## Optum

# Stress and Anxiety Can Make You Sick

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When we experience changes or pressure around us, stress often arises. If we respond to certain situations with fear and dread, we can have an anxiety reaction. Stress and anxiety can make you sick. I don't mean they can make you feel sick; I mean stress or anxiety can actually make you physically sick, and potentially very sick. Our bodies are well equipped to handle stress or anxiety for brief periods or in small doses, but when these responses become long-term or chronic, it can have serious effects on your body. We've seen much more of this during the pandemic. According to the American Institute of Stress, 77% of people experience stress that affects their physical health.

Let's break down how it affects each of your body's systems:

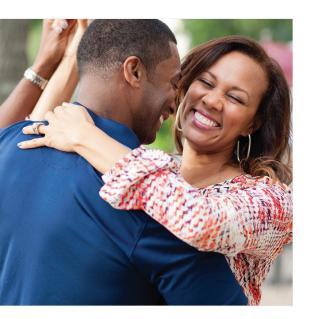
77% of people experience stress that affects their physical health. **Musculoskeletal** – When the body is stressed or anxious, muscles tense up and then release their tension when the stress passes. Chronic stress causes the muscles in the body to be in a near constant state of tension, which can cause things like migraine headaches.

**Respiratory** – Stress and strong emotions can cause shortness of breath and rapid breathing. This can be more dangerous for people with pre-existing respiratory diseases like asthma or COPD. Some studies show that an acute stressor, such as the death of a loved one, can even trigger asthma attacks.

**Cardiovascular** – Chronic stress and anxiety can contribute to long-term problems for the heart and blood vessels. The persistent increase in heart rate, stress hormones and blood pressure can lead to hypertension and increase your risk for heart attack and stroke.



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Laughing, singing, or doing something creative can help alleviate even high stress levels.



**Endocrine** – During times of stress or anxiety, our adrenal glands increase the production of cortisol, often called the "stress hormone." Cortisol increases the level of energy fuel available. But chronic stress creates a miscommunication in this system, which can cause diabetes, obesity, and immune disorders. Chronically elevated levels of cortisol can even have a negative impact on the developing brain, changing the way children learn and manage their emotions.

**Gastrointestinal** – Stress and anxiety are associated with changes in gut bacteria which in turn can influence mood. Early life stress can change the development of the nervous system as well as how the body reacts to stress. These changes can increase the risk for gut diseases. Also, stress can lead to an unhealthy diet which can cause obesity and heart disease. Contrary to popular belief, stress does not increase acid production in the stomach, nor causes stomach ulcers. Ulcers are caused by a bacterial infection. When stressed though, ulcers may be more painful.

**Sexuality and reproductive system** – Chronic stress or anxiety is exhausting for both the body and mind. It's not unusual to lose your desire when you're under constant stress. While short-term stress may cause men to produce more of the male hormone testosterone, this effect

doesn't last. If stress continues for a long time, a man's testosterone levels can begin to drop. This can interfere with sperm production and cause erectile dysfunction or impotence. Chronic stress may also increase risk of infection for male reproductive organs like the prostate and testes. For women, stress can affect the menstrual cycle. It can lead to irregular, heavier or more painful periods. Chronic stress can also magnify the physical symptoms of menopause.

**Immune system** – Stress or anxiety stimulates the immune system, which can be a plus for immediate situations. This stimulation can help you avoid infections and heal wounds. But over time, stress hormones will weaken your immune system and reduce your body's response to foreign invaders. People under chronic stress are more susceptible to viral illnesses like the flu and the common cold, as well as other infections. Stress can also increase the time it takes you to recover from an illness or injury.

### Effective Strategies for Managing Stress and Anxiety

- Maintain a healthy social support network.
- Engage in regular physical exercise. Even a walk is highly beneficial.
- Get an adequate amount of sleep each night. Turn off your devices an hour before bedtime.
- Work with a psychologist to develop relaxation, breathing, and other cognitive behavioral strategies to enhance your resilience.
- Find occasions to laugh, sing or even engage in creative activities. This can increase your capacity to effectively manage even high levels of stress and its effects.
- Set aside regular time for prayer or quiet meditation each day.
- Enjoy mindfulness activities and positive reflection focusing on gratitude about the things in your life that are helpful and good.



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