## Chapter 13 Crisis Management



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Abstract The word "crisis" means the turning point of whether one recovers from illness or the situation worsens; thus, we can map crises into four stages of illness, i.e., "prodromal crisis stage," "acute crisis stage," "chronic crisis stage," and "crisis resolution stage." From the societal safety sciences viewpoint, crisis management means a situation where an event that threatens safety and security of the society is close or proper responses at each stage after the event have taken place. For nations, administrations, and corporations, crisis management is the "processes of responding to serious situations of major accidents or mega disasters that have suddenly broken out after some symptoms and calming the seriousness to settle and situations to recover."

**Keywords** Crisis · Crisis management · Crisis matrix · ICS

### 13.1 What Is Crisis Management?

#### 13.1.1 Meaning of Crisis

Webster, one of the well-known dictionaries in the USA, defines "crisis" as the turning point of whether a disease is going to heal or to worsen. In other words, crisis is the time when a moderate disease condition is making a big change.

The origin of the word crisis is the Greek "Krisis (judgment)" or "Krinein (decision, make selection)." The word has a meaning of a turning point for better or worse, a decisive moment, or crucial time. The word crisis with its origin in medicine was introduced into psychology and psychiatry and started to carry the meaning of "important point" and then generalized into a term for critical danger.

Since the word has its origin in the medical field, we can describe the four stages of crisis as Steven Fink (1986) explained as follows:

- 1. Prodromal crisis stage
- 2. Acute crisis stage
- 3. Chronic crisis stage
- 4. Crisis resolution stage

When recovery is not made from a crisis, there are cases the situation turns into bankruptcy for a corporation, death for human, and "terminal stage" in medical terms. Avoiding the terminal stage and entering the recovery stage, that is, to prevent organizational corruption or human death at times of accidents or disasters is crisis management, and it is the purpose of societal safety sciences.

"Kiki," the Japanese word for crisis, means "Time or case when a serious trouble may take place. Dangerous situation," and "Kiki kanri" in Japanese, the phrase for crisis management, means "Policy or organization to counter a sudden large-scale disaster, accident, or event that was unexpected. Quick and effective measures like lifesaving or prevention of damage spreading take place."

From the above, we can say the concept of crisis is a transition of how the situation progress from a serious turning point (Delbecque and de Saint Rapt 2016).

#### 13.1.2 Significance of Crisis Management

From a viewpoint of societal safety sciences, crisis management means to deal with a situation that an event that threatens the safety and security of the society is about to take place or to manage the state after one has happened. Koichi Oizumi, through researcher's eyes, defined crisis management as "Predict and prevent dangers that can break out anytime and at anyplace in unexpected forms and if they take place, quickly counter them with 'initial actions' to minimize the damages" (Oizumi et al. 2015). Steven B. Fink defined "Crisis management, i.e., plans against the turning point crisis, are the techniques to remove many of the risks and uncertainties to control own destiny to the extent possible" (Fink 1986).

The above discussions lead to our definition of crisis management; after a "premonition," when a major accident or disaster "suddenly" breaks out, it is the transitional process from the "serious situation" to reach a "calming" status and "recovery."

# 13.1.3 Relation Between Risk Management and Crisis Management

There is subtle difference between risk management that originated from insurance management and safety engineering and crisis management that started from nation level crises like the 1962 Cuban missile crisis. Risk management features before-theevent measures like accident prevention or insurance subscription. Crisis management, on the other hand, characterizes countermeasures against emergencies after an accident or disaster.

The summary of risk management as prior measures is the following six points:

- 1. Listing up the risks with keen risk sensitivity
- 2. Identifying risks and carrying out risk assessment of analysis and evaluation
- 3. Determining measures against risks
- 4. Setting safety management plans and business continuity plans (BCP)
- 5. Executing simulated trainings
- 6. Performing risk communication

The summarizing points of crisis management with emphasis on post event actions are:

- 1. Recognizing premonitions with risk sensitivity
- 2. Having decisiveness, leadership, and good communication when suddenly put under serious situations after major accidents or disasters
- 3. Executing resilience after turmoil in steady situations
- 4. In the recovering stage, reflecting lessons learned from the accident or disaster into the action plans for the next emergencies

### 13.1.4 Fink's Crisis Management Theory

At the time the TMI accident in the USA, Fink was a member of the Pennsylvania crisis management team and published *Crisis Management* in 1986. The book was the first in the USA about crisis management, and it is still in print. In the book, Fink explained steps in crisis management as follows: in the premonition stage, carry out "crisis forecasting," "crisis intervention," and "crisis management plans." During the first acute stage, when a major accident or disaster has broken out, conduct "crisis survey and crisis identification." In the second acute stage, execute "crisis isolation and crisis management." Throughout the acute stages, "crisis communication" is important. Crisis communication are divided into "controlling the message" and "handling hostile press" (Fink 1986).

Among these steps, Fink introduced his unique assessment method for crisis forecasting in the premonition stage. The method evaluated a crisis with the damage and an indicator called "crisis impact value (CIV)." CIV evaluates a crisis with its effect, results, monetary loss, and damage to human, with a number from 0 to 10. The indicator is the average of the scores (0–10) to the following five questions:

Question 1: Might the crisis intensify and if so, how fast?

Question 2: How observable is the crisis by outsiders such as media, regulatory agencies, or customers?

Question 3: How much does it interfere with operations?

Question 4: Is the company the victim or culprit of this crisis?

Question 5: How damaging is it to the bottom line (however one defines bottom

line)?

Fink explained the risk forecasting with a coordinate plane divided into four quadrants with probability of occurrence in the horizontal axis from 0% to 100% and CIV in the vertical axis with values 0–10. The intersection of the horizontal and vertical axes is where the occurrence probability is 50% with CIV 5. Fink named the quadrants with high probability and high CIV the red zone (dangerous area), low probability and high CIV the yellow zone (caution area), high probability but low CIV the gray zone (intermediate area), and low probability with low CIV the green zone (safety area). Fink's method was visual and easy to understand, and it has now developed into "risk map" in wide use.

#### 13.2 Crisis Management of the Administration

Crisis management developed around national emergency situations and large-scale accidents and disasters. It, thus, has an important position in administration by the national government and so.

### 13.2.1 Origin of Crisis Management: Cuban Missile Crisis

While post World War II insurance management by private companies in the USA shaped risk management, the government established the concept of crisis management as a method of countering emergency situations starting from the 1962 Cuban missile crisis.

Cuban missile crisis was triggered when the USA demanded the Soviet Union back then (Soviet) to remove the midrange nuclear missiles Soviet had deployed in Cuba. At the time, the USA and Soviet were in a strong military conflict, and the risk of a nuclear war was at its peak. On 16 October 1962, a US reconnaissance plane spotted a nuclear missile deployed in Cuba. A number of discussions were made on whether to bomb Cuba or not, and on 24 October, the USA started a blockade and boarding of ships headed for Cuba. On 27 October, a US U-2 reconnaissance plane was shot down by Soviet expeditionary force in Cuba. The warning issued by President Kennedy of the USA lifted up the confrontation level, and the entire world was at a risk of nuclear war. The Soviet leader Khrushchev announced on 29 October, in reply to Kennedy's final warning, that the missiles will be removed from Cuba. President Kennedy's leadership, firm determination, and quick action added with the First Secretary Khrushchev's decision at the critical moment prevented the nuclear war.

Even during such a national emergency, the four stages apply the "prodromal stage," cold war; "acute stage," discovery of missile site construction; "chronic stage," USA and Soviet confrontation; and "resolution stage," winding down with decisions by the two leaders.

During the 1970s the world experienced national emergencies of currency crisis and oil crisis. In 1979, the TMI accident in the USA broke out. Also 1984 was the year when the Union Carbide had a gas leakage accident in its Bhopal factory in India. Occurrences of such large-scale accidents at the corporate level led to people watching corporate crisis management as well.

#### 13.2.2 Crisis Management by the Japanese Government

We will next overview crisis management by administration and the government in Japan. Japan, in the 1970s, experienced currency crisis, oil crisis, terror attacks, and hijacks by the extremists and started to discuss the need for crisis management at the Cabinet level in the early 1980s. A Korean Airlines flight was shot down in 1983, the Glico-Morinaga case took place in 1984, and in 1990 the Gulf War started. After the burst of bubble economy, the Tokyo subway was attacked with sarin in 1995, and the concept and phrase crisis management spread to the public. Also in the field of natural disasters, the 1995 Great Hanshin Awaji earthquake triggered strong awareness of crisis management against large-scale natural disasters.

Under these circumstances, the Cabinet Law was amended in April of 1998, and the Japanese government formally made its system of crisis management. The amendment of the Cabinet Law added Article 15 that defined crisis management as "response to an emergency that has caused, or is likely to cause, material damage to the lives, persons or property of citizens, or the prevention of occurrence of such emergencies" (The Cabinet Law 1998; Yasuda 2006). The amendment newly gave the secretary for crisis management the duty of, upon occurrence of an emergency situation, making the first decision about necessary actions by the Cabinet and arranging with related ministries and agents about initial actions. In January of 2001, the Cabinet National Security and Crisis Management Office were closed, and one of the three Assistant Chief Cabinet Secretaries was assigned to take charge of national security and crisis management. The Assistant Chief Cabinet Secretary (in charge of national security and crisis management) is supported by over 100 staff members like Deputy Director General of Crisis Management, Deputy Director General of the Cabinet, and Councilor of the Cabinet. The system adds staff from ministries and agents on temporary transfer for support.

Figure 13.1 shows the flow of initial actions upon breakout of emergency situations. Once the Cabinet Information Collection Center collects information from private information organizations like the media, public organizations, and related ministries and agencies, the first notification is sent to (A.) Prime Minister, Chief Cabinet Secretary, Assistant Chief Cabinet Secretary; (B.) Secretary for Crisis Management, Assistant Chief Cabinet Secretary (in charge of national security and

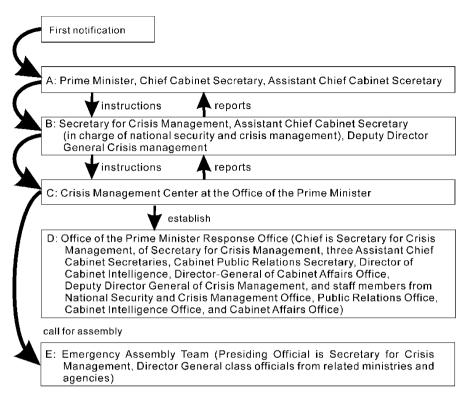


Fig. 13.1 Initial response upon emergency outbreak by the Japanese government

crisis management), Deputy Director General of Crisis Management; and (C.) Crisis Management Center at the Office of the Prime Minister. A gives instructions to B and B to C. B reports to A and C to B. C establishes D, Office of the Prime Minister Response Office (Chief is Secretary for Crisis Management), and makes calls to gather E, Emergency Assembly Team (Presiding Official is Secretary for Crisis Management). D consists of Secretary for Crisis Management, three Assistant Chief Cabinet Secretaries, Cabinet Public Relations Secretary, Director of Cabinet Intelligence, Director General of Cabinet Affairs Office, Deputy Director General of Crisis Management, and staff members from National Security and Crisis Management Office, Public Relations Office, Cabinet Intelligence Office, and Cabinet Affairs Office. This organization is in charge of collecting information, reporting to the Prime Minister, arranging communications among related ministries and agencies, and overall arrangement of initial actions by the government. E calls an emergency assembly of already listed Director General class officials from related ministries and agencies to the Office of the Prime Minister and gathers information about initial actions by the government (Kato and Ota 2010).

The Japanese government modeled its crisis management system after the Incident Command System (ICS) in Europe and the US disaster crisis management by

the administration has important factors of (1) organization, (2) information, (3) evacuation, (4) self and mutual support, (5) incidence reduction, and (6) reconstruction. Especially about information, disaster information that reports what has happened and disaster management information about what to do to lessen the damage are the keys. Leadership is important for crisis management by the administration, and since quick decisions are needed, leaders have to prepare to make decisions even with insufficient information. As regulated in the Disaster Countermeasures Basic Act, when disasters break out in prefectures, the prefectural governor takes the leader role of the Head of Local Disaster Management Headquarter for crisis management. When the incident turns into a mega-disaster, the national government supports the prefectures by establishing the Major Disaster Management Headquarter headed by the Ministers of State and the Extreme Disaster Management Headquarters headed by the Prime Minister. Upon an emergency situation of a mega-disaster, the Cabinet Crisis Management Center in the basement of the Prime Minister's Office carries out the initial action of information gathering and analysis, and a team is assembled around the Deputy Chief Cabinet Secretary for Crisis Management. When the time shifts to the phase of recovery and reconstruction, the Cabinet Office then makes actions (Kawata 2008).

# 13.2.3 USA that Learned Its Lesson: Summary of Disaster Crisis Management

It has been pointed out that the Japanese government lacks leadership and unification of information compared to Europe and the USA. This section discusses the disaster crisis management by the role model of the US government. The 2005 hurricane Katrina left huge damages to the USA, and from the lessons learned then, the USA reviewed its disaster crisis management. Especially by thorough review of the failures during the "prodromal" and "acute" stages after things settled in the "chronic" and "resolution" stages, the USA prepared itself for the next strike by modifying the forecasting system for the "prodromal" stage and the decision-making and communication systems in the "acute" stage (POGO 2006). As a result, good effects surfaced here and there, when hurricane Sandy hit the country.

In the following seven lessons, Yoshiaki Kawata (2013) summarized what the federal government of the USA learned from failures in its response to hurricane Katrina and what improvements it implemented.

Lesson 1: From the stage when a major disaster was possible, the leader of administration carried out risk communication that warned residents and disaster prevention organizations to prepare for a disaster and make measures along disaster response programs (timeline). This action had certain effects.

Lesson 2: In the USA, federal organizations like the Federal Emergency Management Agency (FEMA) with specialized engineers and the US Army Corps of Engineers (USACE) responded to disasters in the field. The federal government gave

these organizations the authorities of execution and the budget responsibilities to establish systems that could make proper disaster emergency responses based on quick decision-making.

Lesson 3: The verification system thoroughly studied lessons and failures in past disasters and did not hold individuals responsible for failures in disaster responses. The system turned the failures to knowledge and worked them into disaster response programs. The Executive Office of the President, the House of Representatives, the Congress, FEMA, and USACE independently carried out After Action Review (AAR). The system stored lessons from failures as systematic "knowledge" for the organization, so it was useful for future disaster response plans (timeline).

- Lesson 4: Prepare against disasters never experienced before, and verify that lessons and failures of disaster responses are useful for future disaster response.
- Lesson 5: Build structures at normal time, so when a disaster is about to strike or has struck, the head of administration can take leads and consult with specialists.
- Lesson 6: Discuss measures to protect lives and economic foundations of residents in metropolitan areas with the assumption that disasters at all sizes can strike.
- Lesson 7: Enhance resilience, that is, ability to recover, throughout the societies in preparation for the risks, dangers, or difficulties that threaten safety hit.

#### 13.3 Crisis Management of Corporations

Corporate crisis management means corporations to respond properly to sudden changes in external environment, breakout of emergencies, major accidents, or natural disasters. In fact, events like terrorism, war, nuclear plant accidents, earthquakes, volcano eruptions, and tsunami are exemptions with regular insurance policies, i.e., premiums will not be paid against those events. These events, therefore, are not topics of risk management that started from insurance management, but they are topics for crisis management. Corporate crisis management differs from that of administration or a nation because if something goes wrong with it, in the worst case, it can lead to bankruptcy and the organization may disappear.

A number of studies have been made about corporate crisis management:

- 1. Leadership theory about how a leader makes decisions upon breakout of crisis
- 2. Theory of organizational crisis management that hypothesizes a crisis outbreak and discusses how to build an organization that responds to it and functions at difficult times
- 3. Crisis information theory to collect and properly spread information when a crisis is about to strike or has struck
- 4. Theory of crisis communication for both stakeholders outside the corporation and members within, about how to communicate what the crisis is about, and how to cope with it in the future
- 5. Theory of finance in relation to crisis management that avoids bankruptcy and balances cost and effect of crisis management

6. Study of failure that identifies lessons from major accidents and disasters and learns from failure in crisis management

Fink (1986) and Tedlow (2010) talked about the 1982 Tylenol incident as an example of best practice in crisis management. The event started with someone lacing poison in Johnson & Johnson's prime product painkiller Tylenol and killed seven people. In the "prodromal" stage, the top management upon receiving inquiry from the media took immediate actions without hesitation. They rushed in a helicopter to inspect the manufacturing factory, set crisis management headquarters, gathered all collectible information from the field, and set the fundamental guideline of "how to protect the consumers and how to protect the product."

Tedlow wrote that corporations fall into crisis when the head of operations hides inconvenient facts. In case of Johnson & Johnson, the company sincerely faced the facts without denying the inconvenience that poison was mixed in their product (Tedlow 2010). Actions by the top management was appropriate when the incident took a sharp turn in the "acute" stage.

Johnson & Johnson's corporate policy "Our Credo" lists it responsibility to the customers, employees, local communities, and shareholders. The top management placed the highest priority on social responsibility of the corporation and under the policy of "for the citizen's reliance, speak all that is known and immediately speak new information," carried out crisis communication to all stakeholders outside the company.

In the "chronic" state when things started to settle, communication inside the company also received attention. Top management wrote a letter to all employees explaining how they reacted to the crisis and what they intended to do. After the turmoil settled in the "resolution" stage, the social reputation of the company went up with its sincere crisis management despite seven deaths and additional cost of 100 million US dollars.

The framework of crisis management starting from the "prodromal" stage, then the "turning point" of an outbreak of a major accident or disaster, and then making transition through "acute," "chronic," and "resolution" stages also applies to nations, administration, and corporations. This chapter overviewed crisis management with nations, administration, and corporations, and the methodology is, of course, also applicable to individuals. Today, expressions and ideas of special incidences and crisis management for the living are widely spread.

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