



## ANXIETY

Everyone periodically can experiences fear and anxiety. Fear is an emotional, physical, and behavioral response to an immediately recognizable external threat (eg, an intruder, a runaway car). Anxiety is a distressing, unpleasant emotional state of nervousness and uneasiness; its causes are less clear. Anxiety is less tied to the exact timing of a threat; it can be anticipatory before a threat, or it can persist after a threat has passed or occur without an identifiable threat. Anxiety is often accompanied by physical changes and behaviors similar to those caused by fear.

Some degree of anxiety is adaptive; it can help people prepare, practice, and rehearse so that their functioning is improved and help them be appropriately cautious in potentially dangerous situations. However, beyond a certain level, anxiety causes dysfunction and undue distress. At this point, it is maladaptive and considered a disorder. Anxiety occurs in a wide range of physical and mental disorders, but it is the predominant symptom of several. Anxiety disorders are more common than any other class of psychiatric disorder. However, they often are not recognized and consequently not treated. Left untreated, chronic, maladaptive anxiety can contribute to or interfere with treatment of some physical disorders.

### *Etiology*

The causes of anxiety disorders are not fully known, but both mental and physical factors are involved. Many people develop anxiety disorders without any identifiable antecedent triggers. Anxiety can be a response to environmental stressors, such as the ending of a significant relationship or exposure to a life-threatening disaster. Some physical disorders can directly produce anxiety, including hyperthyroidism, pheochromocytoma, hyperadrenocorticism, heart failure, arrhythmias, asthma, and COPD. Other physical causes include use of drugs; effects of corticosteroids, cocaine, amphetamines, and even caffeine may mimic anxiety disorders. Withdrawal from alcohol, sedatives, and some illicit drugs may also cause anxiety.

### *Symptoms, Signs, and Diagnosis*

Anxiety can arise suddenly, as in panic, or gradually over many minutes, hours, or even days. Anxiety may last from a few seconds to years; longer duration is more characteristic of anxiety disorders. Anxiety ranges from barely noticeable qualms to complete panic. The ability to tolerate a given level of anxiety varies from person to person.

Anxiety disorders can be so distressing and disruptive that depression may result. Alternatively, an anxiety disorder and depressive disorder may coexist, or depression may develop first, with symptoms and signs of an anxiety disorder occurring later.

Deciding when anxiety is so dominant or severe that it constitutes a disorder depends on several variables, and physicians differ at what point they make the diagnosis. Physicians must first determine, by history, physical examination, and appropriate lab tests, if anxiety is due to a physical disorder or drug. They must also determine if anxiety is better accounted for by another mental disorder. If other causes are not found and if anxiety is very distressing, interferes with functioning, and does not stop spontaneously within a few days, then an anxiety disorder is present and merits treatment.



Diagnosis of a specific anxiety disorder is based on its characteristic symptoms and signs. A family history of anxiety disorders (except acute and posttraumatic stress disorders) helps in making the diagnosis, because some patients appear to inherit a predisposition to the same anxiety disorders that their relatives have as well as a general susceptibility to other anxiety disorders. However, some patients may appear to acquire the same disorders as their relatives through learned behavior.

### **Generalized anxiety disorder**

Generalized anxiety disorder is characterized by excessive, almost daily, anxiety and worry for  $\geq 6$  mo about many activities or events. The cause is unknown, although it commonly coexists in people who have alcohol abuse, major depression, or panic disorder. Diagnosis is based on history and physical examination. Treatment is psychotherapy, drug therapy, or both. Generalized anxiety disorder (GAD) is common, affecting about 3% of the population within a 1-yr period. Women are twice as likely to be affected as men. The disorder often begins in childhood or adolescence but may begin at any age.

#### ***Symptoms and Signs***

The focus of the worry is not restricted as it is in other mental disorders (eg, to having a panic attack, being embarrassed in public, or being contaminated); the patient has multiple worries, which often shift over time. Common worries include work responsibilities, money, health, safety, car repairs, and chores. To meet the criteria of the *Diagnostic and Statistical Manual of Mental Disorders, Fourth Edition (DSM-IV)*, a person must also experience  $\geq 3$  of the following: restlessness, unusual fatigability, difficulty concentrating, irritability, muscle tension, or disturbed sleep. The course is usually fluctuating and chronic, with worsening during stress. Most people with GAD have one or more other comorbid psychiatric disorders, including major depression, specific phobia, social phobia, and panic disorder.

#### ***Treatment***

Antidepressants, including SSRIs, benzodiazepines in small to moderate doses are also often effective, although sustained use usually causes physical dependence. One strategy involves starting with concomitant use of a benzodiazepine with an antidepressant. Once the antidepressant becomes effective, the benzodiazepine is tapered.

### **Obsessive-compulsive disorder**

Obsessive-compulsive disorder is characterized by anxiety-provoking ideas, images, or impulses (obsessions) and by urges (compulsions) to do something that will lessen that anxiety. The cause is unknown. Diagnosis is based on history. Treatment consists of psychotherapy, drug therapy, or, in severe cases, both. Obsessive-compulsive disorder occurs about equally in men and women and affects about 2% of the population.

#### ***Symptoms and Signs***

The dominant theme of the obsessive thoughts may be harm, risk, or danger or contamination, doubt, loss, or aggression. Typically, affected people feel compelled to perform repetitive, purposeful rituals to balance their obsessions: eg, washing balances contamination; checking, doubt; and hoarding, loss. They may avoid people whom they fear behaving aggressively against. Most



rituals, such as hand washing or checking locks, are observable, but some, such as repetitive counting or statements under one's breath, are not. At some point, people with obsessive-compulsive disorder recognize that their obsessions do not reflect real risks and that the behaviors they perform to relieve their concern are unrealistic and excessive. Preservation of insight, although sometimes slight, differentiates obsessive-compulsive disorder from psychotic disorders, in which contact with reality is lost.

Because people with this disorder fear embarrassment or stigmatization, they often conceal their obsessions and rituals, on which they may spend several hours each day. Relationships often deteriorate, and performance in school or at work may decline. Depression is a common secondary feature.

### ***Diagnosis and Treatment***

Diagnosis is clinical based on criteria in the *Diagnostic and Statistical Manual of Mental Disorders*, Fourth Edition (DSM-IV).

Exposure and ritual prevention therapy is effective; its essential element is exposure to situations or people that trigger the anxiety-provoking obsessions and rituals. After exposure, the patient forgoes rituals, allowing the anxiety triggered by exposure to diminish through habituation. Improvement often continues for years, especially in patients who master the approach and use it even after formal treatment has ended. However, a few people have incomplete responses.

Many experts believe that combining psychotherapy and drug therapy is best, especially for severe cases.

### **Panic attack**

A panic attack is the sudden onset of a discrete, brief period of intense discomfort or fear accompanied by somatic or cognitive symptoms. Panic disorder is occurrence of repeated panic attacks typically accompanied by fears about future attacks or changes in behavior to avoid situations that might predispose to attacks. Diagnosis is clinical. Isolated panic attacks may not require treatment. Panic disorder is treated with drug therapy, psychotherapy (eg, exposure therapy, cognitive-behavioral therapy), or both.

Panic attacks are common, affecting as many as 10% of the population in a single year. Most people recover without treatment; a few develop panic disorder. Panic disorder is uncommon, affecting 2 to 3% of the population in a 12-mo period. Panic disorder usually begins in late adolescence or early adulthood and affects women 2 to 3 times more often than men.

### ***Symptoms, Signs, and Diagnosis***

A panic attack involves the sudden onset of at least 4 of the 13 symptoms listed below. Symptoms usually peak within 10 min and dissipate within minutes thereafter, leaving little for a physician to observe. Although uncomfortable—at times extremely so—panic attacks are not medically dangerous.

#### **Symptoms of A Panic Attack**

##### **Cognitive**

Fear of dying



Fear of going crazy or of losing control  
 Feelings of unreality, strangeness, or detachment from the environment

**Somatic**

Chest pain or discomfort  
 Dizziness, unsteady feelings, or faintness  
 Feeling of choking  
 Flashes or chills  
 Nausea or abdominal distress  
 Numbness or tingling sensations  
 Palpitations or accelerated heart rate  
 Sensations of shortness of breath or smothering  
 Sweating  
 Trembling or shaking

Panic attacks may occur in any anxiety disorder, usually in situations tied to the core features of the disorder (eg, a person with a phobia of snakes may panic upon seeing a snake). In pure panic disorder, however, some of the attacks occur spontaneously.

Most people who have a panic disorder anticipate and worry about another attack (anticipatory anxiety) and avoid places or situations where they have previously panicked. People with panic disorder often worry that they have a dangerous heart, lung, or brain disorder and repeatedly visit their family physician or an emergency department seeking help. Unfortunately, in these settings, attention is focused on physical symptoms, and the correct diagnosis often is not made. Many people with panic disorder also have symptoms of major depression.

Panic disorder is diagnosed after physical disorders that can mimic anxiety are eliminated and symptoms meet diagnostic criteria stipulated in the *Diagnostic and Statistical Manual of Mental Disorders*, Fourth Edition (DSM-IV).

**Treatment**

Some people recover without treatment, particularly if they continue to confront situations in which attacks have occurred. For others, especially without treatment, panic disorder follows a chronic waxing and waning course.

Patients should be told that treatment usually helps control symptoms. If avoidance behaviors have not developed, reassurance, education about anxiety, and encouragement to continue to return to and remain in places where panic attacks have occurred may be all that is needed. However, with a long-standing disorder that involves frequent attacks and avoidance behaviors, treatment is likely to require drug therapy combined with more intensive psychotherapy.

Many drugs can prevent or greatly reduce anticipatory anxiety, phobic avoidance, and the number and intensity of panic attacks.



## Phobic disorders

Phobic disorders consist of persistent, unreasonable, intense fears (phobias) of situations, circumstances, or objects. The fears provoke anxiety and avoidance. Phobic disorders are classified as general (agoraphobia and social phobia) or specific. The causes of phobias are unknown. Phobic disorders are diagnosed based on history. Treatment for agoraphobia and social phobia is drug therapy, psychotherapy (eg, exposure therapy, cognitive-behavioral therapy), or both. Some phobias are treated mainly with exposure therapy.

### Categories

**Agoraphobia:** Agoraphobia is fear of and anticipatory anxiety about being trapped in situations or places without a way to escape easily and without help if intense anxiety develops. The situations are avoided or they may be endured but with substantial anxiety. Agoraphobia can occur alone or as part of panic disorder.

Agoraphobia without panic disorder affects about 4% of women and 2% of men during any 12-mo period. Peak age at onset is the early 20s; first appearance after age 40 is unusual. Common examples of situations or places that create fear and anxiety include standing in line at a bank or at a supermarket checkout, sitting in the middle of a long row in a theater or classroom, and using public transportation, such as a bus or an airplane. Some people develop agoraphobia after a panic attack in a typical agoraphobic situation. Others simply feel uncomfortable in such a situation and may never, or only later, have panic attacks there. Agoraphobia often interferes with function and, if severe enough, can cause a person to become housebound.

**Social phobia (social anxiety disorder):** Social phobia is fear of and anxiety about being exposed to certain social or performance situations. These situations are avoided or endured with substantial anxiety. People with social phobia recognize that their fear is unreasonable and excessive.

Social phobia affects about 9% of women and 7% of men during any 12-mo period, but the lifetime prevalence may be at least 13%. Men are more likely than women to have the most severe form of social anxiety, avoidant personality disorder.

Fear and anxiety in people with social phobia often centers on being embarrassed or humiliated if they fail to meet expectations. Often the concern is that anxiety will be apparent through sweating, blushing, vomiting, or trembling (sometimes as a quavering voice) or that the ability to keep a train of thought or find words to express oneself will be lost. Usually, the same activity performed alone produces no anxiety. Situations in which social phobia is common include public speaking, acting in a theatrical performance, and playing a musical instrument. Other potential situations include eating with others, signing one's name before witnesses, or using public bathrooms. A more generalized type of social phobia produces anxiety in a broad array of social situations.

**Specific phobias:** A specific phobia is fear of and anxiety about a particular situation or object. The situation or object is usually avoided when possible, but if exposure occurs, anxiety quickly develops. The anxiety may intensify to the level of a panic attack. People with specific phobias typically recognize that their fear is unreasonable and excessive.

Specific phobias are the most common anxiety disorders. Among the most frequent are fear of animals (zoophobia), heights (acrophobia), and thunderstorms (astraphobia, brontophobia). Specific phobias affect about 13% of women and 4% of men during any 12-mo period. Some cause little inconvenience— eg, fear of snakes (ophidiophobia) in a city dweller, unless he is asked to hike in



an area where snakes are found. However, others interfere severely with functioning—eg, fear of closed places (claustrophobia), such as elevators, in a person who must work on an upper floor of a skyscraper. Phobia of blood (hemophobia), injections and pins (trypanophobia, belonephobia), or injury (traumatophobia) occurs to some degree in at least 5% of the population. People with a phobia of blood, needles, or injury, unlike those with other phobias or anxiety disorders, can actually faint because an excessive vasovagal reflex produces bradycardia and orthostatic hypotension.

### **Diagnosis**

Diagnosis is clinical based on criteria in the *Diagnostic and Statistical Manual of Mental Disorders*, Fourth Edition (DSM-IV).

### **Prognosis and Treatment**

If untreated, agoraphobia usually waxes and wanes in severity. Agoraphobia may disappear without formal treatment, possibly because some affected people conduct their own form of exposure therapy. But if agoraphobia interferes with functioning, treatment is needed. Social phobia is almost always chronic, and treatment is needed. The prognosis for specific phobias is more variable when untreated, because it may be easy to avoid the situation or object that causes fear and anxiety.

Because many phobic disorders involve avoidance, exposure therapy, a form of psychotherapy, is the treatment of choice. With structure and support from a clinician, patients seek out, confront, and remain in contact with what they fear and avoid until their anxiety is gradually relieved through a process called habituation. Exposure therapy helps > 90% of those who carry it out faithfully and is almost always the only treatment needed for specific phobias. Cognitive-behavioral therapy is effective for agoraphobia and social phobia. Cognitive-behavioral therapy involves teaching patients to recognize and control their distorted thinking and false beliefs as well as instructing them on exposure therapy. For example, patients who describe acceleration of their heart rate or shortness of breath in certain situations or places learn that their worries about having a heart attack are unfounded and are taught to respond with slow, controlled breathing or other methods that promote relaxation when in those situations.

Very short-term therapy with a benzodiazepine is generally preferred—10 to 40 mg po), ideally about 1 to 2 h before the exposure, is occasionally useful when exposure to an object or situation cannot be avoided (eg, when a person who has a phobia of flying must fly on short notice) or when cognitive-behavioral therapy is either unwanted or has not been successful.

Many people with agoraphobia also have panic disorder, and many of them benefit from drug therapy with an SSRI. SSRIs and benzodiazepines are effective for social phobia, but SSRIs are probably preferable in most cases, because unlike benzodiazepines, they are unlikely to interfere with cognitive-behavioral therapy.  $\beta$ -Blockers are useful for performance phobia.

### **Stress disorders**

Stress disorders can take the form of acute stress disorder or posttraumatic stress disorder.

#### **Acute Stress Disorder**

Acute stress disorder is a brief period of intrusive recollections occurring very soon after a witnessed or experienced overwhelming traumatic event.



In acute stress disorder, the person has been through a traumatic event, has recurring recollections of the trauma, avoids stimuli that remind him of the trauma, and has increased arousal. Symptoms begin within 4 wk of the traumatic event and last a minimum of 2 days but, unlike posttraumatic stress disorder, last no more than 4 wk. A person with this disorder experiences 3 or more dissociative symptoms: a sense of numbing, detachment, or absence of emotional responsiveness; reduced awareness of surroundings (eg, being dazed); a feeling that things are not real; a feeling that he is not real; or amnesia for an important part of the trauma.

Many people recover once they are removed from the traumatic situation and shown understanding, empathy, and an opportunity to describe what happened and their reaction to it. Some experts recommend systematic debriefing to assist those who were involved in or witness to the traumatic event as they process what has happened and reflect on its effect. In one approach to debriefing, the event is referred to as the critical incident and the debriefing is referred to as critical incident stress debriefing (CISD). Other experts have expressed concern that CISD may not be as helpful as supportive, empathic interviewing and may be quite distressful for some patients.

Drugs to assist sleep may help, but other drugs are generally not indicated.

### **Posttraumatic Stress Disorder (PTSD)**

Posttraumatic stress disorder is recurring, intrusive recollections of an overwhelming traumatic event. The pathophysiology of the disorder is incompletely understood. Symptoms also include avoidance of stimuli associated with the traumatic event, nightmares, and flashbacks. Diagnosis is based on history. Treatment consists of exposure therapy and drug therapy.

When terrible things happen, many people are lastingly affected; in some, the effects are so persistent and severe that they are debilitating and constitute a disorder. Generally, events likely to evoke posttraumatic stress disorder (PTSD) are those that invoke feelings of fear, helplessness, or horror. These events might include experiencing serious injury or the threat of death or witnessing others being seriously injured, threatened with death, or actually dying. Lifetime prevalence approaches 8%, with a 12-mo prevalence of about 5%.

### ***Symptoms, Signs, and Diagnosis***

Most commonly, patients have frequent, unwanted memories replaying the triggering event. Nightmares of the event are common. Much rarer are transient waking dissociative states in which events are relived as if happening (flashback), sometimes causing the patient to react as if in the original situation (eg, loud noises such as fireworks might trigger a flashback of being in combat, which in turn might cause a person to seek shelter or prostrate himself on the ground for protection). The person avoids stimuli associated with the trauma and often feels emotionally numb and disinterested in daily activities. Sometimes the onset of symptoms is delayed, occurring many months or even years after the traumatic event. PTSD is considered chronic if present > 3 mo. Depression, other anxiety disorders, and substance abuse are common in people with chronic PTSD. In addition to trauma-specific anxiety, patients may experience guilt because of their actions during the event or because they survived when others did not.

Diagnosis is clinical based on criteria in the *Diagnostic and Statistical Manual of Mental Disorders*, Fourth Edition (DSM-IV).



### ***Treatment***

If untreated, chronic PTSD often diminishes in severity without disappearing, but some people remain severely handicapped. The primary form of psychotherapy used, exposure therapy, involves exposure to situations that the person avoids because they may trigger recollections of the trauma. Repeated exposure in fantasy to the traumatic experience itself usually lessens distress after some initial increase in discomfort. Stopping certain ritual behaviors, such as excessive washing to feel clean after a sexual assault, also helps.

Drug therapy is effective, particularly with SSRIs. Drugs with mood-stabilizing effects can help reduce arousal, nightmares, and flashbacks.