

There is likely a connection between stress and illness. Theories of the stress–illness link suggest that both acute and chronic stress can cause illness, and several studies found such a link. According to these theories, both kinds of stress can lead to changes in behavior and in physiology. Behavioral changes can be smoking and eating habits and physical activity. Physiological changes can be changes in sympathetic activation or hypothalamic pituitary adrenocorticoid activation, and immunological function. However, there is much variability in the link between stress and illness.

Stress can make the individual more susceptible to physical illnesses like the common cold. Stressful events, such as job changes, may result in insomnia, impaired sleeping, and health complaints. Research indicates the type of stressor (whether it's acute or chronic) and individual characteristics such as age and physical well-being before the onset of the stressor can combine to determine the effect of stress on an individual. An individual's personality characteristics (such as level of neuroticism), genetics, and childhood experiences with major stressors and traumas may also dictate their response to stressors.

Chronic stress and a lack of coping resources available or used by an individual can often lead to the development of psychological issues such as depression and anxiety. This is particularly true regarding chronic stressors. These are stressors that may not be as intense as an acute stressor like a natural disaster or a major accident, but they persist over longer periods of time. These types of stressors tend to have a more negative impact on health because they are sustained and thus require the body's physiological response to occur daily. This depletes the body's energy more quickly and usually occurs over long periods of time, especially when these microstressors cannot be avoided.. For example, studies have found that caregivers, particularly those of dementia patients, have higher levels of depression and slightly worse physical health than noncaregivers.

Studies have also showed that perceived chronic stress and the hostility associated with Type A personalities are often associated with much higher risks of cardiovascular disease. This occurs because of the compromised immune system as well as the high levels of arousal in the sympathetic nervous system that occur as part of the body's physiological response to stressful events.

However, it is possible for individuals to exhibit hardiness—a term referring to the ability to be both chronically stressed and healthy. Many psychologists are currently interested in studying the factors that allow hardy individuals to cope with stress and evade most health and illness problems associated with high levels of stress. Stress can be associated with psychological

disorders such as general anxiety disorder, depression, and post-traumatic stress disorder. However, it is important to note that everyone experiences some level of stress, and diagnosis of stress disorders can only be performed by a licensed practitioner.

It has long been believed that negative affective states, such as feelings of anxiety and depression, could influence the pathogenesis of physical disease, which in turn, have direct effects on biological process that could result in increased risk of disease in the end. However recent studies have shown this to be untrue, it isn't stress itself that causes the increased risk of illness or death, it is actually the *perception* that stress is harmful. For example, when humans are under chronic stress, permanent changes in their physiological, emotional, and behavioral responses are most likely to occur. Such changes could lead to disease. Chronic stress results from stressful events that persist over a relatively long period of time, such as caring for a spouse with dementia, or results from brief focal events that continue to be experienced as overwhelmingly long after they are over, such as experiencing a sexual assault.

Experiments show that when healthy human individuals are exposed to acute laboratory stressors, they show an adaptive enhancement of some markers of natural immunity but a general suppression of functions of specific immunity. By comparison, when healthy human individuals are exposed to real-life chronic stress, this stress is associated with a biphasic immune response where partial suppression of cellular and humoral function coincides with low-grade, nonspecific inflammation.

Even though psychological stress is often connected with illness or disease, most healthy individuals can still remain disease-free after confronting chronic stressful events. Also, people who do not believe that stress will affect their health do not have an increased risk of illness, disease, or death. This suggests that there are individual differences in vulnerability to the potential pathogenic effects of stress; individual differences in vulnerability arise due to both genetic and psychological factors. In addition, the age at which the stress is experienced can dictate its effect on health. Research suggests chronic stress at a young age can have lifelong impacts on the biological, psychological, and behavioral responses to stress later in life. Recent studies have shown that severe psychological stress resulting in PTSD can also significantly affect parenting perception, behavior, neural activity and HPA-axis physiology in response to stressful parent-infant interactions. These recent studies support the existence of intergenerational effects of early chronic psychological stress.