Chapter Six

Post-Traumatic Stress Disorder: Failure to Recover From a Trauma

Imagine yourself as a young person who has lived through the extreme trauma of child sexual abuse, a school shooting, a serious car accident, or a devastating tornado. Now imagine yourself repeatedly reexperiencing that traumatic event in the form of flashbacks, nightmares, intrusive memories, or frightening mental images. For you, the sense of danger never really passes, so your mind and body remain constantly on high alert.

The persistent anxiety you feel after the trauma makes you want to avoid anything associated with that terrible event. You might go out of your way to avoid certain people, places, or activities, or you might simply try to avoid ever thinking or talking about what occurred. Perhaps you feel angry and distrustful of others, or maybe you feel shut off from your own emotions and unable to connect with family and friends.

You've just entered the mind of a teen with post-traumatic stress disorder (PTSD). The thing that makes PTSD diagnosis unique among the anxiety disorders is that it requires a precipitating event. This

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Startling Stats

Adolescents are unfortunately at high risk for traumatic life experiences that can give rise to PTSD in some individuals:

- The National Child Traumatic Stress Network estimates that more than one-fourth of all American youth experience a serious traumatic event by age 16, and many suffer multiple traumas.
- In 2002, nearly 1.7 million young people between the ages of 12 and 19 were victims of a violent crime.
- In a large national survey, 9% of high school students reported having been raped at some point in their lives.

event is some form of terrifying ordeal in which grave physical harm to oneself or others either occurs or is threatened. Examples of such events include child physical or sexual abuse, rape, physical assault, kidnapping, natural disasters, terrorist attacks, serious accidents, life-threatening illnesses, or the sudden, unexpected death of a loved one.

These kinds of events are sadly common in the lives of American adolescents. Teens are twice as likely as other age groups to be victims of violent crime, and they are also at high risk for witnessing violence against others. Of course, not everyone who is exposed to a very traumatic event goes on to develop full-blown PTSD, even though many may have some lingering problems. But of young people who have ever experienced a trauma, it's estimated that from 3% to 15% of girls and from 1% to 6% of boys develop PTSD.

One Family's Story

At the time Jennifer was born, her parents were both addicted to drugs. They soon separated, and Jennifer remained with her

mother, whose lifestyle with a new boyfriend grew increasingly erratic. Luckily for Jennifer, her paternal grandparents remained in the picture, and although they didn't yet know the extent of her problems, they were growing very alarmed by what they *could* see.

"My first thought was that she looked autistic," says Shirley of her granddaughter as a preschooler. "She was completely out of control, very hypersexual, and just a really strange little girl." But when Shirley took the girl to see a doctor, she was shocked when he suggested another explanation. Based on a physical exam, the doctor believed that Jennifer might be reacting to sexual abuse. Then on another occasion, Jennifer turned up with unexplained bruises from head to toe, leading her grandparents to strongly suspect that she was being physically abused as well.

Faced with abuse allegations, Jennifer's mother took the girl and dropped out of sight for a while. When the mother resurfaced, she was no longer willing to let Jennifer see her grandparents. Thus began several years of legal wrangling over visitation and custody. Eventually, Jennifer went to live with her grandparents. But it took another six years of court battles before her mother's parental rights were terminated and her grandparents were able to legally adopt her.

During those years, Jennifer was diagnosed with PTSD, which was traced to the sexual and physical abuse she had suffered as a child. Her symptoms may have been complicated by other emotional fallout from the abuse as well as the neurological impact of drugs her mother had used during pregnancy. Jennifer was plagued by recurring nightmares, and she always seemed to be on the lookout for danger. For a long time, it was difficult for her to connect with other people.

Once Jennifer reached middle school, she began getting into serious trouble at school. "She was always acting out—if it wasn't sexually, it was physically hurting people," her grandmother recalls. "I would get calls from the school while I was at work, and I could hear her screaming in the background."

The healing process was slow, but with therapy and medication as well as the steadfast support of her grandparents, Jennifer's problems gradually improved. One turning point came at age 14, when Jennifer's grandparents officially adopted her. "Once the courts finally severed her mother's parental rights, she got better quickly," Shirley says. "She was so enormously afraid of her mother. Without that hanging over her head, she was able to move on with her life."

Today, Jennifer is 21, married, and expecting her first child. Until recently, she also worked as a youth advocate for a mental health agency. "She's doing well," her grandmother says proudly. "She still has some emotional scars, but she's very self-willed. I've empowered her to the max." After a moment's reflection, she adds, "I feel like I'm very fortunate to have had the experience of raising Jennifer. She really changed our lives, and I learned so much. And man, that girl is brave."

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Aftershocks of Trauma

Many upsetting and stressful things occur in the lives of young people. Parents divorce, grandparents die, classes are failed, best friends move away. While such events are certainly distressing, they generally don't lead to PTSD. To trigger the disorder, an event must involve at least one of these elements:

When Home Is Where the Hurt Is

Home should be the place where children feel loved and secure. For too many, though, it's the source of their trauma. Reliable data on the frequency of domestic violence and child physical abuse are lacking. However, it's estimated that from 3 to 10 million American children each year witness domestic violence against a parent. In addition, documented cases of child physical abuse total nearly 180,000 per year, but most experts consider this figure a gross underestimate, since it includes only cases that have been confirmed by child protective service agencies. All told, millions of young people are at high risk for PTSD because of violence they've witnessed or experienced in their own homes.

One mother of five, including a 19-year-old with PTSD, says she spent 11 years in an abusive relationship before getting out. During that time, she told herself that her children were okay so long as all the violence was aimed at her, not at them. Now she knows otherwise: "If you're in an abusive relationship, regardless of whether the abuse is directed toward you or your child, you need to realize that the damage is being done, and it's enormous. No matter how hard you try to shield your children from it, they know what's happening, and it *will* cause them problems in the future. Children see and understand a lot more than we as parents realize."

If you're struggling with violence in your home—whether you're the victim, a bystander, or the person having trouble controlling your angry feelings—help is out there. Good starting places are the Childhelp USA National Child Abuse Hotline (800-422-4533, www.childhelpusa.org) and the National Domestic Violence Hotline (800-799-7233, www.ndvh.org).

- Actual or threatened death or serious injury
- A threat to the person's physical integrity, such as child sexual abuse
- Witnessing the death, serious injury, or threat to physical integrity of another
- Learning about the sudden, unexpected death or serious injury of a loved one

At the time the event occurs, it gives rise to intense feelings of fear, helplessness, or horror. People who experience a trauma firsthand are generally more likely to develop PTSD than those who just witness or hear about it. Also, the more intense a trauma is, the greater the risk of the disorder. Long-lasting or repeated trauma—for example, ongoing violence in the home—is especially likely to lead to long-term difficulties. Symptoms are also more likely to be severe or long-lasting when the trauma is intentionally inflicted by another person.

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In practical terms, this means there is a much greater likelihood that people will develop PTSD after a rape, for instance, than after a natural disaster. In fact, research has shown that nearly half of women and two-thirds of men who have been raped go on to develop PTSD. The more danger people believed themselves to be in during the rape, the worse the symptoms are apt to be. When friends and family react negatively to what has happened—when they "blame the victim" or refuse to listen sympathetically to the victim's story—the risk is further increased.

In the Aftermath

PTSD includes three main types of symptoms: reexperiencing the traumatic event, avoidance and emotional numbing, and increased arousal or state of heightened alert. All three must be present for a diagnosis of the disorder to be made. Following are examples of specific symptoms that fall into each of these categories.

- Reexperiencing the traumatic event
  - Recurring memories of the event that are intrusive and distressing
  - Recurring nightmares about the event

- Flashbacks in which the person, while awake, acts or feels as if the event is happening again
- Intense emotional distress or physical reactions when exposed to triggers that remind the person of the event

- Avoidance and emotional numbing
  - Efforts to avoid thinking, feeling, or talking about the event
  - Efforts to avoid people, places, or activities that bring back memories of the event
  - Inability to recall some important part of the event
  - Reduced interest or participation in activities that were once enjoyed
  - Feeling detached or estranged from others
  - Restricted range of emotions (for example, the inability to feel love)
  - Sense of a foreshortened future (for example, not expecting to live past 25)

- Increased arousal
  - Difficulty falling or staying asleep
  - Irritability or outbursts of anger
  - Difficulty concentrating
  - Constant vigilance
  - Exaggerated startled response

Sooner and Later

Immediately after a terrible experience, some people have only mild symptoms that go away quickly without treatment. Other people, however, take longer to recover. Such post-trauma problems are given different names depending on how long they persist.

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- Acute stress disorder—Symptoms that develop soon after a very traumatic event and last for less than a month. Although the symptoms are too brief to be considered PTSD, they are severe enough to impair day-to-day functioning.
- Acute PTSD—After a month, a diagnosis of PTSD can be considered. If the symptoms have lasted for only one to three months, the disorder is called acute PTSD.
- Chronic PTSD—If the symptoms have lasted for longer than three months, the disorder is called chronic PTSD.

In most cases, the symptoms of PTSD arise immediately after the traumatic event. Occasionally, though, they don't appear for months or even years afterward. When the onset of symptoms first occurs six months or more after the trauma, the disorder is called delayed PTSD. In such cases, the symptoms are often triggered by the anniversary of the event or the experience of a new trauma, especially if it reminds the person of the original event.

Red Flags to Watch For

Has your teen been through an extremely traumatic event? These are some warning signs that your teen might need help:

Acute Stress Disorder

Acute stress disorder is a short-term anxiety disorder that, by definition, lasts no more than a month. It starts with exposure to the same kind of traumatic event that can trigger PTSD, and it includes many of the same symptoms: reexperiencing the trauma, avoidance, and increased arousal. In addition, acute stress disorder includes dissociative symptoms, such as being "in a daze," feeling like a detached observer of one's own thoughts or behavior, and feeling as if the outside world is strange or unreal. To qualify as acute stress disorder, these symptoms must cause significant distress or impairment in everyday life.

- Having frequent, troubling memories of the event
- Acting as if the event is occurring all over again
- Going out of the way to avoid things associated with the event
- Developing physical or emotional symptoms when reminded of it
- Being unable to recall important aspects of the trauma
- Worrying about dying at a young age
- Seeming emotionally detached from other people
- Startling more easily than before the event
- Having repeated nightmares or trouble sleeping

The complete diagnostic criteria for PTSD can be found in the Appendix.

PTSD in Adolescents

PTSD seems to be relatively common among adolescents. A recent national survey of 4,023 adolescents found that 3.7% of the boys and 6.3% of the girls reported meeting all the criteria for the disorder within the previous six months. Teens with PTSD are more likely than either younger children or adults to behave in an impulsive or aggressive manner. For the most part, though, their symptoms mirror those seen in adults.

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Mark's two children—16-year-old Jason, who has mild mental retardation, and 13-year-old Brittany—developed PTSD after repeated sexual assaults by an older brother, who threatened to kill their parents if they ever told. Several months after Mark and his wife finally learned about the assaults, the older brother is in jail, and Jason and Brittany are

now receiving treatment with therapy and medication. Before the treatment started working, both teens showed the cardinal signs of PTSD: reexperiencing the trauma, avoidance, and increased arousal.

"Jason would have nightmares a couple of times a night, and they were both having frequent flashbacks," says Mark. These symptoms have subsided since treatment began, but the children and their therapist are still working on other symptoms. For example, several of the assaults took place in a basement family room while the parents were out of the house. As a result, both Jason and Brittany began avoiding the basement, and confronting this fear is one of their current goals in therapy. In addition, some of the assaults on Brittany occurred in her bedroom at night, after the parents were asleep. She is still very jumpy about being approached there. For now, her parents have gotten into the habit of talking as they walk down the hallway toward her bedroom so that she'll know they're coming. The healing process for the whole family is taking some time, but they're getting through it together.

Other Related Problems

All teens with PTSD have experienced at least one deeply disturbing event, and some, like Jason and Brittany, have been through multiple traumas over a period of months or years. It's no surprise that these teens often display a number of emotional and behavioral symptoms in addition to the classic signs of PTSD. Studies have found that young people with PTSD, like adults with the disorder, are at substantially increased risk for suicidal thoughts and behaviors, relationship difficulties, and other anxiety disorders, including social anxiety disorder, generalized anxiety disorder, panic disorder, and specific phobias. Physical symptoms—such as headaches, gastrointestinal

complaints, immune system problems, dizziness, and chest pain—are also common. Several other disorders can coexist with PTSD as well.

- Depression—Researchers have found that as many as 41% of adolescents with PTSD develop depression by age 18. Often, the PTSD starts before or at the same time as the depression, suggesting that either the trauma or the PTSD symptoms were the root cause. In fact, many people respond to trauma by losing interest and pleasure in things they used to enjoy—one of the cardinal signs of both depression and PTSD. In addition, people sometimes develop irrational feelings of guilt after a trauma. They may feel as if the event was somehow their fault, even when this is clearly not the case. Such feelings are also typical of people with depression.
- Substance abuse—Teens with PTSD who turn to alcohol or other drugs may be trying to suppress disturbing memories, flashbacks, or mental images. Or they may be seeking relief from the constant state of mental and physical tension in which they live. Whatever the case, substance abuse is common in teens with PTSD. One study found that 46% of young people with the disorder became dependent on alcohol before age 18, and 25% became dependent on other drugs. Interestingly, being a trauma survivor alone doesn't seem to increase the risk of substance abuse. It's the distressing PTSD symptoms that appear to predispose teens to the problem. Unfortunately, any relief that these substances provide is temporary at best. In the long run, alcohol and drug abuse just worsen symptoms and make treatment more difficult.
- Disruptive behavior disorders—Attention-deficit hyperactivity disorder (ADHD), oppositional defiant disorder,

and conduct disorder are sometimes grouped together because all three can lead to highly disruptive behaviors. Such disruptive behavior disorders are more common in young people with PTSD than in those without the disorder.

ADHD—The key features of ADHD are inattention, hyperactivity, or impulsive behavior that begins early in life and may continue throughout the school years. Some young people with ADHD are bothered mainly by distractibility and a short attention span, others by hyperactivity and impulsiveness, and still others by all these problems combined. Certain symptoms of PTSD are similar to those of ADHD, which might lead to misdiagnosis in some cases. But researchers have also suggested that young people with true ADHD may be more likely to develop PTSD after exposure to a trauma.

Oppositional defiant disorder—Most adolescents defy authority at times, especially when they're tired, stressed, or upset. However, for those with oppositional defiant disorder, the defiant, uncooperative, and hostile behavior becomes a long-lasting way of life. Symptoms may include angry outbursts, excessive arguing with adults, habitual refusal to comply with adult requests, and deliberate attempts to annoy people. Once again, there is some symptom overlap with PTSD that could create confusion between the two conditions. However, it's also possible that PTSD might worsen any oppositional or defiant tendencies that are already present.

Conduct disorder—Most teenagers test the rules now and then. However, those with conduct disorder have extreme difficulty following the rules or conforming to social norms. They may threaten others, get into fights, set fires, vandalize property, lie, steal, stay out all night, or run away from

Warning Signs of Suicide

Teens with PTSD are at increased risk for suicidal thoughts and behaviors. Be alert for these warning signs:

- Acting depressed, hopeless, or desperate
- Being preoccupied with death and dying
- Saying things such as "Nothing matters anymore," "I wish I were dead," or "I won't be a problem to you much longer"
- Giving away prized possessions, throwing out important belongings, or otherwise putting affairs in order
- Increasing use of alcohol or drugs
- Losing interest in his or her personal appearance
- Withdrawing from friends, family, and regular activities
- Experiencing a sudden change in eating or sleeping habits
- Describing himself or herself as a bad person
- Being unwilling to accept any praise or rewards

If your teen talks or acts in a way that leads you to believe that he or she might be feeling suicidal, get help immediately. Contact your teen's doctor or therapist right away, or call the National Hopeline Network (800-784-2433, www.hopeline.com) to find a crisis center in your area.

home. It has been suggested that young people who develop PTSD in response to violence may be especially likely to develop significant behavior problems. One possible explanation is that they've learned to identify with the perpetrator and mimic antisocial behavior.

Causes and Contributors

PTSD is triggered by a trauma, but it's influenced by the same kinds of genetic, biological, and environmental factors as other

anxiety disorders. Such factors help explain why two people can live through the same traumatic experience, yet only one develops PTSD.

Past as Prologue

Research suggests that extreme stress early in life can affect how adverse events are experienced at a later date. In studies, rat pups who had been separated from their mothers for several minutes at a young age showed a much greater startle reaction to a stressful event months later than those who had never been separated. A human parallel may be found in people who have endured early traumas, such as child sexual or physical abuse, and who are prone to developing PTSD. According to one theory, extreme stress in early childhood, when the brain is still developing, may have lasting effects on a body system called the hypothalamic–pituitary–adrenal (HPA) axis.

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When a person perceives a threat, part of the brain called the hypothalamus is activated. The hypothalamus releases a hormone called corticotropin-releasing factor (CRF), which, in turn, triggers the release of pituitary and adrenal hormones. Together, these hormones set in motion a number of physiological changes that mobilize the body to respond quickly to the threat.

Research suggests that extreme stress early in life may affect the CRF-producing cells in the brain, leading to long-lasting overactivity of the HPA axis. As a result, a person might have a super-sensitive response to even the slightest whiff of danger, and this may lay the groundwork for both anxiety and depression.

Some studies have indeed found elevated levels of CRF in the cerebrospinal fluid—the fluid surrounding the brain and spinal cord—of people with PTSD. However, the situation is not as clear-cut as it sounds, since some children with anxiety disorders actually show HPA underactivity, rather than overactivity.

More Brain Changes

In brain imaging studies, researchers have found that the hippocampus—the part of the brain involved in emotion, learning, and memory—tends to be smaller than usual in adults with PTSD. It's thought that the hippocampus might shrink as a result of long-term overexposure to stress-related substances in the brain. Such shrinkage might play a role in the intrusive memories and flashbacks associated with PTSD. However, it has been found only in adults, not in children.

Another part of the brain that might be expected to contribute to PTSD is the amygdala, a small structure deep inside the brain that is activated by fear. Imaging studies of adults with PTSD have found that brain activity is increased in the amygdala and decreased in the prefrontal cortex, the part of the brain that inhibits amygdala activity. Selective serotonin reuptake inhibitors (SSRIs), medications that are sometimes used to treat PTSD, inhibit amygdala function, while cognitive-behavioral therapy (CBT) is thought to bolster the functioning of the prefrontal cortex.

Finally, as noted above, exposure to a threat sets off a whole cascade of physiological changes as the body prepares to react. Among these changes is the release of natural morphine-like substances in the brain that help blunt pain perception. Just as with CRF, researchers have found that production of these substances sometimes remains elevated even after the danger has passed. It's believed that this might contribute to the blunted emotions that characterize PTSD.

Genetic Factors

Some people may inherit a vulnerability to PTSD. However, this is a tricky matter to prove, since the disorder can't be assessed in relatives who haven't yet experienced a trauma. And even if the disorder is found in several members of the same family, it could be due to a shared trauma, such as living in the same violent household or going through a natural disaster together. As it turns out, studies suggest that environment alone can't account for all the variance in PTSD occurrence. But it's still important to tease out exactly what it is that's inherited. Is it a predisposition to PTSD itself, or is it instead a predisposition to some coexisting disorder, such as depression or substance abuse? Such coexisting disorders might lead to behaviors that increase the risk of trauma and thus contribute to PTSD, but only indirectly.

To date, the strongest evidence for a genetic link comes from studies of male twins who both served in the military during the Vietnam era. Genetics seemed to influence not only their PTSD symptoms, but also their chance of actually being involved in combat. Of course, individuals with certain inherited characteristics, such as physical strength and endurance, might be more likely to be assigned to a combat situation. However, it's also quite plausible that individuals with an inherited predisposition toward sensation seeking might be more likely to volunteer for hazardous duty. All told, one study of over 4,000 twin pairs found that genetic influences explained nearly half of the variance in combat exposure. Thus, it seems that genes may affect both behaviors that increase the risk of exposure to a trauma and the likelihood that PTSD will develop afterward.

Environmental Factors

PTSD is always a result of some traumatic event. A teen's home, neighborhood, and school environment have a big impact on

the type of trauma to which he or she is potentially exposed. For example, a teen growing up in a neighborhood with lots of gang violence may face different risks than a teen from a safer neighborhood. After the trauma, environmental factors also influence the odds that PTSD will develop. Risk factors are characteristics that increase a person's likelihood of developing a disorder, while protective factors are characteristics that decrease the likelihood.

Table 3 contains some examples of risk and protective factors that have been reported for people who've experienced different

Table 3. Risk and Protective Factors

The presence of risk factors doesn't mean that people will necessarily get PTSD, and the presence of protective factors doesn't guarantee that they won't. Instead, such factors merely raise or lower the risk. These are examples of risk and protective factors for particular types of traumatic events.

Trauma	*Risk factors*	*Protective factors*
School violence	Direct exposure as a victim or witness High rate of injury or loss of life Very disrupted or traumatized community	In-school counseling Referral to community mental health providers Family and community support
Life-threatening illness	Longer duration of treatment Advanced or recurrent disease	Good relationship with medical staff Accurate information about the illness
Natural disaster	Lack of family or social support Cold, fatigue, hunger Dislocation from or loss of one's home Lack of information about the event	Care and concern from recovery services personnel Information about what to expect and where to find help

types of trauma. Unfortunately, some traumas are so severe that even the presence of many protective factors may not prevent PTSD. Nevertheless, the more positive factors that teens have in their lives, the less severe their symptoms may be or the faster they may respond to treatment.

Diagnosis and Treatment

Many teens with PTSD gradually get better on their own over a period of months. But some continue to have symptoms for years if untreated. Any teen who continues to have significant symptoms for more than three months after the traumatic incident should see a mental health professional. If the symptoms are quite severe, treatment should start as early as three weeks after the traumatic event. The longer the symptoms go without treatment, the more likely it is that complications such as alcohol abuse will occur, so it pays to consult a professional sooner rather than later.

Psychological debriefing is a mental health service that is sometimes offered to survivors immediately after a traumatic event. Rather than treating PTSD, the intention of debriefing is to prevent it by helping survivors understand their feelings, reduce their distress, and prepare for what they may face in the future. Studies to date have provided little evidence that psychological debriefing actually prevents PTSD, but it may provide some immediate comfort and support as well as information about what to expect and where to find help. If your teen is offered psychological debriefing and chooses to take part, it could be worthwhile. However, such participation shouldn't be forced if your teen doesn't feel comfortable with it.

The actual treatment of PTSD usually starts only after a person has been safely removed from the traumatic situation. If a teen is still being exposed to extreme ongoing stress—for example, sexual abuse or violence in the home, physical abuse by a dating partner, or homelessness—addressing this crisis is the first concern. Once the situation has been stabilized, treatment for the lingering symptoms of PTSD can begin.

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Getting a Diagnosis

It's common for teens to be upset or have trouble functioning for a few days or weeks after a traumatic event. If symptoms persist, though, it's time to seek a professional diagnosis. A mental health professional will conduct a diagnostic interview with your teen to learn more about past experiences and current symptoms. At times, a symptom checklist may be used as a supplement to the interview. Since you know your child so well, you may be asked to provide information as well.

The accurate diagnosis of PTSD is not always a simple matter, however, even for trained professionals. The symptoms may be complicated by coexisting conditions, or they may be confused with other mental or physical disorders. And since doctors and teachers are not always well informed about PTSD, they may be slow to refer teens for psychological assessment and treatment. Fortunately, your teen has you in his or her corner. If you notice that your teen is struggling in the aftermath of a trauma, don't hesitate to ask for a referral to a mental health professional.

Cognitive-Behavioral Therapy

The best-studied form of therapy for PTSD in young people is cognitive-behavioral therapy (CBT). It focuses on both outward

behaviors and the thoughts and beliefs that accompany these actions. The goal is to replace maladaptive behaviors, thoughts, and emotions with more adaptive ones. One crucial element of CBT that plays a key role in PTSD treatment is exposure therapy, in which a patient gradually confronts people, places, things, or memories that are associated with the trauma and are now safe, but still evoke intense fear.

One CBT program that is very effective with PTSD, called prolonged exposure, has been described by this book's lead author and her colleague Barbara O. Rothbaum. Over the course of 9 to 12 sessions, patients are helped to gradually confront a feared situation in real life. For example, a teen who was traumatized after being involved in a serious auto accident will be encouraged to gradually resume riding in a car again. Typically, patients start with easier steps (for example, sitting in a parked car) and gradually work up to harder and harder ones (for example, going for progressively longer rides). Over time, they come to realize that the feared situation is something they are able to face rather than avoid. Patients are also asked to confront traumatic memories in their imagination. For example, the therapist might have a patient retell traumatic memories until they no longer evoke fear.

Some people also develop unjustified feelings of guilt and self-blame after a traumatic experience. For example, the victim of a rape might blame herself for being in the wrong place at the wrong time, or the survivor of a school shooting might feel guilt for not saving his classmates. Through repeated recounting of the traumatic memory and discussion of it later with the therapist, the patient gains a more realistic perspective on the event.

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During CBT, patients may also learn specific skills that they can use to manage their symptoms of anxiety and stress. For example, in relaxation training, they might learn to control fear and stress by taking deep, even breaths; focusing on a soothing mental image; or progressively tensing and relaxing their muscles. Such techniques may give patients confidence that they can control their own thoughts and feelings rather than be controlled by them.

Although several other forms of therapy have been tried for PTSD, CBT is the best validated in scientific studies. One study published in 2004 included 229 young people ages 8 to 14 who had suffered sexual abuse. Almost all had experienced other traumatic events as well, such as being victims of physical abuse, witnessing domestic violence, or learning about the sudden, unexpected death of a loved one. All of the youngsters had at least several symptoms of PTSD, and a large majority met the full diagnostic criteria for the disorder. The youngsters were randomly assigned to received 12 weekly sessions of either CBT or another form of therapy. Those who received CBT showed greater improvements in PTSD, depression, behavior problems, and feelings of shame and self-blame.

Once your teen starts therapy, urge him or her to see it through. Facing up to frightening or disturbing memories in therapy is not pleasant, and it's understandable that many people want to give up. Let your teen know that you realize how difficult it is, but that this short-term distress is a small price to pay for long-term relief. Your encouragement can make a big difference.

Eye Movement Desensitization and Reprocessing

Another treatment, called eye movement desensitization and reprocessing (EMDR), combines elements of exposure therapy

with directed shifts in attention. Patients are instructed to recall aspects of the traumatic experience while focusing on some back-and-forth stimulus. Originally, EMDR involved having the patient visually follow a therapist's side-to-side finger movements; hence, the name of the treatment. More recently, though, finger taps or sounds that alternate from one side of the patient's body to the other have been also included during treatment or used in place of the eye movements. Although the theory behind EMDR is still evolving, proponents claim that one key to its effectiveness is the side-to-side shift in attention. Several studies have failed to show that eye movements per se are an active part of the treatment, however.

There is some research evidence that EMDR can be helpful for PTSD. However, a head-to-head comparison of EMDR and traditional exposure therapy in adults found that the latter was more effective. Specifically, traditional exposure therapy was better at reducing symptoms of avoidance and reexperiencing the trauma, and it tended to bring faster relief as well.

Medication Therapy

CBT is the first-choice treatment for younger children and adults with PTSD. There is also some evidence that CBT is effective for teens who have the disorder. In contrast, there has been very little controlled research on the use of medications to treat young people with PTSD. Based on the limited evidence that's available, though, medications do seem to help some young people cope with severe or persistent symptoms. Medication is also helpful for treating other conditions, such as depression or different forms of anxiety that often go along with PTSD.

Expert consensus guidelines developed by this book's lead author and her colleagues recommend SSRIs as the first-choice

medications for treating PTSD. SSRIs are antidepressant medications that are widely used to treat not only depression, but also anxiety disorders. A newer group of antidepressants, called serotonin–norepinephrine reuptake inhibitors (SNRIs), are highly recommended by the expert panel, too. If SSRIs and SNRIs fail to provide adequate relief, other types of medications—including tricyclic antidepressants, benzodiazepines, mood stabilizers, and atypical antipsychotics—are sometimes prescribed.

- SSRIs—These medications act by increasing the available supply of serotonin, a neurotransmitter that seems to play a central role in both anxiety disorders and depression. SSRIs include citalopram (Celexa), escitalopram (Lexapro), fluoxetine (Prozac), fluvoxamine (Luvox), paroxetine (Paxil), and sertraline (Zoloft). In well-controlled studies of adults with PTSD, fluoxetine, paroxetine, and sertraline have all been shown to be effective at reducing symptoms. In addition, one study of citalopram found that it worked as well for children and adolescents with PTSD as for adults. On the downside, it can take a few weeks for the full effects of SSRIs to be felt, and they must be started at a low dose, since they sometimes actually worsen anxiety at first. Possible side effects include nausea, headache, nervousness, insomnia, jitteriness, and sexual problems. In 2004, the U.S. Food and Drug Administration (FDA) also issued a warning about a small but significant risk of increased suicidal thoughts and behaviors in children and adolescents who are taking antidepressants. For more information about this warning, see Chapter 7.
- SNRIs—Two newer antidepressants—duloxetine (Cymbalta) and venlafaxine (Effexor)—act on serotonin much as SSRIs do, but also affect another neurotransmitter called

norepinephrine. Like SSRIs, these medications are sometimes prescribed for anxiety disorders, including PTSD, as well as depression. It can take a few weeks to get the full benefits of these drugs. The side effects are similar to those for SSRIs, and the FDA warning about the risk of suicidal thoughts and behaviors applies here as well.

- Tricyclic antidepressants—These older antidepressants also affect the concentration and activity of serotonin and norepinephrine in the brain. However, they're more apt to cause troublesome side effects than their newer cousins, so they're usually not first-choice treatments. Tricyclic antidepressants include amitriptyline (Elavil), clomipramine (Anafranil), desipramine (Norpramin), doxepin (Sinequan), imipramine (Tofranil), maprotiline (Ludiomil), nortriptyline (Pamelor), protriptyline (Vivactil), and trimipramine (Surmontil). Possible side effects include dry mouth, constipation, bladder problems, sexual problems, blurred vision, dizziness, drowsiness, and increased heart rate. The FDA warning about the risk of suicidal thoughts and behaviors applies to these antidepressants, too.
- Benzodiazepines—These antianxiety medications are thought to raise levels of GABA, yet another neurotransmitter that seems to play a role in anxiety. Benzodiazepines include alprazolam (Xanax), chlordiazepoxide (Librium), clonazepam (Klonopin), clorazepate (Tranxene), diazepam (Valium), lorazepam (Ativan), and oxazepam (Serax). The available studies do not indicate that benzodiazepines are beneficial for decreasing PTSD. Nevertheless, they are sometimes still prescribed. One advantage to these drugs is that they are fast-acting. Some people who take them feel better from the very first day. However, these drugs also have significant risks, so they are usually taken only

on a short-term or intermittent basis. Possible side effects include drowsiness, loss of coordination, fatigue, confusion, or mental slowing. If your teen is old enough to drive, he or she may be advised not to do so while taking one of these medications. If your teen has a substance abuse problem, be aware that combining these drugs with alcohol can lead to serious or even life-threatening complications. Also, benzodiazepines themselves can be abused, so their use needs to be closely supervised. For more information about the side effects of antianxiety drugs, see Chapter 7.

- Mood stabilizers and atypical antipsychotics—These medications help even out extreme mood swings. Mood stabilizers include carbamazepine (Tegretol), lamotrigine (Lamictal), and valproic acid (Depakote). Atypical antipsychotics include aripiprazole (Abilify), clozapine (Clozaril), olanzapine (Zyprexa), quetiapine (Seroquel), risperidone (Risperdal), and ziprasidone (Geodon). In small studies of children with PTSD, both risperidone and carbamazepine have been shown to reduce symptoms. While the specific side effects vary from drug to drug, they can be significant. Nevertheless, mood stabilizers and/or atypical antipsychotics may sometimes be helpful for people who don't respond to other medications or who have anger or irritability as prominent symptoms.

What to Expect

When teens have acute PTSD and no other coexisting problems, substantial improvement is often seen after just 12 to 20 sessions of CBT. In certain situations, as few as 3 to 6 CBT sessions may be enough. When medication is required, most experts recommend continuing it for 6 to 12 months.

While the majority of people with chronic PTSD benefit from short-term CBT, occasionally longer-term therapy is needed. This can take the form of either continuous weekly sessions or a few weeks of sessions interspersed with periods away from therapy. When medication is prescribed for chronic PTSD, it's usually taken for at least 12 to 24 months, and sometimes longer if the teen continues to have troublesome symptoms. Factors that increase the likelihood that longer-term treatment will be necessary include:

- Exposure to large-scale violence, such as war or a terrorist attack
- Long-term abuse or repeated exposure to extremely distressing events
- Trauma that is intentionally inflicted by another person
- Homicide or suicide of a family member
- Chaotic living situation or substance abuse by a parent
- Lack of trust and inability to connect emotionally with others
- Coexisting depression, substance abuse, or other mental health issues

Supporting Your Teen at Home

Seeking help for yourself as well as your teen will ultimately benefit both of you.

You play a critical role in helping your teen recover from a traumatic experience. The more effectively parents cope in the aftermath of a trauma, and the more support they give their children, the better their children are apt to do. If you're struggling with your own feelings, seeking help for yourself as well as your teen will ultimately benefit both of you. "Shelby's therapist worked with

our entire family," says one parent. "It's easy to get overwhelmed from dealing with all of your child's issues. I think the therapist was the number one thing that helped us all get through it."

Perhaps the most helpful thing you can do is simply listen. This is harder than it sounds, since it can be wrenching to hear your child talk about going through a terrible ordeal. But your teen will benefit greatly from sharing the painful feelings and memories associated with the trauma. It helps your teen feel less alone to know that there is someone who understands what he or she has been through.

Don't force a discussion of the traumatic event, but let your teen know you're there when he or she needs to talk. You may find that your teen wants to rehash the same memories over and over again. Resist the urge to tell your teen to just forget about them and move on. While this might seem to be sensible advice, it may just make a bad situation worse. Your teen might end up feeling even more hopeless and alone.

Says one mother, "For the most part, I help my son by just listening when he needs to talk. I've learned not to push, but to let him open up when he feels like it." Says another, "A lot of these kids, they've seen a lot, and they've been through the mill. They don't want to be patronized. They want to be respected as real people with real feelings. You've just got to be there for them and listen to what they have to say."

Three Challenges for Parents

Sharon, who raised a granddaughter with chronic PTSD, went on to become a child advocate and parent coordinator for a mental health agency. Based on her own experiences and those of the moms and dads with whom she currently works, Sharon thinks the parents of teens with PTSD face three major challenges:

- Feeling powerless. "For the parents that I deal with, the biggest challenge they have is not feeling empowered themselves." To overcome this feeling, Sharon suggests educating yourself and talking to other parents who've been through the same thing. (To find a support group in your area, ask your teen's treatment provider or contact the Sidran Institute, a national nonprofit organization that provides referrals, education, and advocacy related to traumatic stress.)
- Accepting help. "It's crucial to know when you've had enough and you need other people to help you. If somebody else might know more than you about how to handle a particular situation, let them handle that piece." Sharon believes in building a support team of relatives, friends, teachers, treatment providers, child protective services workers—anyone with a stake in your teen's well-being.
- Letting go. "At the agency where I work, we have a parent whose kid is ready to transition into a different school setting, but the parents want her to stay where she is because *they're* fearful." Sharon knows how strong the urge to overprotect can be. "I had trouble with that, too," she says. "But the time comes when you need to let them move forward and grow on their own. They may surprise you."

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Working with Your Teen's Teacher

PTSD can make it difficult to function in school. Compared to students without PTSD, those with the disorder tend to have lower grade point averages, more absences, and more conduct problems. Teachers and school counselors can often be

invaluable allies when a teen is having trouble at school. But before discussing your child's PTSD with school personnel, talk to your teen and decide together how much information about the traumatic event you'll share. Respect your teen's privacy when it comes to sensitive issues, such as rape. You can always tell those who need to know about the PTSD without providing every detail of the trauma.

If you become aware that a specific classroom topic or situation is very disturbing for your teen, let the teacher know. Based on what the situation is and how far along your teen is in the treatment process, the two of you can then discuss how best to handle the situation in the future. In turn, ask the teacher to let you know if your teen starts showing signs of increased distress at school.

Disaster Relief

Teachers and school counselors play an important role in helping students cope with their feelings after a communitywide disaster, such as a severe storm or a violent attack at the school. If trauma or tragedy strikes your community, you might want to share these classroom suggestions from mental health experts.

- Encourage students to express their feelings through conversation, creative writing, and art projects.
- Provide information and answer questions about the event as best you can, but don't dwell on every awful detail.
- Respect the preferences of students who choose not to take part in classroom discussions about the traumatic event.
- Let students know about school and community resources they can access if they need further help or support.
- Reduce expectations temporarily, perhaps by giving less demanding assignments or rescheduling papers and tests.
- Help students feel safely in control of their environment by offering opportunities to make decisions in the classroom.

"Establish a partnership with the school," advises the parent of a girl with PTSD. "I do believe that it takes a village to raise a child. I knew what I wanted for her, but I was also willing to listen to what the teachers thought she needed. They really worked with me at her school." By teaming up with the teachers, you can help your student stay on track, academically and socially.

Looking to the Future

PTSD is relatively common in teens, but it also frequently goes undiagnosed and untreated. Many teachers, doctors, and other professionals who work with young people are not very familiar with the disorder. In addition, many teens don't seek assistance, because they don't realize they have a problem or that something can be done to help them feel better. It's also natural to want to avoid the upsetting thoughts and feelings associated with a trauma. Without treatment, PTSD often goes away on its own shortly after the trauma. But in some cases, it lingers for years, causing substantial suffering.

By helping your teen with PTSD get the treatment he or she needs, you greatly improve the odds of a good outcome. Even with treatment, some symptoms may not disappear completely. Other symptoms may come and go over months or years. But much more is known today about the effective treatment of PTSD than was known just a decade ago. The chances are excellent that your teen's symptoms can be substantially reduced with CBT and perhaps medication.

"There are going to be good days, and there are going to be bad days," says one mother. "You've just got to be there for them and listen to them." And trust that things will get better in time. For both you and your teen, brighter days lie ahead.