

## Common Infections

People with cystic fibrosis (CF) are at greater risk of getting lung infections because thick, sticky mucus builds up in their lungs, allowing germs to thrive and multiply. Lung infections are a serious problem for those with CF because they can lead to progressive lung damage.

### Germs

Germs are microscopic organisms that can cause infection. They are found in the air, soil and water, and on food, plants and animals. Some germs can survive on surfaces for days and others cannot survive outside the body.

Germs have favourite places they like to live, different ways to spread, and their own unique ways of causing infections. Some can survive in the natural environment, while others prefer living in people or animals. Some thrive in the cold, while others need warmth. All germs have one thing in common; when they find a place that is good for them to live, they set up a home for themselves and multiply.

### How Are Infections Contracted?

Infections can be picked up in the environment and spread through:

- Direct contact (physical touch).
- Indirect contact (touching a surface that has been contaminated by someone else).
- Droplet route (coughing or sneezing).



- Airborne infection (inhalation of pathogens on tiny droplets, which have been ejected from an infected person following a cough or sneeze. These particles can remain suspended in air for a long time).

Bacteria, viruses and moulds are examples of germs that cause infection in CF.

### Common Infections

#### **Pseudomonas Aeruginosa**

Is a common bacteria found in the lungs of people with CF. It comes in thousands of different strains and is found in many different environments.

Some strains have become resistant to antibiotics and can be very hard to treat. People with CF may pick up pseudomonas infections from each other, however it is usually acquired from the environment.

## Staphylococcus Aureus

Is one of the most common organisms in CF lung infections. MRSA is a strain of Staphylococcus aureus that is resistant to commonly used antibiotics. MRSA can be spread person to person by contact transmission.

## Burkholderia Cepacia Complex

Lives in damp or wet places and is often difficult to treat once it infects the lungs. It can be spread via direct or indirect contact.

## Nontuberculous Mycobacteria (NTM)

Lives in soil, swamps and water sources. NTM can survive many disinfectants and severe environmental conditions. The bacteria have been found in growing numbers of people with CF and transmit easily from person to person.

Influenza (flu) is highly contagious, even among people who do not have CF. Although anyone can get the flu, people with CF can get much sicker, leading to a severe lung infection. This is usually spread by contact with infected secretions and to a lesser extent by large particle droplets.

## Aspergillus

Is a fungus that lives in the environment and is often found in the airways of adolescents and young adults with CF. It causes an increase in CF symptoms and is treated with steroids and anti-fungal medications.

## Cross-Infection

The latest medical data shows that people with CF can catch bacteria from each other, which can lead to worse symptoms and a decline in lung function.

To reduce the risk of spreading or getting germs, it is recommended that:

- People who have CF keep at least 4

metres away from others with CF.

- People with CF, who do not live together, avoid activities that put them in close physical contact with others with CF, including shaking hands, hugging or kissing, sharing common objects like pens, toys and computers or being together in enclosed or poorly ventilated places like cars.

## How To Reduce The Risk of Getting An Infection

- Hand hygiene – washing hands regularly with liquid soap and warm water and dry thoroughly. Alcohol-based hand wash is just as effective when used properly.
- Follow recommended cross-infection guidelines
- [Vaccination](#) (influenza vaccines are particularly important).
- Avoid sick people (colds, flus etc).
- Avoid high-risk environments, such as those with stagnant water, mould or damp soil.
- You may want to avoid or take caution with activities such as gardening, lawn mowing, construction dust and cleaning barns/pens or coops, by wearing a face mask, changing clothes after and following good hand hygiene.

## Useful Resources

- [Infection Control Guidelines for Cystic Fibrosis Patients and Carers 2012 \(CFA\)](#)
- [Infection Prevention and Control Guidelines \(CFWA\)](#)
- [CFWA Factsheets](#)

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