



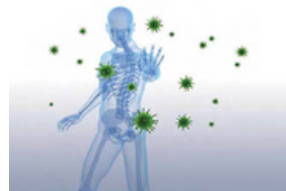
# THE IMMUNOCOMPROMISED PATIENT



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Immunocompromised/immunosuppressed individuals have a diminished ability to fight infections and other disorders. Certain diseases or circumstances, such as AIDS, cancer, diabetes, malnutrition, and genetic problems, may contribute to this. It can also be caused by specific medications or therapies, such as anticancer drugs, radiation therapy, and stem cell or organ transplants.



## Five Factors Can Impair Your Immune System:

### Chronic diseases

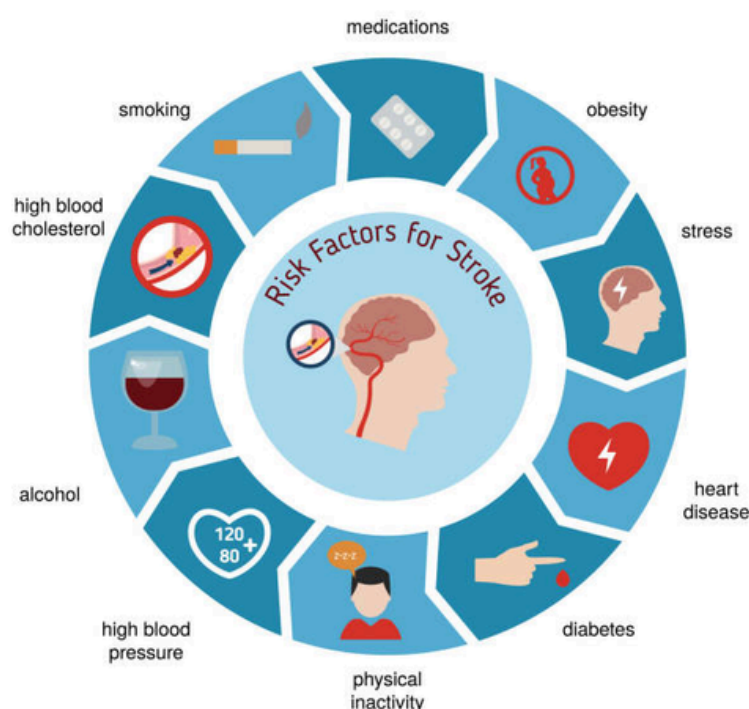
Certain illnesses, such as HIV and AIDS, kill immune cells, leaving in the human body exposing it to further attacks. Autoimmune disorders transform immune cells into double agents, fighting against own healthy tissues. Common autoimmune diseases include lupus, rheumatoid arthritis and type 1 diabetes. Having an illness can boost blood glucose and lead to other infections. Additionally, elevated blood sugar levels can affect immunity. Asthma, for example, can have a negative impact on your immune system by causing it to overreact to harmless substances. Leukaemia and lymphoma are also immune-system disorders. These are white blood cell disorders, and white blood cells are required to fight infections.

### Medical Treatments

Some cancer treatments affect the immune system by destroying cancer cells. If you have an autoimmune disease, a suppressed immune system is the ideal outcome. Due to a patient's immune system which is overactive and attacking multiple sections of the body, treatments for autoimmune illnesses frequently involve drugs targeted to decrease the immune system. This may reduce your body's ability to produce antibodies that are required to eradicate the illness. Long-term corticosteroid therapy, as well as biologics and disease-modifying anti-rheumatic medications (DMARDs), are examples of such treatments.

### Age

As people age, they may have underlying disorders or medical problems, and their immune systems do not always respond adequately to illnesses because they do not operate as well as they do in younger people.



### Smoking

People who smoke are more likely to become ill from infections. It's possible that smoking impairs the immune system's ability to respond properly. Smoking is harmful to the lungs, therefore smokers may lack sufficient healthy lung tissue to tolerate the infection.

## References

1. PennMedicine (2020) What Does It Mean to Be Immunocompromised | Penn Medicine, [www.pennmedicine.org](https://www.pennmedicine.org/updates/blogs/health-and-wellness/2020/may/what-it-means-to-be-immunocompromised). Available at: <https://www.pennmedicine.org/updates/blogs/health-and-wellness/2020/may/what-it-means-to-be-immunocompromised>.
2. Immunocompromised Patient - an overview | ScienceDirect Topics (2010) [Sciencedirect.com](https://www.sciencedirect.com/topics/medicine-and-dentistry/immunocompromised-patient). Available at: <https://www.sciencedirect.com/topics/medicine-and-dentistry/immunocompromised-patient>.