecins inspecteurs dans les départements qui peuvent faire des

missions d'inspection et de contrôle, mais bien souvent pour faire appliquer une politique on passe aussi avec d'autres intervenants, d'autres ministères. Donc je vous ai parlé des deux lois, je ne reviens pas dessus mais elles sont fondamentales. Pour nous elles nous donnent surtout les outils pour faire appliquer le RSI et pour intervenir.

Sur le sujet qui était une des préoccupations sur comment faire pour travailler ensemble ben je vous ai expliqué qu'on avait ces structures. On a à travailler sur l'horizontalité, la transversalité, travailler sur ce qui se fait déjà au niveau local avec la Loi de la décentralisation et puis surtout les avancées d'une loi de 2004 autour des préfets. On a une Constitution de délégation interservices. Par exemple on a un pool de sécurité alimentaire au niveau des préfets de département constitué à la fois par les Directions des affaires sanitaires et sociales de la santé, des Directions des services vétérinaires et les Directions des fraudes et de la consommation. Donc tout ça travaille autour du préfet pour essayer d'agir à la source quand on détecte quelque chose. C'est ce que j'appelle les pools de sécurité sanitaire.

On a aussi un rôle de coordination au niveau national c'est le Service général du gouvernement qui dépend du premier ministre, le SGDN. Le SGDN étant donc la structure qui quand on est en situation de crise... vous vous souvenez du tableau de tout à l'heure, et bien c'est la structure tout en haut ici qui est chargée de coordonner et pis finalement de mettre de l'huile entre les différents ministères. Et puis on a un certain nombre de plans de prévention. On a le plan de prévention pour le SRAS, pour la grippe aviaire pandémique et puis pour d'autres plans qui sont d'autres plans de type variole, peste, charbon, tularémie ou d'autres maladies non infectieuses comme par exemple la canicule qui intègrent un certain nombre de logigrammes organisationnels et décisionnels qui permettent de préciser qui fait quoi à quel moment, et à quel moment la santé par exemple va passer la main au ministère de l'Intérieur voire au premier ministre.

Quelles sont rapidement les difficultés identifiées? Je vais vous parler tout à l'heure pour les mesures de santé publique aux voyageurs. On a à la fois la problématique de ces interconnexions internationales en Europe. On a cinq *hubs* internationaux qui sont des plateformes aéroportuaires de transit majeurs. Il y en a d'autres bien sûr en Asie. Il y en a d'autres partout mais pour l'Europe on en a cinq principales avec Heathrow à Londres, Francfort en Allemagne, Zurich en Suisse et puis aussi Schiphol à Amsterdam et puis Roissy chez nous en

France, Roissy-Charle de Gaulle. Et donc c'est des problèmes majeurs pour tracer les personnes, pour identifier les personnes.

Cinquante pour cent des voyageurs de Roissy il y a 30 millions de passagers à peu près par an et 50 pour cent des voyageurs sont en transit quand ils sont à Roissy c'est-à-dire qu'en fait ils vont passer par Roissy mais ils arriveront dans un aéroport, un petit aéroport en France X ou Y et il va falloir... évidemment c'est beaucoup plus difficile de tracer à ce moment-là ces passagers, de les identifier pour les informer ou pour simplement les prendre en charge. Donc c'est le problème du *screening*, c'est le problème d'avoir des moyens adaptés, c'est le problème d'avoir dans les aéroports des locaux parce que j'ai visité même le local à Dallas à Washington au mois de mai et c'est pareil. Il y a le même problème c'est-à-dire qu'il y a des agents mais il n'y a pas de local précis pour isoler les personnes en quarantaine et au moins pour les examiner de manière approfondie. Enfin il y a une petite salle mais en tout cas qui ne peut pas permettre d'accueillir tout un avion entier.

Donc on a le même problème en France. On a le problème aussi d'identifier autour des aéroports des lieux où on pourrait avoir éventuellement une quarantaine quand il y a un cas déclaré à bord puisque le principe c'est que quand le cas n'est que suspect on prenait plutôt une quarantaine à domicile sur la base du volontariat. Bon il y a tout le problème des conventions avec les médecins, avec les hôpitaux pour les prises en charge. On a le problème très clairement posé par aussi le Règlement sanitaire international qui est-ce qu'on peut faire ou est-ce qu'on ne peut pas faire un examen invasif et notamment un prélèvement oropharyngé puisque dans la liste des choses qu'on peut faire pour lesquelles le RSI nous dit qu'effectivement qu'on considère que cet examen n'est pas invasif, il n'y a pas de prélèvement oropharyngé. Donc il y a l'examen buccal oui. Il y a les examens des urines, des selles, mais il n'y a pas le prélèvement oropharyngé. Donc là une des questions c'est est-ce qu'on pourra le faire quand même dans le cas du RSI ou est-ce qu'il faut une disposition particulière qu'on pourrait prendre nous au titre de la loi du 9 août 2004 si la personne refusait comme menace grave à la santé publique, mais c'est encore une question ouverte aujourd'hui.

On a tout le problème de la traçabilité des voyageurs à posteriori. On a l'exemple tous les jours avec la tuberculose quand on a eu récemment un problème en Finlande avec un passager qui revenait et qu'on a découvert avec une tuberculose multirésistante et bacillifaire. La question derrière c'est effectivement comment identifier à posteriori nos deux rangs devant, deux rangs

derrière si on a des passagers. On a des listes mais les listes des compagnies ne sont pas très fiables et les coordonnées qu'on peut récupérer comme ça nous permettent difficilement d'identifier les personnes.

L'information des touristes j'en parlais. Quel est le rôle des agences de voyages? Quel est le rôle qu'on peut aussi donner comme obligation d'information pour les ventes en ligne sur Internet qui seront de plus en plus fréquentes. Et puis enfin le passager en transit. Le RSI nous dit qu'il va voyager et qu'il peut poursuivre son voyage, qu'il n'y a pas de problèmes particuliers. Effectivement c'est un cas suspect. Même s'il est suspect à priori dans le temps du voyage il a le temps d'arriver avant d'être infectieux. Ceci dit il faut encore convaincre à la fois l'aéroport de destination, le toucher, et surtout le commandant de bord puisque le commandant de bord a cette capacité de garantir... a cette obligation de garantir la sécurité des gens qui seront dans sa cabine pendant le temps du voyage. Donc il pourrait très bien refuser de prendre le passager.

Pour les biens je serai plus bref. Notre principale difficulté c'est que pour l'instant on était concentré. Nos actions de contrôle sanitaire en frontière, démoustification, désinsectisation sont des actions qui sont menées en routine soit par la Direction départementale des affaires sanitaires et sociales dans les départements mais uniquement pour les gros aéroports à trafic international et donc principalement Roissy actuellement et Orly pour nous. Et maintenant il va falloir étendre ces mesures-là a beaucoup d'autres aéroports du fait d'une part qu'il y a des liaisons indirectes avec des transits, mais d'autre part parce qu'on doit mettre ça au point d'entrée de tout ce qui peut rentrer même indirectement mais avec un point d'entrée sur le territoire et de la même façon sur les points de sortie.

Et puis on a encore plus difficile pour l'instant comme *challenge* c'est de mettre ça aussi sur l'ensemble des ports à trafic international puisque jusqu'à maintenant on estimait que les délais nous permettaient quand même en général d'avoir une application plus stricte sur les aéroports mais c'est vrai que sur les ports on avait moins d'action musclée, d'intervention musclée pour garantir le côté exempt de germes, exempt d'insectes.

Donc pour ça on doit faire évidemment tout un tas d'évolution et de concertation avec nos partenaires. Sur le matériel biologique j'ai parlé. Et les données personnelles le problème on a aussi chez nous une Commission nationale informatique et liberté et effectivement ça pourrait poser problème si on levait les secrets avec des listes nominatives. Ceci dit dans un cadre de menaces sanitaires et dans le cadre de la Loi de 2004 il est possible à l'InVS d'obtenir ces listes à

des fins d'investigation de santé publique avec bien sûr une consigne pour une destruction ultérieure.

Donc sur le financement, le partage des frais, là aussi on a un vote annuel. Je vous disais tout à l'heure chaque année on doit travailler à présenter ce rapport. On a des objectifs qui sont définis et donc chaque année aussi on doit dire comment on a atteint, à quel degré on a atteint nos objectifs et puis on doit enfin d'essayer de travailler en amont puisqu'il y a une sorte de mission veille et sécurité sanitaires qui dépasse le ministère de la Santé et donc on doit évidemment intégrer les contributions des uns et les autres à l'amélioration. Donc la part de l'agriculture par exemple qui a travaillé à son plan d'urgence pour la prévention d'influenza aviaire en France, on a eu cette alerte au mois de mars de l'année dernière et donc on a bien sûr tout intérêt à travailler ensemble pour voir qui contribue à quoi et dans quel domaine et pour quel montant.

C'est un peu le résumé de ce qu'on est en train d'essayer de mettre en place. Donc la transversalité bien sûr, le travail en interministérialité quelque chose d'assez nouveau aussi en France, le travail pédagogique, d'explication des enjeux du RSI, du règlement pour éviter que chaque administration aille jusqu'à la validation complète de tout le signal avant de transmettre au point focal national et ça c'est évidemment quelque chose de très délicat puisque derrière il y a des engagements. Il y a des conséquences financières. Il y a éventuellement si on communique trop tôt, on a joué la transparence pour donner un exemple avec le cas de Versailleux dans l'Ain. Vous savez qu'on l'a tout de suite transmis en disant qu'on avait un élevage de dindes qui était contaminées. Évidemment derrière il y a des répercussions en termes d'arrêt des importations, de tas de pays qui se sont aussitôt positionnés en disant ben nous on mangera plus de poulet français alors que c'était un élevage de dindes ponctuel dans l'Ain donc qui est un département quand même relativement circonscrit. Et là c'était l'ensemble du poulet de la filière de production et de l'exportation du poulet français qui était visé. Donc on voit bien que c'est très difficile et que c'est pas simple de prendre une décision de communication d'information.

On a effectivement une toute nouvelle structure aussi qu'il faudra consulter puisqu'on a la Haute autorité de santé qui doit être consultée quand on prend des mesures de santé publique notamment une urgence et donc il faudra voir comment on l'associe aussi à cette consultation avant transmission, ou avant ou après transmission. Et donc ces niveaux de validation je vous ai dit tout à l'heure qu'ils sont fondamentaux.

Peut-être trois propositions à l'OMS puisqu'on a la chance qu'ils soient avec nous, donc travailler sur effectivement cette harmonisation européenne aux points d'entrée/sortie par rapport au problème du trafic international. C'est vrai que c'est assez peu pour nous... moi je suis le seul représentant ici de la Vieille Europe et c'est une petite structure avec beaucoup, beaucoup de pays et de liaisons donc les liaisons sont énormes entre les pays et la France a des frontières avec plus de six pays différents. Donc bien évidemment on va pas fermer les frontières, et bien évidemment on ne peut pas prendre des mesures comme ça, mais il va falloir qu'on travaille à harmoniser pour qu'aux points d'entrée...

Je vous ai parlé d'Amsterdam, je vous ai parlé de Francfort, de Zurich. Il y a Rome, pareil Barcelone ou d'autres. Il va falloir qu'on travaille ensemble pour qu'on prenne les mêmes dispositions à tous les points d'entrée par exemple il ne s'agirait pas que les Anglais laissent... on va dire Neuchatel pour le trafic trans-Manche ouvert et pis que la France décide de fermer parce qu'à ce moment-là il y aurait comme un problème diplomatique. Donc on doit vraiment travailler là-dessus.

Le deuxième point c'est... Alors à la fois on va travailler au niveau entre nous, je pense, mais je pense qu'il y a un rôle important pour au moins l'OMS Europe à jouer là-dessus et le CDC et je pense que de côté-là on doit travailler ensemble puisqu'on a un centre européen de contrôle des maladies maintenant. Le deuxième point c'est le renforcement des obligations des compagnies de transport et de voyages. Je ne reviens pas dessus. Je vous ai dit que c'était important pour nous pour assurer à la fois l'information aux voyageurs et la traçabilité si on a des cas suspects.

Et le troisième point important pour nous c'est le centre RSI de l'OMS. Pour nous on pousse effectivement pour qu'il y ait une implantation sur le pool de Lyons d'un centre qui aurait pour mission d'aider les maillons faibles puisqu'on n'est jamais aussi fort qu'on a la force du maillon le plus faible en termes de vigilance pour aider les maillons faibles justement à *capacity building* et surtout en termes de surveillance, détection, signalement et gestion à la fois pour la formation, la coopération technique ou l'aide financière.

Voilà. Donc c'est un peu les points importants. Le dernier point que je rajouterais effectivement c'est que vu ce qui a été dit ce matin par Stéfano, si on a une région OMS Europe comme une région OMS ailleurs qui est le point focal... le point de contact pour les points focaux nationaux, il faut absolument qu'on ait un système concerté et cohérent avec le dispositif de

signalement qu'on a au sein de l'Union européenne puisqu'on a effectivement tout un tas de dispositifs et de réseaux d'information. Voilà. Je vous remercie.

Dr. Ron St. John

Thank you very much. I've been informed by Dr. Lazzari we do have a little extra time so if we have some time for questions and comments. Thank you very much. It was a very nice presentation. Dr. Lazzari.

Questions and Answers

SL: I'm going to ask the question in English if you allow so that people can take... It's actually a very simple question. If I understood correctly then the national focal point in France is the Department of General Health. But information in terms of events is likely to come to the InVS or go through other surveillance and reporting systems. So how do you envisage to articulate the communication between InVS or other systems at local level and the Director General in order to acquire all the information required? Is this going to request some change in mechanism or some better articulation of exchange of information between these different institutions? And you've mentioned other institutions as well would be [__] but I think that transmission is crucial. And it might apply other countries as well that decide to put the focal point not in a technical unit but in a more senior level managerial unit in the Ministry of Health.

SV: Yes. That was a big debate, a big discussion between the InVS and us and in fact in this, about 90% of signals and alerts are transmitted to European Commission or European Union, and we only make about 10% of the French transmission. It's about all the management and the management measure. So I think we have a big discussion, but the fact is the International Health Regulation does not only concern some infectious disease and that's the main point. It can concern other administrations and nobody can understand or could understand why InVS can transmit some information from the directory of agriculture or the directory of fraud, you know, customers or things like that. So it's not for radiological and nuclear accident. InVS is not competent to transmit to an authority about that type of incident or event so that's why the choice is to put the focal point on the Ministry of Health and not on the Institute. But you're right. If have to move some... and to get better for transmission and the reciprocity of

signals. But we have also some signals that we are used to give to [__] so we must improve that but it's already possible.

RS: Thank you. Other comments, questions? Dr. [__].

Dr.?: Yes. Without going into any detail I can tell you that some of the questions you asked do have answers, some specific, some very indirect in the IHR and we'd be happy to discuss it with you specifically and some of them only have very, very vague answers, and some of them actually say consult your national law which may or may not help, I'm not sure. It depends on the issue. I can tell you that under the IHR, and this was a subject of big debate, they are actually listed what is invasive and what is non invasive and it was a big debate because you can imagine how many doctors were involved in this and everybody, you know, has a different view, you know, is it x-ray invasive is it not invasive? But external collection of urine sample: non invasive. That much we answered specifically. But as to the other ones, if you want to follow up later of course we can go through some of the provisions and see how much help they make.

SV: ... prelevement but for old prelevement for [H_1] is not recorded in the list of non-invasive examination.

Dr.?: These [__] swabs would be... Is that invasive or non-invasive? I remember the debate really well. I was there. I think it may be bad news. If invasive means the puncture or incision of the skin or insertion of an instrument or foreign material into the body or the examination of a body cavity, so if that involves going into something like that then it may be invasive. And I just want to make sure it's not covered in one of the specifics. You can do a temperature assessment in somebody's ear but I think that's... wait, wait... medical examination of the nose. Medical examination of the nose. Then you may have a problem. I should say it doesn't mean you can't do it. It just means that you can't do it on a routine basis. There has to be a specific justification for it. That's the difference.

Dr.?: Right. That was the sort of the way out of the dilemma since as a physician we know that a lot of our diagnostic testing depends on the vena puncture and the extraction of a blood sample. And technically speaking that is invasive. You do puncture the skin. You do select blood. But again that was the caveat that opened the door for a broader interpretation.

RS: Other comments?

Dr.?: Thank you and I apologize if you have addressed this topic in the presentation. Maybe for a point of clarification. It seems like a lot of this ought to be addressed legislatively. I'm just wondering how... are there any mechanisms to ensure that local officials are able to comply with the legislation or have the capacity to comply, and are there any ongoing mechanisms to ensure ongoing compliance?

SV: Peut-être je vais répondre en français si c'est possible. En France nous avons effectivement des Directions départementales des affaires sanitaires et sociales avec des ingénieurs d'étude et du génie sanitaire, des médecins inspecteurs de santé publique. Et au niveau régional nous avons en plus des pharmaciens inspecteurs de santé publique. Donc ces personnes qui sont des agents du ministère de la Santé placées au niveau local ont déjà l'habitude de travailler sur des sujets d'infectieux. C'est eux qui gèrent la plupart des *outbreaks* et épidémies localement soit seuls soit en lien avec l'Éducation nationale pour le... quand c'est en milieu scolaire ou avec la Direction des services vétérinaires quand c'est un *food-borne disease* et des choses comme ça. Maintenant plus spécifiquement par rapport à la mise en oeuvre de l'application du RSI aux points d'entrée si les multiplie effectivement sur le territoire, on a un problème de ressources c'est-à-dire qu'aujourd'hui on a... C'est pas des grosses structures. Il y a peu de techniciens sur ces départements-là donc c'est sûr qu'ils ne pourront pas assurer des veilles 24/24 si on ne les renforce pas. Donc il y a tout un travail pour voir si on renforce spécifiquement ces structures lorsqu'elles ont un aéroport ou un port à trafic international. Et c'est en cours de débat. Est-ce que j'ai répondu à la question?

Dr.?: Yes, thank you very much.

RS: Other questions? I'm sorry, I missed... oh yes Dr. Lazarri.

[Start of Side 10]

SL: J'aimerais clarifier quelque chose. Si je comprends bien en France on fait une distinction entre la déconcentration et la décentralisation, parce que dans votre présentation vous avez utilisé l'expression « déconcentration ». Et pour moi cela suggère que le pouvoir ultime reste à Paris. Il y a des pouvoirs qui sont exercés pas à Paris mais au niveau régional ou local, mais c'est quelque chose… ce pouvoir n'est pas décentralisé à des régions. C'est déconcentré, ça veut dire quelque différent? Est-ce que je…

SV: Je crois que vous avez bien compris, oui, c'est-à-dire qu'on a…

SL: Dans ce contexte c'est une déconcentration, pas une décentralisation?

SV: C'est-à-dire qu'on a des lois de décentralisation en 83 mais qui aboutissent dans les faits à un état semi déconcentré effectivement. Mais l'ensemble des ministères, le gouvernement, le premier ministre restent à Paris et on a des préfets de région qui ont de plus en plus de pouvoir mais plutôt des pouvoirs d'organisation par exemple de l'éducation, des infrastructures routières, des choses comme ça, mais ils n'ont pas vraiment… ils n'ont pas pour l'instant le pouvoir sur tout ce qui est les choses sensibles comme justement l'organisation des secours, l'organisation de la santé, l'organisation de tous ces dispositifs sensibles.

SL: Merci.

Dr. Ron St. John

Apologies to our colleague from Senegal. We will open the place first thing in the morning for your presentation. We did build in some flexibility into the program so we do have room to make up some of the time that we did lose today. Would you like to make any concluding remarks on today?

Dr. Harvey Lazar

No, I was scheduled to say a few things but I think it's too late to do that. I think you should just focus on logistics for this evening, Kumanan.

Dr. Kumanan Wilson

I hope you all received the invitation for dinner to tonight at the Westin, I think it's at 7 o'clock, and there's a map in your program... no, Chris is handing out the map right now. And I believe all hotel issues have been resolved, is that correct? I think it is. Chris, all hotel issues are resolved? I'm asking. Yes, okay! So al hotel issues have been resolved. I don't think there's anything else to discuss, so we'll be starting I guess breakfast again at 8:30 and hopefully starting sharp at 9:00 tomorrow. And again, thank-you very much. A long day but a very informative day, and very useful presentations.

Dr. Ron St. John

Thank-you. We'll consider the session adjourned.

[End of Side 10]