

What Does It Mean To Be Immunocompromised?

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December 12, 2024

STORY AT-A-GLANCE

- › The number of immunocompromised adults has increased to 6.6% of the population (about 18 million people), up from 2.7% in 2013, due to autoimmune diseases and immunosuppressive drug use
- › Immunocompromised conditions can be inherited (primary immunodeficiency) or acquired (secondary immunodeficiency). The second one is more common among adults
- › Common causes of secondary immunodeficiency include autoimmune disorders, chronic diseases, infections, cancer treatments, spleen removal, severe skin burns and certain medications like immunosuppressants
- › Your immune system is able to recover from suppression within weeks or months after stopping immunosuppressive drugs, though severe cases may require years for full recovery
- › Exercise and vitamin D from sunlight exposure are recommended natural ways to strengthen the immune system. However, sun exposure must be carefully managed if you're consuming a diet high in linoleic acid

Your immune system plays a vital role in optimal health. If it's not in top shape, your body will be highly susceptible to pathogens that cause a host of diseases. Moreover, your body won't be able to fight off diseases that begin from the inside, such as cancer.¹ Sadly, there's mounting evidence that weakened immune systems — also known as being immunocompromised — are becoming more prevalent.

More Americans Are Becoming Immunocompromised

What does it mean to be immunocompromised? Essentially, it's a state wherein your immune system does not function as it should. As noted by GoodRx:²

"Being immunocompromised means that your immune system is weakened. This can happen either because of a disease or a medication you take. It means you're more likely to get an infection. It also means you're more likely to have a severe illness from that infection compared with someone whose immune system is working well (this is known as being immunocompetent)."

What's worse is that the number of Americans who are immunocompromised is steadily growing. In a study published in JAMA, researchers estimate that the number of immunocompromised Americans now comprise 6.6% of the population (about 18 million people), which is up from 2.7% back in 2013.³

What are the causes that lead to being immunocompromised? According to The New York Times,⁴ the reasons for this are varied, such as a rise in autoimmune diseases and the use of immunosuppressive drugs to treat chronic conditions such as cancer.

Whatever the cause, "It's no longer a niche group," according to Dr. Joshua Hill, a specialist at Fred Hutch Cancer Center in Seattle. "These are people walking around in the community that you might not know are immunocompromised," he added.⁵

A Deeper Look Into Immunocompromised Systems

A compromised immune system can manifest in a wide variety of ways. For example, you can be born with it — also known as primary immunodeficiency — and there are possibly hundreds of causes for this.⁶ As reported by The New York Times,⁷ researchers have identified more than 430 primary immunodeficiencies caused by genetic variants that weaken the immune system.⁸

On the other hand, you can acquire a secondary immunodeficiency, which is actually more common among adults. Health conditions that cause secondary

immunodeficiency include:⁹

Autoimmune disorders – Commonly diagnosed autoimmune diseases such as multiple sclerosis, rheumatoid arthritis, inflammatory bowel disease, lupus and Type 1 diabetes

Chronic diseases – Much of the chronic diseases adults experience today weaken the immune system, such as liver cirrhosis and Type 2 diabetes

Infections – Certain viral and/or bacterial infections weakens the immune system, such as HIV/AIDS, measles and tuberculosis

Cancer – Any cancer makes you immunodeficient. Undergoing typical cancer treatments such as radiation therapy and chemotherapy will make you immunocompromised, too

Spleen dysfunction or removal – The spleen plays an important role in your immune function. It filters your blood, removing microbes as well as eliminating old and damaged red blood cells. It also helps improve immune function by producing antibodies and lymphocytes.¹⁰ If you don't have a spleen due to a prior injury or have reduced spleen function, your immune system will be weakened

Skin burns – Severe skin burns will weaken your immune system. According to a 2022 study,¹¹ burns cause a prolonged, intense immune response, which causes systemic damage to various organs, such as lungs, heart, blood vessels and kidneys

In addition, medications, such as immunosuppressants, weaken your immune system on purpose. This is usually done for recipients of organ transplants because their immune system will attack the new organ. While a transplant will prolong their life, the obvious downside is the increased risk for contracting infections.¹²

Other times, medications cause secondary immunodeficiency as a side effect. Again, chemotherapy falls under this category, as well as drugs used to treat autoimmune disorders, such as corticosteroids, cyclosporine and methotrexate. Medications

designed to prevent bone marrow transplant complications also cause secondary immunodeficiency.¹³

Despite the Hurdles, Your Immune System Bounces Back

Treatment for compromised immune systems vary. For example, people with severe cases will sometimes require the use of bone marrow transplants. This process essentially replaces their old immune system with a new one to bolster their natural defenses.¹⁴

The reason why this is done is because bone marrow is the source of important immune system cells, namely the white blood cells that help fight infections. As part of your lymphatic system, these cells travel throughout your body, looking for pathogens (such as bacteria and viruses) to eliminate. Once spotted, they mount an immune attack.¹⁵

Apart from those born with primary immunodeficiencies, the good news is that your immune system will bounce back after being assaulted by immune-suppressing drugs or other factors. Your immune system repairs itself within several weeks or months after stopping chemotherapy or immunosuppressive drugs. For severe cases, however, it can take years for the immune system to fully recover.¹⁶

Consider Alternative Cancer Treatments

If you're immunocompromised, building your immune system back is the main goal. There are several natural strategies available to you, but let's start with the first actionable item right away, which is looking for alternative cancer treatments.

In my decades of practice, I've seen enough to know that choosing chemotherapy is one of the worst choices you can make. Not only is it ineffective in many instances, but it also destroys any hope of a full recovery.

As the research shows, chemotherapy damages your immune system, making you more prone to other infections. However, mainstream medical practice still advocates

chemotherapy as the main method for treatment. They also downright ignore alternatives that could be less damaging for patients.

Why? The simple answer is profit. The industry surrounding cancer treatment is worth billions of dollars, and there's little reason for the big players to explore treatments that can't be sold at exorbitant prices. And again, chemotherapy takes center stage here. It acts like a sledgehammer, hoping to kill a tiny fly. You might be able to hit it, but the price to pay for the collateral damage is massive – your immune system.

Instead of choosing chemotherapy as your first line of treatment against cancer, I recommend exploring alternative avenues first. Don't give in to the pressure of taking conventional treatments before exhausting your options.

As noted in my article "[Cut, Poison, Burn – Is Radiation Treatment on the Way Out?](#)" both chemotherapy and radiation therapy have devastating effects on your body. Radiation treatment causes side effects, such as fertility issues, memory problems, hair loss and blurry vision.¹⁷

Remember, your body has the ability to repair itself when the right tools are provided. So, explore alternatives that get less attention before resorting to conventional medical techniques.

Get Your Body Moving to Strengthen Your Immune System

Getting regular exercise is one of the best things you can do for your health, regardless of your current health status. For already healthy individuals, research¹⁸ has shown that exercise helps sustain hallmarks of health, such as improved physical resilience, maintained homeostasis, better repair and regeneration, and better skin health.

For those immunocompromised, don't worry as you're not left out. Research has shown that consistent, moderate-intensity exercise helps boost the immune system among adults and other individuals diagnosed with chronic diseases.¹⁹ Those who are undergoing conventional cancer treatments are able to improve their outcomes by

adding exercise. According to a study²⁰ published in the Journal for ImmunoTherapy of Cancer:

"As the immune system is highly responsive to exercise, one potential avenue to improve immune function is through exercise and physical activity. A single event of dynamic exercise results in the substantial mobilization of leukocytes with increased functional capacities into the circulation.

Chronic, or long-term, exercise leads to higher physical fitness in terms of greater cardiorespiratory function and/or muscle strength and endurance. High aerobic capacity, as measured by maximal oxygen uptake, has been associated with the reduction of dysfunctional T cells and improvements in the abundance of some T cell populations."

Movement has a big effect on your lymphatic system as well. For optimal functioning, it requires regular exercise to keep things flowing. If you're sedentary, the entire system stops to a halt.

How does movement support your lymphatic system? Every muscle contraction you do squeezes your lymphatic vessels that help lymph fluid move to the next node, and doing it regularly ensures that the lymphatic system is properly lubricated. The pressure created during the contraction and relaxation of muscles causes changes within the lymphatic vessels, ensuring that lymph fluid flows forward. Once fluid reaches the nodes, pathogens and other debris are filtered out.

Don't forget about stress, which is another immune system destroyer. According to published research,²¹ "Chronic stress can suppress or dysregulate innate and adaptive immune responses by altering the type 1/type 2 cytokine balance, thereby inducing low-grade inflammation and suppressing the function of immuno-protective cells." With this in mind, exercise has been noted to help restore immune function, helping improve outcomes for cancer patients.²²

Make Sunshine a Priority

Vitamin D is an important factor in immune function. It acts as a master regulator, controlling the activation of over 2,500 genes. It's also been linked to a lower risk of certain cancers, Type 2 diabetes and respiratory infections, all of which weaken your immune system.

Vitamin D does this by modulating your immune system and increasing your body's ability to produce antimicrobial peptides. Vitamin D is also a potent anti-inflammatory agent, as well as being essential for proper cell growth.

To maximize the benefits of vitamin D, I recommend reaching a blood level between 60 and 80 ng/mL. This is the range where vitamin D works provides the greatest protection and benefit, including strengthening your immune system. The ideal way to boost your vitamin D level is exposing your skin to sunlight. However, there are caveats to this approach.

Most people today are eating a diet high in [linoleic acid \(LA\)](#), which, I believe, is the most toxic ingredient in our modern food system. Once LA is embedded into your skin and exposed to sunlight, it breaks down, causing inflammation and DNA damage. This is why I recommend avoiding sunlight six months while you slowly eliminate LA from your body before going for a walk during peak sunlight (solar noon).

While your body slowly eliminates LA, you can go out in the early morning or late afternoon to get the benefits of sunlight exposure without the dangers of oxidizing LA. Sunlight isn't as strong during these hours, so this strategy will provide many of the benefits of sunlight while keeping you safe from sunburn and skin damage.

For extra skin protection, I recommend taking low-dose aspirin, astaxanthin and/or molecular hydrogen, as well as applying niacinamide cream on your skin. After six months of LA avoidance, you can start going out at solar noon.

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