

The effects of anxiety on the body

Anxiety can impact physical and mental health. There are short- and long-term effects on both the mind and body. While many people know about the effects of anxiety on mental health, fewer people are aware of the physical side effects, which can include digestive issues and an increased risk of infection. Anxiety can also change the function of the cardiovascular, urinary, and respiratory systems. In this article, we discuss the most common physical symptoms and side effects of anxiety.

What is an anxiety disorder?

Anxiety describes a group of disorders that cause worry, nervousness, and fear. These feelings of anxiety interfere with everyday life and are out of proportion to the triggering object or event. In some cases, people are unable to identify a trigger and feel anxious for what seems like no reason. While mild anxiety can be expected in some situations, such as before an important presentation or meeting, persistent anxiety can interfere with a person's well-being.

According to the Anxiety and Depression Association of America, anxiety disorders represent the most common mental illness in the United States and affect 40 million adults in the country every year. While these disorders respond well to treatment, but only 36.9 percent of people with an anxiety disorder receive treatment.



Types of anxiety disorders include:

- **Generalized anxiety disorder** — excessive anxiety for no apparent reason that lasts for 6 months or longer
- **Social anxiety** — fear of judgment or humiliation in social situations
- **Separation anxiety** — fear of being away from home or family
- **Phobia** — fear of a specific activity, object, or situation
- **Hypochondriasis** — persistent fear of having serious health issues
- **Obsessive-compulsive disorder (OCD)** — recurring thoughts that cause specific behaviors
- **Post-traumatic stress disorder** — severe anxiety after a traumatic event or events

Symptoms

People with anxiety can experience a range of physical and psychological symptoms. The most common include:

- feeling nervous, tense, or fearful
- restlessness
- panic attacks, in severe cases
- a rapid heart rate
- fast breathing, or hyperventilation
- sweating
- shaking
- fatigue
- weakness
- dizziness
- difficulty concentrating
- sleep problems
- nausea
- digestive issues
- feeling too cold or too hot
- chest pain

Some anxiety disorders have additional symptoms. For example, OCD also causes:

- obsessive thoughts
- compulsive behaviors that aim to reduce the anxiety caused by the thoughts
- periods of temporary relief, which follow the compulsive behaviors

Effects of anxiety on the body

Anxiety can have a significant effect on the body, and long-term anxiety increases the risk of developing chronic physical conditions.

The medical community suspects that anxiety develops in the amygdala, an area of the brain that manages emotional responses. When a person becomes anxious, stressed, or frightened, the brain sends signals to other parts of the body. The signals communicate that the body should prepare to fight or flee. The body responds, for example, by releasing adrenaline and cortisol, which many describe as stress hormones. The fight or flight response is useful when confronting an aggressive person, but it is less helpful when going for a job interview or giving a presentation. Also, it is not healthy for this response to persist in the long term.



Some of the ways that anxiety affects the body include:

Breathing and respiratory changes

During periods of anxiety, a person's breathing may become rapid and shallow, which is called hyperventilation.

Hyperventilation allows the lungs to take in more oxygen and transport it around the body quickly. Extra oxygen helps the body prepare to fight or flee.

Hyperventilation can make people feel like they are not getting enough oxygen and they may gasp for breath. This can worsen hyperventilation and its symptoms, which include:

- dizziness
- feeling faint
- lightheadedness
- tingling
- weakness

Cardiovascular system response

Anxiety can cause changes to the heart rate and the circulation of blood throughout the body. A faster heart rate makes it easier to flee or fight, while increased blood flow brings fresh oxygen and nutrients to the muscles. When blood vessels narrow, this is called vasoconstriction, and it can affect body temperature. People often experience hot flashes as a result of vasoconstriction. In response, the body sweats to cool down. This can sometimes be too effective and make a person feel cold. Long-term anxiety may not be good for the cardiovascular system and heart health. Some studies suggest that anxiety increases the risk of heart diseases in otherwise healthy people.



Impaired immune function

In the short-term, anxiety boosts the immune system's responses. However, prolonged anxiety can have the opposite effect. Cortisol prevents the release of substances that cause inflammation, and it turns off aspects of the immune system that fight infections, impairing the body's natural immune response. People with chronic anxiety disorders may be more likely to get the common cold, the flu, and other types of infection.

Changes in digestive function

Cortisol blocks processes that the body considers nonessential in a fight or flight situation. One of these blocked processes is digestion. Also, adrenaline reduces blood flow and relaxes the stomach muscles. As a result, a person with anxiety may experience nausea, diarrhea, and a feeling that the stomach is churning. They may also lose their appetite.

Some research suggests that stress and depression are linked to several digestive diseases, including irritable bowel syndrome (IBS).

One study, of outpatients at a gastroenterology clinic in Mumbai, reported that 30–40 percent of participants with IBS also had anxiety or depression.

Urinary response

Anxiety and stress can increase the need to urinate, and this reaction is more common in people with phobias. The need to urinate or a loss of control over urination may have an evolutionary basis, as it is easier to flee with an empty bladder.

However, the link between anxiety and an increased urge to urinate remains unclear.



Complications and long-term effects

Having anxiety can lead to long-term negative effects. People with anxiety may experience:

- depression
- digestive issues
- insomnia
- chronic pain conditions
- difficulties with school, work, or socializing
- a loss of interest in sex
- substance abuse disorders
- suicidal thoughts

Causes and risk factors

The medical community has yet to identify the cause of anxiety, but several factors may contribute to its development. Causes and risk factors may include:

- traumatic life experiences
- genetic traits
- medical conditions, such as heart disease, diabetes, or chronic pain conditions
- medication use
- sex, as females are more likely to experience anxiety than males
- substance abuse
- ongoing stress about work, finances, or home life
- having other mental health disorders

Diagnosis and treatment

To make a diagnosis, a doctor will evaluate symptoms and check for any underlying medical conditions that may be triggering the anxiety. Anxiety is highly treatable, and doctors usually recommend a combination of some of the following:

- medication
- therapy
- support groups
- lifestyle changes involving physical activity and meditation

Outlook

Anxiety is the most common mental health disorder in the U.S. It causes both physical and psychological symptoms, and it can be very distressing.

Long-term anxiety increases the risk of physical illnesses and other mental health conditions, such as depression.

However, anxiety can respond very well to treatment. Most people who receive treatment recover well and can enjoy a good quality of life.

By Jayne Leonard