



# Chapter 1

## BACKGROUND KNOWLEDGE

This chapter presents prerequisite background knowledge for schools planning crisis preparedness activities following the PREPARE model. Specifically, it addresses the following questions:

1. What are the crisis *events* for which school safety and crisis response teams strive to prepare? What are the defining characteristics of these events, and how do these characteristics help to determine the appropriate level of school crisis response?
2. What are the crisis *reactions* seen among students, school staff members, parents, and other caregivers? What might be considered the personal consequences of crisis exposure and the focus of school mental health crisis intervention?
3. What are the school safety and crisis response team *activities* associated with school crisis preparedness, and how do these elements fit into the PREPARE model?

The chapter concludes by giving a brief overview of the remainder of the book.

### CRISIS EVENTS: THE CHARACTERISTICS OF CRISES

School safety and crisis response teams must be ready to respond to a variety of crisis situations, but what constitutes a crisis is often open to interpretation. Brock et al. (2009) suggests that a *crisis* is an event that is perceived to be (a) extremely negative, (b) uncontrollable, and (c) unpredictable.

The first and perhaps most fundamental characteristic of a crisis event is that it is viewed as being extremely negative (Brock, 2002a). Crises have the potential to objectively generate extreme physical and emotional pain, or to be subjectively viewed as having the potential to cause such pain. According to the American Psychiatric Association's (APA) *Diagnostic and Statistical Manual of Mental Disorders, Fifth Edition* (DSM-5; 2013), traumatic stress reactions (which may lead to

posttraumatic stress disorder) can be the consequence of directly experiencing, witnessing, or being indirectly exposed to traumatic events. DSM-5 states:

directly experienced traumatic events . . . include but are not limited to, exposure to war as a combatant or civilian, threatened or actual physical assault (e.g., physical attack, robbery, mugging, childhood physical abuse), threatened or actual sexual violence (e.g., forced sexual penetration, alcohol/drug-facilitated sexual penetration, abusive sexual contact, noncontact sexual abuse, sexual trafficking), being kidnapped, being taken hostage, terrorist attack, torture, incarceration as a prisoner of war, natural or human-made disasters, and severe motor vehicle accidents. (p. 274)

DSM-5 also indicates that for children, developmentally inappropriate sexual experiences, even in the absence of physical violence or injury, can be considered sexual violence.

Examples of witnessed events judged capable of generating traumatic stress include “observing threatened or serious injury, unnatural death, physical or sexual abuse of another person due to violent assault, domestic violence, accident, war or disaster” (p. 274). Regarding indirect trauma exposure, DSM-5 specifies that learning about a crisis “is limited to experiences affecting close relatives or friends and experiences that are violent or accidental” (p. 274). These indirectly experienced crisis events include “violent personal assault, suicide, serious accident, and serious injury” (pp. 274–275). Indirect exposure to traumatic events does not include “exposure through electronic media, television, movies, or pictures unless this exposure is work related” (p. 271).

However, perhaps of more importance than the crisis event is how the individual views the event. As discussed in Chapters 13 and 14 of this book, the more negative the individual’s perception of the event and its consequences, the more significant the personal crisis becomes (Bryant, Salmon, Sinclair, & Davidson, 2007; Hecker, Hermenau, Maedl, Schauer, & Elbert, 2013; Kelloway, Mullen, & Francis, 2012; Rubin, Bernsten, & Bohni, 2008; Shaw, 2003).

The second characteristic of a crisis event is that such events are relatively uncontrollable, and individuals who are exposed often feel they have lost control over their lives. The degree to which an event generates these feelings significantly affects how the event is perceived (Adams et al., 2014; Foa, Zinbarg, & Rothbaum, 1992). Some situations can be made to feel more controllable through preparedness training. For example, students who have not had earthquake preparedness training will likely judge an earthquake to be more uncontrollable, and thus more frightening, than students who have been given instructions on how to respond (Brock et al., 2009).

Finally, crisis events typically occur suddenly, unexpectedly, and without warning (Foa et al., 1992; Simmons et al., 2013). A key factor that makes the event traumatic is the lack of time an individual has to adapt to crisis-generated problems. Relatively gradual and predictable events, such as the death of a loved one following a long terminal illness, generate less traumatic stress than sudden and unpredictable events, such as random violence or accidental death. A crisis that is more predictable gives those involved more opportunity to prepare and to make cognitive and emotional adjustments (Saylor, Belter, & Stokes, 1997).

To clarify the types of events that school safety and crisis response teams address, Table 1.1 gives examples of specific events that have the crisis characteristics just described, and Table 1.2

**Table 1.1.** Events That May Require Crisis Intervention

Life-threatening illnesses	Disfigurement and dismemberment
Assaults	Road, train, and maritime accidents
Fires or arson	Suicide attempts
Explosions	Fatal accidents
Sudden fatal illnesses	Suicides
Homicides	Human aggression
Domestic violence	Kidnappings
Terrorist attacks	Invasions
Prisoners of war	Hostage taking
Hijackings	Torture
Hurricanes	Floods
Fires	Earthquakes
Tornadoes	Avalanches or landslides
Volcanic eruptions	Lightning strikes
Tsunamis	Airline crashes
Nuclear accidents	Dam failures
Exposure to noxious agents or toxic waste	Construction or plant accidents

Note. From *School Crisis Prevention and Intervention: The PREPaRE Model*, p. 2, by S. E. Brock et al., 2009, Bethesda, MD: NASP. Copyright 2009 by the National Association of School Psychologists.

**Table 1.2.** Crisis Event Classifications

1. Acts of war and/or terrorism
2. Violent and/or unexpected death
3. Threatened death and/or injury
4. Human-caused disasters
5. Natural disasters
6. Severe illness or injury

Note. From *Preparing for Crises in the Schools: A Manual for Building School Crisis Response Teams* (2nd ed.), p. 14, by S. E. Brock, J. Sandoval, & S. Lewis, 2001, New York: Wiley. Copyright 2001 by John Wiley & Sons. Adapted with permission.

gives more general crisis event classifications. Members of the school community who directly experience or witness one of these events, or learn about a significant other experiencing such an event, are *potential* psychological trauma victims and *may* require one or more of the PREPaRE interventions discussed in the chapters that follow (in particular those discussed in Section 5).

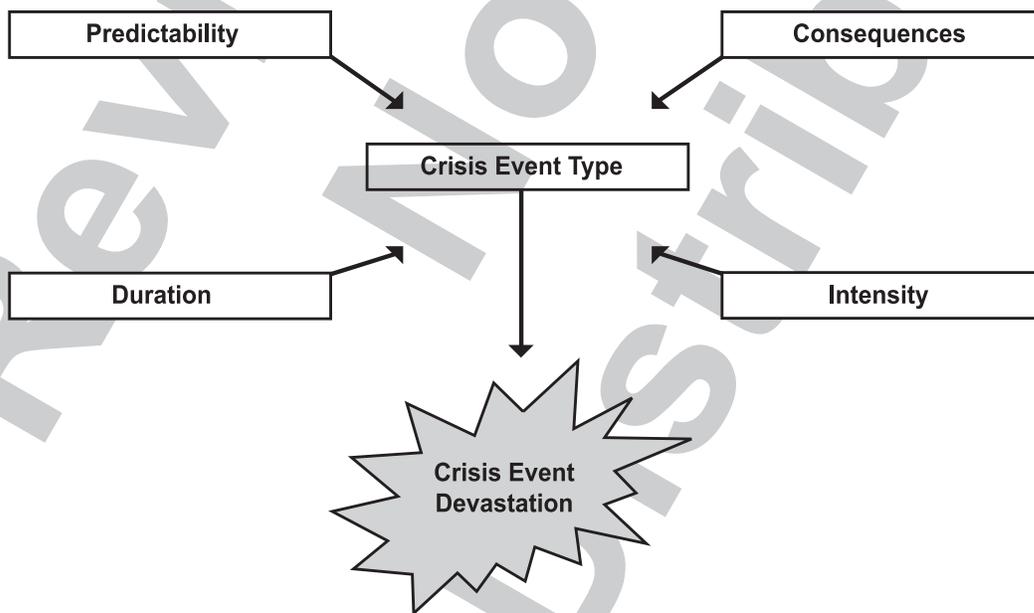
### Crisis Event Variables

Some of the events in Tables 1.1 and 1.2 are more traumatic than others (Kumar & Fonagy, 2013). Supporting this observation, McLaughlin et al. (2013), using data provided by the National Comorbidity Survey, report risk of lifetime posttraumatic stress disorder (PTSD) for adolescents

to range from 39.3% for the victims of rape to 6.5% for those exposed to a man-made or natural disaster, with the victims of interpersonal violence generally having higher rates than those who experienced an accident or witnessed a traumatic event. Brock (2002b) referred to the variables that make some crisis events more traumatic than others as *crisis event variables*. As illustrated in Figure 1.1, a crisis event’s predictability, consequences, duration, and intensity interact with the event itself and make some events more traumatic than others. Knowledge of these factors is important for school safety and crisis response teams because it helps them determine the level of support needed to effectively respond to the crisis.

Generally, human-caused events, particularly those that involve personal assault by someone who is familiar to the victim, are more distressing than natural disasters (or “acts of god”) and severe illnesses and injuries (Charuvastra & Cloitre, 2008; McLaughlin et al., 2013). According to DSM-5, traumatic stress “may be especially severe or long-lasting when the stressor is interpersonal and intentional (e.g., torture, sexual violence)” (APA, 2013, p. 275). For example, although only 5% to 10% of children and adolescents meet full PTSD criteria following exposure to natural disasters (La Greca & Prinstein, 2002), studies of children exposed to war-related stressors typically find PTSD rates above 30% (Feldman & Vengrober, 2011; Saigh, Yasik, Sack, & Koplewicz, 1999). Similarly, it can be concluded that events that are intentional are more distressing than events that are considered to be accidents (Charuvastra & Cloitre, 2008). Among a sample of eighth graders, lifetime prevalence estimates suggest that only 11.5% of females and 10.3% of males involved in a traffic or other serious accident had PTSD, whereas 37.5% of females and

**Figure 1.1.** How Crisis Event Variables Make Some Crisis Events More Traumatic Than Others



Note. From *School Crisis Prevention and Intervention: The PREPaRE Model*, p. 4, by S. E. Brock, A. B. Nickerson, M. A. Reeves, S. R. Jimerson, R. A. Lieberman, and T. A. Feinberg, 2009, Bethesda, MD: National Association of School Psychologists. Copyright 2009 by the National Association of School Psychologists. Reprinted with permission.

16.7% of males who had been physically abused had this trauma-related disorder (Elklit, 2002). However, natural disasters and accidents are also capable of generating severe traumatic stress.

As illustrated in Figure 1.1, natural disasters can be highly traumatic when they have one or more of the following characteristics: (a) they occurred suddenly, unexpectedly, and without warning (i.e., were not predictable); (b) they resulted in multiple fatalities and severe property destruction (i.e., had particularly devastating consequences); (c) they were associated with longer exposure to the crisis event (i.e., were of longer duration); and (d) they involved exposure to gruesome aspects of the crisis (i.e., resulted in exposures that were especially intense; Ayub et al., 2012).

The potential for natural disasters to be highly traumatic is illustrated by Hussain, Weisaeth, and Heir (2011), who studied psychiatric disorders among Norwegian tourists who escaped the 2004 tsunami in the Indian Ocean. Considered to be one of the deadliest natural disasters in recent history, this tsunami—a natural disaster that, given the lack of an early warning system in the Indian Ocean, was especially unpredictable—resulted in over 200,000 fatalities. This disaster also resulted in survivors being exposed to particularly gruesome aspects of the tsunami's aftermath. Despite the fact that these tourists were able to escape the longer term consequences associated with damaged infrastructure by having been able to return to undamaged homes in Norway, Hussain et al. (2011) documented that about two thirds (63.5%) of the survivors interviewed met the criteria for a psychiatric disturbance 2.5 years later. Most common were depression and PTSD, with 28.6% meeting criteria for major depressive disorder and 36.5% meeting PTSD criteria.

Although Hussain et al. (2011) focused on the long-term psychiatric morbidity observed among adult (18 years and older) tourists to the 2004 tsunami, Ghazali, Elklit, Yaman and Ahmad (2013) examined the rates of PTSD among adolescents living in villages directly affected by this natural disaster. In addition, the participants in this study did not have the advantage of being able to leave the disaster area and return to intact homes. For these adolescent survivors, the duration of disaster-related stressors was much longer, and not surprisingly the rates of PTSD were much higher than those found among Hussain et al.'s (2011) participants. Ghazali et al. (2013) found that 4 years after the tsunami, only 9.7% reported no significant PTSD symptoms, whereas 8.3% reported severe symptoms, 39.8% reported moderate symptoms, and 42.1% reported mild symptoms.

Further evidence of how a natural disaster can become highly traumatic is provided by Pynoos et al. (1993), who studied effects in youth following the 1988 Armenia earthquake. The earthquake—a type of natural disaster that is especially unpredictable—resulted in 55,000 fatalities. Its effects had a long duration, given that the associated damage to local infrastructure, particularly schools and hospitals, resulted in long-term survival challenges during the freezing winter months. This traumatic event also resulted in youth being exposed to particularly gruesome aspects of the earthquake's aftermath. At the time of the earthquake, most schools were inadequately designed, and as a result, two thirds of the total deaths were children and adolescents (Azarian & Skriptchenko-Gregorian, 1998a). Given the interaction of the crisis event variables of this natural disaster—unpredictability, duration, consequences, and intensity—it is not surprising to find that just over 90% of youth reported severe PTSD symptoms (Pynoos et al., 1993).

Finally, in the United States, Hurricane Katrina had similarly dramatic consequences. Although a hurricane is a relatively predictable event, the consequences of Katrina were profound. The storm and its aftermath resulted in more than 1,000 deaths, more than 500,000 people displaced,

and over \$100 billion in damage (Rosenbaum, 2006). Furthermore, the duration of crisis challenges and intensity of the crisis experiences were especially high for residents of New Orleans. Given these facts, the numbers are not surprising; almost half (49%) of a sample of adult residents of the New Orleans metropolitan area had a 30-day prevalence of an anxiety or mood disorder identified by DSM-IV-TR, and almost a third (30%) were estimated to have PTSD (Galea et al., 2007). Particularly relevant to educators is the fact that 3 years after Katrina, 28% of students ages 9 to 18 in St. Bernard Parish School District (in a county adjacent to New Orleans) reported significant symptoms of posttraumatic stress and depression. Study authors suggested that this result was not surprising given the long duration of crisis-generated challenges and their more intense trauma exposures (Kronenberg et al., 2010).

### Levels of School Crisis Response

Figure 1.1 is an excellent tool for orienting crisis response team members during a time when rational thinking may be challenging, and different combinations of crisis event variables call for different levels of school crisis response. Accurately estimating the required level of crisis response is important because there are dangers associated with both over- and underreacting to a school associated crisis. Specifically, more extreme caregiver reactions to an event are associated with an increase in PTSD risk among children (Eksi et al., 2007). Overreacting to a crisis event (providing a more involved crisis response than is needed) may increase students' threat perceptions and the associated risk for traumatic stress. On the other hand, underreacting may result in students' needs not being met and valuable crisis response resources being wasted. The four levels of school crisis response, as recommended by the PREPaRE model, are listed in Table 1.3 (Brock, Sandoval, & Lewis, 1996, 2001).

**Table 1.3.** Levels of School Crisis Response

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1. *Minimal response*
  - Few school community members are affected by the event, and school staff members can manage the response without leaving traditional roles.
2. *Building-level response*
  - Many school community members are affected by the event. However, by temporarily suspending typical job duties, school staff members can independently manage the response.
3. *District-level response*
  - Many school community members are significantly affected by the event, and even after temporarily suspending typical job duties to conduct the crisis response, school staff members cannot independently manage the response. Additional district resources are required to manage the response.
4. *Regional-level response*
  - A large number of school community members are significantly affected by the event, and even with district resources the response cannot be managed independently. Additional regionally based staff members are required to manage the response.

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*Note.* From *School Crisis Prevention and Intervention: The PREPaRE Model*, p. 5, by S. E. Brock et al., 2009, Bethesda, MD: NASP. Copyright 2009 by the National Association of School Psychologists.

At the *minimal* level of school crisis response, the event is not highly traumatic for the vast majority of exposed individuals, and school crisis response team members can manage the crisis without leaving their traditional school roles (e.g., there is no need for school crisis response team members to clear their calendars). Any necessary crisis response activities or services can be fit into the normal daily schedule. As illustrated in Table 1.4, events that might require this level of response include nonfatal accidental injuries that are not considered to be human caused or intentionally inflicted. Events of this type are not likely to severely traumatize many school community members, so the need for mental health crisis intervention is minimal.

The second level of school crisis response, the *building* level, implies that although the crisis event is potentially traumatic, available school resources can manage the crisis. However, when responding to the event, crisis response team members are required to leave their traditional roles (e.g., to clear their calendars). Table 1.4 provides an example of an event that might be consistent with this level of response. Other crisis events that might require a building-level response include nonfatal accidental injuries that are human caused or natural disasters that are not associated with fatalities or long-term coping challenges.

The third and fourth levels of school crisis response are the *district* and *regional* levels. At these levels the crisis event has the potential to be highly traumatic, and not only are building-level personnel required to leave their traditional roles, but the number of school students and staff affected will likely overwhelm the building-level crisis response team resources. The affected school or district will need to call in crisis response teams who are not typically assigned to the schools affected by the crisis event.

In addition to the crisis event variables, whether a response is district or regional level also is determined by the availability of local resources. For example, a small school district with relatively few crisis response team members would need support from a regional response team much sooner than a larger school district would. Crisis events that might require this level of response typically include those that are caused by human aggression, have one or more fatalities or significant property destruction, occur with relatively little warning, present ongoing or long-term problems, or result in exposure to intense crisis images and actions. Again, Table 1.4 provides examples of events that might be consistent with these crisis response levels.

## **CRISIS REACTIONS: THE PERSONAL CONSEQUENCES OF CRISIS EVENT EXPOSURE**

To identify appropriate mental health crisis intervention strategies, school safety and crisis response team members must be able to recognize crisis reactions. As with other models of crisis response (e.g., Brymer et al., 2006; Brymer, Taylor, et al., 2012), the PREP<sub>a</sub>RE model does not assume that all trauma-exposed students develop severe mental health challenges. Rather, the model is based on the assumption that students exposed to a crisis event display a range of reactions, some of which necessitate very little professional mental health support and others that require intense mental health crisis intervention. The following discussion of the crisis state is offered to facilitate understanding of the types of crisis reactions that require one or more of the PREP<sub>a</sub>RE mental health crisis interventions.

**Table 1.4.** Matching Level of Crisis Response With Crisis Event Variables

Crisis Event Variable Examples						
Crisis Event Example	Estimated Crisis Response Level <sup>a</sup>	Type	Consequence	Predictability	Duration	Intensity
A student falls and breaks a leg while playing kickball.	Minimal	Accident (not human caused)	Nonfatal injury	Playground accidents are relatively common.	Minutes	Others see the student falling and crying.
A parent volunteer dies shortly after being diagnosed with cancer.	Building	Severe illness (not human caused)	One fatality	A terminal diagnosis had been given.	Month	Students were exposed only to the beginning stages of the illness.
A student commits suicide by hanging himself in a restroom.	District	Human caused (self-directed violence)	One fatal injury	Indirect suicide threats were not identified as suicide warning signs.	Minutes	Three students discover the body of the deceased, and many see the body being removed.
A gunman attacks on a crowded playground; students are in lockdown all day.	Community/Regional	Human caused (violent assault)	Multiple fatalities	The event was sudden and unexpected.	Hours	Students are exposed to gruesome sights.

Note. Adapted from *School Crisis Prevention and Intervention: The PREPaRE Model*, p. 7, by S. E. Brock et al., 2009, Bethesda, MD: NASP. Copyright 2009 by the National Association of School Psychologists. Adapted with permission.

<sup>a</sup> The estimated crisis response levels are not prescriptive. Rather, they are intended to illustrate how crisis event variables may influence response levels. For example, relative to larger schools and school districts, smaller schools and school districts will require a greater level of response for the same crisis event than is required in larger schools.

## The Crisis State

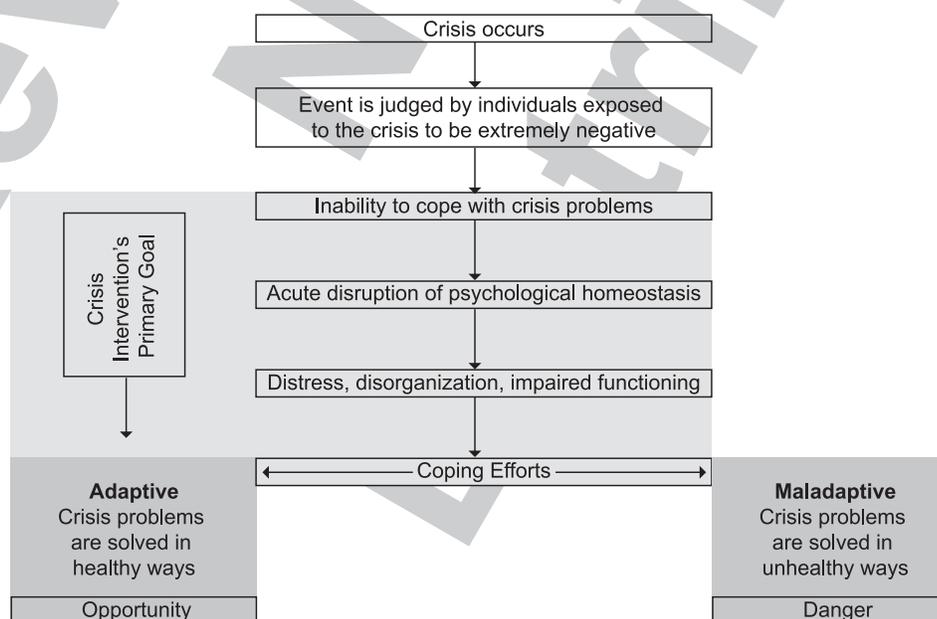
Figure 1.2 illustrates development of the crisis state and specifies that the primary focus of crisis intervention is to facilitate adaptive coping. Shaded in gray are aspects of the crisis state that mental health crisis intervention targets.

Prerequisite to the crisis state is exposure to a crisis event, and the perception of the event as extremely negative. Entry into the state of “crisis” is prompted by an inability to cope with crisis-generated problems. For example, when confronted with a common act of school-yard aggression, such as a fight with a peer, a student might choose from several previously developed coping options (e.g., fight back, ignore the peer, tell a teacher, or run away). Although possibly effective for these more common acts of school-yard aggression, these problem-solving strategies will not work for the individual confronted with a school-yard shooting. Thus, the problem (i.e., how to cope with being shot at while at school) would initially appear to be without a solution, and the student would consequently experience a loss of psychological homeostasis, a construct first defined by Stagner (1951).

The state of psychological equilibrium, or homeostasis, is achieved when a student is successfully coping with daily challenges. Disruption of this state generates distress and psychological disorganization (psychological disequilibrium), and it is often associated with impaired functioning. This disruption of homeostasis manifests itself as the symptoms recognized as crisis reactions. Chapter 13 examines specific ways that acute disruption can be manifested as warning signs of psychological trauma, but for now it is sufficient to acknowledge that they include emotional, cognitive, behavioral, and physical reactions (Brymer et al., 2006; Brymer et al., 2012).

The disequilibrium caused by the acute disruption of psychological homeostasis, and associated distress and disorganization, serves as a powerful motivator for the individual who is in crisis to

**Figure 1.2.** Relationships Among the Characteristics of the Crisis State



find a way to return to the steady state of homeostasis (Brent, 1978). In other words, it creates the impetus for the individual to find a way to cope with or solve crisis-generated problems. It is from the individual's drive to find a way to cope with crisis-generated problems that the final characteristic of the crisis state emerges: the potential for a radically positive or negative outcome. The potential for change is great in the wake of a crisis. Not only are individuals who adaptively cope with a crisis no longer distressed and disorganized, but they also have developed new problem-solving strategies as they return to precrisis levels of functioning. Developing these new strategies also can result in increased psychological resilience. For example, students may cope with a natural disaster by acknowledging that such events are relatively rare and by knowing that they can take actions to keep themselves safe (an adaptive, healthy, and radically positive outcome). Conversely, other students may cope with the same disaster by deciding not to leave their homes (a maladaptive, unhealthy, and radically negative outcome).

Finally, it is important to acknowledge that the crisis state differs from common stress in several ways. First, as a result of the need to restore psychological homeostasis, students in crisis are driven to find a way to cope with crisis-generated problems. Consequently, they have lowered defenses and are open to suggestion. In contrast, individuals who are simply stressed are often defensive. Second, a crisis has the potential for a radically positive or radically negative outcome. Change is mandated by the crisis experience. On the other hand, the typical outcome for the individual experiencing simple stress can be either adaptation and survival or a return to the status quo. Finally, although the crisis state is an acute problem, has a sudden onset, and is of fairly short duration, the stressed state usually builds up gradually and in many cases can become a chronic problem.

Although the symptoms of the crisis state may be similar to those of psychopathologies, they are not necessarily signs of mental illness. Given sufficient traumatic stress, anyone, regardless of how psychologically ill or healthy, can enter into a crisis state. Simply put, it is a common reaction to abnormal circumstances. Although the crisis state typically resolves itself within several weeks, longer-term coping difficulties can evolve into mental illness or psychopathology.

## **Psychopathology**

In all but the most extreme crisis events, most individuals are expected to recover from the psychological trauma generated by event exposure (National Institute of Mental Health [NIMH], 2001). However, to the extent that mental illness results from exposure, some individuals need immediate and highly directive school-based mental health crisis intervention. Thus, it is important for all school safety and crisis response team members to be aware of the psychopathologies that are a potential consequence of crisis exposure.

Trauma- and stressor-related disorders, in general, and PTSD, in particular, are the most common psychopathologies associated with exposure to a crisis event (APA, 2013). Of particular interest to educators is the finding that the severity of PTSD symptoms has been linked to school performance (De Bellis, Woolley, & Hooper, 2013). For example, in a sample of 11- to 14-year-olds, students with severe to very severe PTSD had significantly lower grade point averages (GPAs) than students whose PTSD was described as moderate. Furthermore, following

a group intervention designed to address traumatic stress consequences, reductions in PTSD symptoms were associated with improvements in students' GPAs (Saltzman, Pynoos, Layne, Steinberg, & Aisenberg, 2001). Additional research indicates that when adolescents with this disorder are compared to those without PTSD (including those who have been exposed to crisis events, but who do not have PTSD), they score significantly lower on measures of academic achievement (Saigh, Mroueh, & Bremner, 1997; also see Nickerson, Reeves, Brock, & Jimerson, 2009, for a review of literature and best practices regarding the identification, assessment, and treatment of students with PTSD at school). In addition to these academic concerns, PTSD also has negative physical health consequences (Pacella, Hruska, & Delahanty, 2013).

Despite the frequency and consequences of PTSD, it is not the only diagnosis linked with crisis exposure (APA, 2013; Berkowitz, 2003; Green, 1994; Hoven et al., 2004; Ritchie, 2003). Table 1.5 provides a list of other DSM-5 diagnoses that may afflict individuals following exposure to a crisis event.

Although psychopathological outcomes typically are found among a minority of those exposed to a crisis event, the exact percentage of the population who will have such outcomes will vary because some events are more traumatic than others. In addition, whether an individual will develop a psychopathology depends on the complex interaction between the nature of the crisis event, the crisis victim's unique crisis experiences, and his or her external environmental resources and internal personal vulnerabilities (Berkowitz, 2003; Brock, 2002c). Again, although exposure to a crisis event is necessary to trigger postcrisis psychopathology, it is not sufficient to explain its onset (Berkowitz, 2003; McFarlane, 1988; Saigh et al., 1999). This topic will be explored further in Chapter 13's discussion of psychological trauma assessment.

### Consequences of Crises for the School

In addition to the effects already mentioned, other consequences of crisis events are unique to the school setting (see Table 1.6). Clearly, if these consequences are observed subsequent to a crisis event, a crisis response is warranted. Furthermore, assessment of these crisis consequences can be helpful in evaluating the effectiveness of a school crisis response (see Chapter 21).

**Table 1.5.** Possible Psychopathological Consequences Associated With Crisis Exposure

- 
- Depressive disorders
  - Anxiety disorders (e.g., specific phobia, social anxiety disorder, panic disorder)
  - Trauma- and stressor-related disorders (i.e., disinhibited social engagement disorder, posttraumatic stress disorder, acute stress disorder, adjustment disorders)
  - Dissociative disorders (e.g., dissociative identity disorder, dissociative amnesia, depersonalization/derealization disorder)
  - Sleep-wake disorders (e.g., insomnia disorder, nightmare disorder)
  - Substance-related and addictive disorders
-

**Table 1.6.** The Consequences of Crises on School Functioning

Consequence	Sources
School behavior problems, such as aggressive, delinquent, and criminal behavior	Azarian & Skriptchenko-Gregorian, 1998a; Carlson, 1997; Monahan, 1993; Nader & Muni, 2002
School absenteeism	Azarian & Skriptchenko-Gregorian, 1998a; Hurt, Malmud, Brodsky, & Giannetta, 2001; Silverman & La Greca, 2002
Academic decline <sup>a</sup>	Cook-Cottone, 2004; Goodman, Miller, & West-Olatunji, 2012; Nader & Muni, 2002; Silverman & La Greca, 2002; Thompson & Massat, 2005; Yule, 1998
Poorer school performance	Delaney-Black et al., 2002; Hurt et al., 2001; Saigh et al., 1997; Schwab-Stone et al., 1995
Decreased verbal IQ	Saigh, Yasik, Oberfield, Halamandaris, & Bremner, 2006
Exacerbation of preexisting educational problems	Vogel & Vernberg, 1993

Note. Adapted from *School Crisis Prevention and Intervention: The PREPaRE Model*, p. 11, by S. E. Brock et al., 2009, Bethesda, MD: NASP. Copyright 2009 by the National Association of School Psychologists. Adapted with permission.

<sup>a</sup> It is important to note that traumatic stress reactions, not simple crisis exposure, put students at risk for serious academic decline (Saigh et al., 1997).

### Positive Outcomes Associated With Crises

As discussed earlier, school crises are not only times of danger, but also times of opportunity. Consistent with this observation, an emerging field of study has addressed the construct of *posttraumatic growth*, which has been defined as positive change resulting from the struggle with trauma (Kilmer, 2006). For example, meta-analytic research conducted by Shakespeare-Finch and Lurie-Beck (2014) has suggested that among traumatized individuals (with the exception of sexual assault victims), the potential exists for positive as well as negative outcomes. Shakespeare-Finch and Lurie-Beck concluded:

Research has moved past the idea that PTSD symptoms and perceptions of positive post-trauma changes are at opposite ends of a continuum and practitioners are advised to be mindful of the coexistence of positive and negative perceptions and manifestations of negotiating trauma. (p. 227)

Although much of the research investigating posttraumatic growth has been conducted with adults, there is at least preliminary support for this phenomenon occurring among children and youth (Meyerson, Grant, Carter, & Kilmer, 2011). There is even some evidence of the potential that such growth is greater among children (Shakespeare-Finch & Lurie-Beck, 2014).

Given these reports, school safety and crisis response teams should consider some of the positive outcomes their crisis response may achieve. Positive outcomes for individual students and staff members might include the following: (a) some survivors become better able to cope with future crises or other challenges, and (b) some change their lives in a positive direction (e.g., becoming helpers or advocates for others who later may be a victim or survivor). Evidence of such positive outcomes can help to document the success of a given school crisis response.

Similarly, at the school system level, positive outcomes may include (a) administrators and the public recognizing the need for crisis preparedness (i.e., crisis prevention, protection, mitigation, response, and recovery); (b) more school-employed mental health professionals and other staff members obtaining crisis preparedness training; (c) more assistance being available to schools in the form of grants, emergency aid, and other additional funds to increase crisis preparedness; and (d) more student support resources (e.g., school-employed mental health professionals) and programming becoming available.

## SCHOOL SAFETY AND CRISIS RESPONSE TEAM ACTIVITIES

Finally, before school safety and crisis response team members consider specific crisis prevention, protection, mitigation, response, and recovery strategies, they must be knowledgeable about the range of activities that such teams provide and understand the primary goals of mental health crisis intervention.

### The Range of Crisis Preparedness Activities and PREPaRE

Presidential Policy Directive 8 (PPD-8; Obama, 2011) and the U.S. Department of Education (2013) encourage all public and private entities, including school districts, to prepare for crises through the development of quality crisis plans that encompass five mission areas:

1. *Prevention.* Includes steps that schools take to prevent an incident or crisis from occurring. Examples include suicide and threat assessment programs, bullying prevention, and school mental health services.
2. *Protection.* Involves schools securing their networks, property, visitors, staff, and students against acts of violence and disasters (human caused or natural) and includes having exterior door locks, student supervision, firewalls on computers and the network, and visitor control systems.
3. *Mitigation.* Looks at the school's capabilities to eliminate or reduce the loss of life or property damage by lessening the impact of a crisis event. For example, when a school enacts a tornado emergency protocol and the tornado sirens sound, they are attempting to mitigate the crisis.
4. *Response.* Includes the school's capacity to stabilize emergency situations that are certain to happen or have already occurred. It also includes providing a safe and secure school environment, saving lives and property, and facilitating the transition to recovery. Examples include the school crisis response team's actions following the death of a school staff member or student, utility failure, or chemical spill.
5. *Recovery.* Includes the ability to restore the learning environment after a crisis event. Examples include providing multitiered mental health crisis interventions (a primary focus of the

PREPaRE model), providing temporary classrooms after a classroom is destroyed, and reestablishing payroll after a computer network crashes.

Consistent with these mission areas, the PREPaRE acronym refers to the range of crisis preparedness activities that school safety and crisis response teams work to provide. As illustrated in Figure 1.3, PREPaRE stands for five school safety and crisis response activities: prevent, reaffirm, evaluate, provide and respond, and examine.

Specifically, the PREPaRE model emphasizes that members of school safety and crisis response teams must be involved in the following hierarchical and sequential set of activities. First, team members work to prevent crises that can be avoided and to prepare for events that cannot be prevented. Such prevention activities involve not only avoiding or stopping crises before they occur, but also promoting student resiliency to enable them to better cope with crises that are not prevented. In the PREPaRE model, prevention also includes engaging in ongoing actions to develop the capabilities to protect students if a crisis is not prevented, and mitigating or lessening the impact of crises. Crisis mitigation can “also mean reducing the likelihood that threats and hazards will happen” (U.S. Department of Education, 2013, p. 2).

Second, once a crisis event has occurred, the PREPaRE model specifies that all crisis response team members initially focus on helping to ensure physical health and perceptions of security and safety. This immediate reaction to a crisis event is based on the assumption that for recovery to begin, school community members must have their basic needs met, and not only be safe but also believe that crisis-related danger has passed. Third, team members evaluate the degree to which individuals have suffered psychological trauma. This involves assessing individuals’ crisis exposure and considering their internal and external resources and resulting threat perceptions. This activity also involves directly exploring the individual’s stress reactions. Fourth, from assessment data, team members respond to the psychological needs of school community members, which primarily includes reestablishing and empowering naturally occurring social support systems. It may also include a range of psychoeducational and psychological interventions as indicated. Fifth and finally, the PREPaRE model calls for an examination of the effectiveness of crisis prevention and intervention efforts. This final activity includes both formative and summative evaluations of all school safety and crisis response team efforts.

Throughout its initial development and subsequent revisions, the PREPaRE model has tried to be consistent with guidance and direction offered by the U.S. Departments of Education (2003, 2007b, 2013) and Homeland Security (2004, 2008, 2011b), and the National Child Traumatic Stress Network (Brymer et al., 2006; Brymer, Taylor, et al., 2012). Most recently, referencing Presidential Policy Directive 8 (Obama, 2011), the U.S. Department of Education (2013) has defined crisis preparedness as being based on the five mission areas. Consistent with this guidance, the PREPaRE model directs school crisis response team members to be involved in a range of crisis preparedness activities. Specifically, school safety and crisis response teams are involved in activities designed to “avoid, deter or stop” crises (crisis prevention); “secure schools against acts of violence and manmade or natural disasters” (crisis protection); “eliminate or reduce the loss of life and property damage by lessening the impact of a crisis” (crisis mitigation); “stabilize an emergency” (crisis response); and “assist schools affected by an event . . . in restoring the learning environment” (crisis recovery; U.S. Department of Education, 2013, p. 2).

**Figure 1.3.** The relationship between (a) the phases of a crisis, (b) specific PREPaRE school crisis interventions, (c) the levels of crisis prevention/intervention, (d) crisis preparedness, and (e) psychological first aid.

	Preimpact The period before crisis Preparation, Threat and and planning   warning	Impact When crisis occurs	Recoil Immediately after crisis threats end	Postimpact Days/weeks after the crisis	Recovery and reconstruction Months to years after the crisis
(a) Crisis Phase (Raphael & Newman, 2000; Valent, 2000)					
b) PREPaRE: School Crisis Prevention and Intervention Training Curriculum	1. Prevent and prepare for psychological trauma risk				
	<ul style="list-style-type: none"> <li>Prevention of crises</li> <li>Promotion of resiliency</li> </ul>				
	2. Reaffirm physical health and security and perceptions of safety				
	<ul style="list-style-type: none"> <li>Protection from crises that are not prevented</li> <li>Mitigation of crises (also refers to reducing the likelihood of crises)                             <ul style="list-style-type: none"> <li>Keep students safe</li> <li>Avoid crisis scenes and images</li> </ul> </li> </ul>				
	3. Evaluate psychological trauma				
	<ul style="list-style-type: none"> <li>Assess crisis exposure, internal and external resources, threat perceptions, and crisis reactions</li> <li>Make psychotherapy treatment referrals</li> </ul>				
	4. Provide interventions and Respond to psychological needs				
	<ul style="list-style-type: none"> <li>Reestablish social support systems</li> <li>Provide psychoeducation: Empower survivors and caregivers</li> </ul>				
	<ul style="list-style-type: none"> <li>Provide psychological interventions                             <ul style="list-style-type: none"> <li>Group crisis intervention</li> <li>Individual crisis intervention</li> <li>Psychotherapy</li> </ul> </li> </ul>				
5. Examine the effectiveness of school safety, crisis prevention, and crisis response					
(c) Level of prevention (Caplan, 1964)	Primary	Primary	Primary and secondary	Secondary	Tertiary
(c) Level of preventive intervention (Gordon, 1983)	Universal	Universal	Universal and selected	Universal, selected, and indicated	Selected and indicated
(d) Crisis preparedness (U.S. Department of Education, 2013)	Prevention, Protection, Mitigation	Protection, Mitigation	Protection, Mitigation, Response	Recovery	
(e) Psychological First Aid (Brymer et al., 2006; Brymer, Taylor, et al., 2012)		1. Contact and engagement 2. Safety and comfort 3. Stabilization (if needed) 4. Information gathering: Needs and current concerns	5. Practical assistance 6. Connect with social supports 7. Information on coping 8. Links to services		

Note. Adapted from "Best Practices for School Psychologists as Members of Crisis Teams: The PREPaRE Model" (p. 1488), by S. E. Brock, A. B. Nickerson, M. A. Reeves, and S. R. Jimerson, in A. Thomas and J. Grimes (Eds.), *Best Practices in School Psychology V, 2008*, Bethesda, MD: National Association of School Psychologists. Copyright 2008 by the National Association of School Psychologists. Adapted with permission.

Though crisis events clearly have the potential to generate significant psychological injury, the PREPaRE model also acknowledges that—with the exception of the most extraordinary crisis circumstances and with the support of naturally occurring family, school, and community resources—the majority of school community members will recover from their crisis exposure. Given this reality, most of the school mental health crisis intervention services included in PREPaRE are considered to be indirect consultation services. Often when crisis response team members are implementing the elements of this model, they will be working behind the scenes as consultants to ensure that students, staff, and parents are well positioned to realize their natural potential to cope with a crisis. Of course these naturally occurring resources do have their limits, and this is where the assessment and response elements of PREPaRE become critical. Overall, PREPaRE aims at fostering natural recovery from psychologically traumatic events, while identifying the most severely distressed individuals and providing them with an appropriate mental health crisis intervention.

### **The Primary Goal of Mental Health Crisis Intervention**

The National Disaster Recovery Framework (U.S. Department of Homeland Security, 2011a) instructs the following:

A successful recovery process addresses the full range of psychological and emotional needs of the community as it recovers from the disaster through the provision of support, counseling, screening and treatment when needed. These needs range from helping individuals to handle the shock and stress associated with the disaster's impact and recovery challenges, to addressing the potential for and consequences of individuals harming themselves or others through substance, physical and emotional abuses. Successful recovery acknowledges the linkages between the recovery of individuals, families and communities. (p. 11)

To achieve the primary goal of crisis intervention, that is, to facilitate adaptive coping, school mental health crisis interventions, such as those delineated within the PREPaRE model, help restore crisis-exposed students' basic problem-solving abilities and in so doing return them to their precrisis levels of functioning (Sandoval & Brock, 2009). Given this perspective, crisis response team members should understand how children and adolescents typically cope with challenges. A useful framework for understanding such coping has been offered by Skinner and colleagues (Skinner, Edge, Altman, & Sherwood, 2003; Skinner & Zimmer-Gembeck, 2007; Zimmer-Gembeck & Skinner, 2011), who suggest that three general adaptive processes are associated with 12 specific families of coping. These three processes involve (a) the coordination of actions and contingencies in the environment (i.e., problem-solving, information seeking, helplessness, and escape); (b) the coordination of available social resources (i.e., self-reliance, support seeking, delegation, and social isolation); and (c) the coordination of preferences and available options (i.e., accommodation, negotiation, submission, and opposition). Although much is yet to be learned about how children cope with crisis events (Pfefferbaum, Noffsinger, & Wind, 2012), Tables 1.7 and 1.8 list the 12 families of coping and their associated functions, as well as identify the specific approaches to coping with challenges.

**Table 1.7.** Families of Coping That Crisis Intervention Typically Promotes

<b>Coping Family</b>	<b>Coping Function</b>
Problem solving (strategizing, instrumental action, planning)	Adjust actions to be effective
Information seeking (reading, observing, asking others)	Find additional contingencies
Self-reliance (emotion regulation, behavior regulation, emotional expression, emotional approach)	Protect available social resources
Support seeking (contact seeking, comfort seeking, instrumental aid, social referencing)	Use available resources
Accommodation (distraction, cognitive restructuring, minimization, acceptance)	Flexibly adjust preferences to options
Negotiation (bargaining, persuasion, priority setting)	Find new options

*Note.* Adapted from "The Development of Coping," by E. A. Skinner & M. J. Zimmer-Gembeck, 2007, in *Annual Review of Psychology*, 58, p. 126. Copyright 2007 by Annual Reviews. Adapted with permission.

**Table 1.8.** Families of Coping That Crisis Intervention Typically Tries to Prevent

<b>Coping Family</b>	<b>Coping Function</b>
Helplessness (confusion, cognitive interference, cognitive exhaustion)	Find limits of actions
Escape (behavioral avoidance, mental withdrawal, denial, wishful thinking)	Escape noncontingent environment
Delegation (maladaptive help-seeking, complaining, whining, self-pity)	Find limits of resources
Social isolation (social withdrawal, concealment, avoidance of others)	Withdraw from unsupportive context
Submission (rumination, rigid perseveration, intrusive thoughts)	Give up preferences
Opposition (other-blame, projection, aggression)	Remove constraints

*Note.* Adapted from "The Development of Coping," by E. A. Skinner & M. J. Zimmer-Gembeck, 2007, in *Annual Review of Psychology*, 58, p. 126. Copyright 2007 by Annual Reviews. Adapted with permission.

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