

- Avoid activities with a high risk of Aspergillus exposure, such as, gardening, compost making, building construction, and high dust levels.
- If you cannot avoid being in a high risk environment, it would be helpful to wear a mask that filters spores.
- Avoid skin injuries. Any wounds should be cleaned and covered with a clean sterile dressing. Wash hands thoroughly with soap and water. This is very important after touching any objects known to harbour Aspergillus spores. Also, remember to always washing your hands before meals, before touching your eyes, lips, mouth, nose or any wounds on your skin.
- It is good advice to attend every doctor's appointment, as any changes in your immune system's ability to fight off infection can be quickly spotted by blood tests (i.e. neutrophil count changes) and advice given to avoid infections before the infection is established.
- In addition, good hygiene and a healthy lifestyle will help improve your body's immune defence against Aspergillus and other infections.

If a patient has Aspergillus we may share that information with other hospitals. The patient should also tell their carers of the result on admission.

## How can I contact a member of the Infection Prevention & Control Team?

Ask the Clinical Nurse Manager, Doctor or Nurse looking after you if you would like to speak to a member of the Infection Prevention & Control Team and they will contact us.

We have made every possible effort to make sure that all the information provided in this leaflet is true, accurate, complete and up to date at the time of publication

### References

Health Protection Surveillance Centre (hpsc.ie) National Guidelines for the prevention of Nosocomial Aspergillosis

**Source:** Based on leaflet produced by the Aspergillus Trust ([www.aspergillus.org.uk](http://www.aspergillus.org.uk))



Tallaght  
University  
Hospital

Ospidéal  
Ollscoile  
Thamhlachta

An Academic Partner of Trinity College Dublin

PATIENT  
INFORMATION  
LEAFLET

# Aspergillus Prevention





# What is Aspergillus?

**Aspergillus species** are fungi that commonly occur in soil, water, organically enriched debris and decaying vegetation. There are many types of aspergillus but only a few are associated with human disease. In healthcare settings a number of environmental risks are recognised such as exposure to construction / renovation / demolition activities, poor maintenance of ventilation systems. Bacterial spores have also been found in water systems

## How does Aspergillus spread?

It is spread by breathing in air that has Aspergillus fungus. When it is in the air it is minutely small and once it is breathed in it starts to settle and grow inside the airspaces of the lungs. Illnesses caused by Aspergillus infection is called aspergillosis.

## Who gets Aspergillus infections?

Although the fungus is always in the air around us, the majority of people do not develop illness because their immune system is very capable of protecting them from infection when the fungus spores enters the body. In the lungs there are also special immune defence systems which combat inhaled infections.

**However individuals with weakened immune systems, or long-term lung disease do not have the local defences to protect them from these spores. This makes them more vulnerable to serious Aspergillus infections.**

## So what increases the risk of serious Aspergillus infection?

**Illnesses that weaken your immune response such as:**

- Immune suppressing diseases: such as Chronic Granulomatous Disorder, leukaemia, lymphoma and myeloma
- Cancer patients on chemotherapy treatment
- Long term medications which suppress the immune system (common ones include corticosteroids of cyclosporine).
- Organ transplant recipients (particularly solid organ i.e. heart, lung), bone marrow transplant recipients, and those with illnesses caused by the immune system attacking their own body structures (auto-immune disease)
- Patients on mechanical ventilation
- Patients with extensive burns
- Patients with Chronic Obstructive Pulmonary Disease (COPD)
- Cystic Fibrosis

This list covers the more common risks, but not all risks. Medical advice must be sought from your doctor.

## How can I prevent Aspergillus infection?

In hospitals individuals at high risk of acquiring Aspergillus infections may need to be nursed in special rooms with air dust filters and ventilation systems. This reduces the spores in the air. Where these are not available, windows should be closed/ sealed during building work. Antifungal medication may also be given to vulnerable patients as a preventative measure.

**Aspergillus cannot be completely avoided in the environment but the risk of infection can be reduced for susceptible individuals by:**

- Avoiding places where Aspergillus spores are abundant – forests, gardens, compost heaps, damp bark or wood chippings, grain stores, rotting vegetation, dead leaves and construction or renovation areas.
- Removing any potted and ornamental plants in the household. The household environment and furniture surfaces should be kept clean, dust-free and dry to minimise the accumulation of fungus and moulds.
- Certain food items, such as spices and herbs, which are usually found to contain Aspergillus spores, should be avoided, unless already cooked by someone else.

**Aspergillus cannot be completely avoided but the risk of infection can be reduced**

