



Cultural Property Protection
Conference
Congrès sur la protection
des biens culturels



The Canadian Museums Association, in partnership with the Canadian War Museum, presented the first Canadian **Cultural Property Protection Conference in January 2006.**

Museums, and related institutions, protect our cultural heritage. They provide for the long-term care and safety of our collective heritage while protecting employees, visitors, and facilities. With an increase in organized art crime, terrorist activities, natural disasters, and internal theft, what is the best course of action for ensuring the safety of the collections, the people, and the building?

Directors, Facilities Managers, and Museum Security Professionals came together for this two-day conference, which presented an exciting opportunity to learn from sessions led by experts, to exchange knowledge and experience with peers, and to investigate the latest tools and strategies in museum security.

Get further resources and read the speaker presentations here. Please note that presentations are only available in the language they were presented in.

KEY THEMES

Themes that will be explored include:

- Emerging Issues
- Security Best Practices
- Risk Assessment
- Emergency Preparedness & Recovery

SPEAKERS



DR. PETER E. TARLOW is a sociologist specializing in the impact of crime and terrorism on the tourism industry and also in tourism and economic development. [[read more...](#)]



STEVE KELLER, a Certified Protection Professional, has served in security or security-related positions for over 30 years. [[read more...](#)]





KEY THEMES



Printer friendly
version

Emerging Issues

Recent events such as hurricanes Katrina and Rita, the July bombings in London, and various high profile thefts both in Canadian museums and abroad, have brought museum security issues to the forefront. Emerging issues affecting cultural institutions will be explored, including terrorism, internal theft, the struggle to achieve balance between public access and sound security, and their effects on the tourism industry.

Security Best Practices

Every museum has developed unique solutions to address the many obstacles faced by the sector, such as budget cuts, the security of traveling exhibitions, criminal behaviour, or internal theft. Sessions related to this theme will explore current best practices, and will raise awareness and strengthen the sector's ability to address emerging issues.

Risk Management

Museums face a high number of potential risks, but how does an institution evaluate the relative importance of *all* risks? Different elements of risk management include management strategies, insurance coverage, and the technical review of facilities.

Emergency Preparedness and Recovery

To achieve a state of readiness, institutions rely on emergency preparedness policies and procedures to guide effective response to any emergency or risk faced by museums. These plans provide direction for the entire recovery period and include information on every aspect of museum management, such as managing employees, providing basic services to the building, details of agreements with vendors for emergency supplies and services, and how to effectively communicate key messages to the media.





MONDAY, JANUARY 16

TUESDAY, JANUARY 17



SCHEDULE: January 16, 2006

NOTE

Registration begins at 8:00 am on Monday, January 16, 2006 in the lobby of the Canadian War Museum. CMA staff will be at the registration desk through the duration of the conference.

Sessions run from 9:00 am to 7:00 pm Monday, January 16, and from 8:30 am to 5:00 pm Tuesday, January 17.

KEYNOTE ADDRESS

[Dr. Peter Tarlow: Cultural Property Protection for Today's Society](#)
Introduced by Mike Ferguson, Deputy Director of Operations, Art Gallery of Ontario

Museums play a significant role in - and rely heavily on - the tourism industry. A healthy tourism sector contributes significantly to the economic health of museums and their cities. Just as museums benefit from a healthy tourism sector, they are also victims of trends, disasters and critical incidents, which can have a negative impact on the sector.

In recent years, several events have required museums to implement additional security measures to ensure the safety of their visitors, employees, collections, facilities, and intellectual property. It is equally important to review the impact of security and surety procedures on museums. To thrive as both business entities and as cultural institutions, museums must carefully balance access and security. Failure to do so can have a severe economic impact on cultural institutions and their surrounding communities.

An internationally renowned expert on tourism, crime, and security, Dr. Peter Tarlow will discuss how to achieve, and manage, this delicate balancing act in cultural institutions. Understand how personal safety affect the decisions made by visitors and tourists. Learn how treating security as a top-line investment - rather than a bottom-line expense - can contribute positively to your brand identity, and, most importantly, improve your institution's bottom-line.

This session promises to be an eye-opener!

NETWORKING BREAK**PANEL DISCUSSION: EMERGING ISSUES**

Moderated by [David Tremain, Preservation Advisor, Preservation Services and Training, Canadian Conservation Institute](#)

Prior to 9/11 the word 'terrorism' was not a term largely used by the museum community in relation to security issues: it remained in the preserve of security services and the intelligence community. However, since that fateful day, every public institution now faces the prospect of becoming a terrorist target, or suffering collateral damage as a result of a terrorist incident - museums and galleries are no exception. Museums and galleries are frequently used to host state events, a potentially attractive target for terrorist groups.

Martin Rudner, Director of the Canadian Centre of Intelligence and Security Studies at The Norman

Paterson School of International Affairs, Carleton University, will present International Terrorism: Threats to Cultural Infrastructure, which will address the contemporary terrorist mindset, strategy and tactics that pose threats to secular cultural and social institutions.

Michelle Parks from the Surveillance, Emerging Issues Education and Research (SEER) division of Ottawa Public Health will present an overview of Ottawa's Interagency Pandemic Plan which provides information and direction regarding how Ottawa will respond in the event of a global influenza pandemic. She will also discuss ways in which museums can utilize business continuity planning to identify and maintain their most important services during emergency situations.

LUNCH & MARKETPLACE

AFTERNOON

PANEL DISCUSSION: RISK MANAGEMENT – FROM CONCEPTION TO IMPLEMENTATION

Moderated by Rob Waller, Chief of Conservation, Canadian Museum of Nature

The protection of cultural property involves the combination of many practices and processes to control a variety of factors ranging from physical security, to environmental control, and legal issues. Traditionally, these practices and processes are applied to the highest professional standards, or to achieve what is known as 'As Low As Reasonably Achievable' (ALARA) risks. However, these methods fail to optimize resources for risk mitigation, and they fail to ensure the best protection of cultural property.

Effective protection requires us to foresee risks comprehensively. Then we must evaluate the relative importance of all risks and the options for reducing those risks, and the associated costs. These are the activities of a risk assessment and management system. The value of these systems is becoming evident through their rapid development and implementation across Canada and around the world. This session will highlight work in this area, first from an international perspective, then as applied by Canadian institutions including the [Canadian Conservation Institute](#) (CCI), the [Canadian Museum of Nature](#) (CMN), and the [Royal British Columbia Museum](#) (RBCM).

This session, chaired by Rob Waller, chief of conservation at the Canadian Museum of Nature, will feature Agnes Brokerhof of The Netherlands Institute for Cultural Heritage ([Instituut Collectie Nederland](#)) (TBC) . She will present *Collection Risk Management: The next frontier*.

This session will feature Agnes Brokerhof of The Netherlands Institute for Cultural Heritage (Instituut

Collectie Nederland). She will present **Collection Risk Management: The Next Frontier**.

A panel discussion will follow featuring key experts:

- Jeanne Inch, director general of CCI, will discuss Management Perspectives on **Helping Museums Adopt Risk Management**.
- Grant Hughes, director of Curatorial Services, RBCM, will address **Implementing a Collection Risk Assessment**.
- Roger Baird, director of Collection Services, CMN, will address **Collection Risk Assessment: Guarding Instructional Priorities**

NETWORKING BREAK

PANEL DISCUSSION: LATEST DEVELOPMENTS IN CULTURAL PROPERTY PROTECTION

Moderated by Lyn Guérin, Policy Officer, Cultural Property Protection, Canadian Museums Association

Cultural Property Protection is undertaken by agencies and organizations beyond your museum. This session will highlight efforts by these bodies to provide the systems and tools to respond in times of disaster.

This session will welcome representatives from the Department of Canadian Heritage, the [Department of Public Safety and Emergency Preparedness Canada](#) (PSEPC), and the Canadian Museums Association . Each of these agencies will review their recent and on-going activities that affect cultural property protection.

Canadian Heritage will provide an update on the efforts being made towards acceding to the Protocols of the [Hague Convention](#) on the Protection of Cultural Property in the Event of Armed Conflict. This international legislation offers a legal means to protect cultural property as well as recourse to those who cause damage to protected sites to trial. Kathryn Zedde, Senior Policy Analyst, Heritage Policy Development with the Department of Canadian Heritage will inform participants of this initiative and its impact on Canadian museums.

PSEPC, the government department mandated to secure public safety and national security, is also responsible for Canada's national critical infrastructure protection strategy. Critical infrastructure is found in such sectors as transportation, energy and telecommunications. Following a recent review of the critical infrastructure segments that come under the strategy, **Key National Symbols**, such as national sites and monuments, have been added to their list. Paul Pagotto, Manager, Strategy Implementation and Partnerships with the National Critical Infrastructure Assurance Program (NCIAP) at PSEPC will discuss this latest development and the implications for Canada's cultural property.

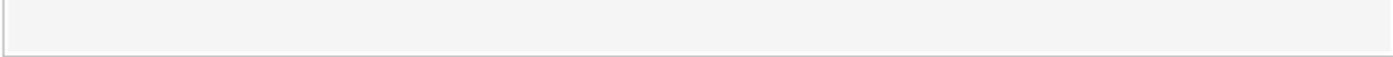
The insurance industry has undergone many significant changes in the last few years, many having a significant



impact on museums. Lyne Turmel, Senior Vice President and National Manager, Group Risk Solutions at Aon Reed Stenhouse Inc. will provide an overview of the insurance marketplace and provide some information current dynamics and future market expectations.

EVENING

MARKETPLACE/NETWORKING EVENT





DR. PETER E. TARLOW is a sociologist specializing in the impact of crime and terrorism on the tourism industry, and also in tourism and economic development. Dr. Tarlow also holds degrees in history, Spanish and Hebrew literature, and psychotherapy. In 1990, Tarlow introduced one of the United States' first courses on the sociology of tourism, and in 1994 Dr. Tarlow designed and taught a groundbreaking course on tourism, crime, and security. Since 1997, Dr. Tarlow has also taught tourism security courses for the International Association of Chiefs of Police.

Dr. Tarlow is a member of the distance learning faculty of The George Washington University in Washington DC, and he is an adjunct faculty member of Colorado State University. He also lectures at numerous universities around the world including universities in the United States, Latin America, Europe, and the Middle East. In 1996, Dr. Tarlow became Hoover Dam's head advisor for tourism development and security. In 1998, Dr. Tarlow was promoted to head advisor on tourism security for all Bureau of Reclamation (Department of the Interior) properties and visitor centers.

Early in 2001 Dr. Tarlow was made part of the senior security team of the Bureau of Reclamation and is a member of its critical infrastructure committee. In this capacity, Tarlow has worked with other government and international agencies such as the United States Park Service at the Statue of Liberty, and with police departments in the area of tourism security in nations around the world. In 1999, Dr. Tarlow was also asked to work with United States Customs agents in the area of customer service and cultural awareness and custom's impact on tourism. In 2000 Dr. Tarlow, due to interagency cooperation on the part of the Bureau of Reclamation, began training security personnel for the FBI in preparation of the Salt Lake City 2002 Olympics.

Dr. Tarlow is now on loan to agencies such as the FBI, The Royal Canadian Mounted Police, and the United States Park Service. Since the Sept. 11, 2001 attack on the United States, Dr. Tarlow has had to travel throughout North America representing the United States Government. He speaks on issues such as: the sociology of terrorism, its impact on tourism security, how the United States government can help local agencies to recover, and how communities must face a major paradigm shift in the way they do business. Dr. Tarlow has trained numerous police departments in both the United States and Mexico in TOPS (Tourism Oriented Policing Skills) and offers certification in this area. He currently is the president of the Texas Chapter of the Travel and Tourism Research Association (TTRA) and a member of the national and Texas Chapter of ASIS. Dr. Tarlow is also a founder and president of Tourism & More Inc. (T & M). His monthly tidbit is read in English, Spanish and Croatian editions by thousands of tourism and travel professional around the world.

Close Window



ALAIN LACOURSIÈRE Sergeant Detective Alain Lacoursière is an Art Crimes Unit Investigator for Québec's provincial police force, la Sûreté du Québec. An art enthusiast since childhood and a graduate of Art History, he has specialized in this area for over 15 years. He and his colleague Jean-François Talbot are the only officers in Canada working in this field. Along with the Art Crimes Unit, Sergeant Detective Lacoursière is well known and has assisted many Canadian museums in recovering from incidents of theft. They continue to be active players in the protection of our cultural heritage.

Close Window



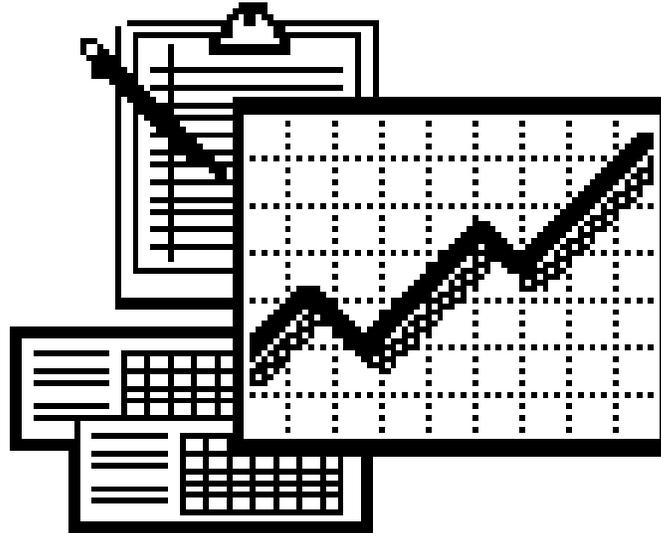
STEVE KELLER , a Certified Protection Professional, has served in security or security-related positions for over 30 years. Twenty of those years were devoted to museum security, either as executive director of protection services for the Art Institute of Chicago or as an independent, non-product affiliated museum security consultant. His firm, [Steven R. Keller and Associates Inc.](#) , has been in operation since 1986, and provides security consulting primarily for museums, historic sites and cultural properties.

During his tenure at the Art Institute of Chicago, Mr. Keller was responsible for security, fire protection, life safety, crowd control, visitor services, coatrooms, telephone operators, off-site warehousing, the Institute's trucks, and other related activities. During major exhibitions such as the *Vatican Collections: The Papacy and Art* and *A Day in the Country: The French Impressionists* , his responsibilities included liaison with Ticketron and special box office operations. His jurisdiction included the School of the Art Institute of Chicago, off-campus centres, off-campus dorms, and warehouses, as well as the Goodman Theatre, one of the best professional theatres in the country. The Art Institute is a one million square-foot facility containing the largest single museum exhibition hall in the United States, a children's museum, three restaurants, one major theatre, two minor theatres, and three additional auditoriums, a retail store, workshops, labs, offices, 27 collections storage vaults, and a college (through MA level).

Mr. Keller has served on the museum committee of the American Society for Industrial Security continuously since 1981 and as its chair and vice chair. Mr. Keller has served on the faculty at Smithsonian's National Conference on Cultural Property Protection (18 of 21 years) and the International Security Conference (five years). He was an adjunct faculty member at New York University where he taught burglar and fire alarm system design for museums and historic sites. He is the recipient of the Executive Achievement Award, presented by *Security Magazine* , and the Award of Merit of the American Society for Industrial Security for lifetime achievement in the profession. He is a member of the American Association of Museums and serves on the security committee.

Close Window

How Good Marketing, Good Visitations, and Good Security Are Interrelated: Balancing Tourism and Security Needs



Canadian Museums Association Cultural Property Protection Conference

January/janvier 2006

Dr. Peter E. Tarlow,

1218 Merry Oaks, College Station, Texas, 77840-2609, USA

Telephone (979) 764-8402/E-mail tourism@bihs.net

(All material in this booklet is the property of the author and may be used only with his expressed permission)

Issues in Tourism Security and Product Development

September 11th caused a great deal of damage to local tourism industries. While attractions and communities do not have a direct impact on the transportation component of tourism, there are a number of things that all aspects of the industry can do.

- Travel is an important part of tourism. Without safe travel tourism will die. The two industries are highly interrelated.
- Government agencies and tourism officials need to work together. Too often we act as independent agencies, good tourism security means working with local agencies, CVBs and gaining the confidence of the local tourism community.
- Make sure that local officials are aware of how important tourism security is not only to you, but also to them. A good way to show that you care is to create an inter-agency partnership with non-government agencies to create a tourism security program
- Understand that tourism is undergoing a major paradigm shift. The old concept that tourism security is a necessary evil that does not add to the bottom line is over. The new model is that that tourism security is part of a good marketing plan.
- Develop a tourism task force. People who should be on this task force are local officials, tourism officials, and transportation officials. Many Government agencies are there to help local community officials and businesses. Ask for their help, they are willing to give it. The key to this task force is the quality of your facilitator
- Develop tourism caring centers, should there be a tourism crisis due to an act of violence, how you handle it will be a major part of your recovery plan.
- Attend conferences on tourism security.
- Check with experts or bring an expert into your area to meet with officials. The worst thing that you will want to do is follow the advice of someone who is not trained in this area. Ask for credentials before meeting with anyone.

On Product Development and Tourism Security

This new attitude has caused, what tourism specialists call, a **paradigm shift**. In other words, tourism specialists are beginning to think in new and innovative ways. In this paradigm shift tourism practitioners have begun to change their emphasis from beautiful brochures to beautiful landscaping. Instead of spending a great deal of money on good advertising, they are spending more money on personnel development in the hopes of creating a better level of customer service. This shift does not mean that all marketing is a waste of money. Instead, the shift calls for new and creative ways to market. To help you connect this paradigm shift with your own community or attraction, consider if some of the following ideas would work for you:

- **Face the fact that today's travelers are highly skeptical about the accuracy of travel information.**
- Security personnel must connect with the public. To personalize your security program consider:
- Inviting a different randomly selected tourist each month to spend an hour speaking with your staff..

- Encourage tourism employees to visit your locale. Ask for suggestions
- Know that tourists are not stupid. It is the visitor who knows best what he/she desires from the vacation, not you. Speak with the people who work with the tourists: your front line personnel. These are the people who hear the complaints and compliments and often know where adjustments are needed. At the end of each season, take the time to interview as many front line people as possible. People to be interviewed should include:
 - gas station attendants
 - hotel cleaning people
 - waiters and waitresses
 - ticket takers
 - airport personnel
 - local police officers who work in tourism areas
- **Combine security with the underlying site theme(s).** Ask yourself such questions as: Why do people come to your location? What do they wish to take away at the end of their stay? What are you really selling?

Train! Train! and then, train some more! The higher the quality of training, the better your product. Bring in experts to train people all over your community. Seek ways to get the entire community on-board by training everyone from security personnel to front line people. Ask these people about the training that they would like to have and then provide it.

Understanding the different roles of Tourism Security Protection and whom we are protecting:

To develop a working tourism security program you must first define tourism security and know whom you are protecting:

What is tourism security?

At whom/what is it aimed?

Understanding the sociology of our visitors forms the basis of a tourism security program. Here are several key elements of that sociology:

- Issues of loss of common sense
- Issues of anomie
- Issues of Uniforms
- Issues of loss of inhibitions
- Issues of tourism stress and anger
- Issues of time management as a tourism security tool

Key Differences Between Crime and Terrorism Protection

	Crime	Terrorism
Goal	Usually economic or social gain	To gain publicity and sometimes sympathy for a cause.
Usual type of victim	Person may be known to the perpetrator or selected because he/she may yield economic gain	Killing is random and appears to be more in line with a stochastic model. Numbers may or may not be important
Defenses in use	Often reactive, reports taken	Some pro-active devices such as radar detectors
Political ideology	Usually none	Robin Hood model
Publicity	Usually local and rarely makes the international news	Almost always is broadcast around the world
Most common forms in tourism industry are:	Crimes of distraction Robbery Sexual Assault	Domestic terrorism International terrorism Bombings Potential for bio-chemical warfare
Statistical accuracy	Often very low, in many cases the travel and tourism industry does everything possible to hide the information	Almost impossible to hide. Numbers are reported with great accuracy and repeated often
Length of negative effects on the local tourism industry	In most cases, it is short term	In most cases, it is long term unless replaced by new positive image
Recovery strategies	? New marketing plans, assumes short-term memory of traveling public. ? Probability ideals: Odds are it will not happen to you. ? Hide information as best as one can	? Showing of compassion ? Need to admit the situation and demonstrate control ? Higher levels of observed security ? Highly trained (in tourism, terrorism, and customer service) security personnel

Some of the differences between domestic terrorism, protest terrorism (Meetings cum Demonstrations or MCDs) and International Terrorism

	Domestic	MCDs	International
Viewed as	Crime	Politics	War
Goal	Overthrow government or policy	Change policy	Conquest
Preparation time	Very little or none	Great deal of time	Very little or none
Targets	Government Buildings	Meetings	Economic or transportation centers. Tourism most at risk here of a direct attack
Effects on Tourism	Major short-term effect. Can become a part of dark tourism.	Major effect during short and medium term memory	Can have long term effects, especially if it is repeated

Some Reasons for the Interaction between Terrorism and Tourism.

- Tourism is interconnected with transportation centers
- Tourism is big business
- Tourism is interrelated with multiple other industries
- Tourism is highly media oriented
- Tourism spots are places of tranquility or places where business can be conducted in a peaceful manner
- Tourism must deal with people who have no history; we have no database for them.
- Tourism must deal with a constant flow of new people
- Tourism is a nation's parlor
- Tourism is the point where business touches relaxation

Do you know that the new paradigm for the travel and tourism industry is based on the fact that tourism security is now a major part of a location's marketing strategy?

Here are just a few examples of the way that the tourism and travel industry is beginning to assimilate this paradigm change.

- The 2002 Olympic Games in Salt Lake City have incorporated into their marketing plans the idea that visitor security is its number one priority.
- Airlines such as El Al, the Israeli airline that emphasizes security are running full when other airlines across the Atlantic travel recently have been traveling at 60% capacity.

- State and national tourism conferences are adding speeches about tourism security and its impact on marketing.

Below are some suggestions to help you make this paradigm change.

- Think conservation. When the environment is safe, the visitor is also safe. Tourism surety is more than merely protecting the visitor, it entails protecting:
 - The visitor
 - The local population
 - The actual site
 - The area s environment
 - The area s reputation
- Recognize that there is a fundamental paradigm shift in the travel industry. Old assumptions will no longer hold. From a business perspective these old assumptions are very dangerous. Those parts of the travel and tourism industry that emphasize security will have a good chance of surviving and this includes federal facilities. The venues that provide give good security mixed with good customer service will flourish. Those parts of the travel and tourism industry that hold on to the old way of thinking will fade away.
- Invite specialists to help train people and to set a paradigm shift in motion. The worst thing you can do is to bring in someone who is not a specialist in both security and travel and tourism. Remember this is not a passing emergency, but a new way in which people think. Travel and tourism industries that believe that this paradigm shift is not essential for their business health are making an error.
- Do not create a false sense of security. Gas masks will do nothing in case of a biological or chemical attack, while sealed rooms may be very useful. Do not panic people, but deal with safety and security issues in the most professional manner possible. People begin to panic not when you take precautions in a professional manner, but when you fail to take precautions.
- Develop security coalitions with all components of the community. Make sure that law enforcement is trained and understands tourism; make sure that you work hand-in-hand with hotel and attraction employees.
- Attend state tourism conferences and regional tourism security conferences. Send representatives to tourism security conferences. The oldest and most famous one is held each year in Las Vegas. Every major CVB should have a representative at a tourism security conference along with at least one member of its law enforcement agency.
- Get over denial, it can happen to you. Recognize that no part of the world today is immune from a terrorist attack. Too many parts of the travel and tourism market simply do not believe that an attack can happen to them and this includes federal agencies. It can! Furthermore, as the media often devotes a great amount of coverage to an attack against a tourism area, the fear factor spreads from one locale to entire regions, nations, and even continents.
- Know what is unsafe in your community and work with local governments to improve these security concerns. How safe is your local airport? Are cab drivers backgrounds investigated? Who has access to a guest s room?
- Start with small successes and build up. You are not going to turn your destination around. Take each step with care and build your security plan on a solid foundation.
- Work closely with local officials. The example of the new USBR Museum in Yuma Arizona is a good example of how security can lead to economic development.

- Make sure that all police personnel and security personnel are aware of how important tourism security is to you. Most police have never been trained in good tourism security. It is essential to have a person work with your local police who can translate between tourism and security issues.
- Develop a tourism task force. People who should be on this task force are local officials, tourism officials, and transportation officials. The key to this task force is the quality of your facilitator.
- Security and Safety may have different meanings to scholars and in the US government, but in the world of travel they are one and the same. In the new paradigm shift recognize that poison water and gunfire have the same results: the destruction of your business. Begin to see the relationship between risk management and security. They are two sides of the same coin.
- Fix rather than market. This is not the time to market security but to provide it. Tourism will need a lot more than mere cosmetic changes in order to beat the threat of terrorism. Among these changes is upgraded surveillance equipment, used in conjunction with good tourism sociological understandings. Simply upgrading security will not work if it is not done in a way that fits into the sociological patterns of visitors.
- When it comes to travel we need to solve such problems on the Federal level such as:
 - employ duplicate checks of baggage
 - scan all bags including those which are checked
 - remove all potential weapons from gift shops that are beyond the security barriers
 - check all workers who have access to airplanes while it is at the gate.
- Check and recheck all ventilation systems. No one should be allowed to approach a ventilation system who does not have your full confidence. Make sure that contract labor is kept far from areas that can be used as delivery systems for bio-terrorism.
- Get beyond the fear that too much security will scare the public. The public is more frightened of security breeches than it is of security methods. The old paradigm of hiding security professionals is no longer valid. Visible security is the best marketing tool that you can develop.
- Know who is studying at your local university, especially in engineering courses.
- Most visitors do not travel smart. In a world of crime and terrorism, it is best that our guests learn to avoid displays of wealth, vary their daily routines, and keep low profiles. Often terrorists strike people who are in easy range, thus avoiding aisle seats may be helpful.

Terrorism will target the tourism industry. This includes:

- Airlines
- Cruise Ships
- Buses
- Restaurants and outdoor cafes
- Major events, sporting or festivals
- Places where people congregate
- Wherever people are carefree and happy.

Terrorism is the marriage of violence to political goals. It is not a crime but an act of war. It works by the random wounding and/or murdering of innocent victims. The more random terror is the more successful it is.

Some of the places where terrorism has struck tourism in the last year

- Bali
- Casablanca
- Israel
- Kenya
- Los Angeles
- Mexico
- Morocco
- Peru
- The Philippines

A Sociology of Air Travel/When we travel via air we tend to:

- 1 Feel out of control
- 2 Enter into anomic states
- 3 Are willing to lower inhibitions
- 4 Rise in stress
- 5 Undergo Reality loss (what becomes important is making a connection rather than safety)
- 6 Undergo physical discomfort
- 7 Enter into anger displacement

Terrorists will seek targets that offer at least 3 out of these 4 possibilities

1. Potential for mass casualties
2. Potential for mass publicity Good Images
3. Potential to do great economic damage
4. Potential to destroy an icon.

Note that in gaming centers, casinos provide all four of these possibilities.

Tourism officials will need to have moral clarity during these difficult times. Terrorism has a history of striking when we least expect it.

Some Reasons for the Interaction between Terrorism and Tourism.

- Tourism is interconnected with transportation centers
- Tourism is big business
- Tourism is interrelated with multiple other industries
- Tourism is highly media oriented
- Tourism spots are places of tranquility or places where business can be conducted in a peaceful manner
- Tourism must deal with people who have no history, thus there is often no data base

- Tourism must deal with a constant flow of new people
- Tourism is a nation's parlor
- Tourism is the point where business touches relaxation
- Tourism centers are the living museum of a nation's cultural riches.

Facing issues of Militant Islam

Key Differences between Militant Islam (MI) and Religious Islam (RI)

Issue	Militant Islam	Religious Islam
Operates in the sphere of	Public Life	Spiritual/Private life
Lead by	Engineers	Religious Scholars
Outside influences	Importation of Western ideas such as Friday as a Sabbath.	Does not seek to emulate the West. Friday is day of assembly
Locus of law	In place	In the person
Attitudes toward the West	Seeks to confront West	Fears the West
Population	Demographics as a weapon	Love of children
Key Nations as models	Iran	Turkey
Type of Philosophy	Political (totalitarian)	Religious (seeks converts)
View on Nostalgia	Nostalgia based on pseudo-history	Adaptation to modernity

Critical Risk Management Steps in Tourism Security:

You need to know:

- How many people will be at the event/location?
- Are there one or multiple venues at the event/location?
- What are the event's/location's demographics and its demographic make-up?
- Is the location a normal event-staging place or used only from time to time?

Know:

- Your own persona strengths and weaknesses
- What is expected of you by your boss, the public and the media

Some of the key assumptions of tourism risk management

- There is no event that is 100% free of risk
- Risk management is statistical in nature. We are playing a probability game.
- To be away from home is to be insecure.
- Allocentric-risk is different than psychocentric-risk.
- All events are a volunteeristic activity; no one ever needs to go to an event.
- No guest ever has to return to your event.
- Most guests assume that you know something about safety and security.
- As world tension mounts, the demand for risk management increases.
- In risk management as in tourism, there is no distinction between security and safety.
- The further we travel from a crisis, the worse the crisis seems
- The further we are from a crisis, the longer it lasts in the collective memory
- Many visitors are highly unsophisticated when it comes to geography
- Visitors do not distinguish between one part of the event and another part. An error is an error.
- Different types of guests require different forms of risk management.
- Often as efficiency rises so does the risk
- As we script events and try to rationalize them, we discover that irrationalities often become part of the event.

Protecting Group tourism and tourism sites from groups

Some examples of a low-risk group are:

- Tours by Elementary schools or senior citizen organizations.
- Established youth groups (scouts etc) that are known to you.
- Local government officials
- Civic groups or other groups with which you are familiar

Some examples of a medium-risk group are:

These are groups that have a higher potential to gather information, some examples are:

- Technical societies and University groups that are composed of US citizens.
- Foreign tourist groups that come to your facility on a regular basis.
- The general traveling public.

Added security measures need to be taken for these groups. Depending on the groups size and the risk potential of your facility consider all or some of the following recommendations

- Ask tour members to sign in or show an ID card (driver s license, passport for non-US citizens)
- If a sponsored group of foreign visitors is scheduled to come to y our facility work the sponsoring group and check with the State Department and law enforcement regarding further regulations needed for this group.
- Work with local law enforcement and make sure that it knows what type of visitors are using/visiting the facility
- Make sure that all doors to sensitive areas are locked
- Do not give special information. Give the same information about your facility and teach guides/tour personnel that they do not have to and often should/must not answer every question.
- Develop sample questions that should not be answered
- Report any person who is insistent about getting information to law enforcement
- Insist that no one wander off from the group

Some examples of a high-risk group are:

In most cases you should only conduct a tour for these groups with proper authority, permission. Always make sure that law enforcement is aware that such a group is visiting your facility. Some examples are:

- Groups that contain citizens of nations that are considered associated with terrorism
- Groups that contain citizens from nations that are hostile to the US
- Groups that seek a great deal of technical information or demand information such as drawings, charts, tour routes etc.

There is not only risk to the facility but also to the public. All facilities should have an evacuation plan, safe areas and a hostage rescue plan. Remember that visitors are less familiar with/and less capable of exiting from your facility at the same speed as your employees

Some Basic Differences between Crisis and Risk Management

	Risk	Crisis
Surety of Occurrence	Uses a statistical system.	Is a known event
Goal of management	To stop the event prior to occurrence	To minimize the damage one event has taken place
Type of preparation to combat risk that can be used	<ul style="list-style-type: none"> • Probability studies Knowledge of past events Tracking systems Learning from Others 	<p>Specific information such as medical, psychological, or crime.</p> <p>Developing a what if attitude</p>
Training needed	Assume crises and find ways to prevent them.	Assume crises and practice reacting to them.
Reactive or Proactive	Proactive	Reactive, though training can be proactive toward the reactive.
Types of victim	Anyone, maybe visitor or staff.	Can be visitors, staff members, or site
Publicity	Goal is to prevent publicity by acting to create non-events	Goal is to limit the public relations damage that may occur.
Some common problems	<p>Poor building maintenance</p> <p>Poor food quality</p> <p>Poor lighting</p> <p>Fear of terrorism</p> <p>Fear of a crime occurring</p>	<p>Rude visitor</p> <p>Sick person</p> <p>Robbery</p> <p>Threat to staff</p> <p>Bomb scare</p> <p>Lack of language skills.</p>
Statistical accuracy	Often very low, in many cases the travel and tourism industry does everything possible to hide the information	Often very low, in many cases the travel and tourism industry does everything possible to hide the information

Ways we can decide to whom we want to market which tourism product. The social-psychology of marketing.

- **Allocentric and psychocentric**
- **Inner and out oriented**
- **Iconic theory**
 1. staging of motif,
 2. motif thematization,
 3. contextualization level,
 4. type of authenticity, to be of great help.
- **McDonalizations**
- **De-differentiation and postmodernism**
- **Use of Simulata**
- **Redefinition**
- **Memory theory**
- **The Stressful Search for Fun**

Understanding our customers is essential to protect them

Forces and Events that Have Influenced US Values¹

If you are in your 80s your values were formed in the 1920s

World War I	Close Family Ties
Radio	Model Ts
Prohibition	Speakeasies
Stock Market Crash	Rural Society

If you are in your 70s your values were formed in the 1930s

Great Depression	Birth of Income Taxes
FDR	The Three R s
Gov t legislation	Boogie-woogies
Work Ethic	Fireside Chats

If you are in your 60s your values were formed in the 1940s

World War II	Family car
Victory Gardens	Big Band Music
Atomic Bomb	Work Ethic
Air travel	Patriotism

¹Adapted from *Building Community* by Manning, Curtis, & McMillan

If you are in your 50s your values were formed in the 1950s

Korean War	The gray flannel suit
Television	Strong unions
Short hair	I Like Ike
Elvis Presley	Ozzie and Harriet

If you are in your late 40s your values were formed in the 1960s

Sputnik	Business Boom
Race for Space	Cuban Missile crisis
Kennedy & Camelot	The Beatles
Sports cars	Interstate Hwys.

If you are in early 40s your values were formed in the year 1965-69

Civil rights	Dr. Spock
Vietnam	Rise in Divorce
Drugs	Kennedy/King assassinations
the pill	Hippie Society

If you are in your 30s your values were formed in the 1970s

Kent State	Mobile society
Watergate	Me generation
Computers	Acid rock
Feminism	Fast food

If you are in your 20s your values were formed in the 1980s

Violent crime	Moral Majority
Reaganomics	Japanese products
Cable television	Gay Rights
MTV	AIDS

If you are in your teens your values were formed in the early 1990s

Desert Storm	Single parent families
Information Society	Health-care crisis
AIDS Crisis	World economy
Homeless people	Radio/TV talk shows

What the Boomer wants

McDonalized World	Tourism World
Efficiency	Environment
Calculability	Caring
Standardization	Service and Individualization
Predictability	Personalization and surprise
High tech	Low tech
Irrationality errors	Integrity of product
Self reflection	Thoughts about the other

Trends to watch in no particular order that can impact our security role.

- A backlash to high tech, the desire to seek places and things that can push low tech. People do not want to struggle to figure things out in their hotel rooms.
- The shift from span of control to monitoring of employees: Resentment toward someone else controlling my life. Can we market ourselves so that the other person is in control?
- New ways of combining data-collection with personalized service.
- The move toward a multi-lingual world.
- The continual march toward do-it-yourself, thus lessening the need for semi-skilled labor
- The effects of reality TV on tourism security, how many people now see travel as an act of survival?
- A continual splintering of lifestyles. I want a specialized world that offers me everything.
- Lower levels of employee loyalty and willingness to quit.
- Need to develop the tactile side of the web, we see it but we really do not yet experience it.
- The role of pets in the travel lives of the baby boomer.
- Expect higher levels of stress leading to rage and complaints
- Learning to market to people who have trouble reading and lack basic math sense
- Hop-scotch has replaced brand loyalty
- Rolling energy crises and postmodernism.
- The next generation of tourists will be best described by three adjectives: Impatience, Communication. And Forward focus.
- Expect to see increased domestic travel. People will take more vacations that are shorter and closer to home.
- As people age the demand for good service will increase. He/she who markets good service and delivers it will do very well.

INTERNATIONAL TERRORISM: THREATS TO CULTURAL INFRASTRUCTURE

**Martin Rudner
Canadian Centre of Intelligence and Security
Studies
The Norman Paterson School of International
Affairs
Carleton University, Ottawa**

AGENDA

- **I. TERRORIST STRATEGY, TACTICS AND TARGETS**
- **II. AL-QAEDA 20 YEAR STRATEGIC PLAN**
- **III. AL-QAEDA PRESENCE IN CANADA**
- **IV. LESSONS THAT NEED TO BE LEARNED**

I. TERRORIST STRATEGY, TACTICS AND TARGETS

- **The Reconfiguration of Global Terrorism**
- **Jihadist Goals and Objectives**
- **Al-Qaeda Strategy and Tactics Post-Iraq**
- **Operations and Targets**

THE RECONFIGURATION OF GLOBAL TERRORISM

- **Al-Qaeda evolves into loosely-structured, decentralized networks**
- **Other Jihadists (Takfir wa a-Hijra) locally autonomous cells using Internet.**
- **Shared strategic outlook, mutual support, tactical synergy**

Jihadist Goals and Objectives

- Destroy “apostates”
- Overcome Dar ul Harb
- Create global Caliphate
- Cross-worshippers

Al-Qaeda Strategy and Tactics Post-Iraq

- **Near: Iraqi objectives**
 - **destroy Shia**
 - **destroy democratic system**
 - **create geographic base for long term strategy**
- **Far: Defeat the United States**
 - **Strategic targeting of the United States.**
 - **Disruption of global economy**
 - **Bleeding America to the point of bankruptcy**

Operations and Targets

Precision Economic Targeting

- **Financial, industrial and infrastructure targets**
 - **Infrastructure**
 - **Energy systems**
 - **Transport & civil aviation**
 - **Cultural and social institutions**
 - **Destruction of assets**
 - **Mass casualties**
 - **Physical damage**
 - **Business disruption**

Operations and Targets

Precision Economic Targeting (cont'd)

- **Damage to national & global societies**
 - **Massive**
 - **Costly**
 - **Long-lasting**
- **Europe: 30 'spectacular' attacks or plots, 2001- 2003 (Norwegian Defence Research Establishment)**
- **US 10 foiled attacks**

III. AL-QAEDA 20 YEAR STRATEGIC PLAN

Definitive Victory

Total Confrontation

Declaration of Caliphate

Downfall of Apostate Muslim regimes

Arising and Standing Up

Opening Eyes

Awakening

III. AL-QAEDA 20 YEAR STRATEGIC PLAN

- **Stage 1: “Awakening” > Sept 11th provokes US to attack Muslims, galvanize Jihadism**
- **Stage 2: “Opening Eyes” (2003-06)> force West on defensive**
- **Stage 3: “Arising and Standing Up” ” (2007-2020)> assaults on Turkey and Israel**
- **Stage 4: Downfall of Apostate Muslim regimes (2010-2013)> Saudi Arabia, Jordan, oil**

III. AL-QAEDA 20 YEAR STRATEGIC PLAN

- **Stage 5: Declaration of Caliphate (2013-2016)> mobilization of Muslim forces for global intifada**
- **Stage 6: “Total Confrontation” (2013-2016)> total war on “non-believers”**
- **Stage 7: “Definitive Victory” ” (2020).**

IV. AL-QAEDA PRESENCE IN CANADA

- **Militant Jihadist network in Canada**
 - **Terrorists activities in Canada: recruitment, finance, incitement, safe houses, procurement, reconnaissance**
 - **Jihadists attract well-educated youth & professionals**
 - **Militant Jihadist operations from Canada**
 - **Ressam (LAX); Pakistan, Singapore, Chechnya. Israel, UK**

IV. AL-QAEDA PRESENCE IN CANADA (cont'd)

- **Public warnings**
 - **National Security Advisor to the Prime Minister (Bill Elliot)**
 - **Outgoing Director of CSIS (Ward Elcock)**
 - **Al-Qaeda country target list**
 - **Kuala Lumpur warning.**

V. LESSONS THAT NEED TO BE LEARNED

- **Gaps in protection represent vulnerabilities to determined terrorists.**
- **Terrorists will exploit any chink in our armor.**
- **There will always be chinks in the armor of an open society.**
- **It is incumbent on us to ensure**
 - **that the cost to adversaries of trying to exploit these chinks is high**
 - **their prospects of success minimal**
 - **the potential consequential damages mitigated, and that our National Security Policy has a pre-planned capacity for resilience**



Influenza Pandemic Planning

Implications for Public Agencies

Ottawa Public Health

Protecting you. Promoting a healthy city.

Overview

- 1. Background**
- 2. Ottawa's Plan**
- 3. Agency Implications**
- 4. Personal Implications**

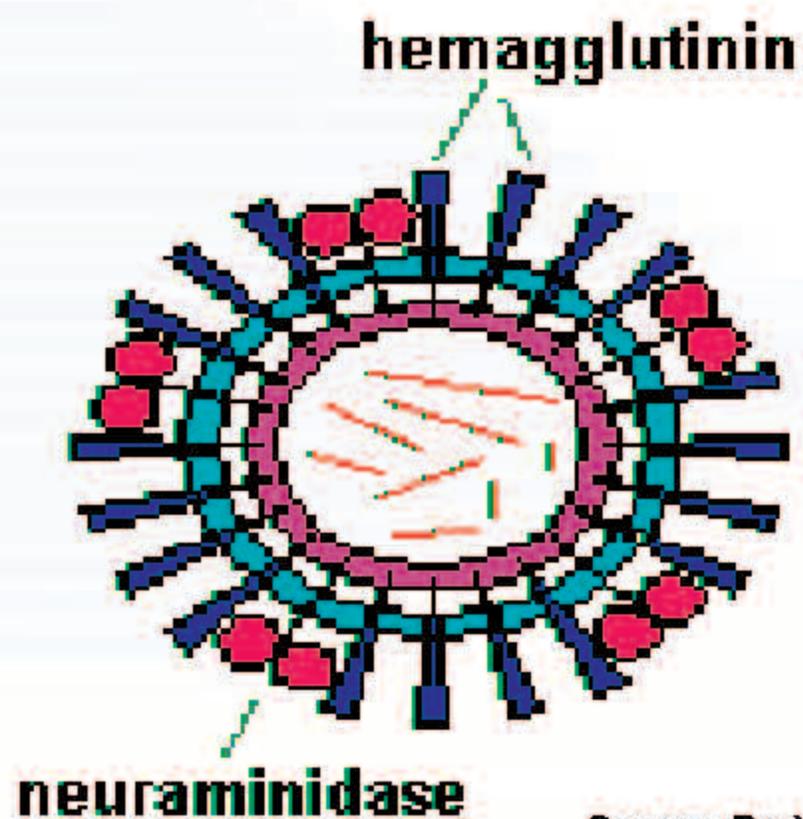
Background

Risk of pandemic influenza

Experts agree that a pandemic influenza very similar to the Spanish flu of 1918 will happen again due to:

- The ever-changing genetic make-up of the influenza virus
- The ability of the influenza virus to jump the species barrier.

Influenza Virus Structure (H5N1)

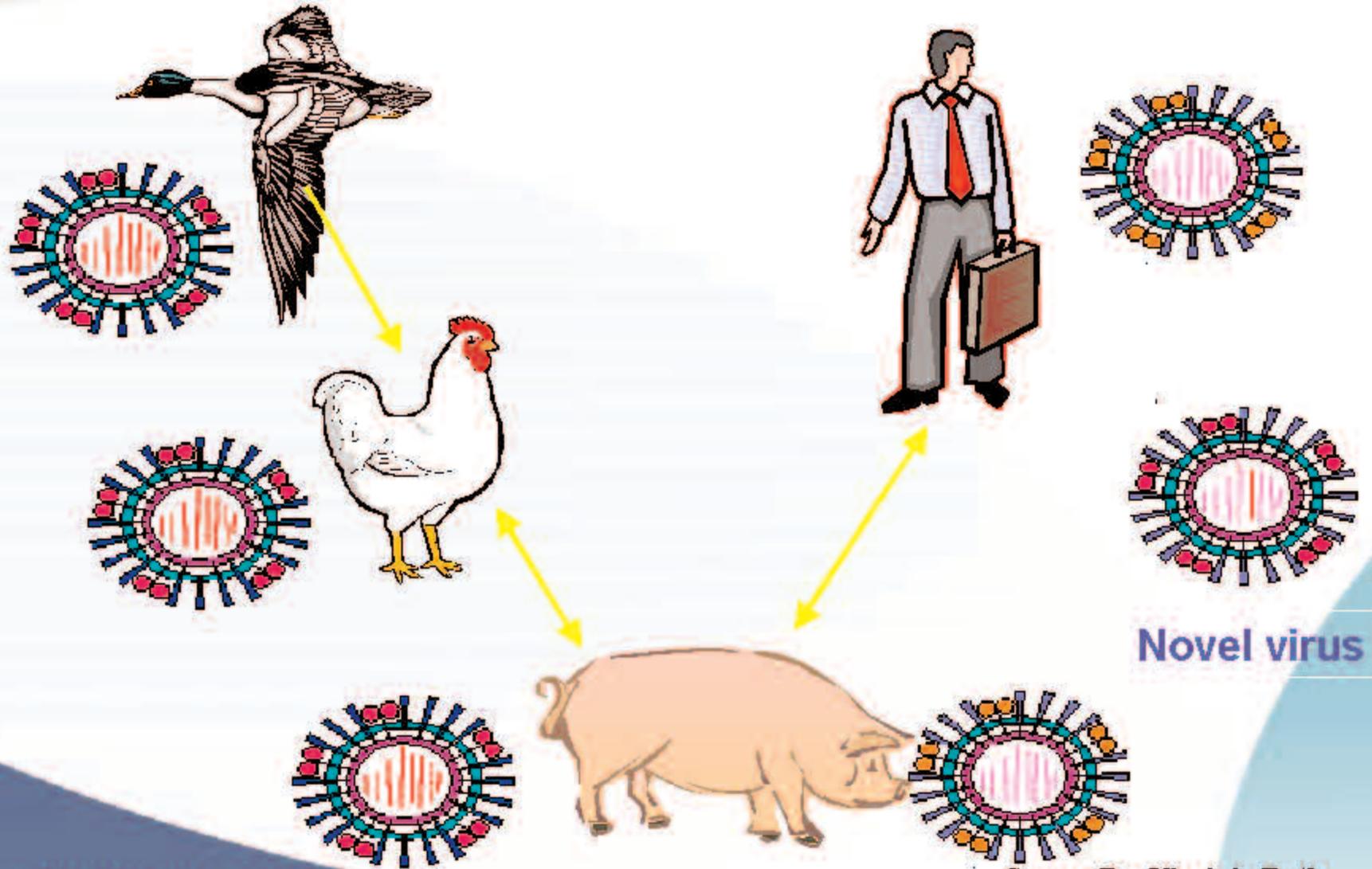


Source Dr. Virginia Roth

What could turn this into a pandemic?

- Either “DRIFT” -- a *slight change* in the genetic structure of the avian influenza virus that enables human-to-human transmission
- Or “SHIFT” – a *major change* in the genetic structure of the avian influenza virus caused by “**mixing**” with a human influenza virus

“SHIFT” = mixing



Current Pandemic Situation

- We are in WHO's "Pandemic Alert" phase
- As of January 10th , 2006 there have been:
 - 147 human cases
 - 78 deaths

May/June 2005

- WHO urged all countries of the world to have operational pandemic plans
- Director of the US CDC identified avian influenza as the #1 public health threat.

September, 2005

- pandemic preparedness identified as a top priority in Canada and in US
- The United Nations identified a top level manager to lead pandemic preparedness program

Since mid-October 2005

Turkey
Romania
Croatia
Sweden

In the last few weeks several other countries,
including Germany...

Countries Affected By Avian Influenza in Birds



Why We Need To Be Prepared

Compared to SARS

- Shorter incubation period (1-3 days)
- Unlike SARS, Influenza is contagious before an individual exhibits symptoms

This is why quarantine will not be a major strategy...

Pandemic Influenza

- Pandemics are different from other natural disasters
- Affect wide geographic area over an extended period of time
- Can infect so many, that health services, local governments and emergency responders are overwhelmed
- Can pose a significant threat to social & economic infrastructure

Predicted impact in Ottawa:

**30,000 people will get influenza
every week**

- ❖ **16,000 health care assessments**
- ❖ **350 hospitalizations**
- ❖ **80 deaths**

***Bottom line: Approx 1 in 4 people could get ill
over a 7 week period...***

(Ontario Health Plan,
2005, p. 33-34)

Ottawa's Plan

Ottawa Pandemic Preparedness

- Ottawa's Interagency Influenza Pandemic Plan approved and circulated this fall.
- Identifies "who does what" for both the City of Ottawa and the broader Ottawa health care system
 - Who is lead?
 - Who is a partner?
 - Who has a supportive role?

Ottawa's Interagency Influenza Pandemic Plan

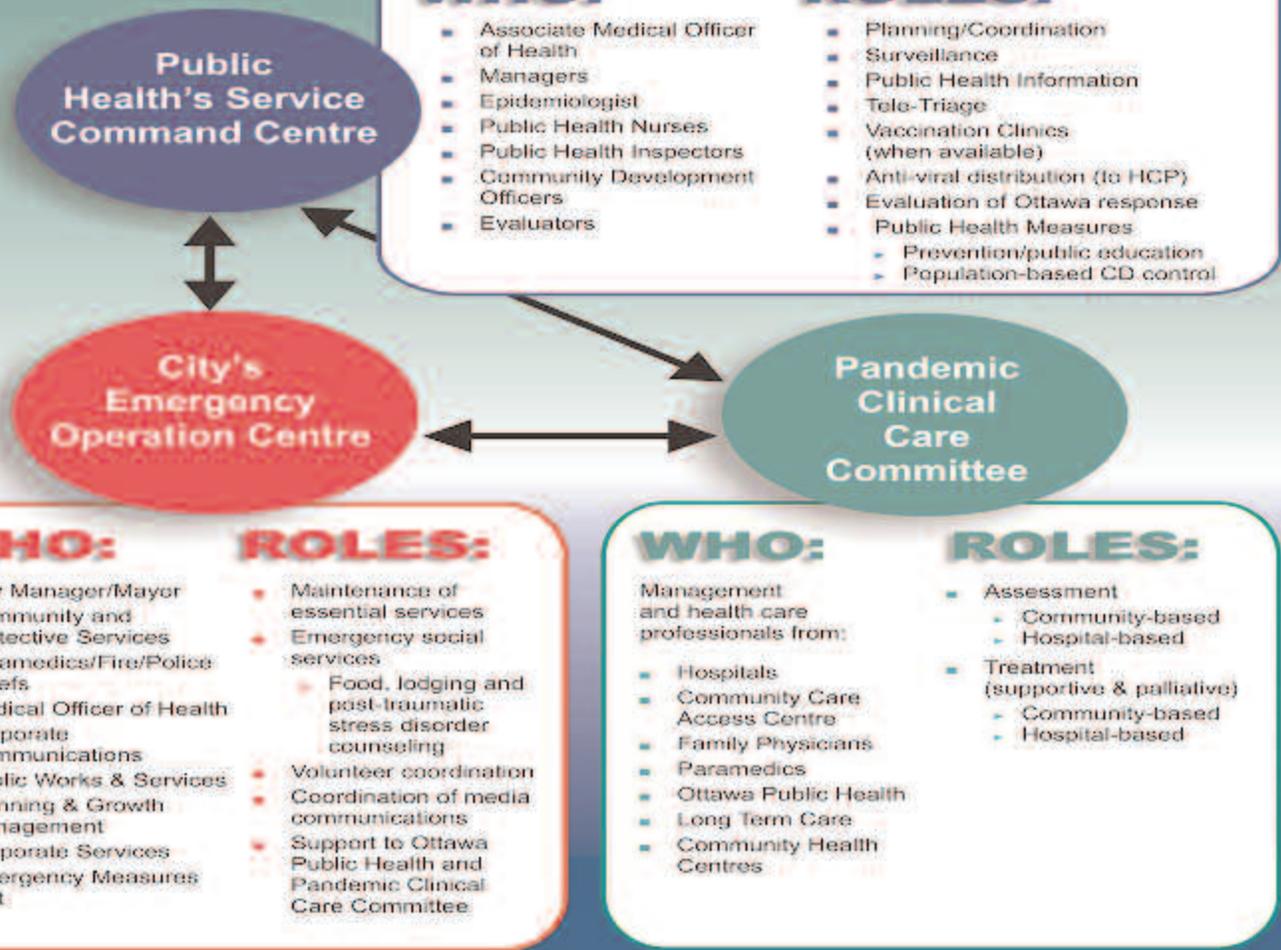
- Developed by the Pandemic Steering Committee
 - Ottawa Public Health (Pat Huston, AMOH, Chair)
 - Emergency Measures Unit
 - Public Health Laboratory
 - Hospitals
 - CCAC ("Homecare")
 - Paramedics
 - Long Term Care facilities
 - Physicians

Functions-based approach

Identified >20 different functions that Ottawa Public Health will do:

- **Surveillance (early detection and reporting)**
- **Public Education/Communication**
- **Antiviral distribution to high-risk groups**
- **Pandemic Information Line**
- **Assessment Centres**
- **Isolation Units**
- **Mass vaccination clinics**
- **Volunteer training and coordination**

Decision Centres for Coordinating the Ottawa Response to an Influenza Pandemic



Agency Implications

What Your Agency Can Do

- Agency business continuity planning
- Staff awareness and education in infection control and personal family planning for pandemic

Business Continuity Planning

- What are our critical services?
- Who can be reassigned?
- How will we protect our staff?
- How can we promote “social distancing”?

Business Continuity Planning

- BCP Governance
- Business Impact Analysis (BIA)
- Plans, measures, and arrangements for business continuity
- Readiness procedures
- Quality assurance techniques

OFFICE OF CRITICAL INFRASTRUCTURE PROTECTION AND
EMERGENCY PREPAREDNESS www.ocipep.gc.ca

The Office of Critical Infrastructure Protection and Emergency

Preparedness

- Public Affairs Division
122 Bank St., 2nd Floor,
Ottawa, Canada
K1A 0W6
Telephone: (613) 944-4875
E-mail:

communications@ocipep.gc.ca

Internet: www.ocipep.gc.ca

Comprehensive Pandemic Preparedness

**Focuses on four general aspects
of a business:**

- **People**
- **Key business functions**
- **Technology**
- **Facilities**

Tools and Resources for the Workplace

- **City of Ottawa - Are You Ready?**
 - **Business *checklists***
- **Ottawa Public Health**
 - **Pandemic info on the *website***
 - **Emergency Preparedness
in the Workplace *checklist***

Emergency Preparedness Workplace Checklist

ottawa.ca/health

Healthy Environments
Workplace Health

Acknowledgements

- U. of O. School of Nursing
- Workplace Safety & Insurance Board
- Ministry of Labour
- Ontario Service Safety Alliance
- Education Safety Association
- Royal Canadian Mounted Police
- Les Suites Hotel, Ottawa
- The Métis Nation of Ontario
- City of Ottawa, Office of Emergency Management
- Ottawa Public Health Divisions

Personal Implications

What Can We Do As Individuals?

- Help educate ourselves and others about the influenza virus
- Create family influenza pandemic preparedness plans
- Promote a community where we care for and about each other

What Do We Need To Know?

- All influenza viruses are spread the same way:

BY DROPLETS!

- Droplets are spread in 2 ways:

Directly...



And from **SURFACES...**

A person coughs and droplets land on the table, arms of a chair etc.

Or:

A person covers their cough with their hand and then touches:

- a phone
- a handrail
- a button in the elevator

AN INFLUENZA VIRUS CAN LIVE ON SURFACES FOR UP TO 48 HOURS

Hand Sanitizers

- Available as rubs, gels or rinses
- Contains 60% propanol or 70% ethanol alcohol
- Kill 95-99% of active viruses
- How to use hand sanitizers:
 - Wash hands with soap & water first if visibly soiled
 - Use a squirt the size of a dime
 - Rub all hand surfaces
 - Rub until hands are dry

Family Preparedness Plans

- Discuss with spouse, children, parents, friends and neighbours your family plans for:
 - Elder parent care
 - Child care
 - Pet care
- Consider supplies you might need
 - Food
 - Alcohol-based hand gel
 - Thermometer, medications (puffers...)

Promoting A Community Where We Care For and Care About Our Neighbours

- Hospitals will only be able to cope with the most sick residents (~ 5% of cases)
- Over 95% of influenza cases will be cared for in the community by family, friends and neighbours
- Need to encourage friends, neighbours, faith organizations and others – *to learn basic infection control strategies* – and help each other

Conclusion

1. If and/ or when an influenza pandemic hits, everyone will be called upon to help each other as never before.
2. You and your agency can make a difference.
3. Know your agency's business continuity planning process.
4. Consider the implications at work and at home.

Thank – you

Comments welcome:
Michelle.Parks@ottawa.ca

Canadian Museum of Nature



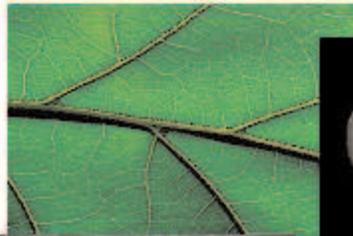
Sustaining Institutional Priorities
through
Risk Assessment

Roger Baird
Director, Collections



In the beginning...

- ◆ Dispersed staff, 13 warehouses
- ◆ Variability in orientation
 - Discipline expertise high
 - Collection Management -more variable



Science	Basic science Discipline specific
Museum studies	Philosophy and practice Conservation etc.
Management	Project System Human resources etc.





The “Standards” Model





Natural Heritage Building

- ◆ Consolidation –Admin & Curatorial Centre
- ◆ “Sandbox” for ground-truthing risk model in functional program and in ongoing care





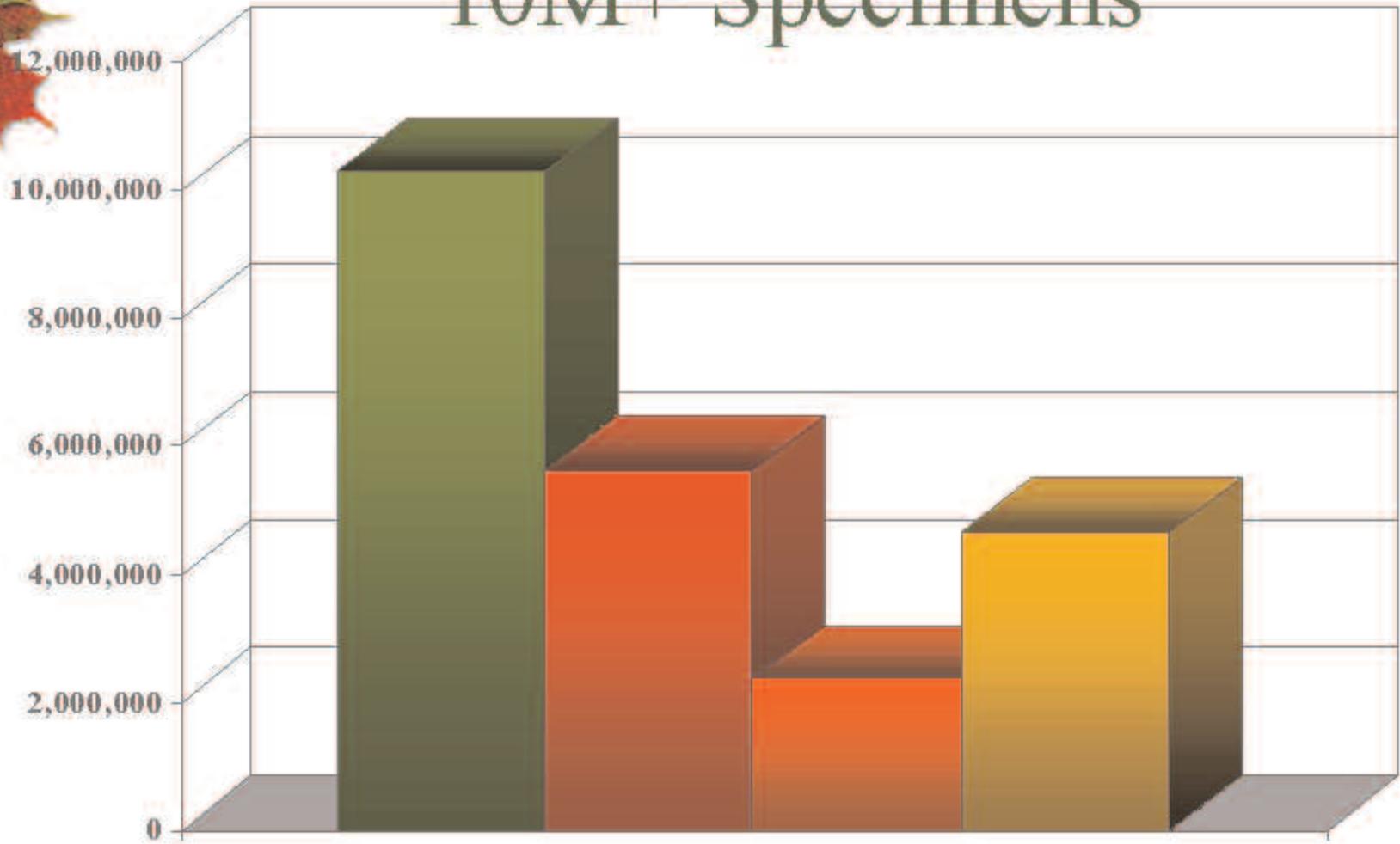
Why do a risk assessment?



- ◆ Success with model in collection storage
- ◆ Identify most serious risks
- ◆ Validate conservation concerns
- ◆ Record of conditions

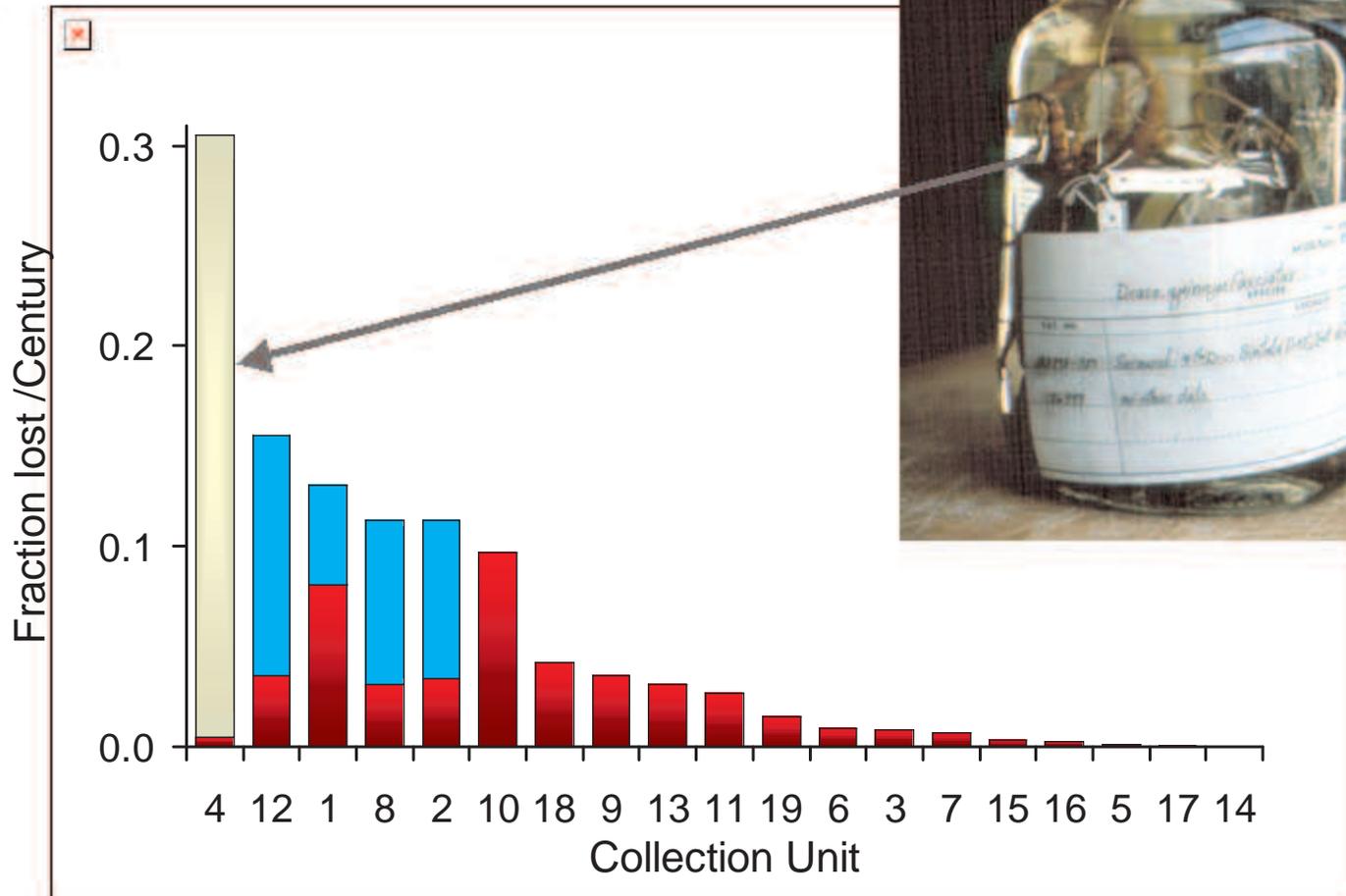


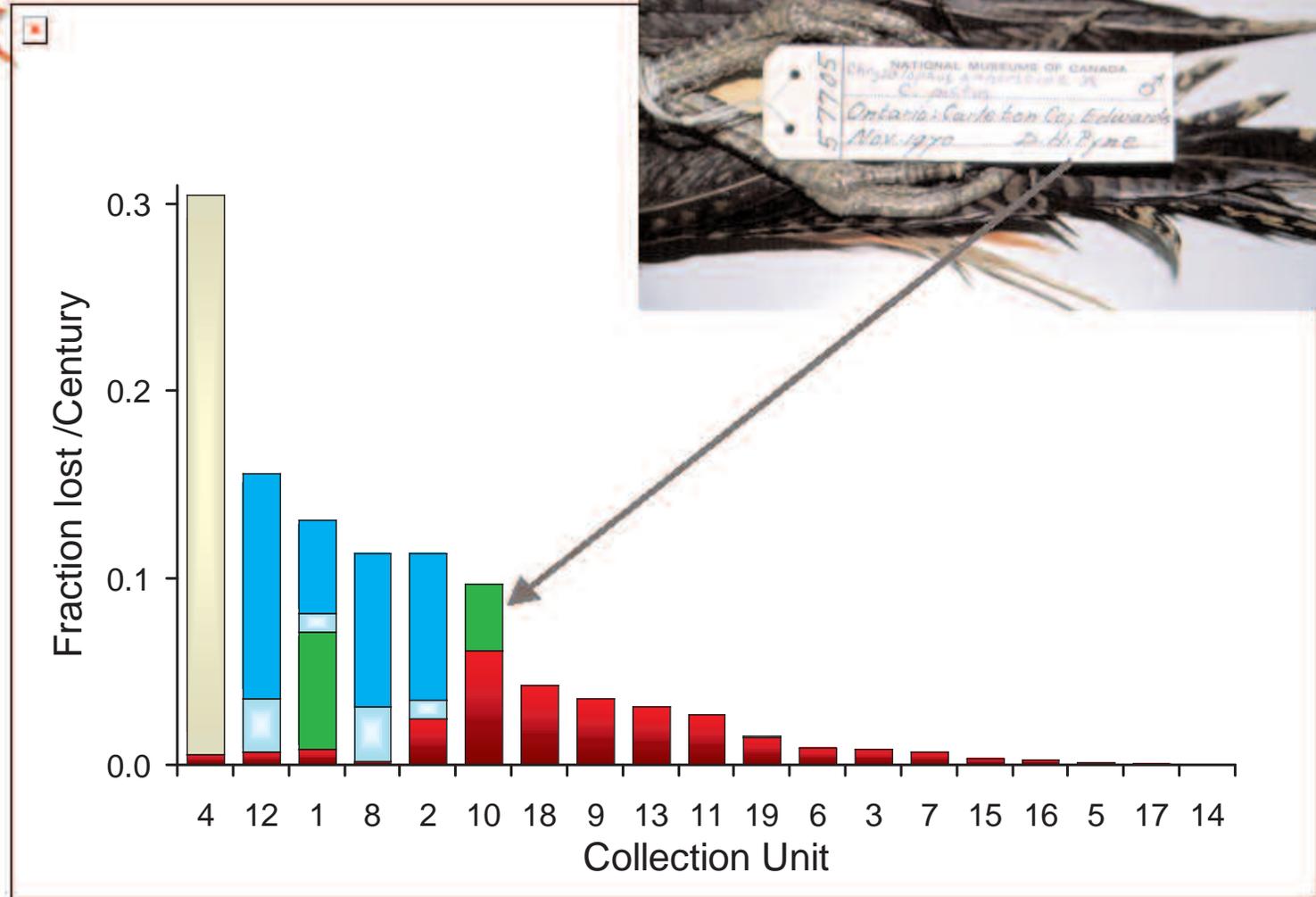
10M+ Specimens



CMN

■ Estimated ■ Catalogued ■ Digitized ■ Backlog







The Victoria Memorial Museum Building (VMMB)





A New Beginning...





- ◆ Heritage museum building
- ◆ Complete capital renewal, commenced 2004
- ◆ Exhibits have gone beyond 30 yr. Life cycle
- ◆ Restoration/Rehabilitation of Heritage dioramas
- ◆ Use of current conditions to set priorities in development of modern, sustainable exhibits



Apply NHB experience at VMMB

- ◆ Quantify and compare risks
- ◆ Identify and prioritize most severe risks
- ◆ Make recommendations
- ◆ Participate in planning for VMMB Renewal project



Project Scope

- ◆ Collection specimens in exhibit
- ◆ 1498 collection specimens
- ◆ Current conditions



Risk Assessment & Management

- ◆ Identify risks
- ◆ Assess risks
- ◆ Identify mitigation methods
- ◆ Evaluate risk mitigation methods



Identify Risks

Agents of deterioration

- ◆ Physical forces
- ◆ Fire
- ◆ Water
- ◆ Criminals
- ◆ Pests
- ◆ Contaminants
- ◆ Light and UV radiation
- ◆ Incorrect temperature
- ◆ Incorrect RH
- ◆ Custodial Neglect

Types of risks

Constant	Sporadic	Rare	
		...Type 1...	Catastrophic
	...Type 2...		Severe
...Type 3...			Gradual/Mild



Assess Risks

◆ **MR(Risk) = FS × LV × P × E**

where:

FS ⇒ Fraction Susceptible

LV ⇒ Loss in Value

P ⇒ Probability

E ⇒ Extent



Identify Mitigation Methods

LEVELS FOR CONTROL

- Location
- Site
- Building
- Room
- Storage Unit
- Object
- Policy/Procedure

METHODS FOR CONTROL

- Eliminate source of risk
- Establish a barrier
- Act on the agent



Evaluate Risk Mitigation Methods

- ◆ Risk
- ◆ Cost
- ◆ Benefit
- ◆ Implementation
- ◆ Long-term
- ◆ Proposed mitigation methods are evaluated according to the risks, costs and other benefits associated both with their implementation and over the long-term.



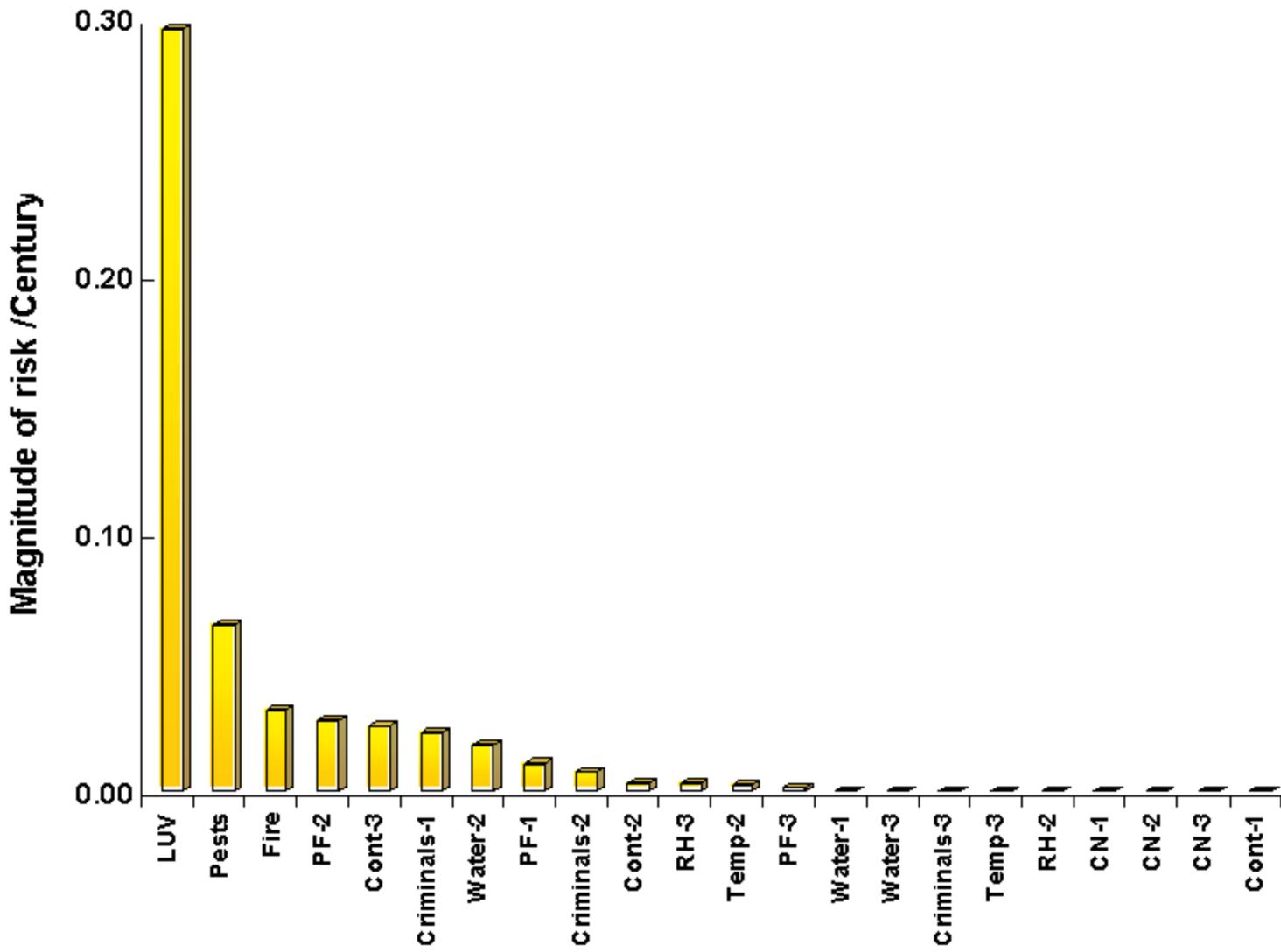
Advantages

- ◆ Comprehensive
- ◆ Cost-effective
- ◆ Convincing



Results for VMMMB

- ◆ Seven highest risks in order of severity
- ◆ Highest risk is more over 4x higher than the next more severe
- ◆ Range in magnitude





LIGHT

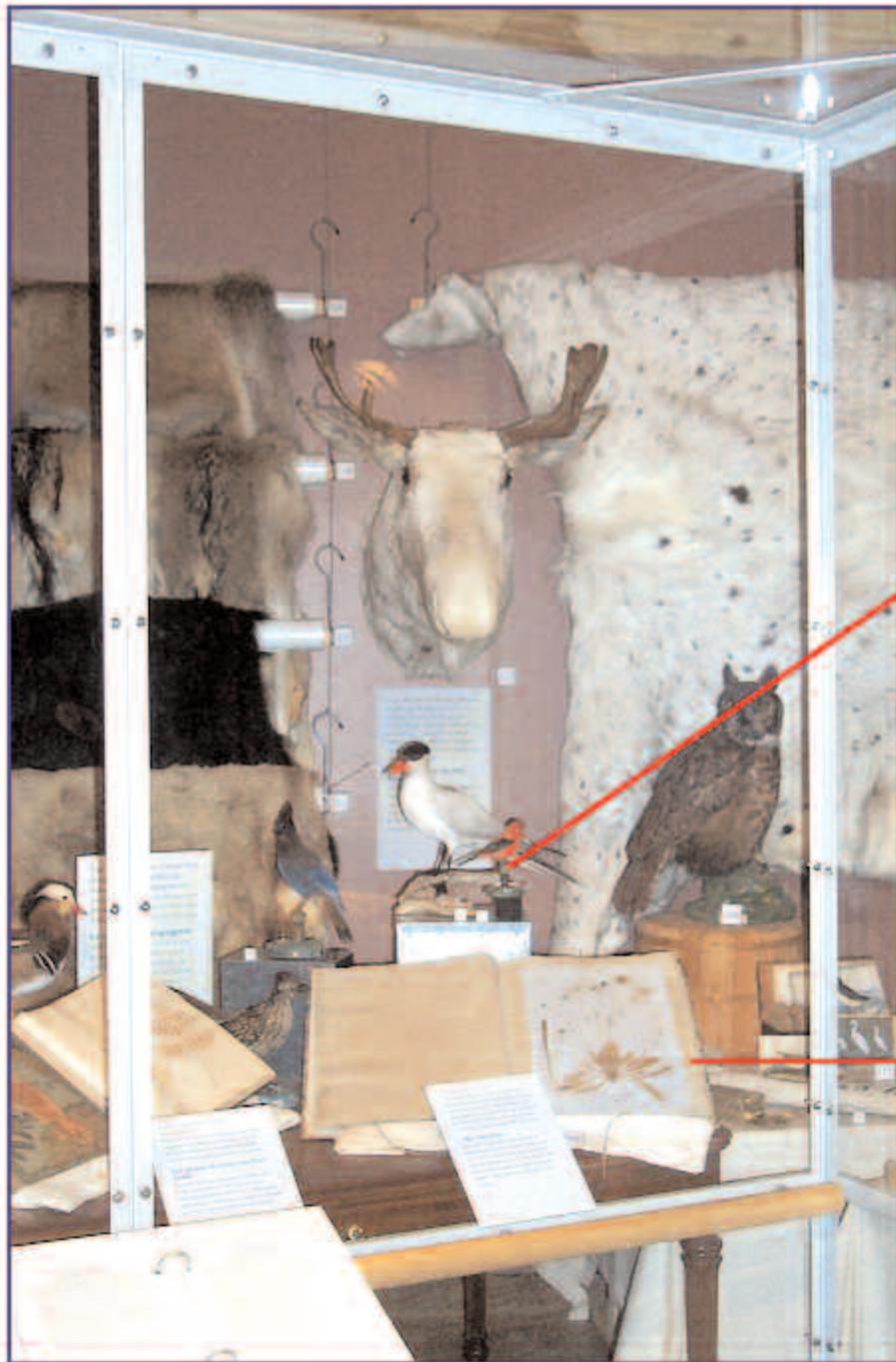




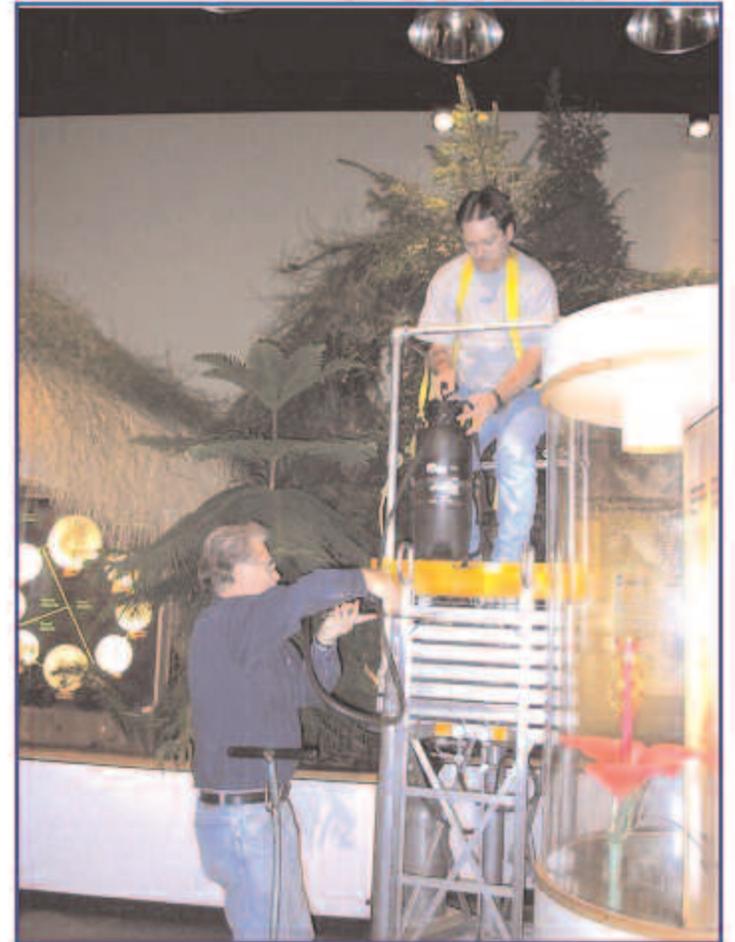
PESTS



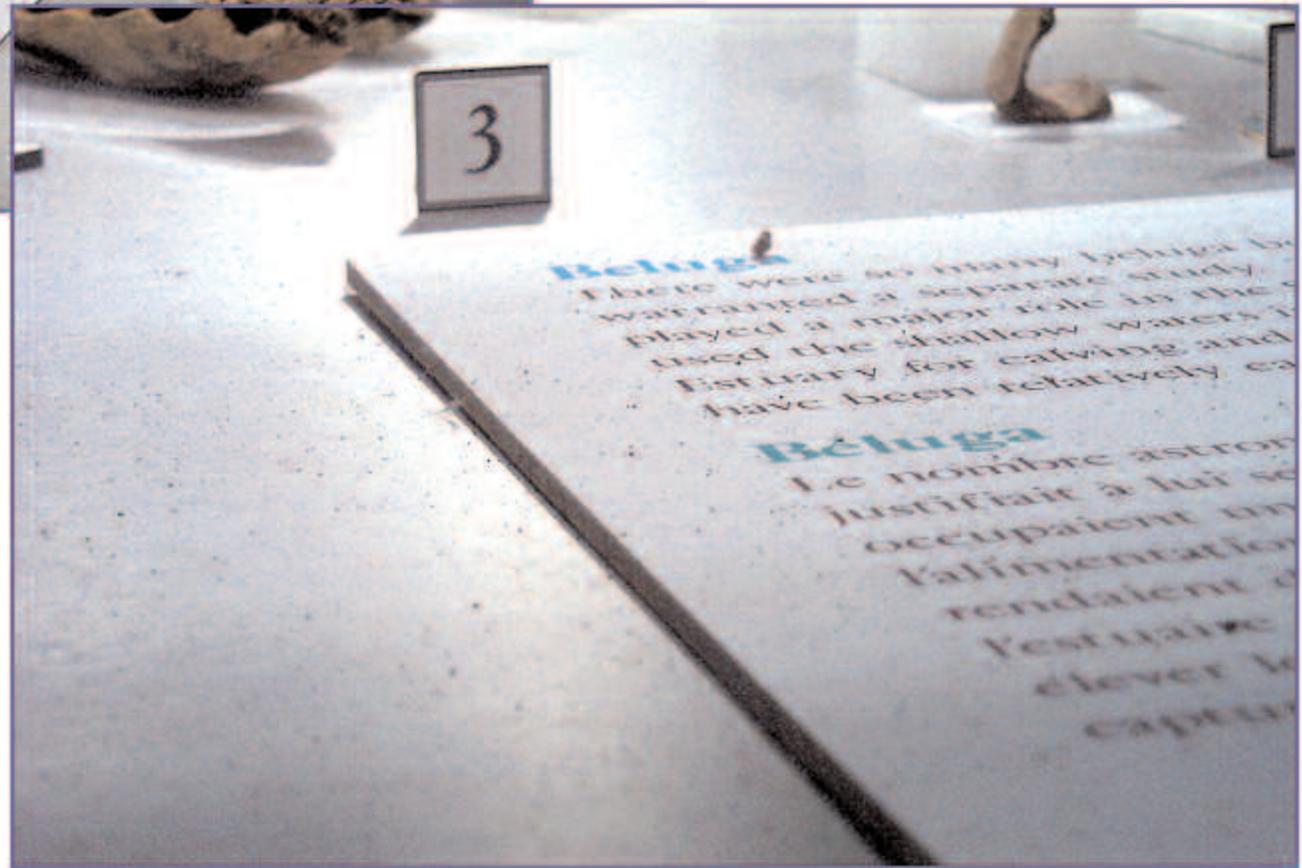
FIRE



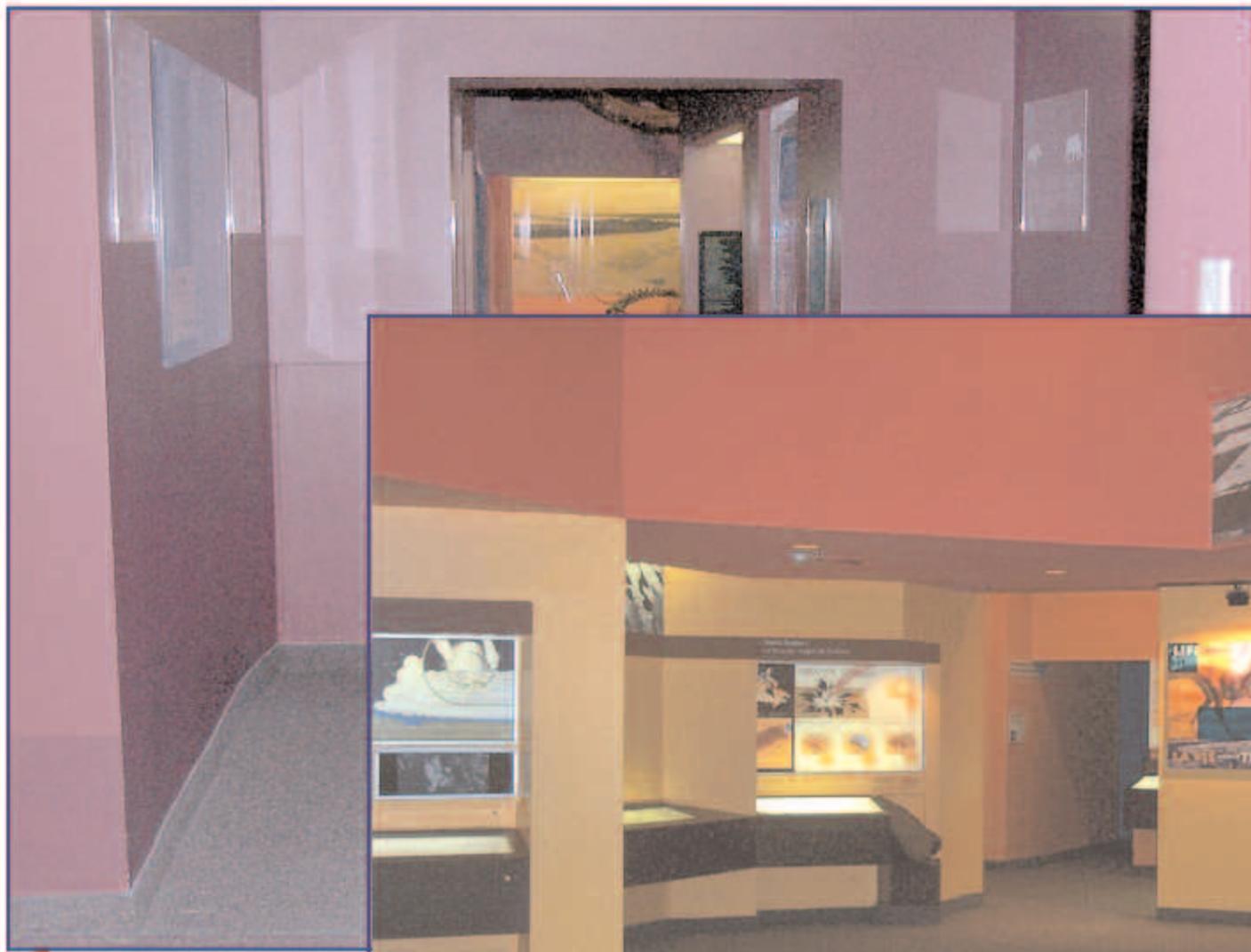
PHYSICAL FORCES



DUST



THEFT





WATER





Documentation

a compounding factor



- ◆ Lack of condition reports and records of past treatments for specimens on exhibit
- ◆ Difficulty in determining quantity of new damage vs. old damage and probability of future damage



Results

- ◆ Sound action plan for management
- ◆ Input into Renewal planning committees
- ◆ Results distributed to divisions
- ◆ Presentations to staff
- ◆ Application of model in broader contexts
 - Material Cultural, Libraries and Archives
 - Alliance of Natural History Museums of Canada



Alliance of
**Natural History
Museums** of Canada



Conclusion

Using the risk assessment model we have achieved:

- ◆ Identification of key issues and priorities
- ◆ Comprehensive documentation of conditions at a particular point in time
- ◆ Effective communication to staff, raising awareness of conservation issues to the museum's collection
- ◆ **A new paradigm for the assessment of Collection Risk Assessment**



Conservation



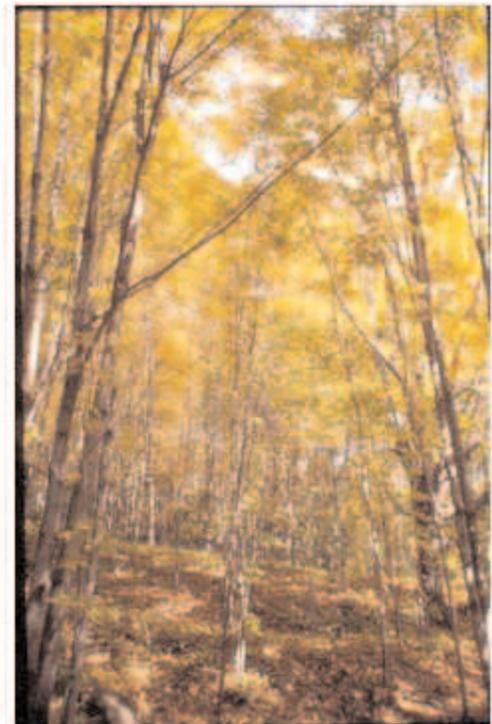
- ◆ Robert Waller
- ◆ Luci Ciperá & Carolyn Leckie
- ◆ Laura Passmore & Garnet Muething
- ◆ Fiona Graham
- ◆ Collections, Facilities & Exhibition Services Divisions
- ◆ Our partners and clients...

Canada



THE ROAD NOT TAKEN

Two roads diverged in a yellow wood,
And sorry I could not travel both
And be one traveler, long I stood
And looked down one as far as I could
To where it bent in the undergrowth;
Then took the other, as just as fair,
And having perhaps the better claim,
Because it was grassy and wanted wear;
Though as for that the passing there
Had worn them really about the same,
And both that morning equally lay
In leaves no step had trodden black.
Oh, I kept the first for another day!
Yet knowing how way leads on to way,
I doubted if I should ever come back.
I shall be telling this with a sigh
Somewhere ages and ages hence:
Two roads diverged in a wood, and I-
I took the one less traveled by,
And that has made all the difference.



Robert Frost

Collection Risk Management – The Next Frontier

Agnes W. Brokerhof
Senior Scientist, Conservation Research Department
Netherlands Institute for Cultural Heritage (ICN),
P.O. Box 76709
1070 KA Amsterdam, The Netherlands

Presented at the CMA Cultural Property Protection Conference, Ottawa, 16 January 2006

Introduction

Let me begin with sketching you a little scenario – the word ‘scenario’ is not entirely without importance in the context of risk management.

It is the 24th century. This is the age in which humans can travel with the speed of light, the age of $E=mc^2$, energy can be transferred into matter and matter into energy. It is the age of transporter technology, you can be scanned, transferred into energy, beamed over to a new location, where you rematerialize again. It is the age of replicator technology, a machine spits out what you want, provided you have stored all the relevant information in the computer database. It can just as easily spit out a ‘coffee, black’ as a ‘Van Gogh, Sunflowers’. It usually produces the perfect replica. There is no longer a need to keep the original in its material existence. This is ideal storage of collections: all the information and coordinates in the database, and if you want to show the object, turn energy into matter. The perfect, dematerialized world.

It is the 24th century. Earth has become a member of the Federation of Planets and the federation starship Enterprise is on one of its missions to explore strange new worlds, to seek out new life and new civilizations. One of the officers on board the Enterprise is Data, an android, an artificial human, an artefact if you want, or in terms of modern art, an installation. Data is kidnapped by Kivas Fajo, a trader and collector of objects from all over the universe. Why collect objects if you can replicate them? Because of their value, their authenticity value, their originality value, their uniqueness. Collecting is not about materials, it is about values incorporated in those materials [1].

Material change and change in value

This is interesting when you consider that many of us study materials. Conservation scientists are the best when it comes to answering questions like ‘of which materials is this made and how?’, and ‘what is the mechanism of this degradation process?’, ‘how does this material interact with its environment?’. We can see cracks, we can see micro-cracks, we can even see scanning electron micro-cracks. And as we get better, we see more and smaller changes, and we are convinced that change is bad. We are conservative after all.

What do we do with our scientific knowledge? We try to avoid change in material. We draw up guidelines for preventive conservation. Strict guidelines for avoiding change as good as we can. And we develop methods to consolidate change or even restore the material condition to what it was before the change. But how do these material changes relate to change in value? How much value is actually lost when a micro-crack is formed in a varnish layer? And how does a loss of value due to micro-cracks compare to the loss of value of a collection due to an earthquake? How can we step back from the micro world into the macro world and look at the bigger picture?

Managing value and risk

In his 2003 dissertation on cultural property risk analysis [2], Robert Waller has sketched the triangle of collection management showing the interaction of three main processes: use of collections, development of collections and preservation of collections (Figure 1). In terms of value this is: exploiting value (in the positive sense of operating, using the value for the collection’s or institution’s benefit, in archives they prefer the word access), adding or increasing value (through acquisition or de-accessioning or through research which adds information and enriches the collection), and keeping the loss of value to a minimum or maintaining value. Collection management then involves making well informed decisions to prioritise and allocate resources to optimize the value of our collections, be that through investing in increase in value or through minimizing the losses, while one needs revenues from collection use to be able to invest anything at all.

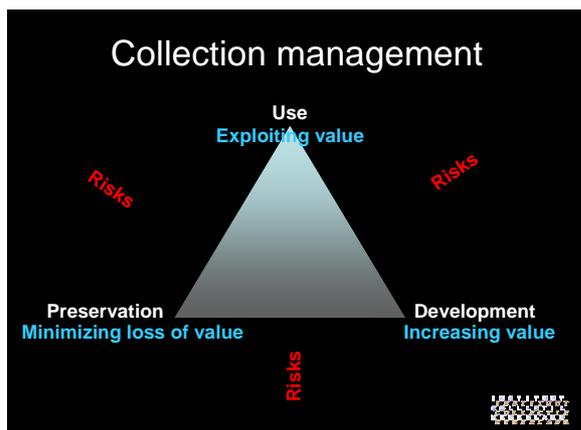


Figure 1. The triangle of collection management (after R. Waller)



Figure 2. Types of risk (after R. Waller)

This triangle of collection management is constantly under threat from all kinds of risk. Risk is defined as the 'possibility of loss' in our case 'loss of value'. Risk is usually looked at as the product of the probability that a harmful event or process takes place and the consequences or effects of that event or process, $R = P \times E$. The various types of risk can be arranged in from the rare but catastrophic events, through the occasional events that result in significant loss, to the continuous processes that cause mild but accumulating loss (Figure 2). These three types of risk are the ones we worry about, and interestingly, in the 24th century, these three types will have led to the same effect in terms of loss to our collections. They are comparable in the long term.

Minimizing the loss of value requires identification of the risks and their quantification, that is risk assessment or risk analysis, followed by developing options to reduce risks and implementing them, mitigation of the risks to our collections, either through preventive or intervening conservation, or, if we cannot change the probability of a catastrophic event, be as prepared as we can be and respond accurately. Evaluation of the process brings the circle to a close. This is the circle of collection risk management (Figure 3).

Prioritising preventive conservation

Looking back at the past 40 years of development in preventive conservation, we can see the fascination for science. Brilliant minds have studied the effect of light on museum materials, of air quality and pests, of relative humidity and temperature on collections and buildings. We have studied all these agents of deterioration separately. Stefan Michalski's framework for preventive conservation [3] may well have been the first attempt to bring all that individual work together and start thinking about integrated preventive conservation. Meanwhile we have adopted and adapted the technical solutions to improve the museum climate and storage conditions. Improve the conditions to minimize the change in material, not necessarily the change in value. In the era of the famous Delta Plan in The Netherlands we believed that the smaller the fluctuations in relative humidity, the better our collections would be preserved. We spent at least 50 million euros in the 1990's on installing climate control in museums. The collections will certainly have benefited from this huge investment, but I secretly wonder how much loss of value we actually avoided with all that. Ironically, the first decade of the 21st century is now dedicated to safety and security, because that slipped to the back of our minds when we were so busy trying to dry the country and achieve the magical 48-55% RH. I fear that we have not been looking at the big picture. Choosing best practice solutions to improve our situation. Best practice being the lazy way of finding solutions to particular problems without assessing them properly first.

The beauty of a risk assessment is that it enables us to quantify different risks expressed in terms of loss of value to our entire collection. It is looking at this change in value, rather than the change in material, that makes collection risk management go beyond preventive conservation, even beyond integrated preventive conservation.

An Example

Let me give you an idea of what a risk assessment can do by explaining some of the work ICN did together with a middle size museum in Amsterdam. Museum Amstelkring *Our Lord in the Attic*, is one of the oldest museums in Amsterdam. It is a 17th century canal house with an interior that shows the splendour of the Dutch Golden Age. Looking as an ordinary house from the outside, visitors are highly surprised to find a complete church in the attic (Figure 4). This church - built in a time when Catholic



Figure 3. The circle of collection risk management



Figure 4. Exterior and interior of Museum Amsteking 'Our Lord in the attic', Amsterdam (photos Gert-Jan van Rooij)

services were officially prohibited – is one of the few hidden Catholic churches to have survived in its original state. The church building is the most important 'object' of the museum and is still used for special masses, weddings and concerts. The moveable collections consists of some 10.000 objects, ranging from 17th century furniture, paintings, catholic artefacts, books to archives.

The mission statement of Museum Amstelkring describes a task that consists of two conflicting parts: preservation of the 17th century canal house, the hidden church and the moveable collections on the one hand and providing accessibility of the monument for visitors on the other hand. There is a growing tension between these two. With visitor numbers increasing from 42.000 in 1992 to 70.000 in 2003 museum management has the feeling that the impact of all these visitors is just too much. They fear wear and tear of especially the building; the 17th century staircase has already been closed for the public. Climate conditions in the building are not optimal, there is condensation in winter when there are large groups of people in the building while due to heating wooden object crack. Lighting needs improvement, both for visibility, conservation and aesthetics. The services provided to visitors do not meet current museum standards and storage space is insufficient. The museum feels that it can no longer adequately balance preservation and presentation requirements.

Museum management decided to systematically study the needs for improvement. ICN was asked to give an integral advice on the issues of preventive conservation, visitor impact, and collection management, and to investigate whether building an extension to the museum would significantly ease the pressure on the main building and create a better environment for the moveable collection. To achieve this, we decided to do a complete risk assessment of building and collections to focus attention on all the possible risks in their integral context. This was done with training and support by Robert Waller and Garnet Muething. Details about the risk assessment and its results can be found in the ICOM-CC paper by Brokerhof et al. [4].

How do the outcomes of a risk assessment have their effect on decision making? There are four obvious roads to choose once you have your results. Reduce the largest risks in a cost-effective manner. Reduce the next largest keeping in mind that you might be able to reduce several risks with a single option for mitigation, look for commonalities. Sometimes the uncertainties are just too big to make a sound decision. Then you may have to invest in research to reduce uncertainty before you decide on how to reduce the risk, if it still proves worth reducing it. And finally there may be risks you have not thought about, so you have to keep investigating and identifying new risks.

When all the calculated risks for the various collection units are plotted in a graph, this provides insight in their relative magnitudes (Figure 5). Plotting the graph slightly different, one sees the contributions of the various risks to the total risk each collection unit is exposed to (Figure 6). Our initial assessment showed that for the moveable collections the painting experienced a large risk from theft during opening hours, while museum staff recognized that wooden and mixed media sculptures were of interest to collectors, such as the staff themselves and other trusted people (not that they are all criminals, but the opportunity to create the thief is present). Light stood out as big risk in the exhibitions. The immoveable collections experienced the biggest threat from building maintenance, a leaky roof and wear and tear, especially the stairs and floors. Fire stood out as a big risk for both building and collections.

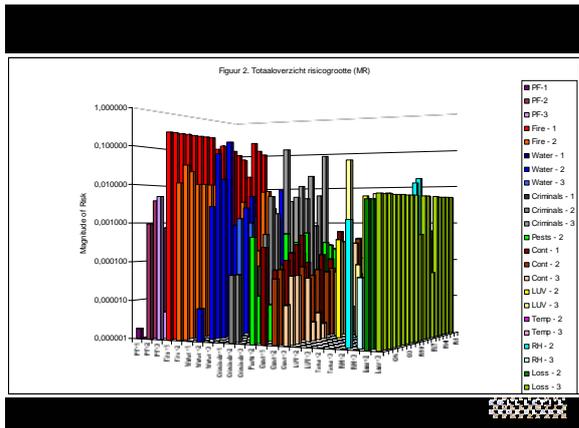


Figure 5. Results of the first risk assessment [2].

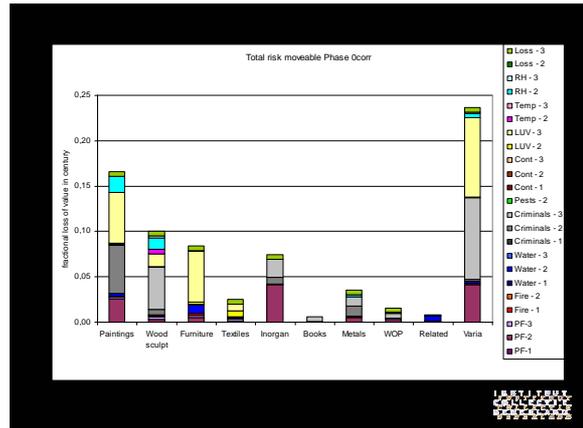


Figure 6. Results showing individual contributions of risks for moveable collections

The museum made several improvements. Short term low cost: a procedure for the keys and access to storage; short term higher costs: improved security with cameras and alarms for the paintings, fire doors to create three compartments, and clamp-fit exhibition racks. A major investment was in restoration of the roof. As for the long term high cost investments planning of an extension to release the pressure on the old building is in full swing.

If we look at the effects on risk reduction of these actions we see the effect of the roof repair on the risks to the walls (Figure 7 bars 4 and 5), and of the security improvements to the risks of the paintings (Figure 7 bars 10 and 11). Honesty requires us to admit that the key procedure does not really reduce the risk of internal theft, although the effect of increased awareness may be psychologically larger than we think. There still needs to be found a good solution to lower the risk of windows breaking during cleaning and maintenance.

If we look at the hypothetical situation of banning all events and exhibitions from the old building, our risk calculations show that this drastic decision may improve the climate conditions, but it does not seem to provide the reduction of wear and tear we are aiming at. This is a topic about which we lack expertise and there is not much published data on visitor impact in museums. Uncertainty is high. Therefore, ICN has recently started research in visitor impact.

The initial risk assessment took approximately 120 person days while the on-going assessment still requires regular staff input. However, the benefits outweigh the costs by far. Awareness of risks is, in itself, the beginning of risk reduction. The assessment has added insight into the relative magnitude of the various risks, thus enabling prioritizing actions for improvement. Instinctive concerns have become more objective. It has provided results that can be communicated in a language that decision makers understand. It has raised awareness of the value of the collections and has served as a binding medium for the human organisation.

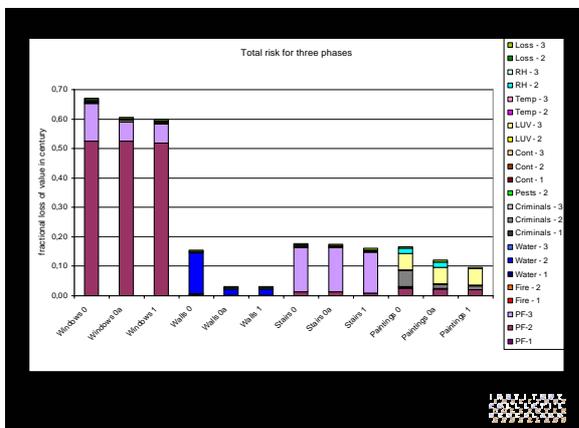


Figure 7. Magnitudes of risk for the collection units windows walls, stairs and painting for the initial assessment (left), first improvements (middle) and hypothetical new situation (right)

Cost:

- Workshop, Start-up with coach
- 3 months with 8 people 1+ dpw (120 person days)
- Supporting investigations
- Lot of work

Benefits:

- Concious of value, awareness of condition
- Insight in risks
- Communicapable results
- Teambuilding

Figure 8. Costs and benefits of a collection risk assessment

Crossing the next frontier

That brings me back to the more conceptual part of my talk. Risk assessment and risk management are nothing new. You have heard many examples here already and you will hear more I expect. The health industry, transportation, construction, building and site management they all think in terms of risk. Back in 1999 Jonathan Ashley-Smith already gave us the book on risk assessment for object conservation [5]. Still, in my opinion, the holistic approach of collection risk management as an integral part of collection management, that is something new and that is what will be developed in the years to come. Collection risk management is not only where all our scientific knowledge and understanding of the materials in our collections comes together, it is also where the entire cultural heritage profession comes together. Together we use our knowledge to estimate the rate of degradation and the occurrence of events, and we determine the consequences when they happen. We need that to estimate what the loss of value will be over a certain period of time. But that value is not determined by me, or you, or him. This is where even society, the public, comes in. We collect and keep collections because they are of value to society. And the very core business of what we do, is to deliver the value of our cultural heritage to the future.

One day in the future, an estimated 5 billion years from now, a mega-catastrophic event will wipe out our entire civilization. Isn't it a comforting thought that all our efforts will be just a speck on the universal time line? Although perhaps, a collector like Kivas Fajo will have one or two valuable remnants of our civilization.

Until that day we have a lot of work to do:

- to produce useful data that enable us to quantify risks
- to seek mitigation methods to reduce losses
- to be prepared and to react efficiently when disaster strikes
- to make well informed decisions to allocate resources to the relevant risks
- to cross the next frontier, from preventive conservation to collection risk management
- to boldly go where no one has gone before (as they would say in Star Trek)

But that is not entirely true, people have gone there already and what I have told you here is only my synthesis of the ideas of great minds, whom I gratefully thank [6].

And I thank you for bearing with me.

References

- [1] Star Trek, The Next Generation, Season 3, Episode 22 'The most toys' (1990), Paramount Pictures.
- [2] Waller, R.R. (2003) *Cultural property risk analysis model: development and application to preventive conservation at the Canadian Museum of nature*. Acta Universitatis Gothoburgensis, Goteborg, Sweden.
- [3] Michalski, S. (1990) 'An overall framework for preventive conservation and remedial conservation'; in *Preprints of the 9th Triennial Meeting of the International Council of Museums Committee for Conservation*, Dresden, ICOM, pp. 589-591.
See also: http://www.cci-icc.gc.ca/tools/framework/index_e.aspx
- [4] Brokerhof, A.W., Luger, T., Ankersmit, H., Bergevoet, F., Schillemans, R., Schoutens, P., Muller, T., Kiers, J., Muething, G., and Waller, R. (2005) 'Risk Assessment of Museum Amstelkring: Application to an historic building and its collections and the consequences for preservation management'; in *Preprints of the 14th ICOM-CC Triennial Meeting*, The Hague, pp.590-596.
- [5] Ashley-Smith, J. (1999) '*Risk assessment for object conservation*', Butterworth-Heinemann, Oxford, 358 pp.
- [6] Inspiration derived from: Catherine Antomarchi, Jonathan Ashley-Smith, May Cassar, Gael de Guichen, Stefan Michalski, Sarah Staniford, Alberto de Tagle, Jean Tétreault, Isabelle Verger, Robert Waller.

CANADIAN
CONSERVATION
INSTITUTE



INSTITUT
CANADIEN DE
CONSERVATION

Helping Museums Adopt Risk Management Aider les musées à exercer la gestion des risques

Protecting Cultural Property - CMA Conference January 2006
Protéger la propriété culturelle - Conférence de l'AMC, janvier 2006

Jeanne Inch

DG & COO Canadian Conservation Institute

DG et chef de l'exploitation de l'Institut canadien de conservation



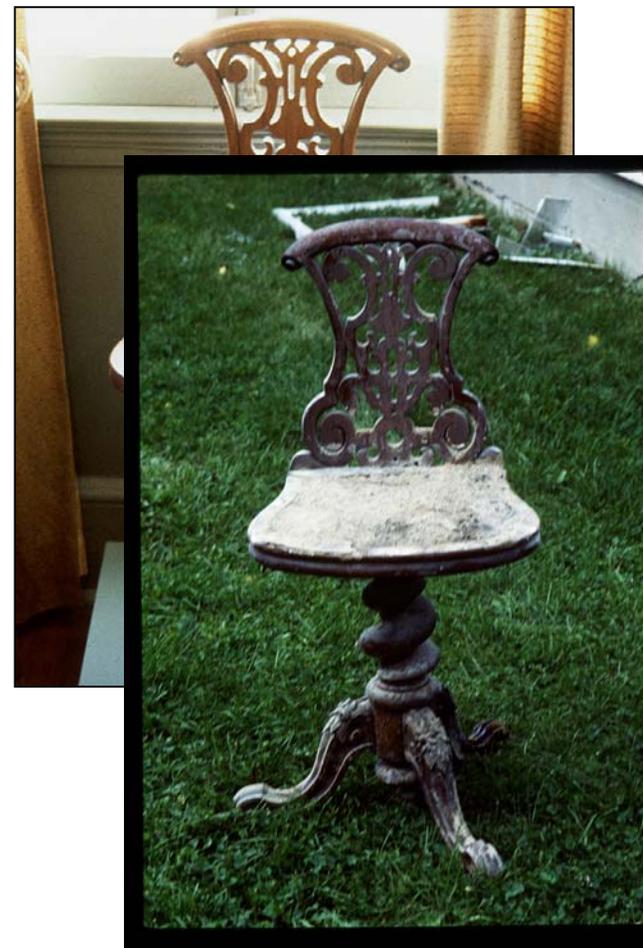
Canadian
Heritage

Patrimoine
canadien

Canada

Our vision Notre vision

- ✿ Better preserved collections through risk-based decision making
- ✿ Des collections mieux préservées par des décisions axées sur la gestion des risques.



Your challenges Vos défis

- 🍁 Limited financial resources
- 🍁 Too few professional staff
- 🍁 Growing collections



- 🍁 Ressources financières limitées
- 🍁 Personnel professionnel insuffisant
- 🍁 Collections croissantes
- 🍁 Installations vieillissantes



Canadian
Heritage

Patrimoine
canadien

CANADIAN
CONSERVATION
INSTITUTE



INSTITUT
CANADIEN DE
CONSERVATION

Canada

Risk management can help museums

La gestion des risques peut aider les musées

- Identify and determine priorities
 - Make more informed decisions about options
 - Justify investments
 - Reduce risks at a reasonable cost
- Cerner et déterminer les priorités
 - Prendre des décisions mieux éclairées à l'égard des options
 - Justifier les investissements
 - Réduire les risques à un coût raisonnable



Canadian
Heritage

Patrimoine
canadien

CANADIAN
CONSERVATION
INSTITUTE



INSTITUT
CANADIEN DE
CONSERVATION

Canada

Our approach Notre approche

- 🍁 Been driven by client requests
- 🍁 Developed through partnerships

- 🍁 Repose sur les demandes des clients
- 🍁 S'améliore au moyen de partenariats



Canadian
Heritage

Patrimoine
canadien

CANADIAN
CONSERVATION
INSTITUTE



INSTITUT
CANADIEN DE
CONSERVATION

Canada

Evolved from preventive conservation Découle de la conservation préventive

1 Physical forces		Forces physiques directes
2 Thieves, vandals		Vol, vandalisme
3 Fire		Feu
4 Water		Eau
5 Pests		et animaux nuisibles
6 Contaminants		Contaminants
7 UV, Light		UV, Éclairement
8 Incorrect temperature		Températures contre-indiquées
9 Incorrect RH		HR contre-indiqués

1 Avoid	Éviter
2 Block	Empêcher
3 Detect	Détecter
4 Respond	Réagir
5 Recover and Treat	Récupérer et Traiter

Diagram description: A red box containing the five stages of the process is positioned between the two tables. A box labeled 'stages étapes' has lines pointing to the corresponding rows in both tables.



Canadian
Heritage

Patrimoine
canadien

CANADIAN
CONSERVATION
INSTITUTE



INSTITUT
CANADIEN DE
CONSERVATION

Canada

But, many questions Mais, beaucoup de questions

🍁 Know the threats...but not able to save everything...

🍁 Many conflicting choices

🍁 Lack feedback on the results of possible

????????

🍁 Nous connaissons les menaces... mais nous sommes incapables de tout sauvegarder...

🍁 Plusieurs choix conflictuels

🍁 Nous n'avons pas suffisamment de rétroaction sur les résultats des mesures éventuelles



Canadian
Heritage

Patrimoine
canadien

CANADIAN
CONSERVATION
INSTITUTE



INSTITUT
CANADIEN DE
CONSERVATION

Canada

So, a predictive model for the future
Alors, un modèle de prévision pour l'avenir



Canadian
Heritage

Patrimoine
canadien

CANADIAN
CONSERVATION
INSTITUTE



INSTITUT
CANADIEN DE
CONSERVATION

Canada

Our work plan... Notre plan de travail...

- ✿ Research to gather data on infrequent and continual risks
- ✿ Services to provide expert advice, tools and support
- ✿ Training for museums
- ✿ Mener des recherches pour recueillir des données sur les risques rares et les risques continus
- ✿ Offrir des services en vue de fournir des conseils d'experts, des outils et du soutien
- ✿ Donner une formation pour les musées



Canadian
Heritage

Patrimoine
canadien

CANADIAN
CONSERVATION
INSTITUTE



INSTITUT
CANADIEN DE
CONSERVATION

Canada

Research: Gathering data on past events Recherche : Recueillir des données sur des événements passés

- 🍁 Data used to determine the likelihood and impact of threats

- 🍁 Données utilisées pour déterminer la probabilité des menaces et leurs répercussions



Canadian
Heritage

Patrimoine
canadien

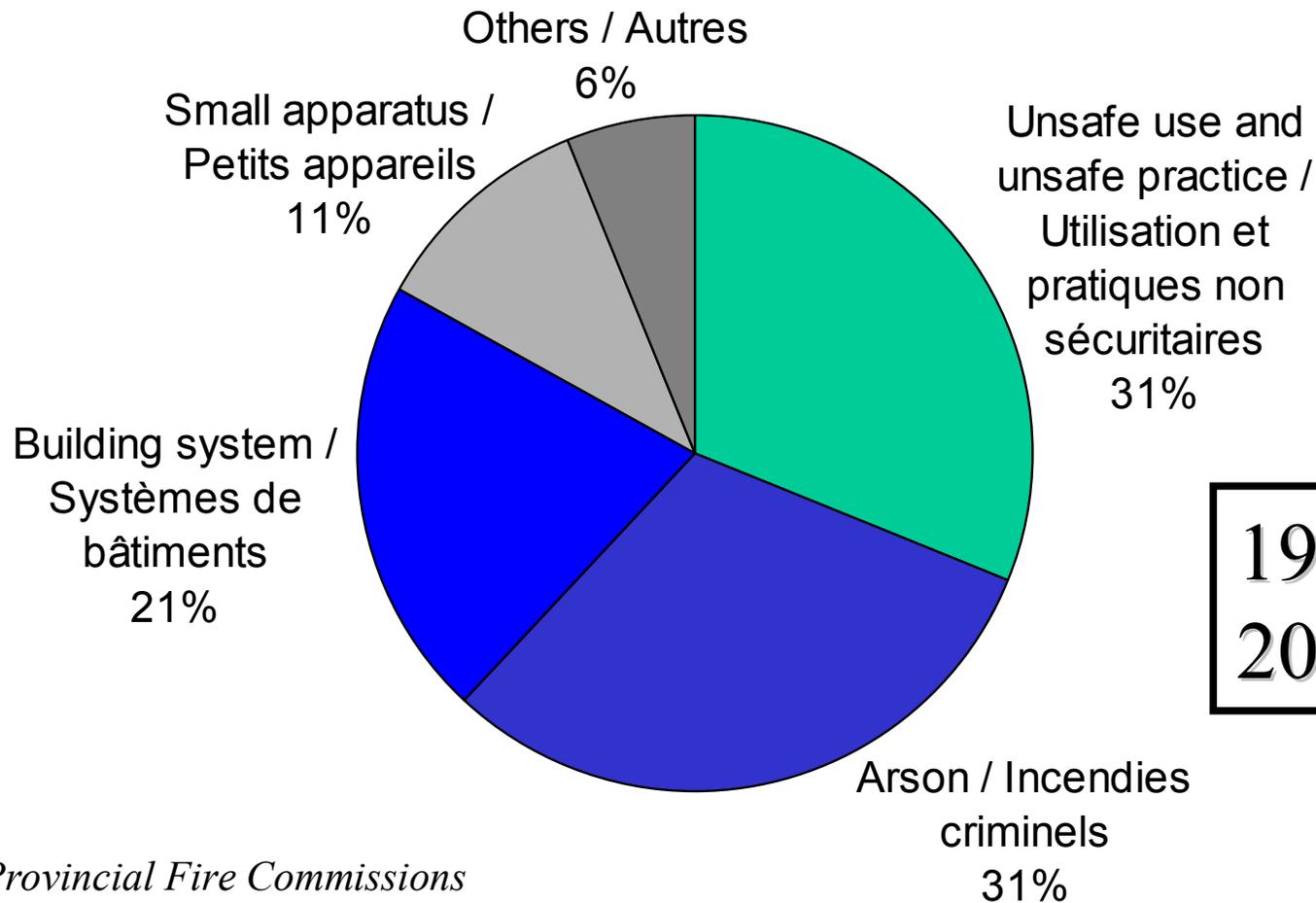
CANADIAN
CONSERVATION
INSTITUTE



INSTITUT
CANADIEN DE
CONSERVATION

Canada

Research: Infrequent events - Fires Recherche: Événements rares - incendies



Source: Provincial Fire Commissions

Source : Commissions des incendies provinciales



Canadian
Heritage

Patrimoine
canadien

CANADIAN
CONSERVATION
INSTITUTE



INSTITUT
CANADIEN DE
CONSERVATION

Canada

Research: Infrequent events - Pest infestations
Recherche: Événements rares - infestations de
vermine



Canadian
Heritage

Patrimoine
canadien

CANADIAN
CONSERVATION
INSTITUTE



INSTITUT
CANADIEN DE
CONSERVATION

Canada

Research: Continual risks – light and RH Recherche: Risques continus -- lumière et HR



Canadian
Heritage

Patrimoine
canadien

CANADIAN
CONSERVATION
INSTITUTE



INSTITUT
CANADIEN DE
CONSERVATION

Canada

Tool: Software tool to predict light damage

Outil: Logiciel pour prévoir la détérioration par la lumière

Microsoft Access - [CCI Light damage calculator]

File Edit View Insert Format Records Tools Window Help

What is being exposed?

Artifact groups CIE ratings Blue wools purples blues greens yellows oranges reds browns blacks

Carmine in oil Information on this item

What light exposure is planned? 14.60 Mega lux hours

50 lux, the young see many objects well 8 hours per day

Any flash exposures? Zero flashes per day every day of the year 100 years

Original color before prior fade 0 Prior fade



Predicted light damage

Advanced users data entry

The yellow line represents a light source similar to daylight through glass. The black line represents a good UV filter. All normal light sources give damage somewhere between these two extremes. The fractional fading is shown both as approximate colour change, and as a reduction in height of the patch.

Form View



Canadian
Heritage

Patrimoine
canadien

CANADIAN
CONSERVATION
INSTITUTE



INSTITUT
CANADIEN DE
CONSERVATION

Canada

Tool: User-friendly assessment method

Outil: Méthode d'évaluation conviviale

- 🍁 A basic tool and resources for museums or consultants to do their own risk assessments
- 🍁 To be introduced at CMA conference in Saint John

- 🍁 Des ressources et des outils fondamentaux pour les musées ou les experts-conseils peuvent ainsi effectuer leurs propres évaluations
- 🍁 La méthode sera présentée pendant la conférence de l'Association des musées canadiens (AMC) à Saint John



Canadian
Heritage

Patrimoine
canadien

CANADIAN
CONSERVATION
INSTITUTE



INSTITUT
CANADIEN DE
CONSERVATION

Canada

Training: Reducing risks to collections

Formation: Réduire les risques pour les collections

🍁 To study and practice risk management approaches

🍁 Pour étudier et appliquer des méthodes de gestion des risques

CCI - Ottawa
Oct 16 - 27



Canadian
Heritage

Patrimoine
canadien

CANADIAN
CONSERVATION
INSTITUTE



INSTITUT
CANADIEN DE
CONSERVATION

Canada

Our vision...

- 🍁 Partnerships for research and data collection
- 🍁 A collection of tools that are practical and easy to use
- 🍁 Training for Canadian museums



Canadian
Heritage Patrimoine
canadien

Notre vision...

- 🍁 Partenariats axés sur la recherche et la collecte de données
- 🍁 Ensemble d'outils pratiques et simples à utiliser
- 🍁 Formation à l'intention des employés des musées canadiens

CANADIAN
CONSERVATION
INSTITUTE



INSTITUT
CANADIEN DE
CONSERVATION

Canada

CANADIAN
CONSERVATION
INSTITUTE



INSTITUT
CANADIEN DE
CONSERVATION

Helping Museums Adopt Risk Management Aider les musées à exercer la gestion des risques

Protecting Cultural Property - CMA Conference January 2006
Protéger la propriété culturelle - Conférence de l'AMC, janvier 2006

Jeanne Inch

DG & COO Canadian Conservation Institute

DG et chef de l'exploitation de l'Institut canadien de conservation



Canadian
Heritage

Patrimoine
canadien

Canada



Public Safety and Emergency
Preparedness Canada

Sécurité publique et
Protection civile Canada



PUBLIC SAFETY AND EMERGENCY PREPAREDNESS CANADA – CANADA’S CRITICAL INFRASTRUCTURE

**Canadian Cultural Property Protection Conference
January 16, 2006**

Canada

KEEPING CANADIANS SAFE

Agenda for Today



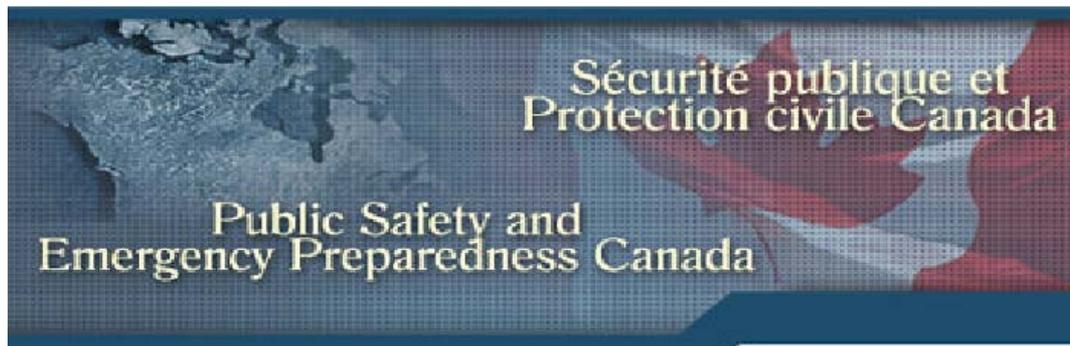
- Public Safety and Emergency Preparedness Canada: the Portfolio and the Department
- Emergency Management and National Security Branch
- Critical Infrastructure Protection



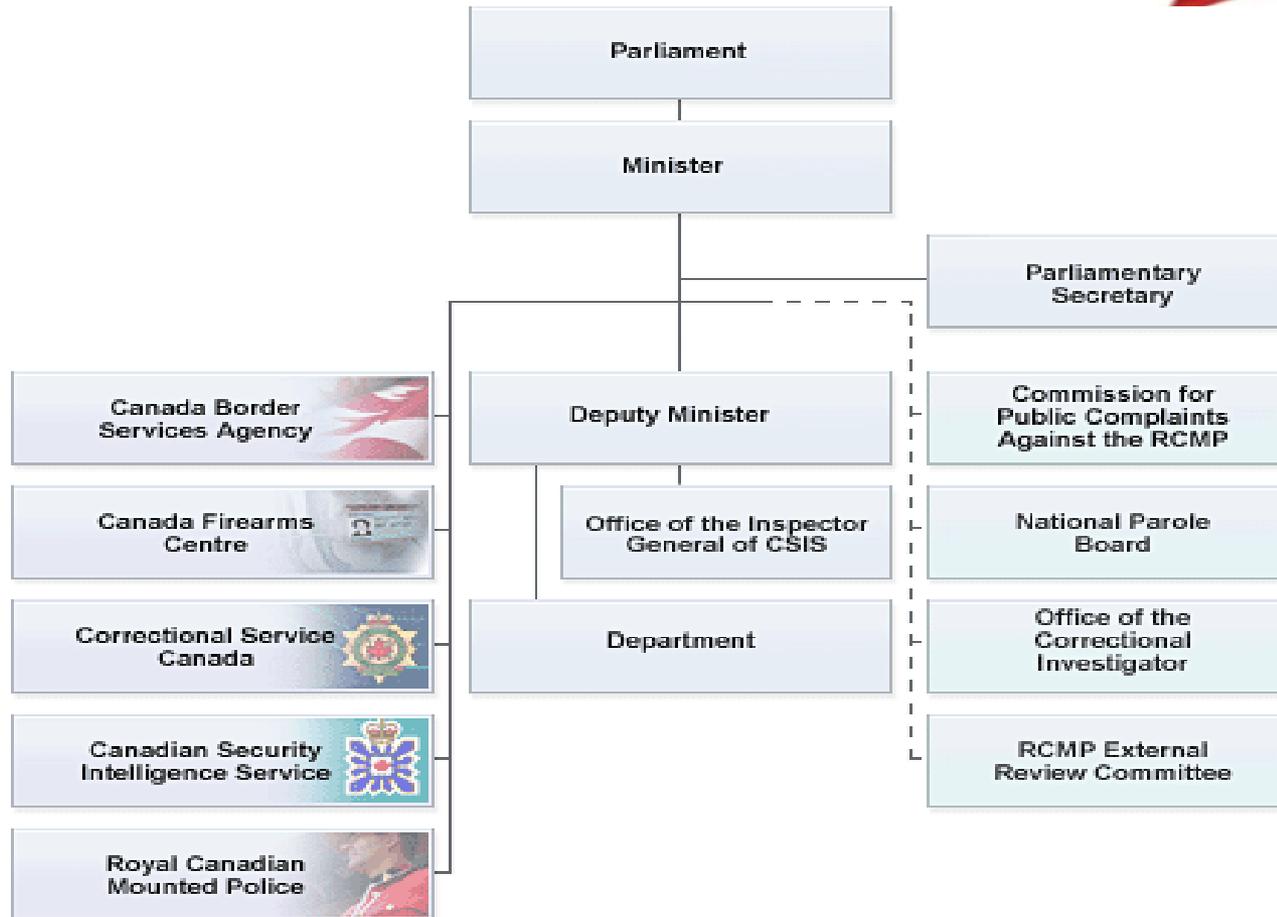
Public Safety and Emergency Preparedness Canada



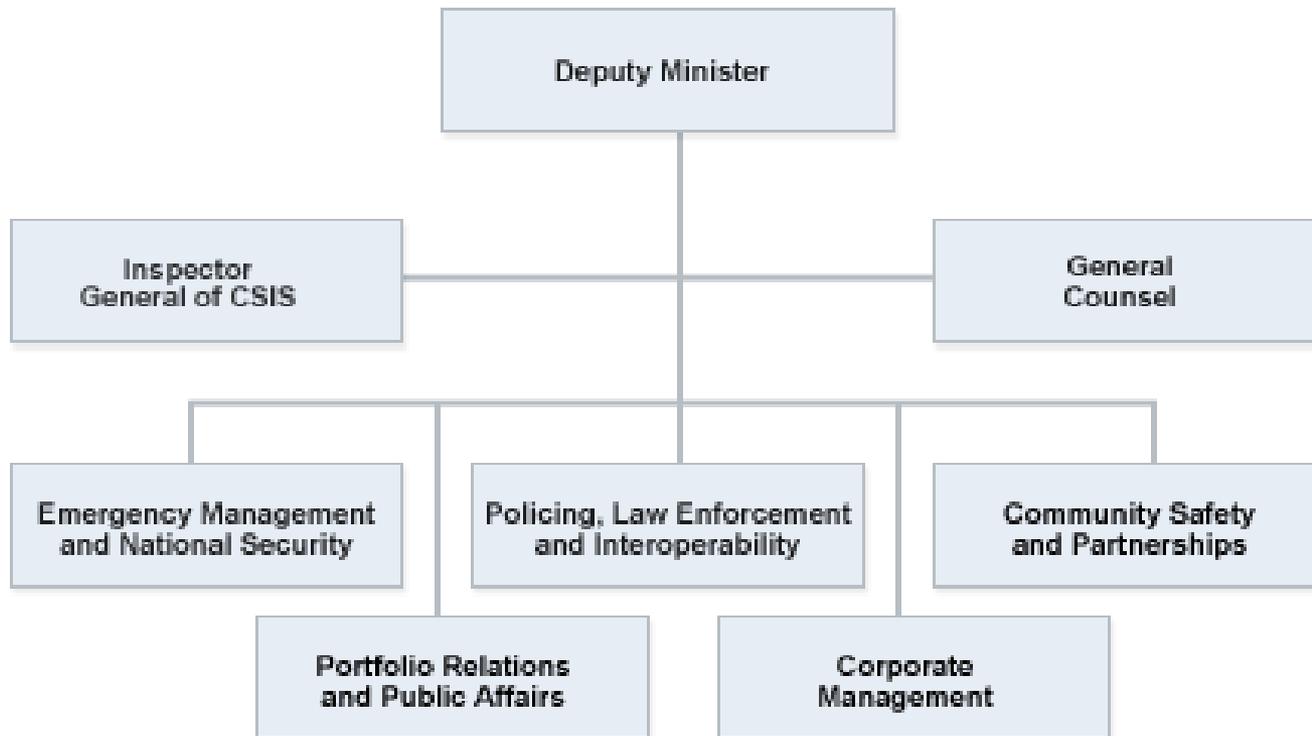
- Created December 12, 2003
- Legislation establishing Department came into force April 4, 2005
- Mission: ***“Enhance the safety and security of Canadians”***



PSEPC Portfolio Overview



PSEP Departmental Overview





Public Safety and Emergency
Preparedness Canada

Sécurité publique et
Protection civile Canada



Public Safety and Emergency Preparedness Canada - Emergency Management and National Security Branch

Canada

KEEPING CANADIANS SAFE

Emergency Management and National Security (EMNS) Branch



Emergency Management
role of former **Office of
Critical Infrastructure
Protection and
Emergency
Preparedness**



National Security role of
former **Department of the
Solicitor General Canada**



EMNS Roles and Responsibilities



Acts as the focal point for policy leadership in modernizing the national emergency management system across the full spectrum of mitigation, preparedness, response and recovery

Delivers preparedness and aid funding to provinces and territories through the Disaster Financial Assistance Arrangements and Joint Emergency Preparedness Program

Delivers emergency management training and education in Canada through the Canadian Emergency Preparedness College

Coordinates infrastructure assurance programs and activities across Government

*Securing an Open Society:
Canada's National Security Policy*

April 2004



EMNS Regional Offices



Direct the development and delivery of EMNS programs within the regions, work with local stakeholders, and ensure emergency readiness in the regions

Play a vital role coordinating the federal response during emergencies

Act as a liaison between EMNS staff in Ottawa and the provincial/territorial governments and work to enhance the relationships and information sharing between the two levels of government





Public Safety and Emergency
Preparedness Canada

Sécurité publique et
Protection civile Canada



Critical Infrastructure Protection

Canada

KEEPING CANADIANS SAFE

Our Critical Infrastructures Are Increasingly Complex, Interconnected, and Vulnerable



Definition of National Critical Infrastructure (NCI)



National Critical Infrastructure refers to those physical and information technology facilities, networks, services and assets, that if disrupted or destroyed, would have a **serious impact on the health, safety, security or economic well-being of Canadians or the effective functioning of governments in Canada**



Ten National Critical Infrastructure Sectors



Energy and Utilities

Communications and Information Technology

Finance

Health Care

Food

Water

Transportation

Safety

Government

Manufacturing



Continuity of Government Operations and Key Critical Services



Government facilities (Far North)

**Government services (meteorological
services)**

Government information networks (Revenue)

Government assets (Canadian Forces)

**Key national symbols (cultural institutions
and national sites and monuments –
Parliament Buildings)**

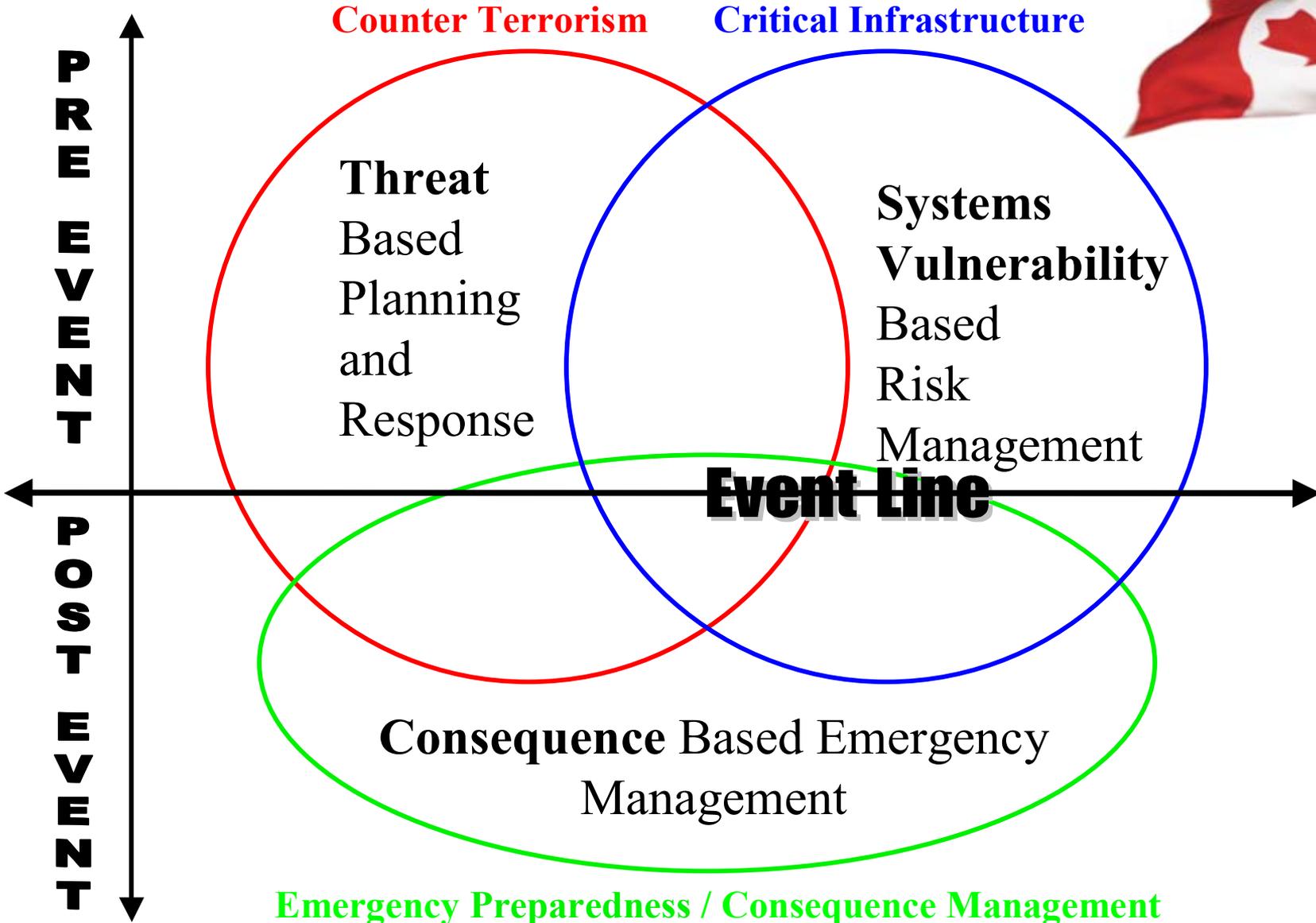


Current Context

Canada faces growing threats: health, environmental and national security

Recent events have demonstrated increasing vulnerabilities due to interconnectedness, interdependencies, diverse ownership, reliance on information technology, and accelerated pace of change

Need for a partnership to ensure joint action in order to increase resilience of infrastructures





Counter Terrorism

Critical Infrastructure

**P
R
E
V
E
N
T**

**P
O
S
T
E
V
E
N
T**



**Sky Dome
CN Tower
Toronto**



**Ambassador
Bridge
Windsor**



**Intermodal
Terminal
Brampton**



Emergency Preparedness / Consequence Management





Critical Infrastructure Protection (CIP) What is it?

Critical infrastructure protection can be defined as actions and programs that:

- Identify the critical infrastructure and its specific components (human, physical and cyber)
- Assess vulnerabilities
- Take mitigative or protective measures to reduce vulnerabilities

INTEGRATED RISK MANAGEMENT



Proposed Impact Factors to identify National Critical Infrastructure



Concentration of People and Assets

Economic (measures direct costs)

Critical Infrastructure Sector

Interdependency (measurement of impact to other critical services or sectors)

Service Delivery (qualitative impact to general economy)

Public confidence (in government)



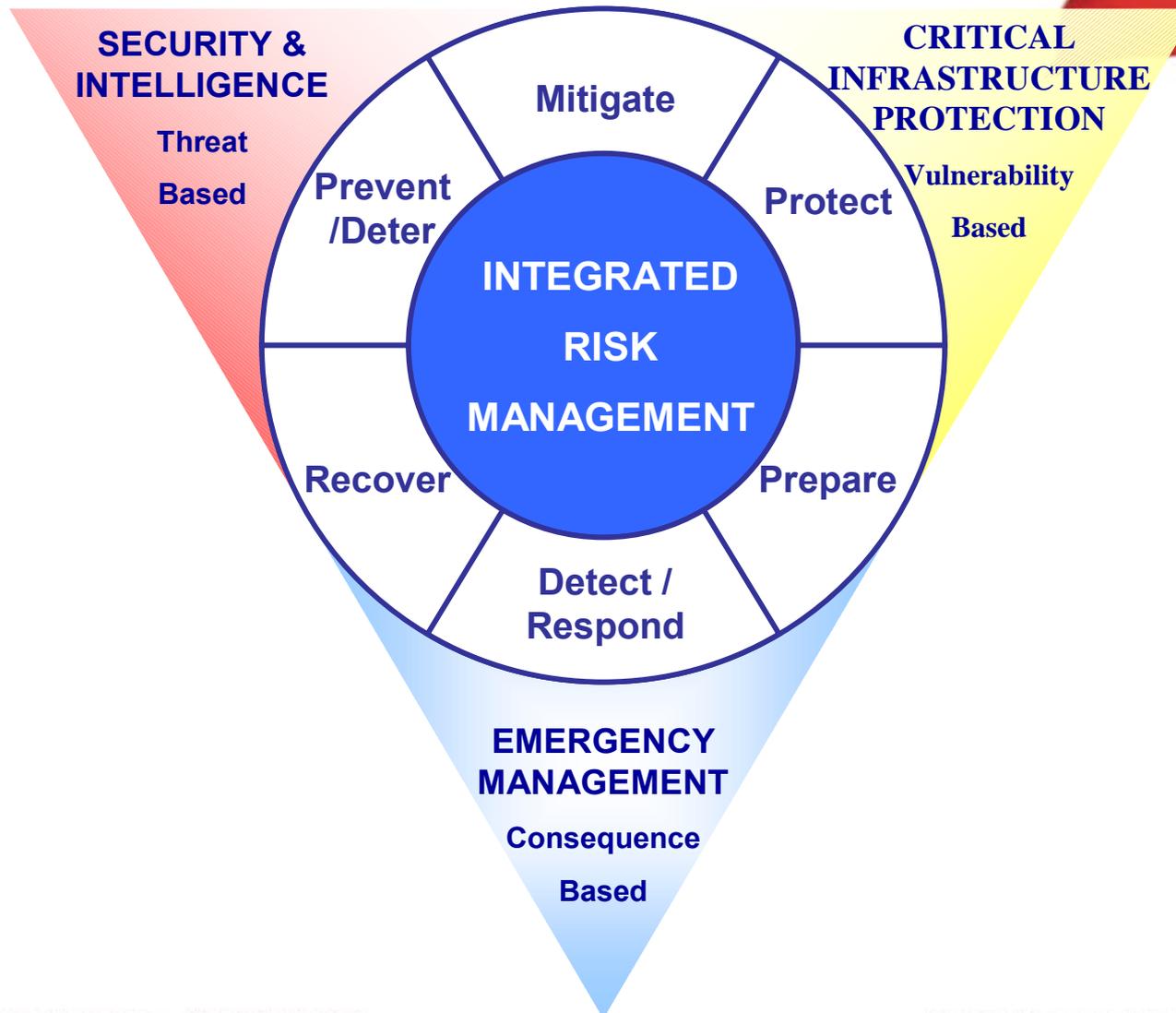
Federal Criticality Proposal



Impact Factor	Severe	High	Medium	Low
Score	15	5	3	1
Concentration of People/Assets	>10,000 people	1,000 to 10,000	100 – 1,000	<100 people
Economic Impact – Direct Cost	> \$1b	\$100m - \$1b	\$10m - \$100m	<\$10m
CI Sector Impact	Sector may shut down	National	Provincial/ Regional	Local
Interdependency Impact	Debilitating	Significant	Moderate	Minor
Service Impact	High, > 1yr	High, months to year	Medium, days to weeks	Low, hours to days
Public Confidence Impact	High national risk control in doubt	High national risk, low ability to control	Moderate risk and ability to control	Low risk, high ability to control



Critical Infrastructure Protection and the Emergency Management and Security Spectrum



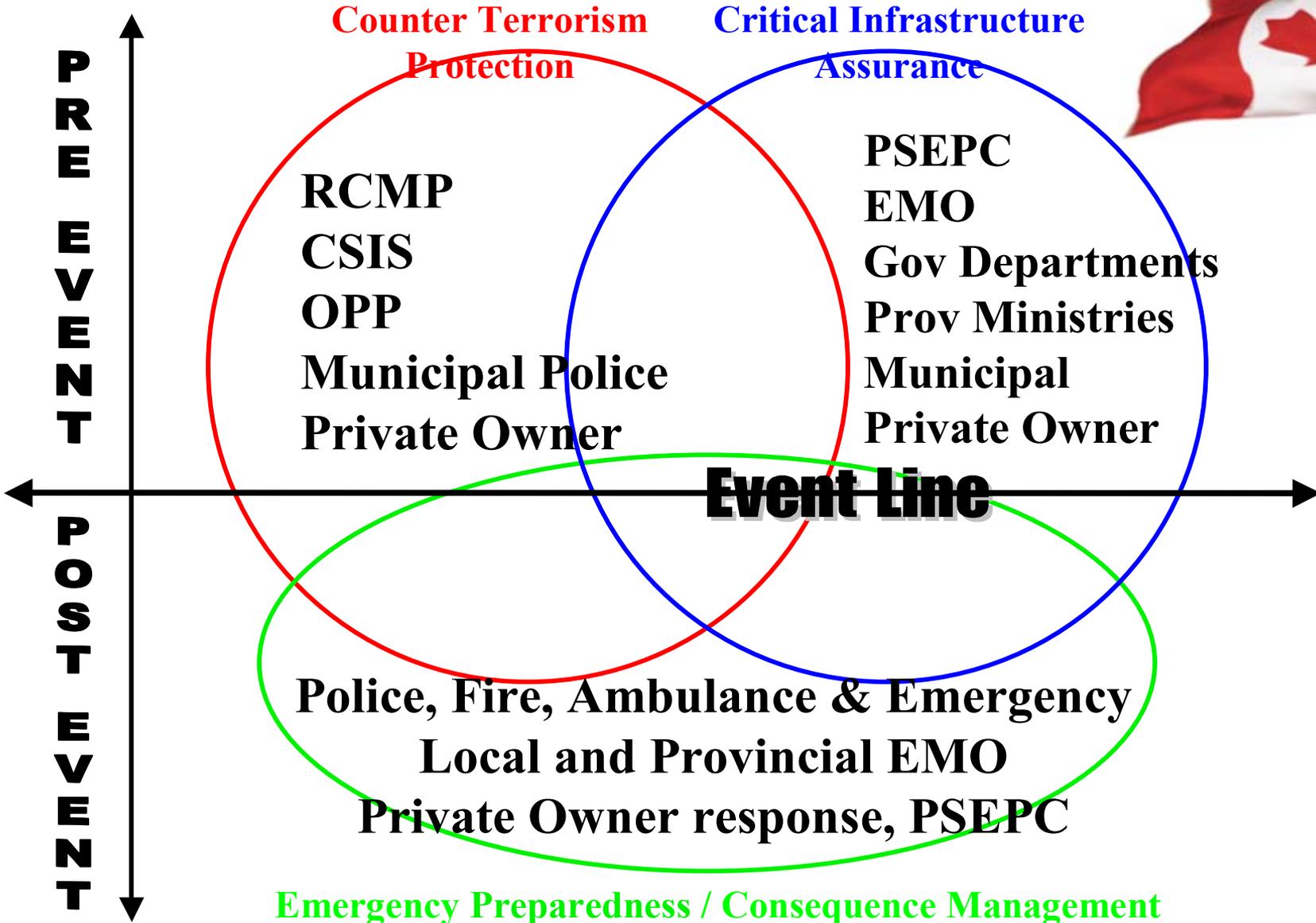
Challenges



Determining:

- What is critical to a sector
- Interdependencies
- Who needs to have the information

Ensuring that analyses of threats, vulnerability and criticality are not performed separately, but rather complement one another as part of a comprehensive risk management approach



Contact



Paul Pagotto

Manager

**National Critical Infrastructure Assurance
Program**

**Emergency Management and
National Security Branch**

(613) 944-4857

Paul. Pagotto@psepc-sppcc.gc.ca

Web: <http://www.psepc.gc.ca/>



WWW.PSEPC.GC.CA



Questions?

Canada 



The Insurance Marketplace

presented by
Aon Reed Stenhouse Inc.

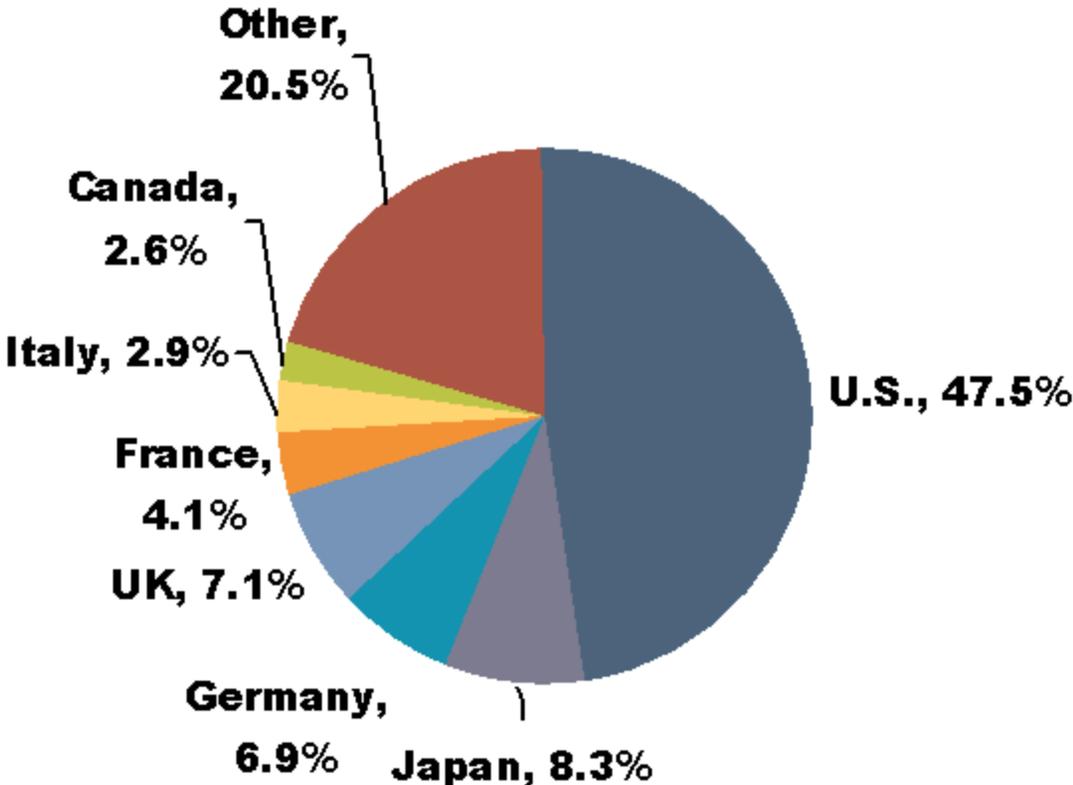
16 January 2006

Agenda

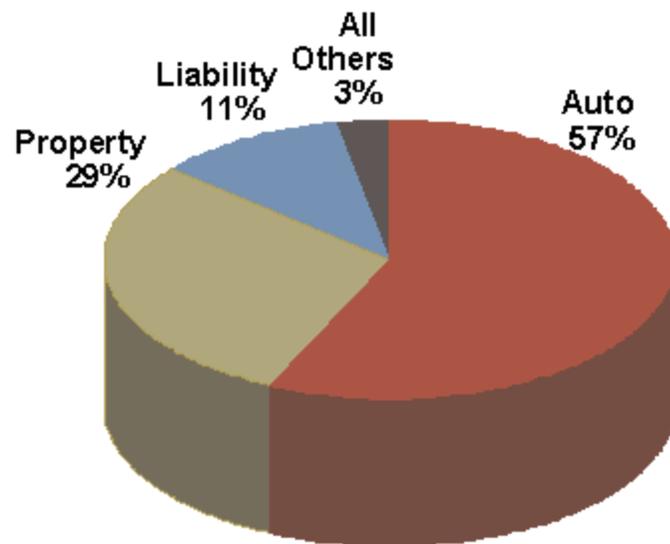
- Overview of the Marketplace
- Large Losses and Liability Trends in North America
- Impact of Catastrophic Losses
- The Insurance Cycle
- Market Expectations for 2006

Global Insurance Market Property – Casualty

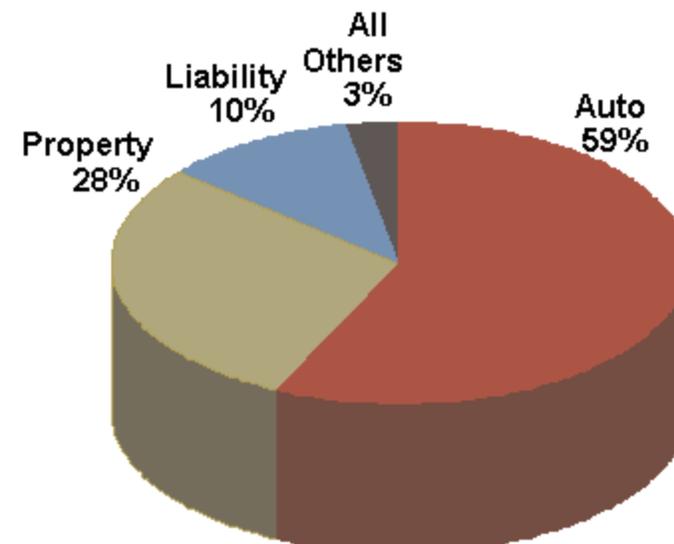
Breakdown of International Property – Casualty Premiums
(Total – USD 969 billion)



The Canadian Market



Total direct premium in 2004
was \$28.8 billion.



Total direct premium in 2003
was \$24.6 billion.

Source: Canadian Insurance – 2003 and 2004 Statistical Reviews

P&C Rankings – Large Risk vs Small Risk Underwriters (Net written)

Complex Risk			
2.	Aviva		2,390
4.	Royal		1,264
8.	AXA		1,016
10.	Lloyds		906
13.	Liberty		738
14.	Allianz		613
15.	Lombard		518
17.	Chubb		453
18.	Zurich		414
19.	AIG		405
22.	St. Paul		282
23.	AFM/Affiliated		243
29.	CNA		200
32.	ACE INA		133
42.	GCAN (Gerling)		59
49.	Commonwealth		45

Predictable Risk			
1.	ING		2,593
3.	Cooperators		1,423
5.	Economical		1,235
6.	State Farm		1,068
7.	Group Desj.		1,037
9.	Wawanesa		910
11.	D of C		782
12.	Allstate/Pembridge		771
16.	Monnex (TD)		500
20.	RBC		304
21.	Ont. Mutual		293
24.	Capital Gen.		237
25.	Citadel		236
26.	SGI		232
27.	Motors (GM)		232
28.	GCNA		209

Source: Canadian Insurance 2003 Statistical Review

Canada top 10 Commercial Property and Liability Insurers

Insurer S&P	Premiums (Millions)	Best's Rating	S&P Rating
ING	632	A+	BBB
Coop/Sovereign	598	B++	BBB- (BB)
Aviva	524	A	A
Lloyd's	498	A-	A
AIG	485	A++	AAA
Zurich	461	A-	A-
Lombard	327	A-	BBB
Royal & SunAlliance	321	A-	A-
Chubb	299	A++	AA
FM/AFM	297	A+	BBB

Re-insurance

Germany

1. Munich Re
9. Gerling Re
10. Hannover Re

United States

5. General Cologne Re
7. GE (ERC)
8. Transreco (AIG)

France

2. AXA
4. SCOR

Bermuda

6. Partner Re

Switzerland

3. Swiss Re

Largest North American Losses

- Losses with market impact
 - B.C. fires – CAD 250 million
 - Hurricane Fabian (Bermuda) – USD 350 million
 - Hurricane Isabel – USD 1.17 billion
 - Ontario power outage – CAD 25-30 million
 - Hurricane Juan (Nova Scotia) – over CAD 100 million
 - California fires – USD 2 billion
 - Sept. 11th – USD 70 billion
 - Hurricane Katrina/Wilma/Rita – USD 60 to 80 billion

Corporate Governance



Liability Trends

- Global
 - Asbestos
 - Tobacco
 - Toxic mold
 - Terrorism
- Canada
 - Increasing litigation
 - Walkerton
 - Sexual abuse
 - Ontario auto liability

Trends in Canadian Jury Verdicts

- Sophisticated plaintiff's bar
- Media coverage (e.g. Tires)
- Juries desensitized to large awards
- Class actions
- Medical inflation/increased life expectancies
- Unforeseeable exposures

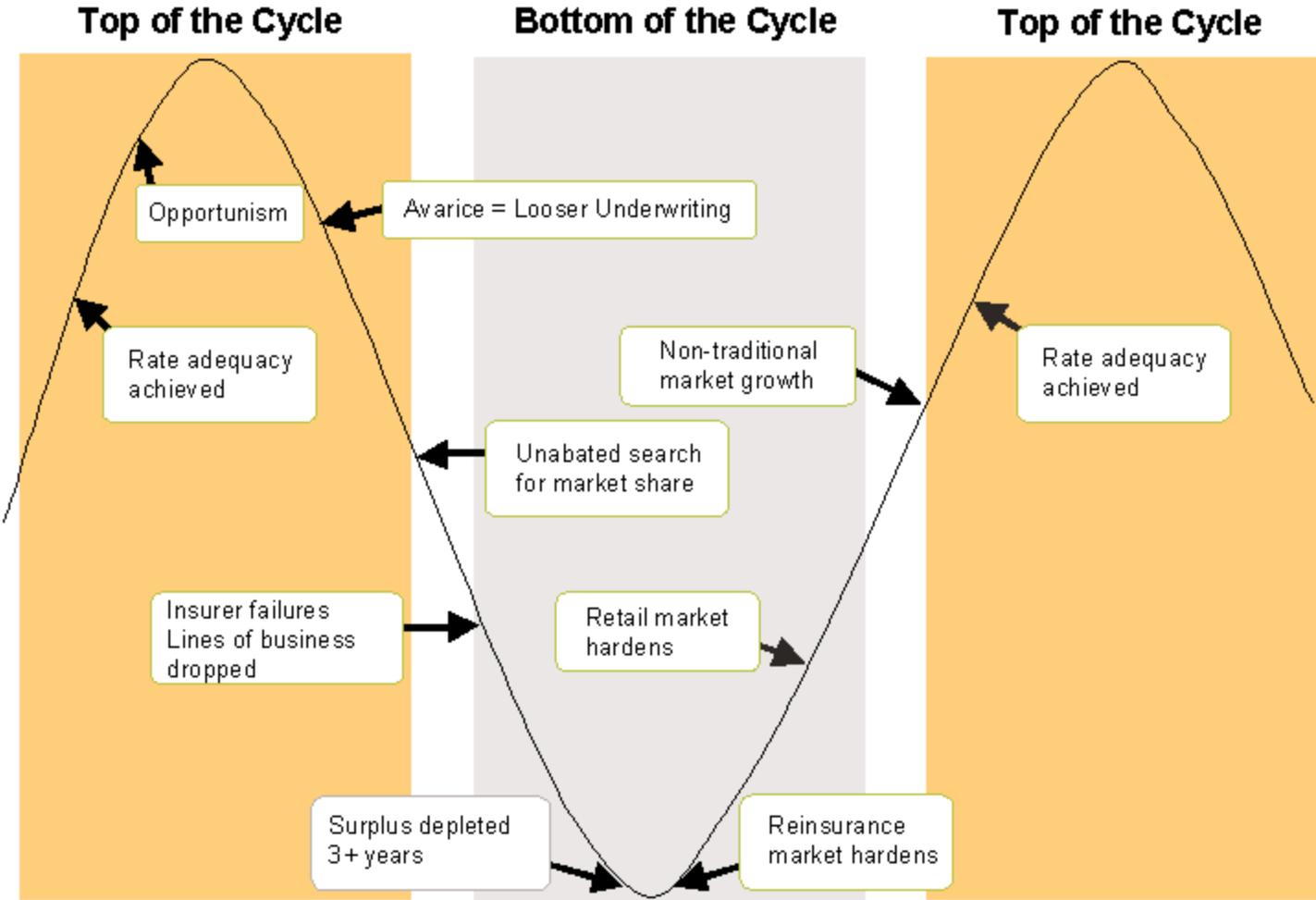
Impact of Catastrophic Losses

- Less capacity
- Less negotiation, less choice
 - Standard insurer wordings
 - Higher deductibles
 - Appraisals to justify values
- Total underwriting review
 - More questions
 - More information
- More time needed for insurance decisions
 - What to buy?
 - How much to buy?

Factors For Your Risk Profile

- Industry
 - Capacity available for client industry
 - Coverage form for client industry
- Loss experience
- Actuarial loss forecast
- Coverage extensions
- Incumbent relationships
- Time since last negotiation
 - Explore entire marketplace

Market Dynamics – The Insurance Cycle



Source: Adapted from Swiss Re (Canada), CSFB

Market Expectations for 2006

- What do we see for the next 6 to 12 months?
 - Single digit ROE for insurers
 - Underwriting discipline required
 - Insurers expect hikes in catastrophe treaties
 - Pricing for profit
 - Stable market conditions



SPONSORS

This conference has been made possible in part through a contribution from the Museums Assistance Program, Department of Canadian Heritage. It is presented in partnership with the Canadian War Museum.



Canadian
Heritage Patrimoine
canadien



CANADIAN
CONSERVATION
INSTITUTE



INSTITUT
CANADIEN DE
CONSERVATION



