

# **Disasters**

## **Psychological Elements and Operational Guidelines**

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## *CHAPTER 1: Incidents, Accidents, Emergencies and Disasters*

*“Disaster” comes from the Latin word “astrum,” which means star. The ancients believed that earthquakes, volcanoes, and the like were mandated by the heavens. Even today, we do not have much control over these natural disasters, but we do have control over their effects” (Zibulewsky, 2001).*

### ***Introduction***

‘Dis’ in Latin means ill, and ‘Astrum’ means star. Together, ‘disastrum’ means sick star. It is similar in ancient Greek, ‘dus’, means ill or bad, and ‘aster’ means star. Again, you have an ill-starred event. Take the Latin, *dis*, and combine it with the Greek *aster*, and you have the disaster (sick star) (Online Etymology Dictionary, 2021). When the ancients saw a star fall from the sky (shooting star) or other unusual celestial phenomena, such as a total eclipse of the sun, they thought of them not only as omens of bad things to come but as the loss of light or the loss of one’s guiding light. It is not much of a stretch to see a disaster, even in ancient people's view, as an event that takes away their guiding light and leaves them distressed, frightened, confused, and disoriented. Disasters have cognitive and emotional effects (psychological) on those who survive or witness them (Cohen & Ahearn, 1980; Farberow & Frederick, C.J., 1978 ;Juzwin, 2014).

This book will combine the fields of disaster management and the psychology of disasters into a useful guide for those who work to alleviate the suffering of people who have directly or indirectly experienced disasters and lost some of their guiding light.

## ***Incidents, Accidents, Emergencies, and Disasters***

Professionals, organizations, and governmental agencies may vary in their interpretations of the words incident, accident, emergency, and disaster. Much depends on how they were trained and their level of experience in the disaster field. The definitions presented in this chapter, however, are simple, straightforward, and easy to remember. Incident and accident share similarities, but emergency and disaster have more distinct meanings.

### **Incident**

An event, such as the dedication of a monument or a building, is a planned situation. An incident, on the other hand, is an unplanned occurrence. Incident, the first term associated with disasters, can be the cause of some confusion. An incident is defined as an unplanned situation or circumstance (National Incident Management System-NIMS, 2010).

An incident is typically, but not always, a minor event. If an unsecured oxygen bottle, for instance, is bumped and falls over in a hospital and hits a concrete wall, the compressed oxygen may be released from the cylinder. The uncontrolled release of oxygen, or any compressed gas, from its metal storage container is inherently dangerous because it can propel the cylinder at an extremely high rate of speed, causing damage, injury, and even death.

If the incident is minor and no damage, injuries, or deaths occur, an “incident report” is filled out, and steps are taken to require more training and attention to the safety issues associated with the handling of compressed gases.

In more serious occurrences, where there is considerable damage or destruction, or even injuries and deaths, a more serious incident investigation is required, often involving local, state, and federal investigators. Such investigations generate detailed final

reports. Depending on the circumstances described in the final report, fines may be levied, and punitive job actions, including suspensions, firings, and even criminal charges, may follow the investigations.

Incidents may be major. We use the term *Incident Command System* to describe managing a wide range of events, from small accidents to large-scale situations, major disasters, catastrophes, and even cataclysms. The word ‘incident’ has been used even in large-scale situations such as warfare to describe an event that caused a tremendous amount of damage and killed or injured many people. Incidents may be accidental or deliberately caused events (National Incident Management System-NIMS, 2010).

There is a good reason to use the same word *incident* for all these different events or disasters. Regardless of the event's nature and magnitude, operations must focus on the main tasks at hand. It is time-consuming to sort out descriptive terms for disasters when the situation is active and dangerous. Lives may be lost if leaders take the time to determine exactly what type of an event it is. Instead, the ‘incident’ was settled decades ago to keep the management simple and facilitate the effective resolution of the event (USDHS, 2020).

Disaster managers must assess the nature and magnitude of the event immediately because the size of the disaster, the dangers involved, and the effect on the community impacts how the event is managed. Different events will need different resources to deal with them appropriately.

Later, disaster responders, investigators, and researchers can take all the time they want to determine if an incident was a minor or major event once all the pertinent information is collected regarding the incident and its impact. It can be redefined as a disaster, a large-scale disaster, a major disaster, or even a catastrophe when lives are not at stake. However, until the situation

is secure and the threat to lives, potential injuries, or further damage is eliminated, all events will be referred to as *incidents* under the Incident Command System (ICS) (USDHS, 2020).

After the above descriptions, it should be easy to see how using the word incident may be confusing.

The following terms should help clarify more precise meanings in the fields of disaster management and the support services required in the aftermath of an incident.

### **Accident**

A closely associated term to the word incident in the disaster literature is ‘accident.’ An accident is an *unplanned, undesired, and unexpected* event that produces damage or harm to property or people. Accidents are not designed. Accidents occur by chance and are typically sudden occurrences. They may often cause injury, destruction, or death. Many times, the causes of an accident are not immediately known. They are unfortunate events resulting from carelessness, inattention, ignorance, unsafe practices, or sheer clumsiness. Most accidents generate punitive or punishing unexpected consequences.

Under certain circumstances, accidents may also have positive results instead of punishing consequences. Those results are called positive unexpected consequences. When they occur, people may feel fortunate. A soldier, for example, who puts a large thick coin (a cherished family heirloom) in the left pocket of his flak jacket for good luck feels very lucky indeed when the coin stops a flying bullet during a dangerous mission (Merriam-Webster Dictionary, 2024).

**NOTE:**

*As previously discussed under Incident above, an accident, an emergency, a disaster, a catastrophe, and a cataclysm are called incidents and are all managed by the Incident Command System (ICS).*

**Emergencies**

Emergencies is the next important term in the disaster literature. An emergency always requires immediate intervention because there is a significant threat of life loss, the loss of a limb, or an obvious threat to public safety and health.

Occasionally, an emergency escalates into a disaster, but most emergencies never rise to the disaster level. An emergency can usually be managed at a local jurisdictional level. That is, a local city or county will have sufficient resources within its fire, rescue, law enforcement, and medical services to care for victims of the emergency, extinguish a fire, or arrest a subject and enforce the law.

Under some emergency conditions, a limited number of additional resources from other jurisdictions will be needed to manage an emergency. The process of calling upon additional resources to aid a local jurisdiction is generally worked out and agreed to in advance. Many times, these agreements are in writing. They are developed to ensure that all adjacent jurisdictions have sufficient emergency resources to manage an emergency. These agreements are called *mutual aid agreements* (National Incident Management System-NIMS, 2010).

Mutual aid agreements also cover Critical Incident Stress Management (CISM) team responses from one jurisdiction to aid another when a community's emotional or crisis intervention needs are in jeopardy. There may be more people who need crisis intervention, for instance, than there are appropriate resources to care for them.

## **Disasters**

These overwhelming events surpass the local community resources and require multi-agency and, often, a multi-jurisdictional response. They are beyond the size and scope of emergencies. Disasters are associated with life threats and threats to safety, health, and community function, but the local jurisdiction lacks the resources, including equipment, staffing, and facilities to manage them. Most disasters do have emergency features to them. Failure to act quickly and effectively, therefore, jeopardizes life, and impairs physical and mental health as well as the infrastructure of the community. In subsequent chapters, the types and magnitude of different disasters will be covered in some detail.

A general rule of thumb in disaster work is the greater the size and intensity of a disaster, the greater the number and specialty functions of operations and relief teams that will be required to respond to the situation (National Incident Management System-NIMS, 2010).

The impact of an event can be so widespread and so devastating that operational and crisis teams from many jurisdictions will be needed for a prolonged period. This was the case in the attacks on America on September 11, 2001. Over a thousand operations personnel worked at the scene daily for many months. Over 500 national and international Critical Incident Stress Management teams were called into the scene for seven-day commitments, and these support activities continued for close to a year. Teams could be requested for additional visits for disaster relief work, but only after sufficient time had elapsed between the first visit and subsequent support services. Staggered operational support times were decided upon to protect the mental health of the crisis team members. Disaster work is intense, and excessive exposure can be

psychologically harmful to those who provide operational services or emotional support to others (Mitchell, 2022).

There is much more to say about disasters and disaster management services in the chapters that follow.

## *ABOUT THE AUTHOR*

Jeffrey T. Mitchell, PhD, CCISM, is a retired Clinical Professor of Emergency Health Services at the University of Maryland, Baltimore County. He spent 44 years working for the department, which is now known as the Department of Emergency and Disaster Health Systems (EDHS).

Dr. Mitchell also worked part-time for 36 years as an adjunct faculty member of the Emergency Management Institute (EMI) of the Federal Emergency Management Agency (FEMA) in Emmitsburg, Maryland.

He is a President Emeritus and current senior faculty member of the International Critical Incident Stress Foundation. He earned his Ph.D. in Human Development from the University of Maryland, College Park, Maryland. After serving as a firefighter/paramedic and a regional coordinator for the Maryland Institute for Emergency Medical Services systems, he developed a comprehensive, integrated, systematic, and multi-component crisis intervention program called “Critical Incident Stress Management.” He has authored over 275 articles and 26 books in the stress and crisis intervention fields.

He is a reviewer for the Journal of the American Medical Association, the International Journal of Emergency Mental Health, and the American Journal of Psychotherapy.

Among many awards and honors he has been privileged to receive, he was awarded the Bronze Medal from the Austrian Red Cross for his work in Crisis Intervention during the Kaprun, Austria, tunnel fire disaster in 2000. It was Austria’s deadliest rail disaster in Austria’s history.

In addition, Dr Mitchell provided Critical Incident Stress Management services in over 100 major disasters in the United States and in 10 other nations.

Dr. Mitchell achieved board certification in traumatic stress and credentialing as a Diplomate and a Member of the Board of Scientific and Professional Advisors of the American Academy of Experts in Traumatic Stress. He has been approved as a Certified Trauma Specialist by the Association of Traumatic Stress Specialists.

The United Nations appointed him to the United Nations Department of Safety and Security Working Group on Stress.



## ICISF VISION AND MISSION

The International Critical Incident Stress Foundation, Inc. (ICISF) promotes a world where people have access to Critical Incident Stress Management programs and services.

The mission of the ICISF is to be the leader in providing education, training, consultation, and support services in comprehensive crisis intervention and disaster behavioral health services to emergency responders, and other professions, organizations and communities worldwide.

## BECOME AN ICISF MEMBER

Membership in ICISF places the member in an international network of Critical Incident Stress Management teams, service providers, administrators, commercial and industrial services, researchers, and educators who function in the field of activity associated with critical incident stress and post trauma syndromes.

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