SLEEP & STRESS

What Years of Stress Can Do to Your Body

Chronic stress can become so familiar that you miss its effects; here is how to notice the strain and decide what to do next.

The alarm that never quite switches off

The deadline passes, but another takes its place. The family problem settles, then the money worry returns. Eventually, you may stop calling yourself stressed. Life simply feels like this now: poor sleep, a tight temper, headaches, stomach trouble and a sense that you are always braced for what comes next.

Stress begins as a useful response. When your brain and body meet a challenge, stress hormones make you more alert and ready to act. Your heart rate, blood pressure and blood glucose can rise. That jolt can help you brake when a car pulls out or push through a deadline. Once the danger or demand is over, short-term stress usually recedes.

Chronic stress is different. It continues for weeks, months or longer, driven by pressures that do not stop, difficult life changes with lasting effects, or trauma. The body in this state acts as though it remains under threat. A response designed for a moment keeps being called back into service.

You may adapt to that state so gradually that it becomes difficult to see. People can get used to stress-related problems without realizing something is wrong. The absence of a dramatic collapse does not mean the strain is imaginary. It may mean you have become very practiced at carrying it.

Your body keeps the score imperfectly

Researchers use the term "allostatic load" for the cumulative burden of chronic stress and life events across interacting physiological systems. It is not one sensation or a simple tally of hard days. Researchers assess it through biological markers and clinical criteria, looking at how multiple systems are operating rather than searching for a single stress reading.

A 2021 systematic review included 267 investigations in clinical and general adult populations. It found that allostatic load and overload were associated with poorer physical and mental health outcomes across varied settings. The word "associated" matters. The review supports a connection between accumulated strain and health, but it does not turn every illness into proof

that stress caused it.

The effects you notice may be less abstract. Long-term stress can be accompanied by headaches, digestive trouble, poor sleep, low mood, anger and feeling easily upset. It can also weaken the body's ability to fight germs, so you may become sick more often than usual. People differ, and you do not need to experience every effect for the pressure to be real.

Over time, persistent stress may play a part in serious problems including high blood pressure, heart disease, diabetes, depression and anxiety. The National Heart, Lung, and Blood Institute says stress can contribute to high blood pressure and other heart-disease risk factors. An emotionally upsetting event, particularly one involving anger, may also trigger a heart attack or angina in some people.

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Sleep becomes both signal and strain

Sleep is often where long-running stress becomes hardest to ignore. You may struggle to settle, wake repeatedly or start the day without feeling restored. Stress and anxiety can both cause loss of sleep, according to the National Institute of Mental Health, while ongoing anxiety can affect the immune, digestive, cardiovascular and reproductive systems.

The relationship is not neatly one-way. A 2022 systematic review examined 34 studies of undergraduate students and found moderate associations between stress and both poor sleep quality and insomnia. The analysis included more than 10,000 participants for sleep quality and more than 5,500 for insomnia. Because the studies varied considerably, the authors said the findings should be interpreted cautiously.

That evidence concerns students, so it cannot describe every person living with years of workplace, caregiving, financial or traumatic stress. It does reinforce something useful: stress and disturbed sleep are intertwined. A bad night may sit inside a larger pattern rather than being an isolated failure to relax.

The same caution applies to other bodily changes. A headache or stomach problem can occur alongside chronic stress, but those problems do not automatically establish stress as the explanation. If you assume every physical change is "just stress," you may overlook something that deserves medical attention. Stress can be part of the story without being the entire story.

Trauma follows a different path

Not every long period of stress is post-traumatic stress disorder. PTSD is a mental health

disorder that some people develop after experiencing or witnessing a traumatic event. Most people recover naturally from fear after trauma, but people with PTSD remain stressed or frightened long after the event is over. Difficulties can begin later and come and go over years.

PTSD may involve reliving the event through flashbacks, nightmares or frightening thoughts; avoiding reminders; feeling tense, easily startled or constantly alert; and experiencing changes in mood, concentration, interest, blame or guilt. Symptoms lasting longer than four weeks, causing great distress or interfering with work or home life may indicate PTSD and warrant assessment by an experienced health care provider.

Researchers do not know why one person develops PTSD and another does not. Several factors may influence risk, including childhood trauma, prolonged traumatic events, little social support, additional losses or injuries, and a history of mental illness or substance use. That uncertainty matters: enduring symptoms are not evidence that you failed to cope correctly.

PTSD has established forms of care, including talk therapy, medicines or both, tailored with a mental health professional. If trauma is behind your ongoing distress, trying to treat it as an ordinary productivity problem may miss what is happening. You are not required to organize your way out of a condition that needs skilled care.

Small responses, honest limits

There is no drug that simply cures stress. Approaches such as physical activity, meditation, mindfulness, yoga, deep breathing and muscle relaxation may help some people, but the evidence is not equally strong for every method. The National Center for Complementary and Integrative Health says some, but not all, yoga studies found improvements, while evidence for several relaxation approaches remains limited or variable.

For example, a 2019 review of three studies involving 880 participants found preliminary evidence that diaphragmatic breathing may reduce stress, with promising changes in self-ratings, cortisol and blood pressure. A separate review of 29 studies produced only weak recommendations for relaxation therapies and biofeedback for blood pressure because the evidence ranged from low to very low quality. "Promising" is not the same as guaranteed.

Relaxation practices are generally considered safe for healthy people, but they are not harmless for everyone. Some people report increased anxiety, intrusive thoughts or fear of losing control, and few mindfulness studies have examined adverse effects closely. If a technique makes you feel worse, you do not have to persist simply because it is marketed as calming.

This stops being only a lifestyle question when stress is persistent, hard to manage or

interfering with daily life. Seek help for severe problems lasting two weeks or more, including disrupted sleep, unwanted weight change from altered eating, trouble getting out of bed, poor concentration, lost interest or inability to manage usual activities. Struggling to cope or using alcohol or drugs more often also calls for help.

For the coming week, choose observation over self-judgment. Notice whether sleep, digestion, headaches, mood or concentration have changed, and name the pressures that keep returning. Consider sharing that pattern with someone supportive or a health professional. If you are in immediate distress or thinking about harming yourself, call or text 988 in the United States. You do not need to wait until stress has taken more from you.

Where this comes from

- Stress

  MedlinePlus, U.S. National Library of Medicine · https://medlineplus.gov/stress.html
- Post-Traumatic Stress Disorder

  MedlinePlus, U.S. National Library of Medicine · https://medlineplus.gov/posttraumaticstressdisorder.html
- I'm So Stressed Out! Fact Sheet

  National Institute of Mental Health · https://www.nimh.nih.gov/health/publications/so-stressed-out-fact-sheet
- Stress

  National Center for Complementary and Integrative Health · https://www.nccih.nih.gov/health/stress
- Heart-Healthy Living Manage Stress

  National Heart, Lung, and Blood Institute · https://www.nhlbi.nih.gov/health/heart-healthy-living/manage-stress
- A systematic review and meta-analysis of poor sleep, insomnia symptoms and stress in undergraduate students.

  Sleep medicine reviews, 2022 · https://pubmed.ncbi.nlm.nih.gov/34922108/
- Allostatic Load and Its Impact on Health: A Systematic Review.

  Psychotherapy and psychosomatics, 2021 · https://pubmed.ncbi.nlm.nih.gov/32799204/