

# Chapter Four:

## Long-Term Stress Reactions

### I. Introduction

People who survive catastrophes often experience stress reactions for years. Even an event that is perceived by others as relatively minor can cause an extended trauma reaction if the victim perceives it as threatening or overwhelming.

Most long-term stress reactions follow common patterns even while being unique to the person who has survived a traumatic event.

Long-term stress reactions are most often a result of imprinted sensory perceptions and reactions in the brain and body that were initially caused by acute stress but have been so overwhelming in their initial perception or in related reactions that they continue on – and sometimes accelerate, due to the modulating influences of other stimuli over time. They may also be influenced by pre-existing patterns of behaviors and responses.

It is important for crisis responders to be aware of and to be able to explain long-term stress reactions in order to predict for survivors what might be experienced as a part of their emotional future. Such a prediction is not made to create in survivors a mood of expectancy or a state of vulnerability but rather to help them understand such reactions as they happen, and to understand why certain cognitive and behavioral knowledge and skills may mitigate them.

Long-term stress reactions are not always pathological nor do they necessarily require intensive mental health interventions. Some are mitigated by learned coping skills and others can be alleviated through effective crisis intervention even long after the original trauma event.

### II. Types of Long-Term Stress Reactions

#### A. Post-traumatic character changes

This type of reaction seems observable primarily when a

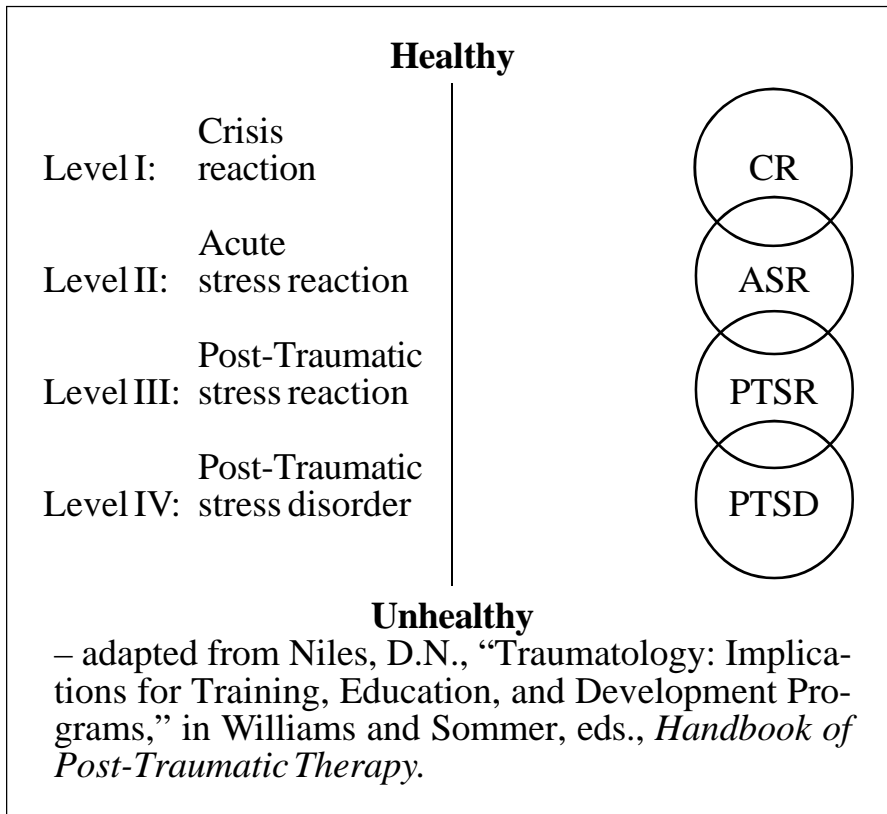
victim or survivor has suffered an intense loss or injury. Often survivors do not feel able, or do not have a desire, to continue to live a life similar to the one they had before the disaster. Life-style changes may be consciously made and may parallel observable personality or character changes.

1. *Negative* changes might include:
  - a. Becoming overcontrolling and rigid.
  - b. Permanent regression to traits or life patterns central to previous life stages.
  - c. Faulty management of tension or stress.
  - d. Inability to retain or initiate relationships.
  - e. Avoidance or withdrawal from new challenges.
2. *Positive* changes can include:
  - a. Redefinition of life goals.
  - b. Increased flexibility in coping strategies.
  - c. Increased tolerance of personal differences with others.
  - d. Development of new understandings of spiritual or religious issues.
  - e. Increased ability to communicate emotional responses and to express situational reactions.

## **B. Post-traumatic stress reactions and Post-Traumatic Stress Disorder (PTSD)**

The following is an outline of post-trauma stress reactions based on the description of “post-traumatic stress disorder” described in the American Psychiatric Association’s *Diagnostic and Statistical Manual, Fourth Edition (DSM IV)*. It is used to describe traumatic stress symptoms that may occur in survivors; it is not designed for use by crisis responders or others without proper mental health credentials as an instrument for diagnosis and treatment.

1. Trauma reactions may be conceived of in a continuum of responses both during the trauma event and in its aftermath. The following “layered conceptual framework of traumatology” is a useful tool for illustrating various levels of trauma reactions.



2. Post trauma reactions include both tonic and phasic features.
  - a. Tonic features are those that are with the survivor most of the time after the trauma and they help constitute a part of mental functioning.
  - b. Phasic features are those which are evoked by a relevant environmental event.
3. The traumatic stressor
  - a. A trauma may occur when an individual has experienced, witnessed, or confronted a traumatic event, including actual or threatened death or serious injury, or threat to one’s own or another’s physical integrity.
  - b. However, not all such events are traumatic – the event must also produce in the individual intense reactions that provoke fear, helplessness or horror.

This recognition of the significance of

individual perception in the determination of the traumatic effect of an event is important in underscoring both the pre-event mental and physical state of the individual as well as the nature of the individual's perceptions. It is also critical to understanding the significance of cultural interpretations of such issues as threat, danger, and response.

#### 4. Symptoms of traumatic impact

- a. Re-experiencing the event both psychologically and with physiological reactivity.

As was indicated in Chapter Two, traumatic memory is different from ordinary memory. It is fragmented, lacks a narrative, and is imbedded through memory traces in the brain through the arousal of the sympathetic nervous system. Traumatic memory erupts into everyday life like a volcano – it may appear as sudden imagery or sensation. It may invade sleeping. Traumatic memory seems to beget traumatic dreams, which are different from ordinary dreams or nightmares. They may be repetitive. They often occur at times when it is unusual to have dreams during a sleep period. They are often characterized by the fact that the dreamer realizes that this dream is related to the trauma event, but the imagery in the dream may be different. Traumatic memory may also be the source for reenactments of the event that can be violent or damaging to the individual or others. Elements of re-experiencing the event include:

- Intrusive thoughts
- Nightmares and distressing dreams
- Flashbacks

- b. Numbing, avoidance, and isolation

This set of symptoms relate to an individual's inability to express emotion or connect with other individuals. It is often predicated upon the individual's experience of dissociation during a traumatic event – a

dissociation that may persist in the aftermath and become a part of the trauma reaction. “Dissociation” is a way the brain organizes itself when faced with trauma. It compartmentalizes emotional experiences and interferes with cognitive understanding of what is happening. Dissociation, itself, shatters the connection between individuals and others as well as between the individual and self. Dissociation is currently used to identify three related phenomena.

***Primary Dissociation***

*Sensory and emotional elements of the event may not be integrated into personal memory and identity, and remain isolated from ordinary consciousness; the experience is split into its isolated somatosensory elements, without integration into a personal narrative. This fragmentation is accompanied by ego states that are distinct from the normal state of consciousness.*

***Secondary Dissociation***

*[Traumatized individuals] report mentally leaving their bodies at the moment of the trauma and observing what happens from a distance. These distancing maneuvers of “secondary dissociation” allow individuals to observe their traumatic experience as spectators, and to limit their pain or distress; they are protected from awareness of the full impact of the event.*

***Tertiary Dissociation***

*When people develop distinct ego states that contain the traumatic experience, consisting of complex identities with distinct cognitive, affective, and behavioral patterns, we call this “tertiary dissociation.”*

– van der Kolk, B., van der Hart, O., Marmar, C., “Dissociation and Information Processing in Posttraumatic Stress Disorder,” *Traumatic Stress*, van der Kolk, McFarlane, and Weisaeth, eds. New York, NY, Guilford Press, 1996.

The more dissociative experiences individuals have at the time of a traumatic event or in the course of chronic trauma, the more at risk they are for post-traumatic stress disorder or complex post-traumatic stress disorder. Critical features of this set of symptoms include:

- avoidance of thoughts or activities that remind one of the event.
- avoidance of previous habits or pleasurable activities that the individual engaged in before the event.
- estrangement and isolation.
- reduced affect or feelings of “emotional anesthesia.”
- partial amnesia.
- a sense of foreshortened future.

c. Behavioral arousal

Hyperarousal is symptomatic of the physiological and emotional imprinting of memory tracks that make the brain supersensitive to interpretation of certain sensory perceptions as threatening, thus triggering and re-triggering of the alarm reaction. The neuronal pathways may become so sensitized that ordinary perceptions are almost completely ignored or blocked and the brain stays in ready alert to respond to any stimulus vaguely reminiscent of the trauma event as a sign of danger. The continued repetition of alarm reactions further solidifies the neural connections. Critical features of this set of symptoms are:

- inability to concentrate.
- insomnia or interrupted sleep patterns.
- flashes of anger or irritability.
- startle reactions or hyperalertness.

5. Duration of symptoms last for one or more months

The above described symptoms may occur in the initial phases of any traumatic reaction. They become symptomatic of disorder only if they last for an extended period of time or erupt after many months in delayed onset. It is important to note,

again, that the symptoms themselves are not necessarily illustrative of the need for intensive intervention – the duration of the symptoms, the simultaneous experiencing of various symptoms in each cluster, and the time of manifestation of such symptoms, must all be taken into account.

6. The trauma reactions and symptoms impair functioning.

Another critical assessment of the intensity of reactions or symptoms is whether they interfere with an individual's normal life patterns and activities. Issues to examine include the level of productivity of the individual in work or school life before and after the trauma, the health of family and social relationships before and after the trauma, participation in pleasurable and healthy activities before and after the trauma, and the strength of an individual's faith or belief systems before and after the trauma.

### **C. Biological models of PTSD**

PTSD and related syndromes are generated, in part, by physiological reactions to threat and trauma. While it is not necessary for crisis responders to fully understand these biological responses, some of the theories are sketched here to underscore the physiological and psychological responses. Many of the explanations overlap each other.

1. Inescapable shock or stress

Some studies indicate that victims suffering from PTSD experience a decrease in pain sensitivity and the development of phasic opioid-mediated stress-induced analgesia. This is similar to the reactions of learned helplessness in animals who lived in circumstances of conditioned fear.

2. Kindling/long-term potentiation

This theory suggests that trauma sensitizes limbic neuronal circuits and lowers neuronal firing thresholds such that there is increased emotional arousal, memory, and reactive behaviors. This sensitization occurs upon exposure and re-exposure to traumatic stimuli.

3. Superconditioning

Neurohormones/neuroregulators may influence the strength of conditioned responses and the consolidation of memory traces. These hormones, mobilized at the time of a traumatic event, may mediate an over-consolidation of the memory trace of the event termed “superconditioning.”

4. Learned traumatic response

This theory focuses upon the role of the amygdala as the brain’s “trauma center,” whose activation elicits fear behaviors similar to those observed in alarm reactions in PTSD.

*... Working with PTSD victims, as well as with rats and monkeys, [Jon Krystal] and his colleagues have learned that certain types of “acute and uncontrollable” stresses, such as those veterans are exposed to in combat and, among research animals, electric shock, can cause long-term changes in the brain’s chemical messaging system. The most dramatic alteration, says Krystal, is found in the way the brain handles adrenaline, the “fight or flight” ingredient that is typically released in situations of high anxiety and fear. After a significant traumatic experience, the brain tends to be more easily provoked than usual into releasing adrenaline and is apparently less able to turn off the flow of the neurotransmitter.*

–Fellman, B., “The Pathways of Pain,” *Yale Alumni Magazine*, March 1995.

5. Neuropsychological sensitization

Excessive stimulation leads to synaptic changes related to hyper-sensitization while depression of synaptic processes allows habituation and discriminative perception. Thus, the synaptic changes are the source of the rerouting of neural patterns and the repetitiveness of stimulation may cause them to become primary patterns rather than secondary alarm-related patterns.



#### **D. Acute Stress Disorder (ASD)**

The inclusion of Acute Stress Disorder in the DSM IV underscores the nature of traumatic reactions as a continuum of individual responses. The description parallels the description of crisis reactions that many caregivers have observed in individuals and communities in the immediate aftermath of a tragedy. It is short-term in nature and the precipitation and symptoms are similar to those described in PTSD, although not as many symptoms may be manifested. For this reason, a simple outline of the symptoms as observed in crisis intervention is presented below.

1. Precipitation

ASD is based on the same type of precipitating event as is found in PTSD.

2. Symptoms

- a. Three or more dissociative symptoms such as:

- numbing of responsiveness to others or a sense of distance from the world.
- being in a daze, feeling like a zombie or simply being unaware of one's surroundings.
- derealization or an experience of being in another world.
- depersonalization, feeling like nothing that is happening relates to the victim, or self-detaching from one's body.
- localized amnesia that blocks the memories of immediate events in the cognitive sense. Emotional recollections may surface but not be connected with a memory of what happened.

- b. Re-experiencing the event through:

- disoriented thinking and mergers of what is happening today with what happened during the trauma.
- dreams of the trauma or crisis experience.
- lapses into daydreams while trying to focus on other things.

- c. Avoidance behavior:

- Panic when asked to revisit the site.
- Unconscious refusals to be exposed to events similar to the trauma.
- Conscious refusals to take part in remembrances of the event.
- d. Increased arousal and anxiety
  - Hypervigilance or hyperalertness about all incoming sensory perceptions.
  - Inability to sleep, or sleep disturbances.
  - Behavioral anxiety over safety precautions.
  - Physiological pain or discomfort, particularly in stress areas such as shoulders, neck, spine, stomach, intestines, and, in older persons, old injuries.
- e. Impairment of daily functioning
  - Can't get up in the morning.
  - Little interest in work, play, or loved ones.
  - Increased dependence on others.
  - Diminished concern with physical hygiene.
  - Life continues in slow motion.
  - Death seems a real, if unlikely, option.
- f. May last from 2 days to 4 weeks, but usually begins within 4 weeks of the event.

### **E. Adjustment disorder**

Many people confuse their distress over developmental crises with the trauma caused by sudden, random events. Adjustment disorder seems to have been described in the DSM IV as a way of distinguishing such distresses from the understanding of immediate and real threats.

#### **1. Precipitation**

The stressor is a significant change in life circumstances, sometimes called a "developmental crisis." Emotional and behavioral symptoms in response to the identifiable stressor occur within three months of the onset of the stressor.

#### **2. Symptoms**

- a. The symptoms may resemble those of PTSD.
  - Recurrent thoughts and dreams of what happened – and what might have happened – may dominate other thinking patterns.

- Outbursts of anger and sadness may occur.
  - Alertness and sleeplessness can result in fatigue and depression.
  - Concern about one's future may overcome the ability to deal with day to day tasks.
  - Sporadic outbursts of hopelessness and helplessness can appear.
- b. There is impairment of daily functioning, although coping skills may mask that impairment, and friends and family may interpret ongoing functioning as healthy. If a support system is not available, individuals may slowly slip into serious depression.
- c. Usually ends within six months after the stressor is eliminated.
- Once a divorce, job loss, or other stressor has been overcome, a person may experience euphoria and immediate physical renewal.
  - The euphoria will diminish as other stresses occur, but the sense of being free of the severe distress will prevail.
  - While immediate euphoria may provide individuals with a sense of purpose, it is important to recognize that they will need ongoing support during the roller-coaster of distress and eu-stress as they re-establish their lives.

### **F. Complex PTSD or Diagnosis of Extreme Stress Not Otherwise Specified (DESNOS)**

Over the last decade, it has become apparent to many working in the field of trauma that PTSD may well describe many of the intense symptoms of persons who have undergone a single, catastrophic traumatic experience, but that for individuals who have survived *chronic* traumatic experiences – such as child physical or sexual violence, violence committed by spouses or partners, prisoners of war, victims of hostage-taking, torture or terrorism, or victims of concentration camps – more extreme reactions complicate the symptoms of PTSD.

While complex PTSD or DESNOS are not yet included in the DSM, crisis responders and trauma counselors should be aware of some of the elements of this set of trauma reactions, since they see signs of them in individuals and communities to which they respond. This is particularly true of caregivers participating in domestic violence crisis response teams, crisis responders to child victims and witnesses of family violence, responders working in war zones, and those responding to hostage-taking and terrorism.

It is beyond the scope of this manual to detail protocols for intervention or counseling for such situations, but an understanding of the precipitating factors and possible symptoms may assist caregivers to identify concerns and make appropriate referrals.

1. Precipitation

The symptoms may occur in persons who have survived complex, prolonged or repeated traumas during which they have been subjected to coercive control. Such control may be imposed through violence or threat of violence, control of bodily functions, capricious enforcement of petty rules, intermittent rewards, isolation, degradation, or enforced participation in the violence.

2. Symptomology

- a. PTSD

Many of the symptoms of PTSD are found in these individuals, such as re-experiencing the event(s), numbing, estrangement and avoidance, and hyperarousal.

- b. Alterations of consciousness

Secondary dissociation is common. It may be particularly apparent in children who have had little time to establish their permanent sense of identity or reality, and thus find it easier to detach and form several senses of self to overcome horrifying and terrifying experiences. However, adults are not unlikely to both consciously and unconsciously use dissociation as a coping strategy for survival. In severe cases of violence against children,

secondary dissociation may become tertiary dissociation, and develop into a permanent internal method of functioning through the development of multiple personalities or selves.

Dissociation may be accompanied with partial or complete amnesia. Through the process of blocking memory input, storage, or retrieval, the brain may simply avoid cognitive knowledge of what happened. However, while there is *cognitive* amnesia, the emotions may continue to react to cues of the traumatic events.

c. Alterations in affect

While PTSD includes an acknowledgment that many survivors constrict their emotional reactions or engagements with the world, in complex PTSD, such reactions may be changed in several ways. In some, there may be a manifestation of “blandness” – a rigid control over all emotional responses or an inhibition of expression of such responses. In others, while there may be an appearance of outward calm, resignation, or apathy, the ongoing internal emotions may erupt suddenly and violently. Some may also externalize emotions through behaviors that are seen as survival behaviors, even acceptable risk-taking behaviors, or manifest fears of intimacy or trust. Elements of alterations in affect include:

- stifled or explosive anger
- compulsive or stifled sexuality
- extreme timidity and passivity
- aggressive and controlling behaviors

d. Alterations in self-perception

Traumatic changes in self-perception are central to the inability to reconnect with the world. They affect individuals' sense of adequacy and self-acceptance and shatter their identity. They often are grounded in internal personal fears of being seen by others as weak,

flawed or a failure. The experience of chronic trauma through coercive control reaffirms their lack of self-worth. They have lost control of their lives and that loss of control is attributed to their own deficiencies. Elements of this alteration include feelings of:

- helplessness and powerlessness,
- humiliation and shame,
- degradation and defilement,
- social stigma,
- self-disgust, and
- self-injury and mutilation.

e. Changes in relationships

Alterations in affect and self-perception contribute to changes in relationships. In most cases, this is manifested by disruptions of previously intimate relationships and the inability to participate in new meaningful and intimate relationships with others. Chronic trauma caused by human brutality or cruelty debilitates the capacity to trust others – sometimes to the point that one can no longer trust even oneself. Withdrawal from social interactions or self-imposed estrangement from others often leads to failure to adequately protect oneself and may contribute to revictimization. It may also induce survivors to seek out relationships with individuals who manifest all the personal characteristics they feel they themselves lack, including persons who exert control over others, are aggressive and dominant in relationships, are proud or arrogant, and at times inspire fear in others.

Elements of these changes include:

- isolation from others,
- disruptions of intimate relationships,
- failures in self-protection,
- search for a rescuer,
- distrust.
- Stockholm syndrome:
  - ideation of the perpetrator,

- acceptance of the perpetrator's belief system,
  - the perception of the perpetrator's reality and the place of the victim within that reality, and
  - gratitude to the perpetrator for allowing the victim to survive.
- f. Alterations in belief systems

Healthy individuals have a sense of meaning and purpose in their lives. Their lives are connected to others and are seen as a narrative in which the past connects to the present and to a future that will be fulfilling for themselves and their communities. Trauma – particularly chronic trauma – can destroy this meaning system. The simple recognition that so many victims and survivors confront – that bad things can happen to good people – challenges a belief in a world that is fair and just and a life that is positive and ultimately “for the best.” Elements of changes in belief systems are manifested through:

- loss of faith,
- sense of hopelessness,
- despair, and
- suicidal tendencies.

### III. Other Long-term Stress Reactions

PTSD and its variants offer crisis responders a great deal of insight into the reactions of survivors in the immediate aftermath of a community-wide trauma as well as in long-term efforts at reconstruction. However, research suggests that in most cases of PTSD, other kinds of long-term stress reactions are also present. There are high rates of depression, anxiety, phobias, and substance abuse problems that exist side-by-side or overlap with the symptoms of PTSD. Therefore, the following descriptions of several of these possible conditions are summarized below as a reference for responders to aid in making referrals and working with survivors over time. These descriptions draw,

in part, from those cataloged in the DSM-IV but are less comprehensive or technical.

### **A. Depression**

#### **1. Precipitation**

- a. Depression should be distinguished from disappointment, sadness, or bereavement.
- b. Depression may be precipitated by a particular event but may also have a neurophysiological basis. Some people have depressive personalities that lead them to feel depressed for most of their lives, although the DSM IV suggests that mild depression may be present for only two years in order to consider a diagnosis of “depressive personality.” Others may suffer depression as a facet of another type of symptomology such as the depression that may accompany the lives of borderline personalities or the depression experienced in manic-depression or bipolar disorder.
- c. People who have suffered a major trauma often experience feelings of hopelessness and helplessness. These feelings may be accompanied by persistent gloominess, troubling malaise, and low energy. While non-depressed people may suffer such feelings periodically in periods of deep sorrow, persons who manifest major depression find that their depression lasts for two weeks or more at a time and the indicators of everyday functioning become increasingly negative.

#### **2. Some manifestations of depression include the following.**

- a. Most depressed people describe at least one of two major symptoms:
  - low mood, and
  - low energy
- b. Other symptoms include:
  - pessimism or loss of spiritual connection,
  - lethargy or fatigue,



- loss of interest in or apathy towards previous interests or pleasures,
  - inability to concentrate, procrastination, and loss of focus,
  - constricted social connections,
  - decrease in sexual interest,
  - sleep disruptions or dysfunctional patterns of sleep,
  - appetite changes,
  - lowered self-esteem, self-loathing or self-blame,
  - compulsive, intrusive and recurrent thoughts of death, and
  - contemplations of suicide.
3. Depression can create a vicious psychological and physiological cycle. As individuals' moods deteriorate, so do their motivations for positive self-reclamation. As their energy level sinks, usually their functional sleeping, eating or exercise patterns become disrupted, exacerbating their depletion of energy. Depressed people often self-medicate with alcohol or intoxicants to combat feelings of depression, but the physical effects of these may increase those feelings after an initial high. In addition, just as in PTSD, the phenomenon of "kindling" seems to affect the structure and chemistry of the brain such that, after each episode of depression, there becomes a lowered threshold for any new depressing events.

## **B. Simple or specific phobias**

1. Precipitation
  - a. Simple phobias may result from one of two occurrences:
    - A single frightening event caused by a thing or person such that the phobic individuals generalize their fear to all such things or persons or generalize their fear to any similar conditions. For example:

*An individual who is in an elevator that gets stuck between floors for several hours*

*may become fearful and anxious when getting on elevators or may feel the same when in any small enclosed space.*

- Repeated attacks or threats under varied circumstances that are identified with one precipitator. For example:

*An individual who has been bitten or threatened by growling dogs several times may become fearful and anxious about all dogs.*

- b. Simple phobias may be developed through repeated exposure to others' fears or through repeated exposure to information about the dangers of certain experiences. This may be particularly true with adult phobias that are transmitted to children who carry them into their own adulthood.
  - c. Simple phobias need to be addressed only if the phobias interfere with the person's normal routine or with usual social activities or relationships with others, or if there is marked distress about having the fears.
2. Simple phobias exist when the following occur:
    - a. There is a persistent fear of a certain object or situation.
    - b. Exposure to the object or situation causes fear and anxiety.
    - c. The object or situation is consciously avoided, or endured with intense anxiety.
    - d. The person knows what is feared and realizes that many do not fear it, and are exposed to it without harm, but is unable to control that fear.
  3. Simple phobias may be reconfirmed by others sharing the phobia.

### **C. Panic attacks**

1. Precipitation
  - a. May occur in the aftermath of a traumatic event. While panic attacks may be a part of generalized anxiety syndromes or specific phobias, they can exist independently. They are

- usually sudden, unexpected and seemingly random, although they tend to be recurrent. They may be triggered by the re-experiencing of the event in post-traumatic stress disorders. Often individuals cannot identify any specific reason for the attack.
- b. Panic attacks usually last for only minutes but leave individuals shaken and overwhelmed.
  - c. While panic attacks are overwhelmingly frightening and disturbing for most people, they become problematic when individuals:
    - become preoccupied with their concerns about having them to the extent that they alter their behaviors; or
    - begin to be concerned about the consequences of such attacks, including the possibility of dying during an attack due to heart failure or loss of breath, or the possibility of harming others.
2. Panic attacks are characterized by the following.
- a. Emotional symptoms
    - Loss of control
    - Terror
    - Chaotic confusion
    - Bizarre impulses
  - b. Physical symptoms
    - Vision distortions
    - Hypersensitivity to sensory perceptions
    - Shortness of breath
    - Racing heartbeat
    - Difficulty breathing
    - Trembling and shaking
    - Ultimately exhaustion

#### **D. Anxiety syndromes**

1. Precipitation
  - a. Severe anxiety responses can be primarily a biological condition that occurs in some individuals, usually developed over time, with increasing severity of symptoms, including panic attacks, phobias, and depression.

- b. Severe anxiety responses may also be occasioned by exposure to severe trauma and usually accompanies other long term stress reactions.
  - c. Precipitations of anxiety responses after exposure to severe trauma generally occur in anticipation, or in the presence of, social or environmental cues or triggers. However, it is not unusual for sleep to be interrupted by generalized anxiety response after trauma.
2. These responses may be characterized by:
- a. Emotional and behavioral symptoms:
    - fear of identified cues or triggers,
    - hypervigilance and hyperalertness,
    - irritability and outbursts of anger,
    - feelings of dread and uncertainty,
    - lack of concentration,
    - anxious, generalized self-blame,
    - depersonalization, or
    - derealization.
  - b. Physical symptoms:
    - sinking sensations in the stomach or nausea,
    - headaches or muscle aches,
    - restlessness and sleeplessness,
    - physical fatigue, weakness or sensations of numbness,
    - palpitations or accelerated heart rate (tachycardia),
    - sweating, or cold, clammy hands,
    - difficulties in breathing,
    - shakiness, dizziness or light-headedness,
    - flushes (hot flashes) or chills, or
    - frequent urination or diarrhea.

#### **IV. Long-term Crisis Reactions**

Not all victims or survivors suffer from long-term stress disorders, but many victims may continue to re-experience crisis reactions over long periods of time. Such reactions are normally in response to “trigger events” or environmental or internal cues that remind the victim of the trauma.

- A. Trigger events** are often mentioned in this manual. The stimuli that trigger crisis reactions vary with different victims. However, they may include:
1. Identification of an assailant,
  2. Sensing (seeing, hearing, touching, smelling, tasting) something similar to something that the victim was acutely aware of during the event,
  3. News accounts of the event or similar events,
  4. “Anniversaries” of the event,
  5. The proximity of holidays or significant “life events,” and
  6. Hearings, trials, appeals or other critical phases of the criminal justice proceeding or civil litigation.
- B. Long-term stress or crisis reactions** may be exacerbated or mitigated by the actions of others. When such reactions are exacerbated, the actions of others are called the “second assault,” and the feelings are often described as a “second injury.” Sources of the second assault may include:
1. The criminal justice system,
  2. The media,
  3. Family, friends, or acquaintances,
  4. Clergy,
  5. Hospital and emergency-room personnel,
  6. Health and mental health professionals,
  7. Social service workers,
  8. Victim service workers,
  9. Schools or educators, and
  10. Victim compensation system.
- C. The intensity of long-term stress reactions** usually decreases over time, as does the frequency of the re-experienced crisis. However, the effects of a catastrophic trauma cannot be “cured.” Even survivors of trauma who reconstruct new lives and who have achieved a degree of normality and happiness in their lives – and who can honestly say they prefer the new, “sadder-but-wiser” person they have become – will find that new life events will trigger the memories and reactions to the trauma.

## **VI. Susceptibility to Long-Term Stress**

While much research needs to be done to identify the complex environmental, psychological, social, and situational factors that may make an individual or a community susceptible to long-term stress reactions, some common themes seem to be relevant to the identification of persons who might be particularly vulnerable to trauma and long-term stress reactions.

### **A. Shyness and lack of social network**

Social support has long been recognized as a key antidote to stress and incubator of resiliency. This support is initially fulfilled by immediate family members and eventually provided by friends, community members and colleagues. Social support helps to meet the need for love and belongingness as well as to reaffirm a sense of connection with the world. Shy or introverted people often retreat from the world due to their social fears or a discomfort in being with others. They lack the ability to reach out to others in the aftermath of disaster and they may also feel more stress when events force them into social interactions.

*If you are having post-trauma symptoms, being able to mobilize people around you for emotional support can help greatly, but if you're shy, say, then I'd speculate you may not have a social network or tap into it if you do. If you're depressed, you may ruminate a lot about your problems, which can perpetuate the symptoms.*

– Dr. Paula Schurr, a psychologist at the National Center for Post-Traumatic Stress Disorder at the Veterans Affairs Medical Center in White River Junction, VT; symposium findings from the 1996 annual meeting of the American Psychiatric Association, reported in *The New York Times*, May 8, 1996.

### **B. Pessimism and apathy**

Dr. Martin Seligman has contrasted behaviors of learned helplessness, which arise when people give up trying to exert control over their environment, and behaviors of learned optimism, which describes how resilient people may more effectively respond to adversity. The key factors in optimism or pessimism are personalization, permanence, and pervasiveness. Individuals are optimistic when they view adversity as non-personal, temporary, and limited in its overall effect on life. They tend to also view success as the result of personal action, permanent, and pervasive in effect. Individuals who are pessimistic look at adversity as being the result of their personal actions, permanent, and pervasive in its effect; while looking at success as being caused by others, temporary and limited in effect. Norman Cousins has also emphasized the role of attitude in surviving tragedy. He defines resilience in terms of hardiness, and identifies four key ingredients that contribute to hardiness: positive expectations, relaxation, positive emotions, and action or activity.

Martin Seligman, *Learned Optimism*, New York: Knopf, 1991; Norman Cousins, *Head First: The Biology of Hope*, New York: Dutton, 1989

### **C. Weak cognitive processing**

The ability to manage the impact of trauma is affected by the ability to understand perceptions, organize and define thoughts, and to conceptualize what has happened. Creativity, the capacity to plan and set goals, facility with language, logic, emotional resilience and intuitive or empathetic understanding reflect capacities for associating, transforming and integrating experiences into adaptive behaviors. These capacities may be innate or learned. Intelligence, broad education and deep exposure to the world may enhance such capacities and improve cognitive processing. Individuals who are less able to think through an event and make sense of it are more likely to remain traumatized over time. They may be unable to construct a coherent story of the event; resolve problems derived from it; or to develop new values or meanings in life.

*Intelligence may be a psychological buffer, helping you make sense of what's happened to you, so you're less likely to feel overwhelmed and helpless by the trauma.*

– Dr. Roger Pittman, a psychiatrist at the Veterans Affairs Medical Center in Manchester, NH; symposium findings from the 1996 annual meeting of the American Psychiatric Association, reported in *The New York Times*, May 8, 1996.

#### **D. Poor physical health**

Physical health has a great effect on the ability to withstand stress and trauma. A healthy person has a well functioning immune system, cortical and limbic alertness, and a coordinated strategy of maintenance through adequate sleep and physical exercise. Those who confront a disaster with diminished physical health are more likely to succumb to physical illness and fatigue. One of the problems that is created is that traumatic stress often is experienced in situations that conspire to further diminish health. Good nutrition may be difficult to find, sleep may be consistently interrupted and physical activity constrained. There can be a spiralling downward towards sickness due to the drain on the body's capacity to maintain its equilibrium.

*Perhaps the most acceptable and powerful stress management tool we can make available to police officers is a comprehensive physical fitness program. Fitness is seen as a primary mitigating behavior that reduces physiological outcomes of stress.*

– Williams, Candis, "Peacetime Combat: Treating and Preventing Delayed Stress Reactions in Police Officers," *Post-Traumatic Stress Disorders: A Handbook for Clinicians*, Williams, T., ed., Disabled American Veterans: Cincinnati, OH, 1987



### **E. Lack of spiritual faith**

The need for a sense of spiritual connection or beliefs in an integrated cosmic system seems to relate to the need to understand how a specific traumatic event fits into a survivor's life plan. It gives depth and richness in the search for integration of the tragedy. More discussion of this factor is found in Chapter Seven.

*Clearly, there are many variables that determine how people cope with a sudden blow: the developmental stage they are in when the trauma occurs, the strength of their family support system, their general coping style, their self-esteem, whether or not they were traumatized earlier in their lives and how they handled that experience. Another often-overlooked factor seems to be faith: Those who have a strong belief in something beyond themselves – God, a universal benevolence or wisdom, or some greater power – are far more likely to see an interruption in their lives as part of a bigger plan, that is, in some mysterious way, in their best interest. With this faith, they are better able to make their peace with sudden catastrophe.*

– Cole, Diane, "Nobody Promised You Tomorrow,"  
*Networker*, November/December, 1991

### **F. What makes people thrive under stress?**

Psychologist Beth Miller lists the following twelve keys to living a more fulfilling existence after disaster.

1. Admit your vulnerability.
2. Find parts of the problem you can manage.
3. Develop your ability to communicate.
4. Figure out what it is you need – and then go after it.
5. Acknowledge your talents.
6. Learn to set limits and state your boundaries.
7. Whenever possible, transform resentment into forgiveness.
8. Keep your sense of humor.
9. Explore the full range of possibilities – then persist.

Participant's Notes

10. Find meaning in crisis.
11. Be willing to endure and fully enter your suffering.
12. Learn to stand alone; but don't be reluctant to reach out and rely on others. (Referred to in Andrews, Valerie, "The Art of Resilience: Learning to turn Crisis into Opportunity," *Intuition*, July/August, 1997)

## VII. Conclusion

People who endure traumatic events often have long term stress reactions. Frequently those experiences are integrated into the lives of individuals and communities such that reactions are understood, processed, and given meaning. The adaptive capacities of individuals and communities may be strong enough to survive the onslaught of trauma related stress in the milieu of ordinary stress factors. Even then, there may be long term crisis reactions when other events or developmental changes occur after the event. Sometimes, traumatic events are so distressing that an individual's adaptive capacities are overwhelmed and additional help is necessary. The symptoms of consequent mental, emotional and physical changes are helpful in tracking individual responses and providing referrals for mental health interventions, if necessary.

*In our sleep, pain which cannot forget falls drop by drop upon the heart until, in our own despair, against our will, comes wisdom through the awful grace of God.*  
– Aeschylus