

**Crisis Management –
An International Overview**

September 2009

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This brief was researched and authored by the Research Division, Institute of Public Administration, Ireland (www.ipa.ie/research). The Research Division provides applied research services for policy makers in a wide range of public service organisations, drawing on an extensive network of contacts and experience gained over more than thirty years.

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Foreword

Crises can neither be avoided nor accurately predicted. When they occur in the public sector, the community rightly expects that their government's response will minimise harm to life and limb and to the operations of important public services, and restore the situation to normal as soon as possible. Senior officials and public organisations will also hope to emerge from crises with their reputations intact, even enhanced.

This document explores how other governments have prepared for crises, how they responded when they occurred, and whether they learned from the experience. It is clear from many other organisations that good preparation and training, both individual and institutional, can help prevent a crisis from becoming a disaster.

We hope that this report will encourage colleagues to review their own preparations.

Head, Efficiency Unit
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Executive Summary

Definitions and the crisis management cycle

- A crisis is a change, which may be sudden or which may take some time to evolve, that results in an urgent problem that must be addressed immediately.
- Although crisis events are unpredictable, they are not always unexpected.
- Crisis management is the process of identifying a potential issue or crisis and coordinating organisational or inter-organisational response as necessary.
- A useful way of understanding the demands of crisis management on public managers is to think of crisis management in terms of different phases of a cycle, as displayed in Figure 1. The phases are:

Preparation – dealing with issues such as planning, simulations and training

Management – dealing with issues such as allocation and deployment of resources, command systems and communications

Evaluation – dealing with issues such as post crisis lesson learning, debriefing and accountability

Preparing for crises

- It is increasingly common practice for a crisis management structure to be created to oversee and coordinate crisis management, featuring political control groups and operational staff groups. Such structures are often supported by a crisis management centre.
- In preparing to manage networks of agencies in a crisis, the use of ‘hub’ agencies and associated ‘spoke’ agencies is a model which, when effectively resourced, has been shown to work well.
- Many crises arise from predictable events and planning can help ensure effective action is

taken in these circumstances. It is the process of planning and the preparation for eventualities more so than the plans themselves that is vital to effective crisis management.

- An important element of planning is preparing for different crisis scenarios. Even with known crises, such as pandemic outbreaks, the nature, type, speed, size and scope of the outbreak may vary considerably. The development of different scenarios can help determine the most effective crisis response.
- Simulation exercises provide important training and testing for people who will be involved in managing an actual crisis. Different types of exercise, in increasing levels of complexity and cost, are shown in Figure 2.

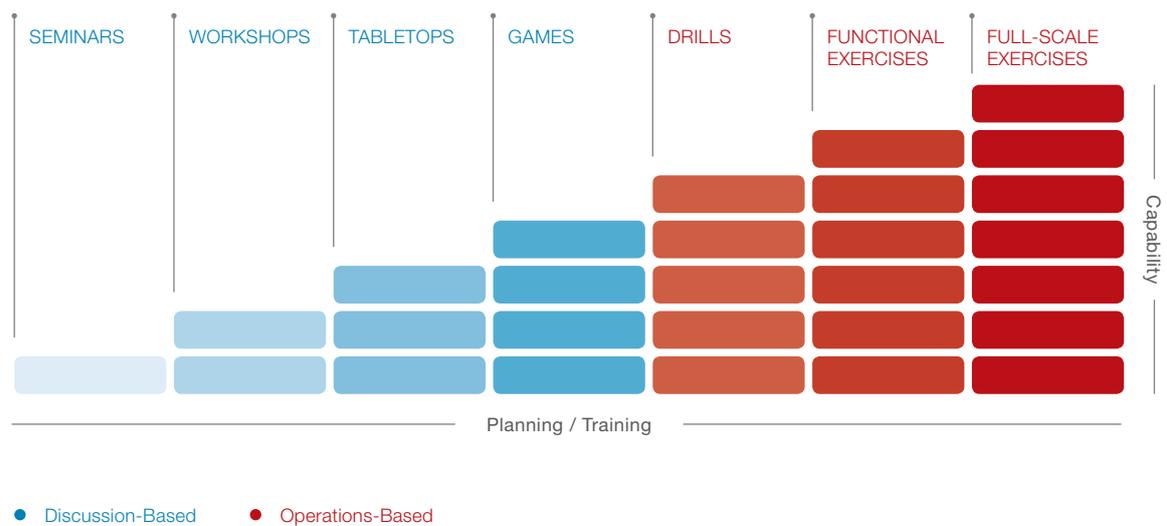
Managing crises

- There is a tension between planning for a crisis and actually dealing with a crisis. The more elaborate a plan is, the more likely it is to be ignored in an actual crisis. Often, responses to crises need to be thought out on the spot, though guided by previous thinking and practice.
- There is a need to identify lines of authority, roles and responsibilities and means of coordination, leaving key identified individuals with a significant amount of autonomy to act as appropriate to the circumstances.
- An effective integrated command system (ICS) has been proven to be particularly helpful where crises require a response from a network of organisations and where there is potential for confusion as to lines of command given the number of different players involved. The structure of an ICS is illustrated in Figure 3.

Figure 1
The crisis management cycle



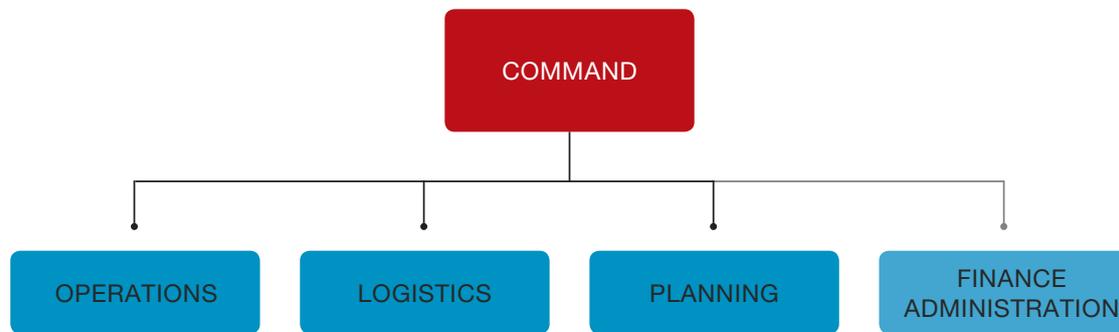
Figure 2
Different types of crisis exercise



Source: adapted from Callahan et al (2008), p. 52
<http://www.businessofgovernment.org/pdfs/OBrienReport.pdf>



Figure 3
Structure of an integrated command system



Source: Moynihan, 2005, p. 9
<http://www.businessofgovernment.org/pdfs/MoynihanReport.pdf>

- Standard practices with regard to reporting and the use of standard operating protocols can be of valuable assistance in managing a crisis.
- But there is a danger that standardisation can limit flexible responses. Standardisation can encourage sticking with ‘tried and tested’ ways of doing things rather than encouraging un-learning of failed activities in a situation that requires new thinking.
- In the early stages of a crisis, leaders need to assess what information is crucial and what information they need to gather. There may be a paradoxical danger of information overload in some areas and complete lack of information in others.
- Leaders do not have the capacity to respond to all situations themselves, and this requires the authorisation and delegation of speedier decision-making than that normally associated with traditional hierarchies.
- A significant part of crisis management is about managing the message going out to the public in situations that do not lend themselves easily to routine communications.
- External communications are vital for both operational and symbolic purposes during a crisis. Symbolically, communications can foster a positive image of crisis response, provide an opportunity to empathise with those affected by the crisis, and demonstrate the will to resolve the crisis.
- For both communications and other aspects of crisis management, the application of newer technologies such as Web 2.0 can provide important supports, as well as significant new challenges.
- Newer technologies can also be used to enable organisations to track, disseminate and communicate information during a crisis.

Post-crisis evaluation and learning

- The culture of organisations can often influence the degree to which they actually learn from crises.
- Organisations need to pay particular attention to their capacity to learn. This is a particular challenge when the crisis and its impacts cut across agencies, and cross-organisational learning is needed.
- Learning can range from operational improvements that enhance crisis response in the future to more fundamental reviews of organisational and system-wide capacity.



1 Definitions and the crisis management cycle

What is a crisis and why the need for crisis management?

The United Kingdom's (UK) Department for Business Innovation and Skills describes a crisis as 'an abnormal situation, or even perception, which is beyond the scope of everyday business and which threatens the operation, safety and reputation of an organisation'

(<http://www.berr.gov.uk/whatwedo/sectors/infosec/infosecadvice/incidentmanagement/crisismanagement/page33391.html>).

Pearson and Clair (1998) describe an organisational crisis as 'a low-probability, high-impact event that threatens the viability of the organisation and is characterised by ambiguity of cause, effect, and means of resolution, as well as by a belief that decisions must be made swiftly'. Crisis is also a social construction, as Drennan and McConnell (2007) point out: individuals view crises in different ways depending on their own beliefs, interpretations, responsibilities etc. Crisis management is the process of identifying a potential issue or crisis and coordinating organisational or inter-organisational response as necessary. With regard to the management of crises, a key point to emerge from international practice and literature is that although crisis events are unpredictable, they are not unexpected.

Simply put, a crisis is a change, which may be sudden or which may take some time to evolve, that results in an urgent problem with a high level of uncertainty that must be addressed immediately. A crisis can occur in many forms. For example as a result of natural disaster such as floods or

storms, socio-political forces such as terrorism or computer hacking or business causes such as financial meltdown of an organisation or sector. Incidents such as leaking of sensitive personal data by government agents, management misconduct (e.g. leader's private life, extravagant fringe benefits), or deception (e.g. hiding or providing false information) can also turn into crises. Crises may have a sudden arrival and a swift conclusion, such as hijackings and bushfires, or they may be slow to develop and conclude, such as global warming or deforestation.

Crises are not the normal ups and downs of an economic cycle or organisational routines, those recurring problems faced in the course of taking risks and exploring new opportunities. Consequently, crisis management can be seen as complementary to and acting in conjunction with business practices such as risk management and business continuity management. For example, while risk management aims to identify and mitigate risks, not all risks can be identified and contained, and a crisis may arise which needs action. A crisis management process is needed to control the damage and protect or restore public confidence. It is the presence of a crucial or determining point or event that results in the need for priority and urgency of action that differentiates a crisis from a routine problem or issue and brings about the need for crisis management. But it is also important to be aware that crisis management doesn't start when a crisis arises and ends when the crisis is over. Crisis management requires actions before a crisis happens, while the crisis



is unfolding, and after the crisis has ended (see the crisis management cycle below).

Crisis management has always been a feature of good public management. But in recent years national and international events and the impacts of globalisation in areas such as pandemics, climate change and terror attacks have raised the importance of good crisis management. Public leaders have a particular responsibility to help safeguard society from the adverse consequences of crisis. When these responses go wrong, the crisis can escalate (see case study on failure to establish clear roles and chains of command).

But when the crisis is managed well, the impact of the crisis can be minimised (see case study on dealing with the train bombing in Madrid). Some crises demand fast and effective whole of government responses, as their scale is beyond the handling capability of individual agencies or group of departments. Other crises can require inputs from non-government organisations and agencies, and the local and/or international community. On this latter point, there is often a need for the public sector to coordinate the actions of non-government organisations and individuals during all the phases of a crisis.

Case study

Failure to establish clear roles and chains of command

McConnell and Stark reviewed the UK response by the then Ministry of Agriculture, Fisheries and Food (MAFF) to the outbreak of foot and mouth disease in February 2001. They described the response as suffering from an institutional malaise and a fragmentary civil service, incapable at least in the early stages of providing an effective response to the crisis. MAFF was seen to be a particular problem, relying on outdated information and unwilling to listen to non-Whitehall expertise.

There was also evidence of lack of clarity about the objectives of the crisis management approach. Closure of footpaths is a local government responsibility, and as the outbreaks spread, many local authorities imposed blanket bans on their use. But at central government level the environment minister was concerned that blanket bans were counter-productive to the 'open for business' message that the government was trying to maintain. There was a division between the local level, focused on eradication and control, and the centre, focused on multiple policy objectives.

Communications was also an issue. Many farmers complained of being unable to contact local MAFF crisis centres, and if they did get through, being unable to get clear directions from officials in a number of areas. This added to a feeling of isolation and uncertainty.

It was only after authority for decision-making was transferred to the Prime Minister's Office, advised by a scientific team of departmental and outside experts, that action became focused and coordinated. The creation of a Cabinet Office briefing room and rural task force helped to provide more transparent and cohesive decision making.

Source: McConnell and Stark, 2002

Case study

Dealing with the train bombing in Madrid: a successful response to a crisis

The train bombings in Madrid on 11 March 2004 killed 191 people and resulted in over 2,000 people needing operations or medical treatment. Madrid has well-established and practiced emergency response plans, backed up by a strong emphasis on coordination between the various responding authorities. This preparation work was vital to the success of the crisis response, as all participants were clear as to their roles and responsibilities. From the first call to the emergency line, seconds after the first explosion at 7.30 am, emergency recovery teams went into action. The declaration of an emergency 'level three' set off the formation of four different action groups. First there were the search and rescue groups – firemen and officers to remove the dead and injured and check and clear adjacent buildings seriously damaged by the blasts. This group got to the scene in just over 15 minutes from the first explosion. Second there were security teams, made up of police and special investigators. Then came specialist legal officers who authorised the removal of corpses. Finally, there was the medical group. All these action groups were operating under the Spanish catastrophic emergency plan. Combined, they activated 5,300 emergency services people, 3,500 police officers, 250 ambulances, 385 other emergency or support vehicles, 38 hospitals and medical centres and 317 psychological support staff in a city of just over five million people.

All the injured were off the scene within an hour and a half. One hundred and twenty significant operations were performed that day. Only 12 people died in hospitals or medical centres. Railway traffic was completely restored, including the lines where the four trains were bombed, within 11 hours. The emergency response telephone line took over 20,000 calls in a 12-hour period from family members and friends. In summary, despite the huge scale of this attack, the city of Madrid had returned to normal operation in less than 24 hours. Planning and preparation for possible crises, combined with effective coordination of action at the time, helped ensure that the response was effective and appropriate.

Source: Cornall, 2005, p. 29



There is also the question of deciding when something is a crisis, and when the government should intervene. This is not necessarily as straightforward as it may seem. In many cases there are no hard and fast rules or clear cut procedures for determining a crisis. And in a public sector context, it can be challenging to determine when a crisis which occurs in another sector requires actions to be taken by the public sector. For example, when do financial difficulties in the banking sector become a crisis that requires government intervention? There is no simple

answer to such a question, and judgements must be made as to when intervention is needed. But it is inevitable that when a crisis has broad public implications affecting a wide range of citizens, attention will focus on the response of the government and the public sector. The case study of delayed response to Bovine Spongiform Encephalopathy (BSE) in the UK shows how delays in accepting a situation as a crisis and then delays in responding to that crisis can lead to problems taking many years to alleviate.

Case study

Delayed reactions to BSE increase risks

In the UK BSE (or more colloquially known as 'mad cow' disease) outbreak, the first report of a cow behaving unusually was in December 1984. It was nine months before samples from the animal were tested by the UK central veterinary laboratory; BSE was diagnosed a week later. It took another ten months for the existence of the new disease to be accepted, seven months to inform Agriculture ministers and a further nine months to inform the UK Department of Health. It took a full nine years to extend a ban on using meat and bone meal to cover all farm animals.

Source: p.13

http://www.irgc.org/IMG/pdf/An_introduction_to_the_IRGC_Risk_Governance_Framework.pdf

Different types and levels of crises

Crises may be of differing scales, dimensions and types. A three level categorisation of crises can be helpful in thinking about crises and how to manage them:

- level 1 crisis refers to a crisis within an organisation or section which can be resolved within the resources of the organisation and which has limited impact outside of the organisation.
- level 2 crisis refers to a major incident which involves several organisations and/or impacts on a sizeable part of the community. Multiple resources are needed and there are impacts outside of the organisations involved.
- level 3 crisis refers to a catastrophic emergency event which involves a whole region or sizeable part of the community. Resolution is beyond the application of local resources and the impacts are large scale and system-wide.

Adapted from:
http://www.lclark.edu/offices/human_resources/employee_resources/policies/institutional/general/crisis_management_plan/

In this report our main focus is on level 2 and 3 crises, though examples are also included of crisis of a smaller scale. Steps taken to deal with smaller scale crises within an organisation or section are normally similar to those required in larger crises. The main difference is that cross-cutting teams or initiatives are less needed, and actions regarding



preparation, management and evaluation can be managed within the organisation. But the same actions described in this report, such as the need for crisis planning, effective leadership and clear communications, still apply whatever the scale of the crisis.

Crises may also appear and disappear relatively quickly, with sudden arrival and conclusion, such as hostage taking, heatwaves or bush fires. Alternatively, crises may be slower to emerge, giving more time to prepare, and slower to conclude, leaving longer-term issues for organisations and society to deal with.

The crisis management cycle

A useful way of understanding the demands of crisis management on public managers is to think of crisis management in terms of different

phases of a cycle, as displayed in Figure 1.1. The phases are:

- **preparation** – dealing with issues such as planning, simulations and training
- **management** – dealing with issues such as allocation and deployment of resources, command systems and communications
- **evaluation** – dealing with issues such as post crisis lesson learning, debriefing and accountability

Of course in reality there is overlap between these phases. And the issue of prevention of crisis underlies them all as the first goal to be achieved. But the cycle process provides a useful mechanism for thinking through the actions needed for effective crisis management, as the following sections of the report show.

Figure 1.1
The crisis management cycle



2 Preparing for crises

In preparing for a crisis, there are a number of issues to be addressed. Putting in place supportive crisis management architecture, using planning to inform actions, and conducting crisis exercises to identify existing strengths and weaknesses are three key issues in crisis management preparation.

Putting in place the right organisational and structural supports

It is increasingly common practice for a crisis management structure to be created to oversee and coordinate crisis management. The case study of Danish crisis management provides an illustration of such a response at national level. Such national level structures are often supported by a crisis management centre, as the case study of the coordination and crisis centre from Belgium illustrates.

Case study

Coordination from the centre: the Belgian Governmental Coordination and Crisis Centre

The Governmental Coordination and Crisis Centre, located in the Ministry of the Interior, was established to assist the federal government in the planning and interdepartmental management of crises and major events. Nationally, it has responsibility for matters such as risk analysis and emergency planning; planning, coordination and follow-up of major events (events at risk); and infrastructure and organisation for crisis management. Internationally, it is the contact point for international centres such as Ecurie (nuclear alert system), BICHAT (biological and chemical attacks and threats) and EMSC (European Mediterranean seismological centre). It has responsibility for the drawing up of cooperation procedures with other departments and/or provincial, national and international institutions.

Source: <http://www.influenza.be/eng/documents/CGCCR.ppt>

The crisis management architecture needs to ensure effective command and control. When Hurricane Katrina hit New Orleans in 2005, over 1,500 people died and tens of thousands were left without basic supplies. The response to Katrina featured neither an effective network nor an effective hierarchy. It lacked a clear command and positive working relationships among key actors.

The capacity of the network was also weakened, in large part due to the capacity weaknesses of its hubs, especially the Federal Emergency Management Agency. Hub agencies need to have high capacity and adequate resources (Moynihan, 2007, p. 14, <http://www.businessofgovernment.org/pdfs/MoynihanKatrina.pdf>)



Case study

Crisis management organisation in Denmark

The national crisis management organisation of Denmark is comprised of the following three levels, which coordinate national level crisis management:

- The Government Security Committee, which normally consists of the Prime Minister (chair), the Minister of Economic and Business Affairs, the Minister for Foreign Affairs, the Minister of Defence and the Minister of Justice. This committee is the primary decision-making body.
- The Senior Officials Security Committee, which consists of the permanent secretaries of the above-mentioned ministries, the Head of the Defence Intelligence Service and the Head of the Security Intelligence Service. The Defence Chief and others may be included if needed. This committee provides administrative support and advice to the Government Security Committee and ensures that its decisions are acted on.
- The Crisis Management Group, which consists of departmental and undersecretary level representatives of the above-mentioned authorities, as well as of the Ministry of Foreign Affairs, the Ministry of Health, Defence Command Denmark, the National Danish Police and the Danish Emergency Management Agency. The group is chaired by the Prime Minister's Department. This group deals with day-to-day issues and advises and supports the Senior Officials Security Committee.

In addition, two operative staffs are established:

- The National Operative Staff: This consists of representatives from the relevant authorities, and its purpose is to strengthen coordination among the military, police and other authorities in the event of major crises in Denmark. The primary task of the staff is coordination in case of major incidents that cannot be resolved in the individual regions. This includes terrorist acts in Denmark.
- The International Operative Staff: This leads the coordination of Danish action in crises that occur abroad, including Danish aid to Danish citizens caught up in a disaster. The staff is led by the Ministry of Foreign Affairs. The members are the most affected authorities, and it is supplemented as necessary with other public and private entities, e.g. from the tourism industry.

Source: <http://www.brs.dk/fagomraade/tilsyn/csb/Eng/NatCriOrg.htm>

The use of effective 'hub' agencies and associated 'spoke' agencies is a model which, when effectively resourced, has been shown to work well – see the case study of the Australian government response to the Bali terrorist bombings. Hub agencies take the lead in coordinating responses, and are seen as the central authorities with particular expertise

and capacity in crisis preparation and management. Spoke agencies are other participants whose input is crucial to the overall success of crisis management which have individual areas of responsibility that may overlap with others and which are coordinated by the hub.



Case study

Response to Bali bombings: hubs and spokes can help keep leadership clear

In the Australian government response to the terrorist attack in Bali, in which many Australians were killed, two 'hub and spokes' models were used to coordinate the government response. The Department of Foreign Affairs and Trade took on the hub role in coordinating the interagency spokes' response to international aspects of the crisis (see figure). At the same time, The Department of Family and Community Services took on another hub role, coordinating the interagency spokes' response to domestic aspects of the recovery. The two clusters of hub and spokes worked alongside each other, attending each other's meetings where necessary, to provide a comprehensive overall response. The hub and spokes arrangement worked well to draw together key agencies and players to share information and coordinate policy responses. These arrangements provided the context for effective consultation, rapid decision making, close attention to the implementation of decisions, and action to address new or unforeseen difficulties, through the use of two inter-departmental committees each chaired by a line agency. Within each committee, clear directives identified the roles and responsibilities of respective agencies, thereby ensuring that mandate issues were resolved early.



Source: <http://www.apsc.gov.au/mac/connectinggovernment7.htm>

Planning for crises

By their nature, *most crises are unpredictable* as to when they will occur and to what degree. But it is possible to determine activities and areas that may be particularly prone to crises and where crisis management is particularly needed. Pre-planning in these areas can contribute to prevention as well as preparation. It is important in these circumstances to keep under scrutiny the changing type, likelihood and severity of

potential crises (see case study on determining the type of crisis to plan for). Of course, *some crises cannot be planned for, particularly where they take a new or previously unknown form. But many crises arise from predictable events and planning can help ensure effective action is taken in these circumstances.* It is the process of planning and the preparation for eventualities more so than the plans themselves that is vital to effective crisis management.

Case study

Determining the type of crisis that can be planned for

The Emergency Management Act 2005 governs emergency management and organisation in Western Australia (WA). The Act sets out the hazards that agencies must prepare for including cyclones, fire, floods, air and rail crashes, hazardous materials spills and human and animal epidemics. It allocates the responsibility for their management to a number of hazard management agencies (HMAs). However, a review by the Auditor General WA found that there is no formal process for regularly reviewing and deciding which hazards the state should prepare for so WA may not be preparing for the right hazards. For example, there is no plan for energy or gas shortages. This indicates the need for periodic scrutiny and updating of potential crisis situations for which pre-planning can be determined and of use.

Source: Auditor General WA 2009, p. 17-18
http://www.audit.wa.gov.au/reports/report2009_04.html

Watkins, 2002, <http://hbswk.hbs.edu/item/3124.html> identifies ten effective elements of crisis response planning:

- 1 a representative set of planning scenarios
- 2 a flexible set of response modules
- 3 a plan that matches response modules to scenarios
- 4 a designated chain of command
- 5 preset activation protocols
- 6 a command post and backup
- 7 clear communication channels
- 8 backup resources
- 9 regular simulation exercises
- 10 disciplined post-crisis review

A number of these elements are discussed in more detail throughout the report. With regard to the development and contents of a crisis management plan itself, the UK Department of Business Innovation and Skills <http://www.berr.gov.uk/whatwedo/sectors/infosec/infosecadvice/incidentmanagement/crisismanagement/page33391.html> note that all crisis management plans should include:

- people involved and their tasks
- methods for identifying crises
- methods for involving management
- lines of communication



- mechanisms for reporting
- process for decision making
- equipment, facilities and occupation of crisis management centre
- levels of control and authority limits

An important element of planning is preparing for different crisis scenarios. Even with known crises, such as pandemic outbreaks, the nature, type, speed, size and scope of the outbreak may vary considerably. In such circumstances, the development of different scenarios can help determine the most effective crisis response. The case study from the Reserve Bank of New Zealand (RBNZ) shows one scenario from their plan for dealing with a pandemic outbreak.

Conducting crisis exercises

Simulation exercises provide important training and testing for people who will be involved in managing an actual crisis. As with all aspects of crisis management preparation, they do not provide ready made answers. Crises are chaotic and unpredictable, and simulation exercises, however life-like, can never fully prepare organisations; it is important that their limitations are borne in mind. A hurricane exercise was carried out in New Orleans in 2004 prior to Hurricane Katrina, but it envisaged that the levees remained unbreached. Exercises are nevertheless an important element in good crisis management as they provide a means of shaping people's outlook and understanding of crisis and can contribute to more effective actions and decision making at a time of crisis.

Case study

Scenario planning for pandemic outbreak in the Reserve Bank of New Zealand

Scenario description

- influenza strain now human-to-human contagious
- isolated and contained incidents of contagion off-shore, or
- influenza pandemic officially declared off-shore
- no vaccine available

Scenario actions

- re-test remote access capability
- maintain preparedness focus
- ensure relevant departments can quickly move to next stage
- communicate to staff about RBNZ preparedness and plans
- communicate to staff about personal preparedness
- action containment plans
 - invoke 'go home stay home' policy for staff arriving at work unwell
 - revoke international travel to affected regions by RBNZ personnel for work purposes
 - review all other international travel with possible blanket revocation
- review all pandemic plans
- monitor national and international pandemic situation
- business as usual

Source: <http://www.rbnz.govt.nz/crisismgmt/2198851.pdf>



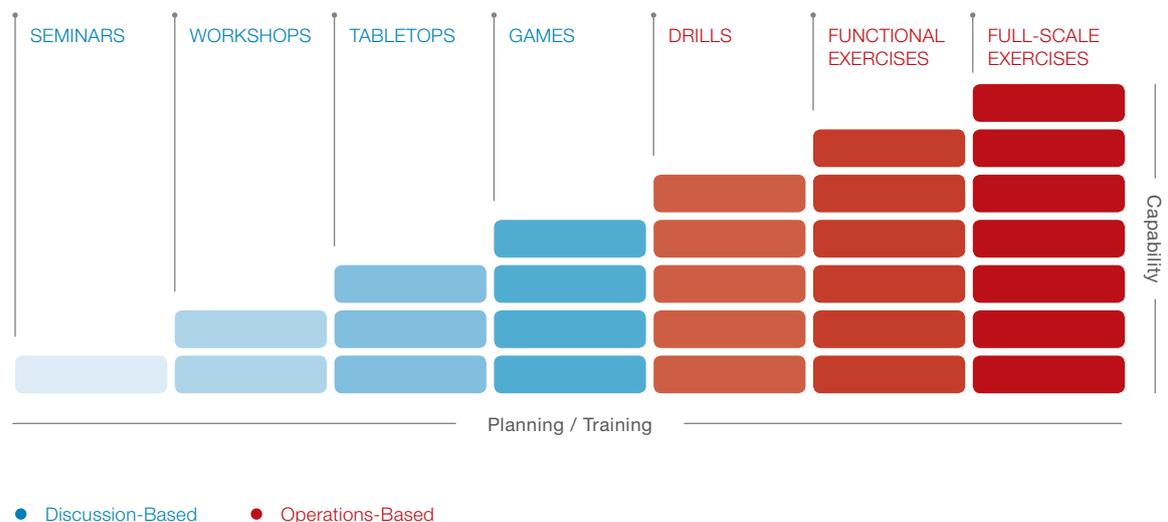
As Figure 2.1 shows, there are two main types of crisis exercise:

- **Discussion-based exercises** These include seminars, workshops, tabletop exercises and gaming. Such exercises can be relatively cost-effective and particularly useful as an initial introduction for personnel to crisis situations and as a way of thinking about new and emerging threats. Tabletop and gaming exercises bring elements of stress and increased realism for participants (Drennan and McConnell, 2007, p.135).
- **Operations-based exercises** These include drills, functional and full-scale exercises. Functional exercises involve one or more agency and focus on testing one aspect of crisis response, such as emergency medical services in the event of a terrorist attack. Full-scale exercises involve testing all major functions and responders in a situation as close as possible to a real crisis situation. These

exercises are hands on in real time, and can be highly realistic. They are particularly useful for preparing for larger-scale crises involving many agencies and where significant numbers are affected. They can also be very expensive, both financially and in terms of personnel resources and time.

The case studies of the Australian government's Exercise Minotaur assessing preparedness for foot and mouth disease and California's annual crisis training exercise provide examples of good practice in the application of crisis exercises. Exercises allow mistakes to be addressed and lessons learned in terms of personal and organisational preparedness in a relatively safe environment. Both cases also illustrate the involvement of non-government agencies and individuals in the exercises. The exercises can be helpful in ensuring the effective involvement and coordination of such groupings in crisis planning and preparedness.

Figure 2.1
Crisis exercise types



Source: adapted from Callahan et al (2008), p. 52
<http://www.businessofgovernment.org/pdfs/OBrienReport.pdf>



Case study

Exercise Minotaur testing responses to foot and mouth in Australia highlights potential weaknesses and problems

The Australian Government comprehensively tested its response systems with regard to foot and mouth disease in 2002 through Exercise Minotaur. The exercise tested diverse issues such as animal health responses, trade advocacy skills, and consular dimensions. The simulation was conducted over four days in September 2002, after twelve months of planning. More than a thousand people from a range of government and industry agencies were formally involved, with the simulation overseen by a panel of evaluators and observers.

One of the lessons of the simulation exercise was the need for agencies to look at human resource capacity in a number of key areas, particularly that of skilled and trained technical employees. It was found that a sustained crisis has the potential to 'burn out' key people. Experience indicates that the long-term nature of individual and community recovery places significant strain on human resources.

Source: <http://www.apsc.gov.au/mac/connectinggovernment7.htm>

Case study

Using training exercises to build effective responses in California

In California, an annual training exercise is used to develop, conduct, and assess state-wide preparedness for a variety of crises, called the Golden Guardian Exercise Series. The exercise aims to coordinate the activities of all levels of government, first responders, volunteer organisations and the private sector in response to potential acts of terrorism and catastrophic disasters. This exercise is accomplished in an 'all-risks' environment, allowing advances in training, skills, and knowledge to be used regardless of the event challenging the state – that is, whether the event is a terrorist, public health, or natural emergency. The goal of the Golden Guardian Exercise Series is to continually improve emergency preparedness capacity by building from the lessons learned from the exercises.

For example in 2006 there was a preventative exercise in analysing terror threats, and regional exercises responding to improvised explosive devices, an earthquake, and to evacuee management from the earthquake. Each exercise included an after action evaluation to gather together the lessons learnt.

Source: Callahan et al (2008), pp.43-46
<http://www.businessofgovernment.org/pdfs/OBrienReport.pdf>

Assessing crisis preparedness

With regard to planning and the conduct of crisis exercises, in terms of assessing the preparedness of organisations for crisis management, a typology

of organisational preparedness enables managers to rate their own organisation's preparedness, as illustrated in Table 2.1.

Table 2.1
A typology of organisational preparedness for crisis

	PREPAREDNESS		
	low	medium / mixed	high
Importance of crisis planning for the organisation	Little or no importance. Not an item for serious consideration.	Fairly important on occasion, but normally of less priority than routine organisational goals.	Very high. Crisis preparedness part of the core goals of the organisation.
Attitude to threats	Dismissive. 'It couldn't happen here' mentality.	Fairly serious consideration. A range of threats recognised and planned for.	Very serious consideration. Organisation gives high priority to planning for a range of threats.
Extent of crisis planning	None at all, or at best ignored with little or no awareness by staff.	Fairly detailed and extensive planning as an add-on to existing practice.	Very detailed and extensive crisis planning, permeating the structures, practices and culture of the organisation.
Extent of active readiness through trials and simulation	Non-existent.	None or patchy. Plans on paper are considered adequate.	Highly active readiness through regular crisis training and exercises.

Source: adapted from Drennan and McConnell (2007), p. 122

Such an assessment of crisis preparedness as illustrated by Table 2.1 can serve a useful purpose for managers to help determine areas of existing good and poor practice. This in turn can help highlight areas that are in need of attention and where actions need to be taken to improve the

situation. For example, if the assessment shows that there is only limited preparedness through the use of trials and simulations, this could indicate the need for the conduct of or participation in a crisis exercise.



3 Managing crises

Planning alone is not enough

At least five contingency plans were in effect at the time of the Exxon Valdez oil spill disaster in Alaska. Each plan assumed amongst other things that rescue and response equipment would be at the ready condition; that communication channels among previously competitive organisations would be established readily; and that each responding organisation or agency would take precisely the right step at precisely the right time to fit the need of other organisations. The reality was that confusion seems to have been far more commonplace than communication. Rather than coordinating their activities the various organisations with a stake in the spill and the clean-up often seemed to have more interest in blaming one another than in working with one another (Barnes, 2001, <http://unpan1.un.org/intradoc/groups/public/documents/APCITY/UNPAN006313.pdf>, pp.9-10).

There is a real-life tension between planning and preparing for a crisis and actually dealing with a crisis. The more elaborate a plan is, the more likely it is to be ignored in an actual crisis as no one has the time to go through it in detail or recall all of its contents. Often, responses to crises need to be thought out on the spot, though guided by previous thinking and practice (see case study on responding to wildland-urban fires). To address such issues, crisis planning often aims to identify lines of authority, roles and responsibilities and means of coordination, leaving key identified individuals with a significant amount of autonomy to act as appropriate to the circumstances (Drennan and McConnell, 2007, p.128). Good management and leadership during the crisis are essential for effective crisis management. The case study of maintaining a group ethos in panic situations affirms the importance of maintaining a belief in the group dynamic and leadership structures put in place to manage crises at times when chaos and panic are likely.

Case study

Maintaining a group ethos can be crucial in panic situations: the Mann Gulch fire disaster

In the Mann Gulch fire disaster in the USA, thirteen fire fighters lost their lives in the fight to control the forest fire. For those who lost their lives, panic seems to have played a part as the group of fire fighters became fragmented and individuals became concerned for their own account rather than collectively, and group orders and control seemed remote to their on-the-ground situation.

The three people who survived did so in ways that avoided group disintegration. Two stuck together and this helped them keep their fear under control and spot a gap that others didn't see or thought was too small to get through. One, as formal leader of a group he believed still existed, ordered his followers to join him in the escape of the fire: he continued to see and to think about the group's welfare, keeping his own fear under control. The rest took less notice of one another.

Sources: Weick, 2006

Case study

Responding to wildland-urban fires: sometimes the scale and pace of crises overwhelm even the best efforts at command and control

The Laguna fire in 1993 and Cedar fire in 2003 were major wildland-urban fires in the United States of America (USA) responsible for significant destruction and damage. At times in the early stages of these fires responders were forced to engage in solo action. In these cases, fire fighters described responding to multiple, emerging catastrophes. Effective command and control and common communications were unavailable. The cases suggest that in the most difficult fires it can take an extensive amount of time to establish a functioning central command, and that during these periods, independent action that is consistent with overall goals is often essential. Independent action is seen as an empowered and focused effort to address the crisis. This is in contrast to 'freelancing' which is seen as unguided effort that is possibly counterproductive or even dangerous.

But even as incident commanders accept that independent action may be sometimes inevitable, they worry about its implications. They worry about a loss of accountability, and uncoordinated tactical response that focuses on initial attack rather than a more coordinated strategic effort. Incident commanders also suggest that independent action can damage the credibility of the central command. Once actors have engaged in solo action, they may be reluctant to reintegrate with a command that they perceive to have failed them.

Sources: Moynihan (2007), p.12
<http://www.businessofgovernment.org/pdfs/MoynihanKatrina.pdf>

Clear structures and support mechanisms

While flexibility of response is important, so too is the need for clear structures and support mechanisms when managing a crisis. Lessons from the USA in the wake of recent crises there such as 9/11 and Hurricane Katrina show the benefits that an effective ICS can bring and how its absence can cause problems. An effective ICS is particularly helpful where crises require a response from a network of organisations and where there is potential for confusion as to lines of command given the number of different players involved. The ICS case study sets out what an ICS looks like and how it is operated.

Crisis situations require speedy decision making. Actions taken in the early stages of a crisis can be crucial in determining the outcome and affect the length of the crisis in many cases. Standard practices with regard to reporting and the use of operating protocols can be of valuable assistance in managing a crisis in such situations. They help align interpretation between senders and receivers of messages – clarifying communications and understanding in situations where the capacity for misunderstanding and misinformation proliferation is great. The case study on the use of significant incident reports shows how such reports are used in Canada to ensure that all in the chain of command are kept up to date on critical events.



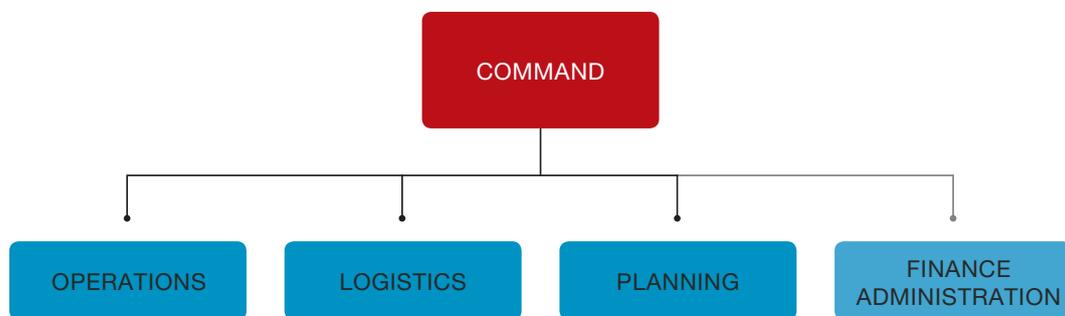
Similarly, the case study on using standard operating procedures shows an example of a crisis situation where such procedures are helpful. Standard operating procedures (SOPs) provide a clear structure and procedures to be followed in particular crisis situations. An example of a SOP

is the use of classroom emergency kits (including first aid equipment, water and food etc) in schools (see <http://www.isle-dso.eu.dodea.edu/SOPs/SOP%2004-005%20-%20Classroom%20Emergency%20Kits%20-%20September%202006.pdf> for full details).

Case study

Using an incident command system

After 9/11, the US government established a national incident management system (NIMS) for the management of domestic incidents. At the heart of NIMS is the ICS used as the dominant approach to tackling emergency issues. An ICS essentially creates a simple command and control system within which staff from different agencies should be placed. It imposes a hierarchy on a network. Structurally, the ICS organises functions by critical management systems: planning, operations, logistics, and administration/finance. Each function reports to a single commander who has decision-making power for the ICS. Commanders are expected to set up at least one incident command post. If multiple incident command posts are necessary, they should be overseen by a single area command. Both incident command posts and area commands are expected to follow the ICS format. The structure of the ICS is illustrated in the figure below.



Source: Moynihan, 2005, p. 9
<http://www.businessofgovernment.org/pdfs/MoynihanReport.pdf>

As with all aspects of crisis management, however, such standardised reporting and operating procedures need constant scrutiny to ensure that they are being used effectively and not creating additional problems of their own. Where the crisis involves a sharp discontinuity with past events and is towards the unknown end of the scale,

there is a danger that standardisation can limit flexible responses which need to be developed. Standardisation can encourage sticking with 'tried and tested' ways of doing things rather than encouraging un-learning of failed activities in a situation that requires new thinking (Smart and Vertinsky, 2006, p. 328).



Case study

Using significant incident reports

In Canada, the Department of National Defence (DND) uses significant incident reports (SIR) as a means of informing all in the chain of command of the situation. Examples of critical incidents include accidental release of hazardous material that may threaten public safety, alteration or destruction of official records and actions by DND employees that may undermine public values, or lead to the discredit of Canada at home or abroad.

Information in a SIR message should be provided in the following format:

Paragraph	Significant Incident Report
1	Date, time and location of the significant incident.
2	Name, location and telephone number of the person or agency initially reporting the incident.
3	Who or what was involved, what happened and how it happened.
4	Name of the parent unit and specific information concerning the persons and equipment involved.
5	Any possible broader implications of the incident, including the effect on future operations.
6	Local public affairs actions, recommendations and proposed further action.
7	Details of actual and probable media interest and involvement, including number of media calls, interviews and information requests, and whether the media were national, local or international.

Source: <http://www.admfincs.forces.gc.ca/dao-doa/2000/2008-3-eng.asp#>



Case study

Using standard operation procedures

SOPs can help in finding the answers to such basic questions as: what are my tasks? How am I to achieve them? What resources do I have? Whom do I report to? How many days do I work? SOPs are valuable because they provide structure, clarity, and knowledge that were not there before. They define which issues in the network have been resolved and which procedures all network actors agree to follow.

Initial disorganisation and lack of coordination created problems for a crisis task force in doing its job in the California Exotic Newcastle Disease poultry crisis. Such problems were observed and procedural solutions suggested and formalised in a SOP manual. The final SOP manual covered all aspects of the task force work, including vehicle use, reporting of accidents and injuries, policy on media contacts, and policy on overtime. Under finance, the manual covered processing purchase orders, processing indemnity claims, and budget reconciliation. There were mobilisation and demobilisation SOPs aimed to help orient employees. One section covered personnel conduct and interacting with the public.

The effective application of SOPs was found to depend upon: (a) their relevance to the actual situation, (b) the emphasis placed on them by direct supervisors and colleagues, and (c) their clarity.

Sources: Moynihan, 2005, pp.26-28

<http://www.businessofgovernment.org/pdfs/MoynihanReport.pdf>

The role of leadership

In the early stages of a crisis, leaders need to assess what information is crucial and what information they need to gather. There may be a paradoxical danger of information overload in some areas and complete lack of information in others. Drennan and McConnell (2007, p.154) suggest that for crises that appear out of the blue, information which leaders want includes: how many casualties, what damage has been done, were the causes accidental, is there the possibility of further threats? If answers to these questions are not available, an alternative is to determine what has not been affected – what is

still intact. A crisis leader needs a sense of the available useful information and the information gaps.

Leaders also have an important role in authorising the action of others (Drennan and McConnell, 2007, p.156). Leaders do not have the capacity to respond to all situations themselves, and this requires the authorisation of speedier decision-making than that normally associated with traditional hierarchies. In a similar vein, leaders can usefully know when to call in outside help which can provide necessary expertise not available otherwise (see case study on using expertise from a variety of sources).



Case study

Using expertise from a variety of sources

An outbreak of Exotic Newcastle Disease in poultry in California led to the establishment of a task force to manage the crisis. The task force brought in officials from the California Department of Forestry and Fire Prevention, and the U.S. Forest Service. These officials did not have substantive expertise on animal disease. Instead, they offered a wealth of experience managing large-scale emergencies. This included an understanding of how to apply the ICS model, expertise on the logistics involved in organising thousands of workers, and experience with emergency planning on a daily planning cycle. The task force veterinarians lacked similar practical experience managing emergencies.

Source: Moynihan, 2005, p.17

<http://www.businessofgovernment.org/pdfs/MoynihanReport.pdf>

Boin et al (2005, pp.10-15) outline five critical tasks that leaders engage in and generally are good at during a crisis:

- **sense making** Leaders appraise the threat situation and decide what the crisis is about. Some crises are readily apparent, but others unfold and produce vague, ambivalent and contradictory signals. Leaders distil these signals and make sense of them to interpret and define the crisis.
- **decision making** Decision making in a crisis often involves hard calls with trade offs and significant risks. Effective crisis responses also require coordination of the actions of many different groups and agencies. Leaders make crucial decisions themselves, and also know when to delegate decision making.
- **meaning making** A crisis often creates strong demands from citizens to know what is going on and what they should be doing. Organisations often struggle with providing the correct information right away. Leaders are expected to reduce uncertainty in such situations by providing authoritative accounts of what is happening and what needs to be done. They

give meaning to the unfolding crisis and in so doing enhance efforts to manage it.

- **terminating** It is a leadership task to determine how and when a crisis should and can be terminated, shifting back from emergency to routine. This also involves giving an account of what has happened, and ensuring that the system of governance is re-stabilised.
- **learning** Leaders ensure that there is lesson drawing from the crisis, both organisational and political. The crisis offers lessons for future emergency planning and the training of officials to handle future crises.

Communications and public relations

Communications have been mentioned several times already. Particularly with regard to external communications with the public and media, a significant part of crisis management is about managing the message in situations that do not lend themselves easily to routine communications. The importance of good public communications is illustrated by the case study on getting the message right in Australia, concerning the Bali bombings.



Case study

Public communications: getting the message right

The importance of communications in educating and shaping community expectations is shown in the Australian government response to the Bali bombings. In the aftermath of the attack, there was considerable public anguish about the disaster victim identification process. The Indonesian government implemented a positive identification process, in line with international norms and protocols. Although undertaken swiftly, the collection of information about victims from Australia meant that the identification process could not be undertaken immediately. This generated anxiety within Australia. Calls were made from the public for the Australian government to assume responsibility in Bali, thereby overriding Indonesian sovereign responsibility for its coronial processes. Others suggested that Australia should encourage the Indonesians to set aside international norms, thereby running the risk that a less rigorous identification process might lead to a serious and tragic error. Government agencies such as the federal and state police services, the Department of Foreign Affairs and Trade and coroners, worked to send a single and simple message: that the positive identification process, which was being properly implemented by the Indonesian government, was the only appropriate course. Media commentary and community expectations shifted fairly quickly towards a clearer understanding of the issue.

Source: <http://www.apsc.gov.au/mac/connectinggovernment7.htm>

External communications are vital for both operational and symbolic purposes during a crisis. Operationally, consistent external communications may enhance messages sent to front-line response teams who can be feeling isolated. Communications can inform the media and citizens of what, if anything, they should be doing to minimise the impact of the crisis. Symbolically, communications can foster a positive image of crisis response, provide an opportunity to empathise with those affected by the crisis, and demonstrate the will to resolve the crisis. The case study on a guide to crisis management and communication shows how one organisation, the United States Agency for International Development (USAID), manages their crisis management communications process to try to ensure effective external communications.

In order to manage this communications process well, Drennan and McConnell (2007, p.159) outline a number of communication pathologies to avoid:

- the impression of a slow or ineffective response
- the impression of having something to hide, i.e. the 'no comment' trap
- accidentally or purposefully giving out false information
- inconsistent messages from different actors or layers of government
- rush to judgement
- expressing lack of sympathy

Such communications pathologies can have the impact of exacerbating a crisis. Poor communications and public relations can significantly worsen the impact of or public perception of a crisis and how it is being managed. For example after the United States space shuttle Challenger explosion in 1986, the National Aeronautics and Space Administration delayed contact with the media for some time while they went in search of details. When they finally made a presentation on air, all they did was repeat what millions of viewers had already seen. This was the first of several public relations blunders in the ensuing crisis. Bernstein identifies twelve mistakes in crisis communications that can result in a public relations crisis arising from an incident:

- play ostrich
- only start work on a potential crisis situation after it is public
- let your reputation speak for you
- treat the media like the enemy
- get stuck in reaction mode versus getting proactive
- use language your audience doesn't understand
- don't listen to your stakeholders
- assume that truth will triumph over all
- address only issues and ignore feelings
- make only written statements
- use 'best guess' methods of assessing damage
- do the same thing over and over again expecting different results

Having a consistent message is vital. But so too is the use of respected local spokespersons to spread the message. A simulated bioterrorism outbreak exercise carried out in the USA showed that as the simulated outbreak became more complicated and personally threatening, participants indicated a preference for information from local government and non-government sources or from federal officials at the outbreak site. The findings from the exercise were that recognised, respected community leaders (e.g. private physicians, government and non-government officials) are likely to provide guidance in a crisis. In an actual bioterrorism related outbreak, these local leaders, supported by federal health authorities, should take the lead in communicating with local residents (DiGiovanni et al, 2003, p.711, <http://www.au.af.mil/au/awc/awcgate/cdc/02-0769.pdf>).

Source: http://advertising.about.com/gi/dynamic/offsite.htm?zi=1/XJ/Ya&sdn=advertising&cdn=money&tm=42&gps=141_988_1251_847&f=00&tt=14&bt=0&bts=0&zu=http%3A//www.bernsteincrisismanagement.com/docs/azatty8.html



Case study

A guide to crisis management and communications

USAID issued a guide to staff for managing communications in the event of an avian influenza crisis. Five steps are identified:

Step 1. Mobilise crisis communications team and support. Timeframe: Within the first few days following outbreak. Pull together pre-identified expertise (and individuals) that the communications officer (or the internal crisis communications team, if one is established) will need access to. To provide consistency and avoid media confusion about whom to contact, appoint one spokesperson. This person should be at a senior level and should not have to focus on other duties. Be sure to have a range of other experts to call upon to handle specific subjects. Inquiries from media or other agencies should be forwarded to the approved spokesperson.

Step 2. Conduct a rapid assessment of the situation. Timeframe: Within 3-5 days following outbreak. This is essentially an analysis of the situation at hand. The team should first ask itself, 'What do we know?' While gathering the information for the rapid assessment, staff should also begin discussing the components of the communication plan of action (See Step 4).

Step 3. Determine the mission's immediate response and make assignments. Timeframe: Within the first week following an outbreak. Based on the rapid assessment, the internal crisis team or decision-makers can decide on emergency actions to pursue. For example, the veterinary health officer could visit non-governmental organisations or other health officials in the region (or in the government) to get a status report and offer support, clarifying the messages arising from the crisis. Part of this immediate response is the communication plan of action, which is outlined in Step 4.

Step 4. Develop a communication plan of action. Timeframe: Within a week following an outbreak. A communication plan of action has essentially three main desired outcomes: determining what types of information will be disseminated by the mission; determining who will deliver that information (e.g. a spokesperson); and deciding how to follow up on these activities. Also important to note is that each type of media will be looking at the situation from a slightly different angle. It is important that the spokesperson understands the different requirements these media have and can anticipate and provide the appropriate information.

Step 5. Monitor developments and prepare for longer-term strategy development. Timeframe: Two weeks following outbreak, or after the initial phase of crisis/emergency response is completed. Once most of the immediate, emergency tasks have been completed, usually over the first week or two following an outbreak, it will be important to look back on what was accomplished and whether it was successful in meeting the communication goals.

Source: <http://avianflu.aed.org/docs/crisiscomm.html>

Using Web 2.0 and newer technologies in crisis management

For both communications and other aspects of crisis management, the application of newer technologies such as Web 2.0 can provide important supports, as well as significant new challenges. Within twenty four hours of the London bombings on 7 July 2005 the BBC had received a hundred stills and video images, 3,000 texts and 20,000 emails from the public. Less than twenty four hours after the terrorist attack in Mumbai, India on 26 November 2008, the Wikipedia site devoted to the attacks had received over 400 edits/updates from over a hundred authors. The use of e-mail, Facebook, MySpace, YouTube, Flickr, Digg, Wikipedia, LinkedIn, Twitter, and other social networking tools (often collectively called Web 2.0) to facilitate discussion, debate, and the exchange of ideas on a worldwide scale is a reality which public managers must take into account in crisis management. Information and disinformation can be spread rapidly through these new media as

well as more traditional media outlets. Particularly when dealing with non-government agencies and individuals, newer technologies can be an important tool of communication. The case study of the use of Twitter shows how proactive management of Web 2.0 can be an important part of the crisis management toolkit. It is also an example of managing a potential public relations crisis arising from a local incident. While a private sector example of a smaller scale organisation-level crisis, the lessons from the case have wider applicability for public managers managing communications in larger-scale crises. But as one commentator on social networks notes: 'For Web 2.0 to be used effectively during a crisis situation there must be trusted actors and trusted networks established before the crisis. Only these can serve as an effective backbone for turning a social network into an effective crisis management and risk communication tool' (<http://knol.google.com/k/james-carafano/iran-in-a-twitter/1o2rtt4b1e8lz/7#>).

Case study

Using Twitter to stem a potential organisational crisis

A potential reputational crisis for the Ford Motor company was headed off in part by a manager in the company using new social media. The company had written to the owner of a Ford fan website telling them to shut down the site and pay US\$5,000 to Ford. The site owner spread news of the threat from Ford on the website and it was picked up by many other fan sites and others. The Ford manager of social media in the region, recognising the damage that could be done to the company, began a damage limitation exercise. He made multiple posts to Twitter and asked people to 'retweet', resulting in his followers passing the message on to over 30,000 other users. The story was contained within twenty four hours.

Source: <http://www.scribd.com/doc/9204719/The-Ranger-Station-Fire>



Newer technologies can also be used to enable organisations to track, disseminate and communicate information during a crisis. For example in St. Louis in the USA fire and police departments used an incident management software tool to facilitate the collaboration of first response agencies (http://www.e-sponder.com/express/pdf/Flood_Crisis_Press_Release.pdf).

Also in the United States, Benton County suffered communications difficulties between agencies during a fire crisis due to the use of different

equipment and poor coordination between VHF and UHF systems. The various agencies are now connected regardless of what communications devices they use, thanks to a new technology-powered, mobile communications unit.

This latter example illustrates the importance of compatibility of technologies between different agents during crises. This is an area that can usefully be addressed in the preparing for crisis phase of the crisis management cycle.



4 Post-crisis evaluation and learning

Crises create great potential for learning from the successes and failures in addressing the crisis. It is common practice for inquiries and evaluations to be set up post-crisis to identify lessons learned, and to promote accountability for actions taken during the crisis (see case study of bureaucratic

attenuation of information flows). However, there is always the danger that such inquiries and evaluations can get overtaken by political fighting between those looking for radical change after a crisis, and those wishing to broadly maintain the status quo.

Case study

Bureaucratic attenuation of information flows

A number of investigations after the space shuttle Challenger explosion called attention to the fact that people within engineering areas of the launch group repeatedly expressed concern, sometimes quite forcibly, about the potential dangers of launching the Challenger under low-temperature conditions. People at the top of the organisation reported never having heard anything about such concerns during the same investigations.

Information filtering can lead to a reduced organisational capacity to make operationally difficult decisions. Over time attenuation of information, especially if it relates to the core functions of sub-systems, can lead to organisational blindness. Such cultural phenomena have been said to manifest readily in pre-crisis incubation periods.

Sources: Barnes, 2001, p.10

<http://unpan1.un.org/intradoc/groups/public/documents/APCITY/UNPAN006313.pdf>

The culture of organisations can often influence the degree to which they actually learn from crises. Organisations where safety is at the heart of what they do, such as air traffic control or fire fighting services, have systems and cultures that support learning and are keen to identify failures and do what they can to eradicate them (Drennan and McConnell, 2007, p.190). In more traditional public organisations, post-crisis learning has to compete with the day-to-day goals of the organisation, and

may not be as deeply embedded in the culture. This is something that leaders and managers need to give attention to. Organisations need to give particular attention to their capacity to learn. This is a particular challenge when the crisis and its impacts cut across agencies, and cross-organisational learning is needed, as the case study on shared learning across agencies illustrates.



Case study

Shared learning across agencies can be problematic

Some agencies in WA have good systems for capturing and monitoring recommendations from incidents and exercises. The Water Corporation includes findings from exercises on its incident database, including who must action them and by when. But there is a lack of central recording and analysis of lessons from incidents and exercises. Agencies carry out a range of post-incident reviews such as hot debriefs and extensive internal reviews, but there is limited dissemination of this information outside the agency. The State Emergency Management Committee as the central emergency management body is in a position to facilitate the sharing and learning of lessons, but do not require or receive all incident and exercise reports. To begin to address such issues, Emergency Management WA have started development of an emergency management extranet which has the ability to record and disseminate lessons learned amongst agencies.

Source: Auditor General WA (2009), p.33
http://www.audit.wa.gov.au/reports/report2009_04.html

Learning can range from operational improvements that enhance crisis response in the future to more fundamental reviews of organisational and system-wide capacity. As an example of the former, the case study of effective use of information technology shows how an online system to help people get support during a crisis was developed and improved due to learning that occurred during previous crises. As an example of more system-wide learning, in response to Hurricanes Gustav and Ike post Katrina, the ability to communicate and exert command and control

over all agencies was a crucial element learned. The planned execution of mandatory evacuation orders 24 to 36 hours earlier than during Katrina, the planned incorporation of the national incident management system, and the planned activation of National Guard assets several days prior to landfall were all crucial to efficient command and control. The purchase and incorporation of radio systems that are compatible among all agencies also improved efficiency and was a lesson learned from Katrina (Simmons, 2009).

Case study

Effective use of information technology to support crises response

ACCESS FLORIDA is an Internet-based application system that permits people to apply for food stamps, certain benefits, and medical aid online. The Florida Department of Children and Families adopted the system in the aftermath of an overwhelming number of paper-based applications for emergency food stamps after several hurricanes hit the state in 2004. After Hurricane Katrina, the department expanded the system so that it could provide simplified access to evacuees from Alabama, Mississippi, and Louisiana. A user feedback survey indicates that the experience of users was positive.

Source: pp.23-24

<http://www.businessofgovernment.org/pdfs/StantonKatrinaReport.pdf>



5 Conclusions

Two broad lessons emerge from this review of international practice with regard to crisis management. One is that there are a number of tools, techniques and procedures that can be of invaluable assistance to managers in preparing for and dealing with a crisis. Developing crisis management plans, envisaging and preparing for alternative scenarios, and using exercises to simulate crises can all be helpful in preparing for a crisis. During a crisis, using an ICS, SOPs and communication planning are amongst the things that can help ensure an effective response.

But the second broad lesson is that all of these supports have limitations, and if used incorrectly can make the crisis worse rather than better. There can be no replacement for good judgement and leadership in these circumstances. Flexibility of response within clearly defined parameters is

needed. There are no simple set of principles of effective crisis management which if followed will lead to positive conclusions. Crises are messy and of their nature unprecedented and unpredictable in their actual on-the-ground impact.

Public organisations need to anticipate and prepare for a wide range of crises they may need to respond to. Some of these are large scale and with wide spread impacts, such as pandemics or terrorist attacks. Others are smaller in nature but no less of a crisis to those affected, such as a fire at a public building or localised serious water contamination. Using a blend of support tools and good judgement, public leaders at all levels in organisations can help ensure that such crises are handled as well as possible to the benefit of society as a whole.



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