Starting Point

Go to www.wiley.com/college/McEntire to assess your knowledge of the basics of human behavior during disasters. Determine where you need to concentrate your effort.

What You'll Learn in This Chapter

▲ The impact of Hollywood and media portrayals about disaster behavior
▲ Research about human responses to disasters
▲ Reasons why researchers must study human behavior
▲ What people actually do in the aftermath of a disaster
▲ The importance of understanding behavior correctly

After Studying This Chapter, You'll Be Able To

▲ Compare and contrast the meaning of the words “myth” and “exaggeration”
▲ Examine what really happens in disaster situations
▲ Examine ways to prevent the spread of incorrect views about human conduct after disasters
▲ Examine how views about behavior affect response and recovery activities

Goals and Outcomes

▲ Evaluate the accuracy of Hollywood films and media broadcasts about disaster behavior
▲ Assess between fact and fiction about disaster behavior
▲ Argue against inaccurate views about disaster response and recovery operations
▲ Predict human behavior in disasters and response accordingly
INTRODUCTION

In order to respond to a disaster effectively, it is imperative that you understand people’s misperceptions about human behavior. Much of this comes from Hollywood films and the mass media. Unfortunately the information presented in movies and by reporters focuses on sensational and unusual stories. For this reason, it is vital that you are aware of the research findings about human behavior in disasters. At the same time, you must also recognize that there is some degree of truth in the public’s perception of post-disaster behavior. One way to ensure successful response and recovery operations is to understand exactly how people behave after disasters.

3.1 The Impact of Hollywood and the Media

Most people get their views about human disaster behavior from films and the media (Fischer 1998). Movies are entertaining, of course, and media reports can keep one riveted to a disaster as it unfolds. Unfortunately, such views are almost always inaccurate. Scholars have labeled these inaccuracies as “myths.” A myth is defined in many dictionaries as a false belief. It is difficult to counter such incorrect portrayals about disaster behavior that are quickly spread through modern video footage.

3.1.1 Hollywood

Hollywood is one of the major contributors to the public’s perceptions about disasters. There are several movies that portray people’s behavior in a negative and fictitious light.

Dante’s Peak is a good example. This movie relays the story about a volcanic eruption in the Northwestern United States. After several deaths result from the emission of dangerous gases from the volcano, community leaders hold a meeting to calm the public. During this gathering, an earthquake occurs and people panic as a result. They run haphazardly out of the building and begin to evacuate in droves as the volcano explodes from the mountain above them. Cars and trucks run into each other as their occupants drive frantically to escape the oozing lava and falling ash. Roads become clogged, and people do all they can to protect themselves while ignoring the needs of others. The movie suggests that when disaster strikes, people behave erratically.

Volcano is another disaster movie. It provides an amusing, but not completely accurate, view of human behavior in extreme events. After workers die in an underground utility tunnel in Los Angeles, a scientist named Dr. Amy Barnes discovers a growing volcanic threat. While investigating the source of deadly gases below ground, the volcano becomes active. Dr. Barnes climbs out of the
hole to save her life. When she arrives on the surface, she takes off her breathing apparatus and sets it down nearby. As she turns around, a bystander grabs her mask and runs off with it. This film gives the impression that theft and looting are common in disasters.

The movie Asteroid also provides an interesting portrayal of disasters. Upon learning that an asteroid is about to hit the United States, the government begins a massive evacuation. As people leave the target area, one person becomes irate because of the government’s decisions and shoots a FEMA official at an airport hangar. This movie, like many others, presents lawlessness and violence as the norm in disasters.

3.1.2 The Media

News reports, whether they come from television coverage, radio broadcasts, or newspaper articles, also portray human behavior in a dismal fashion. News reports and headlines tend to suggest that victims cannot care for themselves. After Hurricane Carla, several newspapers ran a headline noting “More than 100,000 Persons Flee in Near Panic.” This occurred despite the fact that less than 1% of the evacuees were involved in a traffic accident (Quarantelli and Dynes 1982, p. 70). Other stories claim that businesses price-gouge the victims and survivors.

To some extent, such reports are to be expected. The media is interested in abnormal events. For instance, if a dog bites a man, that is not particularly newsworthy. However, if a man bites a dog, this would certainly generate a great deal of publicity! Such unusual stories are the ones the media is infatuated with. They keep the viewers, listeners, and readers interested because of the drama being presented. Media ratings rise as a result.

Nevertheless, the accuracy of such presentations may be in question. Truth is neglected because the media is not providing the full story. The media loves sensational stories. Since the media wants a unique angle on the human

FOR EXAMPLE

Media Reports of Disasters

Turn on the television to any news broadcast and you will likely find at least one disaster-related story. News anchors or reporters will describe what occurred and the resulting impact. Chances are, they will also mention something about looting: it is occurring after the disaster, residents are worried about their property being stolen, law-enforcement officials are out in force to discourage looters. The media seems to be obsessed with looting, even though it is uncommon in most disasters.
disaster-related activities, they are not always careful about gathering all of the facts. For example, one study revealed that people sorting through debris after one disaster were not looters but were good Samaritans who were trying to collect belongings so they could be returned to their rightful owners (Fischer 1998). The media, quickly reacting to the appearance of wrongdoing, incorrectly reported that a large group of people was engaging in looting behavior. This is an excellent, but disappointing, example of how people erroneously gain their views about human behavior in a disaster.

3.2 Research on Myths

Many sociologists have studied human behavior in disaster (see Table 3-1), and a great deal of literature has thus been written about the topic of disaster “myths.” As an emergency manager, you should be familiar with this literature. Much of this research is dated, but prior studies reveal “most persons held preconceived notions about disaster behavior that were essentially untrue.” (Quarantelli and Dynes 1972, p. 67). In other words, “many common beliefs and perceptions about disaster response and post-impact behavior are not empirically valid” (Wenger, Dykes, and Sebok 1975, p. 33). Recent research continues to reiterate previous findings (Tierney, Lindell, and Perry 2001). New investigations are being undertaken after Hurricane Katrina and should be out shortly.

One of the most widely held myths according to the literature is that people act irrationally in disaster situations. It is believed that people always panic. Panic is people’s inability to think clearly or their tendency to run frantically from buildings or the disaster scene. Another related belief is masses of people evacuating at once.

It is true that many people will leave the scene of a disaster. This need not result in panic, however. Research suggests that “despite the fact that people may
### Table 3-1: Respondents' Beliefs About Disaster Response

<table>
<thead>
<tr>
<th>Statement</th>
<th>Agree (%)</th>
<th>Disagree (%)</th>
<th>Undecided or No Response (%)</th>
</tr>
</thead>
<tbody>
<tr>
<td>A major problem community officials confront when faced with a natural disaster is controlling the panic of people fleeing from the danger area.</td>
<td>83.6%</td>
<td>10.2%</td>
<td>6.2%</td>
</tr>
<tr>
<td></td>
<td>(296 respondents)</td>
<td>(36 respondents)</td>
<td>(22 respondents)</td>
</tr>
<tr>
<td>Looting rarely occurs after the impact of natural disasters</td>
<td>27.7%</td>
<td>64.7%</td>
<td>7.6%</td>
</tr>
<tr>
<td></td>
<td>(98 respondents)</td>
<td>(229 respondents)</td>
<td>(27 respondents)</td>
</tr>
<tr>
<td>When warned of an impending disaster, people are willing to cooperate and evacuate the area.</td>
<td>80.2%</td>
<td>13.6%</td>
<td>6.2%</td>
</tr>
<tr>
<td></td>
<td>(284 respondents)</td>
<td>(48 respondents)</td>
<td>(22 respondents)</td>
</tr>
<tr>
<td>The crime rate of a community usually rises after it has experienced a natural disaster.</td>
<td>50.8%</td>
<td>34.4%</td>
<td>14.4%</td>
</tr>
<tr>
<td></td>
<td>(180 respondents)</td>
<td>(123 respondents)</td>
<td>(51 respondents)</td>
</tr>
<tr>
<td>Immediately following the impact of a disaster, the disaster victims are in a state of shock and unable to cope with the situation by themselves.</td>
<td>73.7%</td>
<td>19.2%</td>
<td>7%</td>
</tr>
<tr>
<td></td>
<td>(291 respondents)</td>
<td>(68 respondents)</td>
<td>(23 respondents)</td>
</tr>
<tr>
<td>The news media accurately portray the amount of devastation resulting from a natural disaster.</td>
<td>54.5%</td>
<td>35.6%</td>
<td>9.9</td>
</tr>
<tr>
<td></td>
<td>(193 respondents)</td>
<td>(126 respondents)</td>
<td>(35 respondents)</td>
</tr>
<tr>
<td>Martial law has never been instituted in a disaster area in the United States</td>
<td>17.2%</td>
<td>60.2%</td>
<td>22.6%</td>
</tr>
<tr>
<td></td>
<td>(61 respondents)</td>
<td>(213 respondents)</td>
<td>(80 respondents)</td>
</tr>
</tbody>
</table>

Adapted from Wenger, Dykes, and Sebok 1975, p. 42.
well be terrified in disaster situations, even to the point of feeling that their lives are in imminent danger, they almost never resort to the kind of highly individualistic, competitive, headlong flight behavior that characterizes true panic” (Tierney 2003, p. 35). Panic flight is rare, occurring only when there is an imminent threat to the well-being of the person or people evacuating.

In addition, not everyone evacuates when requested to do so. Many people will ignore warnings and remain in the area that will be or has been affected by a hazard. This creates the need for dangerous search and rescue missions from police, fire, and military personnel.

A second major myth is in regards to antisocial behavior. This includes at least three aspects. First, people assume that *looting*—people searching debris or damaged homes with the intention to steal others’ personal belongings—occurs rampantly after a disaster. Because doors and windows are broken, it is believed that people will automatically enter businesses and homes to steal food, electronic equipment, and other goods. This belief occurs even though much of the property is damaged beyond repair. Second, it is assumed that people will resort to violence to protect their interests. Guns are needed to fight off potential looters. Third, other types of deviant behavior, including price gauging, are viewed as predominant behavioral patterns. People think other individuals or groups will take advantage of victims to make money.

In most disasters, however, there are only reports of antisocial behavior. In other words, people think that looting might be taking place, but they have no evidence to support their assertions. In other cases, people expect there will be looting in disasters because it has occurred in riots and other forms of civil disturbance. Research reveals that this assumption is often erroneous.

Price gauging, or the selling of goods and services at a price higher than the normal market rate, is not a widespread phenomena. Most citizens and business recognize that victims have experienced severe trauma. They would not think of adding to their problems. Some scholars even suggest that criminal activity may witness a decrease after a disaster. For instance, “in the month in which Hurricane Betsey struck New Orleans, major crimes in the city fell 26.6 percent below the rate for the corresponding month of the previous year. Burglaries reported to the police fell from 617 to 425. Thefts of over $50 dropped from 303 to 264, and those under $50 fell from 516 to 366” (Quarantelli and Dynes 1972, p. 69). Similar drop in criminal activity may have been noted in Oklahoma City after the bombing of the Murrah Federal Building. There is a possibility that reporting of crime may be inaccurate, however, since police are concerned about bigger issues than petty theft after a disaster.

Another myth relates to people taking advantage of disaster victims to make money. For instance, it is reported that stores sell ice at inflated costs, as people need to keep food cool due to the loss of power to refrigerators. In other cases, it is commonly assumed that convenience stores raise the price of gasoline as
people evacuate. Although such behavior does occur, it is probably the exception rather than the norm.

An additional myth is that emergency workers are unreliable in the aftermath of disaster. This is known as role or post abandonment. It is believed that police officers, firefighters, and EMTs will not fulfill their roles. They will leave their post when disaster strikes to take care of personal or family needs. Emergency workers are believed to fear the danger they face. Others are expected to quit their jobs to take care of themselves and their families. These views cannot be corroborated in the vast majority of cases.

People also have wrong or incomplete views about disaster victims. Some think that victims will always be in a state of shock—a period of disbelief after disaster, which renders them unable to think or take care of themselves. “The common belief is that shock leaves the victims dazed and disoriented, unable to cope with the immediate task of recovery” (Quarantelli and Dynes 1972, p. 36).

Evidence suggests that victims exhibit shock symptoms in a minority of disaster cases. Most victims do not have long-lasting mental health effects. In addition, the vast majority of people will not require shelter or housing assistance. Typically, “congregate care utilization is likely to be in the range of 5-15 percent” (Tierney, Lindell, and Perry 2001, p. 97).

<table>
<thead>
<tr>
<th>Table 3-2: Respondents’ Beliefs About Effective Personal Aid to Disaster Victims</th>
</tr>
</thead>
<tbody>
<tr>
<td>Respondents were asked to complete this statement: What is the most effective assistance you as a concerned citizen can offer to the victims of natural disasters? Would you:</td>
</tr>
<tr>
<td>a) send supplies or money to the strucken community?</td>
</tr>
<tr>
<td>b) go in person to the community to help?</td>
</tr>
<tr>
<td>c) send money to disaster-relief organizations?</td>
</tr>
<tr>
<td>d) do nothing?</td>
</tr>
<tr>
<td>e) undecidet</td>
</tr>
</tbody>
</table>

Adapted from Wenger, Dykes, and Selbok 1975, 42.
3.2 RESEARCH ON MYTHS

There are other myths about disasters that should be mentioned. It is frequently assumed that the media provides an accurate portrayal of the disaster. It is believed that the statistics regarding the number of dead or injured are complete and trustworthy. Because the media focuses excessively on destruction, the viewers are given an inflated impression about the extent of the situation. People therefore believe that a massive amount of aid is needed.

Research also indicates that the initial media reports are almost always inexact. No one, including the media, has a complete and accurate understanding about disasters initially because information is limited, sketchy, and uncorroborated. Estimates regarding those killed and otherwise affected are almost always overestimated or underestimated. Also, in their efforts to help disaster victims or increase interest in the disaster, reporters frequently request donations even though they may not be needed.

A final myth is that martial law must be imposed after disasters. Martial law is the replacing of civilian authority with that of the military. It involves the imposition of strict curfews and limitations on people’s movement and activity. It is commonly held that the military and National Guard must be mobilized and utilized to maintain social stability when disasters occur. Research shows that martial law may never have been imposed after disasters in the United States. “Press reports of martial law inevitably turn out to be entirely false or incorrect descriptions of limited emergency power usually given to local police by mayors or city councils—usually to bar sightseers. In no way do such actions imply or involve cessation of regular civilian authority in the area” (Quarantelli and Dynes 1972, p. 69).

To summarize, irrational behavior, anti-social behavior, unreliable emergency workers, the helpless state of disaster victims, and other myths are commonly held views about people’s behavior in disaster. They do not appear to be correct in most cases.

FOR EXAMPLE

Alleged Price Gauging

Two scholars traveled to Texas to study the community response to Hurricane Gilbert (Fischer 1999, p. 4). While watching media broadcasts of the event, news reporters claimed that local merchants were arrested for charging high prices for the plywood needed to protect windows from strong winds. The researchers called the police to see if this was accurate. The answer they received was “no.” The media should have reported instead that the city council had passed an ordinance to prevent such behavior.
3.3 Evidence of Exaggeration

The above sections raise some interesting questions about human behavior in disasters. Is the portrayal of disasters by Hollywood and the media completely wrong? Is the research literature entirely correct to assert that widely held views about disaster behavior are purely myths? The answer to both of these questions is somewhat complicated, although in both cases it is probably no. There is now research that seems to question our prior understanding on the matter (see Table 3-3 taken from John Handmer 2006).

Films and media reports may have some element of truth, but the word “myth” could be slightly misleading. It might be more realistic, therefore, to alter our choice of words slightly. When speaking about people’s perspectives of human behavior, we might want to use the term “exaggeration” instead of myth. An exaggeration is a simplistic overstatement about some type of phenomena. This term acknowledges that there could be some element of truth to the impression given by movies and news reports. This should not discount the predominant behaviors exhibited in disasters, however. As an emergency manager, you should be aware of this fine point of distinction.

For instance, people have at times participated in “flight behavior” when a threat requires immediate action. On February 21, 2003, the band Great White was performing in a night club in West Warwick, Rhode Island. The pyrotechnics used by the group caught the ceiling on fire. The tiles on the ceiling were extremely combustible, causing the fire to spread rapidly throughout the structure. As the attendees noticed the dangerous situation, they scrambled to vacate the building. Because most exited the same way they entered, the hallways and doorways immediately became jammed and more than 100 people died as a result. Another example is from the 9/11 terrorist attacks. When the buildings collapsed, people ran down the streets to get out of harm’s way. This, of course, may amount to rational behavior to save one’s life. But it is often portrayed by Hollywood and the media as panic, regardless of the motive.
There are also several factual reports of a few individuals who have had their property stolen after a disaster. When a computer failed due to the collapse of the World Trade Center, at least 66 people illegally withdrew 15 million dollars from the Municipal Credit Union in New York City (Saulny 2002). There was also a visible degree of looting in New Orleans after Hurricane Katrina, as witnessed in many reports from journalists for local, national, and international media outlets. Although some people failed to adequately prepare for this situation, others did need food and water to sustain life (and may have been justified in caring for their physical needs under such dire circumstances). However, many others ran off with TVs, other electronic equipment, and clothing or shoes that had little to do with immediate needs after the hurricane.

Victims and communities may also be taken advantage of in some disasters. Vendors or contractors who get paid in advance will sometimes fail to complete their work. Businesses can also misrepresent their services and goods in advertisements. As an example, a scam promoted by one corporation promised consumers would be reimbursed by FEMA if they purchased air conditioners and purifiers after the 9/11 terrorist attacks. Flyers and websites implied that everyone would be eligible for this special offer. These advertisements did not mention the unique requirements for each grant (FEMA 2002). The FBI has also noted that there were several fraudulent websites claiming to collect donations for the Hurricane Katrina victims.

Post abandonment may not be a completely untrue perspective either. Investigation after Hurricane Katrina illustrated that a few police officers did leave their duties unattended. Some were worried about having sufficient personal protection. Some stopped patrolling the streets during the flooding and went home to care for loved ones. Others even participated in criminal behavior such as looting and lost their jobs as a result. One officer left his post, stole a car, and was arrested a short time later. This is certainly the exception, however, not the rule.

It is also true that a minority of victims can be stunned by the death, property destruction, and social disruption caused by disasters. Victims may be emotionally distraught. Survivors may wander aimlessly around their property, trying to salvage anything worth retrieving. Some may cry and become depressed as a result of lost loved ones. Others may question their future in terms of housing and employment. This negative impact is to be expected. Who would not be overwhelmed initially with the grief and chaos that disasters produce?

Although the need for aid is regarded to be a myth, disasters always require at least some form of outside assistance. In fact, aid from nearby communities or from donors around the country is sometimes essential in major events. Food, water, supplies, emergency workers, and reconstruction specialists are therefore sent in to save lives and help the community recover. However, it is certainly doubtful that affected individuals and jurisdictions need everything. Politicians may overstate need in order to acquire as much free federal disaster assistance as possible.

Finally, disasters may require a heavy law-enforcement and military presence to maintain order. After Hurricane Katrina, lawlessness could be clearly observed.
Table 3-3: Disaster Myths, Reality, and New Orleans

<table>
<thead>
<tr>
<th>“MYTHS” about what happens in a disaster, drawing on the research literature</th>
<th>“REALITY” as established by research &amp; experience</th>
<th>NEW ORLEANS—What seemed to happen</th>
</tr>
</thead>
<tbody>
<tr>
<td>Widespread looting is expected.</td>
<td>There is no increase in criminal activity and little or no looting.</td>
<td>We all saw “looting,” and there were numerous media reports and reports by local officials, people in the streets, blogs, etc. Evidence of looting by officials. Some reports of looting and criminal behavior have been withdrawn. Looting has been redefined by some commentators to exclude much of the behavior: the hungry were feeding themselves, the drug addicted were raiding hospitals for their needs, and so on. Criminal drug gains were very active.</td>
</tr>
<tr>
<td>Helplessness and abandonment of the weak. Disasters strike randomly.</td>
<td>People help those in need. Differential impacts on the vulnerable.</td>
<td>More than 100,000 people did not have the means to evacuate and became dependent on others to keep them alive. This help was very slow to come and seriously inadequate. Some in nursing homes and private hospitals were abandoned and died. (St. Rita’s Nursing Home—pending criminal charges).</td>
</tr>
<tr>
<td>Officials experience conflict between their official duties and family demands. Some will hide from the crisis.</td>
<td>Officials will do their job and not abandon their posts because of “role conflict.”</td>
<td>Large-scale abandonment of officials’ posts and duties. Fifty officers were fired for going AWOL. 228 are still under investigation (Perlstein, 2005). Police were also caught looting department stores. The situation seemed well beyond the capabilities of CEOs at all levels of government. Priority went to security rather than attending to those desperate for food and water and to those dying for want of medical attention. There were no public heroes.</td>
</tr>
</tbody>
</table>
### 3.3 Evidence of Exaggeration

<table>
<thead>
<tr>
<th>“MYTHS” about what happens in a disaster, drawing on the research literature</th>
<th>“REALITY” as established by research &amp; experience</th>
<th>NEW ORLEANS—What seemed to happen</th>
</tr>
</thead>
<tbody>
<tr>
<td>Large-scale demand for official temporary emergency accommodation.</td>
<td>Little need for official accommodation.</td>
<td>About 200,000 people were being housed through official channels a month and a half after the disaster. About 120,000 needed accommodation on the day. The mass evacuation centers were overwhelmed. (There is a dispute over the actual figure, with much higher numbers occasionally quoted.)</td>
</tr>
<tr>
<td>People take advantage of the vulnerable.</td>
<td>Much behavior is altruistic.</td>
<td>There was no shortage of price gouging and people being evicted from private rentals, creating homelessness (Hartman, 2005) and adding to the burden for public authorities. The town of Gretna, across the Mississippi from New Orleans, barricaded itself and at gunpoint prevented refugees from entering the town (Khaleej Times, 2005).</td>
</tr>
<tr>
<td>Outside rescue teams save many lives.</td>
<td>People next door do the saving as outside help may take too long.</td>
<td>There are reports of people assisting each other, but the general picture is of an absence of rescue and help by neighbors.</td>
</tr>
</tbody>
</table>

Adapted from Handmer 2005, p. 32.

In some areas. In addition to the occurrence of looting already mentioned, some people broke into hospitals to obtain narcotics for illicit drug use. Weapons were also fired at those trying to prevent crime or rescue victims stranded on rooftops. People, despite of their own responsibility to care for themselves and others, were angry because of the slow federal response. Citizens were also upset with those who were hoarding relief supplies. The city of New Orleans appeared to be under a condition of anarchy for several days after Katrina struck. The situation was so dire that some people called for martial law. This was never carried out, however. Instead, curfews were established and the streets were patrolled to purge them of criminals. This case, as well as the other evidence presented above, indicates that there might be some degree of truth regarding...
FOR EXAMPLE
Evacuation After Hurricane Rita

Because the entire nation had witnessed the dangers of not evacuating after Hurricane Katrina, hundreds of thousands of people left the Gulf Coast region of Texas when Hurricane Rita neared. Even those in the interior got in their cars and left, even though they were probably far enough inland to avoid major damage from the approaching storm. The presence of so many vehicles on the road clogged the major arteries going away from Galveston and Houston. The situation required that both lanes had to be opened going northbound, a practice known as contra-flow that is common in Florida and other Gulf Coast states. Some people ran out of gas in the stop-and-go traffic, which further exacerbated the situation. This over-response has been labeled the "Katrina effect."

Hollywood movies and media reports. However, "while the stories may be factually correct, they are not representative" (Quarantelli and Dynes 1972, p. 70). It may be wise for you to label these behaviors as exaggerations instead of myths.

SELF-CHECK

3.4 Realities About Response and Recovery

The previous comments must not discount human behavior research. Studies do provide a dramatically different view than is commonly presented by Hollywood and the media. During and after disasters, people act rationally and altruistically. Workers typically do not neglect their duties, and victims can do much to take care of themselves. Other common perceptions about the media, the need for disaster relief, and the use of martial law are also overstated. In order to react
3.4 REALITIES ABOUT RESPONSE AND RECOVERY

Successfully to a disaster, you must understand actual behavior better than anyone else in your community.

Instead of showing extreme panic in disasters, people are generally very rational (Quarantelli 1986, p. 4). People typically respond with logical and calm behavior. They often know what to do to care for themselves and others, and they react accordingly. For instance, while the World Trade Center towers burned out of control on 9/11, people were seen walking calmly out of the building as if they were reacting to a fire drill. Rather than wait for emergency personnel to arrive at the scene, victims will often care for themselves and others.

What is more, the belief about mass evacuation is often overstated. It is true that many people do in fact leave an area when requested to do so. However, it is also likely that some people will not evacuate. These individuals will ignore warnings, potential risks, and requests for evacuation. Such people often require rescue during flooding incidents. Hurricane Katrina illustrated these points clearly. About 100,000 people did not or could not leave New Orleans. Many were rescued by the National Guard and the Coast Guard. Therefore, “it appears that the major problem in an emergency is getting people to move, rather than preventing wild panic and disorderly flight” (Quarantelli and Dynes 1972, pp. 67–68).

If there is looting or antisocial behavior during disaster, it is typically exhibited only among a small minority of the population. In fact, some studies reveal that deviant behavior actually declines in times of disaster. The vast majority of people illustrate pro-social behavior. They work together to solve mutual problems. For example, co-workers help to evacuate the physically disabled if their building is on fire. Taking this into account, Quarantelli observes, “if disasters unleash anything it is not the criminal in us, but the altruistic” (1986, p. 5).

The assertion that emergency workers will always fail to report to work is ludicrous. Police, firefighters, and medical personnel often go to work or volunteer in times of disaster even when they have not been asked to report for duty. In fact, there are often too many emergency personnel responding to the disaster (Drabek 1986). Emergency workers recognize the dangers inherent in their work, but they do it anyway. For instance, on 9/11, firefighters entered burning buildings to rescue those that were trapped. Furthermore, emergency workers do not always stop working to take care of their own personal or family needs. In contrast, many firefighters left home and arrived at the scene and began to help without reporting to incident commanders. Responders often work too long and often burn themselves out responding to the disaster. Some may fail to perform their assigned duties, but this is certainly the minority.

Although some victims may be overwhelmed or otherwise incapacitated due to the disaster, most are not helpless. Those affected by disaster generally take care of themselves and others (Tierney, Lindell, and Perry 2001). As an example,
some may fight fires with extinguishers or garden hoses until firefighters arrive. Others provide basic first aid to the wounded. Victims are creative in how they respond to the needs. For example, people trapped in collapsed buildings eat gum to stay alive and whistle or tap debris (with fingers, hands, rocks, or other debris) to help emergency workers locate them.

Because the expected number of people needing shelters is often overestimated, many responding organizations set up and operate shelters after the disaster. However, most victims will not use them. Evacuees tend to stay in hotels or visit friends and relatives (Quarantelli 1995). They prefer to stay in comfortable accommodations with people they are familiar with. In fact, some people stay in hotels rather than shelters. They are subsequently surprised when they find out the federal government will not reimburse them for their hotel stay.

There is another reality that should be considered. The initial reports by the media are likely to be inaccurate, incomplete, and even misleading (Scallon 1985). For instance, the number of deaths reported by the media is often blown out of proportion. After the 9/11 terrorist attacks, it was believed that up to 50,000 people could have been killed. The actual number was around 3,000. The number of deaths after Hurricane Katrina was also different than predicted.

Although specific types of assistance may be needed, certain types of relief are frequently unwarranted. Food, clothing, and other supplies are generally available to victims and emergency workers. If aid is not present initially, it is likely that it will be after the media reports the need. In many disasters, there is an overabundance of aid. Such aid may create additional problems because it has to be disposed of or sorted and distributed (Neal 1994).

Finally, major disasters do occasionally require the services of the National Guard and armed forces. The governor or the president may request reservists and active-duty personnel to keep people away from dangerous areas or clean up debris. This is not martial law, however. Although martial law has been imposed in wartime and due to disgruntled employees or workers on strike (see http://www.usconstitution.net/consttop_mlaw.html), “it has never been necessary to declare martial law following any U.S. disaster” (Tierney, Lindell and Perry 2001, p. 110). Even with the social chaos after Hurricane Katrina, martial law was not enacted. Some force was needed at times to reign in criminals toting weapons. But martial law was not imposed even in this dire situation. Americans are extremely hesitant to turn over total control to government officials, police, and the military. For example, President Bush was criticized for wiretapping potential suspects after the 9/11 terrorist attacks.

All of this suggests that people tend to behave in ways that are not always consistent with Hollywood and media portrayals. Research findings on myths may also be questionable in regards to certain situations, although they are generally accurate most of the time. You should be cognizant of actual human behavior after disasters.
3.4 REALITIES ABOUT RESPONSE AND RECOVERY

The Reaction to Hurricane Katrina

Hurricane Katrina illustrated both the worst and best of people in New Orleans. Some people looted and engaged in violent behavior after the disaster. However, many people from inside and outside the community worked tirelessly to respond to victims' needs. The deviant behavior after Hurricane Katrina may be a reflection of the continuities in society rather than a sharp break from daily life. "An orthodoxy discussed more among researchers than practitioners, is that disasters tend to highlight or sometime exacerbate existing trends, than that create entirely new circumstances. Given the 'normal' circumstances in New Orleans, what was seen and the fall out does not seem so surprising" (Handmer 2006, p. 33). The case of New Orleans is somewhat unique. It is also complicated. "Press and agency apologies for exaggerating aspects of the extent of the crisis are emerging, although some evidence suggests that aspects were even worse than reported" (Handmer 2006, p. 29).

SELF-CHECK

- Can fleeing the scene of a disaster be rational?
- Do all people leave when an evacuation request is made?
- Do many crimes decline after a disaster?
- Will emergency workers show up, even when they have not been requested?
- Are most people altruistic after disaster?
- Why do most individuals and families avoid public shelters?

3.5 The Importance of Understanding Behavior Correctly

Does human behavior in disaster really matter? The answer is an emphatic "yes"! You must base your post-disaster decisions and policies on what people are most likely to do. You don't want to implement choices on incorrect or incomplete
beliefs. Doing so would unintentionally add to the problems associated with disasters. For example:

▲ The media’s reporting of a “panicked evacuation” may make the emergency manager and government look incompetent. It could also postpone necessary evacuations.
▲ Inaccurate beliefs about human behavior may have led to the inability of DHS to create an effective homeland security advisory system for terrorist attacks.
▲ The belief that there will be massive amounts of looting and price gouging may take law-enforcement officials away from more important work after a disaster (e.g., traffic control). Reports of criminal activity and the law-enforcement responses may also prevent victims from returning to their homes to salvage their personal belongings.
▲ The assumption that responders will be unreliable may result in unnecessary communications to make sure emergency workers are doing their jobs. This ties up communication channels and interrupts vital activities.
▲ An overstatement of the disaster’s impacts may result in the delivery of unnecessary donations. Volunteers may also show up at the scene when they are not needed.
▲ The perception that martial law will be imposed could cause some potential volunteers to refrain from participating in the response and recovery.

Fortunately, emergency managers are more likely to have accurate perceptions of reality today. Henry Fischer surveyed 54 local emergency managers in Ohio to assess their understanding of actual disaster behavior. His study indicates that education and training have helped emergency managers to gain “an increasingly accurate understanding of the actual behavioral response to disaster” (Fischer 1998, p. 94). Table 3-4 reveals the percentage of respondents that had correct views about human behavior in disasters. Progress has therefore been made over the past two decades. Fewer emergency managers accept the portrayals of Hollywood and the media than a decade ago.

However, inaccurate views of disaster behavior are still prevalent among some emergency managers (particularly on the behavioral statements in the lower half of the charts). The public at large has even more room for improvement. Therefore, it is necessary to reiterate that Hollywood and the media frequently do not accurately portray human behavior in disasters. People tend to act rationally and exhibit a great deal of pro-social behavior. Emergency workers are generally selfless individuals that respond to the needs of disaster-affected communities. Victims are most
3.5 THE IMPORTANCE OF UNDERSTANDING BEHAVIOR CORRECTLY

likely to be proactive and take care of themselves and others. Media reports about disaster impacts are often overstated. Too much aid is frequently sent to the scene. The government has not imposed martial law when disaster strikes. The reality of disaster behavior is thus quite different from the exaggerations that are so commonly believed. Thinking otherwise adversely affects response and recovery operations. Nevertheless, more studies will be needed in the future. As an emergency manager, it is your responsibility to maintain awareness of this research.

SUMMARY

Having correct views of disaster behavior is one of the best ways to promote successful response and recovery operations. Unfortunately, Hollywood films and the media often incorrectly portray human behavior in disasters. People tend to

### Table 3-4: Emergency Managers Views About Disaster Behavior

<table>
<thead>
<tr>
<th>Behavior Statement</th>
<th>Percentage Correct</th>
</tr>
</thead>
<tbody>
<tr>
<td>Emergency workers will not be selfish</td>
<td>98</td>
</tr>
<tr>
<td>There will not be volunteer shortage</td>
<td>85</td>
</tr>
<tr>
<td>Local leaders will not panic</td>
<td>83</td>
</tr>
<tr>
<td>Local citizens will help each other</td>
<td>80</td>
</tr>
<tr>
<td>Local citizens do not price gouge</td>
<td>74</td>
</tr>
<tr>
<td>Local merchants do not price gouge</td>
<td>72</td>
</tr>
<tr>
<td>Local residents refuse to evacuate</td>
<td>68</td>
</tr>
<tr>
<td>EMS workers will not leave posts</td>
<td>68</td>
</tr>
<tr>
<td>Survivors will not behave selfishly</td>
<td>67</td>
</tr>
<tr>
<td>Shelters will often be understated</td>
<td>63</td>
</tr>
<tr>
<td>Residents will be looting</td>
<td>61</td>
</tr>
<tr>
<td>There will not be too few shelters</td>
<td>54</td>
</tr>
<tr>
<td>Citizens will not panic</td>
<td>50</td>
</tr>
<tr>
<td>Residents will not behave irrationally</td>
<td>46</td>
</tr>
<tr>
<td>Survivors will know what to do</td>
<td>39</td>
</tr>
<tr>
<td>Damage estimates not initially accurate</td>
<td>37</td>
</tr>
<tr>
<td>Death/injury estimates not accurate</td>
<td>31</td>
</tr>
</tbody>
</table>

Adapted from Fischer 1998, 102.
believe these sensational reports, which scholars label as myths. At times, human disaster behavior is less than desirable. But, for the most part, humans do try to assist one another in time of disaster. For this reason, you may wish to consider using the term “exaggeration” instead of “myth.” You should also develop a solid understanding of how people actually behave in disasters. Failing to do so could jeopardize post-disaster activities.

FOR EXAMPLE

Volunteers After the Loma Prieta Earthquake

After experiencing the Loma Prieta earthquake in October 17, 1989, relief agencies and citizens immediately began to respond to the disaster. Within 30 minutes, the Local Amateur Radio Group set up communications among its members in the affected area. One of its main goals was to assist the operations of the American Red Cross. Volunteers from the Red Cross reported to headquarters and began to register victims and volunteers, establish shelters, feed victims and emergency workers, and take care of other pressing needs. The Salvation Army also distributed food as well as clothing, blankets, and other supplies to disaster victims. The Local Volunteer Coordination Council met to begin matching volunteers with community needs. According to Neal, “One staff member estimated that for every call that requested a volunteer, five people called to volunteer their services. For example, engineers, plumbers, daycare professionals, and businesses called to offer resources (e.g., personnel, expertise, equipment)” (1990, p. 94). It appears that most organizations and people work diligently and cooperatively to help those affected by disasters.

Could media reports of panic make response activities look unsuccessful?
Do reports of looting keep police from other important responsibilities after a disaster?
Is it necessary for superiors to always check on first responders?
Do reporters influence the amount of donations that arrive in a disaster-stricken community?
Can education and training change perspectives about human behavior in disasters?
KEY TERMS

Exaggeration  A simplistic overstatement about some type of phenomena.
Looting  Stealing others' personal belongings.
Martial law  The replacing of civilian authority with that of the military.
Myth  A false belief.
Panic  People's inability to think clearly or their tendency to run frantically from buildings or the disaster scene.
Price gauging  The selling of goods and services at a price higher than the normal market rate.
Role or post abandonment  Not showing up to work during an emergency.
Shock  A period of disbelief after disaster that renders people unable to think or take care of themselves.
ANTICIPATING HUMAN BEHAVIOR IN DISASTERS

ASSESS YOUR UNDERSTANDING

Go to www.wiley.com/college/McEntire to evaluate your knowledge of the basics of human behavior during disasters. Measure your learning by comparing pretest and post-test results.

Summary Questions

1. Most people get their understanding of disasters from movies and the media. True or False?
2. News reports often convey the impression that victims can care for themselves. True or False?
3. Anyone sorting through debris is a looter. True or False?
4. Most people panic when warned of an impending hazard. True or False?
5. Price gauging is not a widespread phenomenon. True or False?
6. Emergency workers cannot be counted on to get their jobs done. True or False?
7. Most people will not need some type of public shelter after a disaster. True or False?
8. Media reports may give a biased representation of the extent of the disaster damages. True or False?
9. The president always imposes martial law after disasters. True or False?
10. When the World Trade Center Towers fell, people ran. This is an example of:
   (a) Panic behavior
   (b) Rational behavior
   (c) Irrational behavior
   (d) Panic flight
   (e) a and d
11. Vendors and contractors
   (a) Will always be honest in their dealings with disaster victims
   (b) Will always be dishonest in their dealings with disaster victims
   (c) May sometimes be honest in their dealings with disaster victims
   (d) May sometimes be dishonest in their dealings with disaster victims
   (e) Will complete all work and never cheat the disaster victims
12. After a disaster, we should expect:
   (a) That all goods are sold at a higher price
   (b) That all goods are sold at a lower price
   (c) That some people might be emotionally distraught
Review Questions

1. Do people have erroneous views about disasters? If so, why?
2. What does the research say about disaster myths?
3. Do most people panic after a disaster?
4. What is a bigger challenge—panic or getting people to evacuate?
5. Is looting a common occurrence in every disaster?
6. Will police and fire personnel abandon their posts?
7. Can victims care for themselves after disaster?
8. Are media reports always accurate? Are they always inaccurate?
9. Do all victims need disaster donations?
10. Do disaster often require outside relief assistance?
11. Is martial law required after every disaster? Is it required in the vast majority of disasters?
12. Why is it preferable to use the term “exaggeration” instead of “myth”?
13. How do people really behave in disasters?
14. Could incorrect views have a negative impact on response and recovery operations?
15. What can be done to counter common but erroneous beliefs about human behavior in disasters?
16. What should the emergency manager do to make sure myths do not adversely affect response and recovery operations?

Applying This Chapter

1. As a risk manager for a major business, you have just been notified that severe weather is approaching your corporate headquarters. One of the Chief Executive Officers asserts that warning the employees will cause a great deal of panic. How would you deal with this situation?
2. An 6.9 earthquake has just occurred in Salt Lake City, Utah. It has damaged thousands of homes and offices, which will take months to repair. It is now winter and the temperatures are reaching record lows. The mayor has requested that you open up shelters for everyone that has been affected. Is this a good or bad decision? What should you tell this community leader?
3. You are in charge of logistics for the American Red Cross. A major winter storm has just affected your community in Minnesota. The news media is requesting that people outside the area send you donations of coats and blankets. Could these items be useful? Could you get too many of them? How would you deal with this situation?
4. While managing the response to a terrorist attack in the central business district in your city, you have been told that looting is taking place in a nearby neighborhood. Would it be advisable to get additional information about this report from the media? Should you send police officers to the neighborhood? What concerns would you have about sending too many officers to this area?
5. An outbreak of a strange strain of flu has occurred in Boston, Massachusetts. Public health officials are concerned that they will not have sufficient flu shots for citizens in this area. A medical official at a nearby hospital has requested that you implement martial law immediately. Is this a wise decision? What factors would you need to consider before proceeding with this choice?
YOU TRY IT

Debunking Myths
You just saw the movie Titanic with a friend. In one scene, an employee of the cruise line calls for order and shoots his gun into the air to get people’s attention. Your friend comments that “disasters always bring out the worst in people.” Write a four-page paper illustrating how you would deal with this situation. Be sure to discuss the media, Hollywood, disaster research, and actual behavior.

Talking Points
While talking to the media about an upcoming disaster exercise, a reporter states “people always panic when a hurricane approaches the coast.” How would you respond as an emergency manager to help him/her understand human behavior accurately?

Educating the Public
As you are engaged in community education about emergency management at a middle school, a student raises his hand and asks “How many firefighters quit their job during disasters?” What would you say to give an accurate view of the situation?

Verifying Sources
While responding to a disaster, the police chief comments that he needs to send some officers to stop looting in one particular neighborhood. The police chief is basing his comments on media reports. How can you ensure that the jurisdiction has sufficient officers to take care of traffic control issues after the disaster?