



## **International Safety Research Inc.**

### **Risk Management for Emergency Planners**

#### ***WHY RISK MANAGEMENT?***

Local, regional and national level emergency planners are faced with a multitude of hazards that cannot be left unmanaged. These hazards come as a result of natural phenomenon or activities in industrial, nuclear, transportation and marine sectors. In spite of improved safety standards, the proliferation of industrial activities has led to an increase in hazard associated risks. Meanwhile, emergency planners are limited in their capacity to counter this situation due to the fixed and sometimes decreasing amount of resources at their disposal.

The solution is to improve the effectiveness of available resources through risk management and integrated planning.

#### ***WHAT IS RISK MANAGEMENT?***

Risk is a concept that is definable, measurable and can be managed through proper design, prevention, planning and response.

Risk management is a rational decision-making tool. It leads to better planning decisions based on risk.

Finally, risk management is a culture. It involves building safety into physical assets as well as changing the way people think and work.

#### ***WHAT IS INTEGRATED PLANNING?***

Integrated planning optimizes resources and emergency planning efforts by recognizing that responses to all types of emergencies have similarities.

#### ***WHO WOULD BENEFIT FROM THIS COURSE?***

This course is intended for local, regional and national emergency planners who interface extensively with the industry and who have a decision-making role related to resource allocation.

#### ***WHAT IS INTERNATIONAL SAFETY RESEARCH INC.?***

International Safety Research Inc. (ISR) is a Canadian firm with international experience in risk assessment and emergency response. ISR has provided countries such as Canada, Austria, the Netherlands, South Africa, Hungary, Romania, Algeria and Indonesia with these types of services.

ISR focuses on the technological aspects of risk, safety and emergency management when helping organizations identify, develop, implement and test the tools and knowledge that are needed to maintain effective small and large-scale safety management programs.

Our core services are:

- risk identification and analysis
- safety assessment
- development of technical basis for emergency planning and response
- development and implementation of emergency response organizations, plans, procedures and tools
- emergency response audits
- emergency response exercise preparation, conduct and evaluation
- training

# RISK MANAGEMENT COURSE FOR EMERGENCY PLANNERS

## Module 1: Concepts and overview

- ❑ Course overview
- ❑ Introduction to risk concepts
- ❑ Risk perception
- ❑ Overview of risk management
- ❑ Historical review of accidents



## Module 2: Risk assessment

- ❑ Overview of risk assessment
- ❑ Hazard identification
- ❑ Qualitative risk analysis
- ❑ Quantitative techniques: frequency analysis
- ❑ Quantitative techniques: consequence analysis
- ❑ Vulnerability modeling and impact assessment
- ❑ Risk evaluation

## Module 3: Risk management

- ❑ Regulatory framework
- ❑ Risk control
- ❑ Participation of stakeholders

## Module 4: Practical examples

- ❑ Production plant handling hazardous chemicals
- ❑ Refinery
- ❑ Natural disasters
- ❑ Transport of dangerous goods
- ❑ Airport
- ❑ Radiological facilities
- ❑ Marine spills



## Module 5: Emergency preparedness

- ❑ Fundamental concepts
- ❑ Technical planning basis
- ❑ Optimization of emergency response strategies

### Workshops

- ❑ Use of index method
- ❑ Screening level risk assessment
- ❑ Computer tools for consequence assessments
- ❑ Computer tools for integrated risk assessment and emergency planning