The Common Cold and Misconceptions

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Key points

- Overview of Common Cold
- How it is caused
- Spread of Disease
- Prevention, Treatment and Ineffective treatment
- Conclusion

The Common Cold is the most common and prevalent disease in our society. Several remedies and medicines have been developed to overcome this problem; however, contrary to popular beliefs, there is no cure for the common cold. Despite great advances in medicine, the common cold continues to be a great burden on society in terms of human suffering and economic loss.

The common cold is an acute respiratory tract infection that is usually caused by viruses. It is mostly self-limiting but has a drastic impact on our daily lives, such as lack of presence and effectiveness at school or work, financial burden, and more. According to previous studies, adults face approximately 2-4 colds per year, while children are affected 6-8 times on average.1

Symptoms of the common cold are mainly related to the respiratory tract and affect the nose, sinuses, pharynx, larynx, and other large airways. These

symptoms include sneezing, coughing, nasal congestion and drainage, sore throat, general malaise, and fever. They may appear as early as 10 hr. after infection and usually reach their maximum intensity at around three days after onset. Coughing in particular may still persist after a few weeks.2

The most prevalent causative agent is Human Rhinovirus, although many other viruses, such as Coronavirus and Syncytial virus, also cause this problem. In the majority of cases, no infectious organisms can be identified.3

Table 1. Viruses associated with the common cold

Virus	Percentage of cases (%)
Rhinovirus	30–50
Coronavirus	10–15
Influenza virus	5–15
Respiratory syncytial virus	5
Parainfluenza virus	5
Adenovirus	<5
Metapneumovirus	±2
Undiscovered virus	20–30

The transmission of common cold infection occurs mostly through hand-to-hand contact, with passage to the nostrils or eyes. This rejects the common perception that they pass as droplets in the air.

The wide variety of viruses present in nature makes it nearly impossible to develop a cure or vaccine for the common cold. Frequent mutations in viral proteins of RNA viruses (for example, genetic drift and shift of influenza) have further caused problems in the prevention of the illness. Influenza vaccines are the only commercially available vaccines and purified subunit vaccines are used worldwide. The A and B strains used in immunization were selected yearly, based on recommendations by the World Health Organization in accordance with national public health institutions.4

It is important to know that most cases of the common cold improve without treatment, usually within a week to 10 days. However, cough may linger for a few days. Symptomatic treatment of colds is aimed at relieving the most disturbing symptoms of the illness, and hundreds of different over-the-counter preparations are available.

Surprisingly, there are more ineffective treatments than effective treatments for the common cold, and some may even be harmful. A research article has stated that,

"Treatments that are not recommended include antibiotics, antivirals, most cough medications, antihistamine monotherapy, intranasal corticosteroids, steam, Vitamins D and E, Echinacea, and Pelargonium sidoides."5 Further studies have shown that most common household practices have proven ineffective against colds, and they mainly disappear on their own.

Overall, it is clear that the common cold has no cure, contrary to popular belief, and only measures can be taken to prevent the disease and suppress symptoms.5

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